UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

FOR ANNUAL AND TRANSITION REPORTS
PURSUANT TO SECTIONS 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

(Mark One)

|X| ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 31, 1998

OR

|| TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission file number: 0-26520
NEOPROBE CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

<TABLE>
<CAPTION>
<S> <C>

DELAWARE	31-1080091
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
425 Metro Place North, Suite 300, Dublin, Ohio	43017-1367
(Address of Principal Executive Offices)	(Zip Code)

</TABLE>

Registrant's telephone number, including area code: (614) 793-7500 Securities registered pursuant to Section 12(b) of the Act: None Securities registered pursuant to Section 12(g) of the Act:

Common Stock, par value $.001 per share

(Title of Class)

Rights to Purchase Series A Junior Participating Preferred Stock

(Title of Class)

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes |X| No | |

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. |_|

The aggregate market value of shares of Common Stock held by non-affiliates of the Registrant on March 19, 1999 was $24,212,375.

The number of shares of Common Stock outstanding on March 19, 1999 was 22,965,017.

The following documents have been incorporated by reference into this Form 10-K:

Document	Part of Form 10-K
Registrant's Proxy Statement for its 1999 Annual Meeting of Stockholders	Part III

The report of KPMG LLP on the financial statements of the Registrant for the fiscal year ended December 31, 1998 and the report of Coopers & Lybrand LLP on the financial statements of the Registrant for the fiscal years ended December 31, 1996 and December 31, 1997 are unavailable and have been omitted pursuant to Rule 12b-25(e)(1).

PART I

ITEM 1. DESCRIPTION OF BUSINESS

DEVELOPMENT OF THE BUSINESS

Neoprobe Corporation, a Delaware corporation ("Neoprobe" or the "Company"), was incorporated in the State of Ohio in 1983 and reincorporated in the State of Delaware in 1988. The Company's executive offices are located at 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367. The telephone number at that address is (614) 793-7500.

Since inception, substantially all of the Company's efforts and resources have been devoted to research and clinical development of innovative systems for the intraoperative diagnosis and treatment of cancers. However, developments during late 1997 and throughout 1998 have forced the Company to make significant changes in its strategic direction and business plan. Before 1998, the Company's primary research and development efforts were on the Company's proprietary RIGS(R) (radioimmunoguided surgery) technology. However, research and development efforts during 1997 and 1998 also included development as well as market launch activities related to gamma radiation detection instrumentation used in the application of intraoperative lymphatic mapping ("ILM") and development activities related to an activated cellular therapy ("ACT") methodology for the treatment of certain cancers and viral diseases. Beginning in the fourth quarter of 1998, the Company's primary focus was changed to ILM and related procedural product development and commercialization activities.

From 1983, when Neoprobe was organized, until 1998, Neoprobe was primarily engaged in research and development of its RIGS technology, which consists of a patented hand-held radiation detection probe, and proprietary cancer targeting agents labeled with radioactive isotopes. In 1996, the Company completed a series of clinical trials of its first generation targeting agent for the detection of colorectal cancer, RIGScan(R) CR49. During 1996, the Company submitted applications to European and U.S. regulatory agencies requesting approvals to begin marketing RIGScan CR49 for the detection of metastatic colorectal cancer. Late in the fourth quarter of 1997, the Company received requests for further information from United States and European regulatory agencies following review of its applications. Consequently, during the first quarter of 1998, the Company implemented changes to its business plan to reduce operating expenses and focus on three main business objectives: commercializing its RIGScan CR49 diagnostic product for the surgical detection of metastatic colorectal cancer, increasing the Company's market position in device sales for intraoperative lymphatic mapping and other gamma guided surgery applications, and developing activated cellular therapy products for cancer and viral diseases. First quarter plan changes resulted in a 20% reduction in the Company's domestic staff and the postponement of research projects for earlier stage RIGS diagnostic products which were originally expected to be carried out in 1998.

During the second quarter of 1998, the Company engaged the services of Lehman Brothers to assist in securing development partners and in the strategic assessment of the Company's business. The Company has not entered into any

definitive development agreements as a result of these efforts and terminated the arrangement with Lehman Brothers during the fourth quarter of 1998. Also during the second quarter of 1998, the Company determined that Neoprobe Europe AB ("Neoprobe Europe"), the Company's biologics manufacturing and purification facility located in Lund, Sweden, was no longer needed to implement the Company's business plan, and put Neoprobe Europe up for sale.

During the third quarter of 1998, based on further assessments of its RIGScan CR49 development plans with clinical and regulatory advisers and on assessments of the Company's financial position by management and the Board of Directors, the Company further modified its business plan. Third quarter modifications to the business plan focused the Company's operating activities on its core gamma guided surgery instrument business for use in intraoperative lymphatic mapping ("ILM") while management carries on efforts to identify business partners who would assume financial responsibility for the development of RIGS and ACT. The third quarter plan also involved steps to be taken to sell certain non-strategic assets, and to limit activities at the Company's subsidiary, Neoprobe

(Israel) Ltd. ("Neoprobe Israel"), to the completion of certain construction activities and the performance of only non-product specific plant validation.

During the fourth quarter of 1998, the Company made additional headcount reductions and took action to begin winding down operations at Neoprobe Israel. Since the beginning of 1998, the Company has decreased its worldwide headcount by approximately 60% and has ended or is in the final stages of ending the majority of its research and development activities that are not related to ILM. Also, during the fourth quarter of 1998, the Board of Directors directed management to initiate actions to shutdown the facility and validation operations at Neoprobe Israel. These actions were taken to arrive at the minimum support structure management believes is necessary to support the gamma guided surgery business and to move the Company towards profitability.

Neoprobe's current strategy is to commercialize gamma-guided surgery products based upon technologies that are patented or exclusively licensed by the Company for diagnosis and treatment of patients with cancer. The Company has suspended any future research and development activities related to its RIGS or ACT products until it finds partners who will take on the financial burden of development.

THE COMPANY'S TECHNOLOGY

Intraoperative Lymphatic Mapping and Other Gamma Guided Surgery Instrument Applications

Surgeons use lymphatic mapping to help trace the lymphatic patterns in a cancer patient to evaluate potential tumor drainage and cancer spread. The technique does not detect cancer; it helps surgeons find the first lymph node(s) to which tumor is likely to drain and spread. That node (sometimes referred to as the "sentinel" node) may provide critical information about the stage of a patient's disease. Intraoperative lymphatic mapping begins when a patient is injected at the site of the main tumor with a commercially available radioactive tracing agent; e.g., filtered sulfur colloid labeled with Technetium-99m, a radioactive element. The agent is intended to follow the same lymphatic flow as the cancer would if it had metastasized. The surgeon may then track the agent's path with the probe, thus following the potential avenues of metastases and identifying lymph nodes to be biopsied for evaluation and determination of cancer spread. Lymphatic mapping gives surgeons a "road map" to find the sentinel nodes to which tumor is likely to drain or spread. Numerous clinical studies involving nearly two thousand patients, published in the most prestigious peer-review medical journals, have shown ILM is 97% accurate in predicting the presence or absence of disease spread in melanoma or breast cancers. As a result, over 80% of patients who would have undergone lymphadenectomies can be spared this radical surgical procedure.

Surgeons practicing ILM have found that the Company's gamma-detecting probes are very well suited to the procedure. The Company's first-generation gamma-detecting probe, the Neoprobe(R) 1000 device, was originally developed for use in RIGS clinical trials and other RIGS product clinical development. The patented Neoprobe 1000 instrument consisted of a hand-held gamma-ray-detection

probe and a software-driven control unit. The reusable probe is a stainless steel tube with an angled tip for ease of maneuverability. The detection device in the tip of the probe is a highly radiosensitive crystal that relays a signal through a preamplifier to the control unit to produce both a digital readout and an audible signal. The detector element fits in a housing approximately the size of a pocket flashlight. During 1997, the Company launched an enhanced gamma detector, the Neoprobe(R) 1500 portable radioisotope detector, in response to the emergence of ILM, and in late 1998 the Company launched a new system the neo2000tm. The neo2000 is intended to be the cornerstone of Neoprobe's future ILM instrument products.

Lymphatic mapping has become the standard of care for treating patients with melanoma at many institutions. The Company has supported this initiative through training support, technical expertise and device placement. For cutaneous malignant melanoma, lymphatic mapping has become the standard of care in major cancer centers and community hospitals in the U.S. and was recently declared the standard of care for melanoma treatment by the World Health Organization. For breast cancer, the technique is moving toward standard of care status in major cancer centers and is being confirmed in several high profile, national, and international clinical trials. Several large multi-center clinical trials began in 1998, including studies sponsored by the U.S. Department of Defense and the National Cancer Institute. In addition to lymphatic mapping, surgeons are using Neoprobe's device for other gamma

guided surgery applications, such as locating enlarged cancerous parathyroid glands for intraoperative localization of osteoid osteomas, small painful bone lesions, and in surgical biopsy of suspected spread of cancer to the bone (osseous metastases). Surgeons have also found the technique useful in staging patients with vulvar, prostate, and penile cancers, and additional applications of the technology are being investigated.

The Company continues to work with thought leaders in the surgical community to set up and support training courses internationally for lymphatic mapping. Courses were held for over 350 surgeons during 1998 at such institutions as M.D. Anderson Cancer Center, the University of Washington, the Netherlands Cancer Institute, the University of Louisville, and H. Lee Moffitt Cancer Center and Research Institute. Additional training centers are expected to open during 1999.

The Company is currently selling the Neoprobe 1500 and neo2000 instruments for lymphatic mapping and other gamma guided surgery applications and expanding its line of instruments to provide a variety of gamma-detecting probes for specialized uses. The growing use of the lymphatic mapping technique by surgeons has helped generate revenue for the Company of approximately $5.9 million during 1998. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Neoprobe's ILM business strategy will be designed around the following objectives:

- Providing cost effective technology to reduce patient morbidity and allow the ILM procedure to be done in an outpatient setting.

- Increasing the Company's market position in device sales for intraoperative lymphatic mapping and other gamma guided surgery applications by expanding and improving its ILM devices, and completing strategic marketing partnerships to globalize its technology.

- Evaluating procedural ILM product opportunities, including disposable products and the development of minimally invasive radiation detection devices. In addition, Neoprobe will support the activities of thought leaders in evaluating the use of ILM in the treatment of prostate and other cancers.

The RIGS Technology

Since inception, Neoprobe has devoted significant efforts and resources to the development of its proprietary RIGS technology. The RIGS system combines a

patented hand-held gamma radiation detection probe, proprietary radiolabeled cancer targeting agents, called RIGScan products, and a patented surgical method to provide surgeons with real-time information to locate tumor deposits not detectable by conventional methods, and to assist in more thorough removal of the cancer. The Company's targeting agents are monoclonal antibodies or peptides, labeled with a radioactive isotope that emits low energy gamma rays. Before surgery, a cancer patient is injected with one of the RIGScan targeting agents which circulates throughout the patient's body and binds specifically to cancer cell antigens or receptors. Concentrations of the targeting agent are then located during surgery by Neoprobe's gamma-detecting instrument, which emits an audible tone to direct the surgeon to targeted tissue.

Since 1992, more than 700 patients have participated in several phases of clinical trials for surgical detection of primary and metastatic colorectal cancer using the Company's lead product, RIGScan CR49. In 1996, Neoprobe submitted applications to the European Agency for the Evaluation of Medicinal Products ("EMEA") and the United States Food and Drug Administration ("FDA") for marketing approval of RIGScan CR49 for the detection of metastatic colorectal cancer. Following review of its applications, the Company received requests for further information from the FDA and from the European Committee for Proprietary Medicinal Products ("CPMP") on behalf of the EMEA. Both the FDA and EMEA acknowledged that the Company's studies met the diagnostic endpoint of the Phase III clinical study which was to provide incremental information to the surgeon regarding the location of hidden tumor. However, both agencies wanted to know how the finding of additional tumor provided clinical benefit that altered patient management or outcome. The Company developed a clinical response plan for both agencies during the first half of 1998. However, the formalized process in Europe required Neoprobe, in November 1997, to withdraw its European application from the EMEA.

During 1998, the Company discussed the FDA's request for additional information with the FDA and with expert clinical and regulatory advisors. Based on these discussions, the Company determined that the best plan for obtaining regulatory approval of its RIGS technology would be to re-apply after conducting clinical trials of a second generation antibody. Because of the cost and risk of clinical trials, the Company has determined that it will not conduct clinical trials of RIGScan CR49 or a second generation antibody unless it finds a partner who will assume the financial burden of the trials and manufacturing validation. The Company does not intend to fund any further RIGS-related research and development by itself. The Company has not entered into any agreements with a development partner for the RIGS technology and does not know if a partner will be identified on a timely basis, on terms acceptable to the Company, or at all. There can be no assurance that the FDA or the EMEA will approve the Company's RIGS products for marketing, or that any such products will be successfully introduced or achieve market acceptance. See "Risk Factors -- Government Regulation."

Activated Cellular Therapy for Cancer and Viral Disease

As a result of its RIGScan CR49 research, Neoprobe developed a RIGS based Activated Cellular Therapy ("ACT") for cancer, which boosts the patient's own immune system by removing lymph nodes identified using the RIGS process during surgery and then, in a cell processing facility, activating and expanding "helper" T-cells found in the nodes. Within 10 to 14 days, the patient's own immune cells, now activated and numbering more than 20 billion, are infused into the patient in an attempt to trigger an effective immune response to the cancer. An in-vitro research program has shown that soluble factors secreted by the activated cells produce significant chemo-enhancement in a number of tumor cell lines for a variety of chemotherapeutic agents. The in-vitro assessment correlates with an observation of potential chemo-enhancement in an earlier Phase I clinical study of unresectable colorectal patients performed at The Ohio State University.

In addition, Neoprobe has preliminarily evaluated the application of a non-RIGS based ACT therapy for the treatment of chronic viral diseases. ACT for viral diseases uses peripheral lymph nodes, which are obtained in an out-patient setting, as the initial starting culture material. After using Neoprobe's activation and expansion procedures, the cells are infused in 10 to 14 days. A

Phase I study has been completed with HIV/AIDS patients at The Ohio State University with encouraging results. The Company also recently completed a Phase I trial in additional viral diseases, extending the use of activated cellular therapy to patients co-infected with HIV/AIDS and chronic active hepatitis B or C at the Miami VA Medical Center in Florida. Because of the cost and risk of clinical trials, the Company has determined that it will not conduct clinical trials of ACT unless it finds a partner who will assume the financial burden of the trials and manufacturing validation. The Company does not intend to fund any further ACT-related research and development by itself. The Company has not entered into any agreements with a development partner for the ACT technology and does not know if a partner will be identified on a timely basis, on terms acceptable to the Company, or at all. There can be no assurance that any ACT products will be successfully developed, tested or licensed, or that any such products will gain market acceptance. See "Risk Factors - Government Regulation."

CANCER MARKET OVERVIEW

Cancer is the second leading cause of death in the U.S. and Western Europe and is responsible for over half a million deaths annually in the U.S. The National Cancer Institute estimates the overall annual costs for cancer, the primary focus of the Company's products, at $104 billion: $35 billion for direct medical costs, $12 billion for morbidity, and $57 billion for mortality. NCI estimated that breast cancer will annually affect approximately 500,000 women in North America, Western Europe, and other major economic markets. Approximately 80% of the patients diagnosed with breast cancer undergo a lymph node dissection to determine if the disease has spread. While many breast cancer patients are treated in large cancer centers or university hospitals, regional and/or community hospitals treat the majority of breast cancer patients. Over 10,000 hospitals are located in the markets targeted for Neoprobe's breast cancer ILM products. Melanoma is the fastest increasing form of cancer in the United States and Europe. The medical importance of ILM staging has been accepted for melanoma. However, more melanoma patients are typically treated at large cancer centers or university hospitals focusing the market opportunity for Neoprobe's melanoma ILM products. An aging population, coupled with longer survival rates, should increase the size of the overall oncology market significantly in the coming years.

MARKETING AND DISTRIBUTION

The Company began development of its first portable gamma radiation detection device, the Neoprobe 1000, in 1987. In 1996, Neoprobe began marketing a device in the emerging ILM technology as a pre-marketing strategy for the anticipated commercial launch of the first RIGS product. ILM has become a significant stand-alone product. Significant marketing activity related to ILM products in the U.S. did not begin until the fourth quarter of 1996 and in Europe until the fourth quarter of 1998, following receipt in August, 1998 of the European CE mark for the Neoprobe 1500.

In October 1997, the Company launched an improved version of its gamma radiation detection device, the Neoprobe 1500, in response to the expanding adoption of the ILM technique in melanoma, breast and other cancers. In October 1998, Neoprobe introduced a feature-enhanced device, the neo2000. Neoprobe intends to market both the 1500 and 2000 systems as entry-level and feature-enhanced ILM systems respectively. In April 1998, the Company launched a new 14mm reusable probe that has been optimized for breast cancer procedures. Neoprobe intends to introduce additional probe products in the first quarter of 1999. There can be no assurance that such products will achieve regulatory approval (See "Risk Factors -- Government Regulation") or if approved that such products will achieve market acceptance (See "Risk Factors -- Dependence on Principal Product Line").

To market its ILM products in the United States and Europe, Neoprobe has established a corporate sales force consisting of product specialists and physician-training specialists. Neoprobe currently has 10 product specialists in the United States and 4 product specialists in Europe. To supplement the activities of its direct sales force, the Company has developed a relationship with KOL Bio-Medical Products ("KOL"). KOL will coordinate the efforts of approximately 60 sales representatives throughout the United States. In

addition, the Company and KOL will jointly present Neoprobe's ILM products at medical conferences and conduct and sponsor surgeon training courses at thought-leader institutions and its surgeon training facilities.

Physician training is critical to the use and adoption of ILM products by surgeons and other medical professionals. Neoprobe has established relationships with the leaders in the ILM surgeon community and has established and supported training courses internationally for lymphatic mapping. Courses were held for over 700 surgeons during 1997 and 1998 at such institutions as M.D. Anderson Cancer Center, the University of Washington, the Netherlands Cancer Institute, the University of Louisville, H. Lee Moffitt Cancer Center and Research Institute, and University of California, San Francisco. Additional training centers are expected to open during 1999 bringing the number of sites at which Neoprobe participates to over 20.

In September 1996, the Company executed a License and Distributorship Agreement with United States Surgical Corporation ("USSC"). Effective October 1997, the Company and USSC agreed to terminate the agreement, as amended. In connection with the termination, the Company agreed to pay USSC net commissions on orders for devices received prior to the effective date of the termination and to continue to warranty and service devices sold under the terms of the agreement. The parties also agreed to discharge and release each other from all remaining claims and financial obligations relating to the Agreement, including license fees.

In April 1998, the Company executed a non-exclusive Sales and Marketing Agreement with Ethicon Endo-Surgery, Inc. ("EES"), a Johnson & Johnson company, to market and promote the Neoprobe 1500 Portable Radioisotope Detector and its 14mm and 19mm reusable probes in the United States. In October 1998, the agreement with EES was amended to cover marketing of these products in Europe. On January 29, 1999, the Company provided EES with notice of the Company's intent to terminate the Agreement effective March 1, 1999.

Effective February 1, 1999, the Company executed a Sales and Marketing Agreement with KOL Bio-Medical Instruments, Inc. ("KOL") to market the Company's current and future gamma guided surgery products in the United States. In exchange for marketing and selling the products and providing customer training, KOL will receive commissions on net sales of applicable products and milestone payments on the achievement of certain levels of product sales. The term of the agreement is indefinite with provisions for both parties to terminate with a minimum of six months notice under certain conditions or without cause. Under the terms of the agreement, KOL is required to meet certain sales objectives and minimum quotas related to sales of the Company's instrument

products. However, if the agreement is terminated by the Company without cause or because of a change of control of the Company, KOL is entitled to receive a termination fee of 15% based on monthly net sales for a maximum of twenty-four months and the Company is obligated to buy back, at a discount, demonstration units purchased by KOL during the nine-month period prior preceding termination.

In Europe, the Company intends to supplement its sales force through development of marketing partner or distribution partner relationships. In other markets such as South America and the Pacific Rim, Neoprobe intends to enter into relationships with medical product distributors. Neoprobe recently completed agreements for ILM product distribution in Brazil, Japan, and China. Each of the agreements requires the distributor to annually purchase a minimum quantity of product. During 1999, Neoprobe intends to complete similar agreements for product distribution in other countries such as Australia, New Zealand, Argentina, Mexico and Canada. There can be no assurances that the Company will be able to enter or maintain marketing agreements on terms favorable to the Company. See "Risk Factors -- Limited Marketing Experience."

MANUFACTURING

Neoprobe Instruments. The Company relies on independent contract manufacturers, some of which are single source suppliers, for the manufacture of the principal components of its current line of gamma guided surgery products, see "Risk Factors--Limited Manufacturing Capacity and Experience". In August 1996, the Company entered into a Manufacturing and Supply Agreement with RELA, Inc. of

Boulder Colorado ("RELA"), a developer and manufacturer of medical devices. Under the agreement, RELA manufactured Neoprobe 1000 instruments for the Company. During the fourth quarter of 1997, the Company introduced the Neoprobe 1500 system. The Company continues to use RELA for the production of the Neoprobe 1500 instrument and the 19mm hand-held gamma detector probe.

During 1998, the Company began manufacturing the 14mm probe and the neo2000 control unit. The neo2000 and the 14mm probe involve the manufacture of components by a variety of subcontractors, including but not limited to Electronic Assembly Corporation, a subsidiary of Plexus Corporation ("EAC"); eV Products, a division of II-VI Corporation ("eV"); and MedTech Corporation. eV produces the crystal used in the detector probes, MedTech produces certain molded parts and subassemblies used in the probe and the neo2000 control unit, and EAC performs assembly of the neo2000 control unit and final assembly of the 14mm probe. Currently, the Company has a Manufacturing and Supply Agreement with eV for the production of crystals; however, work being performed by EAC and MedTech is being performed under terms of letters of intent, pending completion of final manufacturing, and supply agreements. There can be no assurance that the Company will be able to complete or maintain agreements with its subcontractors on a timely basis, on terms acceptable to the Company, or at all. Any significant supply interruption or yield problems experienced by the Company would have a material adverse effect on the Company's ability to manufacture its products and, therefore, a material adverse effect on its business, financial condition, and results of operations until a new source of supply is qualified. See "Risk Factors -- Limited Manufacturing Capacity and Experience."

During 1997, the Company entered into a supply agreement with eV for the supply of certain crystals and associated electronics to be used in the manufacture of the Company's proprietary line of hand-held gamma detection probes. The original term of the agreement expires on December 31, 2002 but may be automatically extended for an additional three years. The agreement calls for the Company to purchase minimum quantities of crystals and associated electronics based on annually forecasted production needs. eV supplies 100% of the crystals used by the Company. While eV is not the only potential supplier of such crystals, any prolonged interruption from this source could restrict the availability of the Company's probe products, which would affect operating results adversely.

PATENTS AND PROPRIETARY RIGHTS

The Company regards the establishment of a strong intellectual property position in its technology as an integral part of the development process. Each of the Company's technologies is protected by patents and intellectual property positions, in the United States as well as foreign countries. Specifically, Neoprobe's ILM technology is protected by twelve (12) instrument patents that have been issued in the United States as well as major foreign

markets. In addition to the issued patents, twenty (20) patent applications have been filed in the United States and certain major foreign markets. The patent applications cover the Company's newly introduced neo2000 systems, probes, and products that the Company plans to introduce in the coming months and years.

The Company continues to attempt to maintain proprietary protection for the products related to RIGS and ACT, which although not currently integral to the Company's business plans, may be important to a potential development partner. Certain aspects of Neoprobe's RIGS technology are claimed in the United States in U.S. Patent No. 4,782,840, which expires in 2005, unless extended. The Company believes that some of its RIGS technology will not be patentable in certain foreign countries.

The patent position of biotechnology and medical device firms, including the Company, generally is highly uncertain and may involve complex legal and factual questions. Potential competitors may have filed applications for, or may have been issued patents, or may obtain additional patents and proprietary rights relating to products or processes in the same area of technology as that used by the Company. The scope and validity of these patents and applications, the extent to which Neoprobe may be required to obtain licenses thereunder or under other proprietary rights, and the cost and availability of licenses are uncertain. There can be no assurance that the Company's patent applications will result in additional patents being issued or that any of the Company's patents

will afford protection against competitors with similar technology; nor can there be any assurance that any of the Company's patents will not be designed around by others or that others will not obtain patents that Neoprobe would need to license or design around. See "Risk Factors -- Patents, Proprietary Technology and Trade Secrets."

The Company also relies upon unpatented trade secrets. No assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to the Company's trade secrets, or disclose such technology, or that the Company can meaningfully protect its rights to its unpatented trade secrets. The Company requires its employees, consultants, and advisers to execute a confidentiality agreement upon the commencement of an employment or consulting relationship with Neoprobe. The agreement provides that all confidential information developed or made known to the individual during the course of the relationship will be kept confidential and not disclosed to third parties except in specified circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual will be the exclusive property of Neoprobe. There can be no assurance, however, that these agreements will provide meaningful protection for Neoprobe's trade secrets in the event of an unauthorized use or disclosure of such information.

GOVERNMENT REGULATION

The production and marketing of Neoprobe's products and its research and development activities are subject to detailed and substantive regulation by governmental authorities in the United States and other countries. In the United States, drugs, biologic products, and medical devices are regulated by the FDA. Federal and state statutes and regulations, govern, among other things, clinical testing, manufacture, labeling, packaging, marketing, distribution, and record keeping in order to ensure that the Company's products are safe and effective for their intended use. Noncompliance with applicable requirements can result in, among other things fines, injunctions, suspensions or loss of regulatory approvals, recall or seizure of the Company's products, and criminal prosecution. The FDA has the authority to revoke previously granted licenses. See "Risk Factors -- Government Regulation."

Instrument Products. The FDA classifies medical devices into one of three classes -- class I, II, or III. Class I devices are subject to general controls, such as labeling, premarket notification (the "510(k)" process), and adherence to FDA-mandated quality system requirements ("QSR"). Class II devices are subject to general and special controls, such as performance standards, postmarket surveillance, patient registries, and FDA guidelines. Class III devices are generally life-sustaining, life-supporting, or implantable devices and must receive pre-market approval by the FDA.

If a seller of medical devices can establish that a new device is "substantially equivalent" to a legally marketed Class I or Class II medical device or to a Class III device for which the FDA has not required pre-market approval, the seller may market the device without further approvals being granted by the FDA. The FDA may, however,

determine that the new device is not substantially equivalent and require the seller to submit further information, such as additional clinical test data, before it is able to make a determination regarding substantial equivalence, which can substantially delay the market introduction of the product. For a device that is cleared through the 510(k) process, modifications or enhancements that could significantly affect the safety or effectiveness of the device, or that constitute a major change to the intended use of the device, will require a new 510(k) submission.

A premarket approval application ("PMA") must be filed if a proposed device is not substantially equivalent to a legally marketed reserved Class I or Class II device, or if it is a Class III device for which the FDA has called for PMAs. The PMA process is much more expensive, uncertain and lengthy than the 510(k) process. A PMA application must be supported by valid scientific evidence, which typically includes extensive testing and manufacturing information, including preclinical and clinical trial data to demonstrate the safety and effectiveness of the device.

The Neoprobe 1000 instrument received 510(k) clearance in December 1986, and modified versions received 510(k) clearance in June 1992 and February 1995. The Neoprobe 1500 systems received 510(k) clearance in June 1997 . In February 1998, the FDA reclassified "nuclear uptake detectors" as being exempt from the 510(k) (premarket notification) process. The Company must continue to manufacture the devices under QSR and maintain appropriate technical files; however, Neoprobe will not need to submit 510(k) applications for modifications to the Neoprobe device. The Company believes the neo2000 is exempt from the 510(k) process because it is substantially equivalent to the Neoprobe 1500.

The FDA ensures QSR compliance through periodic facility inspections. Accordingly, manufacturers must commit ongoing substantial resources to maintaining a high level of compliance with QSR. In addition, Neoprobe's promotional and educational activities regarding its diagnostic instrument products must comply with FDA policies and regulations regarding acceptable device product promotion practices.

RIGS and ACT products. The Company's biologic products, if developed, would require a regulatory license to market by the FDA and by comparable agencies in foreign countries. The process of obtaining regulatory licenses and approvals is costly and time consuming, and the Company has encountered significant impediments and delays related to its previous proposed biologic products. See "Risk Factors -- Government Regulation."

The steps required before a biologic agent may be marketed in the United States include (i) preclinical laboratory and animal testing; (ii) submission to the FDA of an Investigational New Drug ("IND") application, which must become effective before human clinical trials may commence; (iii) adequate and well controlled human clinical trials to establish the safety and efficacy of the biologic for its intended use; (iv) submission of a Biologic License Application ("BLA") to the FDA; and (v) FDA approval of these applications.

In addition to reviewing information submitted in the BLA, each manufacturing facility must undergo a pre-approval inspection by the FDA to assess its suitability and compliance with GMP and periodic inspections thereafter. Once approved, any significant changes in the manufacturing process, equipment, facilities, or product specifications must be pre-approved by the FDA and may require additional clinical data to validate the changes prior to allowing their implementation.

The FDA may deny a BLA if applicable regulatory criteria are not satisfied, require additional testing or information, or require postmarket testing and surveillance to monitor the safety or efficacy of the Company's products. Notwithstanding the submission of such data, the FDA may ultimately decide that the application does not satisfy its regulatory criteria for approval. Finally, product approvals may be withdrawn if compliance with regulatory standards is not maintained, or if a problem occurs following initial marketing.

The process of completing clinical testing usually takes a number of years and requires the expenditure of substantial resources, and there can be no assurance that any approval will be granted on a timely basis, if at all. Additionally, the length of time it takes for the FDA to evaluate an application for marketing approval varies considerably, as does the amount of preclinical and clinical data required to demonstrate the safety and efficacy of a specific product. The FDA may require additional clinical studies which may take several years to perform. The

length of the review period may vary widely depending upon the nature and indications of the proposed product and whether the FDA has any further questions or requests any additional data. Also, the FDA will require postmarketing reporting and surveillance programs to monitor the side effects of the products. There can be no assurance that any of the Company's potential products will be approved by the FDA or approved on a timely or accelerated basis, or that any approvals received will not subsequently be revoked or modified.

The Company submitted a dossier to the European regulatory agencies in May 1996, and a BLA to the FDA in December 1996, for its RIGScan CR49 product for the

detection of metastatic colorectal cancer. In November 1997, the Company voluntarily withdrew its European Marketing Authorization Application after a decision by the Committee for Proprietary Medicinal Products (CPMP) determined that there was insufficient data to support the clinical utility of the product; additional information has been requested. In December 1997, the FDA issued an action letter to the Company stating that the BLA is "not approvable at this time" and requested a formal response to the deficiencies listed in the letter. This additional information must be submitted in the form of a BLA Amendment. During 1998, the Company discussed the FDA's request for additional information with the FDA and with expert clinical and regulatory advisers. Based on these discussions, the Company determined that the best plan for obtaining regulatory approval of its RIGS technology would be to re-apply after conducting clinical trials of a second generation antibody. Because of the cost and risk of clinical trials, the Company has determined that it will not conduct clinical trials of RIGScan CR49 or a second generation antibody unless it finds a partner who will assume the financial burden of the trials and manufacturing validation. The Company does not intend to fund any further RIGS-related research and development by itself. The Company has not entered into any agreements with a development partner for the RIGS technology and does not know if a partner will be identified on a timely basis, on terms acceptable to the Company, or at all. There can be no assurance that the Company's RIGS products will be approved for marketing by the FDA or the EMEA, or that any such products will be successfully introduced or achieve market acceptance. See "Risk Factors -- Government Regulation."

Before marketing its products in Western Europe, the Company will be required to receive the approval of the European Council or European Commission and the appropriate governmental agencies in each of the respective countries. For marketing outside the United States, the Company is also subject to foreign regulatory requirements governing human clinical trials, pharmaceutical sales, and marketing approval of its products. Whether or not FDA approval has been obtained, approval of a product by comparable regulatory authorities of foreign countries must be obtained prior to commencement of manufacturing or marketing of the product in those countries. The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country; however, foreign procedures are similar to those required by the FDA. The Company intends, to the extent possible, to rely on foreign distributors of its products to manage and obtain regulatory approval for those products.

In addition to regulations enforced by the FDA, the manufacture, distribution, and use of radioactive targeting agents, if developed, are also subject to regulation by the Nuclear Regulatory Commission, the Department of Transportation and other federal, state, and local government authorities. Neoprobe or its manufacturer of the radiolabeled antibodies must obtain a specific license from the Nuclear Regulatory Commission to manufacture and distribute radiolabeled antibodies, as well as comply with all applicable regulations. Neoprobe must also comply with Department of Transportation regulations on the labeling and packaging requirements for shipment of radiolabeled antibodies to licensed clinics, and must comply with federal, state, and local governmental laws regarding the disposal of radioactive waste. There can be no assurance that the Company will be able to obtain all necessary licenses and permits and be able to comply with all applicable laws. The failure to obtain such licenses and permits or to comply with applicable laws would have a materially adverse effect on the Company's business, financial condition, and results of operations.

COMPETITION

Neoprobe faces competition from medical device companies, as well as from universities and other non-profit research organizations in the field of cancer diagnostics and treatment. Many emerging medical device companies have corporate partnership arrangements with large, established companies to support the research, development, and commercialization of products that may be competitive with those of the Company. In addition, a number of

large established companies are developing proprietary technologies or have enhanced their capabilities by entering into arrangements with or acquiring companies with proprietary antibody technology, or other technologies applicable

to the detection or treatment of cancer. Many of the Company's existing or potential competitors have substantially greater financial, research and development, regulatory, marketing, and production resources than those of the Company. Other companies may develop and introduce products and processes competitive with or superior to those of the Company. Further, the development by others of new cancer diagnostic, or treatment methods or the development of a cure or vaccine for cancer could render the Company's technology and products under development noncompetitive or obsolete. See "Risk Factors -- Competition" and "-- Risk of Technological Obsolescence."

For the Company's products, an important factor in competition may be the timing of market introduction of its products or those of its competitors' products. Accordingly, the relative speed with which Neoprobe can develop products, complete the approval processes and supply commercial quantities of the products to the market will be an important competitive factor. Neoprobe expects that competition, among products approved for sale, will be based, among other things, on product efficacy, safety, reliability, availability, price, and patent position.

With the emergence of ILM, a number of companies have begun to market gamma radiation detection instruments. Most of the competitive products have been designed from a nuclear medicine perspective rather than developing products for the surgeon. The principal competitive product in both the United States and Europe has been the Navigator system which is marketed by US Surgical Corporation, and a device manufactured and sold by Carewise Medical Products. The Company also anticipates that Ethicon Endo-Surgery, a former marketing partner, is preparing to enter the gamma guided surgery marketplace with its own hand-held gamma detector probe and system. The Company believes its intellectual property portfolio will be a barrier to competitive products; however, there can be no assurance that competitive products will not be developed and be successful in eroding the Company's market share for gamma guided surgery products. See -- "Risk Factors Competition."

EMPLOYEES

As of March 19, 1999, Neoprobe, including Neoprobe (Israel), had 43 full-time employees. Neoprobe considers its relations with its employees to be satisfactory.

RISK FACTORS

The discussion in this Report contains forward-looking statements that involve risks and uncertainties. The Company's actual results may differ significantly from the prospects discussed in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those listed below.

Limited Revenues; Continuing Net Losses; Accumulated Deficit

The Company's limited history of operations, the nature of its business, and its limited marketing and manufacturing experience make the prediction of future operating results difficult and highly unreliable. The Company's future prospects, therefore, must be evaluated in light of the substantial risks, expenses, delays and difficulties normally encountered by companies in the medical device industry, which is characterized by an increasing number of participants, intense competition and a high rate of failure. The Company began active marketing of its ILM products in 1997 and has limited experience in manufacturing, marketing and selling its ILM products. Since its inception in 1983, the Company expended the majority of its efforts and resources in the research and development of its RIGS technology. During 1998, based on disappointing regulatory feedback from the FDA and European regulatory authorities, the Company revised its business plan to severely curtail research and development of the RIGS technology and to focus on gamma guided surgery products such as those used in ILM. The Company has experienced significant operating losses in each year since inception, and had an accumulated deficit of approximately $115 million as of December 31, 1998. For the years ended December 31, 1996, 1997 and 1998, the Company's net losses were $21 million, $23.2 million and $28 million, respectively. The Company expects operating losses to continue into 1999 as the Company expends substantial resources to continue development of the Company's products, and build its marketing, sales, manufacturing and finance organizations. There can be no

assurance that the Company will ever achieve a profitable level of operations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Future Capital Needs; Uncertainty of Capital Funding

To date, the Company's capital requirements have been significant. The Company has depended on the proceeds of sales of its securities and other financing vehicles to continue research and development and to fund its working capital requirements. The Company's future capital requirements depend on numerous factors, including the extent to which the Company's products achieve market acceptance and generate revenue, the resources the Company devotes to developing, manufacturing and marketing its products, the progress of future development programs, and the time required to obtain additional regulatory clearances or approvals. The Company expects to continue to devote substantial capital resources to market and sell its products, to fund research and development of additional gamma guided surgery products, and to secure manufacturing capacity. The timing and amount of such capital requirements cannot be accurately predicted. Consequently, the Company may be required to raise additional funds through public or private financing, collaborative relationships, or other arrangements. However, no assurance can be given that the necessary additional financing will be available to the Company on acceptable terms, if at all, or that would not result in further dilution to the holders of the Company's equity securities. The Company's ability to raise additional financing may be dependent on many factors beyond the Company's control, including the state of capital markets and the development or prospects for development of competitive technology by others. See "Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources."

Dependence upon Gamma Guided Surgery Product Line; Uncertainty of Market Acceptance

The Company's products, although being investigated for potential use in a number of areas, are currently only widely used in the treatment and diagnosis of two primary types of cancer: melanoma and breast cancer. The Company's success is dependent on acceptance of ILM, and of its devices for use in ILM, by the medical community as a reliable, safe and cost effective alternative to current treatments and procedures. Although the Company believes that ILM has significant advantages over other currently competing procedures, broad-based clinical adoption of ILM will not occur until physicians outside the major cancer centers and teaching hospitals determine that the ILM approach is an attractive alternative to current treatments for use in melanoma and breast cancer and expand its use to other types of cancer. There can be no assurance that ILM will achieve significant market acceptance. There can be no assurance that the Company's marketing efforts will result in significant demand for its products, or that the current demand for the Company's products will be maintained or continue to grow.

Competition

The medical device industry is intensely competitive. The Company's competitors have significantly greater financial, technical, manufacturing, and distribution resources as well as greater experience in the medical device industry than the Company. The particular medical conditions that can be treated using the Company's ILM products can also be treated and diagnosed by other medical devices, procedures, or pharmaceuticals. Many of these alternatives are widely accepted in the medical community and have a long history of use. The Company also believes that its relationships with physicians and customer support are important competitive factors. There can be no assurance that physicians will use the Company's products or replace or supplement established treatments with the Company's products, or that the Company's products will be competitive with other technologies. There can be no assurance that the Company can achieve or maintain a competitive position. In such event, the Company's business, operating results, and financial condition could be materially adversely affected. See "Item 1. Business -- Competition."

Limited Marketing Experience

The Company has limited experience in sales, marketing, or distribution of any

of its products. The Company currently employs a small sales and marketing organization in the United States and Europe. The Company also currently markets its products in the United States with the assistance of a marketing partner. There can be no

assurance that the Company will be able to compete effectively in attracting, motivating, and retaining qualified sales personnel.

The Company believes that in order to successfully penetrate the gamma guided surgery market that it is necessary to supplement the efforts of its internal marketing organization with those of a marketing partner with experience in the medical device marketplace and who has a greater number of representatives to reach potential customers. In certain international markets, the Company sells its products through distributors. The Company has already terminated marketing arrangements with two other companies. There can be no assurance that the Company will be able to identify suitable distribution agreements on acceptable terms, if at all, or that such distribution agreements will result in significant sales. There can be no assurance that the Company will be able to maintain agreements with distributors, or that such distributors will devote adequate resources to selling the Company's products. Since the Company has entered into distribution agreements for the sale of its product in certain countries, it will be dependent on the efforts of these third parties, and there can be no assurance that such efforts will be successful. Failure to maintain or grow an effective direct sales and marketing organization or to maintain effective distributors could have a material adverse effect on the Company's business, financial condition, and results of operations. There can be no assurance that the Company will be able to, or its marketing partners will be able to, market the Company's products successfully in the future. In such event, the Company's business, operating results, and financial condition could be materially adversely affected.

Risks of International Operations

The Company markets its products internationally. Changes in overseas economic conditions, currency exchange rates, foreign tax laws or tariffs or their trade regulations could have a material adverse effect on the Company's business, financial condition and results of operations. The international nature of the Company's business is also expected to subject it and its distributors to laws and regulations of the foreign jurisdictions in which they operate or the Company's products are sold. The regulation of medical devices in a number of such jurisdictions, particularly in the European Union, continues to develop and there can be no assurance that new laws or regulations will not have an adverse effect on the Company's business, financial condition and results of operations.

Limited Manufacturing Capacity and Experience

The Company relies on independent contract manufacturers, some of which are single source suppliers, for the manufacture of the principal components of its current line of gamma guided surgery products. Shortages of raw materials, production capacity constraints or delays on the part of the Company's contract manufacturers could negatively affect the Company's ability to ship products and obtain revenue. The Company uses or relies on certain components and services used in its devices that are provided by sole source suppliers. Although the Company has identified primary and alternative vendors, the qualification of additional or replacement vendors for certain components or services is a lengthy process. Any significant supply interruption or yield problems experienced by the Company would have a material adverse effect on the Company's ability to manufacture its products and, therefore, a material adverse effect on its business, financial condition, and results of operations until a new source of supply is qualified. Some of the components of the Company's products are molded parts that require custom tooling that is manufactured and maintained by third party vendors. Should such custom tooling be damaged, it could result in a supply interruption that could have a material adverse effect on the Company's ability to manufacture its products until a new tool is manufactured. Also, the Company's new product development efforts and the timeliness of new product launches can be significantly impacted by the tooling vendor's ability to meet completion and quality commitments on the manufacture of custom tooling. Companies often encounter difficulties in scaling up production, including problems involving production yield, quality control and assurance, and

shortages of qualified personnel. As the Company increases production, it may, from time to time, experience lower than anticipated yields or production constraints, resulting in delayed product shipments which could have a material adverse effect on the Company's business, financial condition, and results of operations.

The Company expects to manufacture its products based on forecasted product orders. Lead times for materials and components ordered by the Company vary significantly, and depend on factors such as the business practices of the specific supplier, contract terms, and general demand for a component at a given time. Certain components used in

the Company's products have long lead times. As a result, there is a risk of excess or inadequate inventory if orders do not match forecasts.

In addition, medical device manufacturing facilities are subject to GMP regulations, international quality standards, and other regulatory requirements. The failure of the Company's contractors to implement and maintain their facilities in accordance with GMP regulations, international quality standards, or other regulatory requirements could entail a delay or termination of production, which could have a material adverse effect on the Company's business, financial condition and results of operations.

Patents, Proprietary Technology and Trade Secrets

The Company's success depends, in part, on its ability to secure and maintain patent protection, to preserve its trade secrets, and on its ability to operate without infringing on the patents of third parties. The Company seeks to protect its proprietary positions by filing United States and foreign patent applications related to its technology, inventions and improvements that are important to the development of its business. There can be no assurance, however, that the patents for which the Company has applied will be issued to the Company. There can be no assurance that any of the Company's patents or patent applications will not be challenged, invalidated, or circumvented in the future. In addition, there can be no assurance that competitors, many of which have substantially more resources than the Company and have made substantial investments in competing technologies, will not seek to apply for and obtain patents that will prevent, limit, or interfere with the Company's ability to make, use, or sell its products either in the United States or internationally.

Patent applications in the United States are maintained in secrecy until patents issue, and patent applications in foreign countries are maintained in secrecy for a period after filing. Publications of discoveries in the scientific or patent literature tend to lag behind actual discoveries and the filing of related patent applications. Patents issued and patent applications filed relating to medical devices are numerous, and there can be no assurance that current and potential competitors and other third parties have not filed or will not file in the future applications for, or have not received or in the future will not receive, patents or obtain additional proprietary rights relating to products or processes used or proposed to be used by the Company. The Company also relies upon trade secrets, technical know-how, and continuing technological innovation to develop and maintain its competitive position.

The Company typically requires its employees, consultants, and advisors to execute confidentiality and assignment of invention agreements in connection with their employment, consulting, or advisory relationships with the Company. There can be no assurance, however, that these agreements will not be breached or that the Company will have adequate remedies for any breach. Further, there also can be no assurance that others will not gain access to the Company's trade secret information or independently develop or acquire the same or equivalent trade secret information. Certain of the research activities relating to the development of antibody technology that may be components of the Company's proposed RIGS system technology products were conducted by agencies of the United States government. When the United States government participates in research activities, it retains certain rights that include the right to use the technologies for governmental purposes under a royalty-free license, as well as rights to use and disclose technical data and computer software that could preclude the Company from asserting trade secret rights in that data and software.

The Company has not been notified by any third party that the Company's products and procedures infringe any valid, enforceable claim of any patent owned by others. Any such claim, however, whether with or without merit, could be time consuming and expensive to respond to and could divert the Company's technical and management personnel. The Company may become involved in litigation to defend against claims of infringement made by others, to enforce patents issued to the Company, or to protect trade secrets of the Company. If any relevant claims of third-party patents are upheld as valid and enforceable in any litigation or administrative proceeding against the Company, it could be prevented from practicing the subject matter claimed in such patents, or would be required to obtain licenses from such patent owners, or to redesign its products and processes to avoid infringement. There can be no assurance that the Company will be able to obtain acceptable licenses or rights, if at all, to other patents which the Company deems necessary for its operations. Accordingly, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent the Company from manufacturing

and selling its products, which would have a material adverse effect on the Company's business, financial condition, and results of operations. The Company intends to vigorously protect and defend its intellectual property. Costly and time consuming litigation brought by the Company may be necessary to enforce patents issued to the Company, to protect trade secrets or know-how owned by the Company, or to determine the enforceability, scope, and validity of the proprietary rights of others. See "Item 1. Business-- Patents and Proprietary Rights" and "-- Competition."

Government Regulation

The Company's products in the United States are regulated as medical devices by the FDA. The process of obtaining United States regulatory approvals and clearances may be lengthy, expensive, and uncertain. Commercial distribution of the company's products in foreign countries is also subject to varying government regulations which may delay or restrict marketing of the Company's products in those countries. In addition, such regulatory authorities may impose limitations on the use of the Company's products. FDA enforcement policy strictly prohibits the marketing of FDA cleared or approved medical devices for unapproved uses. Within the European Union, the Company's products are required to display the CE mark in order to be sold. The Company has obtained certification to display the CE mark on its current line of portable radiation detection instruments. However, there can be no assurance that the Company will be able to maintain certification for its current products or that the Company will be able to obtain certification for any new products in a timely manner, or at all.

The manufacturing operations of the Company's contract manufacturers are subject to compliance with Good Manufacturing Practices ("GMP") regulations of the FDA and similar regulations of the European Union. These regulations include controls over design, testing, production, labeling, documentation, and storage of devices. Enforcement of GMP regulations has increased significantly in the last several years, and the FDA has publicly stated that compliance will be more strictly scrutinized in the future. The Company's facilities and manufacturing processes, as well as those of current and future third party suppliers, will be subject to periodic inspection by the FDA, the Company's European Union notified body, and other agencies. Failure to comply with these and other regulatory requirements could result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to grant premarket clearance or premarket approval for devices, withdrawal of clearances or approvals, and criminal prosecution, which could have an adverse effect on the Company and its operations.

The Company does not currently market any RIGS products or radioactive targeting agent to be used in ILM applications. However, if a partner is identified to fund and assist in the development of RIGS products, or if the Company were to undertake development of a radioactive targeting agent for use in ILM, these products would also be subject to detailed and substantive regulation by the FDA and by comparable agencies in foreign countries. Various federal, state, and

foreign statutes also govern or influence the manufacture, safety, labeling, storage, record keeping, and marketing of such products. The process of obtaining regulatory licenses and approvals is costly, time consuming, and prone to unexpected delay. The Company has encountered and may continue to encounter delays in the completion of testing or in the application process for RIGS and ACT products. Future delays could result from, among other things, a longer than expected regulatory review process, slower than expected patient enrollment rates, difficulties in analyzing data from clinical trials or in validating manufacturing processes and changes in regulatory requirements. Moreover, foreign and domestic approvals, if granted, may include significant limitations on uses of the products. Further, even if such regulatory approval is obtained, use of the Company's products could reveal side effects that, if serious, could result in suspension of existing licenses and delays in obtaining licenses in other jurisdictions. A marketed product, manufacturer, and manufacturing facilities are subject to continual review and periodic inspections, and later discovery of previously unknown problems with a product, manufacturer, or facility may result in restrictions on such product or manufacturer, including withdrawal of the product from the market. Noncompliance with applicable governmental requirements can result in import detentions, fines, civil penalties, injunctions, suspensions or loss of regulatory approvals, recall or seizure of the Company's products, operating restrictions, government refusal to approve product export applications or to allow the Company to enter into supply contracts, and criminal prosecution. Additional governmental regulation may be established which could prevent or delay regulatory approval of the Company's products. Any delays or failure to receive required approvals or limiting conditions on approvals could materially adversely affect the Company's business, operating results, and financial condition. See "-- Government Regulation."

Risk of Technological Obsolescence

The medical device industry is characterized by rapid and significant technological change. There can be no assurance that third parties will not succeed in developing or marketing technologies and products that are more effective than those developed or marketed by the Company, or that would render the Company's technology and products obsolete or noncompetitive. Additionally, new surgical procedures and medications could be developed that replace or reduce the importance of current procedures that use the Company's products. Accordingly, the Company's success will depend, in part, on its ability to respond quickly to medical and technological changes through the development and introduction of new products. There can be no assurance that the Company's products will not become obsolete and that its efforts to develop will result in any commercially successful products. In such event, the Company's business, operating results, and financial condition could be materially adversely affected. See "-- Competition."

Limited Third Party Reimbursement

The Company's products will be marketed to hospitals and other users that bill various third party payers, including government programs, such as federal Medicare and state Medicaid, and private insurance plans, for the health care services provided to their patients. Third party payers carefully review and are increasingly challenging the prices charged for medical products and services. Although the Company intends to establish the prices for its products according to criteria believed to be acceptable to third party payers, there can be no assurance that such payers will not deny reimbursement on the basis that the Company's products are not in accordance with established payer policies regarding cost effective treatment methods, or on some other basis. There can be no assurance that the Company would be able to provide economic and medical data to overcome any third party payer objections.

In foreign markets, reimbursement is obtained from a variety of sources, including governmental authorities, private health insurance plans, and labor unions. In most foreign countries, there are also private insurance systems that may offer payments for alternative therapies. Although not as prevalent as in the United States, health maintenance organizations are emerging in certain European countries. The Company may need to seek international reimbursement approvals, although there can be no assurance that any such approvals will be obtained in a timely manner or at all. Failure to receive international reimbursement approvals could have an adverse effect on market acceptance of the

Company's products in the international markets in which such approvals are sought.

There can be no assurance, as to either United States or foreign markets, that third party reimbursement and coverage of newly approved products will be available or adequate, that current reimbursement policies of third party payers will not be decreased in the future, or that future legislation, regulation, or reimbursement policies of third party payers will not otherwise adversely affect the demand for the Company's products, or its ability to sell its products on a profitable basis. If third party payer coverage or reimbursement is unavailable or inadequate, the Company's business, financial condition, and results of operations could be materially adversely affected. See "--Marketing and Distribution."

Product Liability

The testing, marketing and sale of the Company's products could expose the Company to liability claims. The Company currently has product liability insurance which, the Company believes, is adequate for its current activities. There can be no assurance, however, that the Company will be able to continue to obtain such additional insurance at a reasonable cost, if at all, or that such insurance would be sufficient to cover any liabilities resulting from any product liability claims, or that the Company will have funds available to pay any claims over the limits of its insurance. Either an underinsured or an uninsured claim could have a material adverse effect on the Company's business, operating results, and financial condition.

Need to Manage a Changing Business

The Company's business has experienced certain developments during 1998, which have resulted in several significant changes in the Company's strategy and business plan, including downsizing to what the Company considers to be the minimal level of management and employees necessary to operate a publicly traded medical device

business. The Company believes its restructured organization is appropriate to support modest growth over the next few years. However, losing any members of the management team could have an adverse effect on the Company's operations. The Company's success is dependent on its ability to attract and retain technical and management personnel with expertise and experience in the medical device business. The competition for qualified personnel in the medical device industry is intense and, accordingly, there can be no assurance that the Company will be successful in hiring or retaining the requisite personnel. The Company's future success will depend, to a significant extent, on the ability of its current and future management personnel to operate effectively. There can be no assurance that the Company's personnel, systems, procedures, and controls will be adequate to support the Company's future operations. Any failure to implement and improve the Company's operational, financial, and management systems or to expand, train, motivate or manage employees could have a material adverse effect on the Company's business, financial condition, and results of operations. The Company's future success will depend, in part, on management's ability to manage future growth, and there can be no assurance that these efforts will be successful. See "Item 9. Directors, Executive Officers, Promoters, and Control Persons; Compliance with Section 16(a) of the Exchange Act."

Anti-Takeover Provisions

The Company has adopted a Shareholder Rights Plan. Certain provisions of the Shareholder Rights Plan and certain of the Company's charter provisions and applicable corporate laws could be used to hinder or delay a takeover bid for the Company. Such provisions may inhibit takeover bids and decrease the chance of stockholders realizing a premium over market price for their Common Stock as a result of a takeover. The Board amended the Shareholder Rights Plan in February 1999, to permit an equity investment in the Company.

Blank Check Preferred Stock

The Company's Certificate of Incorporation authorizes the issuance of "blank

check" preferred stock with such terms as may be set by the Board of Directors. 500,000 shares of preferred stock have been designated as Series A Junior Participating Preferred Stock and reserved for issuance under the Company's Shareholder Rights Plan. If the Company issues preferred stock, the issuance could be used to thwart a takeover bid and may have a dilutive effect upon the Company's common stockholders. On February 16, 1999, the Company issued $3.0 million of 5% Series B Convertible Preferred Stock in a private placement. The Company has the option to sell an additional $3.0 million Series B Preferred Stock in the fourth quarter, at the earliest, subject to several conditions, including shareholder approval of the transaction, and meeting operating revenue and stock price targets. However, there can be no assurances that the transaction will be approved by the shareholders or that the Company will be able to achieve the required targets and close the additional placement on a timely basis, on terms acceptable to the Company, or at all. If the shareholders do not approve the transactions, the Company will be required to redeem the preferred stock for $3.6 million. If this were to come to pass, the Company would be in severe financial straights and might not be able to continue operations. The terms of the Company's 5% Series B Convertible Preferred Stock allow the holders to convert it into Common Stock at $1.03 per share. The conversion price will be decreased to market values if the Common Stock is trading at less than $1.03 per share subject to a floor price of $0.55 per share. The dilutive effect of this provision could have a negative impact on shareholders of the Company if the market price of Common Stock begins to decline.

No Dividends

The Company has never paid dividends on its Common Stock. The Company intends to retain any future earnings to finance its growth. Accordingly, any potential investor who anticipates the need for current dividends from its investment should not purchase any of the Common Stock offered hereby. See "Item 5. Market for Common Equity and Related Stockholders Matters."

ITEM 2. DESCRIPTION OF PROPERTY

The Company currently leases its office at 425 Metro Place North, Dublin, Ohio. The Company executed a lease agreement, commencing on January 1, 1997 and ending in May 2003, with the landlord of these facilities for

approximately 25,000 square feet. The lease provides for a monthly base rent of approximately $21,700 in 1999 and increases to $26,000. During December, 1998, and February, 1999, the Company executed two lease agreements to sublease approximately 2,600 square feet and 4,600 square feet of the Company's office space, respectively. The two subleases are expected generate monthly sublease income of approximately $5,000 in 1999 and increases to $6,000 per month in 2003. The Company and its subtenants must also pay a pro-rata portion of the operating and real estate taxes of the building. Neoprobe believes these facilities are in good condition and will be adequate for its needs for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS

In June 1996 a lawsuit against the Registrant was terminated by dismissal. The Registrant was named as an additional party defendant in the In Re Blech Securities litigation pending in the United States District Court for the Southern District of New York before Judge Robert Sweet in March 1995. The plaintiffs were eight named individuals who were alleged to be representatives of a class of securities purchasers. The defendants included David Blech, who was a principal stockholder of the Registrant until September 1994, Mark Germain, who was a director of the Registrant until September 1994, D. Blech & Co., a registered broker-dealer owned by Mr. Blech, trustees of certain trusts established by Mr. Blech, Bear Stearns & Co., Baird Patrick & Co., Parag Saxena and Chancellor Capital Corp., as well as the Registrant and 10 other corporations of which Mr. Blech was a principal stockholder (the "Corporate Defendants"). The complaint alleged that David Blech and D. Blech & Co. conducted a scheme intended to artificially inflate the prices of securities issued by corporations Mr. Blech controlled; that Mr. Blech, D. Blech & Co. and corporations controlled by Mr. Blech gave or sold cheap stock to fund managers

in order to induce them to participate in this scheme; and that David Blech, his trusts, D. Blech & Co., Baird Patrick, Bear Stearns, the Corporate Defendants and unnamed other persons engaged in sham transactions, including "round trip" sales, for the purpose of artificially inflating trading volumes and securities of corporations controlled by Mr. Blech and maintaining their trading prices. The complaint alleged that David Blech was the controlling person and Mark Germain was a director of the Corporate Defendants, and that the knowledge and participation of Messrs. Blech and Germain in the alleged scheme were the responsibility of the Corporate Defendants. The complaint also alleged that the Corporate Defendants actively engaged in the alleged scheme and benefited from it. The complaint further alleged that all of the defendants engaged in a conspiracy to manipulate the market, and failed to disclose truthful information about the true value of securities issued by corporations controlled by Mr. Blech. The complaint alleged violations of Securities and Exchange Commission Rule 10b-5 and common law fraud by all defendants, violations of the Racketeer Influenced Corrupt Organizations Act (RICO) by defendants other than the Corporate Defendants and liability under Securities Exchange Act 20(a), as the liability of controlling persons, by Messrs. Blech and Germain and D. Blech & Co., Baird Patrick and Bear Stearns. The amount of damages requested was not specified in the complaint. In June 1996, Judge Sweet dismissed the allegations against the Registrant and the other Corporate Defendants because the plaintiffs had failed to identify the alleged fraudulent acts of the Registrant and the other Corporate Defendants with the specificity required by federal law. The dismissal terminated the action against the Registrant without any findings of liability against Registrant in July 1996. The Judge's order can still be appealed, and the time for appeal will not begin to run until a final judgment has been entered in the entire multi-party proceeding.

The Company has one case, "Della Jules Bryant v. Neoprobe Corporation", pending before the Court of Appeals for the State of Ohio. Ms. Bryant filed a complaint on July 18, 1997 in Ohio Common Please Court against Neoprobe alleging racial discrimination. On June 10, 1998, the trial judge granted Neoprobe's motion for summary judgment. The plaintiff has appealed.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

SUPPLEMENTAL ITEM. EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of the Company and their ages and positions are as follows:

<TABLE>
<CAPTION>

Name	Age	Position
Matthew F. Bowman	48	Senior Vice President, Operations and Marketing
David C. Bupp	49	President, Chief Executive Officer and Director
Patricia A. Coburn	54	Vice President, General Counsel
Brent L. Larson	35	Vice President, Chief Financial Officer

</TABLE>

Matthew F. Bowman has served as Senior Vice President, Operations and Marketing of the Company since February 1998. From June 1996 until February 1998, Mr. Bowman served as Vice President, Therapeutics of the Company. Prior to his employment with the Company, Mr. Bowman was employed by Pharmacia Inc. ("Pharmacia") where he served as Vice President of the Therapeutic Products Division from 1995 to 1996 and as Senior Director, Therapeutics, from 1993 to

1995. From 1988 to 1993, Mr. Bowman was employed by Adria Laboratories, Inc. ("Adria") where, in 1993, he served as Senior Director, New Business Development and Licensing, from 1990 to 1992, he served as Director, New Business Development and Licensing, and, from 1988 to 1990, he served as Associate Director, New Business Development. Mr. Bowman has a B.A. degree in Political Science from The Citadel.

David C. Bupp has served as President and a director of the Company since August 1992 and as Chief Executive Officer since February 1998. From August 1992 until February 1998, Mr. Bupp served as Chief Operating Officer of the Company. From August 1992 to May 1993, Mr. Bupp served as Treasurer of the Company. In addition to the foregoing positions, from December 1991 to August 1992, he was Acting President, Executive Vice President, Chief Operating Officer and Treasurer, and from December 1989 to December 1991, he was Vice President, Finance and Chief Financial Officer. From 1982 to December 1989, Mr. Bupp was Senior Vice President, Regional Manager for AmeriTrust Company National Association, a nationally chartered bank holding company, where he was in charge of commercial banking operations throughout Central Ohio. Mr. Bupp has a B.A. degree in Economics from Ohio Wesleyan University. Mr. Bupp completed a course of study at Stonier Graduate School of Banking.

Patricia A. Coburn has served as Vice President, General Counsel of the Company since February 1998. From August 1996 until February 1998, Ms. Coburn served as Legal Counsel of the Company. Prior to her employment with the Company, Ms. Coburn was employed by Pharmacia from 1994 until May 1996 where she served as Assistant General Counsel. From September 1986 until 1994, Ms. Coburn was employed by Adria where she served as Director, Intellectual Property until 1994 when Adria was acquired by Pharmacia. Ms. Coburn received a B.S. degree from the University of Cincinnati in 1969 and a J.D. from the University of Toledo in 1977.

Brent L. Larson has served as Vice President, Chief Financial Officer since February, 1999. Mr. Larson served as Vice President, Finance from June 1998 to February 1999 and as Controller from July 1996 to June 1998. Prior to joining Neoprobe, Mr. Larson was employed by Price Waterhouse LLP. Mr. Larson has a B.B.A. degree in accounting from Iowa State University of Science and Technology and is a Certified Public Accountant.

PART II

ITEM 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The Common Stock of the Company trades on The Nasdaq Stock Market under the trading symbol "NEOP". The prices set forth below reflect the high and low sale prices for shares of Common Stock during the last two fiscal years as reported by The Nasdaq National Market.

	HIGH	LOW
Fiscal Year 1997		
First Quarter	$18.25	$12.88
Second Quarter	16.00	12.25
Third Quarter	15.00	10.50
Fourth Quarter	14.44	5.50
Fiscal Year 1998		
First Quarter	$ 6.75	$ 4.00
Second Quarter	6.56	2.38
Third Quarter	3.06	0.75
Fourth Quarter	2.50	0.44

As of March 19, 1999, the Registrant had approximately 678 holders of Common Stock of record.

The Company has not paid any dividends on its Common Stock and does not anticipate paying cash dividends in the foreseeable future. The Company intends

to retain any earnings to finance the growth of its business. There can be no assurance that the Company will ever pay cash dividends. The terms of the Company's 5% Series B Convertible Preferred Stock forbid the Company from paying any dividends on its Common Stock until it has paid a special dividend of $100 per share plus any portion of the accrued 5% cumulative dividend. This would amount to at least $3 million, a sum that the Company is unlikely to be able to use for this purpose in the foreseeable future, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Recent Sales of Unregistered Securities

The following sets forth certain information regarding the sale of equity securities of the Company during the period covered by this Report that were not registered under the Securities Act of 1933.

In July 1998, the Board of Directors of the Company authorized the issuance of 2,893 shares of common stock to the trustees of its 401(k) employee benefit plan without registration. Such issuance is exempt from registration under the Act under Section 3(a)(2). The Plan is a pension, profit sharing or stock bonus plan that is qualified under Section 401 of the Internal Revenue Code. The assets of the Plan are held in a single trust fund for the benefit of the employees of the Company which does not hold assets for the benefit of the employees of any other employer. All of the contributions to the plan from employees of Neoprobe have been invested in assets other than Common Stock. All of the Common Stock held by the plan has been contributed to the plan by the Company as a matching contribution and has been less in value at the time it was contributed to the plan than the employee contributions which it matches.

ITEM 6. SELECTED FINANCIAL DATA

The following summary financial data are derived from consolidated financial statements of the Company which have been audited by the Company's independent public accountants. These data are qualified in their entirety by, and should be read in conjunction with, the Company's Consolidated Financial Statements and Notes thereto included herein.

<TABLE>
<CAPTION>

(Amounts in thousands, except per share data)	Years Ended December 31,				
	1994	1995	1996	1997	1998
<S>	<C>	<C>	<C>	<C>	<C>
Statement of Operations Data:					
Net sales	$ 933	$ 960	$ 1,171	$ 5,128	$ 5,833
Gross profit	345	454	494	3,552	4,428
Research and development expenses	6,761	7,829	16,083	19,657	12,960
Marketing and selling expenses			1,532	4,307	5,268
General and administrative expenses	4,313	4,148	6,222	6,853	5,284
Loss related to subsidiaries in liquidation	--	--	--	--	9,385
Loss from operations	(10,730)	(11,523)	(23,342)	(27,265)	(28,468)
Other income	175	764	2,373	4,018	436
Net loss	$(10,555)	$(10,759)	$(20,969)	$(23,247)	$(28,033)
Net loss per common share from continuing Operations (basic and diluted)(1)	$ (1.18)	$ (0.73)	$ (1.06)	$ (1.02)	$ (1.23)
Shares used in computing net loss per					

Common share (1)	8,926	14,726	19,743	22,735	22,842

</TABLE>

<TABLE>
<CAPTION>

	As of December 31,				
	1994	1995	1996	1997	1998
<S>	<C>	<C>	<C>	<C>	<C>
Balance Sheet Data:					
Total assets	$ 7,839	$ 24,145	$ 63,873	$ 41,573	$ 11,994
Long-term obligations	300	1,182	1,009	2,069	156
Accumulated deficit	(32,387)	(43,147)	(64,116)	(87,363)	(115,395)

</TABLE>

(1) Net loss per common share is based on the weighted average number of common shares outstanding during the year. The loss per share for all periods presented excludes the number of common shares issuable upon the conversion of preferred stock and the number of shares issuable upon exercise of outstanding stock options and warrants since such inclusion would be anti-dilutive.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The statements contained in this Management Discussion and Analysis of Financial Condition and Results of Operations and other parts of this Report that are not purely historical or which might be considered an opinion or projection concerning the Company or its business, whether express or implied, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may include statements regarding the Company's expectations, intentions, plans or strategies regarding the future which involve risks and uncertainties. All forward-looking statements included in this document are based on information available to the Company on the date hereof, and the Company assumes no obligation to update any such forward looking statements. It is important to note that the Company's actual results in 1999 and future periods may differ significantly from the prospects discussed in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, limited revenues, continuing net losses, accumulated deficit, future capital needs, uncertainty of capital funding, competition, limited marketing experience, limited manufacturing experience, dependence on principal product line, uncertainty of market acceptance, patents, proprietary technology and trade secrets, government regulation, risk of technological obsolescence, limited third party reimbursement, product liability, need to manage a changing business, possible volatility of stock, anti-takeover provisions, dependence on key personnel, and no dividends.

BUSINESS ENVIRONMENT

Operating activities related to the Company's medical device business to-date have been predominantly related to the United States which enjoyed overall strong economic conditions during 1998 despite concerns over the impact of the Asian crisis on the U.S. market. The medical device industry appears to be experiencing growth consistent with other U.S. economic conditions. According to the U.S. Health Manufactures Association ("HIMA"), the U.S. market for medical devices grew 8% in 1998 over 1997. HIMA estimates a 7% growth rate for medical devices in the U.S. in 1999. HIMA also expects that emerging markets will

account for nearly 16% of the global medical technology market by the end of the year. Neoprobe intends to take advantage of growth in Asian and South American markets through expanding its distributor relationships in these markets.

LIQUIDITY AND CAPITAL RESOURCES

Financing Activities. During 1996, 1997, and 1998, the Company raised net proceeds of $50 million, $717,000 and $196,000, respectively, through the public and private sale of equity securities. On February 16, 1999, the Company completed the private placement of $3.0 million of convertible preferred stock. The Company has the option to close on an additional $3.0 million placement of convertible preferred stock in the fourth quarter of 1999, at the earliest, subject to the completion of several conditions, including shareholder approval of the transaction and meeting certain sales and stock performance targets. However, there can be no assurances that the transaction will be approved by the shareholders or that the Company will be able to achieve the required targets and close the additional placement on a timely basis, at terms acceptable to the Company, or at all. If the shareholders do not approve the transactions, the Company will be required to redeem the preferred stock for $3.6 million. If this were to come to pass, the Company would be in severe financial straights and might not be able to continue operations.

Investing Activities. During 1996, 1997, and 1998, the Company made capital investments in property and equipment of $3.6 million, $4.7 million and $3.4 million, respectively. The majority of these capital investments related to the construction of a radiolabeling facility at Neoprobe (Israel) Ltd.

The Company determined during the second quarter of 1998, that Neoprobe Europe was no longer needed to implement the Company's business plan, and put Neoprobe Europe up for sale. During October 1998, the Company reached an agreement to sell substantially all of the assets of Neoprobe Europe to a Swedish company which paid the Company $125,000 and assumed certain contractual obligations of Neoprobe Europe, such as the lease commitment. To account for the sale, the Company recorded a provision of approximately $2.0 million during the

third quarter of 1998, principally to write down the remaining assets of Neoprobe Europe to their estimated realizable value. At December 31, 1998, the Company has adopted the liquidation basis of accounting for Neoprobe Europe. Accordingly, the consolidated balance sheet includes approximately $150,000 in current assets of Neoprobe Europe at their net realizable value, and $70,000 in liabilities at the amounts expected to settle the obligations due. Included in operating results of subsidiaries in liquidation for 1998 is $1.7 million related to the non-cash impairment of assets, $235,000 related to severance and exit costs, and $1.2 million of losses from operations incurred prior to the decision to liquidate.

Neoprobe Israel was founded by the Company and Rotem Industries Ltd. ("Rotem") in 1994 to construct and operate a radiolabeling facility near Dimona, Israel. Rotem, the private arm of the Israeli atomic energy authority, currently has a 5% equity interest in Neoprobe Israel and has the right to acquire an additional 4% under certain conditions related to the completion of the facility. Based on the status of the Company's marketing applications in the U.S. and Europe, and the Company's inability to find a development partner for its RIGS products, the Company decided during 1998 to suspend construction and validation activities at Neoprobe Israel. Following suspension of RIGS development activities at Neoprobe Israel and unsuccessful attempts to market the facility, the Company initiated actions during the fourth quarter of 1998 to liquidate Neoprobe Israel. The Company has, therefore, adopted the liquidation basis of accounting for Neoprobe Israel as of December 31, 1998. As the Company may relinquish ownership of the facility to the bank if a suitable buyer cannot be found on a timely basis, the Company has written down the value of the fixed assets of the facility and reduced the recorded balance of the related debt to zero on the basis that the bank would assume ownership of the facility under the collateralization terms of the debt agreement. Accordingly, the consolidated balance sheet includes approximately $555,000 in current assets of Neoprobe Israel at their net realizable value and $876,000 in liabilities at the amounts expected to settle the obligations due. Included in operating results of subsidiaries in liquidation for 1998 is $5.1 million related to the primarily non-cash

adjustment of assets and liabilities to their net realizable value, $79,000 related to severance and other exit costs, and $1.0 million related to losses from operations incurred prior to the decision to liquidate.

Operating Activities. During 1996, 1997, and 1998, the Company experienced net losses of $21.0 million, $23.2 million, and $28.0 million, respectively. During each of these three years, substantially all of the Company's efforts and resources were devoted to research and clinical development of innovative systems for the intraoperative diagnosis and treatment of cancers. These efforts were principally related to the Company's proprietary RIGS system; however, efforts during 1997 and 1998 also included activities related to development of ILM-related products. To-date, the Company has financed its operations primarily through the public and private sale of equity securities.

Operational Outlook. The Company's only approved products are instruments and related products used in gamma guided surgery. The Company does not currently have a RIGS drug or ACT product approved for commercial sale in any major market. Based on the Company's modified business plan that focuses Company resources on ILM, the Company does not anticipate commercial sales of sufficient volume to generate positive cash flow from operations until late fiscal year 1999, at the earliest. The Company has incurred, and will continue to incur, substantial expenditures for research and development activities related to enhancing and expanding its current gamma guided surgery product portfolio and to fund marketing development in bringing its products to the commercial market. The Company currently estimates it will require approximately $5.2 million to fund research and development and general and administrative activities in 1999. The Company anticipates a significant portion of the cash necessary to fund such operating activities will be generated from sales of its gamma guided surgery products. However, there can be no assurance that any additional gamma guided surgery products will be successfully introduced, or achieve market acceptance.

As of December 31, 1998, the Company had cash and cash equivalents and available-for-sale securities of $3.5 million. Of this amount, approximately $1.0 million is pledged as security associated with the Company's revolving line of credit and $1.0 million is restricted related to the debt outstanding under the financing program for the construction of Neoprobe Israel. At December 31, 1998, the Company had access to approximately $1.5 million in unrestricted funds to finance its operating activities for 1999. In the first quarter of 1999, the Company

supplemented its cash on hand by issuing convertible preferred stock in a private placement described above under "Financing Activities." The Company currently anticipates that approximately $2.0 million in cash will be used to finance operating activities during 1999. The Company anticipates an approximate 80% increase in sales during 1999 compared to 1998, due to increased sales volumes of its gamma guided surgery products, at prices and margins similar to what has been achieved in 1998. However, there can be no assurance that current sales levels will be maintained or that increases in sales volumes and revenue will occur, or that the prices and margins achieved on instrument sales in the fourth quarter of 1998 will be maintained. The Company is attempting to sell approximately $1.5 million in non-strategic assets. However, there can be no assurance that these assets will be sold during 1999, on terms acceptable to the Company, or at all. If the Company does not receive these anticipated funds, it may need to further modify its business plan and seek other financing alternatives. Such financing may require further sales of equity securities that could be dilutive to current holders of common stock, debt financing which may be on unfavorable terms, or asset dispositions that could force the Company to further change its business plan. The Company also expects to experience cost savings during 1999, as a result of modifications to its business plan regarding RIGS and ACT.

At December 31, 1998, the Company had U.S. net operating tax loss carryforwards of approximately $95.5 million to offset future taxable income through 2018. Additionally, the Company has U.S. tax credit carryforwards of approximately $3.3 million available to reduce future income tax liability through 2018. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, use of prior tax loss and credit carryforwards is limited after an ownership change. As a result of ownership changes as defined by Sections 382 and 383, which have occurred at various points in the Company's history, management believes utilization of the Company's tax loss carryforwards and tax credit carryforwards

may be limited. The Company's international subsidiaries also have net operating tax loss carryforwards in their respective foreign jurisdictions. However, as the Company is in the process of liquidating its interests in both foreign subsidiaries as of December 31, 1998, the Company does not anticipate that the foreign loss carryforwards will be utilized within their respective jurisdictions.

The Company has executed various agreements with third parties that supplement the technical and marketing capabilities of the Company. The Company is generally obligated to such parties to pay royalties or commissions upon commercial sale of the related product. The Company's estimate of its allocation of cash resources is based on the current state of its business operations, its current business plan, and current industry and economic conditions, and is subject to revisions due to a variety of factors including without limitation, additional expenses related to marketing and distribution, regulatory licensing and research and development, and to reallocation among categories and to new categories. The Company may need to supplement its funding sources from time to time.

Impact of Recent Accounting Pronouncements. In June 1998, the Financial Accounting Standard Board issued Statement of Financial Accounting Standards ("SFAS") No. 133, Accounting for Derivative Instruments and Hedging Activities, which is required to be adopted in years beginning after June 15, 1999. The Company expects to adopt SFAS No. 133 effective January 1, 2000. The Statement will require companies to recognize all derivatives on the balance sheet at fair value. Derivatives that are not hedges must be adjusted to fair value through income. If a derivative is a hedge, depending on the nature of the hedge, changes in the fair value of the derivative will either be offset against the change in fair value of the hedge asset, liability or firm commitment through earnings, or recognized in other comprehensive income until the hedge item is recognized in earnings. The ineffective portion of a derivative's change in fair value will be immediately recognized in earnings. The Company does not anticipate that the adoption of this Statement will have a significant effect on its results of operations or financial position.

Y2K. As many computer systems and other equipment with embedded chips or processors (collectively, "Business Systems") use only two digits to represent the year, they may be unable to process accurately certain data before, during or after the year 2000. As a result, business and governmental entities are at risk for possible miscalculations or system failures causing disruptions in their business operations. This is commonly known as the Year 2000 ("Y2K") issue or Century Date Change ("CDC") issue. The CDC issue can arise at any point in the Company's supply, manufacturing, distribution, and financial chains. The Company is in the process of implementing an

assessment and readiness plan with the objective of having all its significant internal Business Systems functioning properly with respect to the Y2K issue before January 1, 2000, and minimizing the possible disruptions to the Company's business which could result from the Y2K problem.

As part of its readiness plan, the Company is in the process of conducting a company-wide assessment of its Business Systems to identify elements that are not Y2K compliant. Based on assessment activity to date, the Company presently believes that the majority of its critical Business Systems have been purchased and installed in recent years and are already Y2K compliant. The Company's internal Business Systems do not have internally generated programmed software coding to correct, as substantially all of the software utilized by the Company has been recently purchased or licensed from external vendors. At the completion of the assessment phase, the Company intends to perform comprehensive testing of its Business Systems in early 1999.

Those Business Systems that are not presently Y2K compliant are anticipated to be replaced, upgraded or modified in the normal replacement cycle prior to 2000. The Company estimates the total cost to the Company of completing any required modifications, upgrades, or replacements of its internal systems will not have a material adverse effect on the Company's business. This estimate is being monitored and will be revised, as additional information becomes available.

The Company has also initiated communications with third parties whose Business

Systems functionality could impact the Company. These communications will facilitate coordination of Y2K solutions and will permit the Company to determine the extent of which it may be vulnerable to failures of third parties to address their own Y2K issues. Because the manufacturing and distribution of the Company's products are almost entirely outsourced to other entities, the failure of these third parties to achieve Y2K compliance could have a material impact on the Company's business, financial position, results of operations and cash flows. The Company has attempted, where possible, to establish contractual requirements for Y2K compliance by such third parties. However, the Company has limited control over the actions of these third parties on which the Company directly or indirectly places reliance. There can be no guarantee that such systems that are not now Y2K compliant will be timely converted to Y2K compliance.

The Company has also assessed the potential Y2K related exposure it may have with respect to gamma detection instrumentation which it has delivered to customers. The Company does not believe products it has distributed to date or that may be distributed in the future face any significant Y2K problems which will affect their functionality or utility by the customer.

The Company does not yet have a comprehensive contingency plan with respect to the Y2K issue but intends to establish such a plan during calendar 1999 as part of its ongoing Y2K compliance effort.

The foregoing assessment of the impact of the Y2K problem on the Company is based on management's best estimates at the present time and could change substantially. The assessment is based on numerous assumptions as to future events. There can be no guarantee that these estimates will prove accurate, and actual results could differ from those estimates if these assumptions prove inaccurate.

RESULTS OF OPERATIONS

Since inception, the Company has dedicated substantially all of its resources to research and development of its RIGS technology for the intraoperative diagnosis and treatment of cancer. Until the appropriate regulatory approvals are received, the Company is limited in its ability to generate revenue from these sources. During 1998, the Company generated sales of gamma detection instruments of $5.8 million. Results of operations for the year include approximately $1.2 million in costs associated with the restructuring domestic operating activities of the Company during 1998 in addition to $9.4 million in expenses which were recorded related to placing its two international subsidiaries in liquidation.

Research and development expenses during 1998 were $13.0 million, or 53% of operating expenses for the year. Marketing and selling expenses were $5.3 million, or 16% of operating expenses during the year, and general and

administrative expenses were $5.1 million, or 16% of operating expenses for the year. The Company recorded $9.3 million in charges during 1998 related to the third quarter decision to close Neoprobe Europe and the fourth quarter decision to shut down the facility at Neoprobe Israel. The Company anticipates that 1999 total operating expenses will decrease over 1998. The Company expects research and development and general and administrative expenses to decrease from 1998 levels as a result of the modifications to the business plan adopted during the fourth quarter of 1998. However, the Company also expects marketing and selling expenses to increase from 1998 levels although such expenses are expected to decrease as a percentage of sales.

Years ended December 31, 1997 and 1996.

Revenue. Net sales increased $3.9 million or 325% to $5.1 million in 1997 from $1.2 million in 1996. In 1997, net sales included instrument sales of $5 million and sales of blood serology products of $125,000. In 1996, net sales included instrument sales of $780,000 and sales of blood serology products of $391,000. Instrument sales increased as a result of the introduction of the Neoprobe 1500 system and the continuing growth of the lymphatic mapping technique. Sales of serology products at Neoprobe Europe continued to decrease as a result of the Company's efforts to develop the long-term production capacity for targeting

agents.

Research and Development Expenses. Research and development expenses increased $3.6 million or 22% to $19.7 million in 1997 from $16.1 million in 1996. The increase is a result of a substantial increase in instrument development and design and in manufacturing validation activities during 1997. Clinical trial costs decreased during the year as clinical trial activity related to RIGScan CR49 declined following the submission of applications to regulatory bodies for marketing approval. The decline in costs related to RIGScan CR49 was partly offset by an increase in costs related to the development of ACT technology during the period.

Marketing and Selling Expenses. Marketing and selling expenses increased $2.8 million or 187% to $4.3 million in 1997 from $1.5 million in 1996. The increase was directly related to increased instrument sales during the year. The Company was obligated to pay a commission to USSC for devices sold through the termination of the Company's agreement with USSC in October 1997. In addition, the Company hired additional marketing staff during the period to support the lymphatic mapping business.

General and Administrative Expenses. General and administrative expenses increased $630,000 or 10% to $6.9 million in 1997 from $6.2 million in 1996. The increase was primarily a result of growth in staff and increased costs for rent, leases, taxes, and other expenses. Other expenses increased primarily as a result of greater travel and insurance costs.

Other Income. Other income increased $1.6 million or 67% to $4 million in 1997 from $2.4 million in 1996. Other income in 1997 consisted of interest income of $2.2 million and miscellaneous income of $2 million representing recognition of income of a license fee received from USSC, net of interest and other expenses. During 1996, other income was $2.4 million and represented primarily interest income earned during the period.

Years ended December 31, 1998 and 1997

Revenue and Other Income. Net sales increased $705,000 or 14% to $5.8 million during 1998 from $5.1 million during 1997. Net sales in both years were composed almost entirely of instrument sales. Instrument sales in 1997 reflect contributions from the Company's marketing arrangement with USSC which was terminated in October 1997. Instrument sales during 1998 were based on leads generated primarily by the Company's clinical specialists' sales force with assistance from representatives of Ethicon Endo-Surgery ("EES"), a Johnson & Johnson company, subsequent to initial training of EES representatives in June 1998.

Research and Development Expenses. Research and development expenses decreased $6.7 million or 34% during 1998 to $13 million from $19.7 million in 1997, excluding approximately $1.5 million in 1998 research and development costs related to Neoprobe Europe and Neoprobe Israel which were reclassified to losses related to subsidiaries in liquidation in connection with the adoption of the liquidation basis of accounting for these subsidiaries during the fourth quarter of 1998. The decrease reflects the Company's efforts to reduce costs

consistent with the refocused business plan announced in February 1998, which was further modified in the third and fourth quarters of 1998. Research and development costs in 1998 include approximately $1 million related to severance and other separation-related costs and an impairment charge of $1 million related to technology licensed from the Dow Chemical Company. Such costs were offset by decreases in project expenses related to RIGScan CR49 pending identification of a development partner and decreases in instrument-related project expenses due to the wind-down of the design phase of neo2000 and related products. Pipeline projects also decreased related to the refocused business plan.

Marketing and Selling Expenses. Marketing and selling expenses increased by $960,000 or 22% to $5.3 million in 1998 from $4.3 million in 1997. The increase in marketing expenses during 1998, as compared to the same period in 1997, relates to an increased marketing effort to meet competitive pressure and

further penetrate the ILM market. The increased expenses were the result of a greater number of sales and marketing personnel in 1998, coupled with relative increases in travel and entertainment as well as promotional costs associated with the launch of new products.

General and Administrative Expenses. General and administrative expenses decreased $1.6 million or 23% to $5.2 million for 1998 from $6.8 million in 1997, excluding $1.0 million in 1998 general and administrative costs related to Neoprobe Europe and Neoprobe Israel which were reclassified to losses related to subsidiaries in liquidation in connection with the adoption of the liquidation basis of accounting for these subsidiaries during the fourth quarter of 1998. Severance and other overhead and employee separation costs of $160,000 related to 1998 restructuring activities were offset by an overall lower headcount during 1998 as compared to 1997.

Losses related to Subsidiaries in Liquidation. Losses related to subsidiaries in liquidation increased to $9.4 million in 1998 from $0 in 1997. This increase is due to changes in the Company's business plan which occurred throughout 1998 that ultimately resulted in the shutdown of both of the Company's international subsidiaries, Neoprobe Europe and Neoprobe Israel. Related to the decision to shutdown operations at these subsidiaries, the Company adopted the liquidation basis of accounting for both subsidiaries as of December 31,1998. Included in operating results of subsidiaries in liquidation for 1998 is $1.7 million related to the non-cash impairment of assets, $235,000 related to severance and exit costs, and $1.2 million of losses from operations incurred prior to the decision to liquidate Neoprobe Europe. Included in operating results of subsidiaries in liquidation for 1998 is $5.1 million related to the primarily non-cash adjustment of assets and liabilities to their net realizable value, $79,000 related to severance and other exit costs, and $1.0 million related to operations incurred prior to the decision to liquidate Neoprobe Israel.

Other Income. Other income during 1998 and 1997 was $436,000 and $4.0 million, respectively. Other income in 1998 was comprised primarily of interest income of $598,000 compared to interest income in 1997 of $2.2 million, both of which were offset by interest expenses on the Company's outstanding debt. The change in interest income is the result of lower overall funds available for investment in 1998. Other income in 1997 also included miscellaneous income of $2 million representing recognition of income of a license fee received from USSC.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company does not currently use derivative financial instruments, such as interest rate swaps, to manage its exposure to changes in interest rates for its debt instruments or investment securities. As of December 31, 1997 and 1998, the Company had outstanding debt instruments of $2.4 million and $1.5 million, respectively. Outstanding debt consisted primarily of variable rate long-term debt and a variable rate line of credit as of December 31, 1997 and 1998, respectively, with average interest rates of 7% for both years. At December 31, 1997 and 1998, the fair market values of the Company's debt instruments approximated their carrying values. A hypothetical 100-basis point change in interest rates would not have a material effect on cash flows, income or market values.

The Company has maintained investment portfolios of available-for-sale corporate and U.S. government debt securities purchased with proceeds from the Company's public and private placements of equity securities. The market value of these investments at December 31, 1997 and 1998 was approximately $14.7 million and $449,000,

respectively. A hypothetical 10% decrease in the prices for these securities at December 31, 1998 would decrease the fair value by approximately $45,000.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements of the Company, and the related notes, together with the reports of KPMG LLP and PricewaterhouseCoopers LLP dated March 29, 1999 and February 20, 1998, respectively, are set forth at pages F-1 through F-24 attached hereto.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

On December 1, 1998, after discussions between the Registrant and PricewaterhouseCoopers LLP ("PWC"), the Registrant's principal accountant, the parties agreed that PWC would not conduct the Registrant's 1998 fiscal year-end audit. Discussions between the parties were initiated by PWC; however, during the Registrant's two most recent fiscal years and subsequent interim periods, no reports or financial statements issued by PWC contained an adverse opinion or disclaimer or were qualified or modified as to uncertainty, audit scope or accounting principles. Further, during the Registrant's two most recent fiscal years and subsequent interim periods, there were no disagreements between the Registrant's management and PWC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PWC would have caused PWC to make reference to the subject matter of the disagreements in connection with PWC's reports. KPMG LLP was engaged as the Company's principal accountant on December 8, 1998.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

Information regarding the Registrant's directors will be set forth at "ELECTION OF DIRECTOR" in the Registrant's Proxy Statement for its 1999 Annual Meeting of Shareholders (the "1999 Proxy Statement") which information is incorporated herein by reference. Information required by this Item concerning compliance with Section 16(a) of the Exchange Act will be set forth at "SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE" in the 1999 Proxy Statement which information is incorporated herein by reference. Information regarding the Registrant's executive officers is set forth in PART I of this report at "Supplemental Item. Executive Officers of the Registrant."

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item will be set forth at "COMPENSATION OF MANAGEMENT" in the 1999 Proxy Statement which information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The information required by this item will be set forth at "SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS, DIRECTORS, NOMINEES AND EXECUTIVE OFFICERS" in the 1999 Proxy Statement which information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information required by this item will be set forth at "CERTAIN TRANSACTIONS" in the 1999 Proxy Statement which information is incorporated herein by reference.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.

(A) LIST OF EXHIBITS AND FINANCIAL STATEMENTS FILED AS PART OF THIS REPORT

(3) ARTICLES OF INCORPORATION AND BY-LAWS

3.1. Complete Restated Certificate of Incorporation of Neoprobe Corporation, as corrected February 18, 1994 and as amended June 27, 1994, July 25, 1995, June 3, 1996 and March 17, 1999.

3.2. Amended and Restated By-Laws, dated July 21, 1993, as amended July 18, 1995 and May 30, 1996 (incorporated by reference to Exhibit 99.4 to the June 1996 Form 8-K).

(4) INSTRUMENTS DEFINING THE RIGHTS OF HOLDERS, INCLUDING INDENTURES

4.1. See Articles FOUR, FIVE, SIX and SEVEN of the Restated Certificate of Incorporation of the Registrant (see Exhibit 3.1).

4.2. See Articles II and VI and Section 2 of Article III and Section 4 of Article VII of the Amended and Restated By-Laws of the Registrant (see Exhibit 3.2).

4.3. Rights Agreement dated as of July 18, 1995 between the Registrant and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 1 to the registration statement on Form 8-A, Commission File No. 0-26520).

4.4. Amendment Number 1 to the Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated February 16, 1999.

(10) MATERIAL CONTRACTS (*indicates management contract or compensatory plan or arrangement).

10.1.1.--10.1.24. Reserved.

10.1.25. Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated as of July 18, 1995 (see Exhibit 4.3).

10.1.26.--10.1.30. Reserved.

10.1.31. Amendment Number 1 to the Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated February 16, 1999 (see Exhibit 4.4).

10.1.32. Preferred Stock and Warrant Purchase Agreement dated February 16, 1999 among the Registrant, The Aries Master Fund, a Cayman Island exempted company, and The Aries Domestic Fund, L.P.

10.1.33. Warrant dated February 16, 1999 for the purchase of shares to purchase Common Stock issued to The Aries Master Fund, a Cayman Island exempted company. This exhibit is one of two substantially identical instruments and is accompanied by a schedule identifying the other instrument omitted and setting forth the material details in which such instrument differs from the one filed herewith.

10.1.34. Option Units dated February 16, 1999 for the purchase of shares of 5% Series B Convertible Preferred Stock of the Registrant and warrants to purchase shares of Common Stock issued to Paramount Capital, Inc.

10.1.35. Financial Advisory Agreement dated February 16, 1999 between the Registrant and Paramount Capital, Inc.

10.1.36. Letter agreement dated February 24, 1999 among the Registrant, The Aries Master Fund, a Cayman Island Exempted Company and The Aries Domestic Fund, L.P.

10.1.37. Letter agreement dated March 12, 1999 among the Registrant, The Aries Master Fund, a Cayman Island Exempted Company and The Aries Domestic Fund, L.P.

10.2.1.-- 10.2.14. Reserved.

10.2.15. Option Agreements between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.7 to the Registrant's registration statement on Form S-1; No. 33-51446 (the "Form S-1")).*

10.2.16.--10.2.17. Reserved.

10.2.18. Non-Qualified Stock Option Agreement dated May 3, 1993 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.50 to the Registrant's Quarterly Report on Form 10--QSB for the quarterly period ended June 30, 1993; Commission File No. 0-26520 (the "2nd Quarter 1993 Form 10-QSB")).*

10.2.19.--10.2.20. Reserved.

10.2.21. Non-Qualified Stock Option Agreement dated May 3, 1993 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.53 to the 2nd Quarter 1993 Form 10-QSB).*

10.2.22. Reserved.

10.2.23. Non-Qualified Stock Option Agreement dated February 28, 1992 and amended and restated June 3, 1993 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 99.5 to Registrant's report on Form 8-K dated January 21, 1994; Commission File No. 0-26520 (the "January 1994 Form 8-K")).*

10.2.24. Non-Qualified Stock Option Agreement dated July 1, 1990 and amended and restated June 3, 1993 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 99.6 to the January 1994 Form 8-K).*

10.2.25. Non-Qualified Stock Option Agreement dated June 1, 1992 and amended and restated June 3, 1993 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 99.7 to the January 1994 Form 8-K).*

10.2.26. Amended and Restated Stock Option and Restricted Stock Purchase Plan dated March 3, 1994 (incorporated by reference to Exhibit 10.2.26 to Registrant's annual report on Form 10-KSB for the year ending December 31, 1993; Commission File No. 0-26520 (the "1993 Form 10-KSB")).*

10.2.27.--10.2.28. Reserved.

10.2.29. Non-Qualified Stock Option Agreement dated February 16, 1995 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.2.29 to the 1994 Form 10-KSB).*

10.2.30. Non-Qualified Stock Option Agreement dated February 16, 1995 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.2.30 to the 1994 Form 10-KSB).*

10.2.31. Employment Agreement dated as of January 1, 1996 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.2.31 to the Registrant's Quarterly Report on Form 10-QSB for the quarterly period ended June 30, 1996; Commission File No. 0-26520 (the "2nd Quarter 1996 Form 10-QSB")).*

10.2.32.-10.2.33. Reserved.

10.2.34. Restricted Stock Purchase Agreement dated June 5, 1996 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.2.32 to the Registrant's Annual Report on Form 10-KSB for the year ending December 31, 1997 (the

"1997 Form 10-KSB"); Commission File No. 0-26520).*

10.2.35. Restricted Stock Purchase Agreement dated June 5, 1996 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.2.35 to the 1997 Form 10-KSB).*

10.2.36. Reserved.

10.2.37. 1996 Stock Incentive Plan dated January 18, 1996 as amended March 13, 1997 (incorporated by reference to Exhibit 10.2.37 to the 1997 Form 10-K).*

10.2.38. Non-Qualified Stock Option Agreement dated January 18, 1996 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.2.38 to the 1997 Form 10-K).*

10.2.39. Non-Qualified Stock Option Agreement dated January 18, 1996 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.2.39 to the 1997 Form 10-K).*

10.2.40. Non-Qualified Stock Option Agreement dated February 3, 1997 between the Registrant and John L. Ridihalgh (incorporated by reference to Exhibit 10.2.40 to the 1997 Form 10-K).*

10.2.41. Non-Qualified Stock Option Agreement dated February 3, 1997 between the Registrant and David C. Bupp (incorporated by reference to Exhibit 10.2.41 to the 1997 Form 10-K).*

10.2.42. Reserved.

10.2.43. Agreement, Release, and Waiver dated February 23, 1998 between the Registrant and Dr. William Eisenhardt (incorporated by reference to the Registrant's quarterly report on Form 10-Q for the quarter ending March 31, 1998; Commission File No. 0-26520).*

10.2.44. Employment Agreement dated as of January 1, 1998 between the Registrant and David C. Bupp. (incorporated by reference to Exhibit 10.2.44 of the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 1998; Commission File No. 0-26520 (the "2nd Quarter 1998 Form 10-Q")).*

10.2.45. Restricted Stock Purchase Agreement between David C. Bupp and the Registrant dated May 20, 1998 (incorporated by reference Exhibit 10.2.45 to the 2nd Quarter 1998 Form 10-Q.*

10.2.46. Waiver by David Bupp dated February 16, 1999 of certain provisions in the employment agreement between the Registrant and David C. Bupp dated January 1, 1998.*

10.2.47. Severance Agreement dated October 23, 1998 between the Registrant and Matthew F. Bowman. This agreement is one of four substantially identical agreements and is accompanied by a schedule identifying the other agreements omitted and setting forth the material details in which such documents differ from the one that is filed herewith.*

10.2.48. Restricted Stock Agreement dated October 23, 1998 between the Registrant and Matthew F. Bowman. This agreement is one of three substantially identical agreements and is accompanied by a schedule identifying the other agreements omitted and setting forth the material details in which such documents differ from the one that is filed herewith.*

10.2.49. Separation Agreement dated October 21, 1998 between the Registrant and John L. Ridihalgh.*

10.3.1. Technology Transfer Agreement dated July 29, 1992 between the Registrant and The Dow Chemical Corporation (incorporated by reference to Exhibit 10.10 to the Form S-1, confidential portions of which were omitted and filed separately with the

Commission subject to an order granting confidential treatment).

10.3.2.--10.3.29. Reserved.

10.3.30. Facility Agreement dated July 17, 1995 among Registrant, Neoprobe (Israel) Ltd., and Rotem Industries, Ltd. (incorporated by reference to Exhibit 10.3.30 to Registrant's Quarterly Report on Form 10-QSB for the quarter ending September 30, 1995, Commission File No. 0-26520 (the "3rd Quarter 1995 Form 10-QSB"), confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment).

10.3.31. Cooperative Research and Development Agreement between Registrant and National Cancer Institute (incorporated by reference to Exhibit 10.3.31 to the 3rd Quarter 1995 Form 10-QSB).

10.3.32. First Amendment to Facility Agreement dated July 17, 1995 among Registrant, Neoprobe (Israel), Ltd. and Rotem Industries, Ltd (incorporated by reference to Exhibit 10.3.32 to the Registrant's Annual Report on Form 10-KSB for the year ending December 31, 1995; Commission File No. 0-26520 (the "1995 Form 10-KSB")).

10.3.33.-10.3.34. Reserved.

10.3.35. Investors' Rights Agreement dated February 5, 1996 between Registrant and XTL Biopharmaceuticals, Ltd. (incorporated by reference to Exhibit 10.3.35 to the 1st Quarter 1996 Form 10-QSB).

10.3.36. Reserved.

10.3.37 Research and Development Agreement dated February 13, 1996 between Registrant and XTL Biopharmaceuticals, Ltd. (incorporated by reference to Exhibit 10.3.37 to the 1st Quarter 1996 Form 10-QSB, confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment).

10.3.38 Sublicense Agreement dated February 13, 1996 between Registrant and XTL Biopharmaceuticals, Ltd. (incorporated by reference to Exhibit 10.3.38 to the 1st Quarter 1996 Form 10-QSB, confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment).

10.3.39.-10.3.44. Reserved.

10.3.45 License dated May 1, 1996 between Registrant and The Dow Chemical Company (incorporated by reference to Exhibit 10.3.45 to the 2nd Quarter 1996 Form 10-QSB).

10.3.46 License Agreement dated May 1, 1996 between Registrant and The Dow Chemical Company (incorporated by reference to Exhibit 10.3.46 to the 2nd Quarter 1996 Form 10-QSB, confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment).

10.3.47. License and Option Agreement between Cira Technologies, Inc. and Neoprobe Corporation dated April 1, 1998 (incorporated by reference to Exhibit 10.3.47 to the 2nd Quarter 1998 Form 10-Q).

10.3.48. Restated Subscription and Option Agreement between the Registrant, Cira Technologies, Inc., Richard G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre Triozzi and Gregory Noll, dated April 17,

1998 (incorporated by reference to Exhibit 10.3.48 to the 2nd Quarter 1998 Form 10-Q).

10.3.49. Restated Stockholders Agreement with the Registrant, Cira Technologies, Inc., Richard G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre L. Triozzi and Gregory Noll, dated April 17, 1998 (incorporated by reference to Exhibit 10.3.49 to the 2nd Quarter 1998 Form 10-Q).

10.4.1.--10.4.15. Reserved.

10.4.16. Project Management Agreement dated May 17, 1995 between Neoprobe (Israel) Ltd. and BARAN Project Construction Ltd. (incorporated by reference to Exhibit 10.4.16 to the 2nd Quarter 1995 Form 10-QSB).

10.4.17-10.4.21. Reserved.

10.4.22. Sales and Marketing Agreement dated April 21, 1998 between the Registrant and Ethicon Endo-Surgery, Inc., an Ohio corporation (incorporated by reference to Exhibit 10.4.22 to the 2nd Quarter 1998 Form 10-Q, confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment).

10.4.23. Loan Agreement between the Registrant and Bank One, NA, dated April 16, 1998 (incorporated by reference to Exhibit 10.4.23 to the 2nd Quarter 1998 Form 10-Q).

10.4.24. Variable Rate Cognovit Promissory Note, dated April 16, 1998, issued by Registrant to Bank One, NA (incorporated by reference to Exhibit 10.4.24 to the 2nd Quarter 1998 Form 10-Q).

10.4.25. Security Agreement between the Registrant and Bank One, NA, dated April 16, 1998 (incorporated by reference to Exhibit 10.4.25 to the 2nd Quarter 1998 Form 10-Q).

10.4.26. Letter amendment dated October 14, 1998 to the Sales and Marketing Agreement dated April 21, 1998 between the Registrant and Ethicon Endo-Surgery, Inc., an Ohio corporation (incorporated by reference to Exhibit 10.4.26 to the Registrant's quarterly report on Form 10-Q for the quarter ending September 30, 1998, confidential portions of which were omitted and filed separately with the Commission subject to an order granting confidential treatment; Commission File No. 0-26520 (the "3rd Quarter 1998 Form 10-Q")).

10.4.27. Promissory Note, dated September 25, 1998, issued by Registrant to Bank One, NA (incorporated by reference to Exhibit 10.4.27 to the 3rd Quarter Form 10-Q).

10.4.28. Addendum to Promissory Note dated September 25, 1998 issued by Registrant to Bank One, NA (incorporated by reference to Exhibit 10.4.28 to the 3rd Quarter Form 10-Q).

10.4.29. Covenant Agreement dated September 25, 1998 between the Registrant and Bank One, NA (incorporated by reference to Exhibit 10.4.29 to the 3rd Quarter Form 10-Q).

10.4.30. Assignment of Deposit Account dated September 25, 1998 between Registrant and Bank One, NA (incorporated by reference to Exhibit 10.4.30 to the 3rd Quarter Form 10-Q).

10.4.31. Asset Purchase Agreement dated October 14, 1998 between the Registrant, Neoprobe AB, a corporation organized and existing under the laws of Sweden, and Bioinvent Production AB, a

corporation organized and existing under the laws of Sweden (incorporated by reference to Exhibit 10.4.31 to the 3rd Quarter Form 10-Q).

10.4.32. Supply Agreement between the Registrant and eV Products dated December 8, 1997 (filed pursuant to Rule 24b-2 under which the Registrant has requested confidential treatment of certain portions of this Exhibit).

(11) STATEMENT REGARDING COMPUTATION OF PER SHARE EARNINGS.

11.1. Computation of Net Loss Per Share.

(21) SUBSIDIARIES OF THE REGISTRANT.

21.1. Subsidiaries of the Registrant.

(23) CONSENT OF EXPERTS AND COUNSEL.

(24) POWERS OF ATTORNEY.

24.1. Powers of Attorney.

24.2. Certified resolution of the Registrant's Board of Directors authorizing officers and directors signing on behalf of the Company to sign pursuant to a power of attorney.

(B) REPORTS ON FORM 8-K.

The Registrant filed a current Report on Form 8-K on December 8, 1998 to report information under Item 4. Changes in Registrant's Certifying Accountant.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 31, 1999

NEOPROBE CORPORATION
(the "Registrant")

By: /s/ David C. Bupp

David C. Bupp, President and Chief Executive Officer

Pursuant to the requirements of the Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<TABLE>
<CAPTION>

SIGNATURE	TITLE	DATE
<S>	<C>	<C>
/s/David C. Bupp	Director, President and Chief	March 31, 1999

- - ---------- David C. Bupp	Executive Officer (principal executive officer)	
/s/Brent L. Larson* - - ---------- Brent L. Larson	Vice President, Finance and Chief Financial Officer (principal financial officer)	March 31, 1999
/s/Melvin D. Booth* - - ---------- Melvin D. Booth	Director	March 31, 1999
/s/John S. Christie* - - ---------- John S. Christie	Director	March 31, 1999
/s/Julius R. Krevans* - - ---------- Julius R. Krevans	Chairman, Director	March 31, 1999
/s/Michael P. Moore* - - ---------- Michael P. Moore	Director	March 31, 1999
/s/J. Frank Whitley, Jr.* - - ---------- J. Frank Whitley, Jr.	Director	March 31, 1999
/s/James F. Zid* - - ---------- James F. Zid	Director	March 31, 1999

*By: /s/ David C. Bupp

David C. Bupp, Attorney-in-fact
</TABLE>

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

NEOPROBE CORPORATION

FORM 10-K ANNUAL REPORT

FOR THE FISCAL YEAR ENDED:

DECEMBER 31, 1998

NEOPROBE CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

December 31, 1997 and 1998

<TABLE>
<CAPTION>

ASSETS	1997	1998
Current assets:		
<S>	<C>	<C>
Cash and cash equivalents	$ 9,921,025	$ 3,054,936
Available-for-sale securities	14,672,496	448,563
Accounts receivable	793,376	2,069,633
Inventory	413,024	1,578,912
Prepaid expenses	1,211,598	720,420
Note receivable	1,500,000	--
Other current assets	789,780	147,008
Total current assets	29,301,299	8,019,472
Investment in affiliates	--	1,500,000
Property and equipment:		
Equipment	9,264,222	3,073,931
Construction in progress	3,757,133	--
	13,021,355	3,073,931
Less accumulated depreciation and amortization	(2,596,459)	(1,654,661)
	10,424,896	1,419,270
Intangible assets	1,715,834	773,863
Other assets	131,375	281,594
Total assets	$ 41,573,404	$ 11,994,199

</TABLE>

CONTINUED

NEOPROBE CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS, CONTINUED

<TABLE>
<CAPTION>

LIABILITIES AND STOCKHOLDERS' EQUITY	1997	1998
<S>	<C>	<C>
Current liabilities:		
Line of credit	$ --	$ 1,000,000
Notes payable to finance company	202,615	242,163
Capital lease obligations, current	156,140	99,539
Accounts payable	3,848,172	2,857,717
Accrued liabilities	2,743,293	2,813,321
Total current liabilities	6,950,220	7,012,740
Long-term debt	1,813,437	--
Capital lease obligations	255,355	155,816
Total liabilities	9,019,012	7,168,556
Commitments and contingencies		
Stockholders' equity:		
Preferred stock; $.001 par value; 5,000,000 shares authorized at December 31, 1997 and 1998; none issued and outstanding (500,000 shares designated as Series A, $.001 par value, at December 31, 1997 and 1998; none outstanding)	--	--
Common stock; $.001 par value; 50,000,000 shares authorized; 22,763,430 shares issued and outstanding at December 31, 1997; 22,887,910 shares issued and outstanding at December 31,1998	22,763	22,888
Additional paid-in capital	120,034,876	120,272,899
Accumulated deficit	(87,362,531)	(115,395,283)
Accumulated other comprehensive loss	(140,716)	(74,861)
Total stockholders' equity	32,554,392	4,825,643
Total liabilities and stockholders' equity	$ 41,573,404	$ 11,994,199

</TABLE>

See accompanying notes to consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

<TABLE>

<CAPTION>

	YEARS ENDED DECEMBER 31,		
	1996	1997	1998
<S>	<C>	<C>	<C>
Net sales	$ 1,171,186	$ 5,127,917	$ 5,832,695
Cost of goods sold	676,773	1,575,699	1,403,951
Gross profit	494,413	3,552,218	4,428,744
Operating expenses:			
Research and development	16,082,761	19,656,804	12,960,208
Marketing and selling	1,531,589	4,306,717	5,267,617
General and administrative	6,221,981	6,853,283	5,284,462
Losses related to subsidiaries in liquidation	--	--	9,384,753
Total operating expenses	23,836,331	30,816,804	32,897,040
Loss from operations	(23,341,918)	(27,264,586)	(28,468,296)
Other income (expenses):			
Interest income	2,179,345	2,156,795	598,834
Interest expense	(83,436)	(61,445)	(189,785)
Other	276,866	1,922,708	26,495
Total other income	2,372,775	4,018,058	435,544
Net loss	$(20,969,143)	$(23,246,528)	$(28,032,752)
Net loss per common share (basic and diluted)	$ (1.06)	$ (1.02)	$ (1.23)
Weighted average number of shares outstanding during the year	19,743,649	22,734,642	22,842,232

</TABLE>

See accompanying notes to consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

<TABLE>
<CAPTION>

	COMMON STOCK		ADDITIONAL PAID-IN	ACCUMULATED	ACCUMULATED OTHER COMPREHENSIVE	
	SHARES	AMOUNT	CAPITAL	DEFICIT	INCOME (LOSS)	TOTAL

<S>	<C>	<C>	<C>	<C>	<C>	<C>
Balance, December 31, 1995	17,334,800	$ 17,335	$ 62,964,787	$(43,146,860)	$ 213,387	$ 20,048,649
Exercise of employee stock options at $2 to $6 per share	132,075	132	553,139			553,271
Exercise of stock warrants at $3.32 to $12.60 per share	2,904,421	2,905	18,165,986			18,168,891
Issued to 401(k) plan at $3.46	5,426	5	18,792			18,797
Issued to employee in exchange for services	10,000	10	121,240			121,250
Sale of common stock at $18.50 per share, net of costs	1,750,000	1,750	30,190,777			30,192,527
Issued in exchange for technology licenses at $16.03 per share	124,805	125	1,999,875			2,000,000
Issued in exchange for note receivable and development activities at $20.25 per share	125,000	125	2,531,125			2,531,250
Issued in conversion of debentures at $5.93 per share	200,000	200	1,185,641			1,185,841
Vesting of compensatory employee options			1,562,500			1,562,500
Comprehensive income (loss):						
Net loss				(20,969,143)		(20,969,143)
Foreign currency translation adjustment					(60,446)	(60,446)
Unrealized loss on available-for-sale securities					(76,339)	(76,339)
Total comprehensive loss						(21,105,928)
Balance, December 31, 1996	22,586,527	22,587	119,293,862	(64,116,003)	76,602	55,277,048
Exercise of employee stock options at $2.50 to $15.75 per share	85,510	85	361,500			361,585
Issued to 401(k) plan at $14.61	1,672	2	24,422			24,424
Exercise of stock warrants at $3.32 to $6.05 per share	89,721	89	355,092			355,181
Comprehensive income (loss):						
Net loss				(23,246,528)		(23,246,528)
Foreign currency translation adjustment					(237,887)	(237,887)
Unrealized gain on available-for-sale securities					20,569	20,569
Total comprehensive loss						(23,463,846)
Balance, December 31, 1997	22,763,430	$22,763	$120,034,876	$ (87,362,531)	$(140,716)	$ 32,554,392
Exercise of employee stock options at $2.50 to $3.88 per share	76,587	77	196,221			196,298
Issued to 401(k) plan at $14.45	2,893	3	41,802			41,805
Issuance of restricted stock to officers	45,000	45				45
Comprehensive income (loss):						
Net loss				(28,032,752)		(28,032,752)
Foreign currency translation adjustment					56,346	56,346
Unrealized gain on available-for-sale securities					9,509	9,509
Total comprehensive loss						(27,966,897)
Balance, December 31, 1998	22,887,910	$ 22,888	$120,272,899	$ (115,395,283)	$ (74,861)	$ 4,825,643

</TABLE>

See accompanying notes to consolidated financial statements.

NEOPROBE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,		
	1996	1997	1998
<S>	<C>	<C>	<C>
Cash flows from operating activities:			
Net loss	$(20,969,143)	$(23,246,528)	$(28,032,752)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	628,015	778,663	1,081,676
Amortization of intangible assets	24,608	117,859	43,254
Provision for bad debts	--	130,660	134,249
Loss on disposal and abandonment of assets	10,199	664,068	1,266,153
Non-cash losses related to subsidiaries in liquidation	--	--	6,443,432
Non-cash expenditures for research and development	500,000	--	--
Compensation expense under restricted stock and stock option plans	1,683,750	--	--
Change in operating assets and liabilities:			
Accounts receivable	(1,002,799)	315,406	(1,410,759)
Inventory	248,734	(199,335)	(1,165,258)
Prepaid expenses and other	(566,291)	465,764	1,144,128
Accounts payable	905,883	1,404,095	(847,970)
Accrued liabilities	1,996,641	(133,131)	(105,694)
Deferred revenue	2,000,000	(2,000,000)	--
Net cash used in operating activities	(14,540,403)	(21,702,479)	(21,449,541)
Cash flows from investing activities:			
Purchases of available-for-sale securities	(50,061,144)	(13,489,774)	(1,738,512)
Proceeds from sales of available-for-sale securities	27,607,495	1,884,610	4,955,601
Maturities of available-for-sale securities	9,982,000	16,739,201	11,050,000
Purchases of property and equipment	(3,616,297)	(4,689,681)	(3,428,811)
Patent costs	(126,287)	(197,873)	(239,400)
Net cash (used in) provided by investing activities	(16,214,233)	246,483	10,598,878
Cash flows from financing activities:			
Proceeds from issuance of common stock, net	50,117,201	716,766	196,343
Proceeds from line of credit	--	--	1,275,750
Payments under line of credit	--	--	(275,750)
Proceeds from notes payable	180,242	--	--
Payment of notes payable	(153,638)	(177,039)	(228,892)
Payments under capital leases	(241,390)	(125,202)	(156,167)
Proceeds from long-term debt	1,000,687	812,750	3,129,499

Net cash provided by financing activities	50,903,102	1,227,275	3,940,783
Effect of exchange rate changes on cash	(13,027)	(18,666)	43,791
Net increase (decrease) in cash and cash equivalents	20,135,439	(20,247,387)	(6,866,089)
Cash and cash equivalents, beginning of year	10,032,973	30,168,412	9,921,025
Cash and cash equivalents, end of year	$ 30,168,412	$ 9,921,025	$ 3,054,936

</TABLE>

See accompanying notes to consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

a. ORGANIZATION AND NATURE OF OPERATIONS: Neoprobe Corporation ("the Company"), a Delaware corporation, is engaged in the development and commercialization of gamma guided surgery products for the diagnosis and treatment of cancers and other diseases. Prior to 1998, the Company had been considered to be a development stage enterprise. However, due to changes in the Company's business plan that occurred during 1998, the Company's strategic direction has changed to focus primarily on gamma guided surgery products such as the Company's line of hand-held gamma detection instruments. Management of the Company believes that the principal operations of the restructured Company commenced in 1998 as evidenced by a second year of substantial revenue from the sale of hand-held gamma detection instruments. Therefore, management believes the Company should no longer be considered a development stage enterprise.

As a result of the changes in the Company's strategic direction, the Company recorded approximately $1.2 million in severance and other employee-related exit costs, excluding severance costs of $314,000 related to subsidiaries in liquidation. At December 31, 1998, the Company has accrued approximately $242,000 related to severance costs of terminated employees.

b. FINANCIAL STATEMENT PRESENTATION:

(1) Principles of consolidation: The consolidated financial statements of the Company include the accounts of the Company and its majority-owned subsidiaries (see Note 9). All significant intercompany accounts and transactions have been eliminated in consolidation.

(2) Adoption of liquidation basis of accounting: During 1998, the Company adopted the liquidation basis of accounting for its two international subsidiaries. Accordingly, assets of these subsidiaries are stated at net realizable value, and liabilities are stated at amounts expected to settle obligations due.

c. FOREIGN CURRENCY TRANSLATION: In accordance with Statement of Financial Accounting Standards (SFAS) No. 52, Foreign Currency Translation, assets and liabilities denominated in foreign currencies are translated at current exchange rates in effect at the balance sheet dates, and revenues and expenses are translated at the average monthly exchange rate. The differences resulting from such translations are included in other comprehensive income (loss).

d. FAIR VALUE OF FINANCIAL INSTRUMENTS: The following methods and assumptions were used to estimate the fair value of each class of financial instruments:

(1) Cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities: The carrying amounts approximate fair value because of the short maturity of these instruments.

(2) Available-for-sale securities: The fair values of debt securities and equity investments are based on quoted market prices at the balance sheet date.

(3) Line of credit and notes payable to finance company: The fair value of the Company's debt is estimated by discounting the future cash flows of each instrument at rates currently offered to the Company for similar debt instruments of comparable maturities by banks or finance companies. At December 31, 1998, the carrying value of these instruments approximates fair value.

e. CASH AND CASH EQUIVALENTS: Cash equivalents of $7,227,807 and $20,691 at December 31, 1997 and 1998, respectively, consist of corporate debt securities and mortgage-backed U.S. government securities with a term of less than three months. For purposes of the statements of cash flows, cash and cash equivalents consist of demand deposits, money market funds, highly liquid debt instruments and certificates of deposit with original maturities of three months or less. At December 31, 1997 and 1998, the use of $377,652 and $993,000, respectively, of cash and cash equivalents was restricted under the terms of the Company's debt agreement financing the construction of Neoprobe (Israel) Ltd. At December 31, 1998, $1 million was pledged as security related to the Company's line of credit.

f. INVESTMENTS:

(1) Investments in affiliated companies with no readily determinable fair value of up to 20% are carried on the cost basis, and investments greater than 20%, where management has determined the Company does not exercise control, are carried on the equity basis.

(2) Available-for-sale securities are recorded at fair value. Unrealized holding gains and losses, net of the related tax effect, on available-for-sale securities are excluded from earnings and are reported as a separate component of accumulated other comprehensive income until realized. Realized gains and losses from the sale of available-for-sale securities are determined on a specific identification basis.

A decline in the market value of any available-for-sale security below cost that is deemed to be other than temporary, results in a reduction in carrying amount to fair value. The impairment is charged to earnings and a new cost basis for the security is established. Premiums and discounts are amortized or accreted over the life of the related available-for-sale security as an adjustment to yield using the effective interest method. Dividend and interest income are recognized when earned.

Information related to amortized cost and fair value of available-for-sale securities, utilizing the specific identification method, at December 31, 1997 and 1998, is provided below:

<TABLE>

<CAPTION>

1997	AMORTIZED COST	UNREALIZED GAINS(LOSSES)	FAIR VALUE
<S>	<C>	<C>	<C>
Mortgage-backed U.S. government securities	$ 993,214	$(6,508)	$ 986,706
Corporate debt securities	13,688,572	(2,782)	13,685,790
	$14,681,786	$(9,290)	$14,672,496
1998			
Mortgage-backed U.S. government securities	$ 448,344	$ 219	$ 448,563
	$ 448,344	$ 219	$ 448,563

</TABLE>

The fair value of available-for-sale debt securities at December 31, 1997 and 1998, by contractual maturity, are shown below. Available-for-sale securities are classified as current based on the Company's intent to use them to fund short-term working capital needs.

<TABLE>
<CAPTION>

1997	AMORTIZED COST	FAIR VALUE
<S>	<C>	<C>
Due one year or less	$11,278,897	$11,282,535
Due after one year through five years	3,402,889	3,389,961
	$14,681,786	$14,672,496
1998		
Due one year or less	$ 18,870	$ 18,816
Due after one year through five years	429,474	429,747
	$ 448,344	$ 448,563

</TABLE>

g. INVENTORY: The components of inventory at December 31, 1997 and 1998, are as follows:

<TABLE>
<CAPTION>

	1997	1998
<S>	<C>	<C>
Materials and component parts	$36,890	$277,505
Work in process	145,234	-
Finished goods	230,900	1,301,407
	$413,024	$1,578,912

</TABLE>

All components of inventory are valued at the lower of cost (first-in, first-out) or market.

h. PROPERTY AND EQUIPMENT: Property and equipment are stated at cost. Equipment under capital leases is stated at the present value of minimum lease payments. Depreciation is computed using the straight-line method over the estimated useful lives of the depreciable assets ranging from 3 to 20 years, and includes amortization related to equipment under capital leases. Maintenance and repairs are charged to expense as incurred, while renewals and improvements are capitalized. Equipment includes $518,507 and $393,869 of equipment under capital leases and accumulated amortization of $119,432 and $153,165 at December 31, 1997 and 1998, respectively.

i. INTANGIBLE ASSETS: Intangible assets consist primarily of the cost of patents and acquired technology licenses. Patent costs are amortized using the straight-line method over the remaining lives of the patents of up to 17 to 20 years. Patent application costs are deferred pending the outcome of patent applications. Costs associated with unsuccessful patent applications and abandoned intellectual property are expensed when determined to have no recoverable value. The Company evaluates the potential alternative uses of intangible assets, as well as the recoverability of the carrying values of intangible assets on a recurring basis.

The components of intangible assets at December 31, 1997 and 1998 are as follows:

<TABLE>
<CAPTION>

	1997	1998
<S>	<C>	<C>
Patents	$ 813,826	$ 871,944
Acquired technology licenses	1,000,000	-
	1,813,826	871,944
Accumulated amortization	(97,992)	(98,081)
	$1,715,834	$ 773,863

</TABLE>

During 1998, the Company recorded $148,000 in general and administrative expense related to patents which will no longer be supported based on changes in the Company's business plan. The Company also recorded a $1 million impairment charge in 1998 related to technology licensed from The Dow Chemical Company (see Note 11).

j. REVENUE RECOGNITION AND PRODUCT WARRANTY: The Company derives revenues primarily from sales of its hand-held gamma detection instruments. However, revenues in prior years also included revenues from sales of blood group serology products. The Company recognizes sales revenue when the product is shipped. The Company warrants its products against defects in design, materials, and workmanship for a period of one year. The Company's provision for warranty expenses is adjusted periodically to reflect actual experience.

k. RESEARCH AND DEVELOPMENT COSTS: All costs related to research and development are expensed as incurred.

l. INCOME TAXES: Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities, and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or

settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

m. STOCK OPTION PLANS: The Company applies the intrinsic value-based method of accounting prescribed by Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, in accounting for its stock options. As such, compensation expense would be recorded on the date of grant only if the current market price of the underlying stock exceeded the exercise price.

n. USE OF ESTIMATES: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

o. IMPAIRMENT OF LONG-LIVED ASSETS AND LONG-LIVED ASSETS TO BE DISPOSED OF: The Company accounts for long-lived assets in accordance with the provisions of SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of. This Statement requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceed the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount of fair value less costs to sell.

p. COMPREHENSIVE INCOME (LOSS): On January 1, 1998, the Company adopted SFAS No. 130, Reporting Comprehensive Income. This Statement establishes standards for reporting and display of comprehensive income in a full set of general purpose financial statements. Comprehensive income consists of net income (loss), net unrealized gains (losses) on securities and foreign currency translation adjustments, and is presented in the consolidated statements of stockholders' equity and accumulated other comprehensive income (loss). The Statement requires only additional disclosures in the consolidated financial statements; it does not affect the Company's financial position or results of operations. Due to the Company's net operating loss position, there are no income tax effects on comprehensive income components for any of the years presented. Prior year financial statements have been reclassified to conform to the requirements of SFAS No. 130.

The accumulated balances for each classification of accumulated other comprehensive income (loss) are as follows:

<TABLE>
<CAPTION>

	FOREIGN CURRENCY TRANSLATION ADJUSTMENT	UNREALIZED GAINS (LOSSES) ON SECURITIES	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)
<S>	<C>	<C>	<C>
Balance, December 31, 1995	$ 166,907	$ 46,480	$ 213,387
Change during 1996	(60,446)	(76,339)	(136,785)
Balance, December 31, 1996	106,461	(29,859)	76,602

Change during 1997	(237,887)	20,569	(217,318)
Balance, December 31, 1997	(131,426)	(9,290)	(140,716)
Change during 1998	56,346	9,509	65,855
Balance, December 31, 1998	$ (75,080)	$ 219	$ (74,861)

</TABLE>

Q. NET LOSS PER COMMON SHARE: During 1997, the Company adopted SFAS No. 128, Earnings Per Share. SFAS No. 128 establishes standards for computing and presenting earnings per share ("EPS") and replaced the presentation of primary EPS with a presentation of basic EPS and diluted EPS. There are no differences in basic and diluted EPS for the Company related to any of the years presented. The net loss per common share

for all periods presented excludes the number of common shares issuable on exercise of outstanding stock options and warrants into the Company's Common Stock since such inclusion would be antidilutive.

r. SEGMENT REPORTING: On December 31, 1998, the Company adopted SFAS No. 131, Disclosures about Segments of an Enterprise and Related Information. This Statement establishes standards for the way that public business enterprises report information about operating segments in annual financial statements issued to stockholders. It also establishes standards for related disclosures about products and services, geographic areas, and major customers. This Statement supersedes SFAS No. 14, Financial Reporting for Segments of a Business Enterprise, but retains the requirement to report information about major customers. The Company has reclassified prior year information to conform to this revised segment reporting.

s. RECLASSIFICATIONS: Certain prior years' amounts have been reclassified to conform with the 1998 presentation.

2. ACCOUNTS RECEIVABLE:

Accounts receivable at December 31, 1997 and 1998, net of allowance for doubtful accounts of $130,660 and $77,000, respectively, consist of the following:

<TABLE>
<CAPTION>

	1997	1998
<S>	<C>	<C>
Trade	$769,578	$1,611,247
Other	23,798	458,386
	$793,376	$2,069,633

</TABLE>

The activity in the allowance for doubtful accounts for the years ended December 31, 1997 and 1998 follows:

<TABLE>
<CAPTION>

	1997	1998
<S>	<C>	<C>
Allowance for doubtful accounts at beginning of year	$ -	$ 130,660

Provision for bad debts	130,660	134,249
Writeoffs charged against the allowance	-	(187,909)
Recoveries of amounts previously charged off	-	-
Allowance for doubtful accounts at end of year	$130,660	$ 77,000

</TABLE>

3. INVESTMENT IN AFFILIATES:

Included in investment in affiliate at December 31, 1998, is an investment in XTL Biopharmaceuticals Ltd. ("XTL"). The investment resulted from the conversion of a note receivable from XTL, which was held by the Company related to an Investment Research and Development Agreement (see Note 11). The note receivable was due to mature on February 13, 1998, and bore interest at 5% payable annually. On January 30, 1998, the Company exercised its option to convert the note receivable into 443,690 shares of Class A Common Stock of XTL. The Company has accounted for its investment in XTL on the cost method. There is currently no publicly quoted market value for shares of XTL; however, management believes, based on a recently completed private placement, that the market value of its investment in XTL approximates book value. The Company has approximately a 6% interest in XTL as of December 31, 1998, on an "as if converted" basis. The Company also has investment interests in two other entities which are carried at zero at December 31, 1998.

4. ACCRUED LIABILITIES:

Accrued liabilities at December 31, 1997 and 1998 consist of the following:

<TABLE>
<CAPTION>

	1997	1998
<S>	<C>	<C>
Royalties due under research and development agreement	$ 171,570	$ 319,693
Compensation	578,683	547,993
Inventory purchases	204,666	38,860
Accrued loan security (Note 5(b))	-	993,000
Contracted services and other	1,788,374	913,775
	$2,743,293	$2,813,321

</TABLE>

Accrued compensation at December 31, 1998, includes $242,351 of separation payments due to former employees, including those of subsidiaries in liquidation.

5. DEBT:

a. LINE OF CREDIT: In September 1998, the Company renegotiated the terms of its $3 million revolving line of credit arrangement with a bank. The new line of credit expires on August 31, 1999. The maximum eligible borrowing limit under the new line was decreased to $1 million and is secured by $1 million in pledged cash and investments of the Company. Interest on the line of credit is based on the prime rate or LIBOR, as elected by the Company. At December 31, 1998, the interest rate was 7.3%, and $1 million was outstanding under the line of credit.

b. LONG-TERM DEBT: As of December 31, 1998, the Company's 95%-owned subsidiary, Neoprobe (Israel) Ltd. ("Neoprobe Israel"), had outstanding debt to a bank of $4.9 million. The funds were drawn pursuant to an investment program approved by the State of Israel's Finance Committee

to construct a radiolabeling facility near Dimona, Israel. Under the approved investment program, Neoprobe Israel was entitled to receive government grants and government guarantees of loans to finance the construction and operation of the facility up to a combined total amount of $9.9 million. Neoprobe Israel is entitled to receive grants based on a percentage of its investment and operating costs, and a government guarantee of 75% to 85% of the principal balance of bank loans taken to build and operate the facility. The loan portion of the investment program expired in September 1998; however, the Company received loan proceeds related to the majority of eligible capital costs incurred prior to the expiration of the loan program. During 1998, the Company successfully negotiated an extension of the grant portion of the program for an additional year. Through December 31, 1998, Neoprobe Israel has received $1.3 million in the form of grants under the approved investment program.

Amounts received as loans bear interest at the LIBOR rate plus a specified percentage based on the exchange rate differential between the New Israeli Shekel and the U.S. dollar on the date of the loan draw, or between 8.2% and 8.45% at December 31, 1998. Amounts received under the agreement are secured by property obtained through the use of proceeds. The loans with the bank are guaranteed by the State of Israel's Investment Centre. The Company has also guaranteed a portion of the loan based on a percentage of the loan drawn. The Company's guarantee is fully secured by $993,000 in cash deposited in an account with the bank for which the bank has the right of set-off.

In December 1998, Company initiated actions to liquidate Neoprobe Israel. As a result, the Company has adopted the liquidation basis of accounting with respect to Neoprobe Israel as of December 31, 1998 (see also Note 9). Under the liquidation basis of accounting, assets are stated at their net realizable value, and liabilities are stated at amounts expected to settle obligations due. If a buyer for the facility cannot be found on a timely basis, the Company believes Neoprobe Israel may be required to relinquish ownership of the radiolabeling facility in lieu of a cash settlement of the obligation to the bank. The Company's consolidated balance sheet, therefore, does not

reflect any debt outstanding to the bank at December 31, 1998. In addition, the Company believes it may be required to relinquish funds currently deposited as security for the loan and has, therefore, recorded an accrued liability at December 31, 1998, equal to the amount of cash deposited as security.

6. INCOME TAXES:

As of December 31, 1998, the Company's net deferred tax assets in the U.S. were approximately $45.3 million, related principally to net operating loss carryforwards of approximately $95.5 million available to offset future taxable income, if any, through 2018 and tax credit carryforwards of approximately $3.3 million (principally research and development) available to reduce future income tax liability after utilization of tax loss carryforwards, if any, through 2018. Due to the uncertainty surrounding the realization of these favorable tax attributes in future tax returns, all of the net deferred tax assets have been fully offset by a valuation allowance.

Under Sections 382 and 383 of the Internal Revenue Code (IRC) of 1986, as amended, the utilization of U.S. net operating loss and tax credit carryforwards may be limited under the change in stock ownership rules of the IRC. As a result of ownership changes as defined by Sections 382 and 383, which have occurred at various points in the Company's history, management believes utilization of the Company's net operating loss carryforwards and tax credit carryforwards may be limited.

In general, it has been the intention of the Company to reinvest the earnings of non-U.S. subsidiaries in those operations. At December 31, 1998, the Company's international subsidiaries have net operating loss

carryforwards of approximately $9.1 million available to offset future statutory income in those jurisdictions. However, as both subsidiaries are currently in loss positions, and as the Company is in the process of liquidating both foreign subsidiaries, no amounts have been estimated to be remitted; accordingly, no amounts have been provided for income tax consequences related to international subsidiaries. Due to the liquidation status of these subsidiaries, it is unlikely the Company will realize any benefit related to the net operating loss carryforwards within the foreign jurisdictions. However, the Company may be able to realize some benefit from these foreign losses under the U.S. IRC.

7. EQUITY:

a. COMMON STOCK: The Company's research and development activities and operating costs have been funded principally with cash generated from the issuance of Common Stock. In April 1996, the Company completed the sale of 1,750,000 shares of Common Stock at a price of $18.50 per share in a secondary offering. Gross proceeds from this offering were $32.4 million, and proceeds net of underwriting discounts were $30.5 million.

In November 1992 and December 1993, the Company issued a total of 2,330,000 Class E Redeemable Common Stock Purchase Warrants ("Class E Warrants"). The Class E Warrants were exercisable over a three-year period beginning November 10, 1993 and expiring on November 12, 1996. During 1996, the Company received proceeds from the exercise of Class E Warrants of approximately $15.0 million.

During 1996, 1997, and 1998, cash generated from public offerings and private placements of Common Stock is as follows:

<TABLE>
<CAPTION>

	1996	1997	1998
<S>	<C>	<C>	<C>
Public offerings, including exercise of warrants	$47,988,930	$361,585	$ -
Private placements and exercise of options	2,128,271	355,181	196,343
	$50,117,201	$716,766	$196,343

</TABLE>

b. STOCK OPTIONS: At December 31, 1998, the Company has two stock-based compensation plans. Had compensation cost for the Company's two stock-based compensation plans been determined based on the fair value at the grant dates for awards under those plans, consistent with SFAS Statement No. 123, the Company's net loss and net loss per share would have been increased to the pro forma amounts indicated below:

<TABLE>

		1996	1997	1998
<S>		<C>	<C>	<C>
Net loss	As reported	$(20,969,143)	$(23,246,528)	$(28,032,752)
	Pro forma	$(22,017,227)	$(25,273,241)	$(30,843,828)
Net loss per common share (basic and diluted)	As reported	$ (1.06)	$ (1.02)	$ (1.23)
	Pro Forma	$ (1.12)	$ (1.11)	$ (1.35)

</TABLE>

Under the Amended and Restated Stock Option and Restricted Stock Purchase Plan (the "Amended Plan"), and under the 1996 Stock Incentive

Plan (the "1996 Plan"), the Company may grant incentive stock options, nonqualified stock options, and restricted stock awards to full-time employees, and nonqualified stock options and restricted awards may be granted to consultants and agents of the Company. Total shares authorized under each plan are 2 million shares and 1.5 million shares, respectively. Under both plans, the exercise price of each option is greater than or equal to the closing market price of the Company's Common Stock on the day prior to the date of the grant.

Options granted under the Amended Plan and the 1996 Plan generally vest on either a monthly basis over two to four years or on an annual basis over three years. Outstanding options under the plans, if not exercised, generally expire ten years from their date of grant or 90 days from the date of an optionee's separation from employment with the Company.

The fair value of each option grant was estimated on the date of the grant using the Black-Scholes option-pricing model with the following assumptions for 1996, 1997, and 1998, respectively: average risk-free interest rates of 5.7%, 6.4% and 5.0%; expected average lives of three to four years for each of the years presented; no dividend rate for any year; and volatility of 181% for 1996, 72% for 1997, and 103% for 1998.

A summary of the status of stock options under the Company's stock option plans as of December 31, 1996, 1997, and 1998, and changes during the years ended on those dates is presented below:

<TABLE>
<CAPTION>

	1996		1997		1998	
	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Outstanding at beginning of year	1,723,543	$ 2.93	2,002,138	$ 5.60	2,194,103	$7.81
Granted	457,700	$15.38	427,900	$13.50	869,791	3.88
Forfeited	(47,030)	$ 6.92	(150,425)	$13.90	(1,527,862)	8.22
Exercised	(132,075)	$ 4.19	(85,510)	$ 4.25	(76,587)	2.56
Outstanding at end of year	2,002,138	$ 5.60	2,194,103	$ 7.81	1,459,445	$5.31
Options exercisable at end of year	1,265,893		1,369,557		912,546	

</TABLE>

On September 28, 1998, the Company repriced 367,000 outstanding options held by non-officer employees of the Company. In exchange for surrendering outstanding options with exercise prices of $5.06 to $17.75, these employees were granted 183,440 new options with an exercise price of $1.50 per share, and the vesting term of the new options was extended by an average of one year from the original vesting term of the surrendered options. No expense was recorded as a result of this repricing. Included in outstanding options as of December 31, 1998, are 100,000 options exercisable at an exercise price of $2.50 per share which vest on the meeting of certain Company achievements.

The following table summarizes information about the Company's stock

options outstanding at December 31, 1998:

<TABLE>
<CAPTION>

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING AT DECEMBER 31, 1998	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE AT DECEMBER 31, 1998	WEIGHTED AVERAGE EXERCISE PRICE
<S>	<C>	<C>	<C>	<C>	<C>
$1.50 - $2.50	563,651	7 Years	$ 1.91	234,482	$ 2.05
$3.00 - $5.63	298,600	6 Years	$ 4.30	150,000	$ 3.15
$6.00 - $6.00	393,160	4 Years	$ 6.00	393,160	$ 6.00
$13.38 - $17.44	204,034	8 Years	$14.85	134,904	$15.20
$1.50 - $17.44	1,459,445	6 Years	$ 5.31	912,546	$ 5.88

</TABLE>

c. RESTRICTED STOCK: During 1998, the Company granted 145,000 shares of restricted Common Stock to officers of the Company under the Amended Plan. However, of the 1998 shares granted, 20,000 shares were forfeited subsequent to being granted but prior to issuance, and 80,000 shares were not issued by the Company's transfer agent until 1999.

At December 31, 1998, the Company has 125,000 restricted shares issued and outstanding under the Amended Plan. However, 50,000 of the 125,000 outstanding restricted shares were forfeited effective December 31, 1998, and are pending cancellation by the transfer agent.

All of the restricted shares granted vest on a change of control of the Company as defined in the specific grant agreements. As a result, the Company has not recorded any deferred compensation due to the inability to assess the probability of the vesting event. Of the shares issued and outstanding, 75,000 also vest under certain conditions of termination as defined in an officer's employment agreement with the Company (see Note 11 (e)).

d. STOCK WARRANTS: At December 31, 1998, there are approximately 67,922 warrants outstanding to purchase Common Stock of the Company. The warrants are exercisable at prices ranging from $3.00 to $17.92 per share with a weighted average exercise price per share of $6.34. Approximately 45,000 of the warrants expired on February 28, 1999; the remaining warrants expire on various dates from June 1999 through December 2000.

e. COMMON STOCK RESERVED: Shares of authorized Common Stock have been reserved for the exercise of all options and warrants outstanding.

8. SHAREHOLDER RIGHTS PLAN:

During July 1995, the Company's Board of Directors adopted a Shareholder Rights Plan. Under the plan, one "Right" is to be distributed for each share of Common Stock held by shareholders on the close of business on August 28, 1995. The Rights are exercisable only if a person and its affiliate commences a tender offer or exchange offer for 15% or more of the Company's Common Stock, or if there is a public announcement that a person and its affiliate has acquired beneficial ownership of 15% or more of the Common Stock, and if the Company does not redeem the Rights during the specified redemption period. Initially, each Right, upon becoming exercisable, would entitle the holder to purchase from the Company one unit

consisting of 1/100th of a share of Series A Junior Participating Preferred Stock at an exercise price of $35 (which is subject to adjustment). Once the Rights become exercisable, if any person, including its affiliate, acquires 15% or more of the Common Stock of the Company, each Right other than the Rights held by the acquiring person and its affiliate becomes a right to acquire Common Stock having a value equal to two times the exercise price of the Right. The Company is entitled to redeem the Rights for $0.01 per Right at any time prior to the expiration of the redemption period. The Shareholder Rights Plan and the Rights will expire on August 28, 2005. The Board of Directors may amend the Shareholder Rights Plan, from time to time, as considered necessary (see Note 17).

9. SEGMENTS AND SUBSIDIARIES INFORMATION:

Prior to the 1998 changes in the Company's business plan, the Company's business was operated based on product development initiatives started under the Company's prior business plan. These strategic initiatives originally included development and commercialization of: hand-held gamma detection instruments currently used primarily in the application of Intraoperative Lymphatic Mapping ("ILM"), diagnostic radiopharmaceutical products to be used in the Company's proprietary RIGS process, and Activated Cellular Therapy ("ACT"). The Company's business plan as of December 31, 1998 focuses primarily on the hand-held gamma detection instruments while efforts are carried out to find partners or licensing parties to fund RIGS and ACT research and development.

The Company's United States operations included activities for 1998 and prior years that benefited all three strategic initiatives. The suspended RIGS initiative included the operations of the Company's two subsidiaries, Neoprobe Europe AB ("Neoprobe Europe") and Neoprobe Israel. Neoprobe Europe was acquired in 1993 primarily to perform a portion of the manufacturing process of the monoclonal antibody used in the first RIGS product to be used for colorectal cancer, RIGScan CR49. Neoprobe Israel was founded to radiolabel RIGScan CR49. Neoprobe Europe and Neoprobe Israel also both performed limited research and development activities related to the Company's RIGS process on behalf of the U.S. parent company. Under SFAS No. 131, neither subsidiary is considered a segment. Both Neoprobe Europe and Neoprobe Israel are in liquidation at December 31, 1998. The results of the operations of Neoprobe Europe and Neoprobe Israel for 1998, as well as the effects of adjustment of their related assets in conformity with the liquidation basis of accounting, is presented as losses relating to subsidiaries in liquidation in the consolidated statements of operations.

Due to changes in the potential production process for RIGScan CR49, the Company determined during the second quarter of 1998, that Neoprobe Europe, the Company's biologics manufacturing and purification facility located in Lund, Sweden, was no longer critical to the manufacturing process, and that research and development activities being carried on at the facility could be performed more efficiently elsewhere. As a result, the Company took action in the second quarter to initiate the sale of Neoprobe Europe. As of June 30, 1998, activities regarding the potential sale were in the preliminary stages, and management was unable to estimate the effect on the Company's financial position. However, management did not believe the $2.5 million book value of the net assets of Neoprobe Europe to be impaired at that time. During October 1998, the Company reached an agreement to sell substantially all of the assets of Neoprobe Europe to a Swedish company. In exchange for the assets, the Swedish company agreed to pay the Company $125,000 and assume certain contractual obligations of Neoprobe Europe, such as the lease commitment. In connection with this agreement, the Company recorded a provision of approximately $2.0 million during the third quarter of 1998, principally to write down the remaining assets of Neoprobe Europe to their estimated realizable value. At December 31, 1998, the Company has adopted the liquidation basis of accounting for Neoprobe Europe. Accordingly, the consolidated balance sheet includes approximately $150,000 in current assets of Neoprobe

Europe at their net realizable value, and $70,000 in liabilities at the amounts expected to settle the obligations due. Included in losses related

to subsidiaries in liquidation for 1998 is $1.7 million related to impairment of assets, $235,000 related to severance and exit costs, and $1.2 million of losses from operations incurred prior to the decision to liquidate.

Neoprobe Israel was founded by the Company and Rotem Industries Ltd. ("Rotem") in 1994 to construct and operate a radiolabeling facility near Dimona, Israel. Rotem currently has a 5% equity interest in Neoprobe Israel and has the right to acquire an additional 4% under certain conditions related to the completion of the facility. Based on the status of the Company's marketing applications in the U.S. and Europe, and the Company's inability to attract a development partner for its RIGS products, the Company decided during the fourth quarter of 1998 to suspend construction and validation activities at Neoprobe Israel. Following suspension of RIGS development activities at Neoprobe Israel and unsuccessful attempts to sell the facility, the Company initiated actions during the fourth quarter of 1998 to liquidate Neoprobe Israel. The Company has, therefore, adopted the liquidation basis of accounting with respect to Neoprobe Israel as of December 31, 1998. The Company has written down the value of the fixed assets of the facility and the related debt to the net amount of zero as the assets may represent settlement of the debt (see Note 5 (b)). Accordingly, the consolidated balance sheet includes approximately $555,000 in current assets of Neoprobe Israel at their net realizable value, and $876,000 in liabilities at the amounts expected to settle the obligations due. Included in losses related to subsidiaries in liquidation for 1998 is $5.1 million related to the primarily non-cash adjustment of assets and liabilities to their net realizable value, $79,000 related to severance and other exit costs, and $1.0 million related to losses from operations incurred prior to the decision to liquidate.

The information in the following table is derived directly from the segments' internal financial reporting used for corporate management purposes. The expenses attributable to corporate activity, including amortization and interest, and other general and administrative costs are not allocated to the operating segments.

<TABLE>
<CAPTION>
($ AMOUNTS IN THOUSANDS)

1996	RIGS	ILM	ACT	UNALLOCATED	TOTAL
<S>	<C>	<C>	<C>	<C>	<C>
Revenue					
United States customers	$ -	$ 725	$ -	$ -	$ 725
International customers	-	55	-	391	446
Research and development expenses	(14,216)	(1,783)	(84)	-	(16,083)
Marketing and selling expenses	-	(1,532)	-	-	(1,532)
General and administrative expenses	-	-	-	(6,222)	(6,222)
Other income	-	-	-	2,373	2,373
Total assets, net of depreciation and amortization:					
United States	351	1,234	-	56,738	58,323
Neoprobe Europe	2,072	-	-	-	2,072
Neoprobe Israel	3,477	-	-	-	3,477
Capital expenditures	3,616	-	-	-	3,616

</TABLE>

<TABLE>
<CAPTION>
($ AMOUNTS IN THOUSANDS)

1997	RIGS	ILM	ACT	UNALLOCATED	TOTAL
<S>	<C>	<C>	<C>	<C>	<C>
Revenue					

United States customers	$ -	$ 4,677	$ -	$ -	$ 4,677
International customers	-	386	-	65	451
Research and development expenses	(12,814)	(4,933)	(1,910)	-	(19,657)
Marketing and selling expenses	-	(4,307)	-	-	(4,307)
General and administrative expenses	-	-	-	(6,853)	(6,853)
Other income	-	-	-	4,018	4,018
Total assets, net of depreciation and amortization:					
United States	182	1,248	84	30,502	32,016
Neoprobe Europe	1,631	-	-	-	1,631
Neoprobe Israel	7,926	-	-	-	7,926
Capital expenditures	4,504	102	84	-	4,690

1998

Revenue					
United States customers	$ -	$ 5,333	$ -	$ -	$ 5,333
International customers	-	430	-	70	500
Research and development expenses	(7,113)	(3,380)	(1,467)	(1,000)	(12,960)
Marketing and selling expenses	-	(5,268)	-	-	(5,268)
General and administrative expenses	-	-	-	(5,284)	(5,284)
Losses related to subsidiaries in liquidation	(9,385)	-	-	-	(9,385)
Other income	-	-	-	436	436
Total assets, net of depreciation and amortization:					
United States	187	4,839	-	6,083	11,109
Neoprobe Europe	152	-	-	-	152
Neoprobe Israel	555	-	-	-	555
Capital expenditures	2,851	578	-	-	3,429

</TABLE>

Neoprobe Europe recorded intrasegment revenue for RIGS-related research performed on behalf of the U.S. parent company of $735,000, $2.7 million, and $1.2 million in 1996, 1997, and 1998, respectively.

For the year ended December 31, 1996, approximately $328,000 (28%) of net sales were concentrated between two customers. These sales related to sales of blood serology products by Neoprobe Europe. The Company discontinued the sale of blood serology products during 1997. No individual customer constituted over 10% of net sales in either 1997 or 1998.

10. RELATED-PARTY TRANSACTIONS:

A partner of a law firm which provides various legal services to the Company, including patent and trademark filings and prosecuting patent and trademark applications, is a former director of the Company. The partner's officer and director affiliations ended in May 1997. Costs incurred related to services performed and patent maintenance fees paid by this firm approximated $201,000 and $302,000 for the years ended December 31, 1996 and 1997, respectively. The Company owed this law firm approximately $21,800 at December 31, 1997.

11. AGREEMENTS:

a. SUPPLY AGREEMENTS: During 1997, the Company entered into a supply agreement with eV Products ("eV"), a division of II-VI Incorporated, for the supply of certain crystals and associated electronics to be used in the manufacture of the Company's proprietary line of hand-held gamma detection instruments. The original term of the agreement expires on December 31, 2002, but may be automatically extended for an additional three years. The agreement calls for the Company to purchase minimum quantities of crystals used by the Company. The Company expects to purchase a minimum of $500,000 in crystals from eV in 1999. eV is not the only potential supplier of such crystals; however, any

prolonged interruption from this source could restrict the availability of the Company's probe products, which would affect operating results adversely.

b. MARKETING AGREEMENTS: In September 1996, the Company executed a License and Distributorship Agreement ("Agreement") with the United States Surgical Corporation ("USSC"). Effective October 17, 1997, the Company and USSC agreed to terminate the Agreement, as amended. In connection with the termination, after receipt of payment, the Company agreed to pay USSC net commissions on orders received prior to the effective date of the termination and to continue to warranty and service devices sold under the terms of the Agreement. The parties have also agreed to discharge and release the other from all remaining claims and financial obligations relating to the Agreement, including license fees. The Company had also received $2 million from USSC on execution of the Agreement in 1996 and recognized this amount as income in the fourth quarter of 1997 concurrent with the termination of the Agreement.

In April 1998, the Company executed a non-exclusive Sales and Marketing Agreement (the "Agreement") with Ethicon Endo-Surgery, Inc. ("EES"), a Johnson & Johnson company, to market and promote the Neoprobe(R) 1500 Portable Radioisotope Detector and its 14mm and 19mm reusable probes for gamma guided lymphatic mapping and minimally invasive surgery in the United States. During October 1998, the Agreement with EES was amended to cover marketing and promotion of the aforementioned products in Europe. During the initial one-year term of the Agreement, EES agreed to promote and sell the aforementioned products and train physicians in the use of the Company's devices. In exchange for promoting and selling the device products, the Company agreed to pay EES commissions based on qualifying net sales of the aforementioned products. At December 31, 1998, the Company owed EES $142,000 under the terms of the Agreement (see Note 17(b)).

c. RESEARCH AND DEVELOPMENT: Under a research and development agreement between the Company, The Ohio State University, and the Department of Development of the State of Ohio, the Company must pay the State of Ohio periodic royalties calculated as a percentage of net sales of products utilizing the results of the sponsored research, a sharing of proceeds received from the sale of technology, and a portion of the royalties collected from any license the Company may grant. The Company has an option to terminate its royalty obligation following completion of the research period by making a termination payment to the State of Ohio.

d. LICENSE AND TECHNOLOGY AGREEMENTS: In February 1996, the Company and XTL Biopharmaceuticals Ltd. ("XTL") executed a series of agreements, including an Investment Agreement and a Research and Development Agreement whereby XTL will perform specific research activities using XTL's proprietary technology for the development of future products for the Company. Under the terms of the agreement, the Company issued 125,000 shares of Common Stock to XTL in 1996 in exchange for a convertible note receivable, a warrant to purchase stock of XTL, and approximately $1 million of product development services. The Company converted the note receivable in 1998 (see Note 3). The warrants expired in February 1999. The Company recorded research and development expenses of $405,000 and $595,000 during 1997 and 1998, respectively, related to the usage of the product development services.

In March 1996, the Company executed a Subscription and Option Agreement with Cira Technologies, Inc. ("Cira"), under which the Company received a 10% equity interest in Cira and an option to increase its interest in Cira by 15%. A former chairman of the Company is a director and shareholder of Cira. In April 1998, the Company and Cira entered into a restated Subscription and Option Agreement that terminated the March 1996 agreement. Under the new Subscription and Option Agreement, the Company agreed to purchase additional shares of Cira stock for $.001 per share. The purchase of the additional shares by Neoprobe brings its interest in Cira to 15% of the total, issued and outstanding, shares of

Cira common stock.

In March 1996, Neoprobe and Cira entered into a Technology Option Agreement under which the Company provided financial, clinical, and technical support to conduct a clinical study using Cira's HIV technology. In return, Neoprobe received an option to acquire an exclusive global license for Cira's technologies. The Company's total financial commitment for this clinical study was capped at $500,000, and the Company had the right to terminate the agreement upon review of interim results of the clinical study. In April 1998, the Company and Cira entered into a License and Option Agreement that replaced the 1996 agreement. Under the terms of the new License and Option Agreement, the Company received an exclusive, worldwide, royalty-bearing license to use Cira technology for the treatment of HIV-infected patients including HIV-infected patients co-infected with other viruses. In consideration for the license, the Company agreed to grant-back to Cira its option to use Cira technology to treat chronic viral conditions, and also to pay Cira up to $50,000 to fund research activities at Cira as incurred.

In connection with the 1996 and 1998 Cira agreements, the Company has incurred expenses of approximately $125,000, $239,000, and $337,000 for the years ended December 31, 1996, 1997, and 1998, respectively, including a total of $431,000 related to the HIV pilot study. No royalties are due to Cira until the Company recovers out-of-pocket expenditures for research and development through net sales of licensed product, up to a maximum of $2 million. Subsequent to December 31, 1998, the Company and Cira have entered into negotiations to further revise the terms of the Agreement.

In May 1996, the Company executed two license agreements with Dow, whereby the Company was granted an exclusive license to technology (including the right to sublicense) covered by patents held by Dow. In exchange, the Company issued Dow 124,805 shares of Common Stock valued at $2 million. The Company agreed to make payments to Dow following achievement of certain development and commercial milestones by the Company. In addition, if the Company sublicenses the technology, the Company must pay Dow a certain percentage of all payments received by the Company. A portion of the technology was used in the Company's RIGS research and development initiatives. Accordingly, the $500,000 allocated to this portion of the technology was recorded as research and development expense in 1996. During 1997, the Company determined that due to specific clinical development achievements of competing technology, $500,000 of the cost of this technology should be expensed as research and development costs. At December 31, 1997, approximately $1 million was included in intangible assets related to this technology assets with alternative future uses. During the fourth quarter of 1998, the Company determined, based on analysis of product failures for similar technologies and unsuccessful attempts to market the technology to other parties, that the remaining value of the technology was impaired. Accordingly, the Company recorded an impairment charge of $1 million which is included in research and development for the year ended December 31, 1998.

e. EMPLOYMENT: The Company has an employment agreement through December 31, 1998, with one executive officer which provides for restricted stock purchase agreements. The agreement provides that the officer is entitled to receive up to an aggregate of 75,000 shares of the Company's Common Stock at par value subject to vesting provisions. Vesting of the shares does not commence unless there is a change in control of the Company, or under certain conditions of termination as defined in the agreement. Of the unvested portion of the restricted shares, 30,000 shares and 45,000 shares, will be forfeited no later than June 4, 2006 and May 20, 2008, respectively. The Company has not recognized any expense under the agreement due to the contingent nature of the vesting provision and the risk of forfeiture.

12. LEASES:

The Company leases certain office and manufacturing equipment under capital leases which expire on various dates through 2002. In December 1996, the Company entered into a seventy-seven month operating lease agreement for office space, commencing April 1, 1997.

The future minimum lease payments, net of sublease rental income, for the years ending December 31 are as follows:

<TABLE>
<CAPTION>

	CAPITAL LEASES	OPERATING LEASES
<S>	<C>	<C>
1999	$106,787	$223,073
2000	91,301	205,129
2001	56,590	182,668
2002	14,148	177,201
2003	--	119,417
	268,826	$907,488
Less amount representing interest	13,471	
Present value of net minimum lease payments	$255,355	
Less current portion	99,539	
Capital lease obligations, excluding current portion	$155,816	

</TABLE>

The Company expects rental income from subleases of $59,620, $65,400, $67,712, $70,652, and $48,291 in 1999 through 2003, respectively, based on two subleases executed in December 1998 and February 1999, respectively. Total rental expense was approximately $515,000, $660,000, and $529,000 for the years ended December 31, 1996, 1997, and 1998, respectively.

13. EMPLOYEE BENEFIT PLAN:

The Company maintains an employee benefit plan under Section 401(k) of the Internal Revenue Code. The plan allows employees to make contributions and the Company may, but is not obligated to, match a portion of the employee's contribution with the Company's Common Stock, up to a defined maximum. The Company recorded expenses of $19,500, $57,300, and $41,644 related to Common Stock to be contributed to the plan in 1996, 1997, and 1998, respectively.

14. SUPPLEMENTAL DISCLOSURE FOR STATEMENTS OF CASH FLOWS:

The Company paid interest, net of amounts capitalized, aggregating $35,917, $62,653, and $129,874 for the years ended December 31, 1996, 1997, and 1998, respectively.

During 1996, the Company issued Common Stock valued at a total of $5.7 million in exchange for license rights, a convertible note receivable, warrants, and product development activities. During 1998, the note receivable was converted into common stock in XTL (see Note 3). The Company also incurred capital lease obligations of approximately $455,000 in 1997 to finance equipment.

15. CONTINGENCIES:

Pursuant to the Company's decision to liquidate Neoprobe Israel, management of the Company believes Neoprobe Israel may be subject to claims from the State of Israel, a bank, and various vendors (collectively, the "Creditors"). The Company believes its only contractual obligation related to Neoprobe Israel relates to the limited amount guarantee which is fully secured through restricted cash and investments (see Note 5 (b)).

However, it is possible that the Creditors would seek to pursue claims against the Company related to potential defaults on the part of Neoprobe Israel under a judicial doctrine generally referred to as "piercing the corporate veil." In the event the Creditors were successful in making a claim under this judicial doctrine, the Company may be required to pay liabilities of Neoprobe Israel of approximately $6 million. Payment of such an amount would deplete the Company's cash, and the Company might not be able to continue operations. Management believes, based on advice from counsel, that it is unlikely that parties would prevail if such claims were brought against the Company. As such, no provision for such a contingent loss has been recorded at December 31, 1998.

The Company is subject to legal proceedings and claims which arise in the ordinary course of its business. In the opinion of management, the amount of ultimate liability with respect to these actions will not materially affect the financial position of the Company.

16. LIQUIDITY:

During 1998, the Company made significant changes to its business plan as a result of unfavorable feedback from regulatory authorities regarding marketing applications for RIGScan CR49. The Company's previous business plan involved the expenditure of significant amounts of funds to finance research and development for the Company's RIGS and ACT initiatives. These expenditures severely depleted the Company's cash position. As of December 31, 1998, the Company had cash and cash equivalents and available-for-sale securities of $3.5 million. Of this amount, approximately $1.0 million is pledged as security associated with the Company's revolving line of credit and $1.0 million is restricted related to the debt outstanding under the financing program for the construction of Neoprobe Israel. At December 31, 1998, the Company had access to approximately $1.5 million in unrestricted funds to finance its operating activities for 1999.

The Company expects its revised business plan, which focuses on gamma guided surgery products such as the Company's line of hand-held gamma detection instruments, will result in increases in sales during 1999 that will improve the Company's cash position. The revised plan also significantly reduces operating expenses compared to the previous plan which was heavily focused on drug research and development activities. In the first quarter of 1999, the Company further improved its liquidity position by issuing convertible preferred stock in a private placement (see Note 17). The Company is also attempting to sell approximately $1.5 million in non-strategic assets. If the Company does not achieve its business plan as intended, it may need to further modify its business plan and consummate other financing alternatives which have been presented to the Company. Such financing alternatives may require further sales of equity securities that could be dilutive to current holders of common stock, debt financing which may be unfavorable terms, or asset dispositions that could force the Company to further change its business plan. However, management believes the Company's revised business plan will ultimately result in an improved liquidity position during 1999.

17. SUBSEQUENT EVENTS:

a. PRIVATE PLACEMENT: On February 16, 1999, the Company completed a private placement involving the issuance of 30,000 shares of 5% Series B Convertible Preferred Stock (the "Series B") for $3 million. The Series B has a $100 per share stated value and is senior to Common Stock as well as the Company's Series A Junior Participating Preferred Stock. Holders of the Series B have the right to convert the stated value of their shares into Common Stock at an initial conversion price of $1.03 (potentially 2.9 million shares). Purchasers of the Series B also received 2.9 million warrants to purchase Common Stock of the Company at an exercise price of $1.03 per share. The conversion price

of the Series B, as well as the exercise price of the related warrants, are subject to adjustment based on trading prices for the Company's Common Stock prior to conversion, as well as on the anniversary date of the placement subject to a conversion price floor. This transaction is subject to the approval of the stockholders at the Company's next Annual Meeting. In the event the stockholders of the Company do not approve the transaction as proposed, the purchasers would be entitled to convert unredeemed Series B into a maximum of 4.9% of the outstanding Common Stock of the Company.

The Company has the right to place an additional 30,000 shares of Series B with the Purchasers for $3 million on the achievement of certain sales milestones. The conversion price for the Series B for the subsequent placement, as well as the exercise price for the related warrants, will be based on the market prices of the Company's Common Stock prior to the subsequent closing.

Under certain conditions, the Company may be obligated to redeem outstanding shares of Series B for $120 per share. Conditions under which redemption may be required include failure to obtain stockholder approval of the transaction, failure to meet timing and filing deadlines for a registration statement for Common Stock into which the Series B may be converted, material breach of the purchase agreement, delisting from the NASDAQ Stock Market, a material qualification of the audit opinion on the consolidated financial statements, or if the Company is liquidated, merged, or sells significantly all of its assets.

Pursuant to the private placement, the Company signed a financial advisory agreement with the placement agent providing the agent with the right to purchase 1,500 shares of Series B and warrants to purchase 145,631 shares of Common Stock of the Company. In addition, the Company agreed to pay the agent a monthly financial advisory fee and success fees based on certain investment transactions consummated during the 24-month term of the agreement.

b. MARKETING AGREEMENTS: On January 29, 1999, the Company provided EES with notice of the Company's intent to terminate the Agreement effective March 1, 1999.

Effective February 1, 1999, the Company executed a Sales and Marketing Agreement with KOL Bio-Medical Instruments, Inc. ("KOL") to market the Company's current and future gamma guided surgery products in the U.S. In exchange for marketing and selling the products and providing customer training, KOL will receive commissions on net sales of applicable products and milestone payments on the achievement of certain levels of product sales. The term of the agreement is indefinite with provisions for

both parties to terminate with a minimum of six months notice under certain conditions such as non-performance or without cause. However, if terminated by the Company without cause or because of a change of control of the Company, KOL is entitled to receive a termination fee of 15% based on monthly net sales for a maximum of twenty-four months, and the Company is required to buy back, at a discount, demonstration units purchased by KOL during the nine-month period preceding termination.

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

NEOPROBE CORPORATION

FORM 10-K ANNUAL REPORT

FOR THE FISCAL YEAR ENDED:

DECEMBER 31, 1998

EXHIBITS

==========

EXHIBIT INDEX

<TABLE>
<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
3.1.	Complete Restated Certificate of Incorporation of Neoprobe Corporation, as corrected and as amended	25	71
3.2.	Amended and Restated By-Laws, as amended	15	*
4.1.	See Articles FOUR, FIVE, SIX and SEVEN of the Restated Certificate of Incorporation of Registrant	25	71
4.2.	See Articles II and VI and Section 2 of Article III and Section 4 of Article VII of the Amended and Restated By-Laws of the Registrant	13	*

4.3.	Rights Agreement dated as of July 18, 1995 between the Registrant and Continental Stock Transfer & Trust Company.	47	*	
4.4.	Amendment Number 1 to the Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated February 16, 1999.	3	96	
10.1.1.-10.1.24.	Reserved			
10.1.25.	Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated as of July 18, 1995.	47	*	
10.1.26.-10.1.30.	Reserved	18	*	
10.1.31.	Amendment Number 1 to the Rights Agreement between the Registrant and Continental Stock Transfer & Trust Company dated February 16, 1999.	3	96	
10.1.32.	Preferred Stock and Warrant Purchase Agreement dated February 16, 1999 among the Registrant, The Aries Master Fund, a Cayman Island exempted company, and The Aries Domestic Fund, L.P.	44	99	
10.1.33.	Warrant dated February 16, 1999 for the purchase of shares to purchase Common Stock issued to The Aries Master Fund, a Cayman Island exempted company. This exhibit is one of two substantially identical instruments and is accompanied by a schedule identifying the other instrument omitted and setting forth the material details in which such instrument differs from the one filed herewith.	11	130	

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

<TABLE>
<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
10.1.34.	Option Units dated February 16, 1999 for the purchase of shares of 5% Series B Convertible Preferred Stock of the Registrant and warrants to purchase shares of Common Stock issued to Paramount Capital, Inc.	15	140
10.1.35.	Financial Advisory Agreement dated February 16, 1999 between the Registrant and Paramount Capital, Inc.	8	153
10.1.36.	Letter agreement dated February 24, 1999 among the Registrant, The Aries Master Fund, a Cayman Island		

	Exempted Company and The Aries Domestic Fund, L.P.	2	160	
10.1.37.	Letter agreement dated March 12, 1999 among the Registrant, The Aries Master Fund, a Cayman Island Exempted Company and The Aries Domestic Fund, L.P.	2	162	
10.2.1.-10.2.14.	Reserved			
10.2.15.	Option Agreements between the Registrant and David C. Bupp	17		*
10.2.16.-10.2.17.	Reserved			
10.2.18.	Non-Qualified Stock Option Agreement dated May 3, 1993 between the Registrant and David C. Bupp	4		*
10.2.19.-10.2.20.	Reserved			
10.2.21.	Non-Qualified Stock Option Agreement dated May 3, 1993 between the Registrant and John L. Ridihalgh	4		*
10.2.22.	Reserved			
10.2.23.	Non-Qualified Stock Option Agreement dated February 28, 1992 and amended and restated June 3, 1993 between the Registrant and David C. Bupp	4		*
10.2.24.	Non-Qualified Stock Option Agreement dated July 1, 1990 and amended and restated June 3, 1993 between the Registrant and David C. Bupp	4		*
10.2.25.	Non-Qualified Stock Option Agreement dated June 1, 1992 and amended and restated June 3, 1993 between the Registrant and John L. Ridihalgh	4		*
10.2.26.	Amended and Restated Stock Option and Restricted Stock Purchase Plan dated March 3, 1994	11		*

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

<TABLE>
<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
10.2.27.-10.2.28.	Reserved.		

10.2.29.	Non-Qualified Stock Option Agreement dated February 16, 1995 between the Registrant and John L. Ridihalgh	3	*
10.2.30.	Non-Qualified Stock Option Agreement dated February 16, 1995 between the Registrant and David C. Bupp	3	*
10.2.31.	Employment Agreement dated as of January 1, 1996 between the Registrant and John L. Ridihalgh	7	*
10.2.32.-10.2.33	Reserved.		
10.2.34.	Restricted Stock Purchase Agreement dated June 5, 1996 between the Registrant and John L. Ridihalgh	4	*
10.2.35.	Restricted Stock Purchase Agreement dated June 5, 1996 between the Registrant and David C. Bupp	4	*
10.2.36.	Reserved.		
10.2.37.	1996 Stock Incentive Plan dated January 18, 1996 as amended March 13, 1997	21	*
10.2.38.	Non-Qualified Stock Option Agreement dated January 18, 1996 between the Registrant and John L. Ridihalgh	3	*
10.2.39.	Non-Qualified Stock Option Agreement dated January 18, 1996 between the Registrant and David C. Bupp	3	*
10.2.40.	Non-Qualified Stock Option Agreement dated February 3, 1997 between the Registrant and John L. Ridihalgh	3	*
10.2.41.	Non-Qualified Stock Option Agreement dated February 3, 1997 between the Registrant and David C. Bupp	3	*
10.2.42.	Reserved.		
10.2.43.	Agreement, Release, and Waiver dated February 23, 1998 between the Registrant and Dr. William Eisenhardt.	7	*
10.2.44.	Employment Agreement dated as of January 1, 1998 between the Registrant and David C. Bupp.	7	*
10.2.45.	Restricted Stock Purchase Agreement between David C. Bupp and the Registrant dated May 20, 1998.	3	*

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

<TABLE>

<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
10.2.46.	Waiver by David Bupp dated February 16, 1999 of certain provisions in the employment agreement between the Registrant and David C. Bupp dated January 1, 1998.	1	164
10.2.47.	Severance Agreement dated October 23, 1998 between the Registrant and Matthew F. Bowman. This agreement is one of three substantially identical agreements and is accompanied by a schedule identifying the other agreements omitted and setting forth the material details in which such documents differ from the one that is filed herewith.	4	165
10.2.48.	Restricted Stock Agreement dated October 23, 1998 between the Registrant and Matthew F. Bowman. This agreement is one of three substantially identical agreements and is accompanied by a schedule identifying the other agreements omitted and setting forth the material details in which such documents differ from the one that is filed herewith.	4	170
10.2.49.	Separation Agreement dated October 21, 1998 between the Registrant and John L. Ridihalgh.	9	173
10.3.1.	Technology Transfer Agreement dated July 29, 1992 between the Registrant and The Dow Chemical Corporation (subject to an order granting portions thereof confidential treatment)	15	*
10.3.2.-10.3.29.	Reserved.		
10.3.30.	Facility Agreement dated July 17, 1995 among Registrant, Neoprobe (Israel) Ltd., and Rotem Industries, Ltd. (subject to an order granting portions thereof confidential treatment)	12	*
10.3.31.	Cooperative Research and Development Agreement between Registrant and National Cancer Institute	67	*
10.3.32.	First Amendment to Facility Agreement dated July 17, 1995 among Registrant, Neoprobe (Israel), Ltd. and Rotem Industries, Ltd.	1	*
10.3.33.-10.3.34.	Reserved.		
10.3.35.	Investors' Rights Agreement dated February 5, 1996 between Registrant and XTL Biopharmaceuticals, Ltd	19	*
10.3.36.	Reserved.		

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

<TABLE>
<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
10.3.37.	Research and Development Agreement dated February 13, 1996 between Registrant and XTL Biopharmaceuticals, Ltd. (subject to an order granting portions thereof confidential treatment)	14	*
10.3.38.	Sublicense Agreement dated February 13, 1996 between Registrant and XTL Biopharmaceuticals, Ltd. (subject to an order granting portions thereof confidential treatment)	8	*
10.3.39.-10.3.44.	Reserved.		
10.3.45.	License dated May 1, 1996 between Registrant and The Dow Chemical Company	9	*
10.3.46.	License Agreement dated May 1, 1996 between Registrant and The Dow Chemical Company(subject to an order granting portions thereof confidential treatment)	27	*
10.3.47.	License and Option Agreement between Cira Technologies, Inc. and Neoprobe Corporation dated April 1, 1998.	32	*
10.3.48.	Restated Subscription and Option Agreement between the Registrant, Cira Technologies, Inc., Richard G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre Triozzi and Gregory Noll, dated April 17, 1998.	12	*
10.3.49.	Restated Stockholders Agreement with the Registrant, Cira Technologies, Inc., Richard G. Olsen, John L. Ridihalgh, Richard McMorrow, James R. Blakeslee, Mueller & Smith, Ltd., Pierre L. Triozzi and Gregory Noll, dated April 17, 1998.	5	*
10.4.1.-10.4.15.	Reserved		
10.4.16.	Project Management Agreement dated May 17, 1995 between Neoprobe (Israel) Ltd. and BARAN Project Construction Ltd.	6	*
10.4.17.-10.4.21.	Reserved.		
10.4.22.	Sales and Marketing Agreement dated April 21, 1998 between the Registrant and Ethicon Endo-Surgery, Inc., an Ohio corporation (subject to an order granting portions thereof confidential treatment)	13	*
10.4.23.	Loan Agreement between the Registrant and Bank		

	One, NA, dated April 16, 1998 (incorporated by reference to Exhibit 10.4.23 to the 2nd Quarter 1998 Form 10-Q).	13	*

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

<TABLE>
<CAPTION>

EXHIBIT NUMBER	Description	Number of Pages in Original Document+	Page in Manually Signed Original
<S>	<C>	<C>	<C>
10.4.24.	Variable Rate Cognovit Promissory Note, dated April 16, 1998, issued by Registrant to Bank One, NA.	10	*
10.4.25.	Security Agreement between the Registrant and Bank One, NA, dated April 16, 1998.	5	*
10.4.26.	Letter amendment dated October 14, 1998 to the Sales and Marketing Agreement dated April 21, 1998 between the Registrant and Ethicon Endo-Surgery, Inc., an Ohio corporation (subject to an order granting portions thereof confidential treatment)	2	*
10.4.27.	Promissory Note, dated September 25, 1998, issued by Registrant to Bank One, NA.	2	*
10.4.28.	Addendum to Promissory Note dated September 25, 1998 issued by Registrant to Bank One, NA.	6	*
10.4.29.	Covenant Agreement dated September 25, 1998 between the Registrant and Bank One, NA.	3	*
10.4.30.	Assignment of Deposit Account dated September 25, 1998 between Registrant and Bank One, NA.	4	*
10.4.31.	Asset Purchase Agreement dated October 14, 1998 between the Registrant, Neoprobe AB, a corporation organized and existing under the laws of Sweden, and Bioinvent Production AB, a corporation organized and existing under the laws of Sweden.	8	*
10.4.32.	Supply Agreement between the Registrant and eV Products dated December 8, 1997 (filed pursuant to Rule 24b-2 under which the Registrant has requested confidential treatment of certain portions of this Exhibit).	17	182
11.1.	Computation of Net Loss Per Share	1	200
21.1.	Subsidiaries of Registrant	1	201

24.1.	Powers of Attorney	9	202
24.2.	Certified resolution of the Registrant's Board of Directors authorizing officers and directors signing on behalf of the Company to sign pursuant to a power of attorney	1	210

</TABLE>

- - ----------

+ The Registrant will furnish a copy of any exhibit to a beneficial owner of its securities or to any person from whom a proxy was solicited in connection with the Registrant's most recent Annual Meeting of Stockholders upon the payment of a fee of fifty cents ($.50) a page.

* Incorporated by reference.

EXHIBIT 3.1

RESTATED CERTIFICATE OF INCORPORATION
OF
NEOPROBE CORPORATION

(as corrected February 18, 1994 and
as amended June 27, 1994, July 25, 1995, June 3, 1996 and March 17, 1999)

ARTICLE ONE

The name of the corporation is Neoprobe Corporation.

ARTICLE TWO

The address of the corporation's registered office in the State of Delaware is the Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is the Corporation Trust Company.

ARTICLE THREE

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

(Article Four was amended to increase the total number of shares authorized to be outstanding from 22,000,000 to 55,000,000 , the total number of shares of Common Stock from 20,000,000 to 50,000,000 and the total number of shares of Preferred Stock from 2,000,000 to 5,000,000 by a resolution duly adopted by the Board of Directors on March 3, 1994 and duly adopted by the stockholders on May 26, 1994).

ARTICLE FOUR

4.1 Authorized Shares. The total number of shares of capital stock which the Corporation has authority to issue is 55,000,000 shares, consisting of:

(a) 50,000,000 shares of Common Stock, par value $.001 per share (the "Common Stock");

(b) 5,000,000 shares of Preferred Stock, par value $.001 per share (the "Preferred Stock").

4.2 Common Stock.

(a) Subject to such voting rights of any other class or series of securities as may be granted from time to time pursuant to this certificate of incorporation, any amendment thereto, or the provisions of the laws of the State of Delaware governing corporations, voting rights shall be vested exclusively in the holders of Common Stock. Each holder of Common Stock shall have one vote in respect of each share of such stock held.

(b) Subject to the rights of any other class or series of stock, the holders of shares of Common Stock shall be entitled to receive, when and as declared by the board of directors, out of the assets of the Corporation legally available therefor, such dividends as may be declared from time to time by the board of directors.

(c) Subject to such rights of any other class or series of securities as may be granted from time to time, the holders of shares of Common Stock

shall be entitled to receive all the assets of the Corporation available for distribution to shareholders in the event of the voluntary or involuntary liquidation, dissolution, or winding up of the Corporation, ratably, in proportion to the number of shares of Common Stock held by them. Neither the merger or consolidation of the Corporation into or with any other corporation, nor the merger or consolidation of any other corporation into or with the Corporation, nor the sale, lease, exchange or other disposition (for cash, shares of stock, securities, or other consideration) of all or substantially all the assets of the Corporation, shall be deemed to be a dissolution, liquidation, or winding up, voluntary or involuntary, of the Corporation.

4.3 Preferred Stock. Shares of Preferred Stock may be issued from time to time in one or more series. The board of directors of the Corporation is hereby authorized to determine and alter all rights, preferences, and privileges and qualifications, limitations, and restrictions thereof (including, without limitation, voting rights and the limitation and exclusion thereof) granted to or imposed upon any wholly unissued series of Preferred Stock and the number of shares constituting any such series and the designation thereof, and to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series subsequent to the issue of shares of that series then outstanding. In case the number of shares of any series is so decreased, the shares constituting such reduction shall resume the status which such shares had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE FIVE

The business and affairs of the Corporation shall be managed by or under the direction of the board of directors, and the directors need not be elected by ballot unless required by the by-laws of the Corporation. In furtherance and not in limitation of the powers conferred by statute, the board of directors of the Corporation is expressly authorized to adopt, amend, or repeal the by-laws of the Corporation.

ARTICLE SIX

Action shall be taken by the stockholders of the Corporation only at annual or special meetings of stockholders, and stockholders may not act by written consent. Special meetings of the Corporation may be called only as provided in the by-laws.

ARTICLE SEVEN

Meetings of the stockholders may be held within or without the State of Delaware, as the by-laws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the board of directors or in the by-laws of the Corporation. The board of directors shall from time to time decide whether and to what extent and at what times and under what conditions and requirements the accounts and books of the Corporation, or any of them, except the stock book, shall be open to the inspection of the stockholders, and no stockholder shall have any right to inspect any books or documents of the Corporation except as conferred by the laws of the State of Delaware or as authorized by the board of directors.

(Article Eight was amended in its entirety by a resolution duly adopted by the Board of Directors on January 18, 1996 and duly adopted by the stockholders at the Annual Meeting of Stockholders held on May 30, 1996).

ARTICLE EIGHT

Notwithstanding any other provision set forth in the Certificate of Incorporation of the Corporation or its By-laws, the board of directors shall be divided into three classes; the term of office of those of the first class

to expire at the annual meeting next ensuing; of the second class one year thereafter; of the third class two years thereafter; and at each annual election held after the initial classification of the board of directors and election of directors to such classes, directors shall be chosen for a full term of three years, as the case may be, to succeed those whose terms expire. The total number of directors constituting the full board of directors and the number of directors in each class shall be fixed by, or in the manner provided in the by-laws, but the total number of directors shall not exceed seventeen (17) nor shall the number of directors in any class exceed six (6). Subject to the foregoing, the classes of directors need not have the same number of members. No reduction in the total number of directors or in the number of directors in any class shall be effective to remove any director or to reduce the term of any director. If the board of directors increases the number of directors in a class, it may fill the vacancy created thereby for the full remaining term of a director in that class even though such term may extend beyond the next annual election. The board of directors may fill any vacancy occurring for any other reason for the full remaining term of the director whose death, resignation or removal caused the vacancy, even though such term may extend beyond the next annual election.

ARTICLE NINE

(a) The Corporation shall, to the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or may hereafter be amended, indemnify all persons whom it may indemnify pursuant hereto.

(b) To the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or may hereafter be amended, a director of this Corporation shall not be personally liable for the Corporation or its Stockholders for monetary damages for breach of fiduciary duty as a director. The modification or repeal of this Article Nine shall not affect the restriction hereunder of a director's personal liability for any breach, act, or omission occurring prior to such modification or repeal.

ARTICLE TEN

The Corporation is to have perpetual existence.

* * *

(A Certificate of Correction was filed to correct a failure to set forth in the Restated Certificate of Incorporation filed with the Secretary of State of Delaware on November 9, 1992, the following resolutions duly adopted by the Board and duly approved by the stockholders):

WHEREAS, the Board of Directors of the Corporation deems it to be advisable and in the best interests of the Corporation that the Corporation effectuates a reverse split of its common stock, par value $0.001 per share (the "Common Stock"), to cause the total number of issued and outstanding shares of Common Stock to be 5,162,762 prior to a contemplated public offering of the securities of the Corporation; it is therefore:

RESOLVED, that, subject to approval by the Corporation's stockholders, there is hereby declared a one-for-two reverse split of the issued and outstanding shares of Common Stock, effective immediately prior to the effective time of the contemplated public offering (the "Conversion Time"), pursuant to which each issued and outstanding share of Common Stock shall automatically be converted into one-half of the one share of Common Stock, and each stockholder of record at the Conversion Time shall receive one or more certificates representing the number of fully-paid and nonassessable shares of Common Stock equal to the number of shares held after the Conversion Time as a result of the foregoing reverse split;

RESOLVED, FURTHER, that the shares of Common Stock that cease to be outstanding as a result of the reverse stock split shall be authorized but

unissued shares;

RESOLVED, FURTHER, that fractions of a share existing after the reverse stock split shall not be issued to the stockholders, and that such fractions shall be paid in cash at their pro rata fair value, which the Board of Directors hereby determines, after due consideration, to be $6.00 per share as of the Conversion Time;

RESOLVED, FURTHER, that appropriate adjustment shall be made to the applicable conversion or other ratios of the Corporation's outstanding warrants, options or other convertible securities to take account of the change in the outstanding Common Stock resulting from the reverse stock split; and

RESOLVED, FURTHER, that the Conversion Time for the one-for-two reverse split of the issued and outstanding shares of Common Stock as authorized on July 22, 1992, and approved by the Corporation's stockholders, shall be at the close of business on Monday, November 9, 1992.

* * *

(The Board of Directors provided for a series of Preferred Stock on July 18, 1995 by the addition to the Certificate of Incorporation of the following paragraphs which were incorporated in a Certificate of Designations, Preferences and Rights of Series A Junior Participating Preferred Stock filed on July 25, 1995):

RESOLVED, that pursuant to the authority vested in the Board of Directors of this Corporation in accordance with the provisions of its Restated Certificate of Incorporation, a series of Preferred Stock of the Corporation be and it hereby is created, and that the designation and amount thereof and the voting powers, preferences and relative, participating, optional and other special rights of the shares of such series, and the qualifications, limitations or restrictions thereof are as follows:

Section 1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" and the number of shares constituting such series shall be 500,000.

Section 2. Dividends and Distributions.

(A) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series A Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series A Junior Participating Preferred Stock shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Junior Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) $.05 or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock, par value $.001 per share, of the Corporation (the "Common Stock") since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Junior Participating Preferred Stock. In the event the Corporation shall at any time after August 28, 1995 (the "Rights Declaration Date") (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Junior Participating Preferred Stock as provided in paragraph (A) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of $.05 per share on the Series A Junior Participating Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Junior Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Junior Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 30 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series A Junior Participating Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Junior Participating Preferred Stock shall entitle the holder thereof to 100 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes to which holders of Class A Junior Participating Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock outstanding immediately prior to such event.

(B) Except as otherwise provided herein or by law, the holders of shares of Series A Junior Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Series A Junior Participating Preferred Stock shall be in arrears in an amount equal to six (6) quarterly dividends thereon, the occurrence of such contingency shall mark the beginning of a period (herein called a "default period") which shall extend until such time when all accrued and unpaid dividends for all previous quarterly dividend periods and for the current quarterly dividend period on all shares of Series A Junior Participating Preferred Stock then outstanding shall have been declared and paid or set apart for payment. During each default period, all holders of Preferred Stock (including holders of the Series A Junior Participating Preferred Stock) with dividends in arrears in an amount equal to six (6) quarterly dividends thereon, voting as a class, irrespective of series, shall have the right to elect two (2) Directors.

(ii) During any default period, such voting right of the

holders of Series A Junior Participating Preferred Stock may be exercised initially at a special meeting called pursuant to subparagraph (iii) of this Section 3(C) or at any annual meeting of stockholders, and thereafter at annual meetings of stockholders, provided that neither such voting right nor the right of the holders of any other series of Preferred Stock, if any, to increase, in certain cases, the authorized number of Directors shall be exercised unless the holders of ten percent (10%) in number of shares of Preferred Stock

outstanding shall be present in person or by proxy. The absence of a quorum of the holders of Common Stock shall not affect the exercise by the holders of Preferred Stock of such voting right. At any meeting at which the holders of Preferred Stock shall exercise such voting right initially during an existing default period, they shall have the right, voting as a class, to elect Directors to fill such vacancies, if any, in the Board of Directors as may then exist up to two (2) Directors or, if such right is exercised at an annual meeting, to elect two (2) Directors. If the number which may be so elected at any special meeting does not amount to the required number, the holders of the Preferred Stock shall have the right to make such increase in the number of Directors as shall be necessary to permit the election by them of the required number. After the holders of the Preferred Stock shall have exercised their right to elect Directors in any default period and during the continuance of such period, the number of Directors shall not be increased or decreased except by vote of the holders of Preferred Stock as herein provided or pursuant to the rights of any equity securities ranking senior to or pari passu with the Series A Junior Participating Preferred Stock.

(iii) Unless the holders of Preferred Stock shall, during an existing default period, have previously exercised their right to elect Directors, the Board of Directors may order, or any stockholder or stockholders owning in the aggregate not less than ten percent (10%) of the total number of shares of Preferred Stock outstanding, irrespective of series, may request, the calling of a special meeting of the holders of Preferred Stock, which meeting shall thereupon be called by the Chairman of the Board, President or the Secretary of the Corporation. Notice of such meeting and of any annual meeting at which holders of Preferred Stock are entitled to vote pursuant to this paragraph (C)(iii) shall be given to each holder of record of Preferred Stock by mailing a copy of such notice to him at his last address as the same appears on the books of the Corporation. Such meeting shall be called for a time not earlier than 20 days and not later than 60 days after such order or request or in default of the calling of such meeting within 60 days after such order or request, such meeting may be called on similar notice by any stockholder or stockholders owning in the aggregate not less than ten percent (10%) of the total number of shares of Preferred Stock outstanding. Notwithstanding the provisions of this paragraph (C)(iii), no such special meeting shall be called during the period within 60 days immediately preceding the date fixed for the next annual meeting of the stockholders.

(iv) In any default period, the holders of Common Stock, and other classes of stock of the Corporation if applicable, shall continue to be entitled to elect the whole number of Directors until the holders of Preferred Stock shall have exercised their right to elect two (2) Directors voting as a class, after the exercise of which right (x) the Directors so elected by the holders of Preferred Stock shall continue in office until their successors shall have been elected by such holders or until the expiration of the default period, and (y) any vacancy in the Board of Directors may (except as provided in paragraph (C)(ii) of this Section 3) be filled by vote of a majority of the remaining Directors theretofore elected by the holders of the class of stock which elected the Director whose office shall have become vacant. References in this paragraph (C) to Directors elected by the holders of a particular class of stock shall include Directors elected by such Directors to fill vacancies as provided in clause (y) of the foregoing sentence.

(v) Immediately upon the expiration of a default period, (x) the right of the holders of Preferred Stock as a class to elect Directors shall cease, (y) the term of any Directors elected by the holders of Preferred Stock as a class shall terminate, and (z) the number of Directors shall be such number as may be provided for in the certificate of incorporation or by-laws irrespective of any increase made pursuant to the provisions of paragraph

(C)(ii) of this Section 3 (such number being subject, however, to change thereafter in any manner provided by law or in the certificate of incorporation or by-laws). Any vacancies in the Board of Directors effected by the provisions of clauses (y) and (z) in the preceding sentence may be filled by a majority of the remaining Directors.

(D) Except as set forth herein, holders of Series A Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Junior Participating Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Junior Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not

(i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock;

(ii) declare or pay dividends on or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock, except dividends paid ratably on the Series A Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Junior Participating Preferred Stock;

(iv) purchase or otherwise acquire for consideration any shares of Series A Junior Participating Preferred Stock, or any shares of stock ranking on a parity with the Series A Junior Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series A Junior Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein.

Section 6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation (voluntary or otherwise), dissolution or winding up of the Corporation, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Junior Participating Preferred Stock shall have received [$.10] per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (i) the Series A Liquidation Preference by (ii) 100 (as appropriately adjusted as set forth in subparagraph C below to reflect such events as stock splits, stock dividends and recapitalizations with respect to the Common Stock) (such number in clause (ii), the "Adjustment Number"). Following the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect to all outstanding shares of Series A Junior Participating Preferred Stock and Common Stock, respectively, holders of Series A Junior Participating Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio of the Adjustment Number to 1 with respect to such Preferred Stock and Common Stock, on a per share basis, respectively.

(B) In the event, however, that there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of preferred stock, if any, which rank on a parity with the Series A Junior Participating Preferred Stock, then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences. In the event, however, that there are not sufficient assets available to permit payment in full of the Common Adjustment, then such remaining assets shall be distributed ratably to the holders of Common Stock.

(C) In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the shares of Series A Junior Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Junior Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. Optional Redemption.

(A) The Corporation shall have the option to redeem the whole or any part of the Series A Junior Participating Preferred Stock at any time at a redemption price equal to, subject to the provisions for adjustment hereinafter set forth, 100 times the "current per share market price" of the Common Stock on the date of the mailing of the notice of redemption, together with unpaid accumulated dividends to the date of such redemption. In the event the Corporation shall at any time after the Rights Declaration Date, (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series A Junior Participating Preferred Stock were otherwise entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. The "current per share market price" on any date shall be deemed to be the average of the closing price per share of such Common Stock for the 10 consecutive Trading Days (as such term is hereinafter defined) immediately prior to such date. The closing price for each day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the New York Stock Exchange or, if the Common Stock is not listed or admitted to trading on the New York Stock Exchange, as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the principal national securities exchange on which the Common Stock is listed or admitted to trading or, if the Common Stock is not listed or admitted to trading on any national securities exchange, the last quoted price or, if not so quoted the average of the high bid and low asked prices in the over-the-counter market, as reported by the National Association of Securities Dealers, Inc. Automated Quotation System ("NASDAQ") or such other system then in use or, if on any such date the Common Stock is not quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market in the Common Stock selected by the Board of Directors of the Corporation. If on such date no such market maker is making a market in the Common Stock, the fair value of the Common Stock on such date as determined in good faith by the Board of Directors of the Corporation shall be used. The term "Trading Day" shall mean a day on which the principal national securities exchange on which the Common Stock is listed or admitted to trading is open for the transaction of business or, if the Common Stock is not listed or admitted to trading on any national securities exchange, a Monday, Tuesday, Wednesday, Thursday or Friday on which banking institutions in the State of New York are not authorized or obligated by law or executive order to close.

(B) Notice of any such redemption shall be given by mailing to the holders of the Series A Junior Participating Preferred Stock a notice of such redemption, first class postage prepaid, not later than the thirtieth day and not earlier than the sixtieth day before the date fixed for redemption, at their last address as the same shall appear upon the books of the Corporation. Any notice which is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the stockholder received such notice, and failure duly to give such notice by mail, or any defect in such notice, to any holder of Series A Junior Participating Preferred Stock shall not affect the validity of the proceedings for the redemption of such Series A Junior Participating Preferred Stock are to be redeemed, the redemption shall be made by lot as determined by the Board of Directors.

(C) If any such notice of redemption shall have been duly given or if the Corporation shall have given to the bank or trust company hereinafter referred to irrevocable written authorization promptly to give or complete such notice, and if on or before the redemption date specified therein the funds necessary for such redemption shall have been deposited by the Corporation with the bank or trust company designated in such notice, doing business in the United States of America and having a capital, surplus and undivided profits

aggregating at least $25,000,000 according to its last published statement of condition, in trust for the benefit of the holders of Series A Junior Participating Preferred Stock called for redemption, then, notwithstanding that any certificate for such shares so called for redemption shall not have been surrendered for cancellation, from and after the time of such deposit all such shares called for redemption shall no longer be deemed outstanding and all rights with respect to such shares shall no longer be deemed outstanding and all rights with respect to such shares shall forthwith cease and terminate, except the right of the holders thereof to receive from such bank or trust company at any time after the time of such deposit the funds so deposited, without

interest, and the right to exercise, up to the close of business on the fifth day before the date fixed for redemption, all privileges of conversion or exchange if any. In case less than all the shares represented by any surrendered certificate are redeemed, a new certificate shall be issued representing the unredeemed shares. Any interest accrued on such funds shall be paid to the Corporation from time to time. Any funds so deposited and unclaimed at the end of six years from such redemption date shall be repaid to the Corporation, after which the holders of shares of Series A Junior Participating Preferred Stock called for redemption shall look only to the Corporation for payment thereof; provided that any funds so deposited which shall not be required for redemption because of the exercise of any privilege of conversion or exchange subsequent to the date of deposit shall be repaid to the Corporation forthwith.

Section 9. Ranking. The Series A Junior Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.

Section 10. Amendment. So long as any shares of Series A Junior Participating Preferred Stock are outstanding, the Restated Certificate of Incorporation of the Corporation shall not be further amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Junior Participating Preferred Stock so as to affect them adversely without the affirmative vote of the holders of a majority or more of the outstanding shares of Series A Junior Participating Preferred Stock, voting separately as a class.

Section 11. Fractional Shares. Series A Junior Participating Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holders fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Junior Participating Preferred Stock.

* * *

(The Board of Directors provided for a series of Preferred Stock on February 11, 1999 by the addition to the Certificate of Incorporation of the following paragraphs which were incorporated in a Certificate of Designations, of 5% Series B Convertible Preferred Stock filed on March 17, 1999):

RESOLVED, that pursuant to the authority conferred on the Board of Directors of this Corporation by its Certificate of Incorporation, a series of Preferred Stock, par value $.001 per share, of the Corporation is hereby established and created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative, participating, optional or other rights of the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

5% Series B Convertible Preferred Stock

1 Designation and Amount and Definitions. (a) There shall be a series of Preferred Stock designated as "5% Series B Convertible Preferred Stock" and the number of shares constituting such series shall be 63,000. Such

series is referred to herein as the "Series B Preferred Stock". Notwithstanding any other provision in this Certificate of Designations (this "Certificate of Designations") to the contrary, such series shall be senior to all other classes or series of stock of the Corporation with respect to the receipt of dividends and the receipt of distributions of assets upon liquidation, dissolution or winding up. Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, however, that no decrease shall reduce the number of shares of Series B Preferred Stock to fewer than the number of shares of Series B Preferred Stock then issued and outstanding.

(b) As used in this Certificate of Designations, the following terms shall have the following meanings:

"Additional Preferred Shares" shall mean any shares of Series B Preferred Stock issued subsequent to the First Closing Date.

The "Closing Bid Price" for any security of the Corporation, for each Trading Day, shall be the reported closing bid price of such security on the national securities exchange on which such security is listed or admitted to trading, or, if such security is not listed or admitted to trading on any national securities exchange, shall mean the reported closing bid price of such security on the Nasdaq SmallCap Market or the Nasdaq National Market System (collectively referred to as "Nasdaq") or, if such security is not listed or admitted to trading on any national securities exchange or quoted on Nasdaq, shall mean the reported closing bid price of such security on the principal securities exchange on which such security is listed or admitted to trading (based on the aggregate dollar value of all securities listed or admitted to trading) or, if such security is not listed or admitted to trading on a national securities exchange, quoted on Nasdaq or listed or admitted to trading on any other securities exchange, shall mean the closing bid price in the over-the-counter market as furnished by any member firm of the National Association of Securities Dealers, Inc. (the "NASD"), selected from time to time by the Corporation for that purpose.

The "Closing Trade Price" for any security of the Corporation, for each Trading Day, shall mean the price at which such security was last exchanged on the Stock Market during such Trading Day, or, if there were no transactions on such Trading Day, the average of the reported closing bid and asked prices, regular way, of such security on the relevant Stock Market on such Trading Day.

"Common Stock" shall mean the common stock, par value $.001 per share, of the Corporation.

"Conversion Price" is defined in Section 4(a).

"Conversion Price Floor" shall mean (i) with respect to the Initial Preferred Shares, the lesser of (x) $.55 and (y) 50% of the average Closing Bid Price of the Common Stock for the five Trading Days immediately prior to the First Closing Date and (ii) with respect to the Additional Preferred Shares, 50% of the average Closing Bid Price of the Common Stock for the five Trading Days immediately prior to the Second Closing Date.

"Conversion Rate Ceiling" shall mean the rate at which a particular share of Series B Preferred Stock shall be convertible when the applicable Conversion Price is the Conversion Price Floor.

"Conversion Rate" shall mean the rate at which a particular share of Series B Preferred Stock is convertible at any time into Common Stock and shall be determined by dividing the then applicable Conversion Price into the sum of (x) $100.00 plus (y) all accrued and unpaid dividends on such share of Series B Preferred Stock.

"Fair Market Value" of any asset (including any security) means the fair market value thereof as mutually determined by the Corporation

and the holders of a majority of the Series B Preferred Stock then outstanding. If the Corporation and the holders of a majority of the Series B Preferred Stock then outstanding are unable to reach agreement on any valuation matter, such valuation shall be submitted to and determined by a nationally recognized independent investment bank selected by the Board of Directors and the holders of a majority of the Series B Preferred Stock (or, if such selection cannot be agreed upon promptly, or in any event within ten days, then such valuation shall be made by a nationally recognized independent investment banking firm selected by the American Arbitration Association in New York City in accordance with its rules), the costs of which valuation shall be paid for by the Corporation.

"First Closing Date" shall mean the date of the closing of the purchase and sale of the Initial Preferred Shares.

"Fixed Conversion Price" is defined in Section 4(a).

"Initial Conversion Price" shall mean (i) with respect to the Initial Preferred Shares, the lesser of (x) $1.03 and (y) 120% of the average Closing Bid Price of the Common Stock for the five Trading Days immediately prior to the First Closing Date and (ii) with respect to the Additional Preferred Shares, the lesser of (x) the average Closing Bid Price for the five Trading Days immediately prior to the Second Closing Date and (y) the Market Price of the Common Stock as of the Second Closing Date.

"Initial Preferred Shares" shall mean any shares of Series B Preferred Stock issued on the date of the first issuance of any shares of Series B Preferred Stock.

"Initial Reset Date" shall mean the 12-month anniversary of the First Closing Date.

"Investment Agreement" shall mean the Preferred Stock and Warrant Purchase Agreement dated as of February 16, 1999, by and among the Corporation and the purchasers signatory thereto.

"Junior Stock" shall mean the Common Stock and any shares of preferred stock of any series or class of the Corporation, whether presently outstanding or hereafter issued, which are junior to the shares of Series B Preferred Stock with respect to (i) the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, (ii) dividends or (iii) voting.

"Market Price" shall mean the average Closing Bid Price for 20 consecutive Trading Days ending with the Trading Day prior to the date as of which the Market Price is being determined (with appropriate adjustments for subdivisions or combinations of shares effected during such period), provided that if the prices referred to in the definition of Closing Bid Price cannot be determined for such period, "Market Price" shall mean Fair Market Value.

"Registered Holders" shall mean, at any time, the holders of record of the Series B Preferred Stock.

"Reset Date" shall mean (i) with respect to the Initial Preferred Shares, the Initial Reset Date and (ii) with respect to the Additional Preferred Shares, the Second Reset Date.

"Reset Trading Price" shall mean (i) with respect to the Initial Preferred Shares, the Market Price of the Common Stock as of the Initial Reset Date and (ii) with respect to the Additional Preferred Shares, the Market Price as of the Second Reset Date.

"Second Closing Date" shall mean the date of the closing of the purchase and sale of the Additional Preferred Shares.

"Second Reset Date" shall mean the 12-month anniversary of the Second Closing Date.

"Stock Market" shall mean, with respect to any security, the principal national securities exchange on which such security is listed or admitted to trading or, if such security is not listed or admitted to trading on any national securities exchange, shall mean Nasdaq or, if such security is not quoted on Nasdaq, shall mean the OTC Bulletin Board or, if such security is not quoted on the OTC Bulletin Board, shall mean the over-the-counter market as furnished by any NASD member firm selected from time to time by the Corporation for that purpose.

A "Trading Day" shall mean a day on which the relevant Stock Market is open for the transaction of business.

The "Variable Conversion Price" with respect to any conversion of Series B Preferred Stock shall equal the average of the three lowest Closing Bid Prices of the Common Stock during the 10 consecutive Trading Days ending on the Trading Day preceding the effective date of such conversion; provided that any of such Trading Days on which the applicable converting holder has sold Common Stock on the Stock Market shall be disregarded for purposes of determining such three lowest Closing Bid Prices, and the Trading Day(s) with the next lowest Closing Bid Price(s) of the Common Stock during such 10-Trading Day period shall be substituted in lieu thereof.

2 Dividends and Distributions. (a) The holders of the Series B Preferred Stock shall be entitled to receive cumulative dividends on each share of Series B Preferred Stock at the rate of 5% per annum of the Dividend Base Amount (as defined below), payable on every six-month and one-year anniversary of the First Closing Date in arrears; provided, however, that on any day on which the Common Stock trades below the Conversion Price Floor, the rate at which such dividends accrue shall increase to 10% per annum. Such dividends shall accrue daily based on a 360-day year consisting of 12 30-day months. Such dividends shall be paid, at the option of the Corporation, in either (i) cash

or (ii) shares of duly authorized, fully paid and non-assessable shares of Common Stock. In calculating the number of shares of Common Stock to be paid with respect to each dividend if payment in shares of Common Stock is elected by the Corporation, each share of Common Stock shall be deemed to have the value equal to the lower of (A) the Conversion Price (as defined in Section 4(a) hereof) or (B) the Market Price of the Common Stock at the time such dividend is payable. Such dividends shall accrue and accumulate whether or not they have been declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. The "Dividend Base Amount" shall be $100 plus all accrued but unpaid dividends on the Series B Preferred Stock (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series B Preferred Stock).

(b) In addition to the foregoing, subject to the rights of the holders of any shares of any series or class of capital stock ranking prior, and superior to, or pari passu with, the shares of Series B Preferred Stock with respect to dividends, the holders of shares of Series B Preferred Stock shall be entitled to receive, as, when and if declared by the Board of Directors, out of assets legally available for that purpose, dividends or distributions in cash, stock or otherwise.

(c) The Corporation shall not declare any dividend or distribution on any Junior Stock of the Corporation unless and until a special dividend or distribution of $100.00 per share (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series B Preferred Stock), together with all accrued and unpaid dividends on the Series B Preferred Stock, has been declared and paid on the Series B Preferred Stock. Following payment in full of such special dividend or distribution, the Corporation may declare dividends and distributions on Junior Stock or stock on parity with the Series B Preferred Stock, provided that the Corporation shall

not declare any dividend or distribution on any Junior Stock or stock on parity with the Series B Preferred Stock unless the Corporation shall, concurrently with the declaration of such dividend or distribution on the Junior Stock or stock on parity with the Series B Preferred Stock, declare a like dividend or distribution, as the case may be, on the Series B Preferred Stock.

(d) Any dividend or distribution (other than that referenced in the first sentence of Subsection 2(c)) payable to the holders of the Series B Preferred Stock pursuant to this Section 2 shall be paid to such holders at the same time as the dividend or distribution on the Junior Stock or any other capital stock of the Corporation by which it is measured is paid.

(e) All dividends or distributions declared upon the Series B Preferred Stock shall be declared pro rata per share.

(f) Any reference to "distribution" contained in this Section 2 shall not be deemed to include any distribution made in connection with or in lieu of any Liquidation Event (as defined below).

(g) No interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments on the Series B Preferred Stock which may be in arrears.

(h) So long as any shares of the Series B Preferred Stock are outstanding, no dividends, except as described in the next succeeding sentence, shall be declared or paid or set apart for payment on any class or series of stock of the Corporation ranking, as to dividends, on a parity with the Series B Preferred Stock, for any period unless all dividends have been or contemporaneously are declared and paid, or declared and a sum sufficient for the payment thereof set apart for such payment, on the Series B Preferred Stock. When dividends are not paid in full or a sum sufficient for such payment is not set apart, as aforesaid, upon the shares of the Series B Preferred Stock and any other class or series of stock ranking on a parity as to dividends with the Series B Preferred Stock, all dividends declared upon such other stock shall be declared pro rata so that the amounts of dividends per share declared on the Series B Preferred Stock and such other stock shall in all cases bear to each other the same ratio that accrued dividends per share on the shares of the Series B Preferred Stock and on such other stock bear to each other.

(i) So long as any shares of the Series B Preferred Stock are outstanding, no other stock of the Corporation ranking on a parity with the Series B Preferred Stock as to dividends or upon liquidation, dissolution or winding up shall be redeemed, purchased or otherwise acquired for any consideration (or any moneys be paid to or made available for

a sinking fund or otherwise for the purchase or redemption of any shares of any such stock) by the Corporation unless the dividends, if any, accrued on all outstanding shares of the Series B Preferred Stock shall have been paid or set apart for payment.

3 Liquidation Preference. (a) In the event of a (i) liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, (ii) a sale or other disposition of all or substantially all of the assets of the Corporation or (iii) any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity or shares of Common Stock constituting in excess of 50% of the voting power of the Corporation are exchanged for or changed into stock or securities of another entity, cash and/or any other property (a "Merger Transaction") (items (i), (ii) and (iii) of this sentence being collectively referred to as a "Liquidation Event"), after payment or provision for payment of debts and other liabilities of the Corporation, the holders of the Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, whether such assets are capital, surplus, or earnings, before any payment or declaration and setting apart for payment of any amount shall be made in respect of any Junior Stock of the Corporation, an amount equal to (x) $100.00 per share plus an amount equal to all declared and/or unpaid dividends thereon plus (y) the

amount by which any per share amount payable with respect to the Series B Preferred Stock pursuant to Section 13 of this Certificate of Designations or Section 7.28 of the Investment Agreement exceeds the amount set forth in (x) less (z) the amount of any special dividend or distribution paid on the Series B Preferred Stock pursuant to Section 2(c) (other than any dividend component thereof, which shall be deemed to have been paid prior to any payment of the $100 per share distribution referenced therein); provided, however, that in the case of a Merger Transaction, such amount may be paid in cash, property (valued as provided in Subsection 3(b)) and/or securities (valued as provided in Subsection 3(b)) of the entity surviving such Merger Transaction. In the case of property or in the event that any such securities are subject to an investment letter or other similar restriction on transferability, the value of such property or securities shall be determined by agreement between the Corporation and the holders of a majority of the Series B Preferred Stock then outstanding. If upon any Liquidation Event, whether voluntary or involuntary, the assets to be distributed to the holders of the Series B Preferred Stock shall be insufficient to permit the payment to such shareholders of the full preferential amounts aforesaid, then all of the assets of the Corporation to be distributed shall be so distributed ratably to the holders of the Series B Preferred Stock on the basis of the number of shares of Series B Preferred Stock held. All shares of Series B Preferred Stock shall rank as to payment upon the occurrence of any Liquidation Event senior to the Common Stock and all other series of the Corporation's preferred stock. Notwithstanding item (iii) of the first sentence of this Subsection 3(a), any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity but the stockholders of the Corporation immediately prior to such transaction own in excess of 50% of the voting power of the Corporation surviving such transaction and own such interest in substantially the same proportions as prior to such transaction, shall not be considered a Liquidation Event provided that the Corporation shall have made provision for the issuance pursuant to such consolidation, merger, combination, reorganization or other transaction of securities in replacement of the Series B Preferred Stock having rights, preferences and privileges (including, without limitation, an aggregate liquidation preference) equal to the outstanding shares of Series B Preferred Stock immediately prior to such consolidation, merger, combination, reorganization or other transaction.

(b) Any securities or other property to be delivered to the holders of the Series B Preferred Stock pursuant to Subsection 3(a) hereof shall be valued as follows:

(i) Securities not subject to an investment letter or other similar restriction on free marketability:

(A) If actively traded on a Stock Market, the value shall be deemed to be the Market Price as of the third day prior to the date of valuation.

(B) If not actively traded on a Stock Market, the value shall be the Fair Market Value.

(ii) For securities for which there is an active public market but which are subject to an investment letter or other restrictions on free marketability, the value shall be the Fair Market Value thereof, determined by discounting appropriately the Market Price thereof.

(iii) For all other securities or property, the value shall be the Fair Market Value thereof.

4 Conversion.

(a) Right of Conversion. Subject to the limitations contained in Section 7 and the limitations hereinafter set forth in this Section 4(a), the shares of Series B Preferred Stock shall be convertible, in whole or in part, at the option of the holder thereof and upon notice to the Corporation as set forth in Subsection 4(b), into fully paid and non-assessable shares of Common Stock and such other securities and property as hereinafter provided. At any

time, the conversion price per share of Common Stock (the "Conversion Price") shall be equal to the lower of (i) the Variable Conversion Price and (ii) the Fixed Conversion Price, as determined in accordance with the next paragraph.

The Fixed Conversion Price ("Fixed Conversion Price") shall initially be equal to the Initial Conversion Price. If the Reset Trading Price is less than the Initial Conversion Price, the Fixed Conversion Price (subject to adjustment pursuant to the provisions of Subsection 4(c)) shall be adjusted and reset effective as of the Reset Date (a "Reset Event"), to equal the greater of (x) the Reset Trading Price and (y) 50% of the Initial Conversion Price. If there is any change in the Fixed Conversion Price as a result of a Reset Event in accordance with the preceding sentence, then the Corporation shall prepare a certificate signed by the principal financial officer of the Corporation setting forth the Fixed Conversion Price and the Conversion Rate in effect as of the Reset Date, showing in reasonable detail the facts upon which such Conversion Rate is based, and such certificate shall be mailed as promptly as practicable (but in any event within 10 days) after the Reset Date by the Corporation to all record holders of the Series B Preferred Stock at their last addresses as they shall appear in the stock transfer books of the Corporation.

If the Conversion Price applicable on the effective date of any conversion of Series B Preferred Stock is less than the Conversion Price Floor, then, except as provided in the next succeeding paragraph, the Corporation shall not be required to effect such conversion unless the holder of such Series B Preferred Stock consents to conversion of such Series B Preferred Stock at the Conversion Rate Ceiling. In such event, the Corporation shall, as promptly as practicable (but in any event within three business days), notify the holder of such Series B Preferred Stock that the Conversion Rate Ceiling is in effect. The holder of such Series B Preferred Stock shall be deemed to have revoked its conversion of such Series B Preferred Stock unless, within 15 days of receipt of such notice, the holder delivers its written consent to conversion of such Series B Preferred Stock at the Conversion Rate Ceiling to the Corporation.

In the event that (a) the Common Stock trades at less than the Conversion Price Floor on 60 or more Trading Days in any 12-month period (irrespective of whether such Trading Days are consecutive), and (b) the Conversion Price applicable to any conversion of Series B Preferred Stock that is requested as of a date not later than the day following the 12-month anniversary of the earliest of such 60 days is less than the Conversion Price Floor, the Corporation shall either effect such conversion at the applicable Conversion Price without regard to the immediately preceding paragraph or pay to the holder of such Series B Preferred Stock, in cash, an amount (the "Cash Pay-Out Amount") equal to the product of (x) the number of shares of Common Stock that would otherwise be issuable upon conversion of the Series B Preferred Stock at such lower Conversion Price and (y) the highest Closing Trade Price for the Common Stock during the period commencing on the date of the request for conversion and ending on the day immediately prior to the date of payment of the Cash Pay-Out Amount. In no event shall the Cash Pay-Out Amount be paid pursuant the preceding sentence more than 10 days after such request for conversion.

The Corporation shall prepare a certificate signed by the Chairman or President, and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary, of the Corporation setting forth the Fixed Conversion Price, upon any adjustment thereto in connection with a Reset Event showing in reasonable detail the facts upon which the Fixed Conversion Price is based, and such certificate shall be mailed as promptly as practicable after the Reset Date by the Corporation to all effected record holders of the Series B Preferred Stock at their last addresses as they shall appear in the records of the Corporation.

(b) Conversion Procedures. Any holder of shares of Series B Preferred Stock desiring to convert such shares into Common Stock shall surrender the certificate or certificates evidencing such shares of Series B Preferred Stock at the office of the transfer agent (the "Transfer Agent") for the Series B Preferred Stock, which certificate or certificates, if

the Corporation shall so require, shall be duly endorsed to the Corporation or in blank, or accompanied by proper instruments of transfer to the Corporation or in blank, accompanied by irrevocable written notice to the Corporation that the holder elects so to convert such shares of Series B Preferred Stock and specifying the name or names (with address) in which a certificate or certificates evidencing shares of Common Stock are to be issued. The Corporation need not deem a notice of conversion to be received unless the holder complies with all the provisions hereof. The Corporation will instruct the Transfer Agent (which may be the Corporation) to make a notation of the date that a notice of conversion is received, which date shall be deemed to be the date of receipt for purposes hereof.

The Corporation shall, as soon as practicable after such deposit of certificates evidencing shares of Series B Preferred Stock accompanied by the written notice and compliance with any other conditions herein contained, deliver at such office of such Transfer Agent to the person for whose account such shares of Series B Preferred Stock were so surrendered, or to the nominee or nominees of such person, certificates evidencing the number of full shares of Common Stock to which such person shall be entitled as aforesaid, together with a cash adjustment of any fraction of a share as hereinafter provided. Subject to the following provisions of this paragraph, such conversion shall be deemed to have been made as of the date of such surrender of the shares of Series B Preferred Stock to be converted, and the person or persons entitled to receive the Common Stock deliverable upon conversion of such Series B Preferred Stock shall be treated for all purposes as the record holder or holders of such Common Stock on such date; provided, however, that the Corporation shall not be required to convert any shares of Series B Preferred Stock while the stock transfer books of the Corporation are closed for any purpose, but the surrender of Series B Preferred Stock for conversion during any period while such books are so closed shall become effective for conversion immediately upon the reopening of such books as if the surrender had been made on the date of such reopening, and the conversion shall be at the conversion rate in effect on such date. No adjustments in respect of any dividends on shares surrendered for conversion or any dividend on the Common Stock issued upon conversion shall be made upon the conversion of any shares of Series B Preferred Stock.

The Corporation shall at all times, reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Series B Preferred Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series B Preferred Stock.

Except as provided in the third paragraph of Section 4(a), all notices of conversion shall be irrevocable; provided, however, that if the Corporation has sent notice of an event pursuant to Subsection 4(g) hereof, a holder of Series B Preferred Stock may, at its election, provide in its notice of conversion that the conversion of its shares of Series B Preferred Stock shall be contingent upon the occurrence of the record date or effectiveness of such event (as specified by such holder), provided that such notice of conversion is received by the Corporation prior to such record date or effective date, as the case may be.

(c) Adjustment of Conversion Rate and Conversion Price.

(i) Except as otherwise provided herein, in the event the Corporation shall, at any time or from time to time after the date hereof, (1) sell or issue any shares of Common Stock for a consideration per share less than either (A) the then applicable Conversion Price (taking into account the limitation set forth in the third paragraph of Section 4(a)) in effect on the date of such sale or issuance or (B) the Market Price of the Common Stock as of the date of such sale or issuance, (2) issue any shares of Common Stock as a stock dividend to all or substantially all the holders of Common Stock, or (3) subdivide or combine the outstanding shares of Common Stock into a greater or lesser number of shares (any such sale, issuance, subdivision or combination being herein called a "Change of Shares"), then, and thereafter upon each further Change of Shares, for purposes of determining the Conversion Price, the Initial Conversion Price or the Reset Conversion Price, as applicable, in effect with respect to a share of Series B Preferred Stock immediately prior to such Change of Shares shall be adjusted to equal a price (rounded to the nearest cent) determined by multiplying such Initial Conversion Price or Reset Conversion Price, as applicable, by a fraction, the numerator of which

shall be the sum of the number of shares of Common Stock outstanding immediately prior to the sale or issuance of such additional shares or such subdivision or combination and the number of shares of Common Stock which the aggregate consideration received (determined as provided

in Subparagraph 4(c)(v)(E)) for the issuance of such additional shares would purchase at the greater of (x) the then applicable Conversion Price (taking into account the limitation set forth in the third paragraph of Section 4(a)) in effect on the date of such issuance or (y) the Market Price of the Common Stock as of such date, and the denominator of which shall be the number of shares of Common Stock outstanding immediately after the sale or issuance of such additional shares or such subdivision or combination. Such adjustment shall be made successively whenever such an issuance is made.

(ii) In case of any reclassification, capital reorganization or other change of outstanding shares of Common Stock, or in case of any consolidation or merger of the Corporation with or into another entity (other than a consolidation or merger in which the Corporation is the continuing entity and which does not result in any reclassification, capital reorganization or other change of outstanding shares of Common Stock other than the number thereof), or in case of any sale or conveyance to another entity of the property of the Corporation as, or substantially as, an entirety (other than a sale/leaseback, mortgage or other financing transaction), the Corporation shall cause effective provision to be made so that each holder of a share of Series B Preferred Stock shall be entitled to receive, upon conversion of such share of Series B Preferred Stock, at the option of the holder of such share of Series B Preferred Stock, either (a) the kind and number of shares of stock or other securities or property (including cash) receivable upon such reclassification, capital reorganization or other change, consolidation, merger, sale or conveyance by a holder of the number of shares of Common Stock into which such share of Series B Preferred Stock was convertible immediately prior to such reclassification, capital reorganization or other change, consolidation, merger, sale or conveyance or (b) in the case of any such reclassification, capital reorganization or other change, consolidation or merger, shares of common stock of the surviving entity in such transaction, or in the case of any such sale or conveyance, shares of common stock of the transferee in such transaction, at a conversion rate determined by dividing the Conversion Price (determined by (1) taking into account the trading price of the common stock of such surviving entity or transferee for purposes of determining the Variable Conversion Price, (2) in the case of any such reclassification, capital reorganization, or other change, consolidation or merger, dividing the Initial Conversion Price or the Reset Conversion Price, as applicable, by the conversion ratio in such transaction, and effecting any appropriate adjustment to take into account the receipt by holders of Common Stock of any consideration other than common stock of such surviving entity in such transaction and (3) in the event such transaction takes place prior to the Reset Date, applying the reset provisions of Section 4(a) to the trading price of the common stock of the surviving entity or transferee in such transaction) into the sum of (x) $100 plus (y) all accrued and unpaid dividends on such share of Series B Preferred Stock. Any such provision shall include provision for adjustments that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Subsection 4(c). The Corporation shall not effect any such consolidation, merger or sale unless prior to or simultaneously with the consummation thereof the successor (if other than the Corporation) resulting from such consolidation or merger or the entity purchasing assets or other appropriate entity shall assume, by written instrument executed and delivered to the Transfer Agent, the obligation to deliver to the holder of each share of Series B Preferred Stock such shares of stock, securities or assets as, in accordance with the foregoing provisions, such holders may be entitled to receive and the other obligations under this Agreement. The foregoing provisions shall similarly apply to successive reclassifications, capital reorganizations and other changes of outstanding shares of Common Stock

and to successive consolidations, mergers, sales or conveyances.

(iii) If, at any time or from time to time, the Corporation shall issue or distribute to all or substantially all the holders of shares of Common Stock evidence of its indebtedness, any other securities of the Corporation or any cash, property or other assets (excluding an issuance or distribution governed by one of the preceding paragraphs of this Subsection 4(c) and also excluding cash dividends or cash distributions paid out of retained earnings of the Corporation determined under generally accepted accounting principles consistently applied (any such non-excluded event being herein called a "Special Dividend")), then in each case the holders of the Series B Preferred Stock shall be entitled to a proportionate share of any such Special Dividend as though they were the holders of the number of shares of Common Stock into which their shares of Series B Preferred Stock are convertible (without giving effect to the limitation set forth in the third paragraph of Section 4(a)) as of the record date or effective date, as the case may be, fixed for the determination of the holders of Common Stock entitled to receive such Special Dividend.

(iv) After each adjustment of the Conversion Price pursuant to this Subsection 4(c), the Corporation will promptly prepare a certificate signed by the Chairman or President, and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary, of the Corporation setting forth: (i) the Conversion Price as so adjusted, (ii) the Conversion Rate corresponding to such Conversion and (iii) a brief statement of the facts accounting for such adjustment. The Corporation will promptly file such certificate with the Transfer Agent and cause a brief summary thereof to be sent by ordinary first class mail to each registered holder of Series B Preferred Stock at his or her last address as it shall appear on the registry books of the Transfer Agent. Neither failure to mail such notice nor any defect therein or in the mailing thereof shall affect the validity of such adjustment. The affidavit of an officer of the Transfer Agent or the Secretary or an Assistant Secretary of the Corporation that such notice has been mailed shall, in the absence of fraud, be prima facie evidence of the facts stated therein. The Transfer Agent may rely on the information in the certificate as true and correct and has no duty or obligation to verify independently the amounts or calculations set forth therein.

(v) For purposes of Paragraph 4(c)(i) hereof, the following provisions (A) to (F) shall also be applicable:

(A) The number of shares of Common Stock deemed outstanding at any given time shall include all shares of capital stock convertible into, or exchangeable for, Common Stock (on an as converted basis) as well as all shares of Common Stock issuable upon the exercise of (x) any convertible debt, (y) warrants outstanding on such date and (z) options outstanding on such date.

(B) No adjustment of the Initial Conversion Price or the Reset Conversion Price shall be made unless such adjustment would require an increase or decrease of at least $.01 in such price; provided that any adjustments which by reason of this Subparagraph (B) are not required to be made shall be carried forward and shall be made at the time of and together with the next subsequent adjustment which, together with adjustments so carried forward, shall require an increase or decrease of at least $.01 in the Initial Conversion Price or the Reset Conversion Price, as the case may be, then in effect.

(C) In case of (1) the sale or other issuance by the Corporation (including as a component of a unit) of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or any securities convertible into or exchangeable for Common Stock (such securities convertible, exercisable or exchangeable into Common Stock being herein called

"Convertible Securities"), or (2) the issuance by the Corporation, without the receipt by the Corporation of any consideration therefor, of any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or Convertible Securities, whether or not such rights, warrants or options, or the right to convert or exchange such Convertible Securities, are immediately exercisable, and the consideration per share for which Common Stock is issuable upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities (determined by dividing (x) the minimum aggregate consideration, as set forth in the instrument relating thereto without regard to any antidilution or similar provisions contained therein for a subsequent adjustment of such amount, payable to the Corporation upon the exercise of such rights, warrants or options, plus the consideration received by the Corporation for the issuance or sale of such rights, warrants or options, plus, in the case of such Convertible Securities, the minimum aggregate amount, as set forth in the instrument relating thereto without regard to any antidilution or similar provisions contained therein for a subsequent adjustment of such amount, of additional consideration, if any, other than such Convertible Securities, payable upon the conversion or exchange thereof, by (y) the total maximum number, as set forth in the instrument relating thereto without regard to any antidilution or similar provisions contained therein for a subsequent adjustment of such amount, of shares of Common Stock issuable upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities issuable upon the exercise of such rights, warrants or options) is less than either the Conversion Price (taking into account the limitation set forth in the third paragraph of Section 4(a)) or the Closing Bid Price of the Common Stock as of the date of the issuance or sale of such rights, warrants or options, then such total maximum number of shares of Common Stock issuable upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities (as of the date of the issuance or sale of such rights, warrants or options) shall be deemed to be

"Common Stock" for purposes of Paragraph 4(c)(i) and shall be deemed to have been sold for an amount equal to such consideration per share and shall cause an adjustment to be made in accordance with Paragraph 4(c)(i).

(D) In case of the sale by the Corporation of any Convertible Securities, whether or not the right of conversion or exchange thereunder is immediately exercisable, and the price per share for which Common Stock is issuable upon the conversion or exchange of such Convertible Securities (determined by dividing (x) the total amount of consideration received by the Corporation for the sale of such Convertible Securities, plus the minimum aggregate amount, as set forth in the instrument relating thereto without regard to any antidilution or similar provisions contained therein for a subsequent adjustment of such amount, of additional consideration, if any, other than such Convertible Securities, payable upon the conversion or exchange thereof, by (y) the total maximum number, as set forth in the instrument relating thereto without regard to any antidilution or similar provisions contained therein for a subsequent adjustment of such amount, of shares of Common Stock issuable upon the conversion or exchange of such Convertible Securities) is less than either the Conversion Price (taking into account the limitation set forth in the third paragraph of Section 4(a)) or the Market Price of the Common Stock as of the date of the sale of such Convertible Securities, then such total maximum number of shares of Common Stock issuable upon the conversion or exchange of such Convertible Securities (as of the date of the sale of such Convertible Securities) shall be deemed to be "Common Stock" for

purposes of Paragraph 4(c)(i) and shall be deemed to have been sold for an amount equal to such consideration per share and shall cause an adjustment to be made in accordance with Paragraph 4(c)(i).

(E) In case the Corporation shall modify the rights of conversion, exchange or exercise of any of the securities referred to in (C) and (D) above or any other securities of the Corporation convertible, exchangeable or exercisable for shares of Common Stock, for any reason other than an event that would require adjustment to prevent dilution, so that the consideration per share received by the Corporation after such modification is less than either the Conversion Price (taking into account the limitation set forth in the third paragraph of Section 4(a)) or the Market Price as of the date prior to such modification, then such securities, to the extent not theretofore exercised, converted or exchanged, shall be deemed to have expired or terminated immediately prior to the date of such modification and the Corporation shall be deemed for purposes of calculating any adjustments pursuant to this Subsection 4(c) to have issued such new securities upon such new terms on the date of modification. Such adjustment shall become effective as of the date upon which such modification shall take effect. On the expiration or cancellation of any such right, warrant or option or the termination or cancellation of any such right to convert or exchange any such Convertible Securities, the Initial Conversion Price or Reset Conversion Price, as applicable, then in effect hereunder shall forthwith be readjusted to such Initial Conversion Price or Reset Conversion Price, as the case may be, as would have obtained (a) had the adjustments made upon the issuance or sale of such rights, warrants, options or Convertible Securities been made upon the basis of the issuance of only the number of shares of Common Stock theretofore actually delivered (and the total consideration received therefor) upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities and (b) had adjustments been made on the basis of the Initial Conversion Price or Reset Conversion Price, as the case may be, as adjusted under item (a) of this sentence for all transactions (which would have affected such adjusted Initial Conversion Price or Reset Conversion Price, as the case may be) made after the issuance or sale of such rights, warrants, options or Convertible Securities.

(F) In case of the sale of any shares of Common Stock, any Convertible Securities, any rights or warrants to subscribe for or purchase, or any options for the purchase of, Common Stock or Convertible Securities, the consideration received by the Corporation therefor shall be deemed to be the gross sales price therefor without deducting therefrom any expense paid or incurred by the Corporation or any underwriting discounts or commissions or concessions paid or allowed by the Corporation in connection therewith. In the event that any securities shall be issued in connection with any other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated among the securities, then each of such securities shall be deemed to have been issued for such consideration as the Board of Directors of the Corporation determines in good faith; provided, however, that if the Registered Holders of in excess of

10% of the then outstanding Series B Preferred Stock disagree with such determination, the Corporation shall retain, at its own expense, an independent investment banking firm for the purpose of obtaining an appraisal.

(vi) Notwithstanding any other provision hereof, no adjustment to the Conversion Price will be made:

(A) upon the exercise of any of the options outstanding on the date hereof under the Corporation's existing stock option plans; or

(B) upon the issuance or exercise of options which may hereafter be granted with the approval of the Board of Directors and consented to by the holders of Series B Preferred Stock, or their representatives, in accordance with the Investment Agreement, or exercised, under any employee benefit plan of the Corporation to officers, directors or employees, but only with respect to such options as are exercisable at prices no lower than the Market Price of the Common Stock as of the date of grant thereof; or

(C) upon issuance or exercise of the Unit Purchase Option for the Purchase of Shares of Preferred Stock and Warrants (the "Unit Purchase Option") issued to Paramount Capital, Inc. in connection with the issuance and sale of the Series B Preferred Stock pursuant to the Investment Agreement or upon the issuance, conversion or exercise of (i) the Series B Preferred Stock issued pursuant to the Investment Agreement (ii) the shares of Common Stock or Series B Preferred Stock issuable upon exercise of the Unit Purchase Option or (iii) the Class L Warrants issued pursuant to the Investment Agreement; or

(D) upon the issuance or sale of Common Stock or Convertible Securities pursuant to the exercise of any rights, options or warrants to receive, subscribe for or purchase, or any options for the purchase of, Common Stock or Convertible Securities, whether or not such rights, warrants or options were outstanding on the date of the original issuance of the Series B Preferred Stock or were thereafter issued or sold, provided that an adjustment was either made or not required to be made in accordance with Paragraph 4(c)(i) in connection with the issuance or sale of such securities or any modification of the terms thereof; or

(E) upon the issuance or sale of Common Stock upon conversion or exchange of any Convertible Securities, provided that any adjustments required to be made upon the issuance or sale of such Convertible Securities or any modification of the terms thereof were so made, and whether or not such Convertible Securities were outstanding on the date of the original sale of the Series B Preferred Stock or were thereafter issued or sold.

Subparagraph 4(c)(v)(E) shall nevertheless apply to any modification of the rights of conversion, exchange or exercise of any of the securities referred to in Subparagraphs (A), (B) and (C) of this Paragraph 4(c)(vi).

(vii) As used in this Subsection 4(c), the term "Common Stock" shall mean and include the Corporation's Common Stock authorized on the date of the original issue of the Series B Preferred Stock and shall also include any capital stock of any class of the Corporation thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Corporation; provided, however, that the shares issuable upon conversion of the Series B Preferred Stock shall include only shares of such class designated in the Certificate of Incorporation as Common Stock on the date of the original issue of the Series B Preferred Stock or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Paragraph 4(c)(ii) hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding shares of Common Stock issuable upon conversion of the Series B Preferred Stock as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such shares of Common Stock as so reclassified or changed.

(d) No Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon conversion of Series B Preferred Stock. If more than one certificate evidencing shares of

Preferred Stock shall be surrendered for conversion at one time by the same holder, the number of full shares issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series B Preferred Stock so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of any shares of Series B Preferred Stock, the Corporation shall pay a cash adjustment in respect of such fractional interest in an amount equal to the same fraction of the Market Price of the Common Stock as of the close of business on the day of conversion.

(e) Reservation of Shares; Transfer Taxes, Etc. The Corporation shall at all times reserve and keep available, out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Series B Preferred Stock, such number of shares of its Common Stock free of preemptive rights as shall be sufficient to effect the conversion of all shares of Series B Preferred Stock from time to time outstanding (including, without limitation, shares of Common Stock issuable upon conversion of the Series B Preferred Stock in the case of a reset of the Initial Conversion Price in accordance with Section 4(a)). The Corporation shall use its best efforts from time to time, in accordance with the laws of the State of Delaware to increase the authorized number of shares of Common Stock if at any time the number of shares of authorized, unissued and unreserved Common Stock shall not be sufficient to permit the conversion of all the then-outstanding shares of Series B Preferred Stock.

The Corporation shall pay any and all issue or other taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series B Preferred Stock. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue or delivery of Common Stock (or other securities or assets) in a name other than that in which the shares of Series B Preferred Stock so converted were registered, and no such issue or delivery shall be made unless and until the person requesting such issue has paid to the Corporation the amount of such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

(f) Prior Notice of Certain Events. In case:

(viii) the Corporation shall declare any dividend (or any other distribution); or

(ix) the Corporation shall authorize the granting to all or substantially all the holders of Common Stock of rights or warrants to subscribe for or purchase any shares of stock of any class or of any other rights or warrants; or

(x) of any reclassification of Common Stock (other than a subdivision or combination of the outstanding Common Stock, or a change in par value, or from par value to no par value, or from no par value to par value); or

(xi) of any consolidation or merger (including, without limitation, a Merger Transaction) to which the Corporation is a party and for which approval of any stockholders of the Corporation shall be required, or of the sale or transfer of all or substantially all of the assets of the Corporation or of any compulsory share exchange whereby the Common Stock is converted into other securities, cash or other property; or

(xii) of the voluntary or involuntary dissolution, liquidation or winding up of the Corporation (including, without limitation, a Liquidation Event);

then the Corporation shall cause to be filed with the Transfer Agent for the Series B Preferred Stock, and shall cause to be mailed to the Registered Holders, at their last addresses as they shall appear upon the stock transfer books of the Corporation, at least 20 days prior to the applicable record date

or effective date hereinafter specified, a notice stating (x) the date on which a record (if any) is to be taken for the purpose of such dividend, distribution or granting of rights or warrants or, if a record is not to be taken, the date as of which all or substantially all the holders of Common Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined and a description of the cash, securities or other property to be received by such holders upon such dividend, distribution or granting of rights or warrants or (y) the date on which such reclassification, consolidation, merger, sale, transfer, share exchange, dissolution, liquidation or winding up or other Liquidation Event is expected to become effective, the date as of which

it is expected that such holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such exchange, dissolution, liquidation or winding up or other Liquidation Event and the consideration, including securities or other property, to be received by such holders upon such exchange; provided, however, that no failure to mail such notice or any defect therein or in the mailing thereof shall affect the validity of the corporate action required to be specified in such notice.

(g) Other Changes in Conversion Rate. The Corporation from time to time may increase the Conversion Rate by any amount for any period of time if the period is at least 20 days and if the increase is irrevocable during the period. Whenever the Conversion Rate is so increased, the Corporation shall mail to the Registered Holders a notice of the increase at least 15 days before the date the increased Conversion Rate takes effect, and such notice shall state the increased Conversion Rate and the period it will be in effect.

The Corporation may make such increases in the Conversion Rate, in addition to those required or allowed by this Section 4, as shall be determined by it, as evidenced by a resolution of the Board of Directors, to be advisable in order to avoid or diminish any income tax to holders of Common Stock resulting from any dividend or distribution of stock or issuance of rights or warrants to purchase or subscribe for stock or from any event treated as such for income tax purposes.

(h) Ambiguities/Errors. Except as otherwise provided herein, the Board of Directors of the Corporation shall have the power to resolve any ambiguity or correct any error in the provisions relating to the convertibility of the Series B Preferred Stock that shall not be adverse to the holders of Series B Preferred Stock, and its actions in so doing shall be final and conclusive absent manifest error.

5. Mandatory Conversion. (a) At any time on or after the later of the Initial Reset Date and the date the registration statement to be filed pursuant to Section 8 of the Investment Agreement becomes effective, the Corporation at its option, may cause the Initial Preferred Shares to be converted in whole or in part, on a pro rata basis, into fully paid and nonassessable shares of Common Stock at the then effective Conversion Rate and such other securities and property as herein provided if the Closing Trade Price of the Common Stock shall have exceeded 300% of the Reset Conversion Price on 20 Trading Days during any 30-Trading-Day period ending on the Trading Day prior to the date notice of mandatory conversion is given to the holders of the Initial Preferred Shares. Any shares of Series B Preferred Stock so converted shall be treated as having been surrendered by the holder thereof for conversion pursuant to Section 4 on the date of such mandatory conversion (unless previously converted at the option of the holder).

(b) At any time on or after the later of the Second Reset Date and the date the registration statement to be filed pursuant to Section 8 of the Investment Agreement becomes effective, the Corporation at its option, may cause the Additional Preferred Shares to be converted in whole or in part, on a pro rata basis, into fully paid and nonassessable shares of Common Stock at the then effective Conversion Rate and such other securities and property as herein provided if the Closing Trade Price of the Common Stock shall have exceeded 300% of the Reset Conversion Price on 20 Trading Days during any 30-Trading-Day period ending on the Trading Day prior to the date notice of mandatory

conversion is given to the holders of the Additional Preferred Shares. Any shares of Series B Preferred Stock so converted shall be treated as having been surrendered by the holder thereof for conversion pursuant to Section 4 on the date of such mandatory conversion (unless previously converted at the option of the holder).

(c) (i) No greater than 60 nor fewer than 20 days prior to the date of any such mandatory conversion, notice by first class mail, postage prepaid, shall be given to the holders of record of the Series B Preferred Stock to be converted, addressed to such holders at their last addresses as shown on the stock transfer books of the Corporation. Each such notice shall specify the date fixed for conversion, the place or places for surrender of shares of Series B Preferred Stock, and the then effective Conversion Rate pursuant to Section 4.

(ii) Any notice which is mailed as herein provided shall be conclusively presumed to have been duly given by the Corporation on the date deposited in the mail, whether or not the holder of the Series B Preferred Stock receives such notice; and failure properly to give such notice by mail, or any defect in such notice, to the holders of the shares to be converted shall not affect the validity of the proceedings for the conversion of any other shares

of Series B Preferred Stock. On or after the date fixed for conversion as stated in such notice, each holder of shares called to be converted shall surrender the certificate evidencing such shares to the Corporation at the place designated in such notice for conversion. Notwithstanding that the certificates evidencing any shares properly called for conversion shall not have been surrendered, the shares shall no longer be deemed outstanding and all rights whatsoever with respect to the shares so called for conversion (except the right of the holders to convert such shares upon surrender of their certificates therefor) shall terminate.

6. Voting Rights.

(a) General. Except as otherwise provided herein, in the Certificate of Incorporation or the By-laws of the Corporation, the holders of shares of Series B Preferred Stock, the holders of shares of Common Stock and the holders of any other class or series of shares entitled to vote with the Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation. In any such vote, each share of Series B Preferred Stock shall entitle the holder thereof to cast the number of votes equal to the number of votes which could be cast in such vote by a holder of the Common Stock into which such share of Series B Preferred Stock is convertible (without regard to the limitations set forth in the third paragraph of Section 4(a)) on the record date for such vote or if no record date has been established, on the date such vote is taken. Any shares of Series B Preferred Stock held by the Corporation or any entity controlled by the Corporation shall not have voting rights hereunder and shall not be counted in determining the presence of a quorum.

(b) Class Voting Rights. In addition to any vote specified in Section 6(a), the Corporation shall not, without the affirmative vote or consent of the holders of at least a majority of all outstanding Series B Preferred Stock voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Series B Preferred Stock, (ii) approve the alteration or change to the rights, preferences or privileges of the Series B Preferred Stock, (iii) authorize or issue, or increase the authorized amount of any security ranking prior to, or on a parity with, the Series B Preferred Stock (A) upon a Liquidation Event, (B) with respect to the payment of any dividends or distributions or (C) with respect to voting rights (except for class voting rights required by law); or (iv) approve the incorporation of any subsidiary company.

7. Limitation on Holder's Right to Convert or Vote. (a)

Notwithstanding anything to the contrary contained in Section 4 or Section 6, no share of Series B Preferred Stock may be converted or voted by a holder to the extent that, after giving effect to such conversion or vote, the total number of shares of Common Stock beneficially owned by such holder, together with all Common Shares deemed beneficially owned by the holder or any other person or entity that would be aggregated for purposes of determining whether a "group" exists under Section 13(d) of the Securities Exchange Act of 1934, as amended, would exceed 4.9 of the total issued and outstanding shares of Common Stock, provided that each holder shall have the right to waive this restriction, in whole or in part, upon 61 days prior notice to the Corporation. A transferee of shares of Series B Preferred Stock shall not be bound by this provision unless it expressly agrees to be so bound.

(b) The Corporation shall not be obligated to issue, in the aggregate, more than 4,539,582 shares of Common Stock as presently constituted (the "NASD Cap") upon conversion of the Series B Preferred if issuance of a larger number of shares would constitute a breach of the rules of the NASD. Subject to the obligation to effect certain redemptions pursuant to the last four sentences of this paragraph, if further issuances of shares of Common Stock upon conversion of the Series B Preferred would constitute a breach of the rules of the NASD (i.e., all of the shares permitted to be issued under the NASD Cap shall have been so issued), then so long thereafter as such limitation shall continue to be applicable, in the event any shares of Series B Preferred Stock are submitted for conversion, such shares shall receive in cash an amount equal to the Cash Pay-Out Amount (as defined in Section 4(a) hereof), in lieu of the Common Stock which such shares would otherwise be entitled to receive upon conversion. Payment of the Cash Pay-Out Amount shall be made no later than 10 days after such conversion would otherwise be effective and shall bear daily interest from the date such conversion would otherwise be effective at the rate of one-tenth of one percent per day until paid. The NASD Cap shall be proportionately and equitably adjusted in the event of stock splits, stock dividends, reverse stock splits, reclassifications or other such events, in such manner as the Board of Directors of the Corporation shall

reasonably determine. If (A) the Corporation is unable to (1) commence its annual meeting of shareholders by May 28, 1999 and (2) obtain the requisite shareholder approval concerning the issuance of shares of Common Stock upon conversion of the Series B Preferred and exercise of the Warrants issued pursuant to the Investment Agreement to satisfy the rules of the NASD at such meeting or within 30 days of the commencement of such meeting (it being understood that the Corporation shall use its best efforts to obtain such shareholder approval by such dates), then the Corporation shall immediately redeem the remaining shares of Series B Preferred Stock as provided in Section 13 of this Certificate of Designations. If there shall be a default in payment of the redemption price pursuant to this Section, the amount so payable shall bear daily interest from and after the date of such redemption at the rate of one-twentieth of one percent per day until paid.

8. Outstanding Shares. For purposes of this Certificate of Designations, a share of Series B Preferred Stock, when issued, shall be deemed outstanding except (i) from the date, or the deemed date, of surrender of certificates evidencing shares of Series B Preferred Stock, all shares of Series B Preferred Stock converted into Common Stock and (ii) from the date of registration of transfer, all shares of Series B Preferred Stock held of record by the Corporation or any subsidiary of the Corporation.

9. Status of Acquired Shares. Shares of Series B Preferred Stock received upon conversion pursuant to Section 4 or Section 5 or otherwise acquired by the Corporation will be restored to the status of authorized but unissued shares of Preferred Stock, without designation as to class, and may thereafter be issued, but not as shares of Series B Preferred Stock.

10. Preemptive Rights. The Series B Preferred Stock is not entitled to any preemptive or subscription rights in respect of any securities of the Corporation.

11. Severability of Provisions. Whenever possible, each provision hereof shall be interpreted in a manner as to be effective and valid under

applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof. If a court of competent jurisdiction should determine that a provision hereof would be valid or enforceable if a period of time were extended or shortened or a particular percentage were increased or decreased, then such court may make such changes as shall be necessary to render the provision in question effective and valid under applicable law.

12. No Amendment or Impairment. The Corporation shall not participate in any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, for the purpose of avoiding or seeking to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but will at all times in good faith assist in carrying out all such action as may be reasonably necessary or appropriate in order to protect the rights of the holders of the Series B Preferred Stock against impairment. Nothing in this Section 12 shall limit the right of the Corporation to amend its Certificate of Incorporation in conformity with the other applicable provisions of this Certificate of Designations.

13. Additional Redemption Events. In the event (i) the Corporation fails to (a) timely file the registration statement required to be filed pursuant to Section 8 of the Investment Agreement or maintain the effectiveness of such registration statement in accordance with such provision, or (b) obtain the shareholder approval required by Section 7(b) of this Certificate of Designations on or prior to the dates specified therein, (ii) the Corporation materially breaches any other provision of the Investment Agreement and such breach continues for 20 days after notice thereof to the Corporation by any holder of Series B Preferred Stock, (iii) any class of equity securities of the Corporation that is at any time on or after the First Closing Date listed or quoted on any Stock Market ceases to be so listed or quoted on such Stock Market, (iv) the Corporation fails to deliver any of the shares of Series B Preferred Stock or Class L Warrants sold pursuant to the Investment Agreement in accordance with the terms thereof, (v) the Corporation receives an audit opinion with respect to any audited financial statement that contains a material limitation or qualification (including, without limitation, any going concern qualification) or (vi) any Liquidation Event occurs (each of the foregoing a "Redemption Event"), then, in each case, the Corporation shall be required to (in the case of the Redemption Events specified in clauses (i), (iv) and (vi)) or shall at the election of any holder of Series B Preferred Stock (in the case of the

Redemption Events specified in clauses (ii), (iii) and (v)) redeem all or any portion of the shares of Series B Preferred Stock held by such holder for cash at a price equal to 120% of the stated value thereof. In the event the Corporation does not have sufficient funds to effect such redemption in full (it being understood that such redemption shall be effected on a pro rata basis with respect to all holders of Series B Preferred Stock electing redemption in response to any Redemption Event), the Corporation shall apply such funds as are available to it (including, without limitation, pursuant to the escrow established by the Corporation for such purpose pursuant to Section 7.6(b) of the Investment Agreement) to such redemption and the remainder of the Corporation's redemption obligation to such holders shall thereafter be represented by a promissory note bearing interest at the rate of 18% per annum and which shall be secured by a security agreement covering substantially all of the assets of the Corporation, which promissory note and security agreement shall be in form and substance satisfactory to the "Purchaser Representative" elected in accordance with Section 11.3 of the Investment Agreement in the sole discretion of the Purchaser Representative. In connection therewith, the Corporation shall make all filings and recordings of Uniform Commercial Code financing statements and such documents and, if any, necessary or advisable, in the discretion of the Purchaser Representative, including, without limitation, the filings of financing statements in Ohio against the Corporation's accounts that may be held there, in each case so as to establish and perfect the holders' rights, title and interests in and to the assets of the Corporation subject to the security agreement. The Corporation shall give written notice of

any Redemption Event to the holders of record of the Series B Preferred Stock and to the Purchaser Representative within five days after such Redemption Event.

14. Certain Legends. Each certificate or document evidencing any share of Series B Preferred Stock shall bear a legend indicating (a) whether such share is an Initial Preferred Share or Additional Preferred Share, as the case may be, (b) that, depending on whether such share is an Initial Preferred Share or Additional Preferred Share, such share has differing rights, including the applicable Conversion Rate and (c) that such shares are subject to the terms and conditions of this Certificate of Designations, a copy of which is on file with the Company and the Transfer Agent, which shall be provided to the holder of such share upon request and without charge.

Exhibit 4.4

AMENDMENT NUMBER 1 TO THE RIGHTS AGREEMENT

This Amendment Number 1 ("Amendment") to the Rights Agreement ("Agreement") between Neoprobe Corporation, a Delaware corporation ("Company"), and Continental Stock Transfer & Trust Company ("Rights Agent") is dated as of February 16, 1999.

WHEREAS, the Company and the Rights Agent entered into the Agreement on July 18, 1995 in connection with a rights dividend declared by the board of directors of the Company; and

WHEREAS, the Company and the Rights Agent desire to amend the Agreement in order to provide for the sale and issuance of a new series of convertible preferred stock of the Company and warrants to purchase common stock of the Company, par value $.001, in order to raise funds for the Company.

NOW THEREFORE, the Company and the Rights Agent hereby agree to amend the Agreement as follows:

1. The definition of "Acquiring Person" contained in Section 1.(a) of the Agreement is hereby deleted in its entirety and the following language be inserted in lieu thereof:

> "Acquiring Person" shall mean any Person who or which, together with all Affiliates and Associates of such Person, shall be the Beneficial Owner of 15% or more of the Common Stock then outstanding, but shall not include (i) the Company, (ii) any Subsidiary of the Company, (iii) any employee benefit plan of the Company or of any Subsidiary of the Company, (iv) any Person organized, appointed or established by the Company for or pursuant to the terms of any such plan, or (v) any Person who becomes a Beneficial Owner of 15% or more of the Common Stock then outstanding solely because such Person or its affiliates and associates (1) acquired shares of 5% Series B Convertible Preferred Stock, par value $.001 per share, stated value $100 per share ("Series B Preferred Stock"), of the Company from the Company, (2) acquired Class L Warrants of the Company ("Class L Warrants") from the Company (3) acquired options ("Advisory Options") to purchase shares of Series B Preferred Stock and Class L Warrants from the Company pursuant to the Financial Advisory Agreement between the Company and Paramount Capital, Inc. dated February 16, 1999, (4) acquired Common Stock through the conversion of Series B Convertible Preferred Stock, which such Person purchased directly from the Company, through the exercise of Class L Warrants or Advisory Warrants, which such Person obtained directly from the Company, through a Common Stock dividend on shares of Series B Preferred Stock declared by the Company or any other issuance of Common Stock in respect of the Series B Preferred Stock or Class L Warrants (including the shares of Series B Preferred Stock and Class L Warrants underlying the Advisory Options), pursuant to the terms of the Certificate of Designations of 5% Series B Preferred Convertible Preferred Stock of Neoprobe Corporation ("Certificate of Designations"), pursuant to any provision of the Class L Warrants or pursuant to any provision of the Preferred Stock and Warrant Purchase Agreement ("Purchase Agreement") dated February 16, 1999 by and among the Company, The Aries Master Fund, a Cayman Island Exempted Company ("Master Fund"), and The Aries Domestic Fund, L.P. ("Domestic Fund"), and the agreements referred to therein, or (5) is the Master Fund or the Domestic Fund or their respective affiliates or associates unless such entities acquire more than an aggregate of 1,000,000 shares of Common Stock (such number to be adjusted to reflect the effect of stock splits, stock dividends and similar events affecting Common Stock after the date of Amendment No. 1 to this Rights Agreement) in addition to acquisitions otherwise described in clauses (v)(1), (v)(2), (v)(3) and (v)(4) of this paragraph.

2. The definition of "Section 11(a)(ii) Event" contained in Section 1.(a) of the Agreement is hereby deleted in its entirety and the following language be inserted in lieu thereof:

"Section 11(a)(ii) Event" shall have the meaning set forth in Section 11(a)(ii) hereof.

Section 11(a)(ii) of the Agreement is hereby deleted in its entirety and the following language be inserted in lieu thereof:

> Section 11. (a)(ii) If any Person (other than the Company, any Subsidiary of the Company, any employee benefit plan of the Company or of any Subsidiary of the Company, or any Person or entity organized, appointed or established by the Company for or pursuant to the terms of any such plan), alone or together with its Affiliates and Associates at any time after the Rights Dividend Declaration Date, becomes a Beneficial Owner of 15% or more of the Common Stock then outstanding, a "Section 11(a)(ii) Event" shall be deemed to have occurred; unless the event causing the 15% threshold to be crossed
>
> (1) is a Section 13 Event;
>
> (2) is an acquisition of Common Stock pursuant to a tender offer or an exchange offer for all outstanding Common Stock at a price and on terms determined by at least a majority of the members of the Board of Directors who are not officers of the Company and who are not representatives, nominees, Affiliates or Associates of an Acquiring Person, after receiving advice from one or more investment banking firms, to be (A) at a price which is fair to stockholders (taking into account all factors which such members of the Board deem relevant including, without limitation, prices which could reasonably be achieved if the Company or its assets were sold on an orderly basis designed to realize maximum value) and (B) otherwise in the best interests of the Company and its stockholders;
>
> (3) (i) is the acquisition of Series B Preferred Stock and Series B Preferred Stock Warrants from the Company, (ii) is the conversion of Series B Preferred Stock into Common Stock by a Person who purchased the shares of Series B Preferred Stock directly from the Company, (iii) is the purchase of Common Stock by the exercise of Class L Warrants, which were obtained by the Persons exercising them directly from the Company, (iv) is the acquisition of Common Stock by conversion of Series B Preferred Stock and exercise of Class L Warrants issuable upon exercise of the Advisory Options, (v) is the acquisition of Common Stock pursuant to any provision of the Purchase Agreement and the agreements referred to therein, (vi) is the acquisition of Common Stock through a Common Stock dividend on shares of Series B Preferred Stock declared by the Company or any other issuance of Common Stock in respect of the Series B Preferred Stock or the Series B Preferred Stock Warrants pursuant to the terms of the Certificate of Designations, or (vii) the acquisition of up to an aggregate of 1,000,000 shares of Common Stock, such number to be adjusted to reflect stock splits, stock dividends and similar events affecting Common Stock occurring after the date of Amendment No. 1 to this Rights Agreement, by the Master Fund or the Domestic Fund or any of their respective affiliates and associates in addition to acquisitions described in clauses (i), (ii), (iii), (iv), (v) and (vi) of this Section 11(a)(ii)(3).
>
> Promptly following the first occurrence of any Section 11(a)(ii) Event, proper provision shall be made so that each holder of a Right (except as provided below and in Section 7(e) hereof) shall

thereafter have the right to receive, upon exercise thereof at the then current Purchase Price in accordance with the terms of this Agreement, in lieu of Preferred Stock or fractions thereof, such number of shares of Common Stock of the Company as shall equal the result obtained by (I) multiplying the then current Purchase Price by the then number of shares of Preferred Stock or fractions thereof for which a Right was exercisable immediately prior to the first occurrence of a Section 11(a)(ii) Event, and (II) dividing that product (which, following such first occurrence, shall thereafter be referred to as

the "Purchase Price" for each Right and for all purposes of this Agreement) by 50% of the current market price (determined pursuant to Section 11(d) hereof) per shares of Common Stock on the date of such first occurrence (such number of shares, the "Adjustment Stock").

3. Except as specifically amended by this Amendment, the provisions of the Agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first written above.

NEOPROBE CORPORATION

By: /s/ David C. Bupp

David C. Bupp, Chief Executive Officer

CONTINENTAL STOCK TRANSFER & TRUST COMPANY

By: /s/ William F. Seegraber

Print Name: William F. Seegraber

Print Title: Vice President

Exhibit 10.1.32
EXECUTION COPY

PREFERRED STOCK AND WARRANT PURCHASE AGREEMENT (this "Agreement") dated as of February 16, 1999, by and among NEOPROBE CORPORATION, a Delaware corporation (the "Company"), and the PURCHASERS listed on Exhibit A ("Purchasers").

The Company desires to issue and sell to Purchasers, and Purchasers desire to purchase from the Company, shares (the "Preferred Shares"), of 5% Series B Convertible Preferred Stock, par value $.001 per share, stated value $100 per share, of the Company ("Preferred Stock"), having the rights, designations and preferences set forth in the Certificate of Designations of the Company (the "Certificate of Designations") in the identical form and substance of Exhibit B, upon and subject to the terms and conditions of this Agreement. Unless the context otherwise requires, the term "Preferred Shares" shall include (i) all shares of Preferred Stock issued or issuable at the First Closing and the Second Closing (in each case as defined below) and (ii) all shares of Preferred Stock that may be issuable upon exercise of the Unit Purchase Option (as defined in Section 5.21).

Pursuant to the terms of the Certificate of Designations, the Preferred Shares will be convertible into shares ("Common Shares") of common stock, par value $.001 per share, of the Company ("Common Stock"), and pursuant to the terms of this Agreement, the Purchasers will have registration rights with respect to the Common Shares issuable upon such conversion and upon exercise of the Warrants (as defined below).

To induce Purchasers to purchase the Preferred Shares, the Company shall issue to the Purchasers warrants to purchase shares of Common Stock in the form attached as Exhibit C (the "Warrants"). Unless the context otherwise requires, the term Common Shares shall be deemed to include any shares of Common Stock issued or issuable upon conversion of Preferred Shares, including those that may be issued as a dividend pursuant to the Certificate of Designations and any shares of Common Stock issuable upon exercise of the Warrants.

Accordingly, in consideration of the premises and the mutual agreements contained herein, and for other good and valuable consideration, Purchasers and the Company agree as follows:

1. Purchase of Company Securities.

1.1. Purchase and Sale of the Preferred Shares and the Warrants. (a) Subject to the terms and conditions of this Agreement, (i) the Company shall issue and sell to Purchasers, and Purchasers, severally and not jointly, shall purchase from the Company, the aggregate number of shares of Preferred Stock (the "Initial Preferred Shares") set forth on Exhibit A (allocated among the Purchasers as set forth on Exhibit A), and (ii) the Company shall issue to Purchasers the aggregate number of Warrants (the "Initial Warrants") set forth on Exhibit A (allocated among the Purchasers as set forth on Exhibit A) at the First Closing (as such term is defined in Section 2.1). The aggregate purchase price for the Initial Preferred Shares shall be $3,000,000 (the "Initial Purchase Price") (allocated among the Purchasers as set forth on Exhibit A). "Operative Documents" shall mean this Agreement, the Warrants and the Certificate of Designations.

(b) Subject to the terms and conditions of this Agreement, and provided that the Required Shareholder Approvals have been obtained and the Shelf Registration Statement has become effective, in the event that the Company's sales for any two consecutive fiscal quarters, commencing with the second quarter of 1999 and ending with the third quarter of 2000, are at least 90% of the sales indicated on the projections attached as Exhibit D for each of such fiscal quarters, the Company shall have the right upon notice to the Purchaser Representative (as defined in Section 11.3) within 60 days after the end of the first two-fiscal quarter period that such sales are achieved to require Purchasers to purchase, on a pro rata basis, an aggregate number of shares of Preferred Stock (the "Additional Preferred Shares") equal to the number of

Preferred Shares purchased at the First Closing (as defined in Section 2.1) for an aggregate purchase price of $3,000,000, and the Company shall issue to Purchasers, on a pro rata basis, an aggregate number of Warrants (the "Additional

Warrants") equal to the number of Warrants issued at the First Closing; provided however, (i) the Company shall not be entitled to give the notice permitted by this Section 1.1(b) if the Market Price of the Common Stock (after adjustment for any stock splits, combinations and the like) is less than 120% of the Initial Conversion Price in effect on the date hereof and (ii) the Purchasers shall not be required to purchase any Additional Preferred Shares if, as of the date scheduled for the Second Closing, the Market Price for the Common Stock is less than 120% of the Initial Conversion Price in effect on the date hereof. A notice contemplated by this Section 1.1 shall be accompanied by (i) an Officer's Certificate to the effect that there has not at any time been (a) any material adverse change in the business, financial condition, operating results, business prospects, employee relations or customer relations of the Company or its Subsidiaries, or (b) other adverse changes, which in the aggregate have been materially adverse to the Company or its Subsidiaries, and (ii) an unqualified certification, in form and substance satisfactory to Purchasers, of the Chief Financial Officer of the Company as to the sales of the Company for the applicable fiscal quarters of the Company to the effect that the sales figures have been prepared in accordance with the books and records of the Company and generally accepted accounting principles applied on a basis consistent with prior periods and the projections. The Additional Warrants shall be exercisable until the seventh anniversary of the date of their issuance. Capitalized terms used but not defined in this Section 1.1(b) shall have the meanings ascribed thereto in the Certificate of Designations.

(c) In the event any additional shares of Common Stock are issued pursuant to the Warrants issued pursuant to Section 8.6, the purchase price(s) paid for the Preferred Shares shall be reallocated on a pro rata, as converted basis over the Preferred Shares and such shares of Common Stock.

2. Closing.

2.1. Closing. (a) The closing of the purchase and sale of the Initial Preferred Shares and the issuance of the Initial Warrants shall take place at the offices of Paramount Capital, Inc. ("Paramount"), at 787 Seventh Avenue, 48th Floor, New York, New York, 10019. Such closing (the "First Closing") will take place at 10:00 A.M., local time, on February 16, 1999; provided that the Closing may take place at such other time, place or later date as may be mutually agreed upon by the Company and Purchasers. The date of the Closing is referred to as the "First Closing Date." At the First Closing, the Company will deliver to Purchasers the Initial Preferred Shares and the Initial Warrants against payment of the Initial Purchase Price by Purchasers by wire transfer payable to the Company. The Initial Preferred Shares and the Initial Warrants shall be registered in Purchasers' names or the names of the nominees of Purchasers in such denominations as Purchasers shall request pursuant to instructions delivered to the Company not less than two days prior to the First Closing Date.

(b) The purchase and sale of the Additional Preferred Shares and the issuance of the Additional Warrants shall take place at a closing (the "Second Closing"; each of the First Closing and the Second Closing being referred to herein as a "Closing") held on a date as promptly as practicable following the date notice is given to the Purchaser Representative by the Company pursuant to Section 1.1(b) (the "Second Closing Date"; each of the First Closing Date and the Second Closing Date being referred to herein as a "Closing Date") and in any event within 30 days of the date of such notice.

2.2. Limitation on Holder's Right to Convert/Vote. Notwithstanding anything to the contrary in any Operative Document, no Preferred Share may be converted or voted, no Warrant may be exercised and no shares of Common Stock issued as a dividend on Preferred Shares or upon exercise of Warrants may be voted by a Purchaser if such right to convert, exercise or right to vote would cause the total number of Common Shares deemed beneficially owned (as defined in Rule 13(d)(3) of the Securities Act of 1933,

as amended) by such Purchaser, together with all Common Shares deemed beneficially owned by the holder's Affiliates (such term and certain other capitalized terms used herein being defined in Section 9) and by any other Person whose ownership of such securities would be aggregated for purposes of determining whether a "group" exists under Section 13(d) of the Securities Exchange Act of 1934, as amended, would exceed 4.9% of the total issued and outstanding shares of Common Stock, provided that each Purchaser shall have the right to waive this restriction, in whole or in part, upon 61 days prior notice to the Company. A transferee of such securities shall not be bound by this provision unless it expressly agrees to be so bound.

3. Conditions to the Obligations of Purchasers at the Closings. (a) Conditions to Each Closing. The obligation of Purchasers to purchase and pay for the Preferred Shares and the Warrants to be purchased by Purchasers at each Closing is subject to the satisfaction on or prior to the applicable Closing Date of the following conditions, which may only be waived by written consent of Purchasers:

3.1. Opinion of Counsel to the Company. Purchasers shall have received from Benesch, Friedlander, Coplan & Aronoff LLP, counsel for the Company, its opinion dated such Closing Date in the form of Exhibit E.

3.2. Representations and Warranties. All of the representations and warranties of the Company contained in this Agreement and the other Operative Documents shall be true and correct at and as of such Closing Date.

3.3. Performance of Covenants. All of the covenants and agreements of the Company contained in this Agreement and the other Operative Documents required to be performed on or prior to such Closing Date shall have been performed in a manner satisfactory in all respects to Purchasers.

3.4. Legal Action. No injunction, order, investigation, claim, action or proceeding before any court or governmental body shall be pending or threatened wherein an unfavorable judgment, decree or order would restrain, impair or prevent the carrying out of the Operative Documents or any of the transactions contemplated thereby, declare unlawful the transactions contemplated by the Operative Documents or cause any such transaction to be rescinded.

3.5. Consents. The Company shall have obtained in writing or made all consents, waivers, approvals, orders, permits, licenses and authorizations of, and registrations, declarations, notices to and filings and applications with, any governmental authority or any other Person (including, without limitation, security holders and creditors of the Company) required to be obtained or made in order to enable the Company to observe and comply with all its obligations under the Operative Documents and to consummate and perform the transactions contemplated thereby. The Board of Directors of the Company shall have taken all action required by the terms of the Rights Agreement dated as of July 18, 1995, between the Company and Continental Stock Transfer & Trust Company, to permit the transactions contemplated by the Operative Documents and the Paramount Agreements (as such term is defined in Section 5.21) without triggering any rights of the Company's security holders pursuant to such Rights Agreement or any securities issued or issuable thereunder.

3.6. Closing Documents. The Company shall have delivered to Purchasers the following:

(a) a certificate executed by the President and Chief Executive Officer of the Company dated such Closing Date stating that the conditions set forth in Sections 3.2 through 3.5 have been satisfied;

(b) an incumbency certificate dated the Closing Date for the officers of the Company executing the Operative Documents and any other documents or instruments delivered in connection therewith at, or in connection with, such Closing;

(c) a certificate of the Secretary of the Company, dated such

Closing Date, as to the continued and valid existence of the Company, certifying the attached copy of the By-laws of the Company, the authorization of the execution, delivery and performance of the Operative Documents, and the resolutions adopted by the Board of Directors of the Company authorizing the actions to be taken by the Company under the Operative Documents;

(d) a certificate of the Secretary of State of the State of Delaware, dated a recent date, to the effect that the Company is in good standing in the State of Delaware and that all annual reports, if any, have been filed as required and that all taxes and fees have been paid in connection therewith;

(e) a certified copy of the Certificate of Incorporation of the Company as filed with the Secretary of State of the State of Delaware, including any amendments thereto; and

(f) such certificates, other documents and instruments as Purchasers and their counsel may reasonably request in connection with, and to effect, the transactions contemplated by the Operative Documents.

3.7. Proceedings. All corporate and other proceedings taken or to be taken in connection with the transactions contemplated by this Agreement and the other Operative Documents to be consummated at such Closing and all documents incident thereto shall be satisfactory in form and substance to Purchasers.

3.8. Closing Financial Statements; Absence of Changes. (a) The Company shall have provided to Purchasers (i) the unaudited consolidated balance sheets of the Company and its Subsidiaries as of September 30, 1998, and the related unaudited consolidated statements of operations, stockholders' equity, and cash flows for the three-month (and nine-month) periods then ended (the "Financial Statements"), all of which will be correct and complete and will present fairly the financial position of the Company and the results of its operations and changes in its financial position as of the time and for the periods then ended, (ii) the unqualified certification, in form and substance satisfactory to Purchasers, of the Chief Financial Officer of the Company as to the Financial Statements to the effect that the Financial Statements have been prepared in accordance with the books and records of the Company and its Subsidiaries and generally accepted accounting principles applied on a basis consistent with prior years (except as otherwise specified in such certification), and present fairly the financial position of the Company and its Subsidiaries and the and the results of their operations and changes in their financial position as of the time and for the periods then ended, and (iii) a "bring-down" certificate, in form and substance satisfactory to Purchaser, of the Chief Executive Officer of the Company and the Chief Financial Officer of the Company with respect to the financial position of the Company as of such Closing Date and as to results for the period from the date of the Financial Statements to such Closing Date.

(b) Except as set forth on the schedules to this Agreement, there shall have been no material adverse change in the business, financial condition, operating results, employee or customer relations or prospects of, or otherwise with respect to, the Company and its Subsidiaries, from September 30, 1998 to such Closing Date.

3.9. Schedules. The Company shall have provided to Purchasers all schedules required pursuant to this Agreement, which schedules shall be satisfactory to Purchasers in their sole discretion.

4. Conditions to the Obligations of the Company at the Closings. The obligation of the Company to issue and sell the Preferred Shares and the Warrants to Purchasers at each Closing is subject to the satisfaction on or prior to the applicable Closing Date of the following conditions, any of which may be waived by the Company:

4.1. Representations and Warranties. The representations and warranties of Purchasers contained in this Agreement shall be true and correct at and as of such Closing Date.

4.2. Legal Action. No injunction, order, investigation, claim, action or proceeding before any court or governmental body shall be pending or threatened wherein an unfavorable judgment, decree or order would restrain, impair or prevent the carrying out of the Operative Documents or any of the transactions contemplated thereby, declare unlawful the transactions contemplated by the Operative Documents or cause any such transaction to be rescinded.

5. Representations and Warranties of the Company. The Company represents and warrants to Purchasers as of each Closing Date as follows (it being understood that the Company's representations set forth in Sections 5.14 and 5.15 shall, for purposes of the Second Closing Date, be deemed to relate to any updated versions of such Schedules provided by the Company to Purchasers on or prior to such Closing Date):

5.1. Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. Each of the Company's Subsidiaries is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization. The Company and its Subsidiaries have all requisite corporate power and authority, and hold all licenses, permits and other required authorizations from governmental authorities, necessary to conduct their respective businesses as now being conducted or proposed to be conducted and to own or lease the properties and assets they now own or hold under license or lease (except that the Company may in the future be required to obtain certain approvals of the U.S. Food and Drug Administration in connection with its business as proposed to be conducted). The Company and the Subsidiaries are duly qualified or licensed and in good standing as a foreign corporation in each jurisdiction wherein the character of their properties or the nature of the activities conducted by them makes such qualification or licensing necessary.

5.2. Charter Documents. The Company has heretofore delivered to Purchasers true, correct and complete copies of the Certificate of Incorporation and By-Laws (or comparable organizational documents) of the Company and its Subsidiaries as in full force and effect on the date hereof.

5.3. Capitalization. Except as set forth on Schedule 5.3 with respect to the Second Closing Date, as of such Closing Date, the Company's authorized capitalization consists of 50,000,000 shares of Common Stock, of which 22,967,910 shares are issued and outstanding as of such Closing Date, and 5,000,000 shares of preferred stock, par value $.001 per share, of which 500,000 shares are designated as Series A Junior Participating Preferred Stock (none of which are issued and outstanding). 2,950,313 shares of Common Stock are reserved for issuance upon the conversion or exercise of convertible securities, options, warrants or other rights to purchase Common Stock outstanding as of such Closing Date. All outstanding securities of the Company are validly issued, fully paid and nonassessable. No stockholder of the Company is entitled to any preemptive rights with respect to the purchase or sale of any securities by the Company. There are no outstanding options, warrants or other rights, commitments or arrangements, written or oral, to purchase or otherwise acquire any authorized but unissued shares of capital stock of the Company or any security directly or indirectly convertible into or exchangeable for any capital stock of the Company or under which any such option, warrant or convertible security may be issued in the future except (i) as set forth on Schedule 5.3, (ii) for the Preferred Shares and Warrants issued or issuable to Purchasers or pursuant to the Placement Warrants or (iii) as are issued to persons other than Purchasers and Paramount in conformity with the terms and provisions of the Operative Documents. There are no voting trusts or agreements, stockholders' agreements, pledge agreements, buy-sell, rights of first offer, negotiation or refusal or proxies or similar arrangements relating to any securities of the Company to which the Company is a party, and to the best knowledge of the Company there are no other such trusts, agreement, rights, proxies or similar arrangements. Except as set forth on Schedule 5.3 and as contemplated by this Agreement, none of the shares of capital stock of the Company is reserved for any purpose, and the Company is neither subject to any obligation (contingent or otherwise), nor has any option to repurchase or

otherwise acquire or retire any shares of its capital stock. Schedule 5.3 sets forth (i) the number of shares of Common Stock authorized for issuance under the Company's 1994 Amended and Restated Stock Option and Restricted Stock Purchase Plan and the Company's 1996 Stock Incentive Plan, in each case as amended and restated (collectively, the "Option Plans"); (ii) the number of shares of Common Stock as to which options issued under the Option Plans have been (a) reserved for issuance and (b) exercised, in each case as of such Closing Date; and (iii) the exercise prices for all outstanding options under the Option Plans as of such Closing Date. Schedule 5.3 also sets forth a list of all securities of the Company which are issued and outstanding or reserved for issuance upon exercise or conversion of outstanding securities of the Company as to which the Company is obligated to file a registration statement under the Securities Act other than on Form S-8.

5.4 Due Authorization, Valid Issuance, Etc. The Preferred Shares to be purchased on such Closing Date have been duly authorized and, when issued in accordance with this Agreement upon such Closing Date, will be validly issued, fully paid and nonassessable and will be free and clear of all liens imposed by or through the Company. The Warrants to be purchased on such Closing Date have been duly authorized and, when issued in accordance with this Agreement upon such Closing Date, will be validly issued and free and clear of all liens imposed by or through the Company. The Common Shares issuable upon conversion of the Preferred Shares to be issued on such Closing Date have been and will, at all times until their issuance, be

duly authorized and reserved, and such Common Shares, upon conversion of such Preferred Shares in accordance with the terms and conditions of the Certificate of Designations and this Agreement, and any shares of Common Stock issued as a dividend upon such Preferred Shares, upon issuance, will be validly issued, fully paid and nonassessable shares of Common Stock and will be free and clear of all liens imposed by or through the Company. The Common Stock issuable upon the exercise of the Warrants to be issued on such Closing Date have been and will, at all times until their issuance, be duly authorized and reserved, and upon the exercise of the Warrants in accordance with the terms and conditions thereof and this Agreement, will be validly issued, fully paid and nonassessable shares of Common Stock and will be free and clear of all liens imposed by or through the Company. The issuance, sale and clear delivery of such Preferred Shares and Warrants, and the Common Shares issuable upon conversion of such Preferred Shares, the exercise of such Warrants and as dividends on such Preferred Shares will not be subject to any preemptive right of stockholders of the Company or to any right of first refusal or other right in favor of any person or entity. The Company's executive officers and directors have studied and fully understand the nature of the securities being sold hereunder, and recognize that they have a potential dilutive effect. Except as set forth on Schedule 5.4, no antidilution adjustments with respect to the outstanding securities of the Company will be triggered by the issuance of the securities contemplated by the Operative Documents.

5.5. Subsidiaries. Except as set forth on Schedule 5.5, the Company has no wholly or partially owned Subsidiaries (as defined in Section 9.10) and does not control, directly or indirectly, any other corporation, business trust, firm, partnership, association, joint venture, entity or organization. Except as set forth on Schedule 5.5, the Company does not own any shares of stock, partnership interest, joint venture interest or any other security, equity or interest in any other corporation or other Person.

5.6. Authorization; No Breach. The Company has the full corporate power and authority to execute, deliver and enter into each of the Operative Documents and to perform its obligations thereunder, and the execution, delivery and performance of each of the Operative Documents and all other transactions contemplated by each of the Operative Documents have been duly authorized by the Company. Each of the Operative Documents constitutes a legal, valid and binding obligation of the Company, enforceable in accordance with its terms except as such enforceability may be limited by (a) bankruptcy, insolvency, moratorium and similar laws affecting creditors' rights generally and (b) the availability of remedies under general equitable principles. Except as set forth on Schedule 5.6, the execution and delivery by the Company of the Operative Documents, the offering, sale and issuance of the Preferred Shares

and the Warrants, and the performance and fulfillment of the Company of its obligations under the Operative Documents, do not and will not (i) conflict with or result in a breach of the terms, conditions or provisions of, (ii) constitute a default under, or event which, with notice or lapse of time or both, would constitute a breach of or default under, (iii) result in the creation of any lien, security interest, adverse claim, charge or encumbrance upon the capital stock or assets of the Company pursuant to, (iv) give any third party the right to accelerate any obligation under or terminate, (v) result in a violation of, (vi) result in the loss of any license, certificate, legal privilege or legal right enjoyed or possessed by the Company under, or (vii) require any authorization, consent, approval, exemption or other action by or notice to any court or administrative or governmental body pursuant to or require the consent of any other Person under, the Certificate of Incorporation or By-Laws of the Company or any law, statute, rule or regulation to which the Company is subject or by which any of its properties are bound, or any agreement, instrument, order, judgment or decree to which the Company is subject or by which its properties are bound.

5.7. Financial Statements and SEC Documents. (a) Attached as Schedule 5.7 (or contained within the SEC documents (as defined in Section 5.7(b)) are the audited consolidated balance sheets of the Company and its Subsidiaries as of December 31, 1995, 1996, and 1997, and the related audited consolidated statements of operations, stockholders' equity, and cash flows for the years ended December 31, 1995, 1996, and 1997, and for the period from November 16, 1983 (date of inception) to December 31, 1997, together with the related notes thereto (the "Audited Financial Statements"), all of which will be correct and complete, and which shall be accompanied by an unqualified report, in form and substance reasonable satisfactory to the Purchaser Representative, of independent public accountants reasonably satisfactory to the Purchaser Representative to the effect that the Audited Financial Statements have been prepared in accordance with the books and records of the Company and its Subsidiaries and generally accepted accounting principles,

have been applied consistently with the past practices of the Company and its Subsidiaries (except as otherwise noted in such Audited Financial Statements), reflect all liabilities and obligations of the Company and its Subsidiaries, as of their respective dates, and present fairly the financial position of the Company and its Subsidiaries and the results of their operations as of the time and for the periods indicated therein.

(b) The Company has made available to Purchasers a true and complete copy of each report, schedule, registration statement and definitive proxy statement filed by the Company with the SEC since January 1, 1995 (as such documents have since the time of their filing been amended, the "SEC Documents") which are all the documents (other than preliminary material) that the Company was required to file with the SEC since such date. As of their respective dates, the SEC Documents complied in all respects with the requirements of the Securities Act (as defined in Section 9.8) and/or the Securities Exchange Act (as defined in Section 9.9) as the case may be, and the rules and regulations of the SEC thereunder applicable to such SEC Documents and none of the SEC Documents contained any untrue statement of a material fact or omitted to statement of material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Documents comply as to form in all material respects with applicable accounting requirements and with the published rules and regulations of the SEC with respect thereto, have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto or, in the case of the unaudited statements, as permitted by Form 10-Q of the SEC) and fairly present the financial position of the Company as at the dates thereof and the consolidated results of their operations and cash flows for the periods then ended.

5.8. No Material Adverse Changes. Since September 30, 1998, except as disclosed in (i) the SEC Documents filed subsequent to that date and (ii) Schedule 5.8 there has not at any time been (a) any material adverse change in the business, financial condition, operating results, business

prospects, employee relations or customer relations of the Company or its Subsidiaries, or (b) other adverse changes, which in the aggregate have been materially adverse to the Company or its Subsidiaries. Except as set forth on Schedule 5.8, no event or circumstance has occurred or exists with respect to the Company or its Subsidiaries or their respective businesses, properties, prospects, operations or financial condition, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed.

5.9. Absence of Certain Developments. Except as contemplated by this Agreement, and except as set forth in Schedule 5.9, since September 30, 1998, the Company and each of its Subsidiaries have not, nor will have prior to such Closing Date: (a) issued any securities (other than, with respect to the Second Closing, as permitted or contemplated by the Operative Documents); (b) borrowed any amount or incurred or became subject to any liabilities (absolute or contingent), other than liabilities incurred in the ordinary course of business and liabilities under contracts entered into in the ordinary course of business, none of which are or shall be material and which involve less than $50,000; (c) discharged or satisfied any lien, adverse claim or encumbrance or paid any obligation or liability (absolute or contingent), other than current liabilities paid in the ordinary course of business; (d) declared or made any payment or distribution of cash or other property to the stockholders of the Company with respect to the Common Stock or purchased or redeemed any shares of Common Stock; (e) mortgaged, pledged or subjected to any lien, adverse claim, charge or any other encumbrance, any of its properties or assets, except for liens for taxes not yet due and payable; (f) sold, assigned or transferred any of its assets, tangible or intangible, except in the ordinary course of business and in an amount less than $50,000, or disclosed to any person, firm or entity not party to a confidentiality agreement with the Company any proprietary confidential information; (g) suffered any extraordinary losses or waived any rights of material value; (h) made any capital expenditures or commitments therefor; (i) entered into any other transaction other than in the ordinary course of business in an amount less than $50,000 or entered into any material transaction, whether or not in the ordinary course of business; (j) made any charitable contributions or pledges; (k) suffered damages, destruction or casualty loss, whether or not covered by insurance, affecting any of the properties or assets of the Company or its Subsidiaries or any other properties or assets of the Company or its Subsidiaries which could have a material adverse effect on the business, financial condition, operating results, employee or customer relations or prospects of, or otherwise with respect to the business or operations of the Company or its Subsidiaries; (l) made any change in the nature or

operations of the business of the Company or its Subsidiaries; or (m) resolved or entered into any agreement or understanding with respect to any of the foregoing.

5.10. Properties. The Company and its Subsidiaries have good and marketable title to all of the real property and good title to all of the personal property and assets they purport to own, including those reflected as owned on (a) the December 31, 1998 balance sheet included in the financial statements included in Schedule 5.8 with respect to the Company and (b) the September 30, 1998 balance sheet included in the Financial Statements with respect to the Subsidiaries, or acquired after such dates, and a good and valid leasehold interest in all property indicated as leased on (a) the December 31, 1998 balance sheet in Schedule 5.8 with respect to the Company and (b) the September 30, 1998 balance sheet included in the Financial Statements with respect to the Subsidiaries, whether such property is real or personal, free and clear of all liens, adverse claims, charges, encumbrances or restrictions of any nature whatsoever, except (a) such as are reflected on (i) the December 31, 1998 balance sheet included in the financial statements included in Schedule 5.8 with respect to the Company and (ii) the September 30, 1998 balance sheet included in the Financial Statements with respect to the Subsidiaries, or described in Schedule 5.10 and (b) for receivables and charges collected in the ordinary course of business. Except as disclosed in Schedule 5.10, the Company and its Subsidiaries own or lease all such properties as are necessary to their operations as now conducted and as presently proposed to be conducted and all such properties are, in all material respects, in good

operating condition and repair.

5.11. Taxes. The Company and its Subsidiaries have timely filed all federal, state, local and foreign tax returns and reports required to be filed, and all taxes, fees, assessments and governmental charges of any nature shown by such returns and reports to be due and payable have been timely paid except for those amounts being contested in good faith and for which appropriate amounts have been reserved in accordance with generally accepted accounting principles and are reflected on (a) the December 31, 1998 balance sheet in Schedule 5.8 with respect to the Company and (b) the September 30, 1998 balance sheet included in the Financial Statements with respect to the Subsidiaries. There is no tax deficiency that has been, or, to the knowledge of the Company or its Subsidiaries might be, asserted against the Company or its Subsidiaries that would adversely affect the business or operations, or proposed business or operations, of the Company or its Subsidiaries. All such tax returns and reports were prepared in accordance with the relevant rules and regulations of each taxing authority having jurisdiction over the Company and its Subsidiaries and are true and correct. The Company and its Subsidiaries have neither given nor been requested to give any waiver of any statute of limitations relating to the payment of federal, state, local or foreign taxes. The Company and the Subsidiaries have not been, nor is it now being, audited by any federal, state, local or foreign tax authorities. The Company and Subsidiaries have made all required deposits for taxes applicable to the current tax year. The Company and its Subsidiaries are not, and have never been, a member of any "affiliated group" within the meaning of Section 1504 of the Internal Revenue Code, as in effect from time to time.

5.12. Litigation. Except as set forth on Schedule 5.12, there are no actions, suits, proceedings, orders, investigations or claims pending or, to the knowledge of the Company and its Subsidiaries, threatened against or affecting the Company or its Subsidiaries, at law or in equity or before or by any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality; there are no arbitration proceedings pending under collective bargaining agreements or otherwise; and, to the knowledge of the Company and its Subsidiaries, there is no basis for any of the foregoing.

5.13. Compliance with Law. The Company and its Subsidiaries have complied in all respects with all applicable statutes and regulations of the United States and of all states, municipalities and applicable agencies and foreign jurisdictions or bodies in respect of the conduct of their business and operations.

5.14. Trademarks and Patents. Schedule 5.14 contains a true, complete and correct list of all trademarks, trade names, patents and copyrights (and applications therefor) if any, owned or licensed or used or required to be used by the Company and the Subsidiaries as of or prior to such Closing Date in connection with their respective businesses and, each such trademark, trade name, patent and copyright (and application therefor) listed in Schedule 5.14 as being owned by the Company or a Subsidiary is not subject to any license, royalty arrangement, option or dispute and is free and clear of all liens. To the best knowledge of

the Company and its Subsidiaries, none of the trademarks, trade names, patents or copyrights used by the Company and its Subsidiaries in connection with their businesses infringe any trademark, trade name, patent or copyright of others in the United States or in any other country, in any way which adversely affects or which in the future may adversely affect the business or operations of the Company or its Subsidiaries. No stockholder, officer or director of the Company or any Subsidiary or any other person owns or has any interest in any trademark, trade name, service mark, patent, copyright or application therefor, or trade secret, licenses, invention, information or proprietary right or process, if any, used by the Company or its Subsidiaries in connection with their businesses. The Company and its Subsidiaries have no notice or knowledge of any objection or claim being asserted by any person with respect to the ownership, validity enforceability or use of any such trademarks, trade names, patents and copyrights (and applications therefor) listed on Schedule 5.14 or challenging or questioning the validity or effectiveness of any license

relating thereto. There are no unresolved conflicts with, or pending claims of, any other person, whether in litigation or otherwise, involving the trademarks, trade names, patents and copyrights (and applications therefor), and there are no liens, encumbrances, adverse claims, or rights of any other person which would prevent the Company from fulfilling its obligations under this Agreement. To the best knowledge of the Company and the Subsidiaries, the business of the Company and its Subsidiaries, as presently conducted and as proposed to be conducted does not and will not cause the Company or any Subsidiary to violate any trademark, trade name, patent, copyright, trade secret, license or proprietary interest of any other person or entity, in any way which adversely affects or which in the future may adversely affect the business or operations of the Company and its Subsidiaries. Except as disclosed in Schedule 5.14, the Company and the Subsidiaries possess all proprietary technology necessary for the conduct of business by the Company and the Subsidiaries, both as presently conducted and as presently proposed to be conducted.

5.15. Insurance. Schedule 5.15 contains a brief description of each insurance policy maintained by the Company and its Subsidiaries with respect to their properties, assets and business; each such policy is in full force and effect; and the Company and the Subsidiaries are not in default with respect to their obligations under any of such insurance policies. Such insurance coverage is in amounts not less than is customarily maintained by corporations engaged in the same or similar business and similarly situated, including, without limitation, insurance against loss, damage, fire, theft, public liability and other risks. The activities and operations of the Company and its Subsidiaries have been conducted in a manner so as to conform to all applicable provisions of these insurance policies and the Company and the Subsidiaries have not taken or failed to take any action which would cause any such insurance policy to lapse.

5.16. Agreements. Except as set forth in Schedule 5.16, the Company and the Subsidiaries are not party to nor bound by any agreement or commitment, written or oral, which obligates the Company or any Subsidiary to make payments to any person, or which obligates any person to make payments to the Company or any Subsidiary, in the case of each such agreement in an amount exceeding $50,000, or which is otherwise material to the conduct and operation of the business or proposed business of the Company and its Subsidiaries or any of their properties or assets, including, without limitation, all shareholder, employment, non-competition and consulting agreements and employee benefit plans and arrangements and collective bargaining agreements to which the Company or any Subsidiary is a party or by which it is bound. All such agreements are legal, valid and binding obligations of the Company and its Subsidiaries, in full force and effect, and enforceable in accordance with their respective terms, except as the enforceability thereof may be limited by (a) bankruptcy, insolvency, moratorium, and similar laws affecting creditors' rights generally and (b) the availability of remedies under general equitable principles. The Company and the Subsidiaries have performed all obligations required to be performed by it, and are not in default, or in receipt of any claim, under any such agreement or commitment, and the Company and its Subsidiaries have no present expectation or intention of not fully performing all of such obligations, nor does the Company or any Subsidiary have any knowledge of any breach or anticipated breach by the other parties to any such agreement or commitment. The Company and its Subsidiaries are not party to any contract, agreement, instrument or understanding which materially adversely affects the business, properties, prospects, operations, assets or condition (financial or otherwise) of the Company or its Subsidiaries. Purchasers have been furnished with, or the Company has made available for the Purchaser's review, a true and correct copy of each written agreement referred to in Schedule 5.16, together with all amendments, waivers or other changes thereto.

5.17. Undisclosed Liabilities. Except as set forth on Schedule 5.17, the Company and the Subsidiaries have no obligation or liability (whether accrued, absolute, contingent, unliquidated, or otherwise, whether or not known to the Company or its Subsidiaries, whether due or to become due) arising out of transactions entered into at or included in Schedule 5.8 or on the September 30, 1998 balance sheet included in the Financial Statements prior to such Closing Date, or any action or inaction at or prior to such Closing Date, or any state of facts existing at or prior to such Closing Date, except (a)

liabilities reflected on the December 31, 1998 balance sheet included in the financial statements included in Schedule 5.8 or the September 30, 1998 balance sheet included in the Financial Statements, (b) liabilities in an amount less than $50,000 incurred in the ordinary course of business since September 30, 1998 (none of which is a liability for breach of contract, breach of warranty, torts, infringements, claims or lawsuits); (c) liabilities or obligations disclosed in the schedules to this Agreement or (d) with respect to the Second Closing Date, liabilities the incurrence of which did not constitute a violation of this Agreement.

5.18. Employees; Conflicting Agreements. (a) The Company has caused all present members of management and all professional employees of and consultants and advisors to the Company and its Subsidiaries, including all employees and consultants and advisors involved in research and development, and will cause all such persons in the future, to be subject to agreements with respect to (i) nondisclosure of confidential information, (ii) assignment of patents, trademarks, copyrights and proprietary rights to the Company or its Subsidiaries and (iii) disclosure to the Company and its Subsidiaries of inventions in form and substance satisfactory to the Purchaser Representative (as defined in Section 11.3).

(b) To the best knowledge of the Company and its Subsidiaries, no stockholder, director, officer or key employee of the Company or any Subsidiary is a party to or bound by any agreement, contract or commitment, or subject to any restrictions in connection with any previous or current employment of any such person (other than as set forth on Schedule 5.18(b) with respect to the Company), which adversely affects, or which in the future may adversely affect, the business or the proposed business of the Company or any Subsidiary or the rights of any of the Purchasers under the Operative Documents, including, without limitation, in respect of Purchasers rights as a holder of the Preferred Shares, the Warrants and the shares of Common Stock issuable in connection therewith.

5.19. Disclosure. Neither this Agreement nor any of the schedules, exhibits, written statements, documents or certificates prepared or supplied by the Company with respect to the transactions contemplated by the Operative Documents contain any untrue statement of a material fact or omit a material fact necessary to make the statements contained therein not misleading in light of the circumstances under which made. There exists no fact or circumstance which, to the knowledge of the Company or its Subsidiaries upon due inquiry, materially adversely affects, or which could reasonably be anticipated to have a material adverse effect on, the existing or expected financial condition, operating results, assets, customer relations, employee relations or business prospects of the Company or its Subsidiaries.

5.20. Compliance with Securities Laws. (a) Other than Paramount, neither the Company nor any of its Affiliates nor anyone acting on their behalf has directly or indirectly offered the Preferred Shares and the Warrants or any part thereof or any similar security of the Company (or any other securities convertible or exchangeable for the Preferred Shares and the Warrants or any similar security), for sale to, or solicited any offer to buy the same from, anyone other than Purchasers. Assuming the accuracy and truth of each of Purchasers' representations set forth in Section 6, all securities of the Company and its Subsidiaries heretofore sold and issued were sold and issued, and the Preferred Shares and the Warrants (and any other securities convertible or exchangeable for the Preferred Shares and the Warrants) were offered and will be sold and issued, in compliance with all applicable federal, state and foreign securities laws. Neither the Company, nor any of its Affiliates, nor, to its knowledge, any person or entity acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the Preferred Shares, the Warrants or the shares of Common Stock underlying the Preferred Shares or the Warrants under the Securities Act or for the offering of the same to be integrated with any other offering of securities.

(b) The Company has not directly or indirectly purchased or redeemed any shares of Common Stock during the 30 Trading Days (as such term is

defined in the Certificate of Designations) preceding the First Closing Date.

5.21. Brokers. Except for Paramount, no finder, broker, agent, financial person or other intermediary has acted on behalf of the Company in connection with the offering of the Preferred Shares or the Warrants, the execution of the Operative Documents or the consummation of any of the transactions contemplated by the Operative Documents. The Company has agreed to grant certain registration rights to the holders of the Unit Purchase Option for the Purchase of Preferred Stock and Warrants (the "Unit Purchase Option") issuable to Paramount pursuant to the Financial Advisory Agreement between Paramount and the Company dated the date hereof (the "Financial Advisory Agreement"). The Company shall be solely responsible for payment of the fees and expenses of Paramount pursuant to the Financial Advisory Agreement and the Letter Agreement between the Company and Paramount dated as of January 21, 1999 (the "Letter Agreement"). The Unit Purchase Option, the Financial Advisory Agreement and the Letter Agreement are referred to herein collectively as the "Paramount Agreements."

5.22. Transactions with Affiliates. Except as set forth on Schedule 5.22, no director, officer, employee, consultant or agent of the Company or its Subsidiaries, or member of the family of any such person or any corporation, partnership, trust or other entity in which any such person, or any member of the family of any such person, has a substantial interest in or is an officer, director, trustee, partner or holder of more than 5% of the outstanding capital stock thereof, is a party to any transaction with the Company or any Subsidiary, including any contract, agreement or other arrangement providing for the employment of, furnishing of services by or requiring payments to any such person or firm.

5.23. Environmental Matters (a) The Company and its Subsidiaries, and all properties owned, operated or leased by the Company and its Subsidiaries have obtained and currently maintain all environmental permits required for their business and operations and are in compliance with all such environmental permits; (ii) there are no legal proceedings pending nor, to the best knowledge of the Company and its Subsidiaries, threatened to modify or revoke any such environmental permits; and (iii) neither Company (and its Subsidiaries) nor any property owned, operated or leased by the Company (and its Subsidiaries) has received any notice from any source that there is lacking any environmental permit required for the current use or operation of the business of the Company or its Subsidiaries, or any property owned, operated or leased by the Company or its Subsidiaries.

(b) All real property owned, operated or leased by the Company and its Subsidiaries, and, to the best knowledge of the Company and its Subsidiaries, all property adjacent to such properties, are free from contamination by any hazardous material; and the Company and its Subsidiaries are not subject to environmental costs and liabilities with respect to hazardous materials, and no facts or circumstances exist which could give rise to environmental costs and liabilities with respect to hazardous materials.

(c) There is not now, nor has there been in the past, on, in, or under any real property owned, leased, or operated by the Company and its Subsidiaries, or by any of their respective predecessors (i) any asbestos-containing materials, (ii) any underground storage tanks, (iii) above-ground storage tanks, (iv) impoundments, (v) poly-chlorinated biphenyls or (vi) radioactive substances.

(d) The Company has provided or made available to Purchasers drafts and final versions of all environmental site assessments (including, but not limited to Phase I and Phase II reports), risk management studies and internal environmental audits that have been conducted by or on behalf of the Company and its Subsidiaries ("Environmental Studies"), with respect to any real property that now or in the past has been owned, operated or leased by the Company and its Subsidiaries, or any of their respective predecessors.

(e) The Company and its Subsidiaries, and all properties owned, operated or leased by the Company and its Subsidiaries, comply with all environmental laws.

(f) Neither the Company (and its Subsidiaries) nor any property owned, leased or operated by the Company (and its Subsidiaries) has received or been issued any written request for information, or has been notified that it is a potentially responsible party under the environmental laws with respect to any on-site or off-site for which environmental costs and liabilities are asserted.

6. Representations, Warranties and Covenants of Purchasers. Purchasers severally represent, warrant and covenant to the Company as of each Closing Date (and with respect to Section 6.1, as of each date of exercise of any Warrants) as follows:

6.1. Investment Intent. Each Purchaser is an "accredited investor" within the meaning of Regulation D under the Securities Act. Each Purchaser has experience in making investments in development stage biotechnology companies and is acquiring the Preferred Shares and the Warrants for its own account and not with a present view to, or for sale in connection with, any distribution thereof in violation of the registration requirements of the Securities Act. Each Purchaser consents to the placing of a legend on the certificates representing its respective Preferred Shares and Warrants to the effect that the shares of Common Stock issuable upon exercise or conversion, as the case may be, of the Preferred Shares and Warrants have not been registered under the Securities Act and may not be transferred except in accordance with applicable securities laws or an exception therefrom. The Purchasers acknowledge and agree that Paramount has not supplied any information to the Purchasers other than information furnished in writing to the Company by Paramount, that Paramount has no responsibility for the accuracy or completeness of any such information and that the Purchasers have not relied upon the independent investigation or verification, if any, which may have been undertaken by Paramount. The Purchasers were contacted regarding the transactions contemplated by the Operative Documents by Paramount, with whom the Purchasers have a prior substantial pre-existing relationship.

6.2. Authorization. Each Purchaser has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder, having obtained all required consents, if any, and this Agreement, when executed and delivered, will constitute a legal valid and binding obligation of such Purchaser.

6.3. Brokers. Other than Paramount, no finder, broker, agent, financial person or other intermediary has acted on behalf of Purchasers in connection with the offering of the Preferred Shares and the Warrants or the consummation of this Agreement or any of the transactions contemplated hereby.

6.4. Trading Restrictions. Purchasers have not directly or indirectly sold any shares of Common Stock during the 30 Trading Days (as such term is defined in the Certificate of Designations) preceding the First Closing Date. As of the First Closing Date, the Purchasers do not directly or indirectly have a "short" position with respect to the Common Stock. During the 30 Trading Days (as such term is defined in the Certificate of Designations) prior to the Reset Date (as such term is defined in the Certificate of Designations), the Purchasers shall not directly or indirectly sell any shares of Common Stock. During the 10 consecutive Trading Days ending on the Trading Day preceding the effective date of conversion of any Purchaser' shares of Preferred Stock, such Purchaser shall not directly or indirectly sell any shares of Common Stock on more than seven of such Trading Days.

7. Covenants of the Company. Until such time as Purchasers and their Affiliates beneficially own less than two percent (2%) of the Common Stock after giving effect to the conversion or exercise of all securities of the Company beneficially owned by Purchasers and their Affiliates, the Company covenants and agrees with Purchasers as follows:

7.1. Books and Accounts. The Company will, and will cause each of its Subsidiaries to: (a) make and keep books, records and accounts, which, in reasonable detail, accurately and fairly reflect its transactions, including without limitation, dispositions of its assets; and (b) devise and maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and

in accordance with the Company's and such Subsidiaries' past practices or any other criteria applicable to such statements, and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

7.2. Periodic Reports. (a) The Company will furnish to the Purchaser Representative as soon as practicable, and in any event within 90 days after the end of each fiscal year of the Company (commencing with the fiscal year ended December 31, 1998), an annual report of the Company and its Subsidiaries, including an audited consolidated balance sheet as at the end of such fiscal year and an audited consolidated statement of operations, stockholders' equity (deficit) and cash flows for such fiscal year, together with the related notes thereto, setting forth in each case in comparative form corresponding figures for the preceding fiscal year, all of which will be correct and complete and will present fairly the financial position of the Company and its Subsidiaries and the results of their operations and changes in their financial position as of the time and for the period then ended. Such financial statements shall be accompanied by an unqualified report, in form and substance reasonably satisfactory to the Purchaser Representative, of independent public accountants reasonably satisfactory to the Purchaser Representative to the effect that such financial statements have been prepared in accordance with the books and records of the Company and its Subsidiaries and generally accepted accounting principles applied on a basis consistent with prior years (except as otherwise specified in such report), and present fairly the financial position of the Company and its Subsidiaries and the results of their operations and changes in their financial position as of the time and for the period then ended. The Company will use its best efforts, and shall cause its Subsidiaries, to conduct its business so that such report of the independent public accountants will not contain any qualifications as to the scope of the audit, the continuance of the Company and the Subsidiaries, or with respect to the Company's and the Subsidiaries' compliance with generally accepted accounting principles consistently applied, except for changes in methods of accounting in which such accountants concur. The delivery requirements of the first two sentences of this paragraph shall be deemed satisfied if the Company provides to the Purchaser Representative within 90 days after the end of each fiscal year (or such earlier date as may be required by the SEC) a copy of the Company's Annual Report on Form 10-K as filed with the SEC for such fiscal year which includes the information and other substantive delivery requirements set forth in this Section 7.2(a).

(b) The Company will furnish to the Purchaser Representative, as soon as practicable and in any event within 45 days after the end of each of the first three fiscal quarters of the Company during each fiscal year, a quarterly report of the Company and its Subsidiaries consisting of an unaudited consolidated balance sheet as at the end of such quarter and an unaudited consolidated statement of operations, stockholders' equity (deficit) and cash flows for such quarter and the portion of the fiscal year then ended, setting forth in each case in comparative form corresponding figures for the preceding fiscal year. All such reports shall be certified by the Chief Financial Officer of the Company to be correct and complete, to present fairly the financial position of the Company and its Subsidiaries and the consolidated results of their operations and changes in their financial position as of the time and for the period then ended and to have been prepared in accordance with generally accepted accounting principles. The delivery requirements of the first sentence of this paragraph shall be deemed satisfied with respect to any fiscal quarter if the Company delivers to the Purchaser Representative with 45 days after the end of such fiscal quarter (or such earlier date as may be required by the SEC) a copy of its Quarterly Report on Form 10-Q as filed with the SEC for such quarter.

(c) The Company shall furnish to the Purchaser Representative, within 30 days after the end of each calendar month, an unaudited consolidated balance sheet of the Company and its Subsidiaries as of the end of such month and the related unaudited consolidated statement of operations, stockholders' equity (deficit) and cash flows for such month and for the fiscal year to date,

setting forth in each case in comparative form the corresponding figures for the budget for the current fiscal year (which, for any period on or after delivery of the first Operating Budget (as defined in Section 7.2(d)), shall be the relevant Operating Budget), or such other financial information as otherwise agreed to by the parties hereto. All such statements shall be certified by the Chief Financial Officer of the Company to the effect that such statements fairly present the financial condition of the Company and its Subsidiaries as of the dates shown and the results of their operations for the periods then ended and that such statements have been prepared in conformity with generally accepted

accounting principles consistently applied except for normal, recurring, year-end audit adjustments and the absence of footnotes.

(d) Commencing with the Company's fiscal year commencing January 1, 1999, the Company shall furnish to the Purchaser Representative, as soon as practicable and in any event not less than 60 days prior to the end of each fiscal year of the Company, (i) an annual operating budget for the Company and its Subsidiaries, for the succeeding fiscal year, containing projections of profit and loss, cash flow and ending balance sheets for each month of such fiscal year (each an "Operating Budget") and (ii) a Business Plan (as defined in Section 7.19) for the Company and its Subsidiaries. The Company shall furnish to the Purchaser Representative within five days after the date the Board of Directors has approved each Operating Budget and Business Plan, which shall be no later than 60 days after the beginning of each fiscal year, such Operating Budget and Business Plan as approved by the Board of Directors. Promptly upon preparation thereof, the Company shall furnish to the Purchaser Representative any other operating budgets or business plans that the Company may prepare and any revisions or modifications of such previously furnished Operating Budgets or Business Plans.

(e) The annual statements and quarterly statements furnished pursuant to Sections 7.02(a) and (b) shall include a narrative discussion prepared by the Company describing the business operations of the Company and its Subsidiaries during the period covered by such statements. The monthly statements furnished pursuant to Section 7.02(c) shall be accompanied by a statement describing any material events, transactions or deviations from the relevant Business Plan and containing an explanation of the causes and circumstances thereof.

7.3. Certificates of Compliance. The Company covenants that promptly after the occurrence of any default hereunder or any default under or breach of any material agreement, or any other material adverse event or circumstance affecting the financial condition, operating results, employee or customer relations or prospects of, or otherwise with respect to, the Company or any Subsidiary, it will deliver to the Purchaser Representative an Officers' Certificate specifying in reasonable detail the nature and period of existence thereof, and what actions the Company has taken and proposes to take with respect thereto.

7.4. Other Reports and Inspection. The Company will furnish to Purchasers (a) as soon as practicable after issuance, copies of any financial statements or reports prepared by the Company for, or otherwise furnished to, its stockholders or the SEC and (b) promptly, such other documents, reports and financial data as Purchasers may reasonably request. In addition the Company will, upon reasonable prior notice, make available to Purchasers or its representatives or designees (x) all assets, properties and business records of the Company and its Subsidiaries for inspection and/or copying and (y) the directors, officers and employees of the Company and its Subsidiaries for interviews concerning the business, affairs and finances of the Company and its Subsidiaries.

7.5. Insurance. The Company will, and will cause its Subsidiaries to, at all times maintain valid policies of worker's compensation insurance and such other insurance with respect to its properties and business of the kinds and in amounts not less than is customarily maintained by corporations engaged in the same or similar business and similarly situated, including, without limitation, insurance against fire, loss, damage, theft,

public liability and other risks. The activities and operations of the Company and its Subsidiaries shall be conducted in a manner to conform in all material respects to all applicable provisions of such policies.

7.6. Use of Proceeds; Restriction on Payments. (a) The Company shall use the net proceeds from the sale of the Preferred Shares and Warrants for general corporate purposes. The Company covenants and agrees that it will not directly or indirectly use any of the proceeds to (i) repay any indebtedness of the Company, including but not limited to any indebtedness to officers, employees, directors or principal stockholders of the Company, but excluding accounts payable incurred in the ordinary course of business or (ii) redeem, repurchase or otherwise acquire any equity or equity-linked security of the Company. The Company shall not make any payment or series of related payments in excess of $25,000 without the prior written consent of the Purchaser Representative, provided that subsequent to the effectiveness of the Shelf

Registration Statement (as defined in Section 8.1), so long as the Company has not less than $1,000,000 of cash and cash-equivalents, the written consent of the Purchaser Representative shall not be required unless such payment or series of related payments is in excess of $100,000.

(b) Notwithstanding anything to the contrary in this Agreement or any other Operative Document, the Company shall set aside and hold in a segregated, escrow account satisfactory to the Purchasers, $1,500,000 in cash from the proceeds of the sale of the Preferred Shares until the later of (x) the receipt of the Required Shareholder Approvals (as defined in Section 7.29) and (y) the declaration of effectiveness of the Shelf Registration Statement.

7.7. Material Changes. The Company will promptly notify the Purchaser Representative of any material adverse change in the business, properties, prospects, assets or condition, financial or otherwise, of the Company or its Subsidiaries, or any other material adverse event or circumstance affecting the Company or its Subsidiaries, and of any litigation or governmental proceeding pending or, to the knowledge of the Company, threatened in writing against the Company or its Subsidiaries or against any director or officer of the Company or its Subsidiaries (excluding any material appearing on an internet "chat" or "bulletin" board).

7.8. Transactions with Affiliates. Except for the transactions contemplated by this Agreement, the Company shall not, and shall cause its Subsidiaries not to, (a) engage in any transaction with, (b) make any loans to, nor (c) enter into any contract, agreement or other arrangement (i) providing for (x) the employment of, (y) the furnishing of services by, or (z) the rental of real or personal property from, or (ii) otherwise requiring payments to, any officer, director or key employee of the Company or its Subsidiaries or any relative of such persons or any other "affiliate" or "associate" of such persons (as such terms are defined in the rules and regulations promulgated under the Securities Act), without the prior written approval of the Purchasers.

7.9. Trading Restrictions. During the 30 Trading Days prior to the Reset Date (as such term is defined in the Certificate of Designations), the Company shall not directly or indirectly purchase or redeem any shares of Common Stock or resolve or contract to do any of the foregoing.

7.10. Corporate Existence, Licenses and Permits; Maintenance of Properties; New Businesses. The Company will, and will cause its Subsidiaries to, at all times conduct its business in the ordinary course and cause to be done all things necessary to maintain, preserve and renew its existence and will preserve and keep in force and effect, all licenses, permits and authorizations necessary to the conduct of its business. The Company will, and will cause its Subsidiaries to, also maintain and keep its properties in good repair, working order and condition, and from time to time, to make all needful and proper repairs, renewals and replacements, so that the business carried on in connection therewith may be properly conducted at all times.

7.11. Other Material Obligations. The Company will, and will

cause its Subsidiaries to, comply with, (a) all material obligations which it is subject to, or becomes subject to, pursuant to any contract or agreement, whether oral or written, as such obligations are required to be observed or performed, unless and to the extent that the same are being contested in good faith and by appropriate proceedings and the Company and the Subsidiaries have set aside on their books adequate reserves with respect thereto, and (b) all applicable laws, rules, and regulations of all governmental authorities, the violation of which could have a material adverse effect upon the business, financial condition, operating results, employee or customer relations or prospects of, or otherwise with respect to of the Company or its Subsidiaries.

7.12. Amendment to the Certificate of Incorporation and the By-Laws. The Company will perform and be in compliance with and observe all of the provisions set forth in its Certificate of Incorporation and By-Laws to the extent that the performance of such obligations is legally permissible; provided that the fact that performance is not legally permissible will not prevent such nonperformance from constituting an event of default under this Agreement. Except with the consent of the Purchaser Representative, the Company will not amend its Certificate of Incorporation or By-Laws or any Certificate of Designations for any other series of Preferred Stock of the Company so as to affect adversely the rights of Purchasers under the

Operative Documents, the Certificate of Incorporation, the By-Laws, or the Preferred Shares. The provisions of this Section 7.12 shall not be deemed to prohibit (i) a combination of the outstanding shares of Common Stock effected at the Company's 1999 annual meeting of stockholders for purposes of satisfying applicable NASD listing standards so long as the ratio applicable to such combination shall have been consented to by the Purchaser Representative (which consent shall not be unreasonably withheld) or (ii) the amendment of the Company's charter documents to reduce the minimum number of the Company's Directors so long as such revised minimum number shall have been consented to by the Purchaser Representative and, following such alteration, the Company is in compliance with (A) all applicable NASD listing standards (or the listing standards of any national securities exchange on which the Common Stock is listed) and (B) Section 7.20(a).

7.13. Merger; Sale of Assets. The Company shall, and, except as set forth on Schedule 7.13, shall cause its Subsidiaries not to, not become a party to any merger, consolidation or reorganization, or sell, lease, license, sublicense or otherwise dispose of all or substantially all of its assets, without the prior approval of the Purchaser Representative.

7.14. Acquisition. The Company shall, and shall cause its Subsidiaries not to, acquire any interest in any business from any person, firm or entity (whether by a purchase of assets, purchase of stock, merger or otherwise) without the prior approval of the Purchaser Representative, except the acquisition of 1% or less of any class of outstanding securities of a company whose securities are listed on a national securities exchange or which has not fewer than 1,000 stockholders and except as otherwise specifically permitted pursuant to the provisions of this Agreement.

7.15. Dividends; Distributions; Repurchases of Common Stock; Treasury Stock. The Company shall, and shall cause its Subsidiaries not to, declare or pay any dividends on, or make any other distribution with respect to, its capital stock, whether now or hereafter outstanding, or purchase, acquire, redeem or retire any shares of its capital stock, without the consent of the Purchaser Representative, provided, however, the foregoing shall not prohibit any dividend, distribution, purchase, acquisition, redemption or retirement of, or with respect to, any Preferred Shares in accordance with the Certificate of Designations.

7.16. Consents and Waivers. (a) The Company has obtained all consents and waivers needed to enable it to perform all of its obligations under the Operative Agreements and the transactions contemplated hereby.

(b) The Company has obtained from all holders of options, warrants and other securities of the Company having any right of first refusal, offer, sale, negotiation or similar rights or antidilution or other rights

(other than the holders of the Company's Class B Warrants) to have the terms (including, without limitation, conversion or exercise prices or rates) of such instruments adjusted by virtue of the purchase and sale of the Preferred Shares and the Warrants or the other transactions contemplated by the Operative Documents, a written waiver in form and substance satisfactory to Purchasers and their counsel.

7.17. Taxes and Liens. The Company shall, and shall cause its Subsidiaries to, duly pay and discharge when payable, all taxes, assessments and governmental charges imposed upon or against the Company and its Subsidiaries or their properties, or any part thereof or upon the income or profits therefrom, in each case before the same become delinquent and before penalties accrue thereon, as well as all claims for labor, materials or supplies which if unpaid might by law become a lien upon any of their property, unless and to the extent that the same are being contested in good faith and by appropriate proceedings and the Company and the Subsidiaries has set aside on its books adequate reserves with respect thereto.

7.18. Restrictive Agreement. The Company covenants and agrees that subsequent to the Closing, it shall, and shall cause its Subsidiaries not to, be a party to any agreement or instrument which by its terms would restrict the Company's performance of its obligations pursuant to this Operative Documents, the Certificate of Incorporation or By-laws of the Company, the Preferred Shares or the Warrants.

7.19. Business Plan. Commencing with the Company's fiscal year commencing January 1, 1999, the Company's Chief Financial Officer shall prepare or have prepared and submit to the Board of

Directors not less than 60 days prior to the beginning of each fiscal year of the Company, an updated business plan (the "Business Plan") for such year which shall set forth the Company's and its Subsidiaries' product development, marketing and servicing plans, capital expenditures and expense budgets and shall encompass a statement of long range strategy over a five-year period and short-range tactics over a two-year period. The Business Plan shall specify quantitative and qualitative goals for the Company and its Subsidiaries and relate the attainment of those goals to the Company's and its Subsidiaries' strategic objectives.

7.20. Director and Observer. (a) The Purchaser Representative shall be entitled to designate a Director to the Board of Directors of the Company. If necessary, the Board of Directors of the Company will elect such person to the Board of Directors by creating a new position on the Board of Directors promptly following such person's nomination by the Purchaser Representative and shall nominate such person for election in connection with any stockholder vote for Directors, and the Company will use its best efforts to ensure that the stockholders of the Company agree to vote all their securities in favor of such person's election. The Company agrees to vote all voting securities for which the Company holds proxies, granting it voting discretion, or is otherwise entitled to vote, in favor of, and to use its best efforts in all respect to cause, the election of each such individual proposed by the Purchaser Representative. In the event that a vacancy is created on the Board of Directors at any time by the death, disability, resignation or removal (with or without cause) of any such individual proposed and nominated by the Purchaser Representative pursuant to this Agreement, the Company will, and will use its best efforts to ensure that the stockholders of the Company, vote all its voting securities to elect the individual proposed by the Purchaser Representative to fill such vacancy and serve as a voting Director. Any Director or observer of the Purchaser Representative pursuant to this Article 8 shall enter into a mutually satisfactory confidentiality agreement containing reasonable terms and conditions and similar in form and substance to that agreed to by each other Director of the Company. Such Director (or observer) shall also be subject to the terms and conditions of the Company's policies on trading restrictions.

(b) In addition to the rights set forth in Section 7.20(a), from and after the First Closing Date, until such time as Purchasers or their Affiliates shall not beneficially own any securities of the Company, the

Purchasers shall be entitled to designate nonvoting observers who shall be entitled to attend all meetings of the Board of Directors and any of its committees and who shall be provided (i) reasonable prior notice of all meetings of the Board of Directors and any of its committees, (ii) reasonable prior notice of any action that the Board of Directors or any of its committees may take by written consent, (iii) promptly delivered copies of all minutes and other records of action by, and all written information furnished to, the Board of Directors or any of its committees and (iv) any other information requested by such observer which a member of the Board of Directors would be entitled to request to discharge his or her duties. Such observers shall be entitled to the same rights to expense reimbursement for attendance at meeting as any outside Director.

(c) If the Purchaser Representative gives notice to the Company that the Purchasers desire to remove a Director proposed by the Purchasers or the Purchaser Representative pursuant to this Agreement, the Company shall, and shall use its best effort to ensure that the stockholders of the Company shall, vote all its voting securities in favor of removing such Director if a vote of holders of such securities shall be required to remove the Director, and the Company agrees to take any action necessary to facilitate such removal.

(d) Each Director nominated by the Purchasers shall be entitled to the same type and an amount of compensation at least equal to the highest amount payable to any other Director for serving in such capacity.

(e) Concurrently with either Closing Date, if requested by the Purchaser Representative, the Company shall have caused the appointment of the initial Directors nominated by the Purchaser Representative, to its Board of Directors in accordance with the provisions of this Section 7.20, which individuals shall be identified in writing to the Company by such time.

(f) At any time that a designee of the Purchaser Representative serves on the Company's Board of Directors, the Purchasers shall be entitled to representation on any committee of the Board of Directors proportionate with their representation of the Board as a whole.

7.21. Board of Directors. (a) The Company shall promptly reimburse each Director or observer of the Company designated by the Purchaser Representative who is not an employee of the Company for all of his reasonable expenses incurred in attending each meeting of the Board of Directors of the Company or any committee thereof.

(b) The Company shall at all times maintain provisions in its By-laws and/or Certificate of Incorporation indemnifying all directors against liability and absolving all directors from liability to the Company and its stockholders to the maximum extent permitted under the laws of the State of Delaware.

(c) The By-laws of the Company shall always contain provisions consistent with the provisions of this Section 7.21 except to the extent this Section 7.21 deals with the possible observer.

(d) For so long as any designee of the Purchaser Representative is a director of the Company, procure and maintain director and officer liability insurance in adequate amounts with a reputable insurance carrier.

7.22. No Subsidiaries. Except for extant Subsidiaries, the Company will not create or acquire any entity that would be a Subsidiary (as defined in Section 9.11 without the prior written consent of the Purchaser Representative.

7.23. Publicity. (a) The Company shall not issue any press release or make any other public announcement with respect to this Agreement or the transactions contemplated hereby or utilizing the names of Purchasers or their officers, directors, employees, agents or Affiliates without obtaining the prior approval of Purchasers, except as may be required by law or the regulations of any securities exchange or the Nasdaq National Market.

(b) Except as may be required by law or the regulations of any securities exchange or the Nasdaq National Market, the Company shall not disclose the names, identity, addresses or any other information regarding each of Purchasers or any of its officers, directors, employees, shareholders, nominees and/or designees without such Purchaser's prior written consent; provided, however, that a copy of this Agreement with all exhibits hereto may be filed with the SEC by the Company and that the name of each Purchaser (but not its address) may be disclosed in the Shelf Registration Statement.

(c) After the First Closing Date, upon request of the Purchaser Representative, the Company shall cause, at its sole expense, the immediate publication of a "tombstone" advertisement in the Wall Street Journal (National Edition) announcing the consummation of this Agreement and the transactions contemplated herein, the exact form and substance of which shall be mutually agreed upon by the Company and the Purchaser Representative.

7.24. Restriction on Securities. (a) During the 18 months following the First Closing Date, the Company shall not, and shall cause its Subsidiaries not to, without prior written consent of the Purchaser Representative, issue, offer or sell any of its equity or debt securities (including, without limitation, any securities convertible into or exercisable for such securities); provided that the Company may issue (i) shares of Common Stock pursuant to an Equity Purchase Agreement on the terms described on Schedule 7.24 (the "Equity Purchase Agreement"), it being understood that the Purchasers shall possess a right of first refusal with respect to the Equity Purchase Agreement as set forth in Section 7.26, and (ii) shares of Common Stock upon conversion or exercise of the Company's outstanding securities and pursuant to exercise of options under the Option Plans in accordance with the terms of such plan (it being agreed that the issuance of any additional options under such plan may be effected only with the prior written consent of the Purchaser Representative). This Section 7.24 shall not apply to the offerings to be conducted by the Company with Paramount acting as placement agent or in connection with the Paramount Agreements or the issuance of Common Stock pursuant to the terms of the Certificate of Designations, the Warrants or the Warrants issuable to Paramount pursuant to the Paramount Agreements. During the 18-months following the First Closing Date, the Company shall not, and shall cause its Subsidiaries not to, without the prior written consent of the Purchaser Representative, offer or sell any of its debt or equity securities in reliance on Regulation S of the Securities Act. During the 36-

month period following the First Closing Date, the Company will not extend the expiration date or lower the exercise price of any options or warrants, or take any similar action with respect to any convertible securities of the Company, without the prior written consent of the Purchaser Representative.

(b) Prior to the First Closing Date, the Company shall obtain the written agreement of all executive officers and directors of the Company (i) to "lock-up" all of the shares of Common Stock owned by each of them at any time until the later of (x) 24 months following the First Closing Date and (y) six months following the effective date of the Shelf Registration Statement relating to the Additional Preferred Shares and Additional Warrants, (ii) not directly or indirectly, issue, agree or offer to sell, grant an option for the purchase or sale, assign, sell, contract to sell, sell "short" or "short against the box" (as those terms are generally understood), pledge, hypothecate, distribute or otherwise encumber or dispose of, any such shares (including options, rights, warrants or other securities convertible into, exchangeable, exercisable for or evidencing any right to purchase or subscribe for shares of capital stock of the Company (whether or not beneficially owned by such person) or any beneficial interest therein of any shares of the Common Stock, (iii) not directly or indirectly purchase, contract to purchase or otherwise acquire any shares of Common Stock during the 30 Trading Days prior to the Reset Date, all in form and substance satisfactory to Purchasers and their counsel.

7.25. Restriction on Liens. The Company shall not, and shall cause its Subsidiaries not to, create or permit the imposition of any liens on any of their assets from and after the First Closing Date without the prior written consent of the Purchaser Representative.

7.26. Right of First Refusal (a) If the Company wishes to enter into the Equity Purchase Agreement, in whole or in part, it shall first give a written notice (the "Notice") to the Purchasers specifying (x) the amount of the funds which the Company wishes to raise and (y) the equity shares that it is offering for sale pursuant to the Equity Purchase Agreement (the "Equity Amount"), containing an irrevocable offer (open to acceptance for a period of 30 days after the date such Notice is received) to enter into an Equity Purchase Agreement for the Equity Amount on terms consistent with Schedule 7.24 and which shall be stated in the Notice (the "Terms").

(b) The Purchasers shall have the right to purchase all or a portion of the Equity Amount; provided, however, that the Purchasers must, within 5 days after receipt of the Notice, determine the portion of the Equity Amount it is willing to purchase.

(c) If the offer is accepted by the Purchasers, the Purchasers shall provide the Company with written notice of such acceptance specifying the Equity Amount as to which the Purchasers are accepting (a "Notice of Acceptance") within 30 days of receipt of the Notice.

(d) The closing of the purchase by the Purchasers of the Equity Amount pursuant to this Section 7.26 shall take place at the principal offices of the Purchaser Representative on the date chosen by the Purchasers which date shall, except as otherwise provided in this Section 7.26, in no event be more than 30 days after the Notice of Acceptance is given. At such closing, the Purchasers shall deliver to the Company against delivery of duly endorsed certificates representing the securities being sold a certified check or checks in the appropriate amount. Such securities shall be delivered to the Purchasers free and clear of all liens, claims, charges, security interests, options, adverse claims or other legal or equitable encumbrances.

(e) To the extent the Purchasers' ability to consummate the transactions to contemplated by the Equity Purchase Agreement as provided herein (i) is limited by any law, statute, regulation, order, writ, injunction, decree, rule, regulation, policy or guideline promulgated, or judgment entered, by any federal, state, local or foreign court or governmental authority applicable to the Purchasers; or (ii) would constitute or cause a material breach or default (immediately or with notice or lapse of time or both) of any agreement or instrument to which the Purchasers is a party or by which the Purchasers or any of their assets are bound, the Purchasers shall have the option to purchase any equity securities not acquired by it pursuant to this Section 7.24 on the date chosen by the Purchasers (not later than the 15th business day) after such date as the Purchasers learn that it is no longer so restricted from acquiring such securities.

(f) If, at the end of the 30th day after the Notice is received, the Purchasers have not delivered an effective Notice of Acceptance of the offer contained in such Notice, or if it has delivered a Notice of Acceptance covering less than all the Equity Amount, then the Company shall have 30 days in which to enter into an Equity Purchase Agreement for the Equity Amount not accepted for purchase by the Purchasers, at a price not lower than the Terms and on terms not more favorable to the prospective purchaser than those contained in the Notice, to any third party. Promptly after any transaction pursuant to this Section 7.26, the Company shall notify the Purchasers of the consummation thereof and shall furnish such evidence of the completion and time of completion of such transaction and of the terms thereof as the Purchasers may reasonably request. If, at the end of such 30-day period, the Company has not completed the transaction for any or all of such Equity Amount, the Company shall no longer be permitted to enter into a third party Equity Purchase Agreement pursuant to this Section 7.26 without again complying with this Section in its entirety. If the Company determines at any time within such 30-day period that the transaction with respect to any or all of such Equity Amount at a price not lower than the Terms and on terms not more favorable to the third party than those contained in the Notice is impractical, the Company may terminate all attempts to enter into such arrangement and recommence the procedures of this Section in their entirety without waiting for the expiration of such 30-day period by delivering written notice of such

decision to the Purchasers.

(g) The Purchasers shall have the right to assign, at any time, its right to purchase all or a portion of the Equity Amount pursuant to this Section 7.26 to any affiliate of such Purchasers or the Purchaser Representative. Upon such assignment, such assignee shall assume all the same rights and obligations of the Purchasers under this Section 7.26.

7.27. Restrictions on Indebtedness. The Company shall not, and shall cause its Subsidiaries not to, incur, create, assume or permit to exist any indebtedness except (i) indebtedness represented by the obligations of the Company under Section 13 of the Certificate of Designations and Section 7.28, (ii) pursuant to equipment lease financings with commercial banks or Persons whose business consists in substantial part of engaging in such financings, (iii) pursuant to customary accounts receivable and inventory financing in the ordinary course of business, (iv) in an amount less than $25,000 incurred in the ordinary course of business, provided that subsequent to the effectiveness of the Shelf Registration Statement (as defined in Section 8.1), so long as the Company has not less than $1,000,000 of cash and cash-equivalents, the incurrence of indebtedness with respect to a transaction or series of transactions not to exceed $100,000 in the ordinary course of business shall be permitted, and (v) indebtedness for borrowed money existing on the date hereof and disclosed in writing to the Purchasers, but not any extensions, renewals or replacements of such indebtedness.

7.28. Repayment Upon Certain Events. In the event that (a) the Company does not initiate the meeting of its shareholders for the purpose of obtaining the Required Shareholder Approvals by May 28, 1999, (b) the Company does not obtain the Required Shareholder Approvals at such meeting or by 30 days following such meeting if such meeting is adjourned in good faith by the Company in accordance with the Company's By-laws, (c) the Shelf Registration Statement has not become effective by the Outside Target Date (as defined in Section 8.6), or any other Redemption Event (as defined in Section 13 of the Certificate of Designations) occurs, the Company shall effect the redemption of the Series B Preferred Stock in accordance with the terms of the Certificate of Designations and Purchasers shall be entitled to retain the Warrants issued to them.

7.29. Required Shareholder Approvals. The Company will use its best efforts to notice and hold a stockholders meeting as promptly as practicable and in any event not later than May 28, 1999, to obtain any stockholder approvals required by the Company (including those required by all applicable agreements between the Company and the National Association of Securities Dealers ("NASD") or the rules of the Nasdaq National Market), including, without limitation to allow for issuance of all securities to the Purchasers and Paramount in connection with or contemplated by the Operative Documents and the Paramount Agreements. The "Required Shareholder Approvals" shall mean the authorization and approval by the holders of the transactions contemplated by the Operative Documents and the Paramount Agreements, including issuance of the Preferred Shares, the Warrants and the Common Shares issuable pursuant to the terms of the Preferred Shares and the Warrants, to the extent such authorization is necessary to comply with any rule or

regulation of the NASD, the Nasdaq National Market or any other or any other applicable law, rule or regulation of any regulatory agency or applicable stock exchange or market.

8. Registration of Common Stock.

8.1. Registration. (i) Not later than 30 days after the First Closing Date, the Company will file with the SEC a shelf registration statement (the "Shelf Registration Statement") with respect to the resale of the Registrable Securities beneficially owned by Purchasers following the First Closing. Not later than 30 days following the Second Closing Date, the Company will amend the Shelf Registration Statement to include the Registrable Securities beneficially owned by Purchasers as a consequence of the Second Closing. The Company will use its best efforts to effect the registrations, qualifications

or compliances (including, without limitation, the execution of any required undertaking to file post-effective amendments, appropriate qualifications under applicable blue sky or other state securities laws and appropriate compliance with applicable securities laws, requirements or regulations) as may be reasonably requested and as would permit or facilitate that sale and distribution of all Registrable Securities until the distribution thereof is complete; provided that the Company shall not be obligated to maintain the effectiveness of the Shelf Registration Statement (and any related qualifications and compliance) following the earlier of (x) the third anniversary of the last Closing Date and (y) at such time as the Company shall deliver an opinion of counsel reasonably satisfactory to the holders of Registrable Securities (such holders, including, without limitation, the holders of the Placement Warrants, are referred to as the "Holders') and in form and substance satisfactory to each Holder that (i) such Holders may sell in a single transaction all Registrable Securities then held or issuable to such Holder on a registered securities exchange or Nasdaq market under an applicable exemption from the registration requirements of the Securities Act and all other applicable securities laws and (ii) all transfer restrictions and restrictive legends with respect to such Registrable Securities will be removed upon the consummation of such sale. Holders of Common Stock acquired pursuant to the Equity Purchase Agreement shall be permitted to include their shares of Common Stock in the Shelf Registration Statement provided that, in the event the holders of Registrable Securities elect to retain an underwriter in connection with the distribution contemplated by the Shelf Registration Statement, the inclusion in the Shelf Registration Statement of shares of Common Stock issued pursuant to the Equity Purchase Agreement shall be conditioned on such underwriter consenting thereto (which consent may be conditioned upon, among any other factors deemed relevant by such underwriter, the holders of such shares of Common Stock disposing of such shares of Common Stock pursuant to the related underwriting agreement).

8.2. Registration Procedures. In connection with the registration of any Registrable Securities under the Securities Act as provided in this Section 8, the Company will use its best efforts, as expeditiously as possible:

(a) Prepare and file with the SEC the Shelf Registration Statement with respect to such Registrable Securities and use its best efforts to cause such Shelf Registration Statement to become effective as expeditiously as possible but in any event by the Targeted Effective Date (as such term is defined in Section 8.6(b));

(b) Prepare and file with the SEC such amendments and supplements to such Shelf Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Shelf Registration Statement effective until the disposition of all securities in accordance with the intended methods of disposition by the seller or sellers thereof set forth in such Shelf Registration Statement shall be completed, and to comply with the provisions of the Securities Act (to the extent applicable to the Company) with respect to such dispositions;

(c) Furnish to each seller of such Registrable Securities such number of copies of such Shelf Registration Statement and of each such amendment and supplement thereto (in each case including all exhibits), such number of copies of the prospectus included in such Shelf Registration Statement (including each preliminary prospectus), in conformity with the requirements of the Securities Act, and such other

documents, as such seller may reasonably request, in order to facilitate the disposition of the Registrable Securities owned by such seller;

(d) Use its best efforts to register or qualify such Registrable Securities covered by such Shelf Registration Statement under such other securities or blue sky laws of such jurisdictions as any seller reasonably requests, and do any and all other acts and things which may be reasonably necessary or advisable to enable such seller to consummate the disposition in such jurisdictions of the Registrable Securities owned by such seller, except that the Company will not for any such purpose be required to qualify generally

to do business as a foreign corporation in any jurisdiction wherein it would not, but for the requirements of this Section 8.2(d) be obligated to be qualified, to subject itself to taxation in any such jurisdiction, or to consent to general service of process in any such jurisdiction;

(e) Provide a transfer agent and registrar for all such Registrable Securities covered by such Shelf Registration Statement not later than the effective date of such Shelf Registration Statement;

(f) Notify each seller of such Registrable Securities at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus included in such Shelf Registration Statement contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading, and, at the request of any such seller, the Company will prepare a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading;

(g) Cause all such Registrable Securities to be listed on each securities exchange or automated over-the-counter trading system on which similar securities issued by the Company are then listed;

(h) Enter into such customary agreements (including, in the event Purchasers elect to engage an underwriter in connection with the Shelf Registration Statement, an underwriting agreement containing customary terms and conditions) and take all such other actions as reasonably required in order to expedite or facilitate the disposition of such Registrable Securities; and

(i) Make available for inspection by any seller of Registrable Securities, all financial and other records, pertinent corporation documents and properties of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by any such seller in connection with the Shelf Registration Statement pursuant to Section 8.1.

8.3 Registration and Selling Expenses. (a) All expenses incurred by the Company in connection with the Company's performance of or compliance with this Section 8, including, without limitation (i) all registration and filing fees (including all expenses incident to filing with the National Association of Securities Dealers, Inc.), (ii) blue sky fees and expenses, (iii) all necessary printing and duplicating expenses, (iv) all fees and disbursements of counsel and accountants retained by the Company (including the expenses of any audit of financial statements) and (v) a single counsel retained by the Purchaser Representative on behalf of Purchasers to represent all Purchasers (all such expenses being called "Registration Expenses"), will be paid by the Company except as otherwise expressly provided in this Section 8.3.

(b) The Company will, in any event, in connection with any registration statement, pay its internal expenses (including, without limitation, all salaries and expenses of its officers and employees performing legal, accounting or other duties in connection therewith and expenses of audits of year-end financial statements), the expense of liability insurance and the expenses and fees for listing the securities to be registered on one or more securities exchanges or automated over-the-counter trading systems on which similar securities issued by the Company are then listed.

(c) Nothing in this Agreement shall be construed to prevent any Holder or Holders of Registrable Securities from retaining such counsel as they shall choose at their own expense.

8.4. Other Public Sales and Registrations. The Company agrees that it will not, on its own behalf, file or cause to become effective any other registration of any of its securities under the Securities Act or otherwise effect a public sale or distribution of its securities (except pursuant to registration on Form S-8 or any successor form relating to a special offering to the employees or security holders of the Company) until at

least 180 days have elapsed after the effective date of the Shelf Registration Statement.

8.5. Indemnification. (a) The Company shall indemnify, to the extent permitted by law, each holder of Registrable Securities, its officers and directors, if any, and each person, if any, who controls such holder within the meaning of the Securities Act, against all losses, claims, damages, liabilities and expenses (under the Securities Act or common law or otherwise) caused by any untrue statement or alleged untrue statement of a material fact contained in any registration statement or prospectus (and as amended or supplemented if the Company has furnished any amendments or supplements thereto) or any preliminary prospectus, which registration statement, prospectus or preliminary prospectus shall be prepared in connection with the registration contemplated by this Section 8, or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages, liabilities or expenses are caused by any untrue statement or alleged untrue statement contained in or by any omission or alleged omission from information furnished in writing by such holder to the Company in connection with the registration contemplated by this Section 8, provided the Company will not be liable pursuant to this Section 8.5 if such losses, claims, damages, liabilities or expenses have been caused by any selling security holder's failure to deliver a copy of the registration statement or prospectus, or any amendments or supplements thereto, after the Company has furnished such holder with the number of copies required by Section 8.2(c).

(b) In connection with any registration statement in which a holder of Registrable Securities is participating, each such holder shall furnish to the Company in writing such information as is reasonably requested by the Company for use in any such registration statement or prospectus and shall severally, but not jointly, indemnify, to the extent permitted by law, the Company, its directors and officers and each person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages, liabilities and expenses resulting from any untrue statement or alleged untrue statement of a material fact or any omission or alleged omission of a material fact required to be stated in the registration statement or prospectus or any amendment thereof or supplement thereto or necessary to make the statements therein not misleading, but only to the extent such losses, claims, damages, liabilities or expenses are caused by an untrue statement or alleged untrue statement contained in or by an omission or alleged omission from information so furnished in writing by such holder in connection with the registration contemplated by this Section 8. If the offering pursuant to any such registration is made through underwriters, each such holder agrees to enter into an underwriting agreement in customary form with such underwriters and to indemnify such underwriters, their officers and directors, if any, and each person who controls such underwriters within the meaning of the Securities Act to the same extent as hereinabove provided with respect to indemnification by such holder of the Company. Notwithstanding the foregoing or any other provision of this Agreement, in no event shall a holder of Registrable Securities be liable for any such losses, claims, damages, liabilities or expenses in excess of the lesser of (a) the net proceeds received by such holder in the offering or (b) $500,000.

(c) Promptly after receipt by an indemnified party under Section 8.5 (a) or (b) of notice of the commencement of any action or proceeding, such indemnified party will, if a claim in respect thereof is made against the indemnifying party under such Section, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to any indemnified party otherwise than under such Section. In case any such action or proceeding is brought against any indemnified party, and it notifies the indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate therein, and, to the extent that it wishes, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel approved by such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party will not be liable to such indemnified party under such Section for any legal or any other expenses subsequently incurred by such indemnified party in connection with the defense thereof (other than reasonable costs of investigation) unless incurred at the written request of the indemnifying party. Notwithstanding the above, the indemnified party

will have the right to employ counsel of its own choice in any such action or proceeding if the indemnified party has reasonably concluded that there may be defenses available to it which are different from or additional to those of the indemnifying party, or counsel to the indemnified party is of the opinion that it would not be desirable for the same counsel to represent both the indemnifying party and the indemnified party because such representation might result in a conflict of interest (in either of which cases the indemnifying party will not have the right to assume the defense of any such action or proceeding on behalf of the indemnified party or parties and such legal and other expenses will be borne by the indemnifying party). An indemnifying party will not be liable to any indemnified party for any settlement of any such action or proceeding effected without the consent of such indemnifying party.

(d) If the indemnification provided for in Section 8.5(a) or (b) is unavailable under applicable law to an indemnified party in respect of any losses, claims, damages or liabilities referred to therein, then each applicable indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities in such proportion as is appropriate to reflect the relative fault of the Company on the one hand and of the Holders on the other in connection with the statements or omissions which resulted in such losses, claims, damages, or liabilities, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of the Holders on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Company or by the Holders and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, claims, damages and liabilities referred to above shall be deemed to include, subject to the limitations set forth in Section 8.5(c), any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who is not guilty of such fraudulent misrepresentation.

(e) Promptly after receipt by the Company or any holder of Securities of notice of the commencement of any action or proceeding, such party will, if a claim for contribution in respect thereof is to be made against another party (the "contributing party"), notify the contributing party of the commencement thereof; but the omission so to notify the contributing party will not relieve it from any liability which it may have to any other party other than for contribution under this Agreement. In case any such action, suit, or proceeding is brought against any party, and such party notifies a contributing party of the commencement thereof, the contributing party will be entitled to participate therein with the notifying party and any other contributing party similarly notified.

8.6. Additional Common Stock Issuable Upon Delay of Registration and Other Events. (a) Except to the extent any delay is due to the failure of a Holder to reasonably cooperate in providing to the Company such information as shall be reasonably requested by the Company in writing for use in the Shelf Registration Statement, if the Shelf Registration Statement is not filed with the SEC within 30 days following the Closing Date (the "Outside Target Date"), the Company shall immediately declare and issue to each Holder (i) additional Warrants equal to 1.5% of the Warrants then held by such Holder and (ii) an amount equal to 1.5% of the liquidation preference pursuant to Section 3 of the Certificate of Designations of the Preferred Shares then held or issuable to such Holder, for each day after the Outside Target Date that the Registration Statement remains unfiled.

(b) Except to the extent any delay is due to the failure of a Holder to reasonably cooperate in providing to the Company such information as shall be reasonably requested by the Company in writing for use in the Shelf Registration Statement, if the Shelf Registration Statement is not declared effective by the SEC by the Targeted Effective Date, the Company shall

immediately declare, issue and pay for no additional consideration to each Holder (i) additional Warrants equal to 1.5% of the Warrants then held by such Holder and (ii) an amount equal to 1.5% of the liquidation preference pursuant to Section 3 of the Certificate of Designations of the Preferred Shares then held or issuable to such Holder, for each day the Shelf Registration Statement is not declared effective by the SEC following the occurrence of the Targeted Effective Date. As used herein, "Targeted Effective Date" shall mean the 90th day after the Closing Date, provided that in the

event the SEC does not provide comments to the Company (or declare the Shelf Registration Statement Effective) within (i) 35 days after the initial filing of the Shelf Registration Statement or (ii) seven days after the filing of any pre-effective amendment to the Shelf Registration Statement, so long as the Company has used reasonable efforts to respond promptly to any comments pending at the time a pre-effective amendment to the Shelf Registration Statement is filed, the Targeted Effective Date shall be deferred for a number of days equal to the number of days by which the SEC's response time exceeded 35 days or seven days, as applicable.

(c) Except to the extent any delay is due to the failure of a Holder to reasonably cooperate in providing to the Company such information as shall be reasonably requested by the Company in writing for use in the Shelf Registration Statement, following the declaration of the effectiveness of the Shelf Registration Statement by the SEC, if the Shelf Registration Statement is not maintained by Company during the period required by Section 8.1 for more than five Trading Days (as such term is defined in the Certificate of Designations), the Company shall immediately declare and issue to each Holder (i) additional Warrants equal to 1.5% of the Warrants then held by such Holder and (ii) an amount equal to 1.5% of the liquidation preference pursuant to Section 3 of the Certificate of Designations of the Preferred Shares then held or issuable to such Holder, for each additional Trading Day that the Shelf Registration Statement is not effective.

(d) All shares of Common Stock issuable pursuant to this Section 8.6 shall be duly authorized, fully paid and nonassessable shares of Common Stock and shall be included in the Shelf Registration Statement contemplated by Section 8.1. Such shares shall be registered in Purchasers' names or the name of the nominee(s) of Purchasers in such denominations as Purchasers shall request pursuant to instructions delivered to the Company.

(e) All shares of Preferred Stock issuable upon exercise of the Placement Warrants shall be deemed to be outstanding and to constitute outstanding Preferred Shares for purposes of this Section 8.6.

9. Certain Definitions. For the purposes of this Agreement, the following terms have the respective meanings set forth below:

9.1. "Affiliate" means any person, corporation, firm or entity that directly or indirectly controls, is controlled by, or is under common control with the indicated person, corporation, firm or entity.

9.2. "Common Stock" means the Company's Common Stock.

9.3. "Generally Accepted Accounting Principles" means generally accepted accounting principles consistently applied.

9.4. "Officers' Certificate" means a certificate executed on behalf of the Company by its President, Chairman of the Board, Chief Executive Officer, Chief Financial Officer or Secretary.

9.5. "Person" shall mean any natural person and any corporation, partnership, joint venture, limited liability company or other legal person, but shall not include any governmental entity.

9.6. "Registrable Securities" means (i) the shares of Common Stock issuable upon exercise of the Warrants and the warrants issuable upon exercise of the Unit Purchase Option, (ii) the shares of Common Stock issuable upon conversion of Preferred Stock (including without limitation the shares of

Common Stock issuable upon conversion of the Preferred Stock issuable upon exercise of the Unit Purchase Option), (iii) any shares of Common Stock issued in satisfaction of dividends accrued on the Preferred Stock and (iv) any other shares of Common Stock now owned or hereafter acquired by Purchasers (whether Common Stock owned directly or underlying securities of the Company that are convertible or exchangeable directly or indirectly for shares of Common Stock) or Paramount. Without limitation of the foregoing, any shares of Common Stock issued pursuant to Section 8.6 or Section 13 of the Certificate of Designations shall be deemed to be Registrable Securities and the Company shall promptly amend the Shelf Registration Statement to include such shares in the Shelf Registration Statement contemplated by Section 8.1 after their issuance.

9.7. "Securities" means the Preferred Shares, the Common Shares, the Warrants and any Preferred Stock or Common Stock underlying the foregoing whether issued at the Closing or thereafter or pursuant to the Placement Warrants.

9.8. "Securities Act" means, as of any given time, the Securities Act of 1933, as amended, or any similar federal law then in force.

9.9. "Securities Exchange Act" means, as of any given time, the Securities Exchange Act of 1934, as amended, or any similar federal law then in force.

9.10. "SEC" shall mean the United States Securities and Exchange Commission and includes any governmental body or agency succeeding to the functions thereof.

9.11. "Subsidiary" means any person, corporation, firm or entity at least the majority of the equity securities (or equivalent interest) of which are, at the time as of which any determination is being made, owned of record or beneficially by the Company, directly or indirectly, through any Subsidiary or otherwise.

10.1 Company Indemnities. (a) The Company agrees to indemnify, defend and hold Purchasers and their officers, directors, partners, employees, consultants and agents (the "Purchasers' Indemnitees") harmless from and against any liability, obligation, claim, cost, loss, judgment, damage or expense (including reasonable legal fees and expenses) (collectively, "Liabilities") incurred or suffered by any of Purchasers' Indemnitees as a result of or arising out of or in connection with the Company's breach of any representation, warranty, covenant or agreement of the Company contained in this Agreement.

11. Miscellaneous.

11.1. Termination; Survival of Representations, Warranties and Covenants. Except as otherwise provided for in this Agreement all representations, warranties, covenants and agreements contained in this Agreement, or in any document, exhibit, schedule or certificate by any party delivered in connection herewith shall survive the execution and delivery of this Agreement and the Closing Dates and the consummation of the transactions contemplated hereby, regardless of any investigation made by Purchasers or on their behalf.

11.2. Expenses. The Company shall pay all its own expenses in connection with this Agreement and the transactions contemplated herein. The Company agrees to pay promptly and save the Purchasers harmless against liability for the payment all expenses incurred by the Company and the Purchasers in connection with the preparation and consummation of the Agreement and the transactions contemplated herein, including but not limited to: all costs and expenses under Section 8, including without limitation, the costs of preparing, printing and filing with the SEC the Shelf Registration Statement and amendments, post-effective amendments, and supplements thereto; preparing, printing and delivering exhibits thereto and copies of the preliminary, final and supplemental prospectuses; preparing, printing and delivering all selling documents, including but not limited to the subscription agreement, the warrant agreement and stock and warrant certificates; legal fees and disbursements of

the Purchasers' counsel (which amount shall be offset against payment of the purchase price for legal fees that have been accrued up to such date and the remainder of which shall be paid within 30 days of submission of any statements therefor) in connection with the preparation and consummation of this Agreement and the transactions contemplated herein, including the legal fees and costs of negotiating and drafting any transaction documents, due diligence and any necessary regulatory filings (including, without limitation, the Shelf Registration Statement, Forms 3, 4 and 5 and Schedule 13-D or -G filings); the cost of a total of three sets of bound closing volumes for the Purchasers and their counsel; and the cost of the tombstone advertisement in the Wall Street Journal (National Edition) pursuant to Section 7.23(c). The provisions of this Section shall survive any termination of this Agreement in all instances, including without limitation, (i) if the transactions contemplated by this Agreement have not been consummated or (ii) if the transactions have been terminated by Purchasers for any reason.

11.3. Amendments and Waivers. The Operative Documents, the exhibits and schedules thereto and the Paramount Agreements set forth the entire agreement and understanding among the parties as to the subject matter hereof and merges and supersedes all prior discussions, agreements and understandings of any and every nature among them. This Agreement may be amended only by mutual written agreement of the Company and the Purchaser Representative, and the Company may take any action herein prohibited or omit to take any action herein required to be performed by it, and any breach of any covenant, agreement, warranty or representation may be waived, only if the Company has obtained the written consent or waiver of the Purchaser Representative. No course of dealing between or among any persons having any interest in this Agreement will be deemed effective to modify, amend or discharge any part of this Agreement or any rights or obligations of any person under or by reason of this Agreement. "Purchaser Representative" shall mean a representative of Purchasers, elected by the Majority Holders, identified to the Company in writing from time to time by Paramount. "Majority Holders" shall mean the holders of a majority of the shares of Common Stock issuable pursuant to the terms of the Preferred Stock, the Warrants (other than shares issuable as dividends on the Preferred Stock, except to the extent outstanding). It is agreed and understood that the Purchaser Representative shall act solely on behalf of Purchasers and that the Purchaser Representative shall have no duties, obligations or liabilities whatsoever to the Company by virtue of acting as such.

11.4. Successors and Assigns. This Agreement may not be assigned by the Company except with the prior written consent of the Purchaser Representative. This Agreement shall be binding upon and inure to the benefit of the Company and its permitted successors and assigns and Purchasers and their successors and assigns. The provisions hereof which are for Purchasers' benefit as purchasers or holders of the Preferred Shares and the Warrants are also for the benefit of, and enforceable by, any subsequent holder of such Preferred Shares and Warrants.

11.5. Notices. All notices, demands and other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given personally or when mailed by certified or registered mail, return receipt requested and postage prepaid, and addressed to the addresses of the respective parties set forth below or to such changed addresses as such parties may have fixed by notice; provided, however, that any notice of change of address shall be effective only upon receipt:

If to the Company:
Neoprobe Corporation
425 Metro Place North, Suite 300
Dublin, OH 43017-1367
Attn: David C. Bupp

With a Copy to:

Benesch, Friedlander, Coplan & Aronoff LLP

Suite 900
88 East Broad Street
Columbus, OH 43215
Attention: Robert S. Schwartz

If to the Purchasers:

The Aries Master Fund
The Aries Domestic Fund
in care of Paramount Capital Asset Management, Inc.
787 Seventh Avenue, 48th Floor
New York, NY 10019
Attn: Michael S. Weiss

With a Copy to:
Roberts, Sheridan & Kotel,
A Professional Corporation
Tower Forty-Nine
12 East 49th Street, 30th Floor
New York, NY 10017
Attention: Ira L. Kotel

11.6. Governing Law; Consent to Jurisdiction. The validity, performance, construction and effect of this Agreement shall be governed by those laws of the State of New York which are applicable to agreements that are negotiated, executed, delivered and performed solely in the State of New York. The parties hereto irrevocably consent to the jurisdiction of the courts of the State of New York and of any federal court located in such State in connection with any action or proceeding arising out of or relating to this Agreement, any document or instrument delivered pursuant to, in connection with or simultaneously with this Agreement, or a breach of this Agreement or any such document or instrument. In any such action or proceeding, each party hereto waives personal service of any summons, complaint or other process and agrees that service thereof may be made in accordance with the notice provisions of Section 11.5. Within 30 days after such service, or such other time as may be mutually agreed upon in writing by the attorneys for the parties to such action or proceeding, the party so served shall appear or answer such summons, complaint or other process.

11.7. Counterparts. This Agreement may be executed in any number of counterparts and, notwithstanding that any of the parties did not execute the same counterpart, each of such counterparts shall, for all purposes, be deemed an original, and all such counterparts shall constitute one and the same instrument binding on all of the parties thereto.

11.8. Headings. The headings of the Sections are inserted as a matter of convenience and for reference only and in no way define, limit or describe the scope of this Agreement or the meaning of any provision hereof.

11.9. Severability. In the event that any provision of this Agreement or the application of any provision hereof is declared to be illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall not be affected except to the extent necessary to delete such illegal, invalid or unenforceable provision unless the provision held invalid shall substantially impair the benefit of the remaining portion of this Agreement.

11.10. Freedom of Action. (a) The Purchasers and their Affiliates shall not have any obligation to the Company not to (i) engage in the same or similar activities or lines of business as the Company or develop or market any products, services or technologies that does or may in the future compete, directly or indirectly, with those of the Company, (ii) invest or own any interest publicly or privately in, or develop a business relationship with, any corporation, partnership or other person or entity engaged in the same or similar activities or lines or business as, or otherwise in competition with, the Company or (iii) do business with any client, collaborator, licensor, consultant, vendor or customer of the Company. The Purchasers and their officers, directors, employees or former employees and Affiliates shall not

have any obligation, or be liable, to the Company solely on account of the conduct described in the preceding sentence. It is agreed and understood that the preceding sentence shall not limit the obligations to the Company under applicable law of any person acting as a director of the Company. In the event that any Purchaser or any officer, director, employee or former employee or Affiliate thereof acquires knowledge of a potential transaction, agreement, arrangement or other matter which may be a corporate opportunity for a Purchaser and the Company, no Purchaser or officer, director, employee or former employee or Affiliate thereof shall have any duty to communicate or offer such corporate opportunity to the Company and no Purchaser or officer, director, employee or former employee or Affiliate thereof shall be liable to the Company for breach of any fiduciary duty, as a stockholder or otherwise, solely by reason of the fact that such Purchaser or officer, director, employee or former employee or Affiliate thereof pursues or acquires such corporate opportunity for any such person or entity, directs such corporate opportunity to another person or entity or communicates or fails to

communicate such corporate opportunity to the Company. As used in this Section, Purchasers shall mean any, some or all of the Purchasers and their Affiliates (excluding the Company and the Subsidiaries as Affiliates of the Purchasers).

(b) The provisions of this Section 11.10 shall be enforceable to the fullest extent permitted by law.

11.11. Exculpation Among Purchasers and Holders. Each Purchaser acknowledges and agrees that it is not relying upon any other Purchaser, or any officer, director, employee partner or affiliate of any such other Purchaser, in making its investment or decision to invest in the Company or in monitoring such investment. Each Purchaser agrees that no Purchaser nor any controlling person, officer, director, stockholder, partner, agent or employee of any Purchaser shall be liable for any action heretofore or hereafter taken or omitted to be taken by any of them relating to or in connection with the Company or the securities, or both.

11.12. Actions by Purchasers. Any actions permitted to be taken by holders or Purchasers of Preferred Shares, Common Shares, Common Stock, and/or Warrants or otherwise by any Purchaser and any consents required to be obtained from the same under this Agreement, may be taken or given only by, in the case of consents or actions requiring approval of a Purchaser, by the applicable Purchaser, and in all other cases, except to the extent inconsistent with any explicit provision of this Agreement, only by the Purchaser Representative.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

NEOPROBE CORPORATION

By: /s/ David C. Bupp

Name: David C. Bupp
Title: President and Chief Executive Officer

THE ARIES MASTER FUND,
a Cayman Island exempted Company

By: /s/ Lindsay A. Rosenwald

Name:

Title:

THE ARIES DOMESTIC FUND, L.P.

By: /s/ Lindsay A. Rosenwald

Name:
Title:

EXHIBIT A

<TABLE>
<CAPTION>

Name	Initial $ Amount	Initial Preferred Shares	Warrants
<S>	<C>	<C>	<C>
The Aries Master Fund, a Cayman Island exempted Company	2,100,000	21,000	2,038,835
The Aries Domestic Fund, L.P.	900,000	9,000	873,786

</TABLE>

Exhibit 10.1.33

SCHEDULE IDENTIFYING OMITTED DOCUMENTS

The only particulars in which the attached instrument differs from the omitted instrument are the name of the holder and the number of shares of common stock, par value $.001 ("Common Stock"), of the Registrant which may be acquired upon the exercise of the instrument.

The holder of the omitted instrument is the Aries Domestic Fund, L.P.

The number of shares of Common Stock which may be acquired upon the exercise of the omitted instrument is 873,786.

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAW. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

Neoprobe Corporation

Warrant for the Purchase of Shares of Common Stock

No. L-1 2,038,835 Shares
FEBRUARY 16, 1999

FOR VALUE RECEIVED, NEOPROBE CORPORATION, a Delaware corporation (the "COMPANY"), hereby certifies that THE ARIES MASTER FUND, a Cayman Island exempted , L.P. (the "HOLDER"), its designee or its permitted assigns is entitled to purchase from the Company, at any time or from time to time commencing on FEBRUARY 16, 1999, and prior to 5:00 P.M., New York City time, on FEBRUARY 16, 2006, TWO MILLION THIRTY-EIGHT THOUSAND EIGHT HUNDRED THIRTY FIVE (2,038,835), subject to adjustment as hereinafter provided, fully paid and non-assessable shares of common stock, $.001 par value per share, of the Company for an initial aggregate purchase price of $2,100,000. (Hereinafter, (i) said common stock, $.001 par value per share, of the Company, is referred to as the "COMMON STOCK", (ii) the shares of the Common Stock purchasable hereunder or under any other Warrant (as hereinafter defined) are referred to as the "WARRANT SHARES", (iii) the aggregate purchase price payable for the Warrant Shares purchasable hereunder is referred to as the "AGGREGATE WARRANT PRICE", (iv) the price payable (initially $1.03 per share, subject to adjustment) for each of the Warrant Shares hereunder is referred to as the "PER SHARE WARRANT PRICE", (v) this Warrant, all similar Warrants issued on the date hereof and all warrants hereafter issued in exchange or substitution for this Warrant or such similar Warrants are referred to as the "WARRANTS", (vi) the holder of this Warrant is referred to as the "HOLDER" and the holder of this Warrant and all other Warrants and Warrant Shares are referred to as the "HOLDERS" and Holders of more than fifty percent (50%) of the outstanding Warrants and Warrant Shares are referred to as the "MAJORITY OF THE HOLDERS"), (vii) the then Current Market Price per share of the Common Stock (the "CURRENT MARKET PRICE") shall be deemed to be the last sale price of the Common Stock on the trading day prior to such date or, in case no such reported sales take place on such day, the average of the last reported bid and asked prices of the Common Stock on such day, in either case on the principal national securities exchange on which the Common Stock is admitted to trading or listed, or if not listed or

admitted to trading on any such exchange, the representative closing sale price of the Common Stock as reported by the National Association of Securities Dealers, Inc. Automated Quotations System ("NASDAQ"), or other similar organization if NASDAQ is no longer reporting such information, or, if the Common Stock is not reported on NASDAQ, the high per share sale price for the Common Stock in the over-the-counter market as reported by the National Quotation Bureau or similar organization, or if not so available, the fair market value of the Common Stock as determined in good faith by the board of directors, and "TRADING DAY" shall mean a day on which NASDAQ is open for the transaction of business or the reporting of trades. The Aggregate Warrant Price is not subject to adjustment. The Per Share Warrant Price is subject to adjustment as hereinafter provided; in the event of any such adjustment, the number of Warrant Shares deliverable upon exercise of this Warrant shall be adjusted by dividing the Aggregate Warrant Price by the Per Share Warrant Price in effect immediately after such adjustment.

This Warrant, together with warrants of like tenor, constituting in the aggregate Warrants to purchase 2,912,612 Warrant Shares, was originally issued pursuant to a Preferred Stock and Warrant Purchase Agreement (the "Purchase Agreement") between the Company and the Holder in connection with the Holder's purchase of units in a private placement (THE "OFFERING") of an aggregate of thirty (30) units (THE "OFFERING UNITS"), each Offering Unit consisting of (a) 1,000 shares of 5% Series B Preferred Stock (the "PREFERRED STOCK"), $100.00 stated value, and (b) 97,087 Class L Warrants to purchase 97,087 shares of Common Stock.

1. EXERCISE OF WARRANT.

(a) This Warrant may be exercised in whole at any time, or in part from time to time, commencing on February 16, 1999 and prior to 5:00 P.M., Eastern Standard Time, on February 16, 2009 by the Holder:

(i) by the surrender of this Warrant (with the subscription form at the end hereof duly executed) at the address set forth in Section 12(a) hereof, together with proper payment of the Aggregate Warrant Price, or the proportionate part thereof if this Warrant is exercised in part, with payment for the Warrant Shares made by certified or official bank check payable to the order of the Company; or

(ii) by the surrender of this Warrant (with the cashless exercise form at the end hereof duly executed) (a "CASHLESS EXERCISE") and payment of $.001 per Warrant Share at the address set forth in Section 12(a) hereof. Such presentation and surrender shall be deemed a waiver of the Holder's obligation to pay the Aggregate Warrant Price, or the proportionate part thereof if this Warrant is exercised in part. In the event of a Cashless Exercise, the Holder shall exchange its Warrant for that number of Warrant Shares subject to such Cashless Exercise multiplied by a fraction, the numerator of which shall be the difference between the then Current Market Price and the Per Share Warrant Price, and the denominator of which shall be the then Current Market Price. For purposes of any computation under this Section 1(a), the then Current Market Price shall be based on the trading day prior to the Cashless Exercise.

(b) If this Warrant is exercised in part, this Warrant must be exercised for a number of whole shares of the Common Stock and the Holder is entitled to receive a new Warrant covering the Warrant Shares that have not been exercised and setting forth the proportionate part of the Aggregate Warrant Price applicable to such Warrant Shares. Upon surrender of this Warrant, the Company will (i) issue a certificate or certificates in the name of the Holder for the largest number of whole shares of the Common Stock to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional share of the Common Stock to which the Holder shall be entitled, pay to the Holder cash in an amount equal to the fair value of such fractional share (determined in such reasonable manner as the board of

directors of the Company shall determine), and (ii) deliver the other securities and properties receivable upon the exercise of this Warrant, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant.

2. RESERVATION OF WARRANT SHARES; LISTING. The Company agrees that, prior to the expiration of this Warrant, the Company shall at all times (a) have authorized and in reserve, and shall keep available, solely for issuance and delivery upon the exercise of this Warrant, the shares of the Common Stock and other securities and properties as from time to time shall be receivable upon the exercise of this Warrant, free and clear of all restrictions on sale or transfer, other than under Federal or state securities laws, and free and clear of all preemptive rights and rights of first refusal and (b) use its best efforts to keep the Warrant Shares authorized for listing on the Nasdaq National Market, the Nasdaq SmallCap Market or any national securities exchange on which the Company's Common Stock is traded.

3. PROTECTION AGAINST DILUTION.

(a) If, at any time or from time to time after the date of this Warrant, the Company shall issue or distribute to any holder of shares of Common Stock evidence of its indebtedness, any other securities of the Company or any cash, property or other assets (excluding a subdivision, combination or reclassification, or dividend or distribution payable in shares of Common Stock, referred to in Section 3(b), and also excluding cash dividends or cash distributions paid out of net profits legally available therefor in the full amount thereof (any such non-excluded event being herein called a "SPECIAL DIVIDEND")), the Per Share Warrant Price shall be adjusted by multiplying the Per Share Warrant Price then in effect by a fraction, the numerator of which shall be the then Current Market Price in effect on the record date of such issuance or distribution less the fair market value (as determined in good faith by the Company's board of directors) of the evidence of indebtedness, cash, securities or property, or other assets issued or distributed in such Special Dividend applicable to one share of Common Stock and the denominator of which shall be the then Current Market Price in effect on the record date of such issuance or distribution. An adjustment made pursuant to this Subsection 3(a) shall become effective immediately after the record date of any such Special Dividend.

(b) In case the Company shall hereafter (i) pay a dividend or make a distribution to any holder of its capital stock in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock into a greater number of shares, (iii) combine its outstanding shares of Common Stock into a smaller number of shares or (iv) issue by reclassification of its Common Stock any shares of capital stock of the Company, the Per Share Warrant Price shall be adjusted to be equal to a fraction, the numerator of which shall be the Aggregate Warrant Price and the denominator of which shall be the number of shares of Common Stock or other capital stock of the Company that the Holder would have owned immediately following such action had such Warrant been exercised immediately prior thereto. An adjustment made pursuant to this Subsection 3(b) shall become effective immediately after the record date in the case of a dividend or distribution, and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

(c) Except as provided in Subsections 3(a) and 3(d), in case the Company shall hereafter issue or sell any Common Stock, any securities convertible into Common Stock, any rights, options or warrants to purchase or otherwise receive an issuance of Common Stock or any securities convertible into, or exercisable or exchangeable for, Common Stock, in each case for a price per share or entitling the holders thereof to purchase Common Stock at a price per share (determined by dividing (i) the total amount, if any, received or receivable by the Company in consideration of the issuance or sale of such securities plus the total consideration, if any, payable to the Company upon exercise thereof (the "TOTAL CONSIDERATION") by (ii) the number of additional shares of Common Stock issued, sold or issuable upon exercise of such securities) that is less than either the then Current Market Price in effect on the date of such issuance or sale or the Per Share Warrant Price, then the Per

Share Warrant Price shall be adjusted as of the date of such issuance or sale by multiplying the Per Share Warrant Price then in effect by a fraction, the numerator of which shall be (x) the sum of (A) the number of shares of Common Stock outstanding on the record date of such issuance or sale plus (B) the Total Consideration divided by the Current Market Price or the current Per Share Warrant Price, whichever is greater, and the denominator of which shall be (y) the number of shares of Common Stock outstanding on the record date of such issuance or sale plus the maximum number of additional shares of Common Stock issued, sold or issuable upon exercise or conversion of such securities.

(d) No adjustment in the Per Share Warrant Price shall be required in the case of the issuance by the Company of Common Stock (i) pursuant to the exercise of any warrant; (ii) pursuant to the exercise of any stock options or warrants currently outstanding or securities issued after the date hereof, which may be approved by the Company's board of directors pursuant to any Company benefit plan or exercised, under any employee benefit plan of the Company to officers, directors, consultants or employees, but only with respect to such warrants or stock options as are exercisable at prices no lower than the closing bid price of the Common Stock as of the date of grant thereof.

(e) In case of any capital reorganization or reclassification, or any consolidation or merger to which the Company is a party other than a merger or consolidation in which the Company is the continuing corporation, or in case of any sale or conveyance to another entity of the property of the Company as an entirety or substantially as a entirety, or in the case of any statutory exchange of securities with another corporation (including any exchange effected in connection with a merger of a third corporation into the Company), the Holder of this Warrant shall have the right thereafter to receive on the exercise of this Warrant the kind and amount of securities, cash or other property which the Holder would have owned or have been entitled to receive immediately after such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance had this Warrant been exercised immediately prior to the effective date of such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application of the provisions set forth in this Section 3 with respect to the rights and interests thereafter of the Holder of this Warrant to the end that the provisions set forth in this Section 3 shall thereafter correspondingly be made applicable, as nearly as may reasonably be, in relation to any shares of stock or other securities or property thereafter deliverable on the exercise of this Warrant. The above provisions of this Section 3(e) shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, statutory exchanges, sales or conveyances. The Company shall require the issuer of any shares of stock or other securities or property thereafter deliverable on the exercise of this Warrant to be responsible for all of the agreements and obligations of the Company hereunder. Notice of any such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance and of said provisions so proposed to be made, shall be mailed to the Holders of the Warrants not less than thirty (30) days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

(f) No adjustment in the Per Share Warrant Price shall be required unless such adjustment would require an increase or decrease of at least $0.05 per share of Common Stock; provided, however, that any adjustments which by reason of this Subsection 3(g) are not required to be made shall be carried forward and taken into account in any subsequent adjustment; provided, further, however, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this Subsection 3(g)) not later than such time as may be required in order to preserve the tax-free nature of a distribution to the Holder of this Warrant or Common Stock issuable upon the exercise hereof. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Per Share Warrant Price, in addition to those required by this Section 3, as it in its discretion shall deem to be advisable in order that any stock dividend, subdivision of shares or

distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its stockholders shall not be taxable.

(g) Whenever the Per Share Warrant Price is adjusted as provided in this Section 3 and Section 4 and upon any modification of the rights of a Holder of Warrants in accordance with this Section 3, the Company shall promptly prepare a brief statement of the facts requiring such adjustment or modification and the manner of computing the same and cause copies of such certificate to be mailed to the Holders of the Warrants. The Company may, but shall not be obligated to unless requested by a Majority of the Holders, obtain, at its expense, a certificate of a firm of independent public accountants of recognized standing selected by the board of directors (who may be the regular auditors of the Company) setting forth the Per Share Warrant Price and the number of Warrant Shares in effect after such adjustment or the effect of such modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same and cause copies of such certificate to be mailed to the Holders of the Warrants.

(h) If the board of directors of the Company shall declare any dividend or other distribution with respect to the Common Stock other than a cash distribution out of earned surplus, the Company shall mail notice thereof to the Holders of the Warrants not less than ten (10) days prior to the record date fixed for determining stockholders entitled to participate in such dividend or other distribution.

(i) If, as a result of an adjustment made pursuant to this Section 3, the Holder of any Warrant thereafter surrendered for exercise shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and other capital stock of the Company, the board of directors (whose determination shall be conclusive and shall be described in a written notice to the Holder of any Warrant promptly after such adjustment) shall determine the allocation of the adjusted Per Share Warrant Price between or among shares or such classes of capital stock or shares of Common Stock and other capital stock.

(j) Upon the expiration of any rights, options, warrants or conversion privileges with respect to the issuance of which an adjustment to the Per Share Warrant Price had been made, if such shall not have been exercised, the number of Warrant Shares purchasable upon exercise of this Warrant, to the extent this Warrant has not then been exercised, shall, upon such expiration, be readjusted and shall thereafter be such as they would have been had they been originally adjusted (or had the original adjustment not been required, as the case may be) on the basis of (A) the fact that Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants or conversion privileges, and (B) the fact that such shares of Common Stock, if any, were issued or sold for the consideration actually received by the Company upon such exercise plus the consideration, if any, actually received by the Company for the issuance, sale or grant of all such rights, options, warrants or conversion privileges whether or not exercised; provided, however, that no such readjustment shall have the effect of decreasing the number of Warrant Shares purchasable upon exercise of this Warrant by an amount in excess of the amount of the adjustment initially made in respect of the issuance, sale or grant of such rights, options, warrants or conversion privileges.

(l) In case any event shall occur as to which the other provisions of this Section 3 are not strictly applicable but as to which the failure to make any adjustment would not fairly protect the purchase rights represented by this Warrant in accordance with the essential intent and principles hereof then, in each such case, the Holders of Warrants representing the right to purchase a majority of the Warrant Shares subject to all outstanding Warrants may appoint a firm of independent public accountants of recognized national standing reasonably acceptable to the Company, which shall give their opinion as to the adjustment, if any, on a basis consistent with the essential intent and principles established herein, necessary to preserve the purchase rights represented by the Warrants. Upon receipt of such opinion, the Company will promptly mail a copy thereof to the Holder of this Warrant and shall make the

adjustments described therein. The fees and expenses of such independent public accountants shall be borne by the Company.

4. RESET OF PER SHARE WARRANT PRICE; ISSUANCE OF ADDITIONAL WARRANT SHARES.

(a) In the event (a "Reset Event") that on the date that is 12 months from the issuance date of this Warrant (the "Reset Date"), the average closing bid price of the Common Stock for the 20 trading days immediately preceding the Reset Date (the "Reset Trading Price") is less than the Per Share Warrant Price then in effect then:

(i) the Per Share Warrant Price shall be reset and adjusted to equal the greater of (A) the Reset Trading Price and (B) fifty percent (50%) of the Per Share Warrant Price then in effect (such Per Share Warrant price as reset is referred to as the "Reset Price"); and

(ii) the number of Warrant Shares deliverable upon exercise of this Warrant shall be adjusted by dividing the Aggregate Warrant Price by the Reset Price.

(b) Upon the occurrence of a Reset Event, the Company shall inform the Holder by written notice (the "Reset Notice") at the address set forth in Section 10(b) (i) that a Reset Event has occurred, (ii) the Reset Price and (iii) the number of Warrant Shares, as adjusted in accordance with Section 4(a)(ii), issuable upon exercise of this Warrant. The Company may request in such Reset Notice that the Holder surrender this Warrant to the Company at the address set forth in Section 10(a) for cancellation and issuance of a new Warrant in the name of the Holder setting forth (x) the adjusted Per Share Warrant Price and (y) the adjusted number of Warrant Shares issuable upon exercise of this Warrant.

5. PER SHARE WARRANT PRICE FLOOR; CASH PAYOUT. For purposes of this Warrant, "PER SHARE WARRANT PRICE FLOOR" shall mean 50% of the average Closing Bid Price (as defined in the Purchase Agreement") of the Common Stock for the five (5) trading days immediately prior to the Closing Date (as defined in the Agreement). In the event that (a) the Common Stock trades at less than the Per Share Warrant Price Floor on 60 or more trading days in any 12-month period (irrespective of whether such trading days are consecutive), and (b) the Per Share Warrant Price applicable to any exercise of Warrants that is effective as of a date not later than the 12-month anniversary of the earliest of such 60 days is less than the Per Share Warrant Price Floor, the Company shall either effect such exercise at the applicable Per Share Warrant Price or pay to the holder of such Warrants, in cash, an amount (the "Cash Pay-Out Amount") equal to the product of (x) the number of shares of Common Stock that would otherwise be issuable upon such exercise and (y) the highest closing trade price for the Common Stock during the period commencing on the date of the request for exercise and ending on the day immediately prior to the date of payment of the Cash Pay-Out Amount.

6. FULLY PAID STOCK; TAXES. The shares of the Common Stock represented by each and every certificate for Warrant Shares delivered on the exercise of this Warrant shall at the time of such delivery, be duly authorized, validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights or rights of first refusal, and the Company will take all such actions as may be necessary to assure that the par value, if any, per share of the Common Stock is at all times equal to or less than the then Per Share Warrant Price. The Company will pay, when due and payable, any and all Federal and state stamp, original issue or similar taxes which may be payable in respect of the issue of any Warrant Share or any certificate thereof to the extent required because of the issuance by the Company of such security.

7. REGISTRATION UNDER SECURITIES ACT OF 1933. (a) The Holder shall have the right to participate in the registration rights granted to Holders of Registrable Securities (as defined in the Purchase Agreement") with respect to the Warrant Shares, as adjusted. By acceptance of this Warrant, the Holder

agrees to comply with the provisions of Article 8 of the Purchase Agreement to same extent as if it were a party thereto.

(b) Until all of the Warrant Shares, including additional Warrant Shares issuable pursuant to Section 4 hereof, have been sold under a registration statement declared effective by the Securities and Exchange Commission or pursuant to Rule 144, the Company shall use its reasonable best efforts to file with the Securities and Exchange Commission all current reports and the information as may be necessary to enable the Holder to effect sales of its shares in reliance upon Rule 144 promulgated under the Securities Act of 1933, as amended (the "Act").

8. MANDATORY EXERCISE. (a) At any time on or after the Reset Date, the Company, at its option, may cause this Warrant to be exercised in whole into fully paid and nonassessable shares of Common Stock if the closing price of the Common Stock shall have exceeded 300% of the then applicable Per Share Warrant Price for at least 20 trading days in the 30 consecutive trading day period ending on the date on which the Company provides the Holder with notice in accordance with Section 7(b) below. Any Warrants so converted shall be treated as having been surrendered by the Holder for exercise pursuant to Section 1 on the date of such mandatory exercise (unless previously converted at the option of the Holder).

(b) Not more than 60 nor less than 20 days prior to the date of any such mandatory exercise, notice by first class mail, postage prepaid, shall be given to the Holder, addressed to the Holder at the addresses set forth in Section 10(b). Each such notice shall specify the date fixed for exercise, the place or places for surrender of Warrants and the Per Share Warrant Price then in effect.

(c) The "closing price" for each trading day shall be the reported last sales price regular way or, in case no such reported sale takes place on such day, the average of the reported closing bid and asked prices regular way, in either case on the NASDAQ or, if the Common Stock is not quoted on NASDAQ, on the principal national securities exchange on which the Common Stock is listed or admitted to trading (based on the aggregate dollar value of all securities listed or admitted to trading) or, if not listed or admitted to trading on any national securities exchange or quoted on NASDAQ, the average of the closing

bid and asked prices in the over-the-counter market as furnished by any NASD member firm selected from time to time by the Corporation for that purpose, or, if such prices are not available, the fair market value set by, or in a manner established by, the Board of Directors of the Corporation in good faith.

9. INVESTMENT INTENT; LIMITED TRANSFERABILITY.

(a) The Holder represents, by accepting this Warrant, that it understands that this Warrant and any securities obtainable upon exercise of this Warrant have not been registered for sale under Federal or state securities laws and are being offered and sold to the Holder pursuant to one or more exemptions from the registration requirements of such securities laws. In the absence of an effective registration of such securities or an exemption therefrom, any certificates for such securities shall bear the legend set forth on the first page hereof. The Holder understands that it must bear the economic risk of its investment in this Warrant and any securities obtainable upon exercise of this Warrant for an indefinite period of time, as this Warrant and such securities have not been registered under Federal or state securities laws and therefore cannot be sold unless subsequently registered under such laws, unless an exemption from such registration is available.

(b) The Holder, by its acceptance of this Warrant, represents to the Company that it is acquiring this Warrant and will acquire any securities obtainable upon exercise of this Warrant for its own account for investment and not with a view to, or for sale in connection with, any distribution thereof in violation of the Act. The Holder agrees that this Warrant and any such

securities will not be sold or otherwise transferred unless (i) a registration statement with respect to such transfer is effective under the Act and any applicable state securities laws or (ii) such sale or transfer is made pursuant to one or more exemptions from the Act.

(c) In addition to the limitations set forth in Section 1(a) hereon, this Warrant may not be sold, transferred, assigned or hypothecated by the Holder except in compliance with the provisions of the Act and the applicable state securities "blue sky" laws, and is so transferable only upon the books of the Company which it shall cause to be maintained for such purpose. The Company may treat the registered Holder of this Warrant as he or it appears on the Company's books at any time as the Holder for all purposes. The Company shall permit any Holder of a Warrant or his duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holders of Warrants. All Warrants issued upon the transfer or assignment of this Warrant will be dated the same date as this Warrant, and all rights of the holder thereof shall be identical to those of the Holder.

10. LOSS, ETC., OF WARRANT. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Warrant, if mutilated, the Company shall execute and deliver to the Holder a new Warrant of like date, tenor and denomination.

11. WARRANT HOLDER NOT STOCKHOLDER. This Warrant does not confer upon the Holder any right to vote on or consent to or receive notice as a stockholder of the Company, as such, in respect of any matters whatsoever, nor any other rights or liabilities as a stockholder, prior to the exercise hereof; this Warrant does, however, require certain notices to Holders as set forth herein.

12. COMMUNICATION. No notice or other communication under this Warrant shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have been given if, the same is in writing and is mailed by first-class mail, postage prepaid, addressed to:

(a) the Company at 425 Metro Place North, Suite 300, Dublin, Ohio 43017 Attn: President or such other address as the Company has designated in writing to the Holder, or

(b) the Holder at c/o Paramount Capital Asset Management, Inc., 787 Seventh Avenue, 48th Floor, New York, New York 10019 or other such address as the Holder has designated in writing to the Company.

13. HEADINGS. The headings of this Warrant have been inserted as a matter of convenience and shall not affect the construction hereof.

14. APPLICABLE LAW. This Warrant shall be governed by and construed in accordance with the law of the State of New York without giving effect to the principles of conflicts of law thereof.

15. AMENDMENT, WAIVER, ETC. Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that any provisions hereof may be amended, waived, discharged or terminated upon the written consent of the Company and the Majority of the Holders.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its President and has caused its corporate seal to be hereunto affixed and attested by its Secretary this 16TH day of FEBRUARY, 1999.

NEOPROBE CORPORATION

By: /s/ David C. Bupp

Name: David C. Bupp
Title: President and Chief Executive Officer

ATTEST:

/s/ Patricia A. Coburn
- - ---
Patricia A. Coburn, Assistant Secretary

[Corporate Seal]

SUBSCRIPTION (CASH)

The undersigned, _____, pursuant to the provisions of the foregoing Warrant, hereby agrees to subscribe for and purchase _____ shares of the Common Stock, par value $.001 per share, of Neoprobe Corporation covered by said Warrant, and makes payment therefor in full at the price per share provided by said Warrant.

Dated: ----------
Signature: ----------
Address: ----------

CASHLESS EXERCISE

The undersigned _____, pursuant to the provisions of the foregoing Warrant, hereby elects to exchange its Warrant for _____ shares of Common Stock, par value $.001 per share, of Neoprobe Corporation pursuant to the Cashless Exercise provisions of the Warrant.

Dated: ----------
Signature: ----------
Address: ----------

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells, assigns and transfers unto _____ the foregoing Warrant and all rights evidenced thereby, and does irrevocably constitute and appoint _____, attorney, to transfer said Warrant on the books of Neoprobe Corporation

Dated: ----------
Signature: ----------
Address: ----------

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns and transfers unto _____ the right to purchase _____ shares of Common Stock, par value $.001 per share, of Neoprobe Corporation covered by the foregoing Warrant, and a proportionate part of said Warrant and the rights evidenced thereby, and does irrevocably constitute and appoint _____, attorney, to transfer such part of said Warrant on the books of Neoprobe Corporation

Dated: ----------

Signature: ----------

Address: ----------

Exhibit 10.1.34

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NEITHER SUCH SECURITIES NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF NOR CONVERSION THEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAW. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS THE COMPANY RECEIVES AN OPINION OF COUNSEL REASONABLY ACCEPTABLE TO IT STATING THAT SUCH SALE OR TRANSFER IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

NEOPROBE CORPORATION

UNIT PURCHASE OPTION FOR THE PURCHASE OF SHARES OF Preferred Stock and Warrants

NO. 1.5 OPTION UNITS FEBRUARY, 16, 1999

FOR VALUE RECEIVED, NEOPROBE CORPORATION, a Delaware corporation (the "COMPANY"), hereby certifies that PARAMOUNT CAPITAL, INC., or permitted assigns, is entitled to purchase from the Company, at any time or from time to time commencing on FEBRUARY 16, 1999 and prior to 5:00 P.M., New York City time, on FEBRUARY 16, 2004, up to one and one-half (1.5) Option Units, each Option Unit consisting of One Thousand (1,000) fully paid and non-assessable share of the 5% Series B Convertible Preferred Stock, $.001 par value, $100.00 stated value, of the Company and Ninety Seven Thousand Eighty Seven (97,087) Class L Warrants for an aggregate purchase price of $150,000 (computed on the basis of $100,000 per Option Unit). Each Class L Warrant is exercisable to purchase one (1) share of Common Stock, $.001 par value, of the Company for an aggregate purchase price of $1.03 (computed on the basis of $1.03 per share of Common Stock). (Hereinafter, (i) said Option Units are referred to as the "OPTION UNITS", (ii) said 5% Series B Convertible Preferred Stock, together with any other equity securities which may be issued by the Company with respect thereto (other than on conversion thereof) or in substitution therefor, is referred to as the "PREFERRED STOCK", (iii) said Class L Warrants are referred to as the "WARRANTS", (iv) the Common Stock purchasable upon exercise of the Warrants and into which the Preferred Stock is convertible, is referred to as the "COMMON STOCK", (v) the shares of the Preferred Stock purchasable hereunder or under any other Option (as hereinafter defined) are referred to as the "PREFERRED SHARES", (vi) the shares of Common Stock purchasable upon exercise of the Warrants or under any other Option (as hereinafter defined) are referred to as the "WARRANT SHARES", (vii) the shares of Common Stock purchasable hereunder or under any other Option (as hereinafter defined) following the conversion of all shares of Preferred Stock underlying this Option into Common Stock, or other capital stock of the Company as the case may be, and each share of Common Stock, or other capital stock of the Company as the case may be, receivable upon the exercise of the Warrants underlying this Option are referred to as the "CONVERSION SHARES", (viii) the Common Stock or other capital stock issuable upon exercise of one (1) Warrant Share or conversion of one (1) share of Preferred Stock or Preferred Share, as the case may be is referred to as a "SHARE", (ix) the aggregate purchase price payable for the Option Units hereunder is referred to as the "AGGREGATE OPTION PRICE", (x) the price payable (initially $100,000 per Option Unit, subject to adjustment) for each of the Option Units, hereunder is referred to as the "PER OPTION UNIT PRICE", (xi) the price payable (initially $1.03 per Warrant Share, subject to adjustment) for each of the Warrant Shares, hereunder is referred to as the "WARRANT EXERCISE PRICE", (xii) this Option, all similar Options issued on the date hereof and all warrants hereafter issued in exchange or substitution for this Option or such similar Options are

referred to as the "OPTIONS" and (xiii) the holder of this Option is referred to as the "HOLDER" and the holder of this Option and all other Options, Warrant Shares, Preferred Shares and Conversion Shares are referred to as the "HOLDERS" and Holders of more than fifty percent (50%) of the outstanding Options are referred to as the "MAJORITY OF THE HOLDERS." The Aggregate Option Price is

not subject to adjustment. The Per Option Unit Price is subject to adjustment as hereinafter provided.

This Option, together with options of like tenor, constituting in the aggregate Options to purchase 1.5 Option Units, was originally issued pursuant to a financial advisory agreement between the Company and Paramount Capital, Inc. ("PARAMOUNT ").

1. EXERCISE OF OPTION.

(a) This Option may be exercised, in whole at any time or in part from time to time, commencing on February 16, 1999 and prior to 5:00 P.M., New York City time, on February 16, 2004 by the Holder:

(i) by the surrender of this Option (with the subscription form at the end hereof duly executed) at the address set forth in Subsection 10(a) hereof, together with proper payment of the Aggregate Option Price, or the proportionate part thereof if this Option is exercised in part, with payment for the number of Option Units made by certified or official bank check payable to the order of the Company; or

(ii) by the surrender of this Option (with the cashless exercise form at the end hereof duly executed) (a "CASHLESS EXERCISE") at the address set forth in Subsection 10(a) hereof. The Option Exchange shall take place on the date specified in the Cashless Exercise Form or, if later, the date the Cashless Exercise Form is surrendered to the Company (THE "EXCHANGE DATE"). Such presentation and surrender shall be deemed a waiver of the Holder's obligation to pay the Aggregate Option Price, or the proportionate part thereof if this Option is exercised in part. In the event of a Cashless Exercise this Option shall represent the right to subscribe for and acquire the number of Option Units (rounded to the next highest integer) equal to (x) the number of Option Units specified by the Holder in its Cashless Exercise Form up to the maximum number of Option Units subject to this Option (THE "TOTAL NUMBER") less (y) the number of Option Units equal to the quotient obtained by dividing (A) the product of the Total Number and the existing Per Option Unit Price by (B) the Market Price Per Option Unit. "MARKET PRICE PER OPTION UNIT" shall mean first, if there is a trading market as indicated in Subsection (A) below for the Option Units, such Market Price of the Units and if there is no such trading market in the Options Units, then Market Price Per Option Unit shall equal the sum of the aggregate Market Price of all shares of Preferred Stock (the "MARKET PRICE PER SHARE OF PREFERRED STOCK") (or, as the case may be, if after the Conversion Date (as hereinafter defined), the Common Stock) (the "MARKET PRICE PER SHARE OF COMMON STOCK") and Warrants (the "MARKET PRICE PER WARRANT") which comprise an Option Unit, with the meanings indicated in Subsections (B) through (F) below.

(A) If the Option Units are listed on a national securities exchange or listed or admitted to unlisted trading privileges on such exchange or listed for trading on the Nasdaq National Market or the Nasdaq Small Cap Market, the Market Price Per Option Unit shall be the average of the last reported sale price or the average of the last reported bid price of the Option Units on such exchange or market for the twenty (20) consecutive trading days ending with the Exchange Date; or

(B) If the Preferred Stock, Warrants or Common Stock are listed on a national securities exchange or admitted to unlisted trading privileges on such exchange or listed for trading on the Nasdaq National Market or the Nasdaq Small Cap Market, the Market Price Per Share of Common Stock, or Market Price Per Warrant, respectively,

shall be the average of the last reported closing bid price of Preferred Stock, Warrants or Common Stock, respectively, on such exchange or market for the twenty (20) consecutive trading days ending with the Exchange Date; or

(C) If the Preferred Stock, Warrants or Common Stock are not so listed or admitted to unlisted trading privileges, the Market Price Per Share of Common Stock, or Market Price Per

Warrant, respectively, shall be the average of the last reported bid price of the Preferred Stock, Warrants or Common Stock for the twenty (20) consecutive trading days ending with the Exchange Date; or

(D) If the Common Stock is not so listed or admitted to unlisted trading privileges and bid price is not so reported, the Market Price Per Share of Common Stock shall be the fair market value as determined by agreement between the Board of Directors of the Company and a Majority of the Holders; or

(E) If the Preferred Stock is not so listed or admitted to unlisted trading privileges and bid and asked prices are not so reported, the Market Price Per Share of Preferred Stock shall be the Market Price of the Common Stock multiplied by the then effective "conversion rate" for the Preferred Stock (as defined and used in the Articles), or if not so available, the fair market value of the Preferred Stock as determined by agreement between the Board of Directors of the Company and a Majority of the Holders; or

(F) If the Warrants are not so listed or admitted to unlisted trading privileges, and bid price is not so reported for Warrants, then Market Price Per Warrants shall be an amount equal to the difference between (i) the Market Price Per Shares of Common Stock which may be received upon the exercise of the Warrants, as determined herein, and (ii) the Warrant Exercise Price.

(G) If the Company and the Majority of the Holders are unable to reach agreement on any valuation matter, such valuation shall be submitted to and determined by a nationally recognized independent investment bank selected by the Board of Directors of the Company and the Majority of the Holders (or, if such selection cannot be agreed upon promptly, or in any event within ten days, then such valuation shall be made by a nationally recognized independent investment banking firm selected by the American Arbitration Association in New York City in accordance with its rules), the costs of which valuation shall be paid for by the Company.

(b) If this Option is exercised in part, the Holder is entitled to receive a new Option covering the Option Units, which have not been exercised and setting forth the proportionate part of the Aggregate Option Price applicable to such Option Units. Upon surrender of this Option, the Company will (i) issue a certificate or certificates in the name of the Holder for the largest number of whole shares of the Preferred Stock (or the Conversion Shares following conversion of all the Preferred Stock) and Warrants to which the Holder shall be entitled and, if this Option is exercised in whole, in lieu of any fractional shares of the Preferred Stock (or the Conversion Shares following conversion of all the Preferred Stock) or Warrants to which the Holder shall be entitled, pay to the Holder cash in an amount equal to the fair value of such fractional shares (determined in such reasonable manner as the Board of Directors of the Company shall determine), and (ii) deliver the other securities and properties receivable upon the exercise of this Option, or the proportionate part thereof if this Option is exercised in part, pursuant to the provisions of this Option.

(c) If this Option is exercised on or after the date on which all shares of Preferred Stock have been converted into Conversion Shares (the "Conversion Date"), then this Option shall be exercisable only for Warrants and Conversion Shares at the then applicable Per Option Unit Price (including any adjustment pursuant to Section 3 below).

2. RESERVATION OF WARRANT SHARES, PREFERRED SHARES AND CONVERSION SHARES; LISTING. The Company agrees that, prior to the expiration of this Option, the Company will at all times (a) have authorized and in reserve, and will keep available, solely for issuance and delivery upon the exercise of this Option, the Warrant Shares and the Preferred Shares and other securities and properties as from time to time shall be receivable upon the

exercise of this Option, free and clear of all restrictions on sale or transfer, other than under Federal or state securities laws, and free and clear of all preemptive rights and rights of first refusal and (b) have authorized and in reserve, and will keep available, solely for issuance or delivery upon exercise of the Warrants and conversion of the Preferred Shares or the exercise of this Option following the conversion of all Preferred Shares into Common Stock, the shares of Common Stock and other securities and properties as from time to time shall be receivable upon such exercise and conversion, free and clear of all restrictions on sale or transfer, other than under Federal or state securities laws, and free and clear of all preemptive rights and rights of first refusal; and (c) if the Company hereafter lists its Common Stock on any national securities exchange, use its best efforts to keep the Conversion Shares authorized for listing on such exchange upon notice of issuance.

3. PROTECTION AGAINST DILUTION.

(a) The anti-dilution provisions of the Warrant shall protect the Holder from dilution of the purchase rights represented by the Warrants. Prior to the Conversion Date and in addition to the protection set forth in the Articles and the protection set forth in 3(a)(iv), the following anti-dilution provisions shall protect the Holder from dilution resulting from the issuance of Preferred Stock, Common Stock and Common Stock equivalents:

(i) If at any time or from time to time after the date of this Option, the Company shall issue or distribute to any holder of shares of Preferred Stock evidence of its indebtedness, any other securities of the Company or any cash, property or other assets (excluding a subdivision, combination or reclassification, or dividend or distribution payable in shares of Preferred Stock, referred to in Subsection 3(a)(ii), and also excluding cash dividends or cash distributions paid out of net profits legally available therefor in the full amount thereof (any such non-excluded event being herein called a "PREFERRED STOCK SPECIAL DIVIDEND")), the Per Option Unit Price shall be adjusted by multiplying the Per Option Unit Price then in effect by a fraction, the numerator of which shall be the then current Market Price Per Option Unit in effect on the record date, or the date of effectiveness, as the case may be, of such issuance or distribution less the fair market value (as determined in good faith by the Company's Board of Directors) of the evidence of indebtedness, cash, securities or property, or other assets issued or distributed in such Preferred Stock Special Dividend applicable to one share of Preferred Stock and the denominator of which shall be the then current Market Price Per Option Unit in effect on the record date, or the date of effectiveness, as the case may be, of such issuance or distribution. An adjustment made pursuant to this Subsection 3(a)(i) shall become effective immediately after the record date, or the date of effectiveness, as the case may be, of any such Preferred Stock Special Dividend.

(ii) In case the Company shall hereafter (A) pay a dividend or make a distribution on its capital stock in shares of Preferred Stock, (B) subdivide its outstanding shares of Preferred Stock into a greater number of shares, (C) combine its outstanding shares of Preferred Stock into a smaller number of shares or (D) issue by reclassification of its Preferred Stock any shares of capital stock of the Company

(other than the Conversion Shares), the Per Unit Price shall be adjusted by multiplying the Per Unit Price by a fraction, the numerator of which shall be the number of shares of Preferred Stock or other capital stock of the Company which this Option was convertible into prior to such action and the denominator of which shall be the number of shares of Preferred Stock or other capital stock of the Company which he would have owned immediately following such action had such Option been exercised immediately prior thereto. An adjustment made pursuant to this Subsection 3(a)(ii) shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

(iii) Except as provided in Subsections 3(a)(i) and 3(f), in case the Company shall hereafter issue or sell any Preferred Stock, any securities convertible into Preferred Stock, any rights, options or warrants to purchase Preferred Stock or any securities convertible into Preferred Stock, in each case for a price per share or entitling the holders thereof to purchase

Preferred Stock at a price per share (determined by dividing (A) the total amount, if any, received or receivable by the Company in consideration of the issuance or sale of such securities plus the total consideration, if any, payable to the Company upon exercise or conversion thereof (the "PREFERRED STOCK TOTAL CONSIDERATION") by (B) the number of additional shares of Preferred Stock issuable upon exercise or conversion of such securities) which is less than either the then current Market Price Per Option Unit in effect on the date of such issuance or sale or the Per Option Unit Price, the Per Option Unit Price shall be adjusted as of the date of such issuance or sale by multiplying the Per Option Unit Price then in effect by a fraction, the numerator of which shall be (x) the sum of (A) the number of shares of Preferred Stock outstanding on the record date, or the date of effectiveness, as the case may be, of such issuance or sale plus (B) the Preferred Stock Total Consideration divided by the Market Price of the Preferred Stock or the Per Option Unit Price, whichever is greater, and the denominator of which shall be (y) the number of shares of Preferred Stock outstanding on the record date, or the date of effectiveness, as the case may be, of such issuance or sale plus the maximum number of additional shares of Preferred Stock issued, sold or issuable upon exercise or conversion of such securities.

(iv) Notwithstanding the anti-dilution provisions set forth in Subsections 3(a)(i)-(iii), if an event set forth in Subsections 3(a)(i)-(iii) (a "TRIGGER EVENT") shall occur, and provided that the anti-dilution provisions of the Preferred Stock, as set forth in the Articles, shall apply to such Trigger Event, then any adjustments as a result of the Trigger Event shall occur as follows: (A) first, the anti-dilution provisions, as set forth in the Articles shall apply; and (B) second, the anti-dilution provisions set forth in Subsections 3(a)(i)-(iii) shall apply to the extent that the application of such provisions shall result in the Holder receiving additional shares of capital stock of the Company, having the Per Option Unit Price reduced or otherwise further improve the economic position of the Holder.

(b) Upon the conversion of all the Preferred Stock into Common Stock the Per Option Unit Price shall be adjusted to be equal to a fraction, the numerator of which shall be the Aggregate Option Price and the denominator of which shall be the number of shares of Common Stock or other capital stock of the Company which the Holder would have owned immediately following such conversion had this Option been exercised (assuming a cash exercise) immediately prior thereto (the PRE-CONVERSION SHARES"). In addition, after the Conversion Date, the following anti-dilution provisions shall protect the Holder from dilution resulting from the issuance of Common Stock and/or Common Stock equivalents:

(i) If the Company shall issue or distribute to any holder of shares of Common Stock evidence of its indebtedness, any other securities of the Company or any cash, property or other assets (excluding a subdivision, combination or reclassification, or dividend or distribution payable in shares of Common Stock, referred to in Subsection 3(b)(ii), and also excluding cash dividends or cash distributions paid out of net profits legally available therefor in the full amount thereof (any such non-excluded event being herein called a "COMMON STOCK SPECIAL DIVIDEND")), the Per Option Unit Price shall be adjusted by multiplying the Per Option Unit Price then in effect by a fraction, the numerator of which shall be the then

current Market Price Per Option Unit in effect on the record date, or the date of effectiveness, as the case may be, of such issuance or distribution less the fair market value (as determined in good faith by the Company's Board of Directors) of the evidence of indebtedness, cash, securities or property, or other assets issued or distributed in such Common Stock Special Dividend applicable to one share of Common Stock and the denominator of which shall be the then current Market Price Per Option Unit in effect on the record date, or the date of effectiveness, as the case may be, of such issuance or distribution. An adjustment made pursuant to this Subsection 3(b)(i) shall become effective immediately after the record date, or the date of effectiveness, as the case may be, of any such Common Stock Special Dividend.

(ii) If the Company shall (A) pay a dividend or make a distribution on its capital stock in shares of Common Stock, (B) subdivide its outstanding shares of Common Stock into a greater number of shares, (C) combine its outstanding shares of Common Stock into a smaller number of shares or (D)

issue by reclassification of its Common Stock any shares of capital stock of the Company (other than the Conversion Shares), the Per Option Unit Price shall be adjusted to be equal to a fraction, the numerator of which shall be the Aggregate Option Price and the denominator of which shall be the number of shares of Common Stock or other capital stock of the Company which he would have owned immediately following such action had such Option been exercised immediately prior thereto. An adjustment made pursuant to this Subsection 3(b)(ii) shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

(iii) Except as provided in Subsections 3(b)(i) and 3(f), in case the Company shall issue or sell any Common Stock, any securities convertible into Common Stock, any rights, options or warrants to purchase Common Stock or any securities convertible into Common Stock, in each case for a price per share or entitling the holders thereof to purchase Common Stock at a price per share (determined by dividing (A) the total amount, if any, received or receivable by the Company in consideration of the issuance or sale of such securities plus the total consideration, if any, payable to the Company upon exercise or conversion thereof (the "COMMON STOCK TOTAL CONSIDERATION") by (B) the number of additional shares of Common Stock issuable upon exercise or conversion of such securities) which is less than either the then current Market Price Per Option Unit in effect on the date of such issuance or sale or the Per Option Unit Price, the Per Option Unit Price shall be adjusted as of the date of such issuance or sale by multiplying the Per Option Unit Price then in effect by a fraction, the numerator of which shall be (x) the sum of (I) the number of shares of Common Stock outstanding on the record date of such issuance or sale plus (II) the Total Consideration divided by the current Market Price of the Common Stock or the current Per Option Unit Price, whichever is greater, and the denominator of which shall be (y) the number of shares of Common Stock outstanding on the record date, or the date of effectiveness, as the case may be, of such issuance or sale plus the maximum number of additional shares of Common Stock issued, sold or issuable upon exercise or conversion of such securities.

(c) No adjustment in the Per Option Unit Price shall be required unless such adjustment would require an increase or decrease of at least $0.05 per Option Unit; provided, however, that any adjustments which by reason of this Section 3(c) are not required to be made shall be carried forward and taken into account in any subsequent adjustment; provided, further, however, that adjustments shall be required and made in accordance with the provisions of this Section 3 (other than this Subsection 3(c)) not later than such time as may be required in order to preserve the tax-free nature of a distribution to the Holder of this Option. All calculations under this Section 3 shall be made to the nearest cent or to the nearest 1/100th of a share, as the case may be. Anything in this Section 3 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Per Option Unit Price, in addition to those required by this Section 3, as it in its discretion shall deem to be advisable in order that any stock dividend, subdivision of shares or distribution of rights to purchase stock or securities convertible or exchangeable for stock hereafter made by the Company to its stockholders shall not be taxable.

(d) Whenever the Per Option Unit Price is adjusted as provided in this Section 3 and upon any modification of the rights of a Holder of Options in accordance with this Section 3, the Company shall promptly prepare a brief statement of the facts requiring such adjustment or modification and the manner of computing the same and cause copies of such certificate to be mailed to the Holders of the Options. The Company may, but shall not be obligated to unless requested by a Holders of more than fifty percent (50%) of the outstanding Options, Preferred Shares, Warrant Shares and Conversion Shares, obtain, at its expense, a certificate of a firm of independent public accountants of recognized standing selected by the Board of Directors (who may be the regular auditors of the Company) setting forth the Per Option Unit Price and the number of Warrants and Preferred Shares or Conversion Shares, as the case may be, after such adjustment or the effect of such modification, a brief statement of the facts requiring such adjustment or modification and the manner of computing the same and cause copies of such certificate to be mailed to the Holders of the Options.

(e) If the Board of Directors of the Company shall declare any dividend or other distribution with respect to the Preferred Stock or Common Stock other than a cash distribution out of earned surplus, the Company shall mail notice thereof to the Holders of the Options not less than 10 days prior to the record date fixed for determining stockholders entitled to participate in such dividend or other distribution.

(f) No adjustment in the Per Option Unit Price shall be required in the case of the issuance by the Company of Preferred Stock (or, if after the Conversion Date, Common Stock) (i) pursuant to the exercise of any Option or (ii) pursuant to (A) the exercise of any stock options or warrants currently outstanding or (B) securities issued after the date hereof pursuant to any Company benefit plan; provided, however, that with respect to Subsection 3(f)(ii), the issuance of such securities were approved by the Board of Directors of the Company and were issued at a price no less than the Conversion Price or the Market Price of the securities on the date of issuance.

(g) In case of any capital reorganization or reclassification, or any consolidation or merger to which the Company is a party other than a merger or consolidation in which the Company is the continuing corporation, or in case of any sale or conveyance to another entity of the property of the Company as an entirety or substantially as a entirety, or in the case of any statutory exchange of securities with another corporation (including any exchange effected in connection with a merger of a third corporation into the Company), the Holder of this Option shall have the right thereafter to receive on the exercise of this Option the kind and amount of securities, cash or other property which the Holder would have owned or have been entitled to receive immediately after such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance had this Option been exercised immediately prior to the effective date of such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance and in any such case, if necessary, appropriate adjustment shall be made in the application of the provisions set forth in this Section 3 with respect to the rights and interests thereafter of the Holder of this Option to the end that the provisions set forth in this Section 3 shall thereafter correspondingly be made applicable, as nearly as may reasonably be, in relation to any shares of stock or other securities or property thereafter deliverable on the exercise of this Option. The above provisions of this Subsection 3(g) shall similarly apply to successive reorganizations, reclassifications, consolidations, mergers, statutory exchanges, sales or conveyances. The Company shall require the issuer of any shares of stock or other securities or property thereafter deliverable on the exercise of this Option to be responsible for all of the agreements and obligations of the Company hereunder. Notice of any such reorganization, reclassification, consolidation, merger, statutory exchange, sale or conveyance and of said provisions so proposed to be made, shall be mailed to the Holders of the Options not less than 30 days prior to such event. A sale of all or substantially all of the assets of the Company for a consideration consisting primarily of securities shall be deemed a consolidation or merger for the foregoing purposes.

(h) If, as a result of an adjustment made pursuant to this Section 3, the Holder of any Option thereafter surrendered for exercise shall become entitled to receive shares of two or more classes of capital stock or shares of Preferred Stock (or if after the Conversion Date, Common Stock) and other capital stock of the Company, the Board of Directors (whose determination shall be conclusive and shall be described in a written notice to the Holder of any Option promptly after such adjustment) shall determine the allocation of the adjusted Per Option Unit Price between or among shares or such classes of capital stock or shares of Preferred Stock (or if after the Conversion Date, Common Stock) and other capital stock.

(i) Upon the expiration of any rights, options, warrants or conversion privileges, if such shall not have been exercised, the number of Option Units purchasable upon exercise of this Option, to the extent this Option has not then been exercised, shall, upon such expiration, be readjusted and shall thereafter be such as they would have been had they been originally adjusted (or had the original adjustment not been required, as the case may be) on the basis of (i) the fact that Common Stock, or the Preferred Stock, as the case may be, if any, actually issued or sold upon the exercise of such rights, options, warrants or conversion privileges, and (ii) the fact that such shares

of Common Stock or the Preferred Stock, as the case may be, if any, were issued or sold for the consideration actually received by the Company upon such exercise plus the consideration, if any, actually received by the Company for the issuance, sale or grant of all such rights, options, warrants or conversion privileges whether or not exercised; provided, however, that no such readjustment shall have the effect of decreasing the number of Option Units purchasable upon exercise of this Option by an amount in excess of the amount of the adjustment initially made in respect of the issuance, sale or grant of such rights, options, warrants or conversion privileges.

(j) Whenever the Per Option Unit Price payable upon exercise of each Option is adjusted pursuant to this Section 3, (i) the number of shares of Preferred Stock (or if after the Conversion Date, Common Stock) included in an Option Unit shall simultaneously be adjusted by multiplying the number of shares of Preferred Stock (or if after the Conversion Date, Common Stock) included in an Option Unit immediately prior to such adjustment by the Per Option Unit Price in effect immediately prior to such adjustment and dividing the product so obtained by the Per Option Unit Price, as adjusted and (ii) the number of shares of Preferred Stock (or if after the Conversion Date, Common Stock) or other securities issuable upon exercise of the Warrants included in the Option Units and the Warrant Exercise Price shall be adjusted in accordance with the applicable terms of the Warrant Agreement.

(k) In case any event shall occur as to which the other provisions of this Section 3 are not strictly applicable but as to which the failure to make any adjustment would not fairly protect the purchase rights represented by this Option in accordance with the essential intent and principles hereof then, in each such case, the Holders of Options representing the right to purchase a majority of the Shares subject to all outstanding Options may appoint a firm of independent public accountants of recognized national standing reasonably acceptable to the Company, which shall give their opinion as to the adjustment, if any, on a basis consistent with the essential intent and principles established herein, necessary to preserve the purchase rights represented by the Options. Upon receipt of such opinion, the Company will promptly mail a copy thereof to the Holder of this Option and shall make the adjustments described therein. The fees and expenses of such independent public accountants shall be borne by the Company.

4. FULLY PAID STOCK; TAXES. The Company agrees that the shares of the Preferred Stock represented by each and every certificate for Preferred Shares delivered on the exercise of this Option and the shares of Common Stock delivered upon the exercise of the Warrants or the conversion of the Preferred Shares or the exercise of this Option following the conversion of all shares of Preferred Stock into Common Stock, shall at the time of such delivery, be validly issued and outstanding, fully paid and nonassessable, and not subject to preemptive rights or rights of first refusal, and the Company will take all such actions as may be necessary to assure that the par value or stated value, if any, per share of the Preferred Stock and the Common Stock is at all times equal to or less than the then Per Option Unit Price.

The Company further covenants and agrees that it will pay, when due and payable, any and all Federal and state stamp, original issue or similar taxes which may be payable in respect of the issue of any Warrant Share, Preferred Share, Conversion Share or any certificate thereof to the extent required because of the issuance by the Company of such security.

5. REGISTRATION UNDER SECURITIES ACT OF 1933, AS AMENDED. (a) The Holder shall have the registration rights to the extent provided under the Preferred Stock and Warrant Purchase Agreement (the "Purchase Agreement") by and among the purchasers set forth on Exhibit A thereto and the Company, dated as of February __, 1999. By acceptance of this Option, the Holder agrees to comply with the provisions of the Purchase Agreement to same extent as if it were a party thereto.

(b) Until all Conversion Shares have been sold under a Registration Statement or pursuant to Rule 144, the Company shall use its reasonable best efforts to file with the Securities and Exchange Commission all current reports and the information as may be necessary to enable the Holder to effect sales of its shares in reliance upon Rule 144 promulgated under the Act.

6. LIMITATIONS OF EXERCISE. Notwithstanding anything to the contrary this Option may not be exercised if such exercise would cause the total number of Common Shares deemed beneficially owned (as defined in Rule 13(d)(3) of the Securities Act of 1933, as amended) by such Purchaser, together with all Common Shares deemed beneficially owned by the Holder's affiliates (such term as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) and by any other Person whose ownership of such securities would be aggregated for purposes of determining whether a "group" exists under Section 13(d) of the Exchange Act would exceed 4.9% of the total issued and outstanding shares of Common Stock, provided that the Holder shall have the right to waive this restriction, in whole or in part, upon 61 days prior notice to the Company. A transferee of such securities shall not be bound by this provision unless it expressly agrees to be so bound.

7. INVESTMENT INTENT; LIMITED TRANSFERABILITY.

(a) The Holder represents, by accepting this Option, that it understands that this Option and any securities obtainable upon exercise of this Option or upon conversion of such securities have not been registered for sale under Federal or state securities laws and are being offered and sold to the Holder pursuant to one or more exemptions from the registration requirements of such securities laws. In the absence of an effective registration of such securities, any certificates for such securities shall bear the legend set forth on the first page hereof. The Holder understands that it must bear the economic risk of its investment in this Option and any securities obtainable upon exercise of this Option or upon conversion of such securities for an indefinite period of time, as this Option and such securities have not been registered under Federal or state securities laws and therefore cannot be sold unless subsequently registered under such laws, unless an exemption from such registration is available.

(b) The Holder, by his acceptance of its Option, represents to the Company that it is acquiring this Option and will acquire any securities obtainable upon exercise of this Option for its own account for investment and not with a view to, or for sale in connection with, any distribution thereof in violation of the Securities Act of 1933, as amended (the "Act"). The Holder agrees that this Option and any such securities will not be sold or otherwise transferred unless (i) a registration statement with respect to such transfer is effective under the Act and any applicable state securities laws or (ii) the Holder delivers to the Company an opinion of counsel reasonably satisfactory to the Company that such registration statement is not required.

(c) In addition to the requirements set forth in Section 7(b) above, this Option may not be sold, transferred, assigned or hypothecated for six months from the date hereof except (i) to any firm or

corporation that succeeds to all or substantially all of the business of Paramount Capital, Inc., (ii) to any of the officers, employees or affiliated companies of Paramount Capital, Inc., or of any such successor firm, (iii) to any NASD member participating in the Offering or any officer or employee of any such NASD member or (iv) in the case of an individual, pursuant to such individual's last will and testament or the laws of descent and distribution, and is so transferable only upon the books of the Company which it shall cause to be maintained for such purpose. The Company may treat the registered Holder of this Option as he or it appears on the Company's books at any time as the Holder for all purposes. The Company shall permit any Holder of an Option or its duly authorized attorney, upon written request during ordinary business hours, to inspect and copy or make extracts from its books showing the registered holders of Options. All Options issued upon the transfer or assignment of this Option will be dated the same date as this Option, and all rights of the holder thereof shall be identical to those of the Holder.

8. LOSS, ETC., OF OPTION. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Option, and of indemnity reasonably satisfactory to the Company, if lost, stolen or destroyed, and upon surrender and cancellation of this Option, if mutilated, the Company shall execute and deliver to the Holder a new Option of like date, tenor and denomination.

9. OPTION HOLDER NOT STOCKHOLDER. This Option does not

confer upon the Holder any right to vote or to consent to or receive notice as a stockholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a stockholder, prior to the exercise hereof; this Option does, however, require certain notices to Holders as set forth herein.

10. COMMUNICATION. No notice or other communication under this Option shall be effective unless, but any notice or other communication shall be effective and shall be deemed to have been given if, the same is in writing and is mailed by first-class mail, postage prepaid, addressed to:

(a) the Company at Neoprobe Corporation, 425 Metro Place North, #300, Dublin, Ohio 43017-1367, Attn: President or such other address as the Company has designated in writing to the Holder, or

(b) the Holder at c/o Paramount Capital Incorporated, 787 Seventh Avenue, 48th Floor, New York, NY 10019 or other such address as the Holder has designated in writing to the Company.

11. HEADINGS. The headings of this Option have been inserted as a matter of convenience and shall not affect the construction hereof.

12. APPLICABLE LAW. This Option shall be governed by and construed in accordance with the law of the State of New York without giving effect to the principles of conflicts of law thereof.

13. AMENDMENT, WAIVER, ETC. Except as expressly provided herein, neither this Option nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that any provisions hereof may be amended, waived, discharged or terminated upon the written consent of the Company and the then current Majority of the Holders of the Options only.

IN WITNESS WHEREOF, the Company has caused this Option to be signed by its President and attested by its Secretary this 16th day of February, 1999.

NEOPROBE CORPORATION

By: /s/ David C. Bupp

Name: David C. Bupp
Title: President and Chief Executive Officer

ATTEST:

/s/ Patricia A. Coburn
- - ---
Patricia A. Coburn, Assistant Secretary

[Corporate Seal]

SUBSCRIPTION

The undersigned, _____, pursuant to the provisions of the foregoing Option, hereby agrees to subscribe for and purchase_____ Option Units of Neoprobe Corporation, each Option Unit consisting of one share of the Preferred Stock, $.001 par value, and one Class _ Warrant covered by said Option, and makes payment therefor in full at the price per share provided by said Option. The undersigned hereby confirms the representations and warranties made by it in the Option.

Dated: Signature:
---------- ----------
Address:

CASHLESS EXERCISE

The undersigned _____, pursuant to the provisions of the foregoing Option, hereby elects to exchange its Option for _____ Option Units, each Option Unit consisting of one share of Preferred Stock, $.001 par value, and one Class __ Warrant, pursuant to the cashless exercise provisions of the Option. The undersigned hereby confirms the representations and warranties made by it in the Option.

Dated: Signature:
---------- ----------
Address:

ASSIGNMENT

FOR VALUE RECEIVED _____ hereby sells, assigns and transfers unto _____ the foregoing Option and all rights evidenced thereby, and does irrevocably constitute and appoint _____, attorney, to transfer said Option on the books of Neoprobe Corporation.

Dated: Signature:
---------- ----------
Address:

PARTIAL ASSIGNMENT

FOR VALUE RECEIVED _____ hereby assigns and transfers unto _____ the right to purchase _____ Option Units of Neoprobe Corporation, each Option Unit consisting of one share of Preferred Stock, $.001 par value, and one Class __ Warrant covered by the foregoing Option, and a proportionate part of said Option and the rights evidenced thereby, and does irrevocably constitute and appoint _____, attorney, to transfer that part of said Option on the books of Neoprobe Corporation.

Dated: Signature:
---------- ----------
Address:

Exhibit 10.1.35

February 16, 1999

Neoprobe Corporation
425 Metro Place North, Suite 300
Dublin , Ohio 43017-1367

RE: FINANCIAL ADVISORY AGREEMENT

Dear Sirs:

1. This is to confirm our understanding that Paramount Capital, Inc. ("Paramount"), its affiliates and designees have been engaged as a non-exclusive financial advisor of Neoprobe Corporation (the "Company") for a period of twenty-four (24) months commencing on the date hereof (as extended pursuant to Paragraph 12 hereto, or by mutual agreement of the parties hereto, the "Term").

2. (a) The Company will pay Paramount a non-refundable retainer fee for services provided by Paramount hereunder in an amount equal to one hundred fifty thousand dollars ($150,000), minimum engagement of twenty-four (24) months, payable in equal monthly installments; provided, however, that the Company may prepay this amount in whole or in part at any time after the execution of this Agreement, at its discretion.

(b) The Company will sell to the Paramount and/or its designees, for $.001 per warrant, warrants (the "Advisory Options") to acquire a number of newly issued Units equal to five percent (5%) of the number of Units issued in the Offering, exercisable for a period of five (5) years at an exercise price equal to $100,000, each "Unit" consisting of (a) one thousand (1,000) shares of 5% Series B Preferred Stock ("Preferred Stock") and (b) Class L Warrants (the "Warrants") to purchase 97,087 shares of common stock of the Company, par value $.001 (the "Common Stock"). The Company agrees with Paramount and its successors and assigns that the securities underlying the Advisory Options will not be subject to redemption by the Company nor will they be callable or subject to mandatory conversion by the Company. The Advisory Options cannot be transferred, sold, assigned or hypothecated for six (6) months except that they may be assigned in whole or in part during such period to any NASD member or any officer or employee of Paramount Agent or any such NASD member. The Advisory Options will contain a cashless exercise feature and antidilution provisions and the right to have the Common Stock issuable upon conversion of the Preferred Stock and upon exercise of the Warrants underlying such Advisory Options included on the Company's next filed shelf registration statement.

(c) The Company also agrees to pay in cash all out-of-pocket expenses incurred by Paramount in providing its services hereunder, including reasonable fees and disbursements of Paramount's counsel, such expenses to be paid upon submission of a bill or bills by Paramount from time to time. If any individual expense shall exceed $5,000, Paramount agrees to obtain prior written authorization for such expense from the Company.

3. Upon the Closing of each Investment (as defined below) during the Term or during the twelve-month period following the expiration or earlier termination of the Term, the Company shall pay to Paramount a fee in an amount equal to five percent (5%) of the aggregate value of such Investment and shall issue to Paramount warrants to purchase an amount of securities equal to five percent (5%) of the

securities sold as part of such Investment at an exercise price equal to one-hundred-ten percent (110%) of the price of such securities, exercisable until five (5) years from the date of issuance of such warrants. For the purposes of

this Agreement, an Investment shall mean any original issuance of securities of the Company which is made during the Term, other than the initial purchase of the Company's Series B 5% Convertible Preferred Stock and Warrants to Purchase Common Stock under the Preferred Stock and Warrant Purchase Agreement dated as of February 16, 1999, or during the twelve-month period following the expiration of the Term by an investor first introduced to the Company by or through Paramount during or prior to the Term; provided, however, that no compensation shall be due to Paramount pursuant to this paragraph 3 for an Investment with respect to which Paramount is entitled to compensation pursuant to an agreement which supersedes this paragraph 3 and provided further that if the terms of both such superseding agreement and this Agreement would be applicable to any particular investment, the terms of such superseding agreement shall govern and Paramount shall be entitled to the compensation set forth therein.

4. (a) Should the Company enter into an agreement with a party first introduced to the Company by or through Paramount during or prior to the Term pursuant to which the Company consummates a sale, merger, consolidation, tender offer, business combination or similar transaction involving a majority of the business assets or stock of the Company (a "Sale") during the Term, or during the twelve-month period following the expiration of such Term, then the Company shall pay Paramount: (i) a cash fee equal to six percent (6%) of the aggregate cash consideration paid to the Company by the acquiror, such fee to be payable in cash simultaneously with the closing of such Sale; and (ii) a payment in the form of equity securities in an amount to be agreed upon between the parties, but in no event shall the equity received be worth less than six percent (6%) of any equity securities received by the Company (or the aggregate amount of equity securities received by the Company's shareholders) as a result of the Sale.

(b) Should the Company enter into an agreement with a party first introduced to the Company by or through Paramount during or prior to the Term pursuant to which the Company consummates a transaction wherein the Company acquires all or substantially all of the business assets or stock of another entity in which the Company is the surviving entity (an "Acquisition") during the Term, or during the twelve-month period following the expiration of such Term, then the Company shall pay Paramount: (i) a cash fee equal to six percent (6%) of the aggregate cash consideration paid by the Company to the entity acquired, such fee to be payable in cash simultaneously with the closing of such Acquisition; and (ii) a payment in the form of equity securities of the Company in an amount to be agreed upon between the parties, but in no event shall the equity received be worth less than six percent (6%) of any equity securities paid by the Company as a result of the Acquisition.

(c) For purposes of calculating Paramount's fee under this Paragraph 4, the aggregate consideration paid with respect to the business, assets or stock of the Company shall be equal to the total of all cash, securities and/or other assets paid for such business, assets or stock by the acquiror. Aggregate consideration shall also include: (i) any commercial bank or similar indebtedness of the Company which is repaid or for which the responsibility to pay is assumed by the acquiror in connection with such transaction; (ii) the greater of the stated value or the liquidation value of preferred stock of the Company which is assumed or acquired by the acquiror and which is not converted into common stock upon the consummation of such transaction; (iii) future payments for which the acquiror is obligated absolutely ("Acquiror Future Payments"); and (iv) future payments for which the acquiror is obligated upon the attainment of milestones or financial results ("Acquiror Contingent Payments"). The fee to be paid to Paramount as a result of Acquiror Future Payments shall be paid upon the date of closing of such Acquisition and shall be valued at the present value of the Acquiror Future Payments. The fee to be paid to Paramount as a result of Acquiror Contingent Payments shall be paid upon the receipt of such payments by the Company. In the event that a Sale of the Company or an Acquisition by the Company is consummated through a multiple-step transaction wherein the acquiror is not obligated either absolutely or upon the attainment of milestones or financial results to make future payments to further increase the acquiror's

ownership in the Company (the "Multiple-Step Payments"), the Company agrees to

pay Paramount a fee on such Multiple-Step Payments which shall be calculated pursuant to this Paragraph 4. Such fee shall be paid to Paramount upon receipt by the Company of such Multiple-Step Payments and shall be in addition to the fee paid to Paramount in the first step of such transaction.

5. Should the Company enter into an agreement with an investor first introduced to the Company by or through Paramount during or prior to the Term pursuant to which the Company consummates a Strategic Alliance(s) (as defined below) during the term, or during the twelve-month period following the expiration of such Term, then the Company shall pay Paramount: (a) a cash fee equal to six percent (6%) of the present value of the Aggregate Consideration (as defined below) to be received by the Company, its shareholders or employees in each such transaction; and (b) a payment in the form of equity securities in an amount to be agreed upon between the parties, but in no event less than six percent (6%) of any equity securities received by the Company. Such fee shall be paid to Paramount in cash simultaneously with the closing of each such transaction. For the purpose of calculating Paramount's fee under this Paragraph 5, Aggregate Consideration shall include, but not be limited to: (i) all payments made at the closing of such transaction for equity securities, equity security rights or similar rights; (ii) technology access fees or similar up-front payments, (iii) other future payments, including without limitation, licensing fees, lump sum payments, royalties and deferred technology access fees, to be made to the Company or its employees for which the Strategic Alliance partner(s) or other counter-parties (each a "Partner") is obligated either absolutely ("Strategic Future Payments") or upon the attainment of milestones or on a percentage or royalty basis ("Strategic Contingent Payments"); (iv) funding provided, arranged or introduced by the Partner (through reimbursement or otherwise) relative to research and development, testing, clinical trials and related expenditures, whether such work is performed, subcontracted or managed by the Company or the Partner; and (v) the repayment or assumption by the Partner of obligations of the Company, including indebtedness for money borrowed or amounts owed by the Company to inventors or owners of technology. It is further understood that Aggregate Consideration shall not be reduced by the amount of the fee due to Paramount hereunder. Any portion of the Aggregate Consideration constituting Strategic Future Payments shall be paid at closing and shall be valued at the present value of the Strategic Future Payments. The fee to be paid to Paramount as a result of Strategic Contingent Payments shall be paid upon the receipt of such payments and shall be in addition to any fees paid at closing. A "Strategic Alliance" may include, but is not limited to: (i) any joint venture, partnership, license or other contract for the research, development, manufacturing, marketing, distribution, sale or other activity relating to the Company's present and/or future products or proposed products; (ii) the purchase of, or commitment to purchase from the Company, less than a majority of the business, assets or stock of the Company by one or more Partner(s); (iii) the sale of any of the Company's assets or any rights in respect to its products and/or technology; and (iv) a commitment to provide funding for all or part of the Company's research and development activities, whether such work is performed or managed by the Company or such Partner(s).

For purposes of calculating the present value of any Strategic Future Payments, Strategic Contingent Payments, Acquiror Future Payments or Acquiror Contingent Payments, the Company and Paramount agree to discount all such payments by a discount factor equal to fifteen percent (15%) per annum, and, where necessary, to use the projections which have been provided to prospective Partners in the course of the transaction to quantify these Strategic Future Payments, Strategic Contingent Payments, Acquiror Future Payments or Acquiror Contingent Payments. For the purposes of calculating Paramount's fee, securities constituting part of Aggregate Consideration which are traded on a national or recognized foreign securities exchange or the Nasdaq National Market System shall be valued at the last closing bid price thereof prior to the date of the consummation or closing of any such transaction. Such securities which are traded over-the-counter shall be valued at the mean between the latest bid and asked prices prior to date of the consummation or closing of any such transaction. Should the Company enter into a transaction with a third party introduced to it by Paramount, Paramount shall be entitled to compensation pursuant to either this paragraph 5 or paragraph 4, but not both.

6. Should Paramount introduce the Company to a potential product, process, intellectual property or technology which is subsequently licensed or otherwise acquired by the Company, the Company and Paramount shall negotiate in good faith a fee for such introduction provided that in no event shall such fee be less than: (a) two hundred thousand dollars ($200,000) in cash; and (b) an equity payment in an amount to be agreed upon between the parties, but in no event less than ten percent (10%) of the total outstanding shares on a fully diluted basis of any subsidiary through which any such potential product, process, intellectual property or technology may be owned or developed.

7. In the event that the Company, its directors or management initiate any discussions with a third party in furtherance of any Sale, Acquisition, Investment or Strategic Alliance or receive any meaningful inquiry or are aware of the interest of any third party concerning a Sale, Acquisition, Investment or Strategic Alliance which is the subject of this Agreement, they shall promptly inform Paramount of the party and its interest.

8. Any financial advice rendered by Paramount pursuant to this Agreement, as well as the existence of this Agreement, shall not be disclosed publicly in any manner without Paramount's prior written approval and shall be treated by the Company as confidential information; provided, however, that if Paramount has refused to give prior written approval and the Company has obtained a written opinion of independent counsel stating that such action is necessary for the Company to comply with such action and that any course of action not involving disclosure would likely result in a violation of law. The Company shall provide Paramount with all financial and other information requested by Paramount for the purposes of rendering its services pursuant to this Agreement.

9. (a) The Company agrees not to divulge information which Paramount discloses to it and which is marked as "Confidential" (the "Confidential Information") to any third party or parties. The Company further agrees to limit disclosure only to those of its officers, employees, agents, affiliates and consultants as the Company considers necessary. The Company shall use its best efforts to prevent the disclosure of the Confidential Information as provided herein. This obligation shall be binding upon the Company and shall continue for a period of five (5) years from the date of this Agreement.

10. All non-public information given to Paramount by the Company shall not be divulged by Paramount to any third parties and shall be treated by Paramount as confidential information and shall not be used by Paramount except in rendering its services pursuant to this Agreement. Paramount may rely, without independent verification, on the accuracy and completeness of any information furnished to Paramount by the Company, subject to its obligations under the securities laws.

11. In the event that Paramount becomes involved in any capacity in any action, proceeding, investigation or inquiry in connection with any matter referred to in this Agreement or arising out of the matters contemplated by this Agreement, the Company shall reimburse Paramount for its legal and other expenses (including the cost of any investigation and preparation) as they are incurred by Paramount in connection therewith. The Company also agrees to indemnify each of Paramount, the directors, officers, employees and agents thereof (the "Indemnitees"), pay on demand and protect, defend, save and hold each Indemnitee harmless from and against any and all liabilities, damages, losses, settlements, claims, actions, suits, penalties, fines, costs or expenses (including, without limitation, attorneys' fees) (any of the foregoing, a "Claim") incurred by or asserted against any Indemnitee of whatever kind or nature, arising from, in connection with or occurring as a result of this Agreement or the matters contemplated by this Agreement. The foregoing agreement shall be in addition to any rights that any Indemnitee may have at common law or otherwise. This indemnity shall not apply to the gross negligence or willful misconduct of Paramount. This indemnity shall not apply to Claims resulting from the intentional misconduct of Paramount.

12. The Term of this Agreement shall be twenty-four (24) months

commencing on the date hereof. Thereafter, this Agreement shall continue on a month to month basis until terminated by either party upon not less than thirty (30) days notice with the monthly retainer fee payable on the first day of each month (the "Extended Term"); provided, however, regardless of any termination, the rights to compensation contained in Paragraphs 4 and 5 and to indemnity and reimbursement contained in Paragraph 11 shall survive. In addition to any retainer fees, Paramount shall be entitled to the reimbursement of reasonable expenses incurred by Paramount as a result of services rendered prior to the date of the termination.

13. This Agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflicts of law. The parties hereto irrevocably consent to the jurisdiction of the courts of the State of New York and of any federal court located in such State in connection with any action or proceeding arising out of or relating to this Agreement, any document or instrument delivered pursuant to, in connection with or simultaneously with this Agreement, or a breach of this Agreement or any such document or instrument. In any such action or proceeding, each party hereto waives personal service of any summons, complaint or other process and agrees that service thereof may be made in accordance with this Section 13. Within thirty (30) days after such service, or such other time as may be mutually agreed upon in writing by the attorneys for the parties to such action or proceeding, the party so served shall appear or answer such summons, complaint or other process.

14. This Agreement shall be binding upon Paramount and the Company and the successors and assigns of Paramount. The Company shall not assign or sell all or substantially all of the Company's business and/or assets without first requiring in writing that such assignee or successor is bound by the provisions of this Agreement.

15. (a) Paramount shall not be in any way precluded from (i) entering into similar agreements with companies which engage in similar business activities or lines of business as the Company or developing or marketing any products, services or technologies that do or may in the future compete, directly or indirectly, with those of the Company, (ii) investing or owning any interest publicly or privately in, or developing a business relationship with, any corporation, partnership or other person or entity engaged in the same or similar activities or lines or business as, or otherwise in competition with, the Company or (iii) doing business with any client, collaborator, licensor, consultant, vendor or customer of the Company. Paramount and any of its officers, directors, employees or former employees and affiliates shall not have any obligation, or be liable, to the Company solely on account of the conduct described in the preceding sentence. The Company recognizes that Paramount is not obligated to present any opportunities for an Investment, Sale, Acquisition, Strategic Alliance or any other opportunities to the Company and nothing in this Agreement shall be construed to limit Paramount's ability to introduce Investment, Sale, Acquisition, Strategic Alliance or any other opportunities to any other company. In the event that Paramount and/or any officer, director, employee or former employee or affiliate thereof acquires knowledge of a potential transaction, agreement, arrangement or other matter which may be a corporate opportunity for both Paramount and the Company, neither Paramount nor any of its officers, directors, employees or former employees or affiliates shall have any duty to communicate or offer such corporate opportunity to the Company and neither Paramount nor any of its officers, directors, employees or former employees or affiliates shall be liable to the Company for breach of any fiduciary or other duty, as a stockholder or otherwise, solely by reason of the fact that Paramount or any of its officers, directors, employees or former employees or affiliates pursue or acquire such corporate opportunity for Paramount, direct such corporate opportunity to another person or entity or communicate or fail to communicate such corporate opportunity or entity to the Company.

(b) The provisions of this Section 15 shall be enforceable to the fullest extent permitted by law.

16. Paramount has not (a) made any advertisement, article, notice or other communication published in any newspaper, magazine or similar media or

broadcast over television or radio or (b) conducted any seminar or meeting whose attendees had been invited by any general advertising or general solicitation in connection with the sale of the Company's Series B 5% Convertible Preferred Stock and Warrants to Purchase Common Stock under the Preferred Stock and Warrant Purchase Agreement dated as of February 16, 1999.

Please confirm that the foregoing is in accordance with your understanding by signing and returning to us the enclosed duplicate of this letter.

Sincerely yours,

PARAMOUNT CAPITAL, INC.

By: /s/ Lindsay A. Rosenwald

Name: Lindsay A. Rosenwald, M.D.
Title: Chairman

Confirmed as of the date hereof:

NEOPROBE CORPORATION

By: /s/ David C. Bupp

Name: David C. Bupp
Title: President and Chief Executive Officer

Exhibit 10.1.36

NEOPROBE CORPORATION

February 24, 1999

The Aries Master Fund
The Aries Domestic Fund, L.P.
c/o Paramount Capital Asset Management, Inc.
Attn: Michael S. Weiss
787 Seventh Avenue, 48th Floor
New York NY 10019

RE: PREFERRED STOCK AND WARRANT PURCHASE AGREEMENT (THE "AGREEMENT") DATED AS OF FEBRUARY 16, 1999, AMONG NEOPROBE CORPORATION, A DELAWARE CORPORATION, THE ARIES MASTER FUND, A CAYMAN ISLAND EXEMPTED COMPANY, THE ARIES DOMESTIC FUND, L.P., AND THE CERTIFICATE OF DESIGNATIONS OF 5% SERIES B CONVERTIBLE PREFERRED STOCK OF THE COMPANY (THE "CERTIFICATE").

Dear Sirs:

As we have discussed, the delay in completion of the first closing under the Agreement has occasioned the necessity of adjusting the dates of certain events which are to occur under the Agreement or the Certificate.

As we have agreed, the term "Outside Target Date" in the Agreement shall mean March 31, 1999.

For the purposes of the Certificate, the "First Closing Date" shall be Friday, February 26, 1999.

If the foregoing correctly reflects our agreement, please evidence your acceptance of this agreement by signing and returning to me a copy of this letter.

Very truly yours,

/s/ David C. Bupp

David C. Bupp
President
Chief Executive Officer

The Aries Master Fund
The Aries Domestic Fund, L.P.
c/o Paramount Capital Asset Management, Inc.
Attn: Michael S. Weiss

AGREED TO AND ACCEPTED AS OF THE DATE SET FORTH ABOVE.

THE ARIES MASTER FUND, A CAYMAN ISLAND EXEMPTED COMPANY

By: /s/ Lindsay A. Rosenwald

Name:

Title:

THE ARIES DOMESTIC FUND, L.P.

By: /s/ Lindsay A. Rosenwald

Name:

Title:
---

cc: Ira Kotel, Esq.
Roberts, Sheridan & Kotel

Robert S. Schwartz, Esq.
Benesch, Friedlander, Coplan & Aronoff, LLP

Exhibit 10.1.37

NEOPROBE CORPORATION

March 12, 1999

The Aries Master Fund
The Aries Domestic Fund, L.P.
c/o Paramount Capital Asset Management, Inc.
Attn: Michael S. Weiss
787 Seventh Avenue, 48th Floor
New York NY 10019

RE: PREFERRED STOCK AND WARRANT PURCHASE AGREEMENT (THE "AGREEMENT") DATED AS OF FEBRUARY 16, 1999, AMONG NEOPROBE CORPORATION, A DELAWARE CORPORATION, THE ARIES MASTER FUND, A CAYMAN ISLAND EXEMPTED COMPANY, THE ARIES DOMESTIC FUND, L.P.

Dear Sirs:

Section 7.6(b) of the Agreement currently requires Neoprobe, Inc. to set aside and hold in a segregated, escrow account $1,500,000 in cash from the proceeds of the sale of the Preferred Shares until the later of the receipt of the Required Shareholder Approvals and the declaration of the effectiveness of the Shelf Registration Statement. As we have discussed, you have agreed to immediately release $500,000 of this amount and reduce the amount subject to Section 7.6(b) of the Agreement to $1,000,000 even though the Required Shareholder Approvals have not been received and the Shelf Registration Statement has not been declared effective.

Capitalized terms not defined in this letter have the meanings assigned to them in the Agreement.

If the foregoing correctly reflects our agreement, please evidence your acceptance of this agreement by signing and returning to me a copy of this letter.

Very truly yours,

/s/ David C. Bupp

David C. Bupp
President
Chief Executive Officer

The Aries Master Fund
The Aries Domestic Fund, L.P.
c/o Paramount Capital Asset Management, Inc.
Attn: Michael S. Weiss

AGREED TO AND ACCEPTED AS OF THE DATE SET FORTH ABOVE.

THE ARIES MASTER FUND, A CAYMAN ISLAND EXEMPTED COMPANY

By: /s/ Lindsay A. Rosenwald

Name:

Title:

THE ARIES DOMESTIC FUND, L.P.

By: /s/ Lindsay A. Rosenwald

Name:

Title:
---

cc: Ira Kotel, Esq.
Roberts, Sheridan & Kotel

Robert S. Schwartz, Esq.
Benesch, Friedlander, Coplan & Aronoff, LLP

Exhibit 10.2.46

DAVID C. BUPP
5747 RUSHWOOD DRIVE
DUBLIN, OHIO 43017

February 16, 1999

Paramount Capital Asset Management, Inc.
Attn: Lindsay A. Rosenwald, M.D.
Chairman
787 Seventh Avenue
New York NY 10019

RE: PREFERRED STOCK AND WARRANT PURCHASE AGREEMENT (THE "PURCHASE AGREEMENT) DATED AS OF FEBRUARY 16, 1999 BY AND AMONG NEOPROBE CORPORATION, A DELAWARE CORPORATION (THE "COMPANY") AND THE PURCHASERS LISTED ON EXHIBIT A TO THE PURCHASE AGREEMENT (THE "PURCHASERS").

Dear Dr. Rosenwald:

Reference is made to the Employment Agreement dated as of January 1, 1998 between the Company and me (the "Employment Agreement"). In order to induce the Purchasers to enter into the Purchase Agreement and to purchase the 5% Series B Convertible Preferred Stock (the "Preferred Stock") issuable thereunder, which I hereby acknowledge is a direct and material benefit to me, I hereby waive and relinquish any claim that I am entitled to receive a severance payment under the first sentence in paragraph H of Section 3 of the Employment Agreement solely by reason of the issuance of the Preferred Stock or the warrants issued to the Purchasers thereof, or to Paramount Capital, Inc. pursuant to the Purchase Agreement (the "Warrants") or the conversion of the Preferred Stock into the Company's Common Stock or the exercise of the Warrants to purchase Common Stock or Preferred Stock by the persons who acquired the Preferred Stock and the Warrants, pursuant to the Purchase Agreement.

Very truly yours,

/s/ David C. Bupp

David C. Bupp

Exhibit 10.2.47

SCHEDULE IDENTIFYING OMITTED DOCUMENTS

The only particular in which the attached agreement differs from the omitted agreements is the name of the employee who is a party to the agreements.

The following are the employees who are parties to the omitted agreements:

Brent L. Larson

Patricia A. Coburn

SEVERANCE AGREEMENT

This Severance Agreement is made and entered into effective as of October 23, 1998 ("Effective Date"), by and between NEOPROBE CORPORATION, a Delaware Corporation with a place of business at 425 Metro Place North, Suite 400, Dublin, Ohio 43017-1367 (the "Company") and MATTHEW F. BOWMAN (the "Employee") of 8123 Linden Leaf Circle, Worthington, Ohio 43235.

WHEREAS, the Company and the Employee wish to establish new terms, covenants, and conditions for the Employee's continued employment with the Company through this agreement ("Severance Agreement").

NOW, THEREFORE, in consideration of the mutual agreements herein set forth, the parties hereto agree as follows:

1. DEFINITIONS. For the purposes of this Severance Agreement, the following terms shall have the meanings given below:

"Base Salary" means an annual amount of base salary at the highest annual rate (excluding bonuses and benefits but including withholding taxes) paid to Employee at any time during the twenty-four (24) month period immediately before the termination of the employment of the Employee.

A "Change in Control" of the Company has occurred when: (a) any Person, other than Neoprobe or an employee benefit plan created by its Board of Directors for the benefit of its employees, either directly or indirectly, acquires beneficial ownership (determined under Rule 13d-3 of the Regulations promulgated by the Securities and Exchange Commission under Section 13(d) of the Exchange Act) of securities issued by Neoprobe having thirty percent (30%) or more of the voting power of all the voting securities issued by Neoprobe in the election of Directors at the next meeting of the holders of voting securities to be held for such purpose; (b) a majority of the Directors elected at any meeting of the holders of voting securities of Neoprobe are persons who were not nominated for such election by the Board of Directors or a duly constituted committee of the Board of Directors having authority in such matters; (c) the stockholders of Neoprobe approve a merger or consolidation of Neoprobe with another person, other than a merger or consolidation in which the holders of Neoprobe's voting securities issued and outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or (d) the stockholders of Neoprobe approve a transfer of substantially all of the assets of Neoprobe to another person other than a transfer to a transferee, eighty percent (80%) or more of the voting power of which is owned or controlled by Neoprobe or by the holders of Neoprobe's voting securities issued and outstanding immediately before such transfer in the same relative proportions to each other as existed before such event.

"Person" means any person within the meaning of Section 13(d) of the Securities Exchange Act of 1934.

"Termination Without Cause" is a termination of employment that is not for cause and not occasioned by the resignation, death or disability of the

Employee. Should the Company relocate to another city and Employee decide not to relocate also, cessation of employment shall be without cause hereunder.

2. CHANGE IN CONTROL SEVERANCE. In addition to the rights of the Employee under the Company's employee benefit plans or otherwise, if there is a Change in Control and the employment of the Employee is concurrently terminated or is terminated at any time within four (4) months thereafter (a) by the Company

without cause, or (b) by the resignation of the Employee, for any reason, the Employee shall be paid a severance payment equal to one and one-half (1.5) times his Base Salary.

3. LIFE AND HEALTH BENEFITS. If the employment of the Employee is terminated and she is entitled to a severance payment under Section 2 above, she shall be entitled to continue to participate in the Company's life and health insurance programs for a period of eighteen (18) months after such termination on the same terms and conditions (including payments) as are then prevailing for the Company's employees who have the same level of salary and tenure as the Employee did when his employment was terminated. The Company shall not require any payment from the Employee for life or health insurance in excess of the amounts payable by the Company's employees who have the same level of salary and tenure as the Employee, but the Employee understands and agrees that the Company has the right to terminate the availability of such insurance for its then current employees, in which event the Company shall not be required to provide such insurance to the Employee. When the Company's obligation to provide insurance under this Section 3 has terminated the Company shall provide the Employee with such rights under COBRA as she may then be entitled without regard to the lapse of time between the termination of his Employment and the date on which the Company ceases to provide insurance under this Section 3.

4. VESTED BENEFITS. This Severance Agreement is in addition to and not in lieu of any rights the Employee may otherwise have to receive any vested benefits under any employee benefit plan or program or customary practice of the Company at or after the termination of his employment with the Company. Regardless of any amount payable to the Employee under this Severance Agreement, the Employee shall be entitled to receive all benefits and payments that she may otherwise be entitled to under any plan or program or customary practice of the Company all of which shall be payable in accordance with the terms of such plan, program, or practice.

5. ARBITRATION. Any dispute or controversy arising under or in connection with this Severance Agreement shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the nonunion employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific nonunion employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds $100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company shall indemnify the Employee against, and hold him harmless from, any attorney's fees, court costs and other expenses incurred by the Employee in connection with the preparation, commencement, prosecution, defense or enforcement of any arbitration, award, confirmation or judgment in order to assert or defend any right or obtain any payment under Section 2 above or under this sentence; without regard to the success of the Employee or his attorney in any such arbitration or proceeding.

6. GOVERNING LAW. The Severance Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

7. VALIDITY. The invalidity or unenforceability of any provision or provisions of this Severance Agreement shall not affect the validity or enforceability of any other provision of the Severance Agreement, which shall remain in full force and effect.

8. ENTIRE AGREEMENT; NOT AN EMPLOYMENT AGREEMENT. This Severance Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, superseding all negotiations, prior discussions, and preliminary agreements. This Severance Agreement may not be amended except in

writing executed by the parties hereto. This Severance Agreement is not an employment agreement and nothing contained herein gives Employee any right to continue to be employed by or provide services to the Company or, except as otherwise expressly set forth in Section 2 above, affects the right of the Company to terminate Employee's employment or other relationship with Employee.

9. EFFECT ON SUCCESSORS IN INTEREST. This Severance Agreement shall inure to the benefit of and be binding upon heirs, administrators, executors, successors and assigns of each of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Severance Agreement as of the date first written above.

NEOPROBE CORPORATION	EMPLOYEE
By: /s/ David C. Bupp	/s/ Matthew F. Bowman
David C. Bupp, President	Matthew F. Bowman

Exhibit 10.2.48

SCHEDULE IDENTIFYING OMITTED DOCUMENTS

The only particulars in which the attached agreement differs from the omitted agreements is the name of the employee who is a party to the agreements and the number of restricted shares subject to the agreements.

<TABLE>
<CAPTION>

Name	Number of Restricted Shares
<S>	<C>
Brent L. Larson	20,000
Patricia A. Coburn	20,000
Lauren V. Vitek	20,000

</TABLE>

NEOPROBE CORPORATION
SUITE 400
425 METRO PLACE NORTH
DUBLIN, OHIO 43017-1367

October 23, 1998

Matthew F. Bowman
8123 Linden Leaf Circle
Worthington, Ohio 43235

Congratulations. You have been granted a right to purchase Restricted Stock under Neoprobe's 1996 Stock Incentive Plan (the "Plan") on the following terms:

1. PURCHASE AND SALE. On the terms and subject to the conditions set forth in this Agreement, you hereby subscribe for and agree to purchase 40,000 shares of Common Stock (the "Restricted Stock") for and in consideration of a payment by you to Neoprobe of $0.001 per share.

2. TRANSFER RESTRICTIONS. The fair market value of Common Stock is demonstrated by the closing price on the Nasdaq National Market of such securities on the business day before the date first set forth above which was $0.53 per share. In consideration of the difference between the purchase price of the Restricted Stock set forth in paragraph 1 above and its fair market value without the restrictions and risk of forfeiture set forth herein, you agree that, unless and until any of the Restricted Stock vests and becomes transferable as provided in paragraph 4 below, you will neither transfer, sell, assign nor pledge any of the Restricted Stock. Any certificate representing any Restricted Stock issued hereunder shall bear the following legend in larger or other contrasting type or color: "The transfer of these securities is restricted by, and such securities are subject to a risk of forfeiture, under a Restricted Stock Purchase Agreement between the registered owner hereof and the Issuer dated October 23, 1998."

3. FORFEITURE. You will forfeit any portion of the Restricted Stock purchased under this Agreement that has not vested and become transferable on the earliest of: (a) the expiration of 10 years from the date of this Agreement, or (b) (except as otherwise provided in the last sentence of this paragraph 3) immediately upon the termination of your employment by your Employer under the Employment Agreement, whether for cause or without cause or because of your death or disability or by your resignation. If such a forfeiture occurs, all of your right, title and interest in and to any shares of Restricted Stock which have not previously vested and became transferable will be terminated, the certificates representing the forfeited shares will be canceled or transferred free and clear of all restrictions to Neoprobe's treasury and we will pay you

$0.001 per share for each share of Restricted Stock so forfeited. Notwithstanding clause (b) of this paragraph 3 no forfeiture shall occur upon the termination of your employment by your Employer under the Employment Agreement without cause or because of your death or disability if at the time of such termination Neoprobe is engaged in active negotiations that could reasonably be expected to result in a change in control.

4. VESTING PROVISIONS. Any Restricted Stock that has not previously been forfeited under Section 3 above will vest and become transferable if and when a Change in Control (as defined below in Section 5) of the Company occurs or upon the termination of your employment by your Employer under the Employment Agreement without cause or because of your death or disability if at the time of such termination Neoprobe is engaged in active negotiations that could reasonably be expected to result in a Change in Control; provided the Committee certifies such occurrence in its minutes or another writing promptly thereafter. Notwithstanding any provision of this Agreement or any provision of the Plan, including, but not limited to,

the last sentence of Section 7.1 thereof and Section 8.3 thereof, the provisions of which are hereby waived by you, the Committee may, if it determines in its sole discretion that your actions in connection with any Change in Control which results in the vesting of any shares of Restricted Stock hereunder were not in accordance with your duties to the Company and its stockholders as a director, officer or employee of the Company or your actions did not fully support the determinations of the Board of Directors of the Company in connection therewith, reduce the number of shares of Restricted Stock which vest under this Agreement or eliminate such vesting entirely. When any portion of the Restricted Stock vests and becomes transferable, the Company shall, subject to the provision of Section 6 below, promptly deliver a certificate (free of all adverse claims and transfer) representing the number of shares constituting the vested and transferable portion of the Restricted Stock to you at your address given above and such shares shall no longer be deemed to be Restricted Stock subject to the terms and conditions of this Agreement.

5. CHANGE IN CONTROL. For the purpose of this Agreement, a Change in Control of the Company has occurred when: (a) any person (defined for the purposes of this Section 3 to mean any person within the meaning of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than Neoprobe or an employee benefit plan created by its Board of Directors for the benefit of its employees, either directly or indirectly, acquires beneficial ownership (determined under Rule 13d-3 of the Regulations promulgated by the Securities and Exchange Commission under Section 13(d) of the Exchange Act) of securities issued by Neoprobe having thirty percent (30%) or more of the voting power of all the voting securities issued by Neoprobe in the election of Directors at the next meeting of the holders of voting securities to be held for such purpose; (b) a majority of the Directors elected at any meeting of the holders of voting securities of Neoprobe are persons who were not nominated for such election by the Board of Directors or a duly constituted committee of the Board of Directors having authority in such matters; (c) the stockholders of Neoprobe approve a merger or consolidation of Neoprobe with another person, other than a merger or consolidation in which the holders of Neoprobe's voting securities issued and outstanding immediately before such merger or consolidation continue to hold voting securities in the surviving or resulting corporation (in the same relative proportions to each other as existed before such event) comprising eighty percent (80%) or more of the voting power for all purposes of the surviving or resulting corporation; or (d) the stockholders of Neoprobe approve a transfer of substantially all of the assets of Neoprobe to another person other than a transfer to a transferee, eighty percent (80%) or more of the voting power of which is owned or controlled by Neoprobe or by the holders of Neoprobe's voting securities issued and outstanding immediately before such transfer in the same relative proportions to each other as existed before such event.

6. RIGHTS; STOCK DIVIDENDS. Except for the restrictions on transfer set forth in Section 2 and the possibility of forfeiture set forth in Section 3, upon the issuance of a certificate representing shares of Restricted Stock, you will have all other rights in such shares, including the right to vote such

shares and receive dividends other than dividends on or distributions of shares of any class of stock issued by the Company which dividends or distributions shall be delivered to the Company under the same restrictions on transfer and possibility of forfeitures as the shares of Restricted Stock from which they derive.

7. TAXATION. Both you and we intend that the transactions provided for in this Agreement will be governed by the provisions of Section 83(a) of the Internal Revenue Code of 1986. You will have taxable income upon the vesting of Restricted Stock. At that time, you must pay to the Company an amount equal to the required federal, state, and local tax withholding less any withholding otherwise made from your salary or bonus. You must satisfy any relevant withholding requirements before the Company issues certificates representing vested shares of Restricted Stock to you.

8. EMPLOYMENT AGREEMENT. This Agreement is not an employment agreement and nothing contained herein gives you any right to continue to be employed by or provide services to the Company or affects the right of the Company to terminate your employment or other relationship with you.

9. PLAN CONTROLS. This Agreement is a Restricted Stock Purchase Agreement (as such term is defined in the Plan) under Article 7 of the Plan. The terms of this Agreement are subject to, and controlled by, the terms of the Plan, as it is now in effect or may be amended from time to time hereafter, which are incorporated herein as if they were set forth in full. Except as otherwise expressly set forth herein, any words or phrases defined in the Plan have the same meanings in this Agreement. The Company will provide you with a copy of the Plan promptly upon your written or oral request made to its principal financial officer.

10. ARBITRATION. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration in Columbus, Ohio, in accordance with the nonunion employment arbitration rules of the American Arbitration Association ("AAA") then in effect. If specific nonunion employment dispute rules are not in effect, then AAA commercial arbitration rules shall govern the dispute. If the amount claimed exceeds $100,000, the arbitration shall be before a panel of three arbitrators. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company will indemnify you against, and hold you harmless from, any attorney's fees, court costs and other expenses incurred by you in connection with the preparation, commencement, prosecution, defense or enforcement of any arbitration, award, confirmation or judgment in order to assert or defend any right or obtain any payment hereunder after the occurrence of a Change in Control of the Company or under this sentence; without regard to the success of you or your attorney in any such arbitration or proceeding.

11. MISCELLANEOUS. This Agreement sets forth the entire agreement of the parties with respect to the subject matter hereof and it supersedes and discharges all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter. This Agreement may not be amended or terminated except by a writing signed by the party against whom any such amendment or termination is sought. If any one or more provisions of this Agreement shall be found to be illegal or unenforceable in any respect, the validity and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby. This Agreement shall be governed by the laws of the State of Delaware.

Please acknowledge your acceptance of this Agreement by signing the enclosed copy in the space provided below and returning it promptly to the Company.

NEOPROBE CORPORATION

By: /s/ David C. Bupp

David C. Bupp, President

Accepted and Agreed to as of
the date first set forth above:

/s/ Matthew F. Bowman
- - ---
Matthew F. Bowman

Exhibit 10.2.49

SEPARATION AGREEMENT

OCTOBER 21, 1998

NEOPROBE CORPORATION, a Delaware corporation with its principal place of business at 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367 (the "Company"), and

JOHN L. RIDIHALGH, who resides at 2112 Iuka Avenue, Columbus, Ohio 43201 (the "Executive")

hereby agree as follows:

PREAMBLE:

1. Executive has been employed by the Company as its Chairman of the Board and at various times as its Chief Executive and Chief Scientific Officer under an Employment Agreement between it and the Executive effective as of January 1, 1996 ("Employment Agreement").

2. The term of the Employment Agreement will expire on December 31, 1998 and the Board of Directors of the Company has determined that the term will not be extended.

3. The Company has offered to make a substantial separation payment to the Executive on the terms set forth below in exchange for his resignation from all offices with the Company, the execution and delivery of a general release and certain other promises set forth below.

TERMS:

1. In consideration of the promises made by Company as set forth below:

(a) Executive hereby agrees to resign as a director, officer and employee of the Company effective as of the close of business on December 31, 1998 and to execute and deliver to the Company his resignation in the form of Exhibit A hereto on that day;

(b) Executive hereby agrees to execute and deliver to the Company, on December 31, 1998, his general release in the form of Exhibit B hereto;

(c) On or before December 31, 1998, Executive shall return to the Company, (i) all of its documents, and other tangible items in written, magnetic or other form, which contain confidential information concerning the Company, and any copies thereof , that are in his possession or under his control and; and (ii) all other Company property within his possession or under his control, including, but not limited to, office keys, identification badges, credit cards and computer equipment and software;

(d) Executive acknowledges and confirms that the Proprietary Information Agreement between the Company and him, which affirmed his obligation not to disclose the

Company's trade secrets, confidential or proprietary information, is in full force and effect and will remain in full force and effect after termination of his employment;

(e) Executive shall not disparage the Company, its affiliates or their respective businesses, business methods, technologies, directors, officers, employees or agents, and Executive shall not cause, instigate, solicit nor encourage any third party, to file, maintain or prosecute any action or claim of any type against Company, its affiliates or its officers or agents; and

(f) Executive agrees that if a subpoena or other legal document is served upon him requiring production or disclosure of information or documents concerning the Company or any of its employees or property, he shall promptly notify the Company's General Counsel and provide her with copies of any subpoena or other legal document. Executive shall thereafter make such documents available to the Company for inspection and copying at a reasonable time and place designated by the Company prior to their production under the subpoena. If the subpoena or other legal process requires Executive to testify or make written or oral statements, Executive agrees to meet, telephonically or in person, with attorneys designated by Company, at a reasonably convenient time and place designated by Company prior to the testimony, for the purpose of discussing such testimony; Nothing herein shall give Company the right to control or dictate the content of any testimony, or any documents produced pursuant to subpoena or other lawful process; Executive shall provide all information lawfully required of him; If the Company requires any information or testimony from Executive in connection with any claim made against Company, or any claims made by Company against persons or entities not a party to this Agreement, Executive agrees to cooperate fully with Company, including: (i) appearing at any trial, hearing, deposition or arbitration; (ii) meeting telephonically or in person with attorneys designated by Company, at a reasonably convenient time and place designated by Company and prior to the testimony, for the purpose of discussing such testimony and any other matters relating to the claim; and (iii) providing Company with any documentation in his custody or under his control; The Company agrees to pay Executive for any reasonable travel, telephone, photocopy and other out-of-pocket expenses incurred as a result of any requests made by Company under this Paragraph (f); The provisions of this Paragraph (f) shall not apply to any legal action brought under this Agreement.

2. In consideration of the promises made by Executive as set forth above:

(a) Company shall pay Executive a total amount of $137,750 as a separation payment, in 12 equal semi-monthly installments of $11,479.17, in accordance with its normal payroll practices, commencing with its first payroll period in January, 1999 and ending with its last payroll period in June 1999 and subject to all applicable federal, state and local tax, FICA and other payroll deductions;

(b) Company shall not oppose a claim for Ohio unemployment compensation filed by Executive, but shall report in response to OBES inquiry any amounts paid under this Agreement;

(c) The Company hereby confirms that the Employment Agreement between it and the Executive is in full force and effect on the date hereof and will remain in full force and effect until December 31, 1998 when it will expire by its own terms; provided, however, that the Company hereby relieves the Executive from the duty under Section 1 thereof to devote substantially all of his working time to the position he holds with the Company and

agrees that he need not report to the Company's offices on a regular basis during the remainder of 1998; the Company hereby agrees that it will not terminate the employment of the Executive under the Employment Agreement without cause before the end of its term;

(d) On the Company's first pay day in 1999, the Company shall pay Executive all accrued but unused vacation pay owed to him as of December 31, 1998, in a lump sum; the Company will not charge any vacation time against the Executive after the date hereof and he shall continue to accrue vacation time at the applicable rate under the Employment Agreement from the date hereof through December 31, 1998;

(e) Executive's coverage under the Company's health, disability, travel and life insurance plans will terminate at the close of business on December 31, 1998; After December 31, 1998, Executive shall be able to purchase health insurance benefits from the Company on a COBRA basis, but shall be solely responsible for the cost thereof; Executive may have the right to convert other coverages to his own individual plan, if provided for under, and in accordance with, the terms of, such plans;

(f) The Company will use its best efforts to assign to the Executive any life insurance policy on the life of the Executive on or before December 31, 1998, without recourse to or warranty by the Company and the Executive shall accept such assignments and shall be solely responsible for any payments of premium on such policies, including any past due premiums; and

(g) Executive was granted stock options under the Company's Stock Option Plan; Company hereby agrees that all options which are vested and exercisable as of the date hereof shall continue to be vested and exercisable, subject to the express terms thereof.

3. It is understood and agreed by all parties that this Agreement is a settlement of doubtful and disputed claims and it or the fact of settlement does not constitute an admission of liability or wrongdoing on the part of Company, under any state or federal statute, common law or regulation. It purely represents an offer of compromise.

4. The parties hereto agree that this Agreement is privileged, and, except to the extent necessary to enforce this Agreement, neither party may use any part of this Agreement as evidence, nor request that any part be admitted into evidence, in any proceeding of any character, judicial or otherwise, now pending or otherwise instituted.

5. All parties intend that this Agreement will be legally binding upon themselves, their relatives or affiliates (by blood or legal relationship), estates, heirs, personal representatives and assigns.

6. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this instrument shall be construed in all respects as if such invalid or unenforceable provision were omitted.

7. Both parties agree that such parties shall hold all events, transactions and occurrences involving the other party and the terms, provisions and conditions of this Agreement as strictly confidential information, which shall not be reported, divulged, publicized or in any way revealed to any person, corporation, agency or entity not a party to this agreement, except attorneys and immediate family or otherwise as required by law or the regulations of the Securities and Exchange Commission and for purposes of reporting taxes or filing for unemployment compensation. The parties shall prepare

a mutually acceptable joint press release regarding Executive's employment and his resignation, which press release shall be utilized for public dissemination. Company may file a copy of this Agreement with the Securities and Exchange Commission and make disclosures concerning this Agreement as required by its regulations.

8. Executive understands that Section 1 above requires delivery of a General Release that includes a release of claims under the Age Discrimination in Employment Act and the Older Workers Benefit Protection Act. He understands that neither this Agreement nor the General Release will waive rights or claims that arise after the date of the execution of the General Release . Further, Executive acknowledges he has been advised by the Company that he may consult with legal counsel regarding this Agreement and the General Release.

9. Executive acknowledges he may have at least twenty-one (21) days to review and consider this Agreement if he desires; and, as a result, enters into this Agreement willingly and voluntarily. To the extent that Executive has taken less than twenty-one (21) days to consider this Agreement, Executive acknowledges that he has had sufficient time to consider this Agreement and to consult with counsel and that he does not desire additional time.

10. Executive is aware that he has seven (7) days beyond that date of the General Release (December 31, 1998) during which he may revoke the General Release by giving the Company written notice. Such notice should be delivered to Patricia Coburn, Vice President and General Counsel, at Neoprobe Corporation 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367. Upon such notification by Executive, this Agreement and the General Release will become null and void and shall have no force or effect as to either party and, Executive will forfeit all money and other benefits of this Agreement and the General Release.

11. Executive further agree that any breach or threatened breach by Executive of this Agreement cannot be remedied solely by the recovery of damages and Neoprobe shall therefore be entitled to an injunction against such breach or threatened breach without posting any bond or other security. Nothing herein, however, shall be construed as prohibiting Neoprobe from pursuing, in law or equity, any remedy for such breach or threatened breach, including the recovery of damages.

12. All parties affirm that the only consideration for signing this Agreement are the terms stated herein, that no other promises or agreement of any kind have been made to or with any of the parties or any other person or entity whatsoever, and that they fully understand the meaning and intent of this instrument. This Agreement and the exhibits hereto and the agreements and instruments required to be executed and delivered hereunder set forth the entire agreement of the parties with respect to the subject matter hereof and supersede and discharge all prior agreements (written or oral) and negotiations and all contemporaneous oral agreements concerning such subject matter and negotiations. There are no oral conditions precedent to the effectiveness of this Agreement.

13. This Agreement shall be governed by the laws of the State of Ohio and any disputes shall adjudicated within the exclusive jurisdiction and venue of the courts of the State of Ohio and the United States seated in Franklin County, Ohio. If any provision of this Agreement including, but not limited to, the waiver of claims under any particular statute, should be deemed unenforceable, the remaining provisions shall, to the extent possible, be carried into effect, taking into account the general purpose and spirit of this Agreement.

SIGNATURES:

EXECUTIVE ACKNOWLEDGES THAT HE HAS CAREFULLY READ AND FULLY UNDERSTANDS ALL THE PROVISIONS OF THIS AGREEMENT AND THE GENERAL RELEASE ATTACHED HERETO, AND HE IS ENTERING INTO THIS AGREEMENT VOLUNTARILY. EXECUTIVE ACKNOWLEDGES THAT THE PAYMENT HE IS RECEIVING IN EXCHANGE FOR EXECUTING THIS AGREEMENT IS GREATER THAN THAT WHICH HE WOULD BE ENTITLED TO IN THE ABSENCE OF THIS AGREEMENT. EXECUTIVE HAS NOT RELIED UPON ANY REPRESENTATION OR STATEMENT, WRITTEN OR ORAL, NOT SET FORTH IN THIS AGREEMENT.

EXECUTIVE

/s/ John L. Ridihalgh

John L. Ridihalgh

NEOPROBE CORPORATION

By: /s/ David C. Bupp

David C. Bupp, President

JOHN L. RIDIHALGH
2112 IUKA AVENUE
COLUMBUS, OHIO 43201

December 31, 1998

Neoprobe Corporation
425 Metro Place North
Suite 300
Dublin, Ohio 43017-1367

Dear Sirs:

I hereby resign as a director, officer and employee of Neoprobe Corporation effective as of the close of business today, December 31, 1998.

Very truly yours,

/s/ John L. Ridihalgh

John L. Ridihalgh

GENERAL RELEASE

The undersigned, John L. Ridihalgh, who resides at 2112 Iuka Avenue, Columbus, Ohio 43201 ("Mr. Ridihalgh") does hereby release

Neoprobe Corporation, a Delaware corporation with its principal place of business at 425 Metro Place North, Suite 400, Dublin, Ohio 43017-1367, its parent, subsidiary and affiliated entities and their respective directors, officers, employees, attorneys and agents and all of the successors, assigns and personal representatives of such persons (the "Neoprobe Parties"),

From any and all claims, causes of action and rights that Mr. Ridihalgh has or may have against any of the Neoprobe Parties, individually, jointly or in any representative or fiduciary capacity, whether or not Mr. Ridihalgh knows of them, and discharges the Neoprobe Parties, individually and jointly and in any representative or fiduciary capacity, from any further obligation or liability to Mr. Ridihalgh, including but not limited to, any claims which arose out of the employment relationship between Mr. Ridihalgh and Neoprobe Corporation or its termination;

For and in consideration of the amounts payable to Mr. Ridihalgh under the Separation Agreement dated October 21, 1998, between Neoprobe Corporation and Mr. Ridihalgh (the "Separation Agreement"), the receipt and sufficiency of which are hereby acknowledged.

This General Release specifically discharges any claims or charges of discrimination, including age discrimination, that Mr. Ridihalgh has or may have against the Neoprobe Parties under any federal, state or local statute, law, rule or regulation, including, but not limited to, any claim or cause of action asserted or which could be asserted under any of the following laws as they now exist or may be amended in the future:

Ohio Revised Code Chapter 4112 concerning discrimination;
Ohio's Workers' Compensation Law;
Ohio Whistleblowers Protection Act;
Title VII of the 1964 Civil Rights Act;
The 1866 Civil Rights Act;
The Civil Rights Act of 1991;
The Age Discrimination in Employment Act;
The Older Workers Benefit Protection Act;
The Americans with Disabilities Act;
The Fair Labor Standards Act of 1938;
The Equal Pay Act;
The Family and Medical Leave Act of 1993;
The Occupational Safety and Health Act of 1970;
The Employee Retirement Income Security Act of 1974;
The Consolidated Omnibus Budget Reconciliation Act of 1986;
Common law claims for wrongful discharge, unjust dismissal, or constructive discharge;
Common law claims for breach of any oral or written employment contract; and
Common law Claims for libel, slander or defamation.

This General Release, is not intended to and, does not release any right held by Mr. Ridihalgh, or discharge any obligation of any of the Neoprobe Parties: under any check payable to Mr. Ridihalgh's order which was properly issued within the last 6 months; for compensation for current periods; to indemnify or defend Mr. Ridihalgh under the charter or by-laws of Neoprobe Corporation or any of its parent, subsidiary or affiliated entities or under any policy of liability or errors and omissions insurance; that is a vested benefit under any

employee benefit plan; under any stock option or restricted stock purchase agreement that is vested and exercisable, subject to the express terms thereof; or under the Separation Agreement.

Mr. Ridihalgh hereby covenants and agrees with each of the Neoprobe Parties that he will not, directly or indirectly, commence or maintain any action, suit or proceeding concerning any matter as to which he has granted a release herein.

Mr. Ridihalgh represents and warrants to each of the Neoprobe Parties that he has duly executed and delivered this General Release, which constitutes his valid and legally binding obligation and is enforceable against him in

accordance with the terms hereof and that he has not assigned, transferred, conveyed or encumbered any claim, cause of action or right that he has or may have against any of the Neoprobe Parties.

Mr. Ridihalgh intends this General Release to be legally binding upon himself, his family, heirs, attorneys and agents, and his and their successors, assigns and personal representatives.

Mr. Ridihalgh understands that this General Release includes a release of claims under the Age Discrimination in Employment Act and the Older Workers Benefit Protection Act. He understands that this General Release does not waive rights or claims that arise after the date of its execution shown below. Further, Mr. Ridihalgh acknowledges he was advised by the Company that he may consult with legal counsel regarding the Separation Agreement and this General Release.

Mr. Ridihalgh acknowledges he has had at least twenty-one (21) days to review and consider this General Release; and, as a result, enters into this General Release willingly and voluntarily. To the extent that he has taken less than twenty-one (21) days to consider this General Release, he acknowledges that he has had sufficient time to consider this General Release and to consult with counsel and that he does not desire additional time.

Mr. Ridihalgh is aware as of that he has seven (7) days beyond the date of execution of this General Release shown below during which he may revoke the General Release by giving the Company written notice. Such notice should be delivered to Patricia Coburn, Vice President and General Counsel, at Neoprobe Corporation 425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367. Upon such notification by Mr. Ridihalgh, this General Release and the Separation Agreement will become null and void and shall have no force or effect as to any party, and, Mr. Ridihalgh will forfeit all money and other benefits of this General Release and the Separation Agreement.

This General Release may not be changed or terminated orally, but may only be changed or terminated by and instrument in writing signed by the party against whom the enforcement of such change or termination is sought.

The validity, performance and enforcement of this General Release are governed by the law of the State of Ohio.

IN WITNESS WHEREOF, Mr. Ridihalgh has executed and delivered this General Release on this 31st day of December, 1998.

BY SIGNING THIS GENERAL RELEASE, YOU LOSE RIGHTS YOU MAY HAVE TO BRING A LAWSUIT OR RECEIVE A RECOVERY ON ANY CLAIM AGAINST NEOPROBE CORPORATION ITS ASSOCIATES BASED ON ANY ACTIONS, FAILURES TO ACT, STATEMENTS, OR EVENTS THAT OCCURRED BEFORE THE DATE OF THIS GENERAL RELEASE, INCLUDING CLAIMS CONCERNING YOUR EMPLOYMENT WITH NEOPROBE OR ITS TERMINATION.

YOU ACKNOWLEDGE THAT THE PAYMENT YOU ARE RECEIVING IN EXCHANGE FOR EXECUTING THIS GENERAL RELEASE IS GREATER THAN THAT WHICH YOU WOULD BE ENTITLED TO IN THE ABSENCE OF THIS GENERAL RELEASE.

/s/ John L. Ridihalgh

John L. Ridihalgh

Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

EXHIBIT 10.4.32

NEOPROBE CORPORATION

&

EV PRODUCTS

SUPPLY AGREEMENT

DECEMBER 1997

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.

Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

<TABLE>

TABLE OF CONTENTS

<CAPTION>

</TABLE>

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

<TABLE>
<CAPTION>
<S> <C>

</TABLE>

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

SUPPLY AGREEMENT

THIS AGREEMENT entered into this 8th day of December 1997, between Neoprobe Corporation, a Delaware corporation with principle offices at 425 Metro Place North, Suite 300, Dublin, Ohio 43017 (hereinafter "NEOPROBE"), and eV PRODUCTS, a Division of II-VI Incorporated, located at 375 Saxonburg Blvd., Saxonburg, PA 16056 (hereinafter referred to as "eV").

WHEREAS, NEOPROBE is a biopharmaceutical company engaged in the development and marketing of proprietary products and methods useful in the treatment of various diseases including cancer; and

WHEREAS, among the products Neoprobe has under development and will market is a portable radiation detection device consisting of a control unit and hand-held probe; and

WHEREAS, eV manufactures certain crystals and associated hybrid electronics which are components of the probe; and WHEREAS, Neoprobe desires to purchase its requirements for crystals and associated electronics used in the probe exclusively from eV; and

WHEREAS, eV is willing to sell crystals and associated hybrid electronics to Neoprobe for the above-described purpose;

NOW, THEREFORE, in consideration of the mutual covenants exchanged herein, the parties agree as follows:

ARTICLE. DEFINITIONS

1.01 Affiliate. The term "Affiliate" as used herein shall mean with respect to any specified Person, any other Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified. For purposes of this definition, "control" including, with correlative meanings, the terms "controlled by" and "under common control with" means ownership directly or indirectly of more than thirty percent (30%) of the equity capital having the right to vote for election of directors in the case of a corporation and more than thirty percent (30%) of the beneficial interest in the case of a business entity other than a corporation.

1.02 Calendar Year. The term "Calendar Year" shall mean the consecutive twelve (12) month period beginning January 1 of a year and ending December 31 of such year.

1.03 Certificate of Release (or Certificate of Compliance). As used herein the term "Certificate of Release" is used to mean the document supplied by eV with each lot or batch of Crystals and/or Modules stating that all Crystals and/or Modules (as defined in Section 1.07) manufactured by eV meet or exceed the Specifications attached hereto as Schedule 1.07.

1.04 Crystal. As used herein, the term "Crystal" shall mean the active detection medium of the hand-held probe referred to above, consisting of a Cadmium-Zinc-Telluride (CZT) crystal of dimensions and shape defined by the Specifications.

1.05 Effective Date. The "Effective Date" of this Agreement shall be the date first written herein above.

1.06 FDA and Act. The term "FDA" and the term "Act" as used herein shall mean the United States Food and Drug Administration or any successor agency having the administrative authority to regulate the approval for testing or marketing of human pharmaceutical or biological therapeutic products and medical devices in the United States; and the term "Act" as used herein refers to the Federal Food, Drug & Cosmetic Act (21 U.S.C. '301 et seq.) and the regulations promulgated thereunder.

1.07 Crystals and/or Modules. As used herein the term "Crystals and/or Modules" shall mean a Crystal having certain attached electronic components and circuits as described in the Specifications attached hereto as Schedule 1.07 and incorporated herein.

1.08 Person. As used herein the term "Person" shall mean any individual, corporation, partnership, business trust, business association, governmental entity, governmental authority or other legal entity.

1.09 Schedules. The Schedules to this Agreement are listed below and

are an integral part of this Agreement and are incorporated herein

<TABLE>

SCHEDULE	DESCRIPTION
<S>	<C>
1.07	Specifications
2.02	Crystal and/or Modules Price
2.08	Neoprobe Competitors
9.01	Crystal Ingot Price

</TABLE>

ARTICLE II. FORECAST AND SUPPLY OF CRYSTALS AND/OR MODULES

2.01 Supply of Product. Neoprobe hereby agrees to buy and eV hereby agrees to sell to Neoprobe all of Neoprobe's requirements for the Crystals and/or

Modules. eV shall manufacture the Crystals and/or Modules in accordance with the Specifications.

2.02 Price of Crystals and/or Modules. The price of the Crystals and/or Modules supplied by eV to Neoprobe shall be as set forth in Schedule 2.02.

2.03 Working Forecast. Within fifteen (15) days after the Effective Date, Neoprobe shall deliver to eV a forecast of the quantity of Crystals and/or Modules required for the initial 24 month period from the Effective Date (the "Initial Forecast"), and shall thereafter update such forecast on a monthly basis and provide it to eV on the first day of each month, so that the parties have a twenty-four (24) month rolling forecast of the estimated requirements for the Crystals and/or Modules. Any change to the working forecast of +/- 25% or more requires notification and negotiation prior to acceptance.

2.04 Long-Term Business Forecast. Within thirty (30) days after the Effective Date, Neoprobe shall deliver to eV a forecast of the quantity of Crystals and/or Modules required per year for each year from the Effective Date to December 31, 2002. This long-term forecast is for planning purposes only; actual production scheduling and order placements shall be made against the working forecast of Section 2.03.

2.05 Placement of an Order. Neoprobe shall initiate an order for Crystals and/or Modules by sending to eV a purchase order corresponding to Neoprobe's forecasted requirements for a Calendar Year. The first or "initial" purchase order shall be for the period starting January 1, 1998 and ending December 31, 1998, and shall be for a quantity of Crystals and/or Modules corresponding to the Initial Forecast less any pre-existing orders. The "initial" purchase order shall be placed no later than 15 working days from the Effective Date. Thereafter, Neoprobe shall place purchase orders covering each 12-month period on November 1 of each Calendar Year during the term of the Agreement. Orders may be placed in writing, by e-mail or by facsimile.

2.06 eV's Obligation to Meet Requirements. eV agrees to supply, in each Calendar Year, all orders placed by Neoprobe up to one hundred percent (100%) of Neoprobe's Calendar Year order. eV shall attempt to supply any quantity of Crystals and/or Modules ordered by Neoprobe in excess of the order.

2.07 Neoprobes Obligation to Meet Requirements. Neoprobe agrees to receive and/or pay for a minimum of 75% of the Crystals and/or Modules specified by a Neoprobe purchase order placed pursuant to Section 2.05.

2.08 Exclusivity. During the term of this Agreement and any extensions thereof, eV shall not supply Crystals and/or Modules for use in hand-held, radiation detecting, medical devices to any third party listed as specified in Schedule 2.08 attached hereto, as such Schedule may be amended from time to time

by Neoprobe. In the event the size (quantity and dollar value) of the order placed by Neoprobe pursuant to Section 2.05 does not increase on a yearly basis during the

initial term of the Agreement, eV shall have the right to market and sell Crystals to third parties including those listed on Schedule 2.08.

2.09 Shipment of and Payment for Crystals and/or Modules. eV shall ship all Crystals and/or Modules C.I.P. Neoprobe's designated facility. Neoprobe shall pay eV for Crystals and/or Modules within thirty (30) days after receipt of the invoice for Crystals and/or Modules and receipt of a Certificate of Release for the Crystals and/or Modules.

ARTICLE III. TOOLING

3.01 Ownership of Tooling. eV shall procure and/or produce upon mutual pre-approvals, all tools, dies, jigs, and fixtures required to manufacture the Crystals and/or Modules. eV shall invoice Neoprobe, at mutually pre-approved amounts and intervals, for all labor and materials required to procure or produce all such tooling, jigs, fixtures, and the like, and upon payment Neoprobe shall obtain unrestricted ownership thereof and to the detailed assembly drawings for such tooling. Neoprobe shall pay eV for all such items within thirty (30) days after receipt of the invoice. All replacement tools required shall also be owned by Neoprobe upon payment by Neoprobe of the cost thereof. Termination of this Agreement shall result in the surrender by eV of all tools, drawings, for tools, replacement tools, fixtures and jibs, paid for and owned by Neoprobe.

3.02 Tooling Maintenance. At all times under this Agreement during which eV has possession of Neoprobe tooling, eV shall have the responsibility of performing normal, expected maintenance and repairs. The cost of modifying or replacing or rebuilding Neoprobe owned tooling worn through usage or in need of major repair for reasons other than lack of periodic maintenance shall be borne by Neoprobe. eV shall be responsible for such costs if such costs are incurred due to a failure to perform proper maintenance. Payment for the cost of any other required tooling changes shall be negotiated by the parties prior to any change. All modifications and major repairs to tooling must be approved in advance by Neoprobe. eV will obtain a warranty on all tooling purchased by eV for Neoprobe that warrants the tooling against defect during its normal useful life and that obligates the supplier to replace without cost any defective tooling. Neoprobe shall have the right to inspect all tooling during normal business hours. eV agrees that it will obtain agreement from any third parties that will be given possession of Neoprobe owned tooling that such third parties will permit Neoprobe to inspect tooling during normal business hours.

3.03 Tooling Removal. Upon expiration or termination of this Agreement, Neoprobe shall have the right to take possession of and remove from the eV facility or from the facility of any third party, all tooling owned by Neoprobe and all confidential information owned by Neoprobe upon request and upon any expiration, cancellation, or termination of this Agreement. The cost of removing and transferring such tooling shall be borne by Neoprobe. In addition to jigs, fixtures, and tooling, Neoprobe may take possession of a detailed assembly drawing for such

tooling subject to the conditions stated. eV assumes no patent responsibility and gives no express warranty whatsoever on tooling and equipment removed and,

other than warranty of title, such tooling is removed "as is".

ARTICLE IV. TERM AND TERMINATION

4.01 Term. Upon execution by both parties, this Agreement shall be effective as of the date first set forth above and shall expire on December 31, 2002; provided however, that unless either party notifies the other in writing no later than October 31 of that year, the Agreement shall automatically renew for an additional three (3) year period, to end December 31, 2005.

4.02 Termination for Material Breach. Either party may terminate this Agreement in the event of a material breach by the other, provided that the party asserting such breach first serves written notice of the alleged breach on the offending party and such alleged breach is not cured within (60) days of said notice.

4.03 Termination for Insolvency. In the event that either party shall become insolvent or shall suspend its business, or shall file a voluntary petition or any answer admitting the jurisdiction of the court and the material allegations of, or shall consent to, an involuntary petition pursuant to or purporting to be pursuant to any reorganization or insolvency law of any jurisdiction, or shall make an assignment for the benefit of creditors, or shall apply for or consent to the appointment of a receiver or trustee of all or a substantial part of its property (such party, upon the occurrence of any such event, a "Bankrupt Party"), then to the extent permitted by the law the other party hereto may thereafter immediately terminate this Agreement by giving notice of termination to the Bankrupt Party.

4.04 Rights or Obligations Upon Termination. Termination of this Agreement, for whatever reason, shall not affect any rights or obligations which may have accrued to either party prior to the effective date of termination.

4.05 Confidentiality Upon Termination. The obligations of confidentiality in Article IX and of Indemnification as provided in Article VIII shall survive the expiration or termination of this Agreement.

ARTICLE V. REGULATORY

5.01 Access to eV's Facilities. Neoprobe shall have access to eV's manufacturing facility during regular business hours to inspect relevant portions of eV's assembly and test equipment and facilities. In addition, Neoprobe shall have access to any relevant books, records and other documentation of eV reasonably necessary to assure that eV is in compliance with all applicable federal, state and local rules and regulations.

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

5.02 Regulatory Support. eV shall provide Neoprobe at no additional charge, with relevant documents and technical information pertaining to the Crystals and/or Modules, that Neoprobe may require in support of its regulatory filings. In the event additional regulatory support over and above that just described is required by Neoprobe, eV shall provide such support and shall charge Neoprobe for the labor and materials used.

5.03 The Manufacturing Facility. eV represents and warrants that it shall use its best efforts to maintain the relevant portions of its facilities in such a fashion as to be in compliance with applicable federal, state and local rules and regulations.

ARTICLE VI. REPRESENTATIONS & WARRANTIES

6.01 Product Warranty. eV hereby represents and warrants that all Crystals and/or Modules sold to Neoprobe hereunder at the time of shipment to Neoprobe shall have been:

(i) manufactured in accordance with the Specifications;

(ii) manufactured, packaged, stored and shipped in conformity with all applicable requirements; and

(iii) title to all Crystals and/or Modules sold hereunder shall pass to Neoprobe as provided herein free and clear of any security interest, lien or other encumbrance.

ARTICLE VII. INDEMNIFICATION

7.01 eV Indemnity. eV agrees to indemnify, protect and defend Neoprobe and hold Neoprobe harmless from and against any claims, damages, liability, harm, loss, costs, penalties, lawsuits, threats of lawsuit, recalls or other governmental action, including reasonable attorneys' fees, brought or claimed by any third party which (i) arise as the result of eV's breach of this Agreement or of any warranty or representation made to Neoprobe under this Agreement; or, (ii) which result from any claim made against Neoprobe in connection with eV's supply of defective Crystals and/or Modules to Neoprobe.

7.02 Neoprobe Indemnity. Neoprobe agrees to indemnify, protect, and defend eV and hold eV harmless from and against any claims, damages, liabilities, harm, loss, costs, penalties, lawsuits, threats of lawsuit, recalls or other governmental action, including reasonable attorneys' fees, brought or claimed by any third party, which (i) arise out of Neoprobe's breach of this Agreement or of any warranty or representation to eV under this Agreement; or, arise in connection with Neoprobe's sale, marketing or distribution of Devices containing the Crystals and/or Modules or other activities or actions in connection with the Crystals and/or Modules.

7.03 Notice of Defense of Actions. Each party shall give the other prompt notice of any potential liability, and promptly after receipt by a party claiming indemnification under this Article VII of notice of the commencement of any action, such indemnified party shall notify the indemnifying party of the commencement of the action and generally summarize such action. The indemnifying party shall have the right to participate in and to assume the defense of such action with counsel of its choosing. An indemnifying party shall not have the right to direct the defense in such an action of an indemnified party if counsel to such indemnified party has reasonably concluded that there may be defenses available to it that are different from or additional to those available to the indemnifying party; provided, however, that in such event, the indemnified party shall bear the fees and expenses of separate counsel reasonably satisfactory to the indemnifying party. The failure to notify an indemnifying party promptly of the commencement of any such action, if prejudicial to the ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party under this Article VII. No settlement of any claim or action may be made without the consent of the indemnifying party (which consent shall not be unreasonably withheld or delayed).

ARTICLE VIII. CONFIDENTIALITY

8.01 Confidential Information. Each party ("Receiving Party") shall maintain in confidence all information heretofore or hereafter disclosed by the other ("Disclosing Party") during the term of this Agreement and for a period of five (5) years following the termination or expiration of the term, which the Receiving Party knows or has reason to know are trade secrets and other proprietary information owned by or licensed to the other, including, but not limited to information relating to the Crystals and/or Modules, the Device or the Crystal as well as licenses, patents, patent applications, technology or processes and business plans of the other party, including, without limitation, information designated as confidential in writing from one party to the other (all of the foregoing hereinafter referred to as "Confidential Information"),

and shall not use such Confidential Information except as permitted by this Agreement or disclose the same to anyone other than those of its officers, directors or employees as are necessary in connection with such party's activities as contemplated by this Agreement. Each party shall use its best efforts to ensure that its officers, directors and employees do not disclose or make any unauthorized use of such Confidential Information. Each party shall notify the other promptly upon discovery of any unauthorized use or disclosure of the other's Confidential Information.

8.02 Limitations on Confidentiality. The obligation of confidentiality contained in this Article VIII shall not apply to the extent that: i) the Receiving Party is required to disclose information by applicable law, regulation or order of a governmental agency or a court of competent jurisdiction; ii) the Receiving Party can demonstrate that the disclosed information was at the time of disclosure already in the public domain other than as a result of actions or failure to act of the Receiving Party, its officers, directors or employees, in violation hereof; iii) the

disclosed information was rightfully known by the Receiving Party (as shown by its written records) prior to the date of disclosure to the Receiving Party in connection with this Agreement; or iv) the disclosed information was received by the Receiving Party on an unrestricted basis from a source which is not under a duty of confidentiality to the other party.

8.03 Disclosure Required by Law. In the event that the Receiving Party shall be required to make disclosure pursuant to the provisions of Section 8.02 as a result of the issuance of a court order or other government process, the Receiving Party shall promptly, but in no event more than forty-eight (48) hours after learning of such court order or other government process, notify, by personal delivery or facsimile, all pursuant to Section 12.04 hereof, the Disclosing Party and, at the Disclosing Party's expense, the Receiving Party shall: a) take all reasonably necessary steps requested by the Disclosing Party to defend against the enforcement of such court order or other government process, and b) permit the Disclosing Party to intervene and participate with counsel of its choice in any proceeding relating to the enforcement thereof.

8.04 Equitable Remedies for Breach of Confidentiality. The parties acknowledge that their failure to comply with the provisions of Section 8.01 of this Article VIII may cause irreparable harm and damage to the name and reputation of the other party for which no adequate remedy may be available at law. Accordingly, the parties agree that upon a breach by a party of such provisions, the non-breaching party may, at its option, enforce the obligations of the breaching party under those provisions by seeking equitable remedies in a court of competent jurisdiction.

ARTICLE IX. PROTECTION OF SUPPLY

9.01 Disaster Recovery. The Parties agree that it is in the best interest of both Parties for Neoprobe to have assurance of an uninterrupted supply of Crystals for use in the Crystals and/or Modules. Accordingly, eV agrees that no later than one hundred twenty (120) days after the Effective Date of this Agreement it will start to store, in an off-site storage location (storage), an amount of crystal material sufficient to produce a twelve (12) month supply of Crystals. This will be accomplished by taking the mass equivalent (in kilograms) of one (1) ingot per month from the eV production furnaces and placing it in storage immediately subsequent to performing a standard characterization and qualification of said material. The amount of crystal material to be maintained in storage will be determined by reviewing the Forecast as specified in Section 2.03 and the projected fabrication yield. The location of the off-site storage location shall be determined by mutual agreement.

9.02 Placement of Ingot Order. Neoprobe shall initiate an order for the required mass of Crystal by sending to eV a purchase order corresponding to the

mass equivalent to a 12 month supply, to be placed in the storage location during the first sixteen (16) month period of the Agreement. This order is to be placed no later than fifteen (15) days following the issuance of the Initial Forecast. The price

of the mass equivalent supplied by eV to storage shall be as set forth in Schedule 9.02 attached hereto and incorporated herein. Neoprobe shall pay eV for the mass equivalent within thirty (30) days after receipt of material certification and transfer into storage. The total mass of Crystal in storage shall be reviewed by both Neoprobe and eV with each update to the fifteen (15) month rolling forecast (as specified in Section 2.03). Neoprobe shall initiate subsequent purchase orders to increase the total mass in storage to maintain a 12 month supply per the latest forecast. In the event that Neoprobe elects to consume Crystal that resides in storage, eV shall deduct from the Crystals and/or Modules price, the respective value of the Crystal.

9.03 Close of eV's Business. During the term of this Agreement, in the event eV shall cease to do business, eV shall notify Neoprobe at least ninety (90) days prior to going out of business and Neoprobe shall have the following rights:

a) Right to purchase on commercial terms no more onerous than those governing this Agreement at the time of notification by eV of its intent to cease business, all work-in-progress relating to this Agreement including but not limited to, crystal ingots, Crystals and/or Modules; and

b) Right of first refusal to purchase on reasonable commercial terms all manufacturing equipment, technology and know-how necessary for the production of Crystals and/or Modules.

ARTICLE X. MISCELLANEOUS

10.01 Force Majeure. Neither of the parties to this Agreement shall be liable to the other party for any loss, injury, delay, damage or other casualty suffered or incurred by such other party due to strikes, lockouts, accidents, fire, delays in manufacture, transportation or delivery of material, embargoes, inability to ship, explosions, floods, war, governmental action or any other cause similar thereto which is beyond the reasonable control of such other party and any failure or delay by a party in the performance of any of its obligations under this Agreement shall not be considered as a breach of this Agreement due to, but only so long as there exists, one or more of the foregoing causes; provided, however, that if eV cannot complete an order within ninety (90) days due to any such cause, Neoprobe may cancel the order without liability to eV.

10.02 Relationship. This Agreement shall not be construed to create between the parties hereto or their respective successors or permitted assignees the relationship of principal and agent, joint-venturers, co-partners or any other similar relationship, the existence of which is hereby expressly denied by each party

and each of the parties shall in all matters connected to this Agreement be independent contractors. Neither party shall be liable to any third party in any way for engagement, obligation, contract, representation or transaction or for any negligent act or omission to act of the other except as expressly provided.

10.03 Governing Law. The provisions of this Agreement shall be governed in all respects by the laws of the State of Pennsylvania.

10.04 Notice. All notices, proposals, submissions, offers, approvals, agreements, elections, consents, acceptances, waivers, reports, plans, requests, instructions and other communications required or permitted to be made or given hereunder (all of the foregoing hereinafter collectively referred to as "Communications") shall be in writing, and shall be deemed to have been duly made or given when: a) delivered personally with receipt acknowledged; b) sent by registered or certified mail or equivalent, return receipt requested, or c) sent by facsimile or telex (which shall promptly be confirmed by a writing sent by registered or certified mail or equivalent, return receipt requested), or d) sent by recognized overnight courier for delivery within twenty-four (24) hours, in each case addressed or sent to the parties at the following addresses and facsimile numbers or to such other or additional address or facsimile as any party shall hereafter specify by Communication to the other parties:

To Neoprobe: David C. Bupp President
Neoprobe Corporation
425 Metro Pl. N. , Suite 400
Dublin, OH 43017

Fax No.: (614)793-7520

Copy To: P.A. Coburn Legal Counsel

To eV: Bruce Glick
Division Manager
eV PRODUCTS, a Division of II-VI Incorporated
375 Saxonburg Blvd.
Saxonburg, Pa 16056

Fax No.: (412) 352-4435

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

Copy to: Robert D. German
Sherrard, German and Kelly
1, Oliver Plaza, 35th Floor
Pittsburgh, PA 15222

Notice of change of address shall be deemed given when actually received, all other Communications shall be deemed to have been given, received and dated on the earlier of: (i) when actually received, or on the date when delivered personally; (ii) one (1) day after being sent by facsimile, cable, telex (each promptly confirmed by a writing as aforesaid) or overnight courier; or four (4) business days after mailing.

10.05 Legal Construction. In case any one or more of the provisions contained in this Agreement shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable provision which shall be a reasonable substitute for such invalid and unenforceable provision in light of the tenor of this Agreement, and, upon so agreeing, shall incorporate such substitute provision in this Agreement.

10.06 Entire Agreement, Modifications, Consents, Waivers. This Agreement together with the Schedules attached hereto contains the entire agreement of the parties with respect to the subject matter hereof. This Agreement may not be modified or amended except by an instrument or instruments in writing signed by the party against whom enforcement of any such modification or amendment is sought. Each party hereto may, by an instrument in writing, waive compliance by the other party hereto with any term or provision of this Agreement on the part of such other party to be performed or complied with. The waiver by either party hereto of a breach of any term or provision of this

Agreement shall not be construed as a waiver of any subsequent breach.

10.07 Copyright. Copyright in any drawing, computer software, manual or other documentation (hereinafter referred to as the "Materials"), produced by eV solely as a result of its manufacture and release of the Crystals and/or Modules pursuant to this Agreement shall belong to Neoprobe and eV agrees to take all necessary steps and execute all necessary documentation, at Neoprobe's expense, to assign the copyright in such Materials to Neoprobe.

10.08 Section Headings; Construction. The section headings and titles contained herein are each for reference only and shall not be deemed to affect the meaning or interpretation of this Agreement. The words "hereby", "herein", "herein above", "hereinafter", "hereof" and "hereunder", when used anywhere in this Agreement, refer to this Agreement as a whole and not merely to a subdivision in which such words appear, unless the context otherwise requires. The singular shall include the plural, the conjunctive shall include the disjunctive and the

masculine gender shall include the feminine and neuter, and vice versa, unless the context otherwise requires.

10.09 Execution Counterparts. This Agreement may be executed in any number of counterparts and each such duplicate counterpart shall constitute an original, any one of which may be introduced in evidence or used for any other purpose without the production of its duplicate counterpart. Moreover, notwithstanding that any of the parties did not execute the same counterpart, each counterpart shall be deemed for all purposes to be an original, and all such counterparts shall constitute one and the same instrument, binding on all of the parties hereto.

ARTICLE XI. LIMITATION OF LIABILITY

IN NO EVENT SHALL EITHER PARTY NOR ANY OF ITS RESPECTIVE AFFILIATES BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, including, but not limited to, loss of profits or revenue, loss of use of any equipment, cost of capital, down time costs, delays, or claims of customers of any of them or other third parties for such special, indirect, incidental or consequential damages.

ARTICLE XII. BINDING EFFECT

Neither party may directly or indirectly assign, delegate, encumber or in any other manner transfer any of its rights, remedies, obligations, liabilities or interests in or arising under this Agreement, without the prior consent of the other, which consent shall not be unreasonably withheld or delayed; provided, however, that a party may, upon prior written notice, but without obtaining prior consent, directly or indirectly assign, delegate, encumber or in any other manner transfer any of its rights, remedies, obligations, liabilities or interests in or arising under this Agreement, to: i) any Affiliate of a party, or ii) any entity which succeeds, by purchasing stock or assets, by merger or otherwise, to all or substantially all of the assets of the assigning party. Any attempted assignment, delegation, encumbrance or other transfer in violation of this Agreement shall be void and of no effect, and shall be a material breach hereof.

IN WITNESS WHEREOF, the parties have cause this Agreement to be executed as of the day and year first written above.

(Signature Page - Page 13...)

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

NEOPROBE CORPORATION eV PRODUCTS
Division of II-VI Incorporated

By: /s/ David C. Bupp By: /s/ Francis J. Kramer
David C. Bupp Francis J. Kramer
President, COO President, COO
II-VI Incorporated

Date: December 8, 1997 Date: 12/16/97

cmf971208

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

SCHEDULE 1.07

SPECIFICATIONS

The Specifications for the Crystal and the Crystals and/or Modules are those contained in the following documents:

12 mm Probe Specification; Document number ***; May 15, 1997

19 mm Probe Specification; Document number ***; May 15, 1997

*** mm dia. X *** mm thick CdZnTe crystal: Neoprobe dwg.***

*** mm dia. X ***mm thick CdZnTe crystal: Neoprobe dwg.***

eV acknowledges that as of the Effective Date it has a copy of the most current version of the applicable documents and drawings listed above

(I)

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

SCHEDULE 2.02

<TABLE>
CRYSTALS AND/OR MODULES PRICE
<CAPTION>

ITEM	DESCRIPTION	QTY	UNIT PRICE
<S>	<C>	<C>	<C>
1	eV-290; 12 mm re-useable probe	250-499	***
		500-999	***
		1000-2499	***
		2500-4999	***
		5000-9999	***
		10,000+	***
2	eV-291; 19mm re-usable probe	250-499	TBA

		500-999	TBA	
		1000-2499	TBA	
		2500-4999	TBA	
		5000-9999	TBA	
		10,000+	TBA	
3	CdZnTe detector crystal, *** mm dia. X *** mm thick	100-249	***	
		250-499	***	
		500-999	***	
		1,000+	***	
4	CdZnTE detector crystals,*** mm dia. X *** mm thick	100-249	***	
		250-499	***	
		500-999	***	
		1000+	***	

</TABLE>

1) Prices are correct as of November 30, 1997 and are subject to revision annually

2) Prices are valid for Detector specification as per Schedule 1.07 of Supplier Agreement dated November 21, 1997. Any change in specification may result in a revision of these prices.

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

SCHEDULE 2.08

NEOPROBE COMPETITORS*

1. ***
2. ***
3. ***
4. ***
5. ***
6. ***
7. ***
8. ***
9. ***
10. ***
11. ***
12. ***

*Includes Affiliates

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.
Omitted portions of this Exhibit are subject to a Request for Confidential Treatment under Rule 24b-2.

SCHEDULE 9.02

CRYSTAL INGOT PRICE

CdZnTe material costs us *** per kilogram to grow. A typical ingot yields *** kilograms of good CdZnTe (before yield losses). According to latest forecasts, we will need to dedicate *** furnaces to the growth of material for Neoprobe detectors. This equates to *** kilograms of material; therefore, a ***-month supply of CdZnTe, at the current estimated detector production rate, will cost ***.

Text which has been omitted and filed separately under Rule 24b-2, pursuant to which Neoprobe Corporation has requested confidential treatment of this information, has been replaced by "***" in this Exhibit.

Exhibit 11.1

<TABLE>

NEOPROBE CORPORATION AND SUBSIDIARIES
COMPUTATION OF NET LOSS PER SHARE

<CAPTION>

	Year Ended December 31,		
	1996	1997	1998
<S>	<C>	<C>	<C>
Net Loss	$(20,969,143)	$(23,246,528)	$(28,032,752)
Weighted average number of shares outstanding:			
Weighted average common shares outstanding beginning of period	16,966,814	22,586,527	22,763,430
Weighted average common shares issued during period	2,776,835	148,115	78,802
Weighted average number of shares outstanding used in computing basic net loss per share	19,743,649	22,734,642	22,842,232
Weighted average number of shares used in computing fully diluted net loss per share	19,743,649	22,734,642	22,842,232
Earnings (Net Loss) Per Share:			
Basic	$(1.06)	$(1.02)	$(1.23)
Fully diluted	$(1.06)	$(1.02)	$(1.23)

</TABLE>

Exhibit 21.1

SUBSIDIARIES OF REGISTRANT

Neoprobe Europe AB, a Swedish corporation

Neoprobe (Israel), Ltd., an Israeli limited liability company

Neoprobe-Peptor JV - L.L.C.

Cira Technologies, Inc.

Exhibit 24.1

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 30th day of March, 1999.

/s/ Melvin D. Booth

Melvin D. Booth

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in- fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to

such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 8th day of March, 1999.

/s/ David C. Bupp

David C. Bupp

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of

Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 4th day of March, 1999.

/s/ John S. Christie

John S. Christie

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 8th day of March, 1999.

/s/ Julius R. Krevans

Julius R. Krevans

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp and Patricia A. Coburn to be his agents and attorneys-in- fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 4th day of March, 1999.

/s/ Brent L. Larson

Brent L. Larson

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such

Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 26th day of March, 1999.

/s/ Michael P. Moore

Michael P. Moore

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of

which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 3rd day of March, 1999.

/s/ J. Frank Whitley, Jr.

J. Frank Whitley, Jr.

POWER OF ATTORNEY

The undersigned who is a director or officer of Neoprobe Corporation, a Delaware corporation (the "Company");

Does hereby constitute and appoint David C. Bupp, Brent L. Larson and Patricia A. Coburn to be his agents and attorneys-in-fact;

Each with the power to act fully hereunder without the other and with full power of substitution to act in the name and on behalf of the undersigned;

To sign and file with the Securities and Exchange Commission the Annual Report of the Company on Form 10-K, and any amendments or supplements to such Annual Report; and

To execute and deliver any instruments, certificates or other documents which they shall deem necessary or proper in connection with the filing of such Annual Report, and generally to act for and in the name of the undersigned with respect to such filings as fully as could the undersigned if then personally present and acting.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

This Power of Attorney may be executed in any number of counterparts, each of which shall have the same effect as if it were the original instrument and all of which shall constitute one and the same instrument.

IN WITNESS WHEREOF, I have executed this Power of Attorney this 5th day of March, 1999.

/s/ James F. Zid

James F. Zid

EXHIBIT 24.2

SECRETARY'S CERTIFICATE

I, Patricia A. Coburn, certify that I am the duly elected, qualified and acting Assisting Secretary of Neoprobe Corporation, a Delaware corporation (the "Corporation"), that I am authorized and empowered to execute this Certificate on behalf of the Corporation with respect to its Annual Report on Form 10-K for the fiscal year ended December 31, 1998 and further certify that the following is a true, complete and correct copy of a resolution adopted by the Board of Directors of the Corporation on February 11, 1999, which resolution remains in full force and effect as of the date of this certificate:

> RESOLVED, that each representative, officer or director who may be required to execute the Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 1998 and any amendment thereof be, and each of them hereby is, authorized to execute a Power of Attorney appointing David C. Bupp, Brent L. Larson and Patricia A. Coburn as his true and lawful attorney and agent to execute in his name, place and stead (in any capacity) the Annual Report on Form 10-K and any amendments thereto, and all instruments necessary or in connection therewith, and to file the same with the Commission, each of which attorney and agent shall have the power to do and perform in the name of and on behalf of each said representative, officer and director, or both, as the case may be, every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as such representative, officer or director might or could do in person.

IN WITNESS WHEREOF, I have hereunto set my hand as of March 30, 1999.

/s/ Patricia A. Coburn

Patricia A. Coburn, Assistant Secretary

<TABLE> <S> <C>

<ARTICLE> 5

<S> <C>
<PERIOD-TYPE> 12-MOS
<FISCAL-YEAR-END> DEC-31-1998
<PERIOD-START> JAN-01-1998
<PERIOD-END> DEC-31-1998
<CASH> 3,054,936
<SECURITIES> 448,563
<RECEIVABLES> 2,146,633
<ALLOWANCES> 77,000
<INVENTORY> 1,578,912
<CURRENT-ASSETS> 8,019,472
<PP&E> 3,073,931
<DEPRECIATION> 1,654,661
<TOTAL-ASSETS> 11,994,199
<CURRENT-LIABILITIES> 7,012,740
<BONDS> 155,816
<PREFERRED-MANDATORY> 0
<PREFERRED> 0
<COMMON> 22,888
<OTHER-SE> 4,802,755
<TOTAL-LIABILITY-AND-EQUITY> 11,994,199
<SALES> 5,832,695
<TOTAL-REVENUES> 5,832,695
<CGS> 1,403,951
<TOTAL-COSTS> 1,403,951
<OTHER-EXPENSES> 12,960,208
<LOSS-PROVISION> 0
<INTEREST-EXPENSE> 189,785
<INCOME-PRETAX> (28,032,752)
<INCOME-TAX> 0
<INCOME-CONTINUING> (28,032,752)
<DISCONTINUED> 0
<EXTRAORDINARY> 0
<CHANGES> 0
<NET-INCOME> (28,032,752)
<EPS-PRIMARY> (1.23)
<EPS-DILUTED> (1.23)

</TABLE>