

SCHEDULE 14A
(RULE 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE SECURITIES
EXCHANGE ACT OF 1934

Filed by the Registrant [X]

Filed by a Party other than the Registrant []

Check the appropriate box:

[X] Preliminary Proxy Statement [] Confidential, for use of the
Commission Only (as permitted by
Rule 14a-6(e)(2))

[] Definitive Proxy Statement

[] Definitive Additional Materials

[] Soliciting Material Pursuant to Rule 14a-11(c) or Rule 14a-12

INTEGRATED SURGICAL SYSTEMS, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

[X] No fee required.

[] Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed
pursuant to Exchange Act Rule 0-11:

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

 [] Fee paid previously with preliminary materials.

[] Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

INTEGRATED SURGICAL SYSTEMS, INC.

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON APRIL 27, 1999

To the Stockholders of Integrated Surgical Systems, Inc.:

Notice is hereby given that the Annual Meeting of Stockholders of Integrated Surgical Systems, Inc., a Delaware corporation (the "Company"), will be held on April 27, 1999, at the Company's executive offices, 1850 Research Park Drive, Davis, California 95616-4884, at the hour of 9:00 A.M., for the following purposes.

1. To elect six Directors of the Company to serve until the next annual meeting of stockholders and until their successors are duly elected and qualified.
2. To approve an amendment to the Company's Restated Certificate of Incorporation to increase the authorized capital stock by increasing the number of authorized shares of common stock from 15 million to 50 million shares.
3. To approve the issuance upon conversion of the Company's Series A Convertible Preferred Stock of more than 1,127,674 shares of common stock, representing 20% of the outstanding shares of common stock on the date of the sale of the Series A Convertible Preferred Stock, as required by Nasdaq rules.
4. To approve the issuance upon conversion of the Company's Series B Convertible Preferred Stock of more than 1,148,807 shares of common stock, representing 20% of the outstanding shares of common stock on the date of the sale of the Series B Convertible Preferred Stock, as required by Nasdaq rules.
5. To ratify the appointment of Ernst & Young LLP as the Company's independent auditors for the year ending December 31, 1999.
6. To transact such other business as may properly come before the Annual Meeting or any adjournments thereof.

Only stockholders of record at the close of business on March 17, 1998 are entitled to notice of and to vote at the Annual Meeting or any adjournments thereof.

A list of stockholders entitled to vote at the Annual Meeting will be open to examination by any stockholder for any purpose germane to the meeting, at the executive offices of the Company, 1850 Research Park Drive, California 95616-4884, for a period of ten days prior to the Annual Meeting. Such list also shall be available during the Annual Meeting.

By Order of the Board of Directors

MARK W. WINN
Secretary

Davis, California
March 26, 1999

IMPORTANT:

WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE PROMPTLY COMPLETE, SIGN AND DATE THE ENCLOSED PROXY, WHICH IS SOLICITED BY THE BOARD OF DIRECTORS OF THE COMPANY, AND RETURN IT TO THE COMPANY. THE PROXY MAY BE REVOKED AT ANY TIME BEFORE IT IS VOTED, AND STOCKHOLDERS EXECUTING PROXIES MAY ATTEND THE MEETING AND VOTE IN PERSON SHOULD THEY SO DESIRE.

INTEGRATED SURGICAL SYSTEMS, INC.
1850 RESEARCH PARK DRIVE
DAVIS, CALIFORNIA 95616-4884
(530) 792-2600

PROXY STATEMENT

The Board of Directors of Integrated Surgical Systems, Inc. (the "Company") presents this Proxy Statement and the enclosed proxy card to all stockholders and solicits their proxies for the Annual Meeting of Stockholders to be held on Tuesday, April 27, 1999. The record date of this proxy solicitation is March 17, 1999. All proxies duly executed and received will be voted on all matters presented at the Annual Meeting in accordance with the instructions given by such proxies. In the absence of specific instructions, proxies so received will be voted FOR the named nominees for election to the Company's Board of Directors (Proposal 1), FOR the amendment to the Company's Restated Certificate of Incorporation to increase the authorized capital stock by increasing the number of authorized shares of Common Stock from 15 million to 50 million shares (Proposal 2), FOR the approval of the issuance upon conversion of the Company's Series A Convertible Preferred Stock of more than 1,127,674 shares of Common Stock, representing 20% of the outstanding shares of Common Stock on the date of the sale of the Series A Convertible Preferred Stock, as required by the rules of The Nasdaq Stock Market, Inc. (Proposal 3), FOR the approval of the issuance upon conversion of the Company's Series B Convertible Preferred Stock of more than 1,148,807 shares of Common Stock, representing 20% of the outstanding shares of Common Stock on the date of the sale of the Series B Convertible Preferred Stock, as required by Nasdaq rules (Proposal 4), and FOR ratification of the appointment of Ernst & Young LLP as the Company's independent auditors for the year ending December 31, 1999 (Proposal 5). The Board of Directors does not anticipate that any of its nominees will be unavailable for election and does not know of any matters that may be brought before the Annual Meeting other than those listed in the Notice of Annual Meeting.

In the event that any other matter should come before the Annual Meeting or that any nominee is not available for election, the persons named in the enclosed proxy will have discretionary authority to vote all proxies not marked to the contrary with respect to such matter in accordance with their best judgment. A proxy may be revoked at any time before being voted by sending a new proxy bearing a later date or a revocation notice to the Company at the above address, attn: Secretary, or by notifying the Secretary of the Company at the Annual Meeting. The Company is soliciting these proxies and will pay the entire expense of solicitation which will be made by use of the mails. This Proxy Statement is being mailed on or about March 26, 1999.

The total number of shares of Common Stock outstanding as of March 17, 1999, was 5,744,037 shares. The Common Stock is the only outstanding class of securities of the Company entitled to vote. Each share of Common Stock has one vote. Only stockholders of record as of the close of business on March 17, 1999 will be entitled to vote at the Annual Meeting or any adjournments thereof.

The affirmative vote by holders of a plurality of the votes cast for the election of directors at the Annual Meeting is required for the election of Directors. The affirmative vote by the majority of the votes present at the Annual Meeting and entitled to vote is required to approve the issuance of more than 1,127,674 shares of Common Stock upon conversion of the Series A Convertible Preferred Stock and the issuance of more than 1,148,807 shares of Common Stock upon conversion of the Series B Convertible Preferred Stock, and the ratification of Ernst & Young LLP. The affirmative vote of a majority of the outstanding shares of Common Stock is required for approval of the amendment to the Company's Restated Certificate of Incorporation to increase the authorized capital stock by increasing the number of authorized shares of Common Stock from 15 million to 50 million shares. All proxies will be counted for determining the presence of a quorum. Votes withheld in connection with the election of one or more nominees for Director will not be counted as votes cast for such individuals and shares represented by proxies which are marked "abstain" for any other Proposal on the proxy card and proxies which are marked to deny discretionary authority on all other matters

will only be counted for the purpose of determining the presence of a quorum on such proposals. In addition, where brokers are prohibited from exercising discretionary authority for beneficial owners who have not provided voting instructions (commonly referred to as "broker non-votes"), those shares will not be included in the vote totals.

A list of stockholders entitled to vote at the Annual Meeting will be available at the Company's principal office, 1850 Research Park Drive, Davis, California 95616-4884 during business hours, for a period of ten (10) days prior to the Annual Meeting for examination by any stockholder. Such list shall also be available at the Annual Meeting.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information concerning the beneficial ownership of the Company's Common Stock at March 17, 1999 by (i) each stockholder known by the Company to be a beneficial owner of more than five percent of the outstanding Common Stock, (ii) each director of the Company, (iii) each executive officer of the Company listed in the Summary Compensation Table (see Proposal 1) and (iv) all directors and officers as a group.

NAME -----	AMOUNT AND NATURE OF BENEFICIAL OWNERSHIP(1) -----	PERCENTAGE OF COMMON STOCK BENEFICIALLY OWNED(2) -----
International Business Machines Corporation..... Old Orchard Road, Armonk, N.Y. 10504	2,274,066(3)	28.31%
EJ Financial Investments V, L.P. 225 East Deerpath Road, Suite 250 Lake Forest, IL 60045	1,039,792	18.10%
Sutter Health and Sutter Health Venture Partners, L.P. One Capitol Mall Sacramento, CA 95814	467,607(4)	8.14%
Ramesh C. Trivedi(5).....	338,510(6)	5.57%
John N. Kapoor(7).....	1,039,792(8)	18.10%
James C. McGroddy(9).....	47,365(10)	*
Paul A.H. Pankow(11).....	9,163(12)	*
Patrick G. Hays(13).....	5,250(14)	*
Gerald D. Knudson(15).....	5,250(14)	*
Mark Winn (5).....	1,000(16)*	*
All directors and officers as a group (7 persons).....	1,446,330	23.64%

* Less than one percent.

(1) Unless otherwise indicated, each person has sole investment and voting power with respect to the shares indicated, subject to community property laws, where applicable.

(2) For purposes of computing the percentage of outstanding shares held by each person or group of persons named above on March 17, 1999, any security which such person or group of persons has the right to acquire within 60 days after such date is deemed to be outstanding for the purpose of computing the percentage ownership for such person or persons, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person.

(3) Includes warrants to purchase 2,206,479 shares of Common Stock at an exercise price of \$0.01 per share exercisable until December 31, 2005, and warrants to purchase 67,587 shares of Common Stock at an exercise price of \$0.07 per share exercisable until December 31, 2000. which warrants are presently exercisable.

- (4) Includes 449,538 shares of Common Stock owned by Sutter Health and 18,069 shares of Common Stock beneficially owned by Sutter Health Venture Partners L.P. ("Sutter Partners"), an affiliate of Sutter Health.
- (5) Address is c/o the Company, 1850 Research Park, Davis, California 95616-4884
- (6) Includes 4,000 shares owned by Dr. Trivedi and 334,510 shares that he may acquire upon exercise of stock options exercisable within 60 days -- 316,907 shares at an exercise price of \$0.07 per share and 17,603 shares at an exercise price of \$3.00 per share. Dr. Trivedi may acquire an additional 102,397 shares upon exercise of stock options that become exercisable over the remaining term of the options at an exercise price of \$3.00 per share.
- (7) Address is c/o EJ Financial Enterprises, 225 E. Deer Path Road, Suite 250, Lake Forest, Illinois 60045.
- (8) Represents shares of Common Stock owned by EJ Financial Investments V, L.P., a limited partnership of which Mr. Kapoor is the managing general partner. Mr. Kapoor disclaims beneficial ownership of such shares.
- (9) Address is 200 Business Park Drive, Armonk, New York 10504.
- (10) Includes 26,000 shares owned by Dr. McGroddy, 1,000 shares beneficially owned by his daughter, and 20,365 shares that he may acquire upon exercise of stock options exercisable within 60 days -- 16,032 shares at an exercise price of \$5.00 per share, 833 shares at an exercise price of \$5.625 and 3,500 shares at an exercise price of \$3.9375. Dr. McGroddy may acquire an additional 11,770 shares upon exercise of stock options that become exercisable over the remaining term of the options at exercise prices ranging from \$5.00 to \$5.625.
- (11) Address is 7840 East Lake Carlos Drive N.E., Carlos, Minnesota 56319.
- (12) Represents shares that Mr. Pankow may acquire upon exercise of stock options exercisable within 60 days -- 2,028 shares at an exercise price of \$2.07 per share, 1,666 shares at an exercise price of \$5.625 per share, 1,969 shares at an exercise price of \$5.00 per share, and 3,500 shares at an exercise price of \$3.9375 per share. Mr. Pankow may acquire an additional 2,207 shares upon exercise of stock options that become exercisable over the remaining term of the options at exercise prices ranging from \$2.07 to \$5.00 per share.
- (13) Address is c/o Blue Cross/Blue Shield Association, 225 North Michigan, 9th Floor, Chicago, Illinois 60601-7680.
- (14) Represents shares that he may acquire upon exercise of options exercisable within 60 days -- 1,750 shares at an exercise price of \$5.625 per share and 3,500 shares at an exercise price of \$3.9375. He may acquire an additional 1,750 shares issuable upon exercise of stock options that become exercisable over the remaining term of the options an exercise price of \$5.625 per share.
- (15) Address is c/o Sterling Diagnostic Imaging, Inc., 10 South Academy Street, Greenville, South Carolina 29602.
- (16) Represents shares owned by Mr. Winn. Does not include 45,000 shares that Mr. Winn may acquire upon exercise of options exercisable within 60 days at an exercise price of \$3.00 per share. None of these options are exercisable within 60 days.

ACTIONS TO BE TAKEN AT THE ANNUAL MEETING

PROPOSAL 1. ELECTION OF DIRECTORS

The Directors to be elected at the Annual Meeting will serve until the next Annual Meeting of Stockholders and until their successors are duly elected and qualified. Proxies not marked to the contrary will be voted "FOR" the election to the Board of Directors of the following six persons, all of whom are incumbent Directors.

Set forth below is certain information as of March 17, 1999 concerning each nominee for Director, including his age, present principal occupation and business experience during the past five years and the period he has served as a director.

NAME	AGE	PRINCIPAL OCCUPATION AND RELATED INFORMATION	DIRECTOR SINCE
Ramesh C. Trivedi.....	59	Chief Executive Officer of the Company since November 1995; consultant to the Company from February 1995 until November 1995; Principal of California Biomedical Consultants (an international consulting firm) from 1987 to November 1995; President and Chief Executive Officer of DigiRad Corporation (a medical imaging company) from 1985 to 1986.	November 1995
James C. McGroddy.....	61	Chairman of the Board of Directors of the Company since November 1995; self-employed consultant since 1997; Senior Vice President and Special Advisor to the Chairman of IBM from January 1996 through December 1996; Senior Vice President of Research of IBM from May 1989 to December 1995; Director of Paxar Corporation (a manufacturer of apparel identification and related printing products) since January 1998.	November 1995
John N. Kapoor.....	55	President of EJ Financial Enterprises, Inc (a healthcare consulting and investment company) since April 1990; Chairman of Option Care, Inc. (a franchiser of home infusion therapy businesses) since October 1990; Chairman of Unimed Pharmaceuticals, Inc. (a specialty pharmaceutical company) since 1990; Chief Executive Officer and Chairman of Akorn, Inc. (a manufacturer and distributor of ophthalmic products) since May 1996; and Chairman of NeoPharm, Inc. (cancer drug research and development company).	December 1995
Paul A.H. Pankow...	69	President of PAP Consulting (business and technical consulting firm) since March 1995; held various positions with 3M Corporation, including Vice President and Chief Executive Officer of its Imaging Systems Division, from September 1959 to March 1995.	May 1995
Gerald D. Knudson.....	55	Executive Vice President of Sterling Diagnostic Imaging, Inc. (manufacturer and distributor of medical diagnostic imaging products) since January 1997; President, Medical Systems Division of Polaroid (manufacturer of medical diagnostic imaging printers and film) from 1994 to 1996; Chief Executive Officer of Resonex, Inc. (manufacturer of MRI systems) from 1988 to 1994.	May 1997
Patrick G. Hays....	56	President and Chief Executive Officer of Blue Cross and Blue Shield Association (national coordinating body for the United States' sixty-two community-based and independent Blue Cross and Blue Shield Plans) since February 1996; President and Chief Executive Officer of Sutter Health (vertically integrated provider of health services in northern California) from 1980 to 1995	May 1997

On August 16, 1992, a lawsuit was filed against Dr. Kapoor in the United States District Court for the Northern District of Illinois by Fujisawa Pharmaceutical Co., Ltd. and Fujisawa USA, Inc. ("Fujisawa"). The complaint alleged that Dr. Kapoor, while President and Chief Executive Officer of Lyphomed, Inc., a company acquired by Fujisawa, violated provisions of the Federal securities laws and the Racketeer Influenced and Corrupt Organizations Act (RICO), and also asserted certain state law claims. The factual basis of the complaints alleges that Dr. Kapoor filed false applications for generic drug approvals with the FDA on behalf of Lyphomed, Inc. On July 25, 1996, the complaint was dismissed in part, and Dr. Kapoor was granted summary judgment on the remaining claims. On June 16, 1997, the Court of Appeals for the 7th Circuit reversed the District Court's order dismissing the RICO and state law claims and remanded the case to the District Court. Dr. Kapoor vigorously denies the allegations and has asserted counterclaims against Fujisawa for breach of contract, defamation of character and other state law claims.

All directors hold office until the annual meeting of stockholders of the Company following their election or until their successors are duly elected and qualified.

MEETINGS OF THE BOARD OF DIRECTORS AND INFORMATION REGARDING COMMITTEES

The Board of Directors has two standing committees, an Audit Committee and a Compensation Committee.

The Audit Committee is composed of Dr. Kapoor (Chairman), Mr. Hays and Mr. Pankow. The duties of the Audit Committee include recommending the engagement of independent auditors, reviewing and considering actions of management in matters relating to audit functions, reviewing with independent auditors the scope and results of its audit engagement, reviewing reports from various regulatory authorities, reviewing the system of internal controls and procedures of the Company, and reviewing the effectiveness of procedures intended to prevent violations of law and regulations. The Audit Committee held one meeting in 1998.

The Company's Compensation Committee is composed of Dr. McGroddy (Chairman), Dr. Kapoor and Mr. Knudson. The duties of this Committee are to recommend to the Board remuneration for officers of the Company, to determine the number and issuance of options pursuant to the Company's stock option plans and to recommend the establishment of and to monitor a compensation and incentive program for all executives of the Company. The Compensation Committee held five meetings in 1998.

The Board of Directors held seven meetings in 1998. All six of the Directors attended at least 75% of the total number of Board meetings and meetings of committees on which they served during the period they served thereon in 1998.

The Company pays independent Directors \$7,500 per annum, plus \$500 for each Board of Directors meeting attended in person and \$250 for each Board of Directors meeting attended by telephone. Members who serve on either the Audit or Compensation Committees are paid \$300 for each meeting attended in person and \$150 for each meeting attended by telephone. Committee chairmen also are paid \$500 per annum. Independent Directors (other than Dr. Kapoor) also receive annually ten year non-qualified stock options to purchase 3,500 shares of the Company's Common Stock at an exercise price equal to the fair market value of the Common Stock on the date of grant.

The following table sets forth information concerning stock options granted to independent Directors since January 1, 1998.

NAME	NUMBER OF SHARES UNDERLYING OPTIONS GRANTED	EXERCISE PRICE PER SHARE	EXPIRATION DATE
----	-----	-----	-----
James C. McGroddy.....	3,500	\$3.93	1/23/08
Paul A. H. Pankow.....	3,500	\$3.93	1/23/08
Patrick G. Hays.....	3,500	\$3.93	1/23/08
Gerald D. Knudson.....	3,500	\$3.93	1/23/08

THE BOARD OF DIRECTORS RECOMMENDS THAT
STOCKHOLDERS VOTE "FOR" THE NOMINEES FOR
DIRECTOR NAMED ABOVE (PROPOSAL 1)

SUMMARY COMPENSATION TABLE

The following table sets forth the compensation awarded to, earned by or paid to the Company's Chief Executive Officer and each other executive officer of the Company whose salary and bonus exceeded \$100,000 for the year ended December 31, 1998.

SUMMARY COMPENSATION TABLE

NAME AND PRINCIPAL POSITION	YEAR	ANNUAL COMPENSATION		LONG-TERM COMPENSATION
		SALARY	OTHER ANNUAL COMPENSATION	SECURITIES UNDERLYING OPTIONS
-----	---	-----	-----	-----
Ramesh C. Trivedi.....	1998	\$279,840	\$42,501	120,000
Chief Executive Officer and President	1997	\$264,000	\$50,400	20,000
	1996	\$264,000	\$50,000	316,907
Mark W. Winn.....	1998	\$118,833	--	--
Chief Financial Officer	1997(1)	\$ 38,333	\$ 8,316	45,000

(1) Mr. Winn commenced employment with the Company on September 2, 1997.

EMPLOYMENT AGREEMENT

Dr. Ramesh Trivedi serves as the Company's Chief Executive Officer and President pursuant to an employment agreement terminable at will by either party. Dr. Trivedi's annual salary is \$279,840 (\$23,320 per month). Upon termination by the Company, other than for cause (as defined in the employment agreement), Dr. Trivedi is entitled to receive his monthly salary for a period of eighteen months following the date of termination.

STOCK OPTIONS

The following table contains information concerning the grant of stock options under the Company's 1998 Stock Option Plan to Dr. Trivedi and Mr. Winn (collectively, the "Named Executive Officers") during the fiscal year ended December 31, 1998.

OPTION GRANTS IN LAST FISCAL YEAR
(INDIVIDUAL GRANTS)

NAME -----	NUMBER OF SHARES UNDERLYING OPTIONS GRANTED(1) -----	PERCENT OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR -----	EXERCISE PRICE PER SHARE(2) -----	EXPIRATION DATE -----
Ramesh C. Trivedi.....	120,000	16.6%	\$3.00	8/27/08
Mark W. Winn.....	45,000	6.2%	\$3.00	8/27/08

(1) Stock options are granted at the discretion of the Compensation Committee of the Company's Board of Directors. Stock options have a 10-year term and vest periodically over a period not to exceed five years.

(2) The Compensation Committee of the Company's Board of Directors may elect to reduce the exercise price of any option to the current fair market value of the Common Stock if the value of the Common Stock has declined from the date of grant.

The following table summarizes for each of the Named Executive Officers the total number of unexercised options, if any, held at December 31, 1998, and the aggregate dollar value of in-the-money, unexercised options, held at December 31, 1998. The value of the unexercised, in-the-money options at December 31, 1998, is the difference between their exercise or base price and the value of the underlying Common Stock on December 31, 1998. The closing sale price of the Common Stock on The Nasdaq SmallCap Market on December 31, 1998 was \$3.125 per share.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FY END OPTION VALUES

NAME -----	SHARES ACQUIRED UPON EXERCISE OF OPTIONS DURING FISCAL 1997 -----		NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1997 -----		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1997 -----	
	NUMBER	VALUE REALIZED	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Ramesh C. Trivedi.....	None	None	334,510	102,397	\$985,754(1)	\$12,800(2)
Mark W. Winn.....	None	None	0	45,000	0	\$ 5,625(3)

(1) Represents value of options to purchase 316,907 shares at an exercise price of \$0.07 per share and options to purchase 17,603 shares at an exercise price of \$3.00 per share.

(2) Represents value of options to purchase 102,397 shares at an exercise price of \$3.00 per share.

(3) Represents value of options to purchase 45,000 shares at an exercise price of \$3.00 per share.

REPRICING OF OPTIONS

NAME	REPRICE/ REGRANT DATE	NUMBER OF SECURITIES UNDERLYING OPTIONS REPRICED OR AMENDED	MARKET PRICE OF STOCK AT TIME OF REPRICING OR AMENDMENT	EXERCISE PRICE OF STOCK AT TIME OF REPRICING OR AMENDMENT	NEW EXERCISE PRICE	LENGTH OF ORIGINAL OPTION TERM REMAINING AT DATE OF REPRICING OR AMENDMENT
Ramesh C. Trivedi.....	8/28/98	120,000	\$3.00	20,000@\$6.13 100,000@\$4.75	\$3.00	8 yrs. 7 mos. 9 yrs. 6 mos.
Mark W. Winn.....	8/28/98	45,000	\$3.00	25,000@\$8.25 20,000@\$4.875	\$3.00	9 yrs. 1 mo. 9 yrs. 8 mos.

The Compensation Committee of the Board of Directors approved the replacement of these options to Dr. Trivedi and Mr. Winn, and options to other employees of the Company, at an exercise price of \$3.00 per share, having concluded that the principal purpose of the Company's stock option program (i.e., to provide an equity incentive to employees to remain in the employment of the Company and to work diligently in its best interests) would not be achieved for those employees holding options exercisable above the market price of the Common stock.

PROPOSAL 2. AMENDMENT OF THE COMPANY'S RESTATED CERTIFICATE OF INCORPORATION TO INCREASE AUTHORIZED CAPITAL STOCK BY INCREASING THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 15 MILLION TO 50 MILLION.

The Board of Directors has adopted, subject to shareholder approval, an amendment to the Company's Restated Certificate of Incorporation to increase the authorized capital stock by increasing the number of authorized shares of Common Stock from 15,000,000 to 50,000,000 shares.

The Company is presently authorized to issue 15,000,000 shares of Common Stock and 1,000,000 shares of preferred stock, par value \$.01 per share ("Preferred Stock"). As of March 17, 1999, there were 5,744,037 shares of Common Stock outstanding and an additional 8,761,996 shares of Common Stock reserved for issuance upon conversion of the Series A Convertible Preferred Stock and Series B Convertible Preferred Stock, and upon exercise of outstanding warrants and options granted pursuant to the Company's stock options plans. As of March 17, 1999, there were 3,300 shares of Series A Convertible Preferred Stock and 1,500 shares of Series B Convertible Preferred Stock outstanding.

The additional 35,000,000 shares of Common Stock to be authorized would provide needed flexibility for future financial and capital requirements so that proper advantage could be taken of favorable market conditions and possible business acquisitions, and in the event the market price of the Common Stock decreases from present levels, for issuance upon conversion of the Series A Convertible Preferred Stock and the Series B Convertible Preferred Stock. Additional shares of Common Stock would also be available to the Company for stock dividends or splits should the Board of Directors decide that it would be desirable, in light of market conditions then prevailing, to broaden the public ownership of, and to enhance the market for, the shares of the Company's Common Stock. The additional shares would be available for issuance for these and other purposes, subject to the laws of Delaware and Nasdaq rules, at the discretion of the Company's Board of Directors without, in most cases, the delays and expenses attendant to obtain further stockholder approval.

Although the Company's Board of Directors does not consider the proposed amendment to the Company's Restated Certificate of Incorporation to be an antitakeover proposal, the ability to issue additional shares of Common Stock could also be used to discourage hostile takeover attempts of the Company. Among other things, the additional shares could be privately placed thereby diluting the stock ownership of persons seeking to obtain control of the Company, or the Board could adopt a stockholders' rights plan that would provide for the issuance of additional shares of Common Stock in the event of certain purchases not approved by the Board of Directors.

Although the Board of Directors has no current plans to propose measures to the Company's stockholders that may have the effect of discouraging takeovers, such measures may be proposed if warranted from time to time in the judgment of the Board of Directors. In addition, the Board of Directors may, from time to time,

adopt other measures or enter into agreements that could have the effect of discouraging takeovers, but that do not require stockholder approval.

Approval of this amendment to the Restated Certificate of Incorporation requires approval by a majority of the outstanding shares of Common Stock entitled to vote thereon. As a result, any shares not voted (whether by abstention, broker non-vote or otherwise) will have the same effect as a vote against the proposal.

THE BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS
VOTE "FOR" THE ADOPTION OF THE AMENDMENT TO THE RESTATED CERTIFICATE
OF INCORPORATION TO INCREASE AUTHORIZED CAPITAL STOCK BY
INCREASING THE NUMBER OF AUTHORIZED SHARES OF
COMMON STOCK FROM 15 MILLION TO 50 MILLION SHARES (PROPOSAL 2)

PROPOSAL 3. TO APPROVE THE ISSUANCE UPON CONVERSION OF SERIES A CONVERTIBLE PREFERRED STOCK OF MORE THAN 1,127,674 SHARES OF COMMON STOCK, AS REQUIRED BY NASDAQ RULES.

Nasdaq rules require the Company to obtain stockholder approval for the issuance of securities involving the sale of 20% or more of its Common Stock at less than fair market value. Nasdaq may delist the securities of any issuer that fails to obtain such stockholder approval before the issuance of such securities.

On September 10, 1998, the Company sold 3,520 shares of the Company's Series A Convertible Preferred Stock, together with warrants to purchase 44,000 shares of its Common Stock at an exercise price above the then market value of the Common Stock, to two institutional investors for an aggregate purchase price of \$3,520,000. The Series A Convertible Preferred Stock is convertible into shares of Common Stock, at the option of the holder thereof, subject to certain limitations discussed below. The number of shares of Common Stock into which the Series A Convertible Preferred Stock may be converted is equal to \$1,000 times the number of shares to be converted, divided by the conversion price. The conversion price is equal to the lower of \$4.97 and 85% of the lowest sale price of the Common Stock on the Nasdaq SmallCap Market during the five trading days preceding the date of conversion. There is no minimum conversion price. Consequently, the lower the market price of the Common Stock, the greater the number of shares of Common Stock the holders of the Series A Convertible Preferred Stock will receive upon conversion. No holder may convert the Series A Convertible Preferred Stock to the extent such conversion would result in the holders in the aggregate acquiring more than 1,127,674 shares of Common Stock, representing 20% of the number of shares of Common Stock outstanding on the date upon which the shares of Series A Convertible Preferred Stock were issued, unless and until such issuance is approved by stockholders.

The conversion price and the number of shares of Common Stock that may be acquired upon conversion of the Series A Convertible Preferred Stock is subject to adjustment in the event of a stock split, stock dividend, reorganization or reclassification. In addition, if prior to January 14, 2000 the Company issues shares of Common Stock (or securities convertible into, or exercisable or exchangeable, for Common Stock) at less than the conversion price in a transaction exempt from the registration requirements of the Securities Act and the Company grants the purchasers of such shares or other securities the right to demand registration of such shares, the conversion price of the Series A Convertible Preferred Stock will be adjusted to such lower price.

The conversion, or the potential conversion, of the Series A Convertible Preferred Stock at a discount of approximately 15% of the then prevailing market price of the Common Stock and the immediate resale of the shares of Common Stock acquired upon conversion into the public market may depress the market price of the Common Stock and will have a dilutive impact on other stockholders.

If this proposal is not approved by stockholders, upon any conversion that, together with prior conversions, would result in the issuance of more than 1,127,674 shares of Common Stock but for the 20% limitation discussed above, the Company will be required to pay the holder requesting conversion an amount in cash equal to the closing price of the Common Stock on the date of conversion times the number of shares in excess of 1,127,674 shares. The Company's ability to make such cash payments will depend on its available cash resources at the time of a request for conversion. The payment of such amounts instead of the issuance of shares of Common Stock upon conversion may adversely affect the liquidity and financial condition of the Company.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS
VOTE "FOR" THE APPROVAL OF THE ISSUANCE OF MORE THAN
1,127,674 SHARES OF COMMON STOCK UPON CONVERSION OF THE
SERIES A CONVERTIBLE PREFERRED STOCK, AS REQUIRED
BY NASDAQ RULES (PROPOSAL 3)

PROPOSAL 4. TO APPROVE THE ISSUANCE UPON CONVERSION OF SERIES B CONVERTIBLE
PREFERRED STOCK OF MORE THAN 1,148,807 SHARES OF COMMON STOCK, AS
REQUIRED BY NASDAQ RULES.

Nasdaq rules require the Company to obtain stockholder approval for the issuance of securities involving the sale of 20% or more of its Common Stock at less than fair market value. Nasdaq may delist the securities of any issuer that fails to obtain such stockholder approval before the issuance of such securities.

On March , 1999, the Company sold 1,500 shares of the Company's Series B Convertible Preferred Stock together with warrants to purchase 18,750 shares of its Common Stock, to two institutional investors for an aggregate purchase price of \$1,500,000. The Series B Convertible Preferred Stock is convertible into shares of Common Stock, at the option of the holder thereof, commencing July , 1999, subject to certain limitations discussed below. The number of shares of Common Stock into which the Series B Convertible Preferred Stock may be converted is equal to \$1,000 times the number of shares to be converted, divided by the conversion price. The conversion price is equal to the lower of \$ and 85% of the lowest sale price of the Common Stock on the Nasdaq SmallCap Market during the five trading days preceding the date of conversion. There is no minimum conversion price. Consequently, the lower the market price of the Common Stock, the greater the number of shares of Common Stock the holders of the Series B Convertible Preferred Stock will receive upon conversion. No holder may convert the Series B Convertible Preferred Stock to the extent such conversion would result in the holders in the aggregate acquiring more than 1,148,807 shares of Common Stock, representing 20% of the number of shares of Common Stock outstanding on the date upon which the shares of Series B Convertible Preferred Stock were issued, unless and until such issuance is approved by stockholders.

The conversion price and the number of shares of Common Stock that may be acquired upon conversion of the Series B Convertible Preferred Stock is subject to adjustment in the event of a stock split, stock dividend, reorganization or reclassification. In addition, if prior to the earlier of the first anniversary of the date upon which a registration statement for the resale of the shares of Common Stock that may be acquired upon conversion of the Series B Convertible Preferred Stock and the warrants is declared effective by the Securities and Exchange Commission and the closing of a registered firm commitment underwritten secondary offering of the Company's securities, the Company issues shares of Common Stock (or securities convertible into, or exercisable or exchangeable for, Common Stock) at less than the conversion price in a transaction exempt from the registration requirements of the Securities Act and the Company grants the purchasers of such shares or other securities the right to demand registration of such shares, the conversion price of the Series B Convertible Preferred Stock will be adjusted to such lower price.

The conversion, or the potential conversion, of the Series B Convertible Preferred Stock at a discount of approximately 15% of the then prevailing market price of the Common Stock and the immediate resale of the shares of Common Stock acquired upon conversion into the public market may depress the market price of the Common Stock and will have a dilutive impact on other stockholders.

If this proposal is not approved by stockholders, upon any conversion that, together with prior conversions, would result in the issuance of more than 1,148,807 shares of Common Stock but for the 20% limitation discussed above, the Company will be required to pay the holder requesting conversion an amount in cash equal to the closing price of the Common Stock on the date of conversion times the number of shares in excess of 1,148,807 shares. The Company's ability to make such cash payments will depend on its available cash resources at the time of a request for conversion. The payment of such amounts instead of the issuance of shares of Common Stock upon conversion may adversely affect the liquidity and financial condition of the Company.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE APPROVAL OF THE ISSUANCE OF MORE THAN 1,148,807 SHARES OF COMMON STOCK UPON CONVERSION OF THE SERIES B CONVERTIBLE PREFERRED STOCK, AS REQUIRED BY NASDAQ RULES (PROPOSAL 3)

PROPOSAL 5. RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS

The Board of Directors has appointed Ernst & Young LLP, independent auditors, to continue as the Company's auditors and to audit the consolidated financial statements of the Company for the fiscal year ending December 31, 1999. Ernst & Young LLP has audited the Company's financial statements since the fiscal year ended December 31, 1991. They have no financial interest, either direct or indirect, in the Company. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting to respond to appropriate questions from stockholders and to make a statement if they desire to do so.

THE BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE "FOR" THE RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS (PROPOSAL 3)

OTHER MATTERS

The Board of Directors is not aware of any business to be presented at the Annual Meeting except the matters set forth in the Notice of Annual Meeting and described in this Proxy Statement. Unless otherwise directed, all shares represented by Board of Directors' proxies will be voted in favor of the proposals of the Board of Directors described in this Proxy Statement. If any other matters come before the Annual Meeting, the persons named in the accompanying Proxy will vote on those matters according to their best judgment.

EXECUTIVE OFFICERS AND SIGNIFICANT EMPLOYEES

The names, ages and business backgrounds of the executive officers and other significant employees of the Company who are not nominees for Director are as follows:

MARK W. WINN, 48, has been Chief Financial Officer and Secretary of the Company since September 1997. Mr. Winn served as the Senior Vice President and Chief Financial Officer of Research Medical, Inc. (a manufacturer and developer of specialty cardiovascular and pharmaceutical products) from November 1991 to August 1997. Mr. Winn was the Vice President and Chief Financial Officer of Gory Associated Industries (a south Florida building products manufacturer) from 1984 to 1991.

LELAND WITHERSPOON, 46, has been Vice President, Engineering since April 1997. Mr. Witherspoon was Director Product Research and Development for Sorin Biomedicals, Inc. (a developer and manufacturer of cardiopulmonary and cardiovascular products) from February 1992 to April 1997. He was Manager of Research and Development for Pfizer/Shiley (a developer and manufacturer of cardiopulmonary and cardiovascular equipment and disposables) from February 1992 to April 1997. Mr. Witherspoon held various technical and management positions with Xerox Medical Systems (a manufacturer and developer of diagnostic medical electronic and mechanical systems) from March 1979 to October 1990.

PETER KAZANZIDES, PH.D., 36, a co-founder of the Company, has been an employee of the Company since November 1990 and Director of Robotics and Software of the Company since December 1995. He received Sc.B., Sc.M., and Ph.D. degrees in electrical engineering from Brown University in 1983, 1985, and 1988, respectively. His dissertation focused on force control and multiprocessor systems for robotics. He performed post-doctoral research in surgical robotics from March 1989 to March 1990 at the IBM T.J. Watson Research Center.

HANS WEYENSCHENK, 48, has been Director of Marketing, Orthopaedics, of the Company since February 1997. Prior thereto, he was employed by Vitatron Medical, Inc., a wholly-owned subsidiary of

Medtronic, Inc. (a manufacturer of cardiac products), as Director of Marketing, Communications and Services from 1996 to February 1997 and Director of International Sales from 1987 to 1995.

MARK JENSEN, 51, joined the Company as Director of Quality Systems in July 1998. Prior to joining the Company, he held Quality/Regulatory management positions with Medtronic, Inc., Nellcor Puritan Bennett (a developer and marketer of products for the diagnosis, monitoring and treatment of respiratory disorders), and Novo Nordisk A/S (a biotech based manufacturer and distributor of pharmaceutical and industrial enzyme products) in Copenhagen Denmark.

SCOTT M. BURKHART, 44, has been Director of Sales and Marketing since January 1999. Prior to joining the Company, he served as Vice President of Sales for Instrumedix (manufacturer of cardiac telemedicine products) from 1988 to 1999 and as Marketing Manager Imaging Systems Division -- 3M Company from 1978 to 1984.

RD HIBBERT, 50, has been Director, Clinical and Regulatory Affairs since February 1998. Prior to joining the Company, he was Director, Clinical and Regulatory Affairs of Research Medical, Inc. from August 1985 to February 1998.

CERTAIN TRANSACTIONS

On October 29, 1997, the Company amended warrants to purchase 2,079,584 shares of Series D Preferred Stock owned by IBM so that they were exercisable for an equal number of shares of Common Stock and on such other terms of conditions stated in such warrants. In April 1998, the Company amended warrants to purchase 2,274,066 shares of Common Stock owned by IBM to permit IBM to exercise those warrants without payment of cash for a lesser number of shares, based upon the difference between market price of the Common Stock at the time of exercise and the exercise prices. In consideration for such cashless exercise rights, IBM agreed to limit sales of shares acquired upon exercise of warrants to the volume limitations of Rule 144, whether or not applicable, and granted the Company a right of first refusal with respect to such sales.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's Officers, Directors and persons who own more than ten percent of a registered class of the Company's equity securities within specified time periods to file certain reports of ownership and changes in ownership with the Securities and Exchange Commission. Officers, Directors and ten percent stockholders are required by regulation to furnish the Company with copies of all Section 16(a) forms they file. Based solely on a review of copies of such reports received by the Company and written representations from such persons concerning the necessity to file such reports, the Company is not aware of any failures to file reports or report transactions in a timely manner during the fiscal year ended December 31, 1998.

EXPENSES

The entire cost of preparing, assembling, printing and mailing this Proxy Statement, the enclosed Proxy and other materials, and the cost of soliciting Proxies with respect to the Annual Meeting, will be borne by the Company. The Company will request banks and brokers to solicit their customers who beneficially own shares listed of record in names of nominees, and will reimburse those banks and brokers for the reasonable out-of-pocket expenses of such solicitations. The original solicitation of proxies by mail may be supplemented by telephone and telegram by officers and other regular employees of the Company, but no additional compensation will be paid to such individuals.

STOCKHOLDER PROPOSALS

No person who intends to present a proposal for action at a forthcoming stockholders' meeting of the Company may seek to have the proposal included in the proxy statement or form of proxy for such meeting unless that person (a) is a record beneficial owner of at least 1% or \$1,000 in market value of shares of

Common Stock, has held such shares for at least one year at the time the proposal is submitted, and such person shall continue to own such shares through the date on which the meeting is held, (b) provides the Company in writing with his name, address, the number of shares held by him and the dates upon which he acquired such shares with documentary support for a claim of beneficial ownership, (c) notifies the Company of his intention to appear personally at the meeting or by a qualified representative under Delaware law to present his proposal for action, and (d) submits his proposal timely. A proposal to be included in the proxy statement or proxy for the Company's next annual meeting of stockholders, will be submitted timely only if the proposal has been received at the Company's principal executive office no later than November 26, 1999. If the date of such meeting is changed by more than 30 calendar days from the date such meeting is scheduled to be held under the Company's By-Laws, or if the proposal is to be presented at any meeting other than the next annual meeting of stockholders, the proposal must be received at the Company's principal executive office at a reasonable time before the solicitation of proxies for such meeting is made.

Even if the foregoing requirements are satisfied, a person may submit only one proposal with a supporting statement of not more than 500 words, if the latter is requested by the proponent for inclusion in the proxy materials, and under certain circumstances enumerated in the Securities and Exchange Commission's rules relating to the solicitation of proxies, the Company may be entitled to omit the proposal and any statement in support thereof from its proxy statement and form of proxy.

FORM 10-KSB FOR THE YEAR ENDED DECEMBER 31, 1998

Copies of the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1998 as filed with the Securities and Exchange Commission, including the financial statements, can be obtained without charge by stockholders (including beneficial owners of the Company's Common Stock) upon written request to Mark W. Winn, the Company's Secretary, Integrated Surgical Systems, Inc., 1850 Research Park Drive, Davis, California 95616-4884 or on the Commission's Web Site at www.sec.gov.

By Order of the Board of Directors

Mark W. Winn, Secretary

Davis, California
March 26, 1999

INTEGRATED SURGICAL SYSTEMS, INC.
1550 RESEARCH PARK DRIVE
DAVIS, CALIFORNIA 95616-4884

PROXY

The undersigned, a holder of Common Stock of INTEGRATED SURGICAL SYSTEMS, INC., a Delaware corporation (the "Company"), hereby appoints DR. RAMESH C. TRIVEDI and MARK W. WINN, and each of them, the proxy of the undersigned, with full power of substitution, to attend represent and vote for the undersigned, all of the shares of the Company which the undersigned would be entitled to vote, at the Annual Meeting of Stockholders of the Company to be held on April 27, 1999 and any adjournments thereof, as follows:

1. The election of six Directors of the Company to serve until the next annual meeting of stockholders and until their successors are duly elected and qualified.

FOR all nominees listed below WITHHOLD AUTHORITY to vote for all nominees listed below.

(Instructions: TO WITHHOLD AUTHORITY TO VOTE FOR ANY INDIVIDUAL NOMINEE, STRIKE A LINE THROUGH OR OTHERWISE STRIKE OUT HIS NAME BELOW)

Ramesh C. Trivedi, James C. McGroddy, John N. Kapoor, Paul A.H. Pankow, Gerald D. Knudson and Patrick G. Hays

2. The approval of an amendment to the Company's Restated Certificate of Incorporation to increase the authorized capital stock by increasing the number of authorized shares of Common Stock from 15 million to 50 million shares.

FOR AGAINST ABSTAIN

3. The approval of the issuance of more than 1,127,674 shares of Common Stock upon conversion of Series A Convertible Preferred Stock, as required by Nasdaq rules.

FOR AGAINST ABSTAIN

4. The approval of the issuance of more than 1,148,807 shares of Common Stock upon conversion of Series B Convertible Preferred Stock, as required by Nasdaq rules.

FOR AGAINST ABSTAIN

5. The ratification of the appointment of Ernst & Young LLP as the Company's independent auditors for the year ending December 31, 1999.

FOR AGAINST ABSTAIN

6. Upon such other matters as may properly come before the meeting or any adjournments thereof.

(continued, and to be signed, on other side)

(continued from other side)

The undersigned hereby revokes any other proxy to vote at such Annual Meeting, and hereby ratifies and confirms all that said attorneys and proxies, and each of them, may lawfully do by virtue hereof. With respect to matters not known at the time of the solicitations hereby, said proxies are authorized to vote in accordance with their best judgment.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN ACCORDANCE WITH THE INSTRUCTIONS ON THE OTHER SIDE HEREOF. IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE SIX DIRECTORS NAMED IN PROPOSAL 1 AND FOR THE ADOPTION OF PROPOSALS 2, 3, 4 AND 5, AND AS SAID PROXIES SHALL DEEM ADVISABLE ON SUCH OTHER BUSINESS AS MAY COME BEFORE THE MEETING.

The undersigned acknowledges receipt of a copy of the Notice of Annual Meeting dated March 26, 1999 relating to the Annual Meeting.

Date: _____, 1999

SIGNATURE(S) OF STOCKHOLDER(S)

The signature(s) hereon should correspond exactly with the name(s) of the Stockholder(s) appearing on the Stock Certificate. If stock is jointly held, all joint owners should sign. When signing as attorney, executor, administrator, trustee or guardian, please give full title as such. If signer is a corporation, please sign the full corporate name, and give title of signing officer.

THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF INTEGRATED SURGICAL SYSTEMS, INC.
PLEASE MARK, SIGN, DATE AND RETURN THE PROXY PROMPTLY USING THE ENCLOSED ENVELOPE.