

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

FORM 12b-25
NOTIFICATION OF LATE FILING

SEC FILE NUMBER: 1-12471
CUSIP NUMBER: 458124 10 8

Form 10-K Form 20-F Form 11-K Form 10-Q Form 10-D
 Form N-SAR Form N-CSR

For Period Ended: December 31, 2004

Transition Report on Form 10-K
 Transition Report on Form 20-F
 Transition Report on Form 11-K
 Transition Report on Form 10-Q
 Transition Report on Form N-SAR

For the Transition Period Ended: _____ to _____

Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates: Not applicable

PART I - REGISTRANT INFORMATION

Full Name of Registrant: Integrated Surgical Systems, Inc.

Former Name if Applicable: Not Applicable

Address of Principal Executive Office:

1850 Research Drive, Davis, California 95616

PART II - RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed.

- (a) The reasons described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense;
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
- (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III - NARRATIVE

State below in reasonable detail the reasons why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR or the transition report or portion thereof, could not be filed within the prescribed period.

The registrant has significantly reduced its workforce in order to conserve funds as it seeks equity and/or debt financing. The unavailability of staff and the need to obtain equity and/or debt financing has required the registrant's executive officer and employees to devote substantial effort and expense which otherwise would have been devoted to the preparation and filing of the registrant's Annual Report on Form 10-KSB for the year ended December 31, 2004. For such reason, the subject Form 10-KSB could not be filed within the prescribed period.

PART IV - OTHER INFORMATION

- (1) Name and telephone number of person to contact in regard to this notification: Charles J. Novak, Chief Financial Officer: (530) 792-2600
- (2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If the answer is no, identify report(s). Yes No

- (3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof? Yes No
- If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

The registrant anticipates reporting a net loss of approximately \$0.5 million on net sales of \$2.45 million for the fiscal year ended December 31, 2004, compared to a net loss of \$3,250,219 on net revenues of \$5,831,482 for the fiscal year ended December 31, 2003.

Integrated Surgical Systems, Inc.

has caused this notification to be signed on its behalf by the undersigned thereunto duly authorized.

Date: March 31, 2005

Integrated Surgical Systems, Inc.

By: /s/ Charles J. Novak

Charles J. Novak
Chief Financial Officer