Registration No. 333-____

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ASPEN TECHNOLOGY, INC. (Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)

04-2739697 (I.R.S. Employer Identification No.)

Ten Canal Park, Cambridge, Massachusetts 02141 (Address of Principal Executive Offices) (Zip Code)

Aspen Technology, Inc. 1995 Directors Stock Option Plan (Full Title of the Plan)

Lawrence B. Evans
Chairman of the Board and Chief Executive Officer
Aspen Technology, Inc.
Ten Canal Park
Cambridge, Massachusetts 02141
(Name and Address of Agent for Service)

(617) 949-1000 (Telephone Number, Including Area Code, of Agent For Service)

CALCULATION OF REGISTRATION FEE

(1) Estimated solely for the purpose of calculating the registration fee, and based on the average of the high and low prices of the Common Stock on the Nasdaq National Market on July 24, 2000 in accordance with Rules 457(c) and 457(h) under the Securities Act of 1933. This Registration Statement covers 200,000 shares of our common stock issuable pursuant to our Aspen Technology, Inc. 1995 Directors Stock Option Plan. These shares are in addition to the 240,000 shares of common stock (after giving effect to a two-for-one stock split) registered pursuant to the Registration Statement on Form S-8, File No. 333-11651, we filed with the Securities and Exchange Commission on September 9, 1996.

PART I. INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information required by Part I is included in documents sent or given to participants in the Aspen Technology, Inc. 1995 Directors Stock Option Plan pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

PART II. INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The Registrant is subject to the informational and reporting requirements of Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are filed with the Commission, are incorporated in this Registration Statement by reference:

- (1) The Registrant's latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the Registrant's latest fiscal year for which such statements have been filed.
- (2) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the prospectus referred to in (1) above.
- (3) The description of the common stock of the Registrant, \$.10 par value per share (the "Common Stock"), contained in the Registrant's registration statement on Form 8-A filed with the Commission under Section 12(g) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all shares of Common Stock offered hereby have been sold or which deregisters all shares of Common Stock then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of the filing of such documents.

Item 4. DESCRIPTION OF SECURITIES

Not applicable.

Item 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

Item 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article SEVENTH of the Registrant's Certificate of Incorporation, as amended (the "Certificate of Incorporation"), provides that no director of the Registrant shall be personally liable for any monetary damages for any breach of fiduciary duty as a director, except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breach of fiduciary duty.

Article EIGHTH of the Certificate of Incorporation provides that a director or officer of the Registrant shall be indemnified by the Registrant against:

- (a) all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement incurred in connection with any litigation or other legal proceeding (other than an action by or in the right of the Registrant) brought against him or her by virtue of his or her position as a director or officer of the Registrant if he or she acted or not opposed to, the best interests of the Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful and
- (b) all expenses (including attorneys' fees) and amounts paid in settlement incurred in connection with any action by or in the right of the Registrant brought against him or her by virtue of his or her position as a director or officer of the Registrant if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Registrant, except that no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses.

Notwithstanding the foregoing, to the extent that a director or officer has been successful, on the merits or otherwise, including the dismissal of an action without prejudice, he or she is required to be indemnified by the Registrant against all expenses (including attorneys' fees) incurred in connection therewith. Expenses shall be advanced to a director or officer at his or her request, provided that he or she undertakes to repay the amount advanced if it is ultimately determined that he or she is not entitled to indemnification for such expenses.

Indemnification is required to be made unless the Registrant determines that the applicable standard of conduct required for indemnification has not been met. In the event of a determination by the Registrant that the director or officer did not meet the applicable standard of conduct required for indemnification, or if the Registrant fails to make an indemnification payment within sixty days after such payment is claimed by such person, such person is permitted to petition the court to make an independent determination as to whether such person is entitled to indemnification. As a condition precedent to the right of indemnification, the director or officer must give the Registrant notice of the action for which indemnity is sought and the Registrant has the right to participate in such action or assume the defense thereof.

Article EIGHTH of the Certificate of Incorporation further provides that the indemnification provided therein is not exclusive, and provides that in the event that the Delaware General Corporation Law is amended to expand the indemnification permitted to directors or officers the Registrant must indemnify those persons to the fullest extent permitted by such law as so amended.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of

the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his or her conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

The Registrant maintains a directors' and officers' insurance policy that covers certain liabilities of directors and officers of the Registrant, including liabilities under the Securities Act of 1933. The Registrant maintains a general liability insurance policy that covers certain liabilities of directors and officers of the Registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

Item 8. EXHIBITS

The following exhibits are filed as part of this Registration Statement:

- 4.1 Certificate of Incorporation of the Registrant. Incorporated by reference to an exhibit to the Registrant's Form 8-K dated March 12, 1998 (filed March 27, 1998).
- 4.2 By-Laws of the Registrant. Incorporated by reference to an exhibit to the Registrant's Registration Statement on Form 8-A (filed on September 13, 1994), as amended by Amendment No. 1 thereto (filed on June 12, 1998).
- 4.3 Rights Agreement dated as of October 9, 1997, between the Registrant and American Stock Transfer and Trust Company, as Rights Agent. Incorporated by reference to an exhibit to the Registrant's Registration Statement on Form 8-A (filed on October 10, 1997), as amended by Amendment No. 1 thereto (filed on June 12, 1998).
- 4.4 Specimen certificate representing Rights to Purchase Series A Participating Cumulative Preferred Stock of Aspen Technology, Inc. Incorporated by reference to Exhibit B to the Rights Agreement referenced in Exhibit 4.3.
- 4.5 Specimen certificate for the Registrant's common stock, \$.10 par value. Incorporated by reference to an exhibit to the Registrant's Registration Statement on Form 8-A (filed on October 10, 1997), as amended by Amendment No. 1 thereto (filed on June 12, 1998), and incorporated herein by reference.
- 4.6 Registrant's Aspen Technology, Inc. 1995 Directors Stock Option Plan. Incorporated by reference to Registrant's Registration Statement on Form S-8 (Registration No. 333-11651) filed on September 9, 1996.
- 5.1 Opinion of Hale and Dorr LLP.
- 23.1 Consent of Arthur Andersen LLP.
- 23.2 Consent of Hale and Dorr LLP (included in Exhibit 5.1).
- 24.1 Power of Attorney (included in the signature page of this Registration Statement).

Item 9. UNDERTAKINGS

The Registrant hereby undertakes:

- (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;
- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be in the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Massachusetts, on this twenty-fourth day of July, 2000.

ASPEN TECHNOLOGY, INC.

By: /s/ Lawrence B. Evans
Lawrence B. Evans
Chief Executive Officer

NAME

Alison Ross

POWER OF ATTORNEY

We, the undersigned officers and directors of Aspen Technology, Inc., hereby severally constitute and appoint Lawrence B. Evans and Lisa W. Zappala, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the Registration Statement on Form S-8 filed herewith and any and all subsequent amendments to said Registration Statement, and generally to do all such things in our names and behalf in our capacities as officers and directors to enable Aspen Technology, Inc. to comply with all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities indicated, as of July 21, 2000.

TITLE

	Chairman of the Board and Chief Executive Officer (principal executive officer)
/s/ Lisa W. Zappala Lisa W. Zappala	Senior Vice President and Chief Financial Officer (principal financial and accounting officer)
/s/ Joseph F. Boston Joseph F. Boston	Director
Gresham T. Brebach, Jr.	Director
Douglas R. Brown	Director
/s/ Stephen L. Brown Stephen L. Brown	Director
/s/ Stephen M. Jennings 	Director
/s/ Joan C. McArdle Joan C. McArdle	Director
	Director

EXHIBIT INDEX

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HALE AND DORR LLP Counsellors at Law 60 State Street, Boston, Massachusetts 02109 617-526-6000 * FAX 617-526-5000

July 28, 2000

Aspen Technology, Inc. Ten Canal Park Cambridge, Massachusetts 02141

Re: Aspen Technology, Inc. 1995 Directors Stock Option Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") relating to 200,000 shares of common stock, \$.10 par value per share (the "Shares"), of Aspen Technology, Inc., a Delaware corporation (the "Company"), issuable under the Company's Aspen Technology, Inc. 1995 Directors Stock Option Plan (the "Plan").

We have examined the Certificate of Incorporation of the Company and the By-laws of the Company, each as amended, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In examination of the foregoing documents, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or facsimile copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the Delaware General Corporation Law and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Company has duly authorized for issuance the Shares covered by the Registration Statement to be issued under the Plan, as described in the Registration Statement, and such Shares, when issued in accordance with the terms of the Plan, will be legally issued, fully paid and nonassessable.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act of 1933, as amended. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of such Act or the rules and regulations of the Commission.

Very truly yours,

HALE AND DORR LLP

EXHIBIT 23.1

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports dated August 4, 1999 included in the Annual Report on Form 10-K of Aspen Technology, Inc. and subsidiaries for the fiscal year ended June 30, 1999 and to the reference to our firm in this Registration Statement.

/s/ Arthur Andersen LLP

Boston, Massachusetts July 27, 2000