

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ASPEN TECHNOLOGY, INC.
(Exact name of registrant as specified in its charter)

MASSACHUSETTS
(State or other jurisdiction
of incorporation or organization)

04-2739697
(I.R.S. employer
identification number)

TEN CANAL PARK
CAMBRIDGE, MASSACHUSETTS 02141
(617) 577-0100
(Address, including zip code, and telephone number, including area code, of
registrant's principal executive offices)

LAWRENCE B. EVANS
Chairman of the Board and Chief Executive Officer
ASPEN TECHNOLOGY, INC.
Ten Canal Park
Cambridge, Massachusetts 02141
(617) 577-0100
(Name, address, including zip code, and telephone number, including area code,
of agent for service)

Copies to:

STEPHEN J. DOYLE, ESQ.
Vice President, General Counsel and Clerk
ASPEN TECHNOLOGY, INC.
Ten Canal Park
Cambridge, Massachusetts 02141

MARK L. JOHNSON, ESQ.
FOLEY, HOAG & ELIOT LLP
One Post Office Square
Boston, Massachusetts 02109

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The Registrant hereby withdraws from registration a total of 156,297 shares of its common stock, \$.10 par value, registered pursuant to its Registration Statement on Form S-3 (registration number 333-20647). Such Registration Statement initially covered a total of 246,186 shares of common stock (after giving effect to a two-for-one stock split by way of a stock dividend to persons who were holders of record of common stock as of February 14, 1997). The shares being withdrawn were registered for sale from time to time by certain selling stockholders (as named in such Registration Statement) and have not been sold as of the time of filing of this Post-Effective Amendment No. 1.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Post-Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Massachusetts, on this thirtieth day of January, 1998.

ASPEN TECHNOLOGY, INC.

By: /s/ Stephen J. Doyle

 Stephen J. Doyle
 Vice President, General Counsel and Clerk

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to Registration Statement has been signed on this thirtieth day of January, 1998 by the following persons in the capacities indicated.

SIGNATURE

TITLE

*

Chairman of the Board of Directors
 and Chief Executive Officer
 (Principal Executive Officer)

 LAWRENCE B. EVANS

*

Executive Vice President (Principal
 Accounting Officer and Principal
 Financial Officer)

 MARY A. PALERMO

*

Director

 JOSEPH F. BOSTON

*

Director

 GRESHAM T. BREBACH, JR.

*

Director

 DOUGLAS R. BROWN

*

Director

 JOAN C. MCARDLE

*

Director

 ALISON ROSS

*By /s/ Stephen J. Doyle

 STEPHEN J. DOYLE
 Attorney-in-fact