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

American Tower Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

65-0723837 (I.R.S. Employer Identification No.)

116 Huntington Avenue Boston, Massachusetts 02116 (617) 375-7500

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

James D. Taiclet, Jr.
Chairman, President and Chief Executive Officer
American Tower Corporation
116 Huntington Avenue
Boston, Massachusetts 02116
(617) 375-7500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

William H. Hess, Esq.
Executive Vice President and General Counsel
American Tower Corporation
116 Huntington Avenue
Boston, Massachusetts 02116
Tel: (617) 375-7500

Fax: (617) 375-7575

Matthew J. Gardella, Esq.
Palmer & Dodge LLP
111 Huntington Avenue
Boston, Massachusetts 02199-7613
Tel: (617) 239-0100
Fax: (617) 227-4420

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the amended Registration Statement shall become effective on such date as the Commission, acting pursuant to Section 8(c) of the Securities Act of 1933, may determine

Explanatory Note

On June 2, 2003 the Securities and Exchange Commission declared the effectiveness of the Registration Statement on Form S-3 (Registration No. 333-104800) (the "Registration Statement") of American Tower Corporation ("American") with respect to the resale of up to an aggregate of 808,000 warrants (the "Warrants") to purchase shares of American's Class A Common Stock, \$0.01 par value per share (the "Common Stock"), and 11,389,012 shares (the "Shares") of Common Stock issuable upon exercise of the Warrants. The Registration Statement was filed by American for the benefit of holders of the Warrants (the "Warrantholders") who were granted registration rights pursuant to a Warrant Registration Rights Agreement dated as of January 29, 2003 (the "Agreement").

The Agreement required that American maintain the effectiveness of the Registration Statement until January 29, 2005. In accordance with the terms of the Agreement, and in accordance with American's undertaking under Regulation S-K Item 512(a)(3), American is filing this Post-Effective Amendment No. 1 to remove from registration all Warrants not sold by Warrantholders pursuant to the Registration Statement. American hereby requests the deregistration of an aggregate of 620,098 Warrants and the Shares issuable upon exercise of the Warrants, and requests that upon the effectiveness of this Post-Effective Amendment No. 1, that such Warrants and Shares be removed from registration.

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-3 and 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 Boston, Commonwealth of Massachusetts, on this 28th day of February, 2005.

AMERICAN TOWER CORPORATION

By: /s/ JAMES D. TAICLET, JR.

James D. Taiclet, Jr. Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JAMES D. TAICLET, JR.	Chairman, President and Chief Executive Officer (Principal	February 28, 2005
James D. Taiclet, Jr.	Executive Officer)	
/s/ Bradley E. Singer	Chief Financial Officer and Treasurer (Principal Financial	February 28, 2005
Bradley E. Singer	Officer)	
/s/ TIMOTHY F. ALLEN	Senior Vice President, Finance and Controller (Principal Accounting	February 28, 2005
Timothy F. Allen	Officer)	
/s/ RAYMOND P. DOLAN	Director	February 28, 2005
Raymond P. Dolan		
/s/ CAROLYN F. KATZ	Director	February 28, 2005
Carolyn F. Katz		
/s/ GUSTAVO LARA	Director	February 28, 2005
Gustavo Lara		
/s/ FRED R. LUMMIS	Director	February 28, 2005
Fred R. Lummis		
/s/ PAMELA D. A. REEVE	Director	February 28, 2005

Pamela D. A. Reeve