

SECURITIES AND EXCHANGE COMMISSION
 WASHINGTON, D.C. 20549

FORM S-3
 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

RAYTHEON COMPANY	Delaware	95-1778500
(Exact name of registrant as specified in its charter)	(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

141 Spring Street
 Lexington, Massachusetts 02421
 (781) 862-6600

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

Neal E. Minahan, Esq.
 Senior Vice President and General Counsel
 Raytheon Company
 141 Spring Street
 Lexington, Massachusetts 02421
 (781) 862-6600

Copy to:
 William J. Curry, Esq.
 Sullivan & Worcester LLP
 One Post Office Square
 Boston, MA 02109
 (617) 338-2800

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

Approximate date of commencement of proposed sale to the public: As soon as practicable 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 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 securities offered only 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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. /X/ Registration Nos. 333-82529 and 333-58474.

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 statement 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. / /

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Security(1)	Proposed Maximum Aggregate Offering Price(1) (2) (3) (4)	Amount of Registration Fee (5)
Common Stock of Raytheon, par value \$.01 per share			\$175,937,500	\$43,984.38

- (1) Not required to be included in accordance with Rule 457(o).
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o). In no event will the aggregate initial offering price of all securities issued under this Registration Statement exceed \$175,937,500.
- (3) The registrant has previously registered securities with a maximum initial offering price of \$3,000,000,000 pursuant to a Registration Statement on Form S-3 (File No. 333-82529), as amended, and as further

amended by Registration Statement on Form S-3 (File No. 333-58474) (as so amended, the "Shelf Registration"). As of the date of this registration statement, the total initial offering price of securities issued pursuant to the Shelf Registration was \$2,120,312,500.

- (4) The aggregate amount of Common Stock registered hereunder is limited to that which is permissible under Rule 415(a)(4) under the Securities Act of 1933, as amended. Each share of Common Stock includes one preferred share purchase right. No separate consideration is payable for the preferred share purchase rights.
- (5) Calculated pursuant to Rule 457(o) of the rules and regulations under the Securities Act of 1933, as amended.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The registrant hereby incorporates by reference into this registration statement the contents of the Registration Statement on Form S-3 (File No. 333-82529), as amended and supplemented, filed with the Securities and Exchange Commission on April 9, 1999 and declared effective on March 8, 2000 and the related Post-Effective Amendment No. 1 to Form S-3 Registration Statement (File No. 333-58474) filed with the Securities and Exchange Commission on April 6, 2001 and declared effective on April 13, 2001.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, Raytheon Company certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Lexington, The Commonwealth of Massachusetts, on October 22, 2001.

RAYTHEON COMPANY

By: /s/ Neal E. Minahan
Name: Neal E. Minahan
Title: Senior Vice President
and General Counsel

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-3 has been signed below by the following persons in the capacities and on the dates indicated.

Signature -----	Title -----	Date ----
* Daniel P. Burnham	Chairman and Chief Executive Officer and Director (Principal Executive Officer)	October 22, 2001
* Franklyn A. Caine	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	October 22, 2001
* Edward S. Pliner	Vice President and Corporate Controller (Principal Accounting Officer)	October 22, 2001
* Barbara M. Barrett	Director	October 22, 2001
* Ferdinand Colloredo-Mansfeld	Director	October 22, 2001
* John M. Deutch	Director	October 22, 2001
* Thomas E. Everhart	Director	October 22, 2001
* John R. Galvin	Director	October 22, 2001
* L. Dennis Kozlowski	Director	October 22, 2001

*
Henrique de Campos Meirelles Director October 22, 2001

*
Dennis J. Picard Director October 22, 2001

*
Frederic M. Poses Director October 22, 2001

*
Warren B. Rudman Director October 22, 2001

*
Michael C. Ruettgers Director October 22, 2001

*
William R. Spivey Director October 22, 2001

*
Alfred M. Zeien Director October 22, 2001

* By: /s/ Richard A. Goglia
Name: Richard A. Goglia

ATTORNEY-IN-FACT PURSUANT TO THE
POWERS OF ATTORNEY PREVIOUSLY FILED.

EXHIBIT INDEX

- 5.1 Opinion of Neal E. Minahan, Esq.
- 23.1 Consent of Neal E. Minahan, Esq. (included in Exhibit 5.1)
- 23.2 Consent of PricewaterhouseCoopers LLP
- 24.1 Powers of Attorney of directors and officers signing this registration statement are part of the signature pages to the Shelf Registration.

October 22, 2001

Raytheon Company
141 Spring Street
Lexington, MA 02421

Ladies and Gentlemen:

I am Senior Vice President and General Counsel of Raytheon Company, a Delaware Corporation (the "Company"), and am rendering this opinion in connection with a registration statement on Form S-3 (the "Registration Statement") to be filed today by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the proposed issuance and sale pursuant to Rule 462(b) under the Securities Act of up to \$175,937,500 aggregate initial offering price of the Company's common stock, \$0.01 par value per share (the "Common Stock").

As Senior Vice President and General Counsel of the Company, I have examined and am familiar with the Restated Certificate of Incorporation of the Company, as amended to date. I am also familiar with the corporate proceedings taken by the Board of Directors of the Company to authorize the filing of the Registration Statement and the issuance of the Common Stock.

In connection with this opinion, I have examined originals, or copies certified or otherwise identified to my satisfaction, of such documents, corporate records and other instruments as I have deemed necessary or appropriate for the purpose of this opinion.

In connection with the foregoing, I have assumed: (i) the genuineness of all signatures on all documents examined by me, (ii) the authenticity of all documents submitted to me as originals and the conformity to the originals of all documents submitted to me as copies, (iii) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Securities Act; (iv) a prospectus supplement will have been filed with the Securities and Exchange Commission describing the Common Stock offered thereby; (v) all shares of Common Stock will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable prospectus supplement; (vi) a definitive purchase, underwriting or similar agreement with respect to any shares of Common Stock offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; and (vii) there will be sufficient shares of Common Stock authorized under the Company's Restated Certificate of Incorporation and not otherwise reserved for issuance.

Based upon the foregoing, and subject to the assumptions, limitations and qualifications set forth herein, I am of the opinion that:

1. The Company is a corporation duly organized and validly existing in good standing under the laws of the State of Delaware.
2. The shares of Common Stock registered under the Registration Statement, when duly authorized and issued for consideration having a value not less than the par value thereof, will be validly issued, fully paid and nonassessable.

I hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to me under the heading "Legal Matters" in the prospectus supplements and prospectuses constituting a part of the Registration Statement. In giving such consent, I do not thereby concede that I am within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Neal E. Minahan
Neal E. Minahan

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated January 25, 2001, except for the information in the second paragraph of Note B as to which the date is March 2, 2001 relating to the consolidated financial statements, which appears in the 2000 Annual Report to Shareholders, which is included in Exhibit 13 on Form 10-K for the year ended December 31, 2000. We also consent to the incorporation by reference of our report dated January 25, 2001 relating to the financial statement schedule, which appears in such Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
Boston, Massachusetts
October 22, 2001