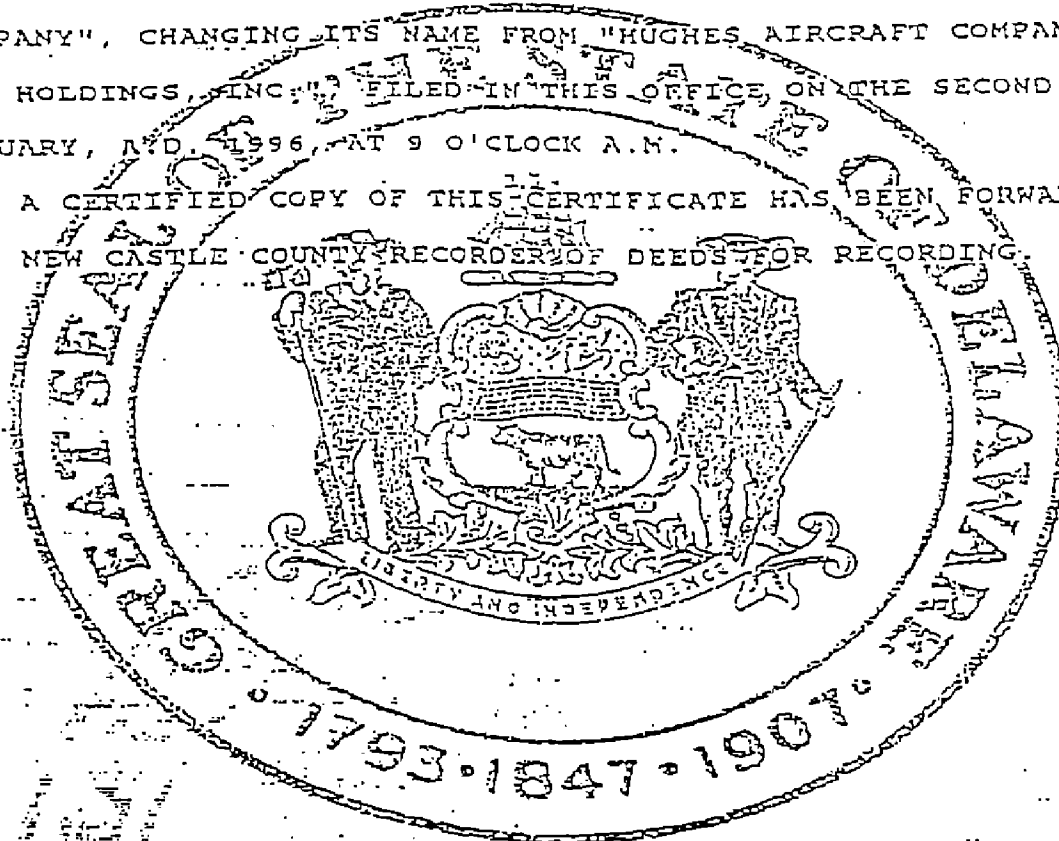


State of Delaware
Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "HUGHES AIRCRAFT COMPANY", CHANGING ITS NAME FROM "HUGHES AIRCRAFT COMPANY" TO "THE HOLDINGS, INC." FILED IN THIS OFFICE ON THE SECOND DAY OF JANUARY, A.D. 1996, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel

Edward J. Freel, Secretary of State

0472015-8100

960000711

AUTHENTICATION:

7774686

DATE:

01-02-96

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
HUGHES AIRCRAFT COMPANY

Hughes Aircraft Company, a corporation organized and existing under and by
e of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: That the sole stockholder of the Corporation did consent to and adopt
following resolution setting forth a proposed amendment to the Certificate of
poration of the Corporation:

RESOLVED, That Article 1 of the Certificate of Incorporation
of this corporation is hereby amended to read as follows:

"1. The name of the corporation is HE Holdings, Inc."

SECOND: That this amendment was duly adopted in accordance with the
sions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said corporation has caused this certificate to be
ed by its Chairman of the Board and attested by its Secretary this 8th day of
ember, 1995.

HUGHES AIRCRAFT COMPANY

By: *M. T. Smith*
M. T. Smith
Chairman of the Board

R. M. Hall
R. M. Hall
Secretary

3:29 FAX 302 638 0348

1/3

RICHARDS LAYTON & FINGER

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 03:20 PM 12/17/1997
971434564 - 0472013

CERTIFICATE OF MERGER

OF

RAYTHEON COMPANY

WITH AND INTO

HE HOLDINGS, INC.

Under Section 251

of

the Delaware General Corporation Law

THE UNDERSIGNED, HE Holdings, Inc. ("Defense") and Raytheon Company ("Raytheon"), in connection with the merger of Raytheon with and into Defense (the "Merger"), hereby certify as follows:

FIRST: The name and the state of incorporation of each of the constituent corporations are:

<u>Name</u>	<u>State of Incorporation</u>
HE Holdings, Inc.	Delaware
Raytheon Company	Delaware

SECOND: An agreement and plan of merger relating to the Merger (the "Agreement of Merger") has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with Section 251 of the Delaware General Corporation Law.

THIRD: The name of the surviving corporation of the merger is HE Holdings, Inc.

FOURTH: The Certificate of Incorporation of the surviving corporation shall be the Amended and Restated Certificate of Incorporation of HE Holdings, Inc. as filed with the Secretary of State of Delaware on December 12, 1997; provided, however, that Article I thereof shall be amended and restated as of the effectiveness of the Merger to read as follows:

87 WD 11:28 FAX 302 656 8848

WILLIAMS LAYTON & FINGER

003

Article I
Name

The name of the corporation (which is hereafter referred to as the "Corporation") is Raytheon Company.

FIFTH: The merger shall be effective at and as of 5:00 p.m. (Eastern Time) on December 17, 1997.

SIXTH: The executed Agreement of Merger is on file at the principal place of business of the surviving corporation at 141 Spring Street, Lexington, Massachusetts 02173.

SEVENTH: A copy of the Agreement of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of either constituent corporation.

IN WITNESS WHEREOF, the undersigned corporations have duly executed this Certificate this 17th day of December 1997.

RAYTHEON COMPANY

By: Thomas D. Hyde
Name: THOMAS D. HYDE
Title: VICE PRESIDENT AND GENERAL COUNSEL

HH HOLDINGS, INC.

By: J. L. Williamson
Name: J. L. WILLIAMSON
Title: ASSIST. SECRETARY

State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP, WHICH MERGES:

"HUGHES AIRCRAFT COMPANY", A DELAWARE CORPORATION, WITH AND INTO "HE HOLDINGS, INC." UNDER THE NAME OF "HE HOLDINGS, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE SIXTEENTH DAY OF DECEMBER, A.D. 1997, AT 12 O'CLOCK P.M.

FAX COPY RECEIVED
FEB 14 2002
TECHNOLOGY CENTER 2800



Edward J. Freel

Edward J. Freel, Secretary of State

9413672

0472015 8100M

981444070

AUTHENTICATION:

11-18-98

DATE:

PATENT
REEL: 015223 FRAME: 0549

State of Delaware

PAGE 1

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"RAYTHEON COMPANY", A DELAWARE CORPORATION, WITH AND INTO "HE HOLDINGS, INC." UNDER THE NAME OF "RAYTHEON COMPANY", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED, IN THIS OFFICE THE SEVENTEENTH DAY OF DECEMBER, A.D. 1997, AT 3:20 CLOCK P.M.



Edward J. Freel

Edward J. Freel, Secretary of State

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AUTHENTICATION#

8985779

DATE:

03-23-98

PATENT

REEL: 015223 FRAME: 0550

2 15:00 FAX 3106472618

RAYTHEON - WEST P & L

024

TUE 12:04 FAX 302 058 0548

RICHARDS LAYTON & FINGER

STATE OF DELAWARE 002
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 12:00 PM 12/16/1997
971430861 - 0472015

CERTIFICATE OF OWNERSHIP AND MERGER

OF

HUGHES AIRCRAFT COMPANY
(a Delaware corporation)

INTO

HE HOLDINGS, INC.
(a Delaware corporation)

(UNDER SECTION 253 OF THE DELAWARE
GENERAL CORPORATE LAW)

It is hereby certified that:

1. HE Holdings, Inc. (the "Corporation") is a corporation of the State of Delaware.
2. The Corporation is the owner of all of the outstanding shares of capital stock of Hughes Aircraft Company, a Delaware corporation (the "Subsidiary").
3. The Corporation hereby agrees to merge the Subsidiary into the Corporation (the "Merger").
4. The following are resolutions adopted by the Board of Directors of the Corporation on December 7, 1997:

"Approval of Merger of Hughes Aircraft Company with and into the Corporation

RESOLVED, that the Hughes Aircraft Company, a Delaware corporation and wholly-owned subsidiary of the Corporation (the "Subsidiary"), be merged with and into the Corporation (the "Sub Merger") pursuant to the provisions of the General Corporation Law of the State of Delaware (the "DGCL"); and

RESOLVED, that the Sub Merger shall be effective on the date (the "Effective Date") of the filing of the Certificate of Ownership and Merger with the Secretary of State of the State of Delaware, substantially in the form attached hereto as Annex 5; and

TUE 12:03 FAX 302 638 6343

RICHARDS LAYTON & FINGER

003

RESOLVED, that pursuant to Section 259 of the DGCL, upon the Effective Date, the separate existence of the Subsidiary shall cease, and the Corporation shall continue its existence as the surviving corporation; and

RESOLVED, that the appropriate officers of the Corporation be, and each of them hereby is, authorized, empowered and directed, in the name and on behalf of the Corporation, to execute and cause to be filed a Certificate of Ownership and Merger with respect to the Sub Merger with the Secretary of State of the State of Delaware.

5. The Merger shall be effective on the date of the filing of this Certificate of Ownership and Merger with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, the undersigned, for the purpose of effectuating the Merger, pursuant to the DGCL, under penalties of perjury does hereby declare and certify that this is the act and deed of the Corporation and the facts stated herein are true and accordingly has hereunto signed this Certificate of Ownership and Merger as of the 16th day of December 1997.

HE HOLDINGS, INC.

By: J. L. Williamson
Name: J. L. Williamson
Title: ASSISTANT SECRETARY

State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"RAYTHEON COMPANY", A DELAWARE CORPORATION,
WITH AND INTO "HE HOLDINGS, INC." UNDER THE NAME OF "RAYTHEON COMPANY", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE SEVENTEENTH DAY OF DECEMBER, A.D. 1997, AT 3:20 O'CLOCK P.M.



Edward J. Freel

Edward J. Freel, Secretary of State

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981318002

AUTHENTICATION: 9259021

DATE: 08-18-98