

Business and Commuter Aviation Systems

Honeywell Inc.
P. O. Box 29000
Phoenix, Arizona 85038-9000
602 436-8000

November 20, 2001
5150-0111-1898

Federal Communications Commission
Equipment Approval Services
P.O. Box 358315
Pittsburgh, PA 15251-5313

Subject: **HP-700 FAA Approval Data (Non-Confidential)**

Dear Sir or Madam:

The enclosed FAA approval information is being furnished to support FCC Type Certification of the HP-700 High Power Amplifier, P/N 7516251. This information is comprised of three parts: the FAA first-of-type approval letter; the associated Supplemental Type Certificate (STC); and the applicable pages of the corresponding Master Data List (MDL) that list the approved part(s).

Please note that in spite of the Proprietary Notice contained on the front page of the MDL, only those pages that are non-confidential and relevant to this FCC application are contained herein.

Regards,



Carl L. Shore
SATCOM System Technical Manager
(602) 436-4624
E-mail: Carl.Shore@Honeywell.com

Honeywell, Intl.,
Commercial Electronic Systems – Bell Road (CES - BR)
5353 W. Bell Road
Glendale, AZ 85308

November 20, 2001
5150-0111-1898



U.S. Department
of Transportation
Federal Aviation
Administration

OCT 27 1998
Honeywell Inc.
Air Transport Systems
21111 N. 19th Avenue
Phoenix, Arizona 85027

Attn: Mr. Don Smoker
Technical Staff

Dear Mr. Smoker:

Supplemental Type Certificate (STC) No. ST00653LA
Installations of Honeywell Intermediate Gain Satcom system and Cabin telephone
on Boeing 737-300 Series Aircraft
Project Nos: SA6504LA-T and ST6221LA-T

We have completed our evaluation of the subject change in type design and are enclosing your Supplemental Type Certificate No. ST00653LA, a copy of FAA approved Honeywell Master Data List, Specification No. ML4085635, Revision "A", dated October 14, 1998, and FAA approved Honeywell Airplane Flight Manual Supplement, Specification No. A72-5111-259, Revision "", FAA approval dated October 14, 1998.

This certificate signifies approval of the type design change and authorizes modification of the aircraft model listed on the certificate. A copy must be included with each kit you issue or each time you make the data available to other persons who intend to make the subject alteration. The certificate may be transferred or made available to others by means such as a licensing arrangement in accordance with §21.47.

For your information, you are required to maintain an updated file related to this STC. If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the certificate, you are required to comply with the Federal Aviation Regulations, Parts §21.303 and §45.15. Application for Parts Manufacturer Approval (PMA) should be made in writing with reference to this STC and addressed to: Federal Aviation Administration, Phoenix Manufacturing Inspection District Office, 13951 North Scottsdale Road, Suite 123, Scottsdale, Arizona 85254, telephone (602) 640-2101. Please note that §21.303(g) specifies that the FAA does not issue a PMA if the manufacturing facility for the part is located outside of the United States, unless a determination is made that the location of the manufacturing facility places no burden on the FAA in administering the applicable airworthiness requirements.

In accordance with Federal Aviation Regulation (FAR) §21.3, and as a recipient of this certificate, you are required to report any failure, malfunction, or defect, except as provided in §21.3(d), in any product or part manufactured by you or your contracted suppliers, and which

Transport Airplane Directorate
Los Angeles Aircraft
Certification Office

3960 Paramount Boulevard
Lakewood, California 90712-4117

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you have determined has resulted or could result in any occurrences listed in §21.3(c). The report should be communicated initially by telephone to the Manager, Systems and Equipment Branch, ANM-130L, Los Angeles Aircraft Certification Office, telephone number (562) 627-5330, within 24 hours after it has been determined a failure has occurred and followed up with a written notice to the address shown above. FAA form 8010-4 (malfunction or defect report) or other appropriate format is acceptable in transmitting the required details.

You, as the STC holder, are responsible for any design changes necessary to correct unsafe conditions as well as for submitting those design changes to this office for approval. This requirement is contained in §21.99. In addition, you are required to advise this office of any change in address.

Also, §21.50 requires that maintenance procedures for continued airworthiness, as applicable to this change in type design, be made available to the operator at the time the aircraft is returned to service.

By accepting this certificate, you acknowledge that you have read and understand your responsibilities as an STC holder.

Sincerely,

Robert M. Stach
for
Alan T. Shinseki
Manager, Systems and Equipment Branch

Enclosures (3)

November 20, 2001
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United States of America
Department of Transportation—Federal Aviation Administration
Supplemental Type Certificate

Number **ST00653LA**

This certificate is issued to
Honeywell Inc.
21111 N. 19th Avenue
Phoenix, Arizona 85027

*certifies that the change in the type design for the following product with the limitations and conditions
hereinafter specified herein meets the airworthiness requirements of Part 25 of the Federal Aviation
Regulations. * (for Certification basis see T. C. Data Sheet A16WE)*

Original Product—Type Certificate Number: **A16WE**
Make: **The Boeing Company**
Model: **737-800 Series**

Description of Type Design Change: Installation of Honeywell/Racal Intermediate Gain Satellite
Communication System in accordance with FAA approved Honeywell Master Data List, Engineering
Specification No. ML4085635, Revision "A", dated October 14, 1998, or later FAA approved revisions
of this specification.

*Applicable FAA approved Honeywell Airplane Flight Manual Supplements are listed in Honeywell
Master Data List, called out above.*

Limitations and Conditions: The approval of this modification applies to the above noted airplane model
series only. This approval should not be extended to other specific airplanes of this model series on
which other approved modifications are incorporated, unless it is determined that the
interrelationship between this change and any of those other previously approved modifications will
introduce no adverse effect upon the airworthiness of that aircraft. If the holder agrees to permit
another person to use this certificate to alter the product, the holder shall give the other person
written evidence of that permission.

*This certificate and the supporting data which is the basis for approval shall remain in effect until sur-
rendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the
Federal Aviation Administration.*

Date of application: **April 15, 1998**

Date received: **January 7, 1999**

Date of issuance: **October 27, 1998**

Date amended:

Signature of the Administrator

Mark J. Schaefer

**Project Manager, Systems and Equipment Branch,
Los Angeles Aircraft Certification Office**

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-88)

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ENGINEERING SPECIFICATION		SECURITY NOTATION	SPEC NO. ML4085635-9001	REV LTR
TYPE Master Data List	CLASS X	CAGE CODE 58960		
DIVISION CM-AT	DEPARTMENT NO. 5141	PRODUCT LINE NO. 5111	INITIAL RELEASE DATE 14 OCT 98	
TITLE MASTER DATA LIST FOR INSTALLATION OF HONEYWELL/RACAL AERONAUTICAL SATELLITE COMMUNICATION SYSTEM ON ROYAL AIR MAROC'S B737-800 SERIES AIRCRAFT				
PREPARED BY  98-10-14	DATE 98-10-14	APVD BY SECTION HEAD  99-10-14	DATE 99-10-14	APVD BY ENGRG DEPT MGR
REF AWAEB/PSAEB NO. 7518081	CHECKER L.Darnell	PRODUCT DESIGN CHECKER (FOR REF. SPCL CONT PER EPM 1A-40)	COGNIZANCE OF QE SUPVR (FOR REF. SPCL CONT PER EPM 1A-40)	
FOR PAGE INDEX SEE PAGE OR-2. REVISION RECORD FOLLOWS PAGE INDEX.				
<p>FAA APPROVED OCT 27 1998</p> <p>LOS ANGELES AIRCRAFT CERTIFICATION OFFICE INITIALS: <u>NC/1901</u> - 1901 Rev -</p>				
<p>PROPRIETARY NOTICE THIS DOCUMENT AND THE INFORMATION DISCLOSED HEREIN ARE PROPRIETARY DATA OF HONEYWELL INC. NEITHER THIS DOCUMENT NOR THE INFORMATION CONTAINED HEREIN SHALL BE REPRODUCED, USED, OR DISCLOSED TO OTHERS WITHOUT THE WRITTEN AUTHORIZATION OF HONEYWELL INC.</p>				
<p>NOTICE FREEDOM OF INFORMATION ACT (5 USC 552) AND DISCLOSURE OF CONFIDENTIAL INFORMATION GENERALLY (18 USC 1905) THIS DOCUMENT IS BEING FURNISHED IN CONFIDENCE BY HONEYWELL INC. THE INFOR- MATION DISCLOSED HEREIN FALLS WITHIN EXEMPTION (b) (4) OF 5 USC 552 AND THE PRO- HIBITIONS OF 18 USC 1905.</p>				
Honeywell	SECURITY NOTATION	AW/PS CRITICAL NOTATION	CR-1	TITLE PAGE
15101-000 (REV 12-97 AF) HONEYWELL INC.				

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5150-0111-1898

ENGINEERING SPECIFICATION		SECURITY NOTATION	SPEC. NO. ML4085635-9001	—
			CAGE CODE 58960	REV LTR
REV LTP	SEE FIRST PAGE FOR PROPRIETARY OR DATA RIGHTS NOTATIONS.			
5	MASTER DATA LIST FOR INSTALLATION OF HONEYWELL/RACAL AERONAUTICAL SATELLITE COMMUNICATION SYSTEM ON ROYAL AIR MAROC'S B737-800 SERIES AIRCRAFT			
10	STC No.			
15	SCOPE This is the Master Data List for Installation of the Honeywell/Racal multiple channel Aeronautical Satellite Communication (MCS SATCOM) System on Royal Air Maroc's B737-800 series aircraft. Each certification application of the Honeywell/Racal MCS SATCOM on Boeing 737 aircraft under this STC is defined in one of a series of documents identified as ML4085635-9XX. The base document, ML4085635, is referenced on the Supplemental Type Certificate and lists each of the ML4085635-9XX series documents that define a particular application.			
20	1.1 DOCUMENT ORGANIZATION Section 1 provides an introduction to, and defines the scope of, this document and section 2 contains several supplemental notes. Section 3 contains nine (9) subsections that define the STC data for this project. Section 3.1 identifies the operator and the aircraft type. Section 3.2 provides a brief description of the alteration to the aircraft and section 3.3 addresses the continued airworthiness aspects for the alteration. Section 3.4 identifies the system functionality added by this alteration and section 3.5 lists the required equipment. Section 3.6 provides the installation documentation and section 3.7 identifies the equipment documentation. Section 3.8 lists the interfacing equipment and section 3.9 contains explanatory notes that supplement the information in sections 3.5 through 3.8.			
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Honeywell		SECURITY NOTATION	SUPPLEMENTS	PAGE 1

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ENGINEERING SPECIFICATION		SECURITY NOTATION	SPEC. NO. ML4085635-9001	CAGE CODE 58960	REV.LTR																														
REV LTR	SEE FIRST PAGE FOR PROPRIETARY OR DATA RIGHTS INDICATIONS.																																		
3.4 SYSTEM FUNCTIONALITY The equipment configuration specified in this document provides the following functional capabilities: 1. SDU, RFU AND HPA Baseline 6-channel SATCOM System configuration supporting: a. Nonessential multiple channel satellite communication to support passenger voice use. b. Nonessential multiple channel satellite communication to support unrestricted, supplemental cockpit voice use. c. Nonessential satellite communication to support Data-2 messaging via ACARS.																																			
3.5 EQUIPMENT CONFIGURATION <table border="1"><thead><tr><th colspan="6">Multiple Channel SATCOM Equipment</th></tr><tr><th>Item No.</th><th>Norman- nature</th><th>Manufacturer</th><th>Component</th><th>Part No.</th><th>Qty.</th></tr></thead><tbody><tr><td>1</td><td>SDU</td><td>Honeywell/Racal</td><td>Satellite Data Unit</td><td>7515100-20060</td><td>1</td></tr><tr><td>2</td><td>RFU</td><td>Honeywell/Racal</td><td>Radio Frequency Unit</td><td>7516240-20060</td><td>1</td></tr><tr><td>3</td><td>HPA</td><td>Honeywell/Racal</td><td>High Power Amplifier</td><td>7516251-20060</td><td>1</td></tr></tbody></table>						Multiple Channel SATCOM Equipment						Item No.	Norman- nature	Manufacturer	Component	Part No.	Qty.	1	SDU	Honeywell/Racal	Satellite Data Unit	7515100-20060	1	2	RFU	Honeywell/Racal	Radio Frequency Unit	7516240-20060	1	3	HPA	Honeywell/Racal	High Power Amplifier	7516251-20060	1
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