

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



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 737-800 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 "C", 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

Purpose - Aviation Safety Professionalism - Technical Excellence Pride - Highest Quality

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,

for *Robert M. Shinsaki*
Alan T. Shinsaki
Manager, Systems and Equipment Branch

Enclosures (3)

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United States of America
Department of Transportation—Federal Aviation Administration
Supplemental Type Certificate

Number ST00653LA

This certificate 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
therefor as 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: B737-800 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
[Signature]
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.

FAA Form 8110-2 (10-68)

This certificate may be transferred in accordance with FAR 21.47.

November 20, 2001
5150-0111-1898

ENGINEERING SPECIFICATION		SECURITY NOTATION		SPEC NO. ML4085635-9001	REV LTR
				CAGE CODE 58960	
TYPE Master Data List		CLASS X		INITIAL RELEASE DATE 14 OCT 98	
DIVISION CM-AT	DEPARTMENT NO. 5141	PRODUCT LINE NO. 5111		CONTRACT NO.	
TITLE MASTER DATA LIST FOR INSTALLATION OF HONEYWELL/RACAL AERONAUTICAL SATELLITE COMMUNICATION SYSTEM ON ROYAL AIR MAROC'S B737-800 SERIES AIRCRAFT					
PREPARED BY <i>D. Smolen</i>	DATE 98-10-17	APVD BY SECTION HEAD <i>[Signature]</i>	DATE 98-10-14	APVD BY ENGRG DEPT MGR	DATE
REF AWAEB/PSAEB NO. 7518081	CHECKER L. Damell	PRODUCT DESIGN CHECKER (FOR REF, SPCL CONT PER EPM I-A-40)		COGNIZANCE OF QE SUPVR (FOR REF, SPCL CONT PER EPM I-A-40)	
FOR PAGE INDEX, SEE PAGE CR-2. REVISION RECORD FOLLOWS PAGE INDEX.					
<div style="border: 2px solid black; padding: 10px; text-align: center;">FAA APPROVED OCT 27 1998 LOS ANGELES AIRCRAFT CERTIFICATION OFFICE INITIALS: <i>NEP/PSL</i> <i>- 9001 Rev -</i></div>			Note: The information within this document is <u>not</u> FAA approved unless the box immediately to the left contains an FAA APPROVED stamp that has been appropriately initialed.		
<div style="border: 1px solid black; padding: 5px;"><p style="text-align: center;">PROPRIETARY NOTICE</p><p>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 style="text-align: center;">NOTICE</p><p style="text-align: center;">FREEDOM OF INFORMATION ACT (5 USC 552) AND DISCLOSURE OF CONFIDENTIAL INFORMATION GENERALLY (18 USC 1905)</p><p>THIS DOCUMENT IS BEING FURNISHED IN CONFIDENCE BY HONEYWELL INC. THE INFORMATION DISCLOSED HEREIN FALLS WITHIN EXEMPTION (b) (4) OF 5 USC 552 AND THE PROHIBITIONS OF 18 USC 1905.</p></div>					
Honeywell		SECURITY NOTATION		AW/PS CRITICAL NOTATION	CR-1 TITLE PAGE

15101-000 (REV 12-87 AF) HONEYWELL INC.

ENGINEERING SPECIFICATION	SECURITY NOTATION	SPEC. NO. ML4085635-9001 CAGE CODE 58960	REV LTR
REV LTR	SEE FIRST PAGE FOR PROPRIETARY OR DATA RIGHTS NOTATIONS.		
	<p style="text-align: center;">MASTER DATA LIST FOR INSTALLATION OF HONEYWELL/RACAL AERONAUTICAL SATELLITE COMMUNICATION SYSTEM ON ROYAL AIR MAROC'S B737-800 SERIES AIRCRAFT</p> <p style="text-align: center;">STC No.</p> <p>1. SCOPE</p> <p>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.</p> <p>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 ML4085635-9XXX. The base document, ML4085635, is referenced on the Supplemental Type Certificate and lists each of the ML4085635-9XXX series documents that define a particular application.</p> <p>1.1 DOCUMENT ORGANIZATION</p> <p>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.</p> <p>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.</p> <p>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.</p>		
Honeywell	SECURITY NOTATION	SUPPLEMENTS	1 PAGE

5200-032 (REV 3-88 AF) HONEYWELL INC.

ENGINEERING SPECIFICATION		SECURITY NOTATION		SPEC. NO. ML4085635-9001		REV. LTR																																				
				CAGE CODE 58960																																						
SEE FIRST PAGE FOR PROPRIETARY OR DATA RIGHTS NOTATIONS.																																										
REV LTR																																										
5	3.4 SYSTEM FUNCTIONALITY																																									
10	The equipment configuration specified in this document provides the following functional capabilities:																																									
15	1. SDU, RFU AND HPA																																									
20	Baseline 8-channel SATCOM System configuration supporting:																																									
25	a. Nonessential multiple channel satellite communication to support passenger voice use.																																									
30	b. Nonessential multiple channel satellite communication to support unrestricted, supplemental cockpit voice use.																																									
35	c. Nonessential satellite communication to support Data-2 messaging via ACARS.																																									
40	3.5 EQUIPMENT CONFIGURATION																																									
45	<table border="1"> <thead> <tr> <th colspan="7">Multiple Channel SATCOM Equipment</th> </tr> <tr> <th>Item No.</th> <th>Nomenclature</th> <th>Manufacturer</th> <th>Component</th> <th>Part No.</th> <th>Qty.</th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SDU</td> <td>Honeywell/Racal</td> <td>Satellite Data Unit</td> <td>7516100-20060</td> <td>1</td> <td></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> <td></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> <td></td> </tr> </tbody> </table>							Multiple Channel SATCOM Equipment							Item No.	Nomenclature	Manufacturer	Component	Part No.	Qty.	Note	1	SDU	Honeywell/Racal	Satellite Data Unit	7516100-20060	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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