United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA4959NM

This certificate, issued to: **Panasonic Avionics Corporation**
22333 29th Drive SE
Bothell, WA 98021

certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part **25** *of the* **Federal Aviation** *Regulations.*

Original Product—Type Certificate Number: A20WE
Make: Boeing
Model: 747-237

Description of the Type Design Change: Installation of a Matsushita Avionics Systems (MAS) Passenger Entertainment System/Passenger Service System Number MAS-00003 in accordance with FAA approved MAS document number WS-00003, Revision B, dated June 29, 1990 and MAS Top Level System Drawing Number MAS 00003, sheet 1, Revision B, dated April 6, 1990 and sheet 2, Revision E, dated July 18, 1990, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate must be maintained as part of the permanent records for the modified 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 surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: January 11, 1990

Date of issuance: July 23, 1990

Date reissued: March 3, 1993, June 5, 2006

Date amended: June 5, 2006

By direction of the Administrator

(Signature)

Acting Manager, Seattle 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(10-68)