

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

*Number* SA4090NM

*This certificate, issued to* Ball Communication Systems Division

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

*Original Product — Type Certificate Number:* A20WE

*Make:* Boeing

*Model:* 747-300

*Description of Type Design Change:*

Installation of an aviation satellite communication system (SatCom) in accordance with Ball Communication Systems Division Drawing List DL300887, revision C, FAA approved October 15, 1990 or later approved revision.

*Limitations and Conditions:*

1. FAA approved Airplane Flight Manual Supplement dated October 15, 1990, is required.
2. This approval should not be extended to 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. (See Continuation Sheet, page 3 of 3.)

*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 8, 1990

*Date issued:*

*Date of issuance:* October 15, 1990

*Date amended:*



*By direction of the Administrator*

Ronald F. May  
(Signature) Acting Supervisor  
Denver Aircraft Certification Field Office  
Northwest Mountain Region, Denver, Colorado  
(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.*

United States of America  
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**Supplemental Type Certificate**  
(Continuation Sheet)

*Number* SA4090NM

A copy of this Certificate, Continuation Sheet, and Airplane Flight Manual Supplement dated October 15, 1990, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

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