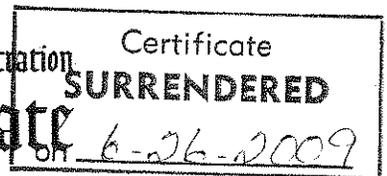


United States of America
Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate



Number SA2756NM-D

This certificate, issued to UNITED AIR LINES, INC.

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. SEE TYPE CERTIFICATE DATA SHEET A22WE FOR SPECIAL CONDITIONS.

Original Product — Type Certificate Number: A22WE
Make: McDONNELL-DOUGLAS
Model: DC-10-10

Description of Type Design Change: INSTALLATION OF WIRING PROVISIONS FOR A SINGLE TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS II). THE PROVISIONS WILL INCLUDE INTERCONNECT WIRING, CIRCUIT BREAKERS, MOUNTING TRAYS, ANTENNAE AND ANTENNA COAX CABLES, AND TCAS TYPE VERTICAL SPEED INDICATORS. IN ADDITION, A DUAL OPERATIONAL MODE S TRANSPONDER SYSTEM WILL BE INSTALLED. UNITED AIR LINES AFM SUPPLEMENT TO FAA APPROVED FLIGHT MANUAL MDC-J1010 DATED 7/27/90, OR LATER APPROVED REVISION, IS REQUIRED AS PART OF THIS INSTALLATION OF A DUAL OPERATIONAL MODE S TRANSPONDER SYSTEM.

Limitations and Conditions:

THIS APPROVAL DOES NOT EXTEND TO OTHER AIRCRAFT OF THIS MODEL ON WHICH OTHER PREVIOUSLY APPROVED MODIFICATIONS ARE INCORPORATED UNLESS IT IS DETERMINED BY THE INSTALLER 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.

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: 5/30/89

Date issued:

Date of issuance: 8/7/89

Date amended: 7/27/90, 6/01/92



By direction of the Administrator

R. M. Gasterline

R. M. Gasterline (Signature)

DAS Staff Coordinator

United Air Lines DAS 1 WE

(Title)

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