

ATTACHMENT 11

Boeing Communication to Rescind 1.3 Reverser Detent



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LBTEL 152 0742AM 07APR97
LBLPS1 0092 0742AM 07APR97 MSQ 033287

LBVAX LBLPS
PROFS
TO: C008407@LBVM6

ATTN: V. BRINKMANN

MD80-COM-0006/KRH ATA: 09-78-30-00 DATE: 07APR97

TO: ALL MD-80 OPERATORS AND ALL FIELD SERVICE REPRESENTATIVES

FROM: C. B . RUDOLPH / K. R. HACKWORTH, C1-L33 (D035-0035)

SUBJ: DC-9 SERIES 80 THRUST REVERSER, REPLACEMENT OF THRUST
REVERSER INTERMEDIATE DETENT CAM SUPPORT ASSEMBLY

REF: A) SERVICE BULLETIN (S/ B) MD80-78-068R01,
DATED JUNE 14, 1996
B) S/ B MD80- 78-070 , SCHEDULED TO BE ISSUED MAY 29, 1997

FILE: NAA

THIS COM TWX IS TO ADVISE THAT ON SEVERAL OCCASIONS MD-80 AIRCRAFT HAVE DEPARTED THE END OR THE SIDE OF THE RUNWAY DURING LANDING ROLL IN ADVERSE AMBIENT CONDITIONS. THESE INSTANCES ALL INVOLVED THE USE OF HIGH REVERSE THRUST LEVELS. TO MAINTAIN GOOD RUDDER EFFECTIVENESS, DOUGLAS FLIGHT CREW OPERATING MANUAL (FCOM) PROCEDURES FOR LANDING ON WET OR SLIPPERY RUNWAYS RECOMMEND LIMITING REVERSE THRUST TO NO MORE THAN 1.3 EPR. TO ASSIST THE FLIGHT CREW IN LIMITING REVERSE THRUST TO 1.3 EPR, A NEW CAM WAS DEVELOPED WITH AN ADDITIONAL INTERMEDIATE DETENT AT APPROXIMATELY 1.3 EPR. THIS REVISED CAM WAS ADDED BY REF.(A) SERVICE BULLETIN.

DOUGLAS HAS RECEIVED REPORTS FROM THE TWO OPERATORS, WHO HAVE INCORPORATED REFERENCE (A) SERVICE BULLETIN ON 15 AIRCRAFT, THAT OPERATIONAL DIFFICULTY WAS EXPERIENCED WHEN ATTEMPTING TO OBTAIN MATCHED EPR DURING REVERSE THRUST. INVESTIGATION BY DOUGLAS REVEALED THAT BECAUSE OF THE STEEP SLOPE OF THE ENGINE 3-D CAM IN REVERSE THRUST, COUPLED WITH INHERENT HYSTERESIS WITHIN THE MECHANICAL ENGINE CONTROL SYSTEM, IT IS IMPOSSIBLE TO RIG AND/OR TRIM THE ENGINE CONTROL SYSTEM TO OBTAIN REPEATABLE MATCHED REVERSE THRUST EPR IN SERVICE. IN ADDITION, DOUGLAS HAS FOUND THAT IT IS MORE DIFFICULT TO ACCURATELY OBTAIN THE MAXIMUM ALLOWABLE OPERATIONAL LIMIT OF 1.6 EPR WITH THE INTERMEDIATE CAM INSTALLED.

BASED ON THE ABOVE, DOUGLAS DOES NOT RECOMMEND FURTHER
INCORPORATION OF REFERENCE (A) ON MD-80 AIRCRAFT.

REFERENCE (B) IS SCHEDULED TO BE ISSUED MAY 29, 1997, TO
RECOMMEND REPLACEMENT OF THE THRUST REVERSER INTERMEDIATE
DETENT CAM INSTALLED PER REFERENCE (A) WITH THE ORIGINAL CAM.

SHOULD ADDITIONAL INFORMATION BE REQUIRED, PLEASE SUBMIT YOUR
QUESTIONS TO PRODUCT SUPPORT, ATTN: CUSTOMER TECHNICAL
ENGINEERING, HYDRO-MECHANICAL SYSTEMS, DOUGLAS AIRCRAFT COMPANY,
P. O. BOX 1771, LONG BEACH, CA. 90801; SITA: TOAMD7X, ARINC,
LAXMDCR, TELEX: 674357, FAX (562) 593-7710, OR CALL
(562) 593-3947.

C. B . RUDOLPH
SENIOR MANAGER-SYSTEMS
CUSTOMER TECHNICAL ENGINEERING
PRODUCT SUPPORT

F. C. HAAS
DIRECTOR
CUSTOMER TECHNICAL ENGINEERING
PRODUCT SUPPORT

END/FLS