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PLEASE ADVISE BOEING ACTIVITY REGARDING SUBJECT SYSTEM CHANGES.

RESPONSE: BOEING IS INVOLVED IN REDESIGN OF THE YAW DAMPER COUPLER FOR THE 737 MODEL AIRPLANES. THE NEW YAW DAMPER COUPLER WILL BE RETROFITTABLE INTO EXISTING 737 MODEL AIRPLANES WITH MINOR WIRING CHANGES REQUIRED. THE NEW DESIGN WILL:

1. BE DIGITAL WITH DUAL PROCESSORS

- 2. HAVE DUAL SOLID STATE RATE SENSORS TO REPLACE THE RATE GYRO
- 3. HAVE BITE AND IN-FLIGHT FAULT MONITORING AND STORAGE 4. REQUIRE REVISION TO THE AUTOPILOT ACCESSORY UNIT OR
- INTEGRATED FLIGHT INSTRUMENT ACCESSORY UNIT
- 5. WILL REQUIRE A MINOR AMOUNT OF SHIELDED WIRING BE INSTALLED TO REPLACE EXISTING WIRING IN THE AFT FUSELAGE

OUR CURRENT SCHEDULE ANTICIPATES HAVING NEW YAW DAMPER COUPLER HARDWARE AVAILABLE APPROXIMATELY JUNE 1998, HOWEVER, WE ARE WORKING TO IMPROVE THE NEW YAW DAMPER COUPLER AVAILABILITY DATE. IF ADDITIONAL INFORMATION IS REQUIRED, PLEASE CONTACT US.

COTTRILLE/CROW/MIKE DIDONATO CUSTOMER SERVICES DIVISION BOEINGAIR M-7272 2H-95

SEP 96 0901

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/ATTN (617) M. DIDONATO MANAGER /7/7/7/7 AIRLINE SUPPORT /CC (BFSLHR) M. HAMILTON MGR M-7424 /CC (BRDLHR) E.W. BERTHIAUME REG DIR

96-0260TR SEP 96 ATA 0200-00 MODEL 737-500 IN-FLIGHT ATTITUDE EXCURSION - ROLL REF /A/ -96-0258TR AIRPLANE HOURS/CYCLES

THE REF ADDRESSED A SUBJECT EVENT OF THE DATUM 737 SEP 96. THE YAW DAMPER COUPLER WAS CHANGED ON THE DATUM 737 SEP 96 DUE IT HAD FAILED BITE TEST 1 SEP 96. THE APL RESUMED FLYING SEP AND FLEW WITHOUT PIREP UNTIL SEP WHEN A HYD SYST B EMDP HAD AN OVERHEAT WARNING . NO FAULT WAS FOUND AND THE APL RETURNED TO WHERE THE B EMDP WAS CHANGED AS PRECAUTIONARY.

ON A SUBSEQUENT FLIGHT INTO(LHR A SEP 96 TECH LOG ENTRY STATED "A/C DEPARTED FROM NORMAL FLIGHT ON TWO OCAISIONS". VERBAL RREPORTS STATED THAT A ROLL OCCURRED TO THE RIGHT OF 20 DEG AND A ROLL LEFT TO 30 DEG. IAS RESPECTIVELY WERE 250 KTS AND 210 KTS, ALTITUDE FL 160. FDR DATA DUMPS WERE REQUESTED AS WERE RADAR PLOTS.

DUE CONCERNS REGARDING THIS EVENT, THE REF EVENT, BOTH ON THE SAME 737, OTHER RUDDER/YAW DAMPER COUPLER REMOVALS, ETC (REPORTED UNDER ATA 2221-20) REQUESTED DIRECT BOEING INVOLVEMENT BOTH VIA TELECON AND ON-SITE TECH ASSIST.

THE WAS ALSO INVOLVED AND REQUESTED SIMILAR DATA PLUS THE CVR REMOVAL. THE 737 WAS "IMPOUNDED" AT UNTIL FURTHER 'NVESTIGATION WITH BOEING PERSONNEL ATTENDING.

JEING SEATTLE SENT TWO ENGINEERRING SPECIALISTS, BEN SMITH, FLT CONT, AND BILL WATTERS, AVIONICS. TELECONS WERE ALSO HELD BETWEEN CSE, DUWAMISH, ENGINEERING AND ROCKCASTLE BCS, (DALE WILEN) WAS ALSO ON-SITE THE NIGHT OF SEP.

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THE SPECIALISTS ARRIVED SEP AND IMMEDIATELY STARTED

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