

# ALERT BULLETIN

AB 2004:138/2-18

12/1/04

630943,630803

TO: Boeing Commercial Airplane Company

INFO: FAA (ASY-300, AFS-200, AFS-300, AFS-900, AAI-200, SEA-AEG, ANM-100, AEU-100, BOS-AEG), AASC, ASAP, AMFA, ALPA, APA, AIA, ATA, IAM, IATA, ICAO, ICASS, IFALPA, NATA, NBAA, NTSB, PAMA, RAA, SWAPA

FROM: Linda J. Connell, Director  
NASA Aviation Safety Reporting System

SUBJ: B737-500 MAINTENANCE PUBLICATION INCIDENT

We recently received an ASRS report describing a safety concern which may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

ASRS received reports from two maintenance technicians claiming that a B737-500 was dispatched with a reverser line not connected to the standby hydraulic power module, due to an omission in the maintenance manual. The disconnected reverser line was discovered by a flight crew member during a pre-flight inspection. The reverser line was allegedly disconnected during installation of the standby hydraulic system module at an off line station. The reporter claimed that the reverser line adapter fittings and "O" ring seals were to be included with the unit received from stores, but were not with the hydraulic power module unit. The maintenance manual reportedly does not call out the installation of an adapter for the reverser line, or call out for the reverser system to be checked during the operational checks portion of the procedure.

(Keywords: Maintenance Manual, Operational Checks)

To properly assess the usefulness of our AB service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Michael Jengo at (650) 969-3969 or [mjengo@mail.arc.nasa.gov](mailto:mjengo@mail.arc.nasa.gov).



Aviation Safety Reporting System  
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## ACN: 630943

### Time

Date : 200408

Day : Fri

### Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 4

### Aircraft / 1

Make Model : B737-500

### Person / 1

Function.Maintenance : Technician

ASRS Report : 630943

### Person / 2

Function.Maintenance : Technician

ASRS Report : 630803

### Person / 3

Function.Flight Crew : First Officer

### Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Maintenance Problem : Improper Documentation

Anomaly.Maintenance Problem : Improper Maintenance

Anomaly.Non Adherence : FAR

Resolatory Action.None Taken : Detected After The Fact

Consequence.Other : Company Review

Consequence.Other : Maintenance Action

### Narrative

REPLACED STANDBY HYDRAULIC MODULE IN MLG WHEEL WELL PER MAINT MANUAL ON AUG/FRI/2004. ON SEPT/FRI/2004, HYDRAULIC LINE FOR REVERSE WAS FOUND NOT HOOKED UP TO MODULE. MAINT MANUAL DOES NOT REFERENCE A PLUG TO BE REMOVED OR AN ADAPTER TO BE INSTALLED ON THE STANDBY HYDRAULIC MODULE FOR REVERSER LINE TO BE CONNECTED. MAINT MANUAL DOES NOT REFERENCE AN OPERATIONAL TEST OF THE REVERSERS UPON COMPLETION OF STANDBY HYDRAULIC MODULE REPLACEMENT. HAD EITHER ITEM BEEN STATED IN THE MAINT MANUAL, I BELIEVE THE ERROR WOULD NOT HAVE TAKEN PLACE. SUPPLEMENTAL INFO FROM ACN 630803: ACCOMPLISHED LEAK CHECK OF MODULE AFTER UNIT REPLACED. ACCOMPLISHED OPERATIONAL TEST OF STANDBY MODULE. TEST PASSED REFERENCE MAINT MANUAL. REFERENCE ILLUSTRATED PARTS CATALOG. THIS JOB WAS ACCOMPLISHED AFTER A TURNOVER FROM PREVIOUS CREW, WHICH HAD ALREADY CHANGED MODULE, BUT NEW MODULE WAS BAD (CRACKED) SAME PLACE ORIGINAL WAS. WE CONTINUED ON WITH NEW PART. CALLBACK CONVERSATION WITH RPTR ACN 630943 REVEALED THE FOLLOWING INFO: THE RPTR STATED THE REVERSER LINE THAT SHOULD HAVE BEEN ATTACHED TO THE STANDBY HYDRAULIC POWER UNIT WAS DISCONNECTED BY ANOTHER SHIFT DURING THE MODULE REMOVAL AND PUSHED BACK BEHIND THE 'B' PUMPS OUT OF SIGHT. THE RPTR SAID THE STANDBY HYDRAULIC PWR UNIT WAS INSTALLED PER THE MAINT MANUAL AND TESTED OK FOR SERVICE. THE RPTR STATED THE MANUAL DOES NOT CALL OUT THE INSTALLATION OF THE ADAPTER FOR THE REVERSER LINE. THE RPTR SAID THE REVERSER WAS NOT ON THE OPERATIONAL TEST IN THE MAINT MANUAL. THE RPTR STATED THE ILLUSTRATED PARTS CATALOG PICTORIAL VIEW OF THE STANDBY HYDRAULIC MODULE SHOWS THE REVERSER PORT HAVING A PLUG INSTALLED NOT AN ADAPTER FITTING FOR A LINE CONNECTION. THE RPTR SAID THE REVERSER LINE ADAPTER FITTINGS AND 'O' RING SEALS WERE TO BE INCLUDED WITH THE UNIT RECEIVED FROM STORES BUT WERE NOT WITH THE MODULE.

### **Synopsis**

A B737-500 WAS DISPATCHED IN NON COMPLIANCE WITH A REVERSER LINE NOT CONNECTED TO THE STANDBY HYDRAULIC POWER MODULE.