



FAA

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Airworthiness Concern Sheet

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Make, Model, Series, Serial No.:
Raytheon Model 390 Premier 1,
Serials RB-1, RB-4 through RB-84, RB-87 through RB-90, RB-92
through RB-96, RB-99 through RB101, and RB-103 through RB-106

Reason for Airworthiness Concern: The FAA has received reports of damage to the left and/or right MLG harness assemblies resulting in various system failures/anomalies due to erroneous air/ground status signals.

FAA Description of Airworthiness Concern (Who, What, Where, When, How? Attachments: RA and appropriate data):
There is a concern that the various systems utilizing air/ground status signals will fail or operate erroneously. Some of these can be severe, and the cumulative effect of them can be severe. Some of the effects are loss of lift dump, perceived anti-skid failure, loss of pressurization, loss of transponder responses to interrogations, and various other less severe anomalies that increase crew workload. These appear to be a result of damaged wire harnesses caused by the harness and/or other hardware physically interfering with gear ext/ret. It should be noted these interferences appear to have been introduced with the implementation of a previous Mandatory Service Bulletin (SB 27-3608 and kit 390-8103-0001). That service bulletin and kit are being revised to reflect an improved installation for those operators who have not yet incorporated the original change. In response to these concerns, for operators who have previously implemented SB 27-3608, the manufacturer has published a Mandatory Service Bulletin (SB 32-3678, rev -) correcting this (inspect for damage, repair, reroute, secure bundle) at no charge to the customer, and has requested this be enforced with an Airworthiness Directive.

Request for Information (Proposed Alternate Inspection/Repair Procedures, Cost Impact, Etc. Note: Any comments or replies to the FAA need to be as specific as possible. Please provide specific examples to illustrate your comments/concerns.): We are currently evaluating what corrective action would be appropriate. Please direct all comments/input to Philip Petty at the Wichita Aircraft Certification Office no later than August 9, 2004. (Contact information above)

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owner/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve an AD action or an SAIB, or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type clubs comments.

Attachments: *SDR(s) *A/IDS *SL(s) *SAIB *FAASR/*NTSBSR *AD *AMOC *RA

Notification: FAA *AOPA *EAA Type Club *TC Holder Other:

Response Requested ___/___/___: Emergency (10 days) Alert (30 days) Information (90 days)
(Space Bar Adds "X" to Check Boxes)

*Service Difficulty Reports (SDRs); Accident/Incident Data System (A/IDS); Service Letter (SL); Special Airworthiness Information Bulletin (SAIB); Federal Aviation Administration (FAA)/National Transportation Safety Board (NTSB) Safety Recommendation (FAASR/NTSBSR); Airworthiness Directive (AD); Alternate Method of Compliance (AMOC); Risk Assessment (RA); Aircraft Owners & Pilots Association (AOPA); Experimental Aircraft Association (EAA); Type Certificate (TC)