

Safety Regulation Group

Engineering Department – Avionics & Electrical Systems

6 July 2006

Our Ref 9/97/CtAw/30

LETTER TO OWNER/OPERATORS NO 2903 RAYTHEON/BEECH 200 ELECTRICAL GENERATOR WARNINGS

The AAIB and CAA are investigating a recent serious incident that occurred on a Beech 200 Super King Air. An unsafe condition resulted from the total loss of all electrical power, including the standby electrical provisions, whilst the aircraft was operating in IMC. The CAA is also aware of two previous incidents in which Beech 200 Super King Air aircraft lost total electrical power in flight. These events call into question the effectiveness of the existing annunciations provided by the aircraft's caution and warning system for the status of the aircraft's generators.

At present on the Beech 200, when any generator is off-line, an amber 'x DC GEN' annunciation is provided on the Caution and Advisory Panel for the respective generator. Unusually, there is no red warning annunciation in the pilot's line of sight in the event that both electrical generators are off-line, or when the battery starts to support part of the main electrical load. As has been shown by experience, failure to notice and react in either of these situations will result in total depletion of reserve electrical power in a short period of time.

Whilst investigations continue with EASA, Raytheon/Beech and the FAA concerning whether design changes may be necessary to address the unsafe condition, this LTO is issued to advise owners and operators of Beech 200 aircraft of the following:

- In the event of a total loss of generated power the amber indication given may not have the required attention getting characteristics that such a failure scenario demands. Therefore, a conscious check of the status of the annunciations should be made frequently.
- The meaning of the annunciations should be carefully reviewed to ensure a full and thorough understanding of their significance.

Enquiries regarding this LTO should be referred to Mark Bonnick, Engineering Department at the address below:

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