



Beech B200 Series  
Engine Fire Detection Systems

**AWB** 26-005 **Issue :** 1  
**Date :** 10 April 2013

## 1. Applicability

All Beech 200 King Air Series aeroplanes without continuous loop engine fire detection systems installed.

## 2. Purpose

Provide information to operators and maintainers regarding improved engine fire detection systems to avoid false in-flight engine fire indications.

## 3. Background

Operators with OEM Walter Kidde optical flame detectors installed in the engine compartment continue to report in-flight engine fire warnings, frequently discharging the fire extinguisher in flight, only to subsequently find it was a false indication. Some have attributed the problem to water penetrating the optical sensor and have tried to improve reliability with additional sealing.

The manufacturer identified that such false triggers were caused by external light sources and sought to improve the scan of the flame detectors by issuing service information to reposition the detectors and add "sun shields" to ensure that this type of detector only responded to engine fire flame and not the sun or other light sources.

In 1995, Beechcraft issued Service Bulletin No. 2596 with associated kits to replace the optical system with a continuous loop fire and overheat detection system. This system has apparently proven to be very reliable, eliminating false indications.

It should be noted that world-wide stocks of flame detectors is dwindling because the key chemical used in the manufacture these detectors, Cadmium Sulphide, is no longer allowed to be made and production has ceased. Eventually optical flame detectors will become unavailable.

## 4. References

1. Beech Service Instruction 1190 Relocation of the Lower RH Fire Detector
2. Beech Service Instruction 1260 Relocation of Lower Forward Engine Fire Detectors
3. Beech Mandatory Service Bulletin 2005 Rev1 Fire Protection Part I Relocation of Lower Forward Engine Fire Detector's, Part II Installation of additional light shield.



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4. Beech Service Bulletin 2596 Kit No. 101-9077-1 / -3 Fire Protection - Continuous Loop Fire and Overheat Detection System Installation.

## 5. Recommendation

CASA strongly recommends that in order to avoid false in-flight engine fire indications, operators install the continuous loop engine fire detection systems.

## 6. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link e-mail address:

[AirworthinessBulletin@casa.gov.au](mailto:AirworthinessBulletin@casa.gov.au)

or in writing, to:

Airworthiness & Engineering Branch  
Civil Aviation Safety Authority  
GPO Box 2005, Canberra, ACT, 2601