The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type-certification basis for the GVI.

In lieu of the requirements of § 25.1353(c)(1) through (c)(4) at amendment 25–42, lithium batteries and battery installations on the GVI must be designed and installed as follows:

1. Safe lithium battery-cell temperatures and pressures must be maintained during any charging or discharging condition, and during any failure of the battery-charging or battery-monitoring system not shown to be extremely remote. The lithium-battery installation must preclude explosion in the event of those failures.

2. Design of lithium batteries must preclude the occurrence of self-sustaining, uncontrolled increases in temperature or pressure.

3. No explosive or toxic gases emitted by any lithium battery in normal operation, or as the result of any failure of the battery-charging or battery-monitoring system, or battery installation which is not shown to be extremely remote, may accumulate in hazardous quantities within the airplane.

4. Installations of lithium batteries must meet the requirements of 14 CFR 25.863(a) through (d).

5. No corrosive fluids or gases that may escape from any lithium battery may damage surrounding structure or any adjacent systems, equipment, or electrical wiring of the airplane in such a way as to cause a major or more-severe failure condition, as determined in accordance with 14 CFR 25.1309(b).

6. Each lithium-battery installation must have provisions to prevent any hazardous effect on structure or essential systems caused by the maximum amount of heat the battery can generate during a short circuit of the battery or its individual cells.

7. Lithium-battery installations must have a system to control automatically the charging rate of the battery to prevent battery overheating or overcharging, and

(i) A battery-temperature-sensing and over-temperature-warning system with a means to automatically disconnect the battery from its charging source in the event of an over-temperature condition or,

(ii) A battery-failure sensing-and-warning system with a means to automatically disconnect the battery from its charging source in the event of battery failure.

8. Any lithium-battery installation, the function of which is required for safe operation of the airplane, must incorporate a monitoring-and-warning feature that will provide an indicating to the appropriate flight crewmembers whenever the state-of-charge of the batteries has fallen below levels considered acceptable for dispatch of the airplane.

9. The instructions for continued airworthiness required by § 25.1529 and § 26.11 must contain maintenance steps to assure that the lithium batteries are sufficiently charged at appropriate intervals specified by the battery manufacturer. The instructions for continued airworthiness must also contain procedures to ensure the integrity of lithium batteries in spares storage to prevent the replacement of batteries, the function of which are required for safe operation of the airplane, with batteries that have experienced degraded charge-retention ability or other damage due to prolonged storage at a low state-of-charge. Precautions should be included in the continued-airworthiness maintenance instructions to prevent mishandling of lithium batteries, which could result in a short circuit or other unintentional damage that could result in personal injury or property damage.

GAC must show compliance with the requirements of these special conditions by test and/or analysis. The aircraft certification office, or its designees, will find compliance in coordination with the FAA Transport Standards Staff.

Note 1: The term “sufficiently charged” means that the battery retains enough of a charge, expressed in ampere-hours, to ensure that the battery cells are not damaged. A battery cell may be damaged by reducing the battery’s charge below a point where the battery’s ability to charge and retain a full charge is reduced. This reduced charging and charge-retention capability would be greater than the reduction that may result from normal operational degradation.

Note 2: These special conditions are not intended to replace § 25.1353(c) in the certification basis of the GVI. These special conditions apply only to lithium batteries and rechargeable lithium-battery-system installations. The requirements of § 25.1353(c) remain in effect for batteries and battery installations on the GVI that do not use lithium batteries.
reducing nose down elevator control.
attaching linkage to move over-center,
the following reports of the elevator
necessary. This AD was prompted by
bob-weight (stabilizer weight) traveling
the weight and/or weight bracket with corrective action as necessary.

Interim Action

We consider this AD interim action to
address the immediate unsafe condition
affecting these airplanes. We may take
further AD action at a later date.

FAA’s Determination of the Effective Date

An unsafe condition exists that
requires the immediate adoption of this
AD. The FAA has found that the risk to
the flying public justifies waiving notice
and comment prior to adoption of this
rule because the elevator stabilizer
weight (bob-weight) could move over-
center resulting in reduced nose down
elevator control, which could result in
loss of control of the airplane.
Therefore, we find that notice and
opportunity for public comment are
impracticable and that good cause
exists for making this amendment
effective in less than 30 days.

Comments Invited

This AD is a final rule that involves
requirements affecting flight safety and
was not preceded by notice and an
opportunity for public comment.
However, we invite you to send any
written data, views, or arguments about
this AD. Send your comments to an
address listed under the ADDRESSES
section. Include the docket number
FAA–2012–0014 and Directorate
Identifier 2011–CE–044–AD at the
beginning of your comments. We
specifically invite comments on the
overall regulatory, economic,
environmental, and energy aspects of
this AD. We will consider all comments
received by the closing date and may
amend this AD because of those
comments.

We will post all comments we
receive, without change, to http://
www.regulations.gov, including any
personal information you provide. We
will also post a report summarizing each
substantive verbal contact we receive
about this AD.

Costs of Compliance

We estimate that this AD affects 300
airplanes.

We estimate the following costs to
comply with this AD:

- Federal eRulemaking Portal: Go to
http://www.regulations.gov. Follow the
instructions for submitting comments.
- Fax: (202) 493–2251.
- Mail: U.S. Department of
Transportation, Docket Operations,
M–30, West Building Ground Floor,
Room W12–140, 1200 New Jersey
Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail
address above between 9 a.m. and
5 p.m., Monday through Friday, except
Federal holidays.

For service information identified in
this AD, contact Hawker Beechcraft
Corporation at P.O. Box 85, Wichita,
Kansas 67201–0085; telephone: (800)
429–5372 or (316) 676–3140; Internet:

Examining the AD Docket

You may examine the AD docket on
the Internet at http://
www.regulations.gov; or in person at the
Docket Operations Office between
9 a.m. and 5 p.m., Monday through
Friday, except Federal holidays. The AD
docket contains this AD, the regulatory
evaluation, any comments received, and
other information. The street address for
the Docket Operations Office (phone:
(800) 647–5527) is in the ADDRESSES
section. Comments will be available in
the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT ONE
OF THE FOLLOWING:

- Paul DeVore, Aerospace Engineer,
Witchita ACO, FAA, 1801 Airport
Road, Room 100, Wichita, Kansas
67209; telephone: (316) 946–4142;
fax: (316) 946–4107; email:
paul.devore@faa.gov; or
- Don Ristow, Aerospace Engineer,
Witchita ACO, FAA, 1801 Airport
Road, Room 100, Wichita, Kansas
67209; telephone: (316) 946–4120;
fax: (316) 946–4107; email:
donald.ristow@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On December 23, 2011, we issued
Emergency AD 2011–27–51, which
requires inspecting the elevator bob-
weight and attaching linkage for correct
installation and for damage or
deformation to the weight and/or weight
bracket with corrective action as
necessary. This AD was prompted by
the following reports of the elevator
bob-weight (stabilizer weight) traveling
past its stop bolt, which allowed the
attaching linkage to move over-center,
reducing nose down elevator control.

In one instance, a Model 1900C
airplane experienced jammed elevators
on take-off after a loud bang was heard
in the cockpit shortly after rotation.
The flight crew noticed that they were
unable to move the control column to a
down position. Elevator movement
was only available between neutral to
full deflection nose up. The airplane
pitch was controlled with the elevator
trim and the airplane returned to base,
landing safely. Upon inspection,
mechanics noticed that the bob-weight
interconnect link, part number (p/n)
101–524112–1, was upside down and
trailing forward from the control
column weld assembly instead of
trailing aft as it should. With the link
traveled over-center, the geometry of the
bob-weight was completely changed
relative to its stop. This condition made
the bob-weight hit its stop mid-travel,
where it should actually have positive
clearance from its stop at the full nose
down position. The elevator could now
only move between nose full up and
neutral.

In another instance, on a Model
1900D airplane, during the takeoff roll
the elevator controls felt heavy and
appeared to be jammed/sticking,
requiring more force than usual to
rotate. The crew then aborted the takeoff
run. Subsequent investigation revealed
that the elevator bob-weight attaching
link assembly traveled over-center, thus
preventing full nose down elevator
control authority.

The Model 1900 airplanes have the
same type design and thus are subject to
this unsafe condition.

This condition, if not corrected, could
result in reduced nose down elevator
control and loss of airplane control.

Relevant Service Information

We reviewed Hawker Beechcraft
Corporation Safety Communiqué #321,
dated December 2011. The service
information provides information to
assist in doing the actions of this AD.

FAA’s Determination

We are issuing this AD because we
assessed all the relevant information
determined the unsafe condition
described previously is likely to exist or
develop in other products of the same
type design.

AD Requirements

This AD requires inspecting the
elevator bob-weight and attaching
linkage for correct installation and for
damage or deformation to the weight
and/or weight bracket with corrective
action as necessary.
Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39—AIRWORTHINESS DIRECTIVES**

§ 39.13 [Amended]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):


(a) Effective Date

This AD is effective January 18, 2012, to all persons except those persons to whom it was made immediately effective by Emergency AD 2011–27–51, issued on December 23, 2011, which contained the requirements of this amendment.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Hawker Beechcraft Corporation airplanes, certificated in any category:

- 1900C (Military).
- 1900D

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by reports of the elevator bob-weight (stabilizer weight) traveling past its stop bolt, which allowed the attaching linkage to move over-center. We are issuing this AD to detect and correct conditions that could result in reduced nose down elevator control and loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections

Within the next 10 hours time-in-service after January 18, 2012 (the effective date of this AD), inspect the elevator bob-weight installation for the following conditions. Use Hawker Beechcraft Corporation Safety Communique #321, dated December 2011.

Note: The term “nose down” corresponds to the airplane nose down, down elevator, and control column forward position as used in this AD and Hawker Beechcraft Corporation Safety Communique #321, dated December 2011.

1. The correct positioning of the elevator control column link assembly, (part number P/N 101–524112–1 (1900/1900C) or P/N 101–524112–5 (1900D)). With the elevator control column in the full nose down position (control column forward), the link must form an angle between the link attachment point at the control column and the bell crank pivot point as shown in the Hawker Beechcraft Corporation Safety Communique photo labeled “Correct Link Orientation.” The link should be trailing aft from the control column assembly.

2. The clearance of the bob-weight stop bolt. With the elevator control column in the full nose down position (control column forward), the stabilizer weight stop bolt must have positive clearance with the face of the stabilizer weight.

3. The condition of the bob-weight and alignment with the stop bolt. Inspect for evidence of scraping along either side of the weight by the stop bolt. With side pressure applied by hand to the stabilizer weight, no part of the stop bolt should protrude beyond the face of the stabilizer weight on either edge.

4. The condition of the bob-weight support bracket. Inspect for evidence of damage or deformation by contact with the weight assembly.

(b) Corrective Actions

If any discrepancies are found in the inspections required in paragraph (g) of this AD, before further flight, do the following:

1. Contact Hawker Beechcraft Corporation Technical Support by telephone at (800) 429–5372 or (316) 676–3140 to obtain FAA-approved repair or replacement instructions.

2. Incorporate the repair or replacement specified in the FAA-approved instructions.

(i) Alternative Methods of Compliance (AMOCs)

1. The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if...
DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39

RIN 2120–AA64
Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for The Boeing Company Model 767 airplanes. This AD requires installing new panel assemblies in the main equipment center or on the forward cargo compartment sidewall and removing certain relays from some panels in the main equipment center. This AD also requires revising the maintenance program to incorporate Airworthiness Limitations (AWLs) No. 28–AWL–27 and No. 28–AWL–28. This AD also requires an alternative functional test for the left and right override/jettison pumps. We are issuing this AD to prevent possible sources of ignition in a fuel tank caused by electrical fault or uncommanded dry operation of the main tank boost pumps and center auxiliary tank override and jettison pumps. This AD was prompted by fuel system reviews conducted by the manufacturer. An ignition source in the fuel tank could result in a fire or an explosion and consequent loss of the airplane.

DATES: This AD is effective February 22, 2012.

The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51.

(k) Material Incorporated by Reference

(1) You must use Hawker Beechcraft Corporation Safety Communiqué #321, dated December 2011, to do the actions required by this AD, unless the AD specifies otherwise. The Safety Communiqué #321 references Hawker Beechcraft Corporation Mandatory Service Bulletin 27–3759, but that service bulletin is not required to do the actions of this AD. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Hawker Beechcraft Corporation at P.O. Box 83, Wichita, Kansas 67201–0085; telephone: (316) 946–4142; fax: (316) 946–4107; email: paul.devore@faa.gov; or

(i) Paul DeVore, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946–4142; fax: (316) 946–4107; email: paul.devore@faa.gov; or

(ii) Don Ristow, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946–4120; fax: (316) 946–4107; email: donald.ristow@faa.gov.

(3) You may review copies of the service information at the FAA, Small Airplane Directorate, Aircraft Certification Service, 910 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: http://www.archives.gov/federal-register/cfr/ibr_locations.html.

Issued in Kansas City, Missouri, on January 6, 2012.

Earl Lawrence, Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012–604 Filed 1–17–12; 8:45 am]

BILLING CODE 4910–13–P