AD/ELECT/62 Inventum Water Heaters 5/94

Applicability: Inventum Galley Products Division Model DR1 and DR6 series Water Heaters, part numbers and serial numbers as listed in Inventum Alert Service Bulletin (ASB) DR1/DR6-25-4 Revision A and ASB DR1/DR6-25-5 Revision A, both dated 6 December 1993.

Note: The water heaters are known to be installed in, but not limited to, the following aircraft models:

Boeing	*727 and 737*
McDonnell Douglas	*DC-9*
Fokker	*F28 (except Mk. 1000)*

Requirement:

1. Perform a one time inspection on all affected water heaters to determine whether:

   a. a pressure relief valve has been installed in accordance with Inventum Service Bulletin (SB) 25-330 dated 8 July 1976, SB 25-331 Revision 1 dated 28 September 1977 or ASB DR1/DR6-25-4 Revision A dated 6 December 1993 as applicable; and

   b. two 3-phase safety devices have been installed in accordance with Inventum SB 25-340 dated 7 July 1977, SB 25-344 dated 18 January 1978, SB 25-345 dated 16 February 1978, SB 25-346 dated 16 February 1978 or ASB DR1/DR6-25-5 Revision A dated 6 December 1993 as applicable.

2. If a pressure relief valve and/or two 3-phase safety devices (as applicable) have not been installed, then either:

   a. remove the water heater from the aircraft and install a modified water heater, or

   b. deactivate the water heater and install a placard stating **"Not to be used".**

3. Inventum Model DR1 and DR6 water heaters are not to be fitted to aircraft as replacement items, unless modified in accordance with the referenced Inventum Service Bulletins.

Note: RLD AD 93-168 (AB) dated 17 December 1993 refers.

Compliance:

1 - Prior to 1 July 1994.

2 - Prior to further flight after the Requirement 1 inspection.

3 - With effect 28 April 1994.

Background: The RLD has received a report of an aircraft Inventum DR6 galley water heater exploding during an overheat test in a maintenance facility. Investigation revealed that the heater did not have a pressure relief valve or 3-phase safety devices installed. Since this condition may exist on other similar Inventum water heaters, this Directive is issued to prevent explosions of water heaters and subsequent injuries to passengers or cabin crew members.