



AEROSPACE RECOMMENDED PRACTICE

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PLACARDING OF AIRCRAFT HYDRAULIC EQUIPMENT TO IDENTIFY REQUIRED FLUID SUITABILITY

1. PURPOSE

To recommend a plan for readily identifying the permissible types of fluid to be used in components of an aircraft hydraulic system to assure compatibility between the internal seals and the system fluid.

2. SCOPE

Details of a durable type and semi-permanently attached placard with prescribed text for the permissible fluids are included in the document.

3. INTRODUCTION

Synthetic base fire-resistant hydraulic fluid (of one or more types) is used in a large percentage of the world's commercial jet transport aircraft. Conversely, most of the military aircraft hydraulic systems utilize the mineral-base fluid of USA MIL-H-5606 and UK D. T. D. 585 specification or equivalent. No practical elastomeric seal material has been developed that is totally satisfactory for exposure to and use in both the MIL-H-5606 type and the synthetic base fire-resistant fluids.

Since many components (such as engine-driven pumps and system valves) are similar in external appearance but used in systems with the different type fluids, it is essential that the fluid use requirement be identified on the external surface of the assembly for the internal seals compatibility. Installation of a component in an aircraft system wherein the system fluid is not compatible with the unit's seal material will adversely affect operational reliability of the assembly and promote a malfunctioning due to rapid seal deterioration under these conditions.

Personnel of overhaul shops, parts stores depots, parts pooling agencies and other related military and commercial aircraft maintenance/operational groups will find the recommended identification plan of assistance and reassurance when processing and/or handling hydraulic system components.

4. PLAN

A placard shall be attached to the external surface of all components installed in the aircraft hydraulic system. Text data on the placard shall indicate the fluid suitability for the internal seals in the component.

- 4.1 **Material:** The placard shall be fabricated from a durable material that will resist damage or deterioration from exposure to the component's environmental and operational conditions and to the fluid's vapor or liquid state.
- 4.2 **Color:** Background and text data colors on the placard shall be a permanently-applied surface of the hues listed in Table I. Color applications shall be impervious to damage or deterioration from the component's environmental and operational conditions and from exposure to any type of subject fluid.
- 4.3 **Text Data:** Fluid identifying data as noted in Table I shall be applied to the placard surface.

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