

FAA APPROVED
HANDBOOK
OF

OPERATING AND MAINTENANCE INSTRUCTIONS

THIS MANUAL HAS BEEN APPROVED BY THE FAA AS BEING IN COMPLIANCE WITH ACCEPTABLE PROCEDURES FOR STRUCTURAL REPAIR AND MAINTENANCE OF THE JETSTAR II, HOWEVER, THE MANUAL IS PRIMARILY INTENDED AS A GUIDE FROM WHICH AN CPERATOR MAY DEVELOP PROCEDURES TO SUIT HIS OWN OPERATION, PROVIDED METHODS USED COMPLY WITH FAR 43. IT SHOULD NOT, THEREFORE, BE CONSTRUED THAT THE MANUAL SETS FORTH GUARANTEED OR VALIDATED PROCEDURES OR THE ONLY PROCEDURES WHICH MAY BE FOLLOWED. MANUFACTURER RESERVES THE RIGHT TO RECOMMEND REVISIONS TO THE MANUAL AS SEEM APPROPRIATE FROM TIME TO TIME.

Marieria Georgia 30063

Aeronautical Systems Company

1 NOVEMBER 1976 CHANGE 12 - 19 OCTOBER 1990

HANDBOOK OF OPERATING AND MAINTENANCE INSTRUCTIONS

conform, respectively, to the requirements of these requirements ASTM D1655 Type A.1, MIL-T-5624 Grade JP-5 and MIL-T-83133 Grade JP-8.

Note

Because of the low flash and high volatility characteristics of Jet B and JP-4 fuels, it is recommended that preference be given to Jet A, Jet A-1, JP-5 and JP-8 fuels. Aviation gasoline has not been tested in this airplane and is not to be used. EMS 53113 (Jet B and JP-4) fuels should not be used unless all four engines have been modified in accordance with Garrett Service Bulletin TFE-731-72-3202.

Figure 12-4 provides a list of fuel brand names for fuels that meet the above commercial specifications.

12.1.6 FUEL ADDITIVES.

The use of Phillips PFA-55MB or equivalent (Specification MIL-1-27686) anti-icing additive in the fuel is approved and recommended. In additive is an effective means of controlling microorganism growth and is present in all military specification JP-4, JP-5 and JP-8 jet fuel and is approved for commercial use by the FAA. The quantity of anti-icing additive must not exceed 0.15 percent by volume. The additive must be distributed in proportion to the quantity of fuel in each tank. It must be metered into the tank during fueling operations in order to allow the additive to thoroughly mix and blend with the fuel. The additive should not be dumped into the tank because it would not mix with the fuel and would cause the tank sealant to deteriorate.

BIOBOR JF biocide additive, or equivalent, is approved for use at a concentration not to exceed 20 ppm of elemental boron. This is equal to 270 ppm by weight of BIOBOR JF.

Shell ASA-3 anti-static additive, or equivalent, in amounts to bring the fuel up to 300 conductivity units is permissible as long as the quantity added does not exceed 1 ppm.

Additive manufacturer's mixing instructions should be carefully complied with whenever an additive is used by the operator. Local concentrations of the additive due to poor mixing may be damaging to the engine or aircraft fuel tanks.

12.1.7 DEFUELING THE AIRPLANE.

A defueling valve and fitting is provided for single-point defueling of all fuel tanks (see figures 12-1 and 12-2). Defuel the airplane according to the following procedure:

- a. Open the access door to the single-point defueling valve and fitting.
- b. Remove the cap from the defueling fitting, and attach the defueling hose to the fitting.
- c. Manually operate the defueling valve to "OPEN."
- d. Open the crossfeed valves on the fuel manifold.
- e. Pump the fuel from the tanks by use of either the tank boost pumps (with external electrical power attached to the airplane) or an external suction pump.
- f. When fuel flow ceases, either shut down the boost pumps and remove external power from the airplane, or if an external pump was used, shut down the pump
- g. Manually operate the defueling valve to "CLOSED."
- h. Remove the defueling hose from the defueling fitting, and reinstall the defueling fitting cap and access cover.

Mote

Approximately 10 gallons of unusable fuel remain in each wing tank and 3 gallons in each external tank. This fuel can be removed through the quick drain poppet valves. Approximately 25 gallons of undrainable fuel will remain in the tanks and lines.

Note

The pressure fueling system is not suitable for defueling this airplane.

12.1.8 QUICK DRAIN CONTAMINATION CHECK.

A poppet drain valve is in each fuel tank sump and at the low point of each tank for the purpose of removing moisture accumulations from the tanks. (See figures 28-13 and 28-18.) These flushmounted valves are on the lower surfaces of the wings and external tanks. They are opened by pushing upward with a screwdriver, and are locked by turning a quarter turn. A sump drain container (Lockheed Part No. 11012-MEU) can be used instead of a screwdriver to prevent fuel spillage.