



APPENDIX TO MANUAL E-610 **FOR THE INSTALLATION OF** **MT-TURBINE PROPELLERS ON** **A NEW TURBINE-AIRFRAME COMBINATION**

1. Propeller Design:

The MT-Propellers according to Manual A-610 (ATA-61-06-10) are designed to be installed on the applicable turbine with the reverse system -(A) for Allison, -(G) for Garret, -(P) for Pratt and Whitney and -(W) for Walter with a hydraulically low pitch stop.

2. Technical Background:

New- Propeller-Turbine-Airframe combinations have the possibility that the combination is governor servo pressure on the low pressure side for the whole flight envelope which may result in a uncontrollable propeller.

The most critical flight situation are high speed flights with Flight Idle, and the propeller remaining on the hydraulical low pitch stop.

WARNING:

In case of windmilling of the propeller, the situation can only be recovered by reducing the minimum safe flight speed (IAS).

3. Action:

Any new combination must be flight tested in the entire speed range from min. power (FI) to max Power, whereas the FI and high speed flight is the most critical. All flight tests must be performed in a safe altitude.

The Propeller RPM must be always surveyed and as soon as signs of overspeed occur the IAS must be reduced.

A servo pressure survey according to the instructions given by engine manufacturer must show the servo pressure to be within limits of the engine and propeller manufacturer.

All results must be send to MT-Propeller for evaluation.