Federal Aviation Agency

ADVISORY CIRCULAR Kepli by 2A AC NO: AC 120-2

AIR CARRIER AND COMMERCIAL OPERATIONS

EFFECTIVE:

6/25/63

SUBJECT: PRECAUTIONARY PROPELLER FEATHERING TO PREVENT RUNAWAY PROPELLERS

- 1. <u>PURPOSE</u>. This circular is issued to emphasize the need for prompt feathering when there is an indication of internal engine failure.
- 2. <u>BACKGROUND</u>. Service experience on piston engines, particularly turbocompound engines, has shown that certain types of internal engine damage
 can cause rapid contamination of the engine and governor oil passages
 such that propeller runaway will occur and feathering will not be possible. Severe engine fires have occurred in some cases of uncontrollable
 runaway propellers.

3. INFORMATION.

- a. Indications of internal engine damage which may disable feathering capability are a sudden drop in BMEP, an increase in RPM, or a rapid drop in oil pressure. It is recommended that the affected propeller be feathered immediately when any of the above indications of malfunction occur. In cases where a rapid increase in r.p.m. occurs and takeoff r.p.m. is exceeded before feathering can be initiated, airspeed should be reduced to a minimum safe value before feathering is attempted.
- b. This emphasis on immediate feathering is not intended to apply to other indications of malfunction such as cylinder or oil overheating, engine roughness, ignition difficulties, or evident carburetor icing. In such cases it may be pertinent to analyze the difficulty more deliberately before determining whether or not to feather.
- 4. <u>RECOMMENDED ACTION</u>. The air carriers should review their operations manuals and training programs to determine if emergency procedures for feathering are adequate. These procedures should indicate prompt feathering when there is an indication of internal engine failure.

George S. Moore

Director

Flight Standards Service