

service bulletin

M67-12
FAA-DER Approved

May 31, 1967

TO: Owners and Operators of Continental Aircraft Engines

SUBJECT: Overboost of Turbocharged Engines

Gentlemen:

All turbocharged engine installations which are equipped with controller systems automatically control the engine power within prescribed manifold pressure limits. Although these automatic controller systems are very reliable and eliminate the need for manual control through constant throttle manipulation, they are not infallible. For instance, such things as rapid throttle manipulation (especially with cold oil), momentary waste gate sticking, air in the oil system of the controller, etc., can cause overboost.

Consequently, it is still necessary that the pilot observe and be prepared to control the manifold pressure, particularly during take-off and power changes in flight.

The type of momentary manifold pressure overshoot which normally occurs with cold oil on initial take-off or during a change to full throttle operation in flight is considered an occasional occurrence and must be monitored by the pilot on each and every take-off to keep it from happening. It is generally in the area of 2" to 3" and can usually be controlled by slower throttle movement, however, if slower throttle movement fails to control it and overshooting of this nature persists or if the amount of overboost is from 3" to 6" the system should be checked immediately for necessary adjustments or replacement of the malfunctioning component.

Severe overboost over 6" generally results from extreme malfunction of controls which causes a very rapid and instantaneous rise in manifold pressure very often to the maximum instrument limits if it is not caught immediately. Such overboost can cause engine damage. If it occurs it should immediately be reported to the Continental Motors Branch Regional Service Manager so he can assist you in determining what action needs to be taken. It is imperative that the time interval and degree of overboost be reported to the best of the pilot's ability.