

REPUBLIC AVIATION CORPORATION FARMINGDALE, LONG ISLAND, NEW YORK • • • SERVICE DEPARTMENT • • •

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No. 23A

This sheet replaces No. 23 dated April 24, 1947

POWER SETTINGS

In order to help Seabee owners obtain maximum fuel economy and best performance, a cruise control chart has been prepared to show the proper settings that may be used for high or low speed cruising at various fuel consumption and altitudes.

When changing power settings, if the RPM drops below the given figure, it shows that the propeller is working exceptionally well. However, if the RPM is higher than the given figure, it indicates possible malfunctioning of the propeller, probably binding blades which prevents the blades from rotating to the full high pitch position. To avoid propeller binding, grease the propeller frequently with a grease approved in the Hartzell Manual.

It is important to select the best mixture for any given power setting; when flying over 4000 feet altitude the mixture control should be leaned out carefully for best engine performance since at the higher altitudes the mixture setting is extremely sensitive. A change of 1/16 inch in the control settings may mean the difference between a smooth or rough engine.

W. H. Ehmann Service Manager

| See Note 3 | MAX CONT POWER | | HI SPEED CRUISE | | LOW SPEED CRUISE | | MAX RANGE | |
|-----------------------------------|----------------|------|-----------------|------|---------------------------------|------|------------|------|
| FUEL FLOW and POWER SETTING | 5.8 MI/GAL | | 6.5 MI/GAL | | 7.5 MI/GAL Approx. 75% Power | | 8.5 MI/GAL | |
| ALTITUDE | МР | RPM | MP | RPM | MP | RPM | MP | RPM |
| Sea Level | 28 | 2500 | 27 | 2350 | 25.5 | 2200 | 23.5 | 2000 |
| 2000 | | | 27 | 2350 | 25.5 | 2200 | 23.5 | 2000 |
| 4000 | | | | | 23.5 | 2400 | 21.5 | 2200 |
| 6000 | | | | | 22.5 | 2500 | 21 | 2300 |
| 8000 | | | | | 21 | 2500 | 20 | 2350 |

CRUISE CONTROL CHART (Franklin Engine)

- Note (1) Fuel consumption shown is for airplane of 3150-lbs. Gross weight; better consumption will be experienced for lower gross weight.
- Note (2) Estimate fuel used in full throttle climb at average consumption of 20 gallons per hour.
- Note (3) Each column gives progressively increased range at increasing penalty to cruising speed.
- MP Manifold Pressure in inches of mercury.