

PART IV PERFORMANCE DATA (Reference pages 29-37)

Performance data shown applies to all 1962, '63, '64 and '65 models except for endurance and range on '62 and '63 planes which carry 48 gallons of fuel. Following are the '62-'63 cruise and range tables:

CRUISE AND RANGE DATA
AVERAGE GROSS WEIGHT - 2200 POUNDS
BEST POWER MIXTURE - 48 GALLONS USABLE FUEL
NO RESERVE FOR RANGE CALCULATIONS - STANDARD ATMOSPHERE
ALTITUDE 2500' MSL

RPM	MANIFOLD PRESSURE INCHES Hg	BRAKE HORSE POWER	PERCENT BRAKE HORSE POWER	GALLONS HOURLY	POUNDS HOURLY	(1) TRUE AIR- SPEED	ENDURANCE HR:MIN.	RANGE STATUTE MILES
2600	27.0	170	95	14.4	86.4	185	3:20	616
	26.0	162	90	13.4	80.4	180	3:35	644
	25.0	155	86	12.8	76.8	175	3:45	656
	24.0	147	82	12.0	72.0	170	4:00	680
2500	26.0	159	88	13.1	78.6	178	3:40	651
	25.0	151	84	12.3	73.8	174	3:54	679
	24.0	144	80	11.6	69.6	168	4:08	695
	23.0	136	76	11.0	66.0	163	4:22	711
2400	25.0	148	82	11.7	70.2	171	4:06	701
	24.0	140	78	11.0	66.0	166	4:22	724
	23.0	132	73	10.4	62.4	160	4:37	739
	22.0	125	70	9.8	58.8	154	4:54	755
2300	24.0	136	76	10.7	64.2	163	4:29	732
	23.0	128	71	10.0	60.0	157	4:48	754
	22.0	121	67	9.5	57.0	152	5:03	768
	21.0	113	63	8.9	53.4	145	5:23	782
1800(2)	17.0	66	37	5.7	34.2	109	8:25	918

FUEL SYSTEM

Fuel is contained in two integral sealed sections in the front part of each wing root. Each tank will hold 26 gallons of gasoline. These fuel tanks each have a sump drain under the wing from which fuel may be sampled to check for water or sediment contamination. A small plastic cup with an actuator prong is provided to obtain fuel samples. If water is present in the fuel, a distinct line separating the water from the gasoline may be seen through the plastic cup. Water, being heavier, will be on the bottom of the cup, and the light-colored fuel will be on top.

Aluminum fuel lines feed the fuel from the tank to a two-way, positive-setting selector valve on the floor ahead of the pilot's seat. The selector valve feeds fuel from one of the tanks at a time, and also has an "off" position for extended periods of storage or for emergency use. The selector valve also contains a sump drain which is actuated by pulling the ring adjacent to the fuel valve handle. Switch the selector valve handle to the right and left tanks to drain the respective lines. Be sure sump drain returns to normal closed position after releasing the ring. Fuel is fed from the selector valve through the electric boost pump, then to the engine driven pump and into the carburetor. The electric boost pump is turned on for take-off and landing to provide fuel pressure if the engine driven pump malfunctions.

WARNING: Under no circumstances should aviation fuel of a lower grade than 91/98 octane be used. Aviation fuels may distinguished by their color; 80 octane is red, 91 octane is blue, and 100 octane is green. If 91/98 octane is not available, 100/130 octane gasoline may be used.

THE ELECTRICAL SYSTEM

The Mark 21 electrical system is provided with a 50 amp 12 volt generator and a 35 amp-hour battery which is located on the forward left side of the firewall. All electrical systems can