

rpm, adjust both propeller controls at the same time. This will keep the setting within the limiting range of the system. If the synchronizer is on but unable to adjust the propeller rpm, the system has reached its range limit. Turn the synchronizer switch off, synchronize the propellers manually, and turn the synchronizer switch on.

PROPELLER SYNCHROSCOPE

A propeller synchroscope, located in the tachometer case, operates to give an indication of synchronization of propellers. If the right propeller is operating at a higher rpm than the left, the face of the synchroscope, a black and white cross pattern, spins in a clockwise rotation. Counterclockwise rotation indicates a higher rpm of the left propeller. This instrument aids the pilot in accomplishing manual synchronization of the propellers.

FUEL SYSTEM

The fuel system is an OFF-ON-CROSSFEED arrangement. The fuel selector panel, located on the floor forward of the front seats, contains the fuel selector for each engine and a schematic diagram of fuel flow.

The standard wing fuel system has a total capacity of 142 gallons. Two optional systems are available. The first has a total capacity of 172 gallons; the second, comprising the 172 gallon system plus wet wing tip tanks, provides a total capacity of 200 gallons. The fuel value placarded adjacent to each filler cap indicates fuel capacity and usable fuel

when that wing fuel system is full. Refer to the LIMITATIONS section for usable fuel in each system.

A vapor return line returns excess fuel from the engine to its respective wing system. All of the fuel cells, standard or optional, in each wing are interconnected in order to make all the usable fuel in each wing available to its engine when the fuel selector valve is turned to ON. The standard 142 gallon and optional 172 gallon fuel systems are filled through a single filler located in each wing. When the wet wing tip option is installed (200 gallons total), there are two additional filler caps, one per wing. Refer to the SERVICING section for additional information.

CAUTION

When the wet wing tip tanks are filled with fuel,
DO NOT open the outboard wing leading edge
filler caps, as fuel will exit from those openings.

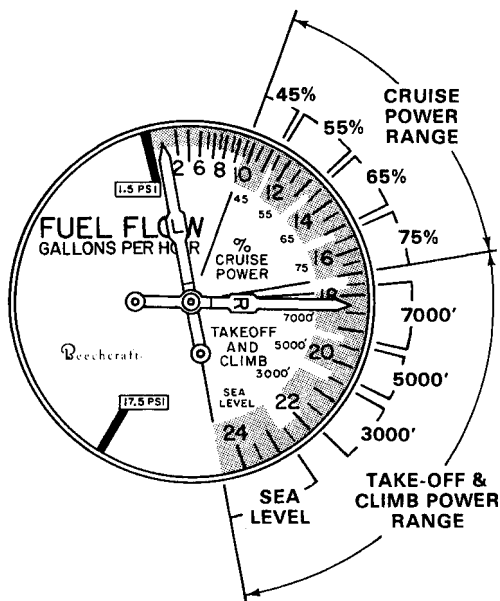
The standard 142 gallon fuel system and the optional 172 gallon fuel system have six drain locations. There are two additional drain locations when the wet wing tip tanks are installed.

Fuel quantity is measured by float type transmitter units which transmit the common level indication to a single indicator for each respective wing system.

When the wet wing tip fuel system is installed, the fuel quantity indicators will read FULL until the fuel quantity remaining is less than 75 gallons. When this occurs, the quantity indicated is coordinated to the total usable fuel supply.

FUEL FLOW AND PRESSURE INDICATOR
Serials TH-773 thru TH-1193

The dual fuel flow indicator on the instrument panel senses fuel pressure at the fuel distributor and is calibrated to indicate fuel flow to each engine in gallons per hour. The green arc indicates the normal fuel flow operating range while the red radials indicate the minimum and maximum allowable fuel pressures.



FUEL FLOW AND PRESSURE INDICATOR
(Serials TH-773 thru TH-1193)

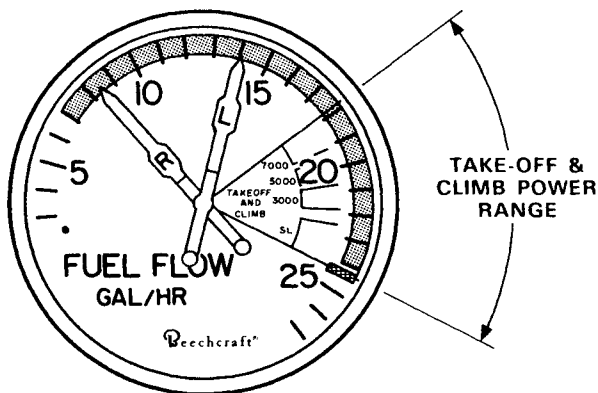
The higher end of the green arc includes a sawtooth segment labeled "TAKE-OFF AND CLIMB" and indicates the approximate fuel flow required for takeoff and climb at sea level, 3000, 5000, and 7000 feet. The pilot should use these markings as a guide only and refer to the performance charts for the exact fuel flow requirements for takeoff, climb at maximum continuous power, or climb at maximum normal operating power.

The lower end of the green arc includes a sawtooth segment labeled "% CRUISE POWER" which indicates the approximate fuel flows for powers ranging from 45% to 75% of maximum continuous power. The lower fuel flow of each sawtooth corresponds to the cruise-lean fuel flow while the higher fuel flow of each sawtooth corresponds to the best power fuel flow. When power is set in accordance with the cruise power setting tables in the PERFORMANCE Section, these sawtooth marks provide approximate percent power information.

FUEL FLOW INDICATOR

Serials TH-1194 and after

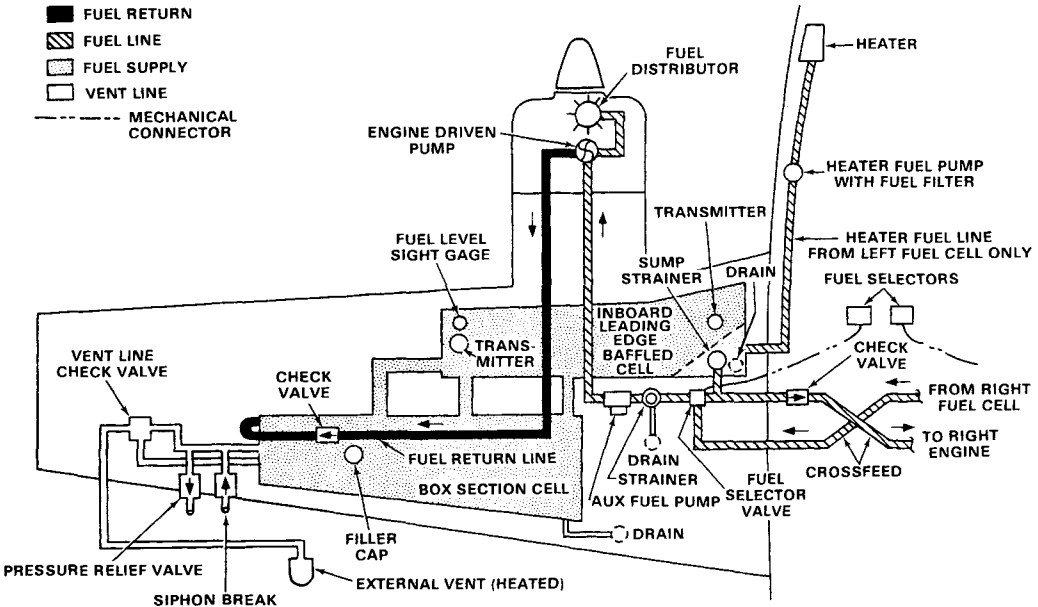
The dual fuel flow indicator on the instrument panel is controlled electrically and indicates fuel flow to each engine in gallons per hour. A turbine meter installed in the fuel line rotates in proportion to the fuel flow. The speed of rotation



FUEL FLOW INDICATOR
(Serials TH-1194 and after)

is converted to an electrical signal which is then interpreted by the fuel flow indicator. The green arc indicates the normal operating range while the red radial indicates the maximum allowable fuel flow.

A segment of fuel flows at the higher end of the green arc is labeled "TAKEOFF AND CLIMB" and indicates the approximate fuel flow required for takeoff and climb at sea level, 3000, 5000, and 7000 feet. The pilot should use these markings as a guide only and refer to the tables in the PERFORMANCE Section for takeoff, climb at maximum continuous power, or climb at maximum normal operating power.

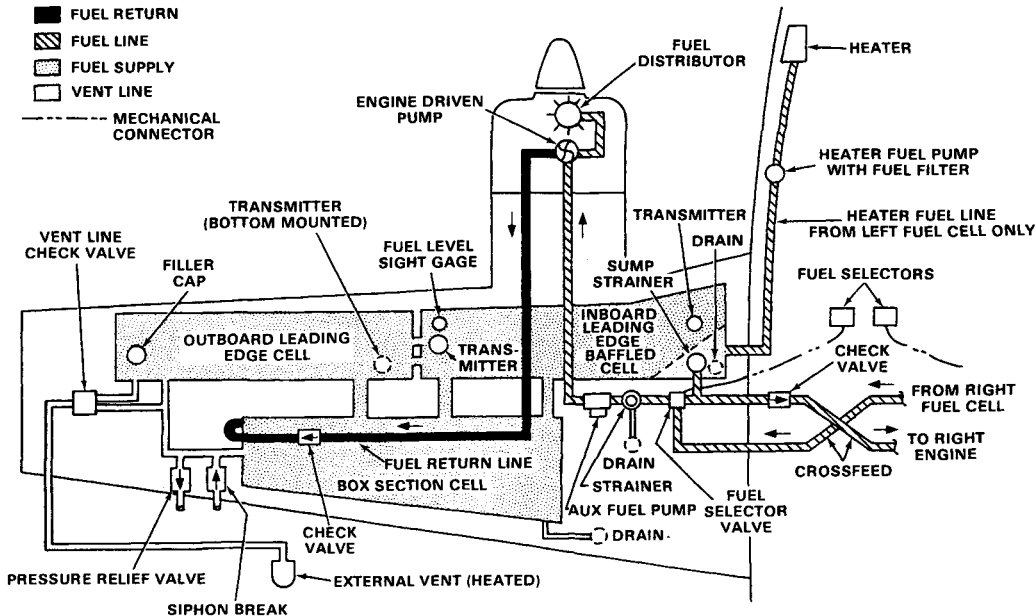


142 GALLON CAPACITY (136 GALLONS USABLE) FUEL SYSTEM

October 1976

7-25

172 GALLON CAPACITY (166 GALLONS USABLE) FUEL SYSTEM



BEECHCRAFT Baron 58
Serial TH 773 and After

Section VII
Systems Description

