

## FUEL SYSTEM

The Seneca fuel system offers two 24.5 gallon aluminum tanks in each wing which are interconnected to eliminate problems of tank selection and fuel management. Both tanks in each wing are filled with a single opening in the outboard tank, and fuel from the outboard tank flows into the inboard tank as the fuel from the inboard tank is consumed. The 98 gallon fuel capacity has only 2-1/2 unusable gallons on each side, making a total of 93 usable gallons. The fuel must be 100/130 octane (light green).

An engine-driven fuel pump is the primary means of supplying fuel for each engine. An electric fuel pump, located on the aft side of the firewall, is provided for each engine as a back-up in case of engine-driven fuel pump failure. The electric pump should be used during landings and take-offs to ensure sufficient fuel pressure in case of an engine-driven fuel pump failure during these portions of the flight sequence. Switches for the electric fuel pumps are conveniently located on the switch panel to the left of the pilot.

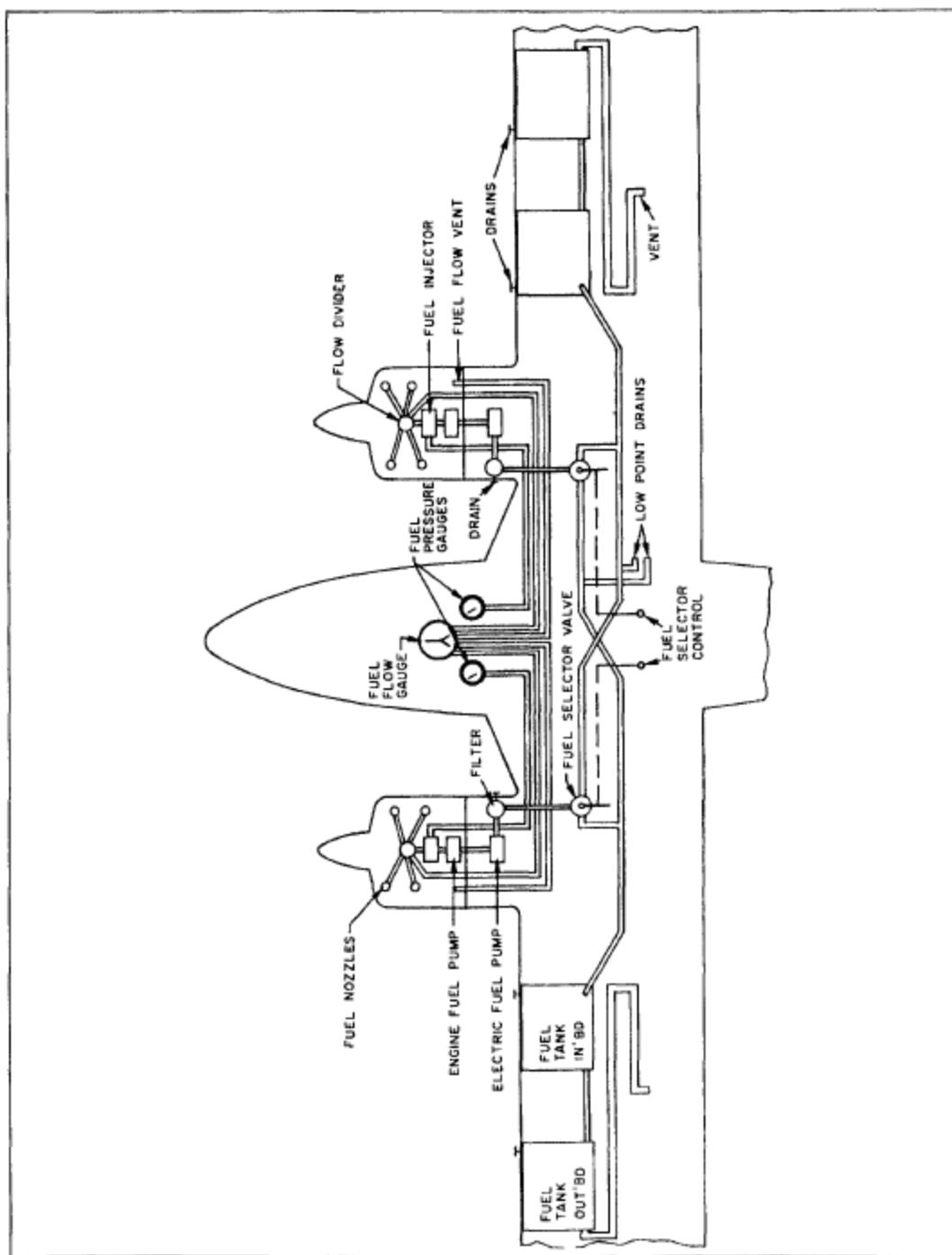
In normal operation, each engine operates with an independent fuel system, drawing fuel from the tanks in the wing on the same side as the engine. However, the two systems are interconnected by crossfeed lines which will permit an engine to use fuel from the tanks on the opposite side in order to extend single-engine range and to enable the pilot to keep fuel weight balanced. When crossfeed has been used during single-engine cruise operation, prior to landing the fuel selector should be positioned so that fuel is used from the same side as the operating engine. The fuel selectors, located on the funnel between the pilot and the copilot seats, reflect the simplified fuel system. Each lever has three positions: OFF, ON and CROSSFEED.

### NOTE

Do not operate with both fuel selectors on CROSSFEED. Do not take off with a selector on CROSSFEED.

To permit the pilot to monitor the system, fuel pressure, fuel flow and fuel quantity gauges (a single fuel gauge for the two tanks in each wing) are mounted on the instrument panel. Fuel quantity sender units, one mounted in each fuel tank, transmit electrically the total quantity of fuel in each pair of tanks.

A gascolator (fuel filter) is located between the fuel selector valve and the electric fuel pump on each side. Quick drains are provided for the fuel gascolators (2), for each fuel tank (4) and each crossfeed line (2). Two fuel tank drains are located under each wing; crossfeed drains are located under the belly of the aircraft opposite the trailing edge of the right wing flap; gascolator drains are on the inboard side of the engine nacelles, forward and below the leading edge of the wing. The vent system for the fuel tanks consists of a vent in each fuel cap, a vent interconnect between the tanks in each wing, and an overflow line from the top of each filler neck.



Fuel Schematic