

# CHAPTER 28 - FUEL

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## GENERAL

C-295 Fuel System is designed to complete the following tasks:

- Engines fuel supply.
- Automatic fuel transfer.
- Fuel tanks refuelling/defuelling.
- System control and indication.

To accomplish these, the system includes:

- ***Fuel Tanks and Ventilation***, comprising:
  - Fuel Tanks
  - Fuel Tank Ventilation
- ***Fuel Distribution***, comprising:
  - Engine Fuel Supply
  - Fuel transfer tanks
  - On-ground Refuelling/Defuelling
  - Gravity Refuelling/Defuelling
- ***Fuel Indications***

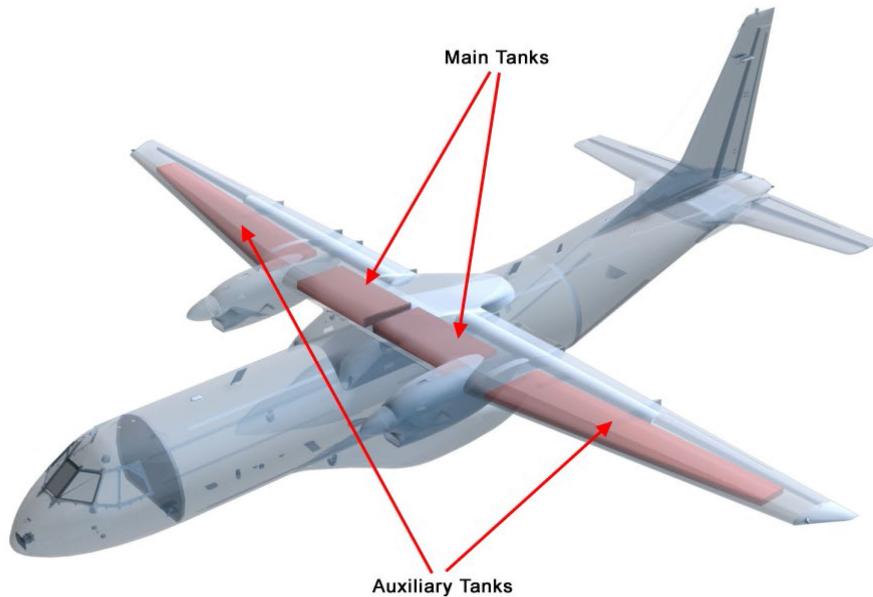


Figure 28-1 Fuel System

# FUEL TANKS AND VENTILATION

## FUEL TANKS

### DESCRIPTION

Four fuel tanks located inside the wing structure: two main tanks in the central wing section, and two auxiliary tanks in the outmost half wing sections, providing a total usable capacity of around 7500 litres (6375kg - 14057lb).

The main components are:

- **Main Tanks:** they are located-on each side of the aircraft and extend from the aircraft primary axis to the relevant engine pod, between both main crossbeams in the central wing area. Each of them has a capacity of 1695 litres (1441kg - 3177lb) of which 23 litres are not usable. Capacity may vary depending on the refuelling procedure (pressure-refuelling or gravity-refuelling). Inside the tank, there is a collector tank with 230 litres (around 196kg - 431lb) capacity that has fuel permanently, and contains the immersed pumps for fuel supply to engines (electric pump and booster pump).
- **Auxiliary Tanks:** each tank extends from the relevant engine pod, to almost 3/4 of the outmost half wing span, between both main crossbeams in the central wing area. Each tank has a capacity of 2055 litres (1747kg - 3852lb), and around 11 litres are not usable.

### NOTE

All fuel weights shown are based on a fuel density of 0.85 kg/litre.

Main and auxiliary tanks have access for different functions (see Figure 28-2):

- **Gravity Refuelling:** there are four caps, one for each tank.
- **Safety Valves:** each auxiliary tank has a safety valve, at the lower covering, to release incidental pressure excess, thus dumping out fuel below the wing. These valves also serve as connection points, when the aircraft is grounded, to drain by gravity portions of fuel from the auxiliary tanks.
- **Water Drain Valves:** these valves allow maintenance personnel to drain any water condensed inside the tanks. There are six water drain valves: one for each auxiliary tank, one for each main tank and one of each collector tank.

For further information about fuel capacity refer to "Section I - Operating Limitations" in "Volume II - Limitations and Procedures"

## OPERATION

The fuel is sucked out of the auxiliary tank by the Venturi effect, passing through the transfer jet pump, and delivered to the collector tank. Another transfer jet pump does the same, from the main tank to the collector tank.

Fuel transfer from the main tank to the collector tank is done through a pair of flapper valves, located on the collector tank wall lower side.

In case of emergency (when no pressurized fuel is in the lines, by failure on the Engine Feed Jet Pump and the Booster pump), fuel transfer of the fuel in the auxiliary tank to the main one is completed by opening the gravity transfer valves.

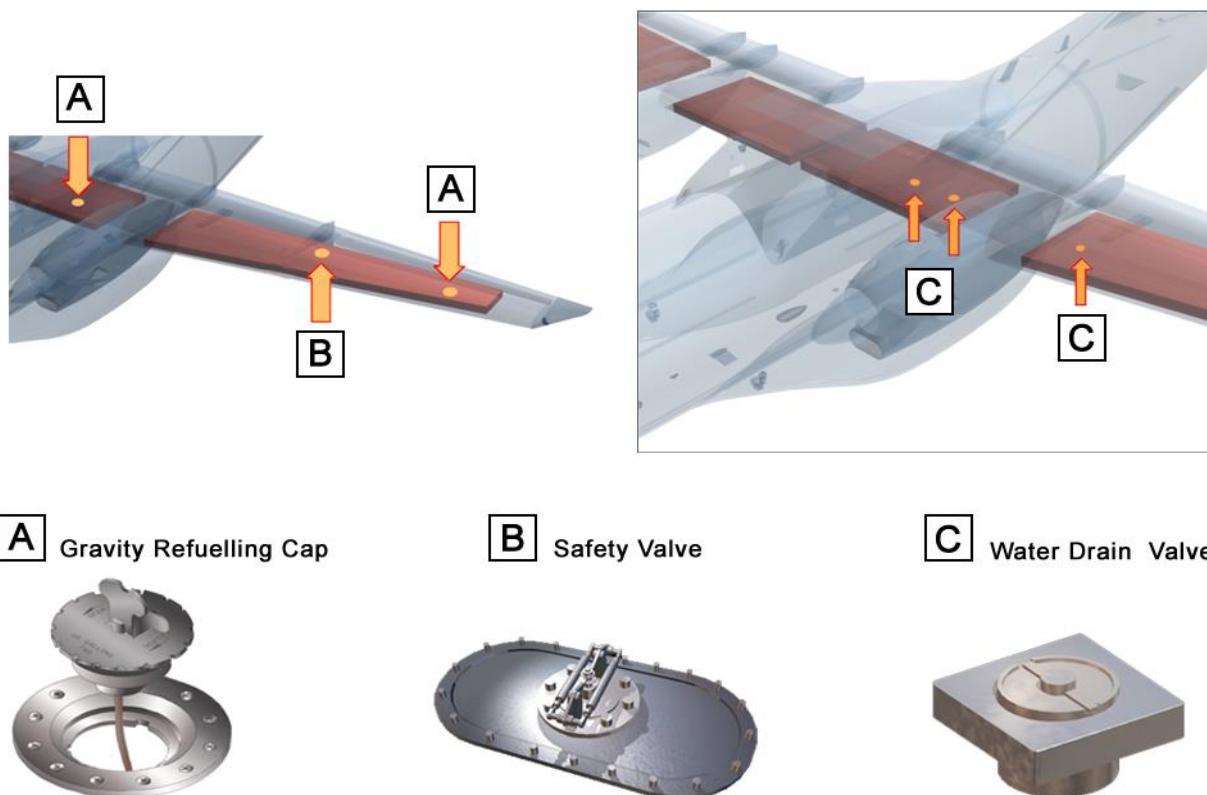


Figure 28-2 Fuel Tanks Components

## TANK VENTILATION

The ventilation system allows fuel tanks to keep always atmospheric pressure. The system also allows air to escape from the tanks during refuelling, and to replace fuel as it is burned or dumped, both on ground and airborne. This procedure avoids over-pressure while the aircraft is climbing or during pressure refuelling, and excessive under pressure while on descent.

### DESCRIPTION

Each tank is ventilated by a pipe running inside the tank, along the topside. The inner end of this pipe is completely open to the tank, and the outer end has a vent controlled by a ventilation valve. This pipe is connected to the auxiliary tank by an external tube that allows the tank to be vented. When refuelling in FULL mode, with the main tank full, this pipe also allows the fuel to flow into the auxiliary tank. The collector tank is ventilated through a series of holes located at the top side of the collector tank wall. These holes also act as an overflow release when the collector tank is totally full of fuel.

A pipe running along the up inner side, ventilates each auxiliary tank. This pipe has airing vents controlled by Ventilation Valves, to prevent fuel spilling. The pipe opens to the atmosphere through a NACA exhaust, located on the wing intrados (see blue line in Figure 28-3).

## OPERATION

Under normal conditions, the main tanks ventilate to the auxiliary tanks, and these ventilate to the atmosphere through the NACA outlet. The vent is closed if the fuel level rises so long to drive the float of the relevant ventilation valve, preventing fuel from outflowing.

If ventilation valves close while refuelling in FULL mode, the safety valve prevents fuel tanks from excessive pressure increase. When there is over-pressure this valve releases fuel to the air, relieving fuel pressure in the tanks.

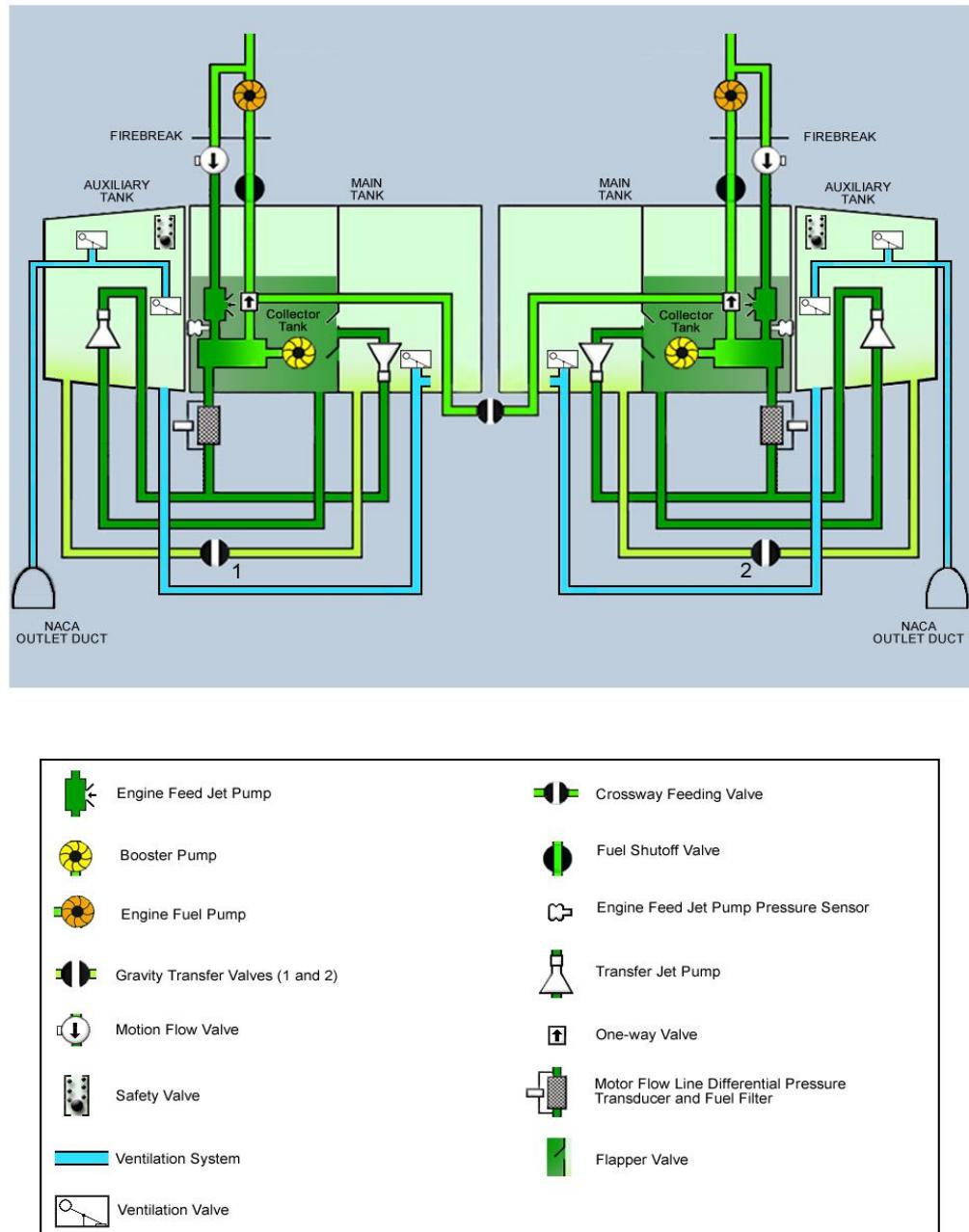


Figure 28-3 Fuel Tanks and Ventilation

# FUEL DISTRIBUTION

Fuel distribution system purpose is to supply fuel to the engines, transfer fuel between the relevant auxiliary and main tanks, and provide for refuelling and defuelling of any tank, else by pressure or by gravity.

## ENGINE FUEL SUPPLY

The purpose of the engine fuel supply is to provide both engines with the required pressure and fuel supply in order to achieve optimum performances through the whole flight profile. The aircraft has separate fuel supply for each engine, to feed engines with fuel from their relevant main tank. There is also a crossway feeding system that allows both engines to be fed from any main tank.

## DESCRIPTION

Each engine is fed with fuel from a collector tank built into the main tank. A Booster Pump at each collector tank supplies the fuel required for engine starting and also the Booster Pump supplies the fuel when the Engine Feed Jet Pump is not able to supply the fuel with enough pressure. This pump stops automatically when the engine is running, and the Engine Feed Jet Pump starts to provide fuel, driven by high pressure fuel from the engine. The system has two Fuel Shut Off Valves and a crossway feeding valve.

Main components of the system are:

- **Booster Pump:** located inside the collector tank, it is an electric pump with a grid at the entry, a one-way valve at the exit, and a bypass valve. It supplies fuel to the engine during starting, or if the Engine Feed Jet Pump fails.
- **Engine Feed Jet Pump:** located inside the collector tank, it is a booster pump driven by the Venturi effect generated by high pressure fuel from the engine (motor flow). It feeds the engine both once started up and airborne.
- **Fuel Shut Off Valve (one per engine):** interrupts the fuel flow to the engine.
- **Motion Flow Valve:** controls the high pressure fuel flow from the engine.
- **Crossway Feeding Valve:** controls the fuel flow through the crossway feeding line.
- **Fuel Low Sensor:** sends a signal warning of a low fuel level.
- **Engine Feed Jet Pump Pressure Sensor:** senses the pressure at the outlet of the Engine Feed Jet Pump. If this sensor senses that the pressure at the outlet of the engine feed jet pump is not enough, the booster pump will be switched on.
- **FUEL SYSTEM Control Panel:** located on the overhead panel at the cockpit, it provides management and monitoring of the aircraft fuel system.

## OPERATION

While engines start up, with the relevant PUMPS pushbutton pushed, the Booster Pump automatically starts (the RUN light comes on) and opens the Motion Flow Valve. The pump impels fuel from the collector tank through the one-way valve, thus reaching the engine fuel system through the Fuel Shut off Valve, which opens when FFL is set to START (the Fuel Shut-off Valve Magnetic Indicator is in the straight line position).

Once the engine is started up, its fuel system provides a high pressure flow of fuel through the Motion flow line (refer to CHAPTER 71 - POWER PLANT). The fuel in the tank is sucked up, and fed to the engine, when this flow begins to pass through the Engine Feed Jet Pump at a certain pressure.

- | When the Engine Feed Jet Pump pressure sensor detects enough pressure in the circuit, it stops the Booster Pump (the RUN light goes off). While no low pressure is detected in the circuit, the pump will remain off. If fuel pressure at the Engine Feed Jet Pump outlet drops below a fixed limit, the Booster Pump will become operative, and the RUN light on the associated PUMPS pushbutton will come on.

If the level in the collector tank is too low, the Fuel Low Sensor sends a signal to start the Booster Pump, added to the Engine Feed Jet Pump. Additionally, the related FUEL LOW warning is displayed in the IEDS.

The Fuel Shut-off Valve is closed by setting the FFL to the OFF position, or by pulling up the FIRE lever (the Fuel Shut-off Valve Magnetic Indicator gets in the crossed position).

### **Crossway Feeding**

Both engines can be supplied with fuel from any of the main tanks, by pressing the XFEED pushbutton. The ON light in the pushbutton will come on. When the Crossway Feeding Valve gets fully open, the horizontal light on the pushbutton will be on, and both engine fuel feed lines will be interconnected. The fuel crossway feeding function allows a single Engine Feed Jet Pump to supply fuel for both engines, or (with one engine stopped) to feed the operative engine with fuel from one of the Booster Pump.

### **Suction Feeding**

Each engine may get its own fuel from the fuel pump (refer to CHAPTER 71 - POWER PLANT). The following table of the Flight Manual shows the recommended operational altitude for Fuel Suction feeding by the engine pump solely:

Fuel used	Maximum flight altitude (feet)
JP-8/Jet A/Jet A-1/JP-5	13000
JP-4/Jet B	6000

Table 28-1 Fuel Suction Feeding Altitude

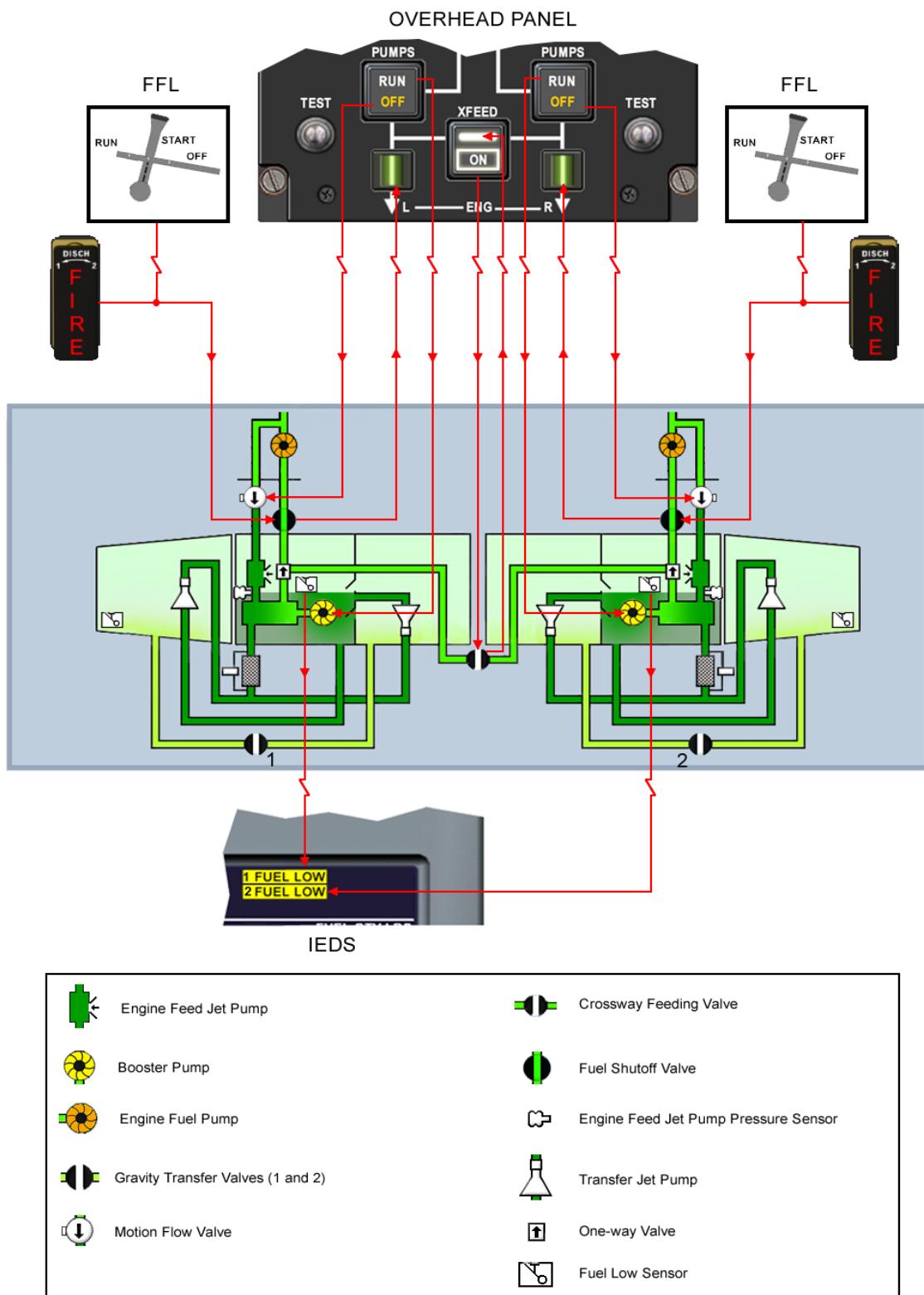


Figure 28-4 Engine Fuel Supply

## CONTROLS AND INDICATORS

### (1) PUMPS Pushbutton:

controls the Booster Pump and the Motion Flow Valve at each main tank.

- *Pressed*: PRESS XFR magnetic indicator is set to the aligned position.
  - RUN light on: Motion Flow Valve is open and Booster Pump functioning.
  - RUN light off: Engine Feed Jet Pump running and Booster Pump on standby.
- *Raised (Amber OFF light on)*: Booster Pump off and Motion Flow Valve closed (Engine Feed Jet Pump inoperative). No pressurized fuel is supplied to the engines, and they continue running by suction feed means.

### (2) XFEED Pushbutton:

- *Inserted*: ON light is on and commands the Crossway Feeding Valve to open.
- *Horizontal indicator on*: Crossway Feeding Valve is open.
- *Raised*: Crossway Feeding Valve is closed.

### (3) Fuel Shut off Valve Magnetic Indicator:

activated by the FFL and the relevant Fire handle, so that when:

- *In line*: Engine Fuel Shut off Valve is open.
- *Crossed*: Engine Fuel Shut off Valve is closed.
- *"Barbers sign"*: Engine Fuel Shut off Valve is in transient position.

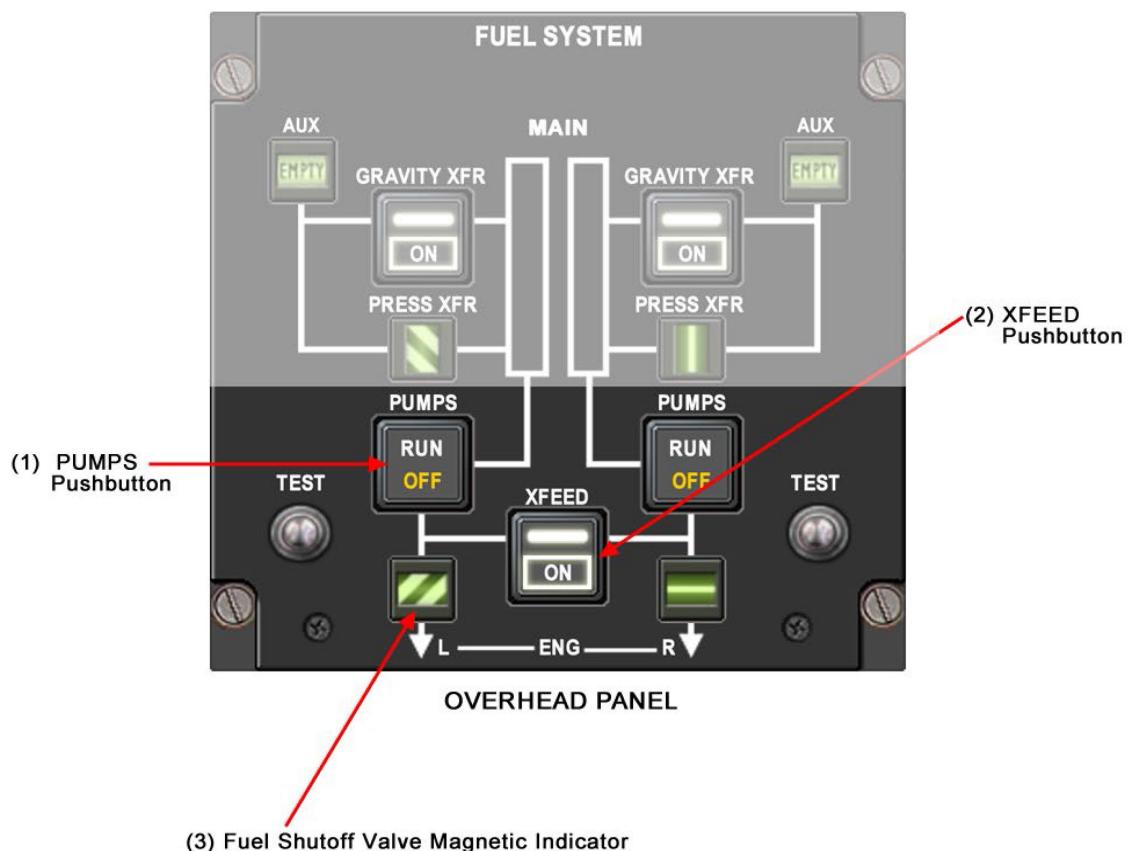


Figure 28-5 Engine Fuel Supply - Controls and Indicators

## FUEL TRANSFER

The fuel transfer system purpose is to allow fuel flowing between the auxiliary and the main tanks, either by gravity or pressurized.

### DESCRIPTION

The fuel pressure transfer system comprises two transfer jet pumps in each wing. One of the pumps transfers fuel from the auxiliary tank to the collector tank, the other transfers fuel from the main tank to the collector tank. Fuel can be transferred from the main tanks to the collector tanks through flapper valves.

Main components of the system for each half wing are:

- **Transfer Jet Pumps:** located at the bottom of each main and auxiliary tank, are driven by fuel bled from the Engine Feed Jet Pump (fuel motor flow) output or by the booster pump in case the Engine Feed Jet Pump sensor is activated or the low level switch send the low level signal.
- **Differential Pressure Transducer:** located at the fuel filter in order to detect a pressure loss greater than 3 psi.
- **Gravity Transfer Valve:** allows the fuel to flow by gravity between the auxiliary and the main tanks. The Gravity Transfer function can be used if the primary pressure transfer subsystem fails.
- **Flapper Valves:** two valves, located at the wall of the collector tank, allow the fuel to flow from the main tank to the collector tank in case the primary pressure transfer subsystem fails.
- **FUEL SYSTEM Control Panel:** located on the cockpit overhead panel, allows the fuel transfer process to be carried out under control.

### OPERATION

Under normal conditions, fuel transfer from the auxiliary tank to the collector tank is carried out by the Transfer Jet Pumps. These Pumps act by the Venturi effect, suctioning fuel and driving it to the collector tank.

Fuel transfer between the auxiliary and the main tank can also be carried out by gravity, pushing the relevant GRAVITY XFR pushbutton on the control panel. This transfer procedure is indicated on the pushbutton indicator by the horizontal bar light.

Besides this, the fuel transfer between the main tank and the collector tank can be carried out by a Transfer Jet Pump that works in the same way as the pump in the auxiliary tank. The main tank can also feed the collector tank through Flapper Valves.

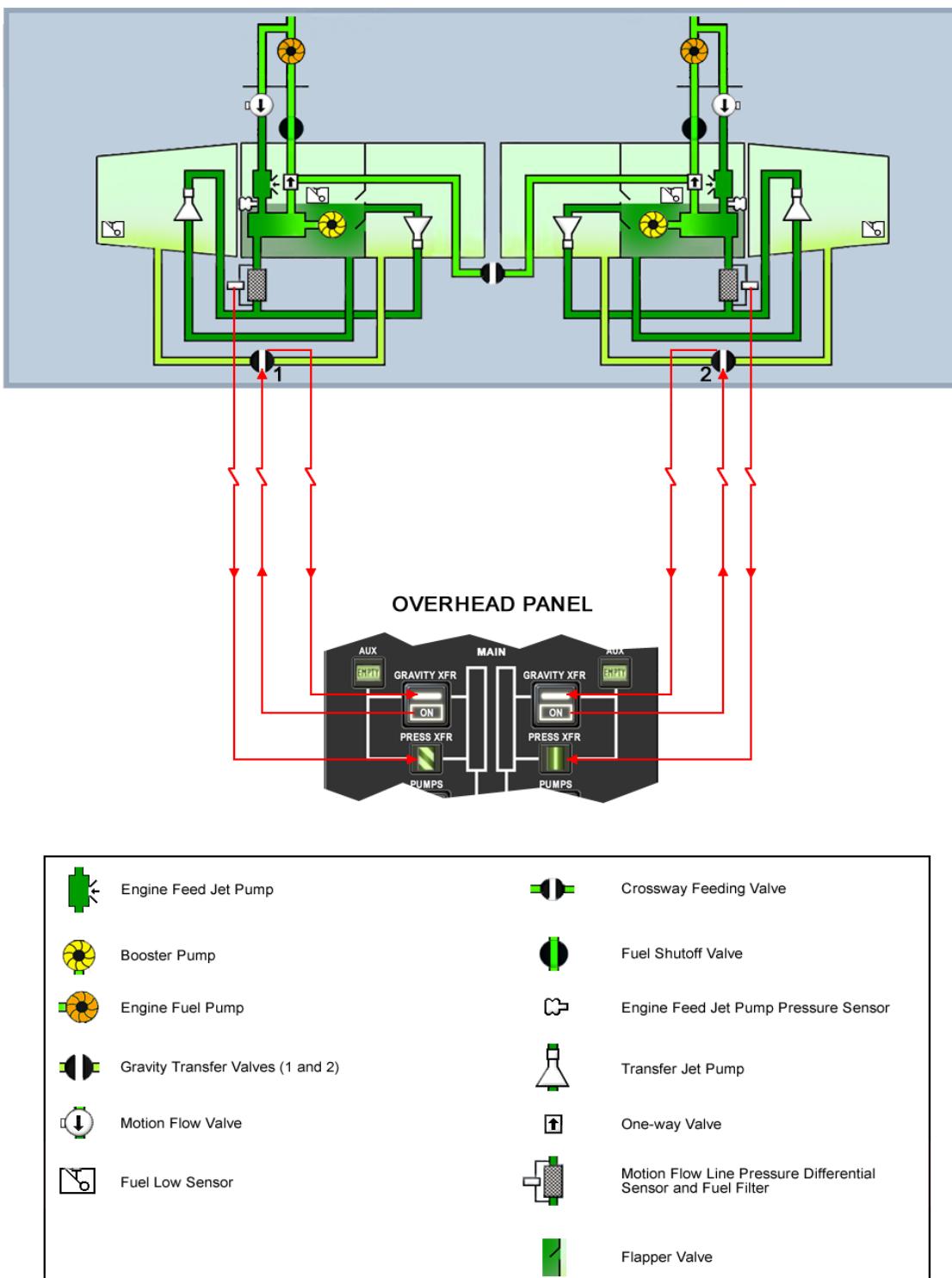


Figure 28-6 Fuel Transfer

## CONTROLS AND INDICATORS

### (1) PRESS XFR Magnetic Indicator:

- "Barbers sign": indicates the system is not pressurized.
- *In line*: pressure transfer is in process.
- *Crossed*: pressure sensor detects the filter is getting obstructed (dirty).

### (2) GRAVITY XFR Pushbutton:

- *Inserted*: ON light is on, and Gravity Transfer Valve is commanded to open.
- *Horizontal bar indicator lightened*: Gravity Transfer Valve is open.

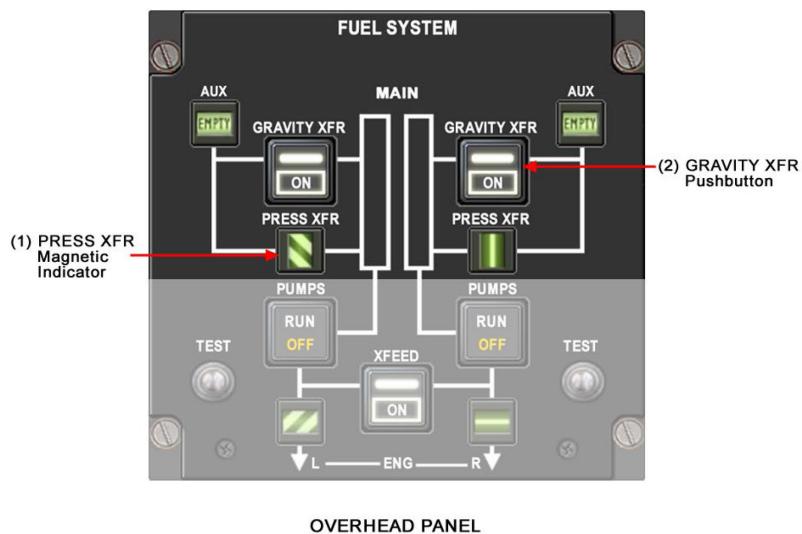


Figure 28-7 Fuel Transfer - Controls and Indicators

## PRESSURE REFUELLING/DEFUELLED

The system purpose is to enable fuel tanks pressure refuelling and defuelling, while the aircraft is grounded.

### DESCRIPTION

The system includes a quick release refuelling fitting, and a Control Panel located in the main landing gear right nacelle. Fuel flows under pressure from the connection through a series of pipes, and enters the tanks via two pressure refuelling valves. These valves are driven by four level control valves that close them once the tanks are full. Pressure defuelling uses the same fitting as for refuelling, provided the Booster Pumps, the crossway feeding valves and defuelling valves are energized.

Main components of the system are:

Quick connection:

- **Pressure Refuelling Valve / Level Control Valves:** two pressure refuelling valves, each governed by two level control valves (one for each tank).
- **Defuelling Valve:** allows draining the tanks through the pressure refuelling port.
- **Overfill Sensor:** located in each tank, the sensor warns when the tank is overfilled.
- **Safety Valves:** located beneath the end section of both wings (auxiliary tanks), discharge fuel excess, in case of excessive pressure.
- **REFUEL-DEFUEL Control Panel:** located in main landing gear right nacelle, enables ground personnel to manage and supervise the refuelling/defuelling process.

### OPERATION

Refuelling process can be carried out manually or automatically.

#### CAUTION

At least once every 15 days, fill auxiliary tanks at 90% or more. This will avoid early degradation in tank seals and o-rings.

#### Automatic Refuelling

The AUTO-FUEL position on the POWER selector is only operable while on the ground, it inhibits gravity transfer valve govern from the cockpit, and energizes the system for automatic refuelling.

The FULL/MAIN pushbutton determines whether refuelling will be limited to the main tanks only (MAIN), or if the auxiliary tanks are also to be filled, once the main tanks are full (FULL). When MAIN is selected (MAIN light on), Gravity Transfer Valves in each half wing will remain in its normal closed position to avoid the fuel flowing from the main tanks to the auxiliary tanks. Selection of FULL (FULL light on), opens the valve.

Once the filling mode has been selected (FULL or MAIN), the outlet from the tanker can be opened, and the fuel will start flowing into the main tanks through the Pressure Refuelling Valves. A small portion of the fuel flows into each tank Level Control Valve. If refuelling is not halted at the tanker, it will be halted for each half-wing, if MAIN has been selected, when the Level Control Valve in the main tank detects the full-tank condition. When FULL is selected, once the main tank is filled, the closure of its corresponding Level Control Valve will not create an excess of pressure in the line that controls the

Pressure Refuelling Valve, as the Level Control Valve in the auxiliary tank is still open. Once the auxiliary tank is full, its control valve will stop refuelling in the relevant half wing.

If any Level Control Valve fails, the overfilling sensor in each tank will indicate this event by lightening the OVERFILL warning on the REFUEL-DEFUEL Control Panel. Refuelling must then be manually halted, either from the tanker, or by turning the POWER selector to OFF.

If the aircraft continues to be refuelled, despite the fact the OVERFILL light is on, the safety valve on the auxiliary fuel tank will open to discharge fuel excess. If only the main tanks are being filled (MAIN selected), as the Gravity Transfer Valve is closed, the fuel excess will flow into the fitting auxiliary tank through the ventilation line, thus relieving pressure on the tank until refuelling is halted.

### **Manual Refuelling**

The MAN position on the POWER knob enables the REFUEL/DEFUEL (L, R) selectors for each half wing. The REFUEL position on every selector allows opening the relevant Pressure Refuelling Valve. The FULL/MAIN pushbutton determines whether refuelling will be limited to the main tanks only (MAIN), or if the auxiliary tanks are also to be filled once the main tanks are full (FULL). The Manual Refuelling offers the possibility of refuelling the tanks in each half wing separately.

### **Pressure Defuelling**

With the POWER selector in the MAN position, and the L and/or R REFUEL/DEFUEL selectors in the DEFUEL position, the Defuelling Valve and the Crossway Feeding Valve open, and the fitting Booster Pump starts, to drain the tanks on the left and/or right side.

The Defuelling Valve turns on the OPEN light on the DEFUEL VLV indicator, located on the REFUEL-DEFUEL Control Panel, when the valve is open.

### **Fuel Transfer**

Transfer fuel from one main tank to another.

With the POWER selector in the MAN position, the REFUEL/DEFUEL selector must be set to the DEFUEL position for the tank to be defuelled, and set to the REFUEL position for the tank to be refuelled. Thus fuel will flow from one tank to the other.

This continues until the main tank is full, or the REFUEL/DEFUEL selectors are set to OFF.

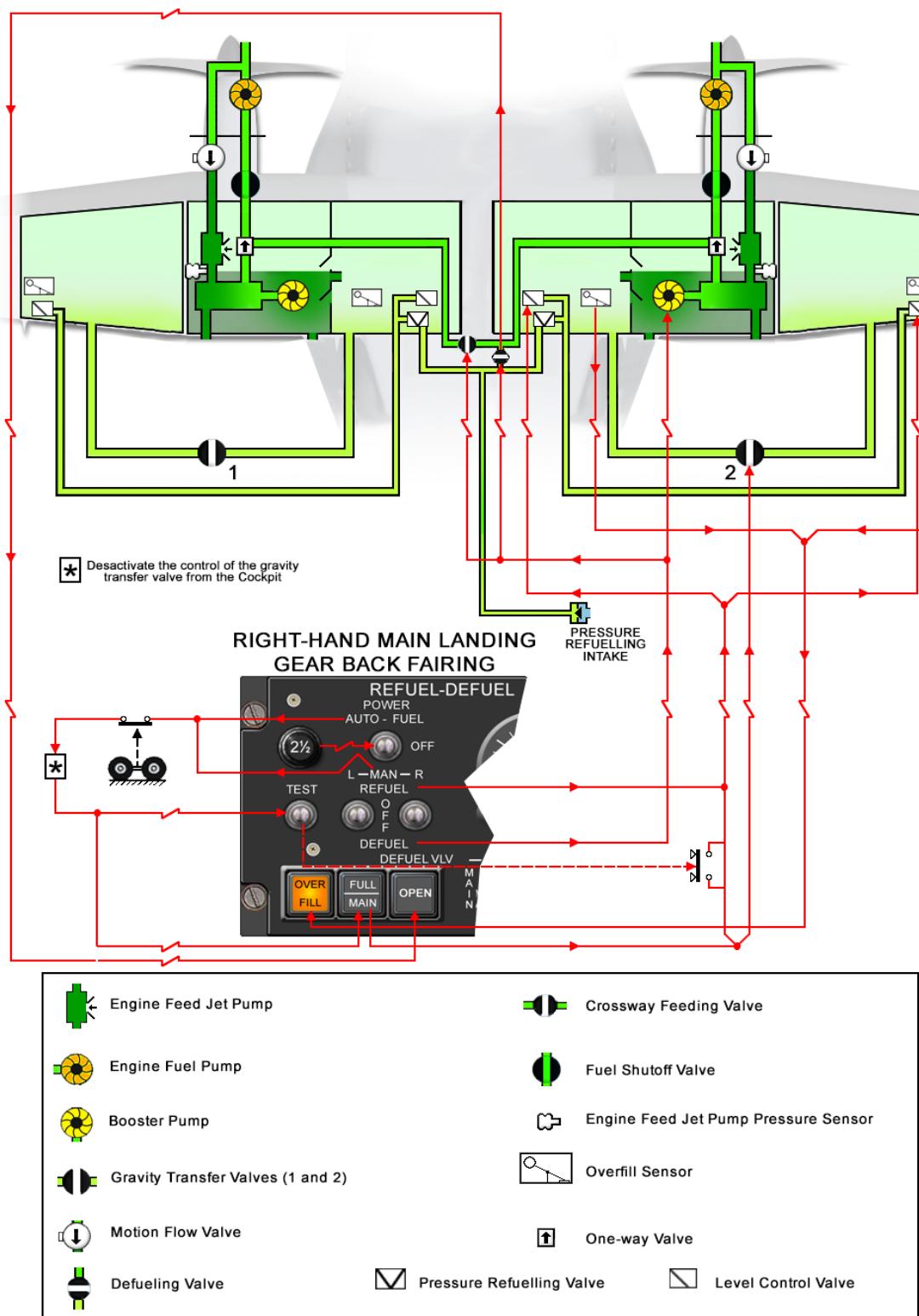


Figure 28-8 Pressure Refuelling/Defuelling

## CONTROLS AND INDICATORS

### (1) POWER Selector:

- *AUTO-FUEL*: selects automatic refuelling and energizes the Level Control Valves, also lets to carry out the refuelling Test (TEST selector). It inhibits Gravity Transfer Valve, govern from the cockpit, by deactivating the GRAVITY XFR pushbuttons on the Fuel System panel (cockpit overhead panel).
- *OFF*: Level Control Valves are not energized, and the Pressure Refuelling Valves are not activated.
- *MAN*: selects manual Refuelling/Defuelling, and allows completing the Refuelling test (TEST switch). It inhibits Gravity Transfer Valve govern from the cockpit, by deactivating the GRAVITY XFR pushbuttons on the Fuel System panel (cockpit overhead panel). It also activates the REFUEL/DEFUEL (L, R) selector.

### (2) L, R REFUEL/DEFUEL Selector:

- *REFUEL*: energizes the associated Level Control Valve that opens the Pressure Refuelling Valve.
- *DEFUEL*: opens the Defueling Valve and the Crossway Feeding Valve, and starts the relevant Immersed Electric Pump (left and/or right) as well.

### (3) DEFUEL VLV Indicator:

- *Lightened*: OPEN legend shows to indicate the Defueling Valve is open, thus allowing defueling.

### (4) FULL/MAIN Pushbutton:

- *FULL*: Gravity Transfer Valve remains open, to allow the auxiliary tanks to be filled once the main tanks are full.
- *MAIN*: Gravity Transfer Valve remains closed. It is only possible to refill the main tanks.

### (5) OVERFILL Indicator:

- *On*: OVERFILL legend is displayed, warning the Level Control Valves have failed and one of the tanks has reached the "overfill" condition. The fuel supply must be halted immediately. The Level Control Valves provide the tank full condition signal.

### (6) Refuelling TEST Switch:

- *TEST*: simulates the full condition at the main tanks (MAIN selected), or for the four tanks if FULL is selected, to check the Level Control Valves, and close the Pressure Refuelling Valves.

### (7) Circuit Breaker:

- *Inserted*: lights the panel, and energizes the POWER selector.

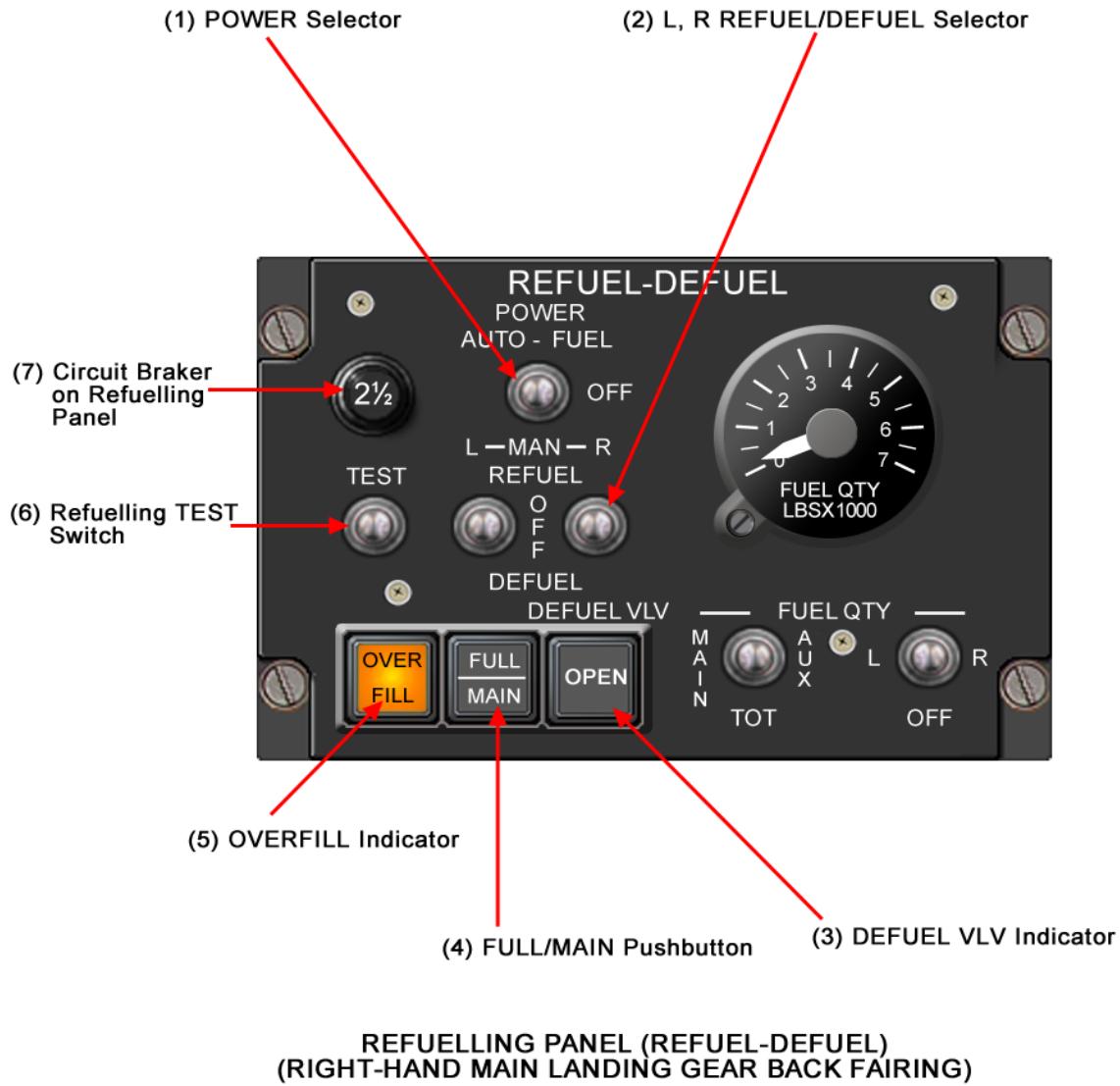


Figure 28-9 Pressure Refuelling/Defuelling - Controls and Indicators

## GRAVITY REFUELLING/DEFUELING

Gravity Refuelling of the aircraft is done using the four filling ports located over every tank, on each wing extrados.

Gravity defuelling can only be carried out on the auxiliary tanks through an adapter fitted to the Safety Valves. Take into account that with this operation it is not possible to perform a full defuelling as it requires pressure defuelling.

## FUEL INDICATIONS

The fuel indication device includes an indicator measuring the fuel quantity, and a set of magnetic level indicators. A low-fuel level indicator and a temperature indicator complete the system.

### DESCRIPTION

The fuel quantity indication system comprises seven probes in each wing, three for the main tank and four for the auxiliary tank. Each set of probes sends an electrical signal, proportional to the fuel quantity in the relevant tank, to a Fuel Control Unit (FCU). After processing that information, the unit sends it to the IEDS and the REFUEL-DEFUEL Control Panel.

The magnetic level indicators consist of four magnetic sticks (one per tank) located beneath the wing. They enable a brief measure, while the aircraft is grounded, of the fuel quantity in each tank.

Main components of the system are:

- **Probes:** variable capacitors that provide a capacitance value range depending on the fuel quantity.
- **Fuel Control Unit (FCU):** calculates the quantity of fuel in each tank taking into account, the signal received from the probes.
- **Magnetic Level Indicators:** they provide an alternative way to measure the fuel quantity on ground. Those indicators are used as back-up.
- **FUEL SYSTEM Control Panel:** located on the cockpit overhead panel, allows fuel indication testing.
- **REFUEL-DEFUEL Panel:** located on the main landing gear right fairing displays the fuel quantity during refuelling.
- **IEDS:** located on the cockpit central instrument panel, displays fuel quantity and failure events on the system.

The IEDS displays in lbs or kg, the quantity of fuel in both main and auxiliary tanks (left and right), and the total quantity of fuel onboard. Besides this, the REFUEL-DEFUEL Control Panel indicates in analog mode, the fuel quantity in lbs as stored in the tanks.

For the low-fuel indication, there is a low-fuel sensor in each collector tank. In levelled flight, when less than 440 lb (200 kg - 230 L) are detected in the associated tank, a signal is sent to the IEDS and the 1, 2 FUEL LOW warning is displayed. Nevertheless, the indication range can be in the 400 to 485 lb (181 to 220 kg - 208 to 253 L) interval.

A sensor in the left main tank sends the fuel temperature signal to the IEDS.

Fuel level can be directly read from a graduated scale on the magnetic level indicators. Following conversion tables give the relation between the marks on the magnetic level indicators and the fuel quantity. To obtain a correct reading, the aircraft must be levelled and it can only be performed on ground. It is an alternative method when the FQI of the cockpit is not available.

**NOTE**

Usable fuel weight values determined through these indicators may differ from those obtained by means of cockpit gage readings. It is recommended to obtain usable fuel weights from cockpit gages whenever practicable.

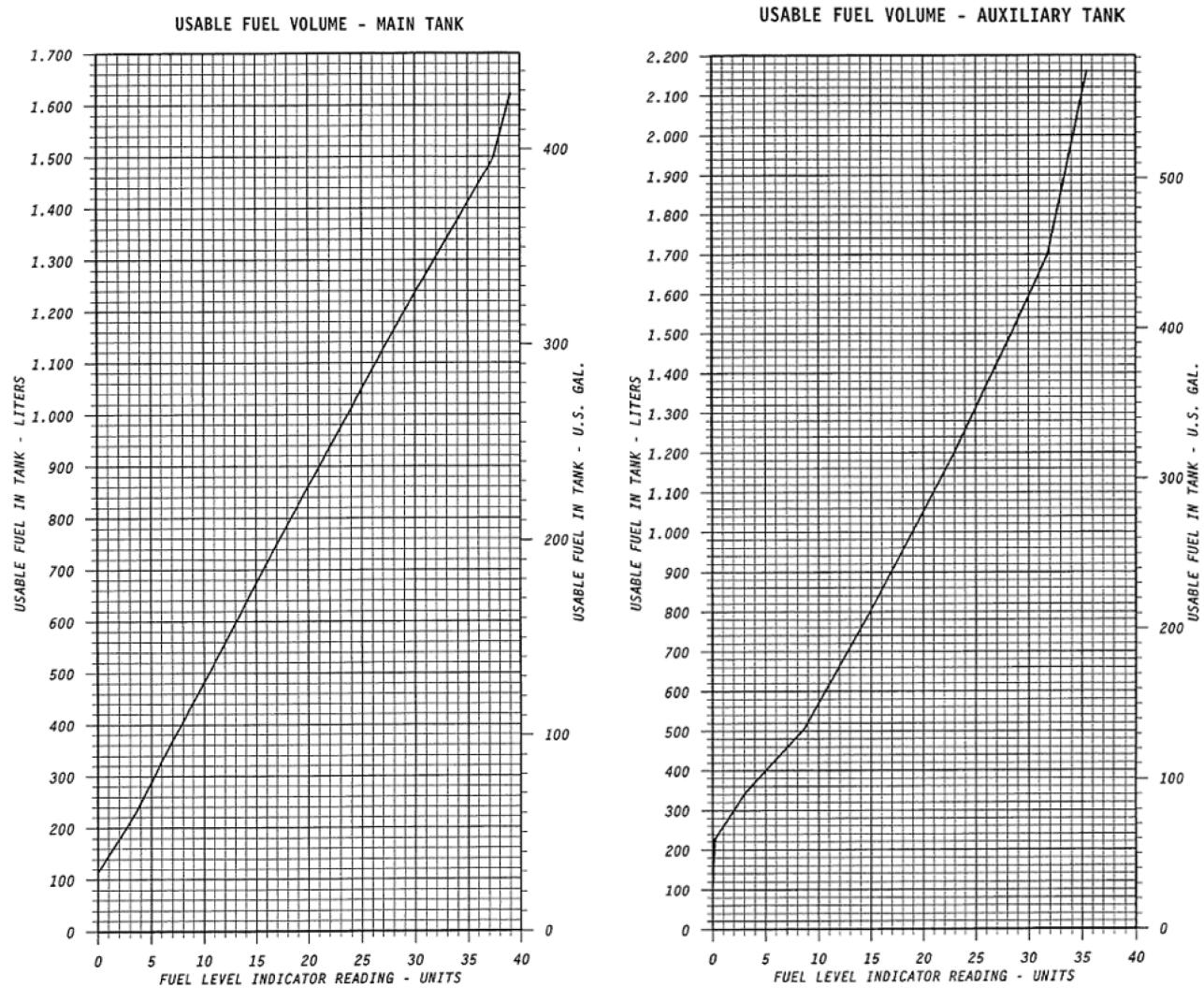


Figure 28-10 Conversion tables for magnetic fuel level indicators

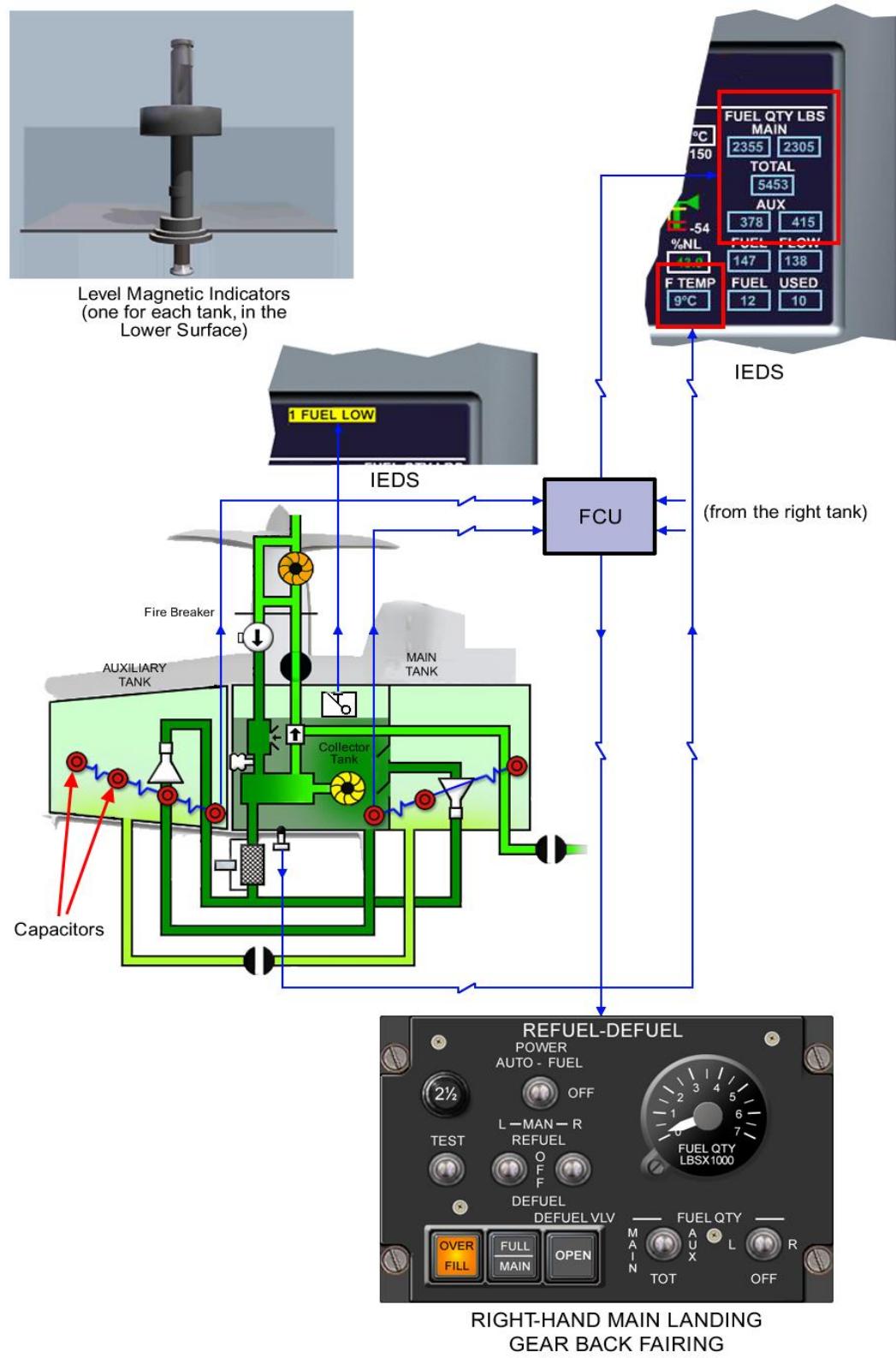


Figure 28-11 Fuel Indications

## CONTROLS AND INDICATORS

### FUEL SYSTEM Control Panel

**(1) AUX Magnetic Indicator:**

- *EMPTY*: there is less than 90 lbs of fuel in the corresponding auxiliary tank.

**(2) TEST Switch (left side, right side):**

in the TEST position, allows completing a check of the fuel quantity indication system. It displays 2350lb ± 120 on the MAIN and AUX windows of the IEDS (the sum of both in the TOTAL window) if the system is operating correctly, or it shows a dashed line if there is any fault.

### REFUEL-DEFUEL Refuelling Panel

**(3) Fuel Quantity Indicator:**

displays the fuel quantity (in lbs) in the selected tank, or the total quantity in the selected side.

**(4) Fuel per Wing Indication Selector:**

- *L (R)*: the Fuel Quantity Indicator shows the quantity of fuel stored in the selected tanks on the left (right). Both positions are momentary and the indication given does not refer to that of the IEDS.

**(5) Tank Indication Selector:**

depending on the position of the Fuel Indication Selector on each wing (L or R), the indicator will show the fuel quantity as follows:

- *MAIN*: In the main tank.
- *AUX*: In the auxiliary tank.
- *TOT*: In both tanks.

### IEDS

**(6) (IEDS) FUEL LOW 1,2 Caution Annunciator:**

there is less than 230 L (around 200 kg - 440 lbs) of fuel in the relevant main tank.

**(7) Fuel in Main Tanks Quantity Indication:**

shows the fuel quantity in pounds or kilograms, stored in the main tanks on both left and right sides. In case of failure on the fuel quantity indication system, it will show a dashed line.

**(8) Total Stored Fuel Quantity Indication:**

shows the fuel quantity in pounds or kilograms, stored onboard.

**(9) Fuel Quantity Indication in the Auxiliary Tanks:**

shows the fuel quantity in pounds or kilograms, stored in the auxiliary tanks on both left and right sides. In case of failure of the fuel quantity indication system, a dashed line will be displayed.

**(10) Fuel Flow Indication:**

displays, in pounds per hour or kilograms per hour, the fuel flow in each engine.

**(11) Fuel Used Indication:**

displays, in pounds or kilograms, the fuel used by the engines.

**(12) Fuel Temperature Indication:**

shows the temperature (in centigrade degrees) of the fuel stored in the left main tank.

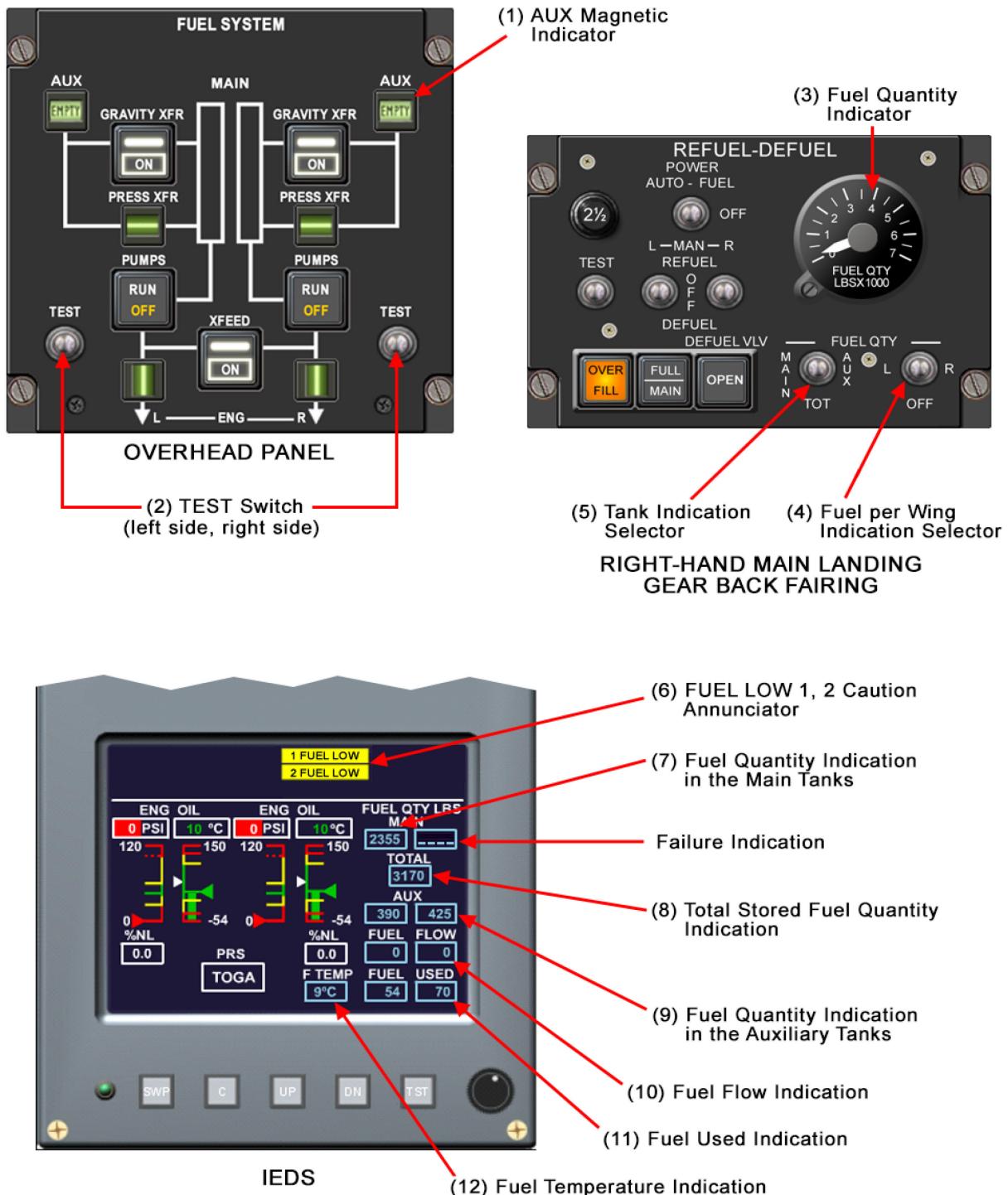


Figure 28-12 Fuel Indications - Controls and Indicators

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