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SERVICE BULLETIN

DATE: 8-08-2000

SERVICE BULLETIN No. 18

ENGINEERING ASPECTS ARE FAA APPROVED
Project No. 100-08-01

REVISION: N/C

SUBJECT: Changing Fuel Valve from Imperial 104 HD to Apollo 76-101

MODELS AFFECTED: A-1, All, A-1A, All prior to S/N 1467, A-1B, All prior to S/N 2096.

TIME OF COMPLIANCE: At Owners Discretion

The Imperial 104HD valve is no longer available. Beginning with Husky A-1A S/N 1467 and A-1B S/N 2096, a stainless steel ball valve P/N 76-101 has been installed. In order to use the Apollo valve, the attaching bracket needs two #10 holes drilled to accept the attaching hardware. A new Handle, P/N 35628-501 has been designed, and is available together with the valve and attaching hardware from Aviat Aircraft.

As long as the original valve is functioning properly, it is not necessary or advisable to retrofit the aircraft with the new valve.

To replace the valve, the following items are necessary, and available from Aviat Aircraft.

CODE #	PART NUMBER	DESCRIPTION	QTY
63921	76-101	Apollo Ball Valve	1
	35628-501	Handle Assembly	1
63922	MS21083N6	Locknut, Nylon Insert – Low Profile	1
56534	AN503-10-6	Screw, Aircraft – Fillister Head	2
58740	AN960-10	Washer, Plain	2
62520	# 51026	Button Plug, 3/4" Dia	1
55775	AN380-3-4	Cotter Pin	1
55675	AN380-2-2	Cotter Pin	1
50826	AN 4-5A	Bolt, undrilled shank	2
54700	AN 316-4	Nut, Hex	2
DT#7592		Drilling Template	1

INSTRUCTIONS

1. Disconnect aircraft battery. Drain all fuel from tanks and lines.
2. Access to the valve needs to be made from the outboard and inboard sides. On the left outboard side, remove panel 9 (Fig 21). It will be necessary to remove the bottom row of machine screws from panel 19. Remove the screws from panel 5. The bottom of panel 5 can be raised and held up by hanging it from safety wire secured to screws loosened from the left wing tank cover. The panel is thin enough to bend without damage. Inboard access is gained by removing the flap handle assembly, and panel 1 (fig. 20). The flap handle is removed by disconnecting the cable, removing the cotter pin 3 (fig. 15) and sliding out tube 2 (fig. 15). It is also necessary to remove the cabin heat box located forward of the front seat, The bungee cover just aft of the front seat control stick and the left hand floorboards, 32 and 38 (fig. 20)
3. To remove the fuel valve, disconnect all fuel lines from the fittings, disconnect fuel flow transducer (if installed). Remove the AN4 bolts securing the valve to the fuselage and slide valve and fittings out from behind the vertical fairing. Remove all fittings from both ends of the old valve. Reference Figure 17.
4. Fasten tool #7592 to fuselage bracket outboard side with the arrow pointing forward, and the drill bushings outboard. Use the hardware supplied with the tool, and fasten to the holes used by the old valve. With the tool secured, drill 2 #10 holes in the plate through the drill bushings. Remove the tool.
5. Install the fittings removed from the old valve to the Apollo valve. Use the mounting Holes to determine forward and aft ends of the valve. Slide the assembly into place and secure with two AN503-10-6 screws with an AN960-10 washer under each head. Safety with .032 lockwire.
6. Before installing the interior panel, the hole for the valve handle must be enlarged to a 1" diameter or slightly larger, depending on alignment. Install the panel. The new valve handle is installed over the stem with the tang pointing fwd if the valve is open up if the valve is closed. Secure with MS21083N6 nut. A 1/4" drive, 9/16" socket will be required to tighten the nut. Install the finish plug over the nut.
7. Reinstall all fuel lines. Pour enough fuel into the tanks to check for leaks. Reinstall Floorboards, heat box, bungee cover, flap handle and exterior panels. Inspect all panels for security, connect electrical system and refuel the aircraft. Make logbook entries and return to service.

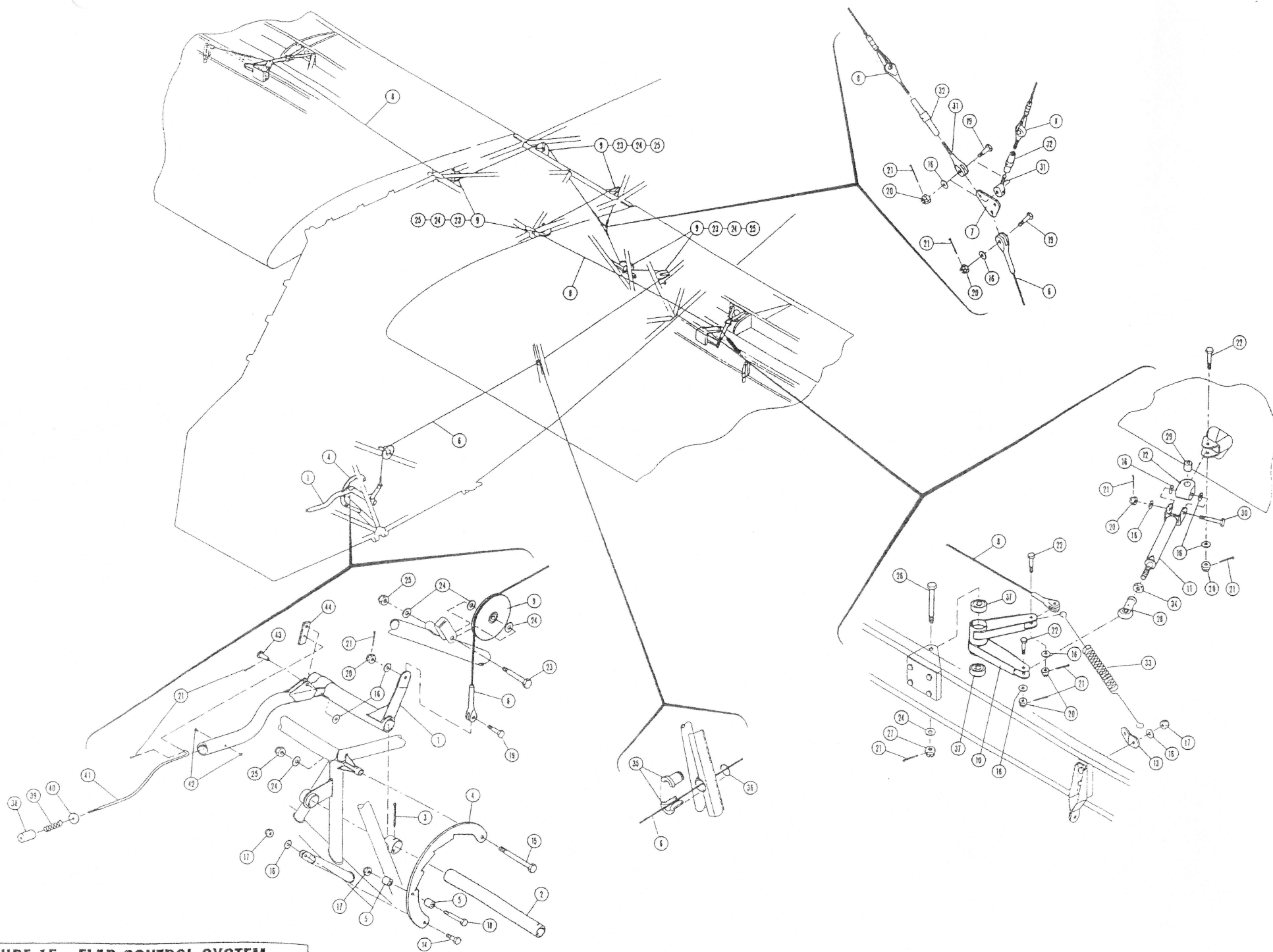
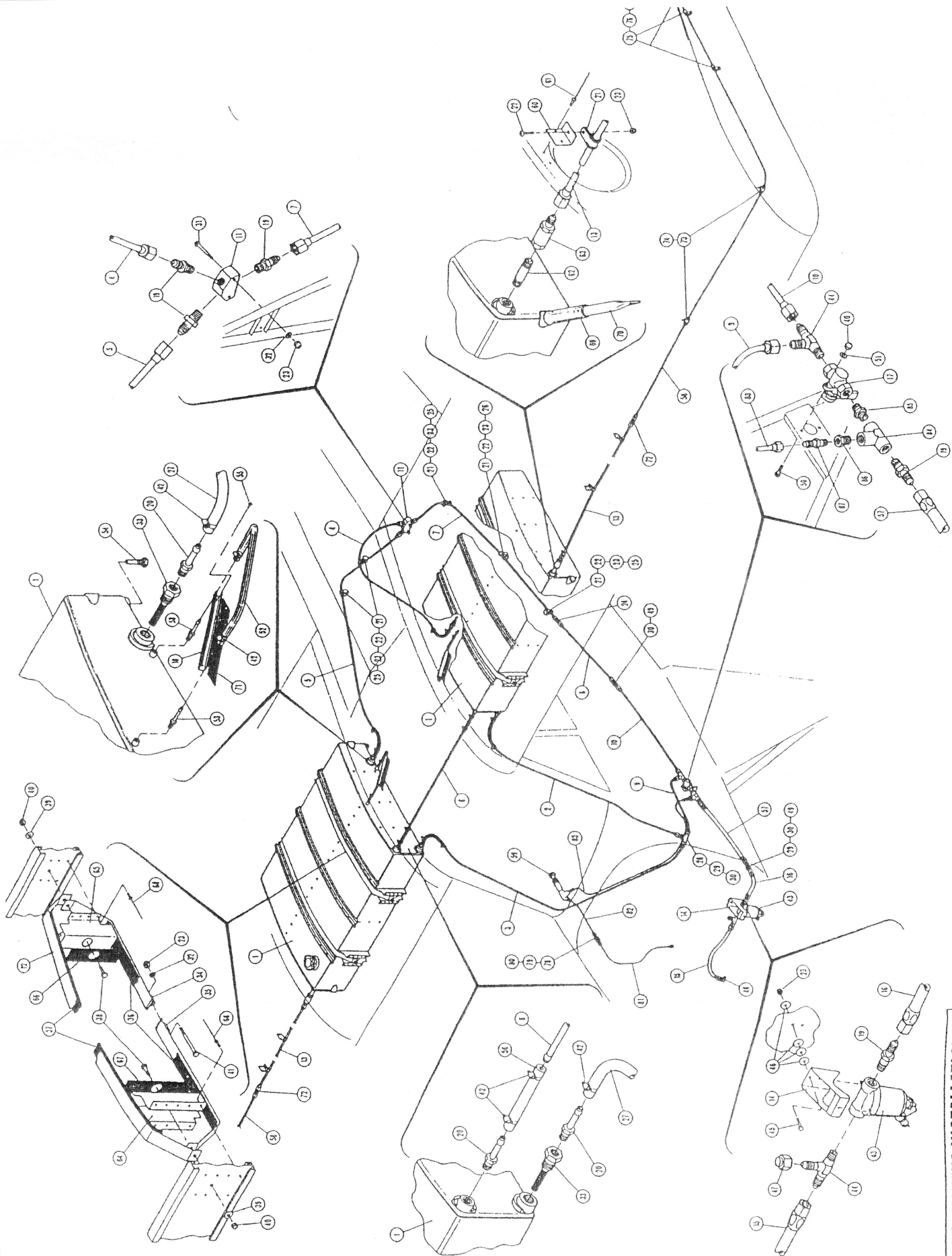


FIGURE 15: FLAP CONTROL SYSTEM



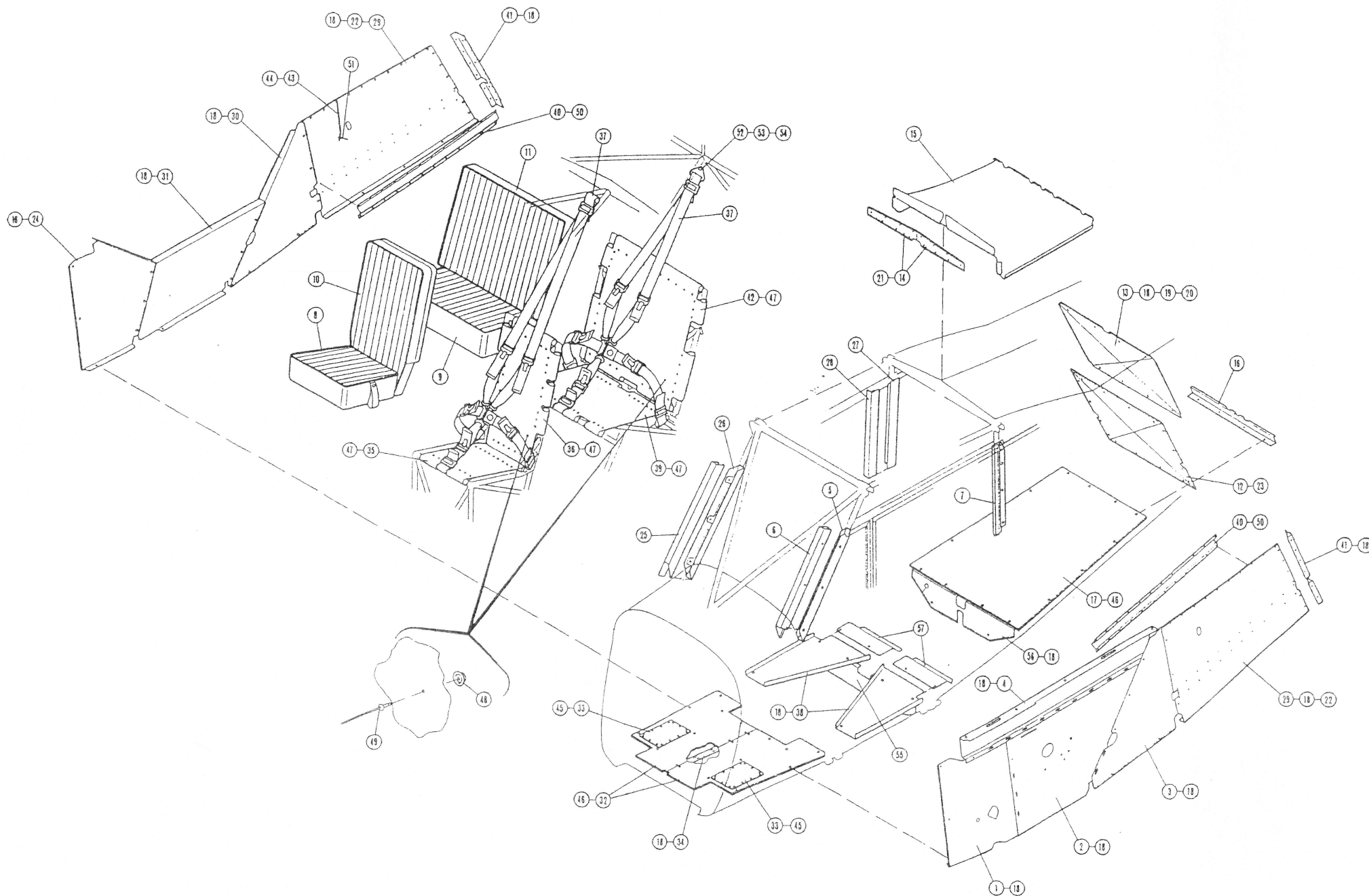


FIGURE 20: FUSELAGE INTERIOR

RE 21: FUSELAGE PANELS & WINDOWS

