Focke-Wulf Fw 200 Condor

Flight Manual

Microsoft Flight Simulator

About the Focke-Wulf Fw 200 Condor

The Fw 200 Condor was a 4-engine, long-range airliner developed and manufactured by German aviation company Focke-Wulf. The Condor took its maiden flight in 1937 and the airframe set several world records for distance. No operational models remain, although an Fw 200 was reconstructed from crash remnants as a non-flyable museum piece.

Focke-Wulf's concept for the Fw 200 emerged in the mid-1930s due to interest in a terrestrial-based airliner capable of crossing the Atlantic Ocean. Engineers drafted a design comprising a large, high-aspect-ratio main wing that was optimized for high-altitude, long-distance flight. The expansive wing inspired the name of the airplane, Condor, after the bird known for its large wingspan and ability to soar great distances.

The first prototype was designated the Fw 200 V-1. "V" stood for "Versuchsflugzeug," German for "experimental aircraft." The all-metal Condor had an unpressurized cabin, a traditional empennage, and a retractable standard undercarriage. It was powered by four wing-mounted, 875-horsepower Pratt & Whitney Hornet radial piston engines.

The Fw 200 V-1 prototype took its maiden flight on July 27, 1937 to great success. It was redesignated Fw 200 S-1 in 1938, "S" standing for "Sonder," German for "Special." It was fitted with additional fuel tanks for extended flight time. On August 10, 1938, it lifted off from Berlin and flew nonstop to New York in just under 25 hours. The 4,000-mile flight set a record for longest distance flown by an airplane at the time. The Fw 200 S-1 set several other distance records in addition to the Berlin-New York flight.

The second Condor that Focke-Wulf built was designated the V-2 and named "Westfalen." It measured 78 feet, 3 inches in length, stood 19 feet, 8 inches tall, and had a wingspan of 108 feet, 2 inches. It was powered by four BMW 132G radial piston engines, each of which generated up to 720 horsepower and turned a 2-blade propeller.

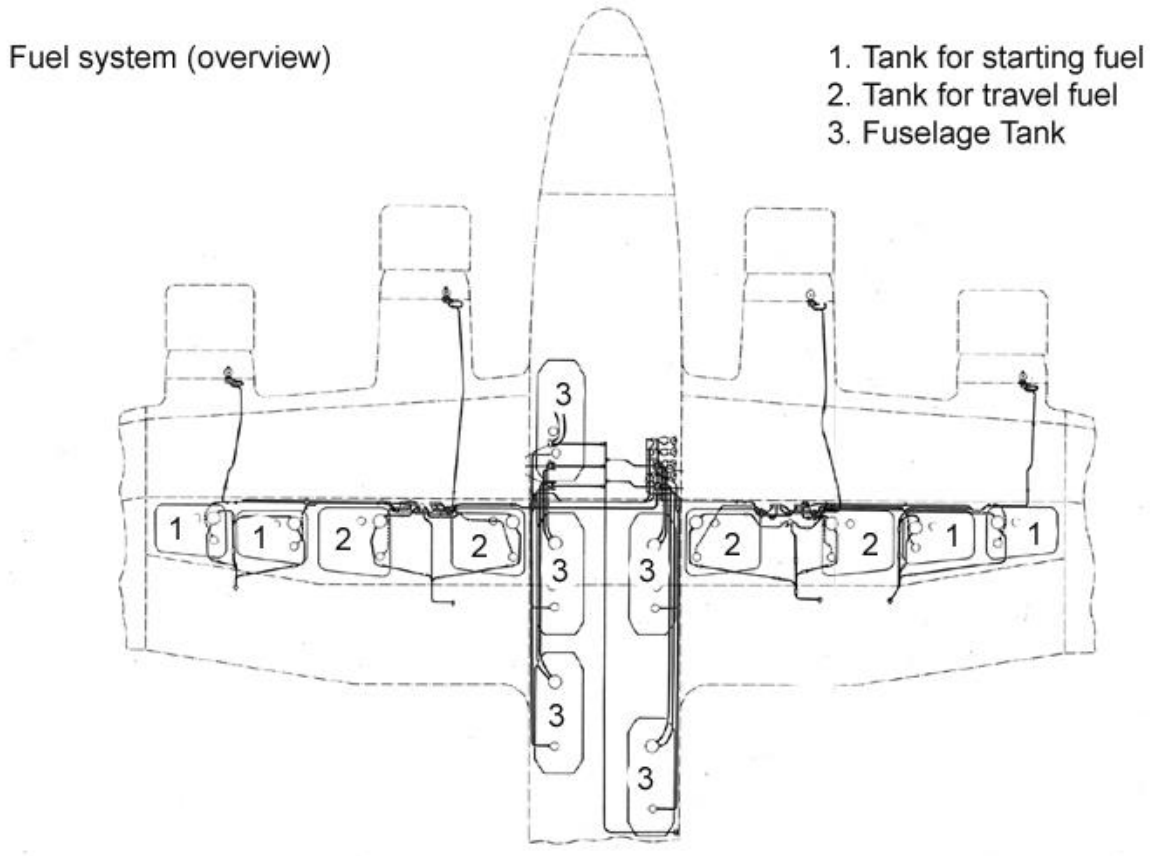
The Fw 200 V-2 had a range of 2,200 miles, a service ceiling of 20,000 feet above sea level, a cruising speed of 208 miles per hour, and a top speed of 233 mph. Other variants had similar performance characteristics.

Despite its large size, the Condor's form was elegant, and it performed magnificently as a long-range carrier. Several airlines used the Fw 200 as an airliner, including those of Germany, Brazil, Denmark, and the United Kingdom.

1. Fuel System

The Focke-Wulf Fw 200 has thirteen fuel tanks, five in the fuselage and four in each wing.

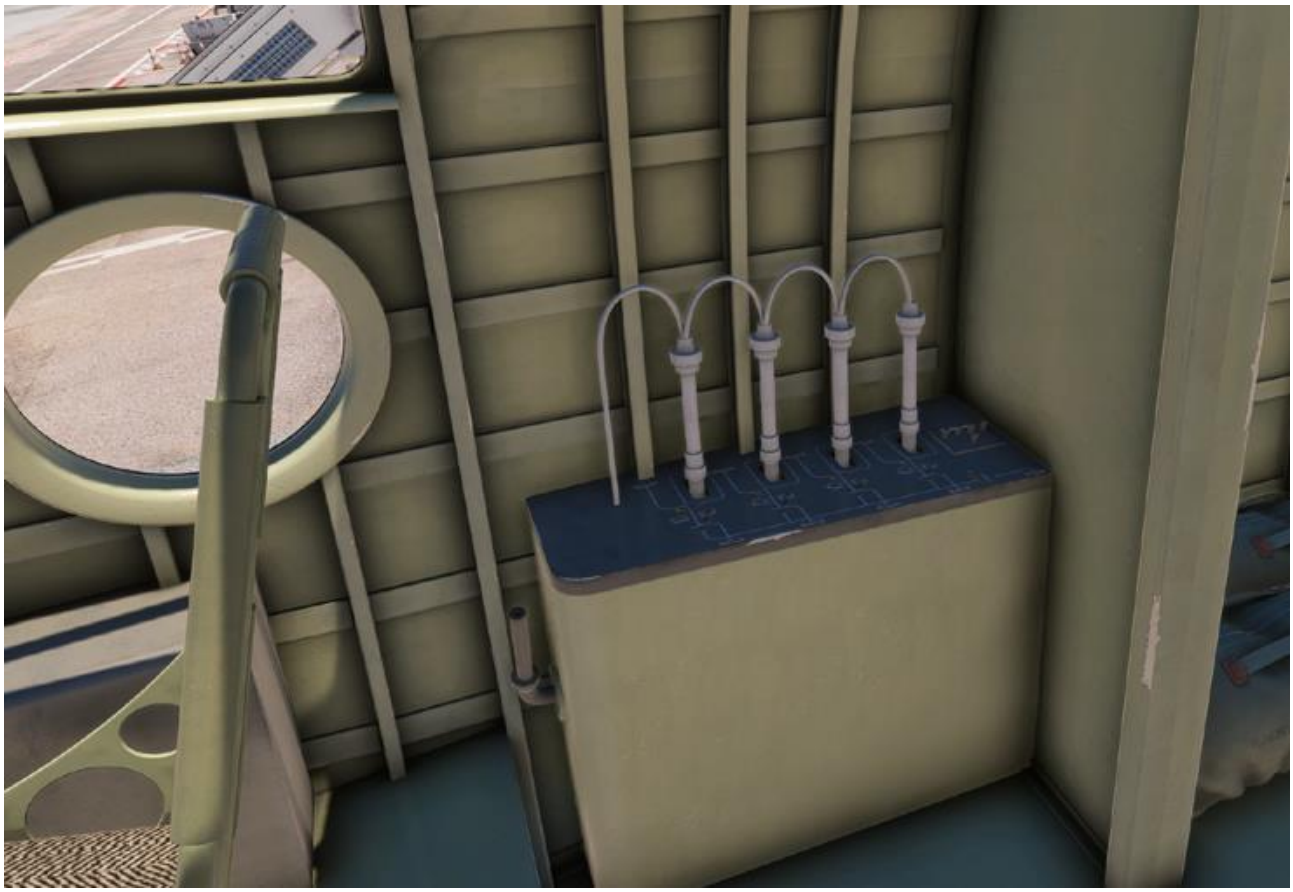
FUEL Quantity		Liters	Gallons	Unusable	
Total Fuel		8060	2129.46		
Fuselage Tank 1		1100	290.62	50 L / 13.21 Gal	
Fuselage Tank 2		1100	290.62	50 L / 13.21 Gal	
Fuselage Tank 3		1100	290.62	50 L / 13.21 Gal	
Fuselage Tank 4		1100	290.62	50 L / 13.21 Gal	
Fuselage Tank 5		1100	290.62	50 L / 13.21 Gal	
Travel Tank 1		380	100.40		
Travel Tank 2		380	100.40		
Travel Tank 3		380	100.40		
Travel Tank 4		380	100.40		
Start Tank 1		260	68.69		
Start Tank 2		260	68.69		
Start Tank 3		260	68.69		
Start Tank 4		260	68.69		

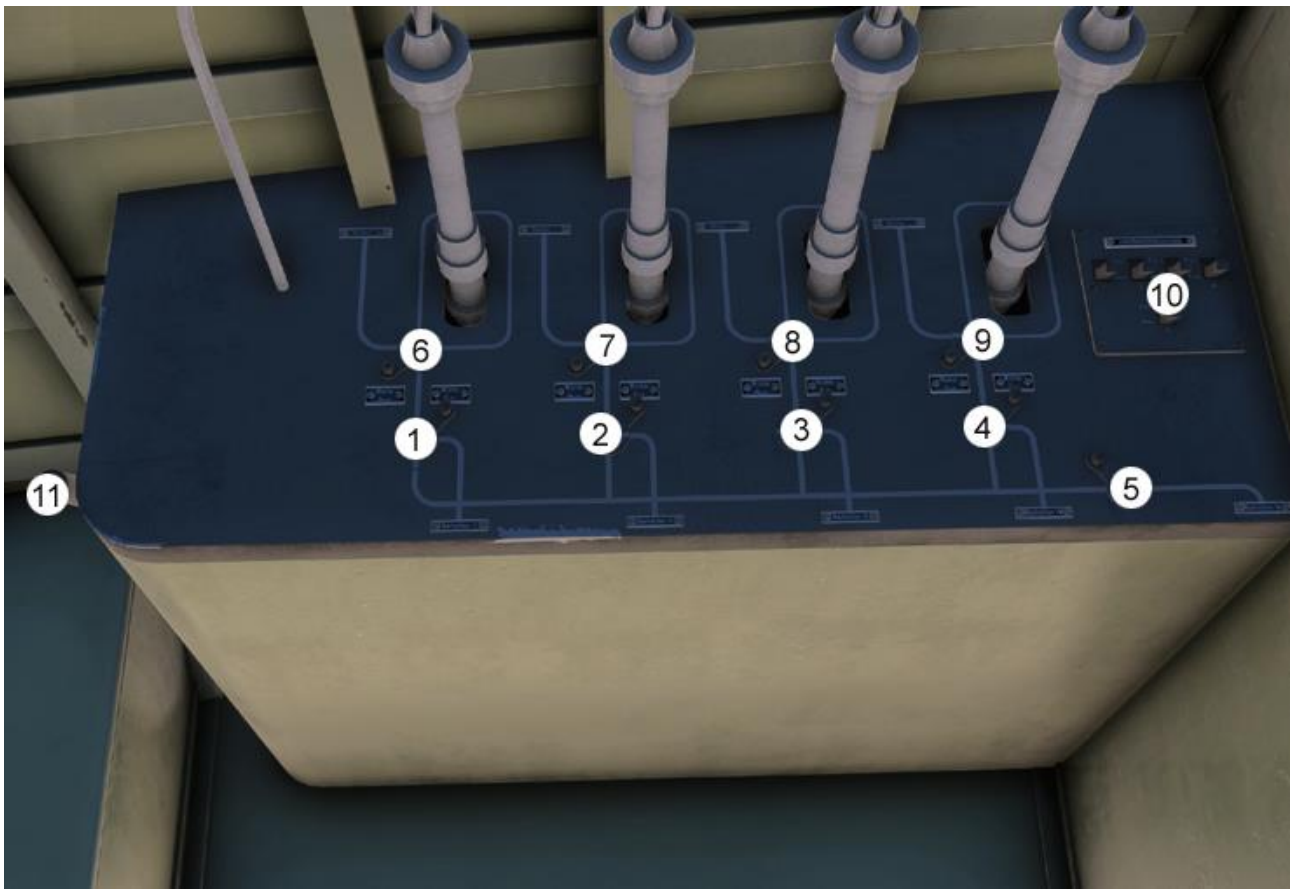


The fuel system panel is located on the right flight deck wall behind the copilot seat.

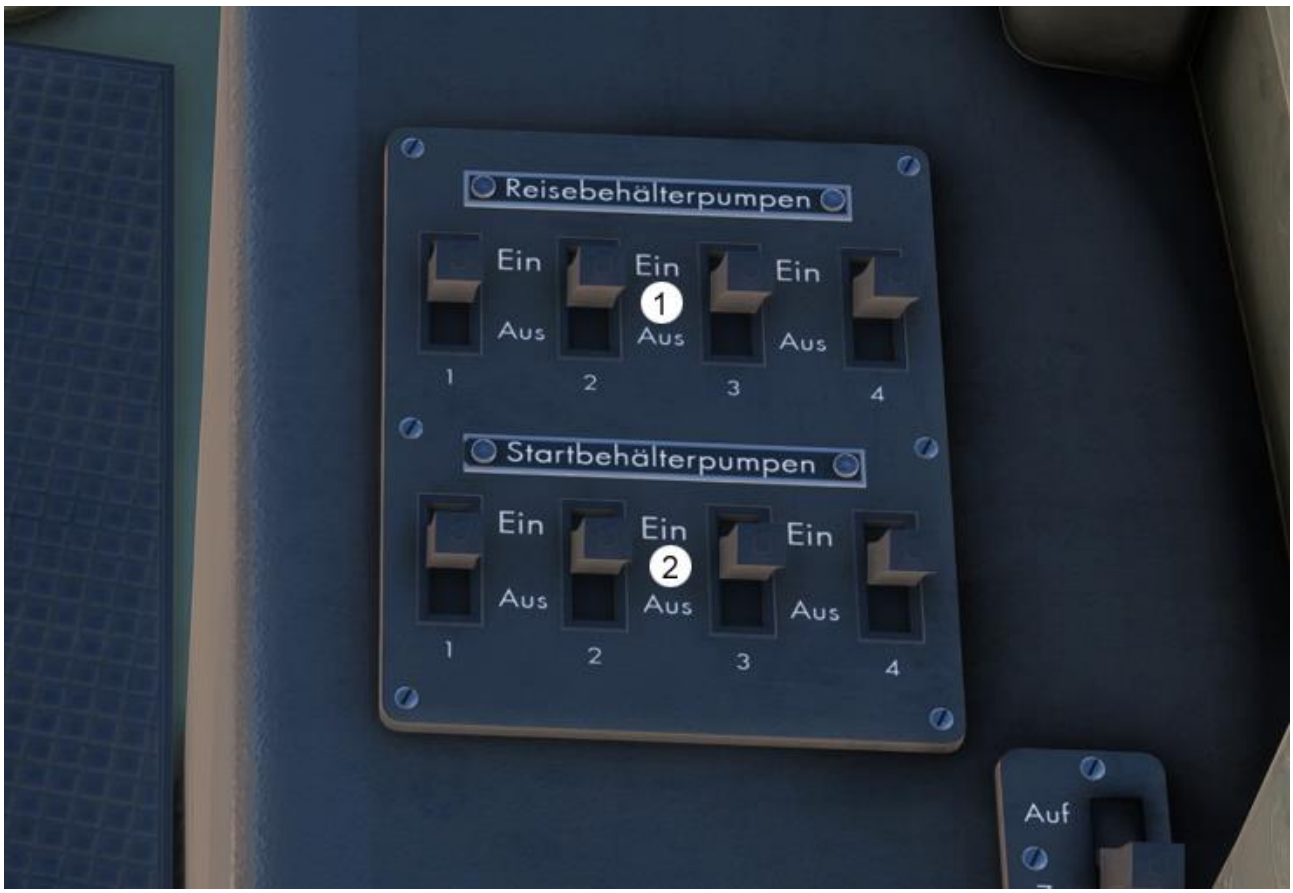
Each engine has three dedicated fuel tanks; cross feeding to other engines is not possible.
Only the Fuselage Fuel Tank (5) can supply all engines.
Therefore, these tanks are used in specific flight configurations.

Use of fuel tanks in different phases of flight.		
Engine Start		Fuselage Tanks
Taxi Out		Fuselage Tanks
Take-Off		Start Tanks
Cruise		First empty the Fuselage Tanks, then the Travel Tanks. Use Fuselage Tank 5 when all other fuselage tanks and travel tanks are empty.
Landing		Start Tanks
Taxi In		Fuselage Tanks





Fuel Tank Valves				
1	Fuselage Tank Fuel Valve Engine 1		Default: Fuel supply to Engine 1 comes from Fuselage Tank 1.	
2	Fuselage Tank Fuel Valve Engine 2		Default: Fuel supply to Engine 2 comes from Fuselage Tank 2.	
3	Fuselage Tank Fuel Valve Engine 3		Default: Fuel supply to Engine 3 comes from Fuselage Tank 3.	
4	Fuselage Tank Fuel Valve Engine 4		Default: Fuel supply to Engine 4 comes from Fuselage Tank 4.	
5	Fuselage Tank 5 Fuel Valve		Default: closed Open: Fuel supply from Fuselage Tank 5 is available. Therefore, set the required Fuselage Tank Fuel Valve Engine 1 to 4 to Fuselage Tank 5.	
6	Engine 1 Fuel Fluctuation Adjustment Lever			
7	Engine 2 Fuel Fluctuation Adjustment Lever			
8	Engine 3 Fuel Fluctuation Adjustment Lever			
9	Engine 4 Fuel Fluctuation Adjustment Lever			
Fuel Pumps				
10	Fuselage Tank Fuel Pump Switches 1 - 5			
11	Manual Fuel Pump			



The fuel system pump panel is located on the left side of the copilot seat.

Fuel Pumps		
1	Travel Tank Fuel Pump Switches 1 - 4	
2	Start Tank Fuel Pump Switches 1 - 4	

2. Flight deck

Magnetic Compass:

Copilot’s Left Side Console:

1		Master Battery Switch		
2		Alternator 1 Switch		
3		Alternator 2 Switch		

1		Travel Tank Fuel Pump Switches 1 - 4		
2		Start Tank Fuel Pump Switches 1 - 4		
3		Main Exit Open / Close Switch		

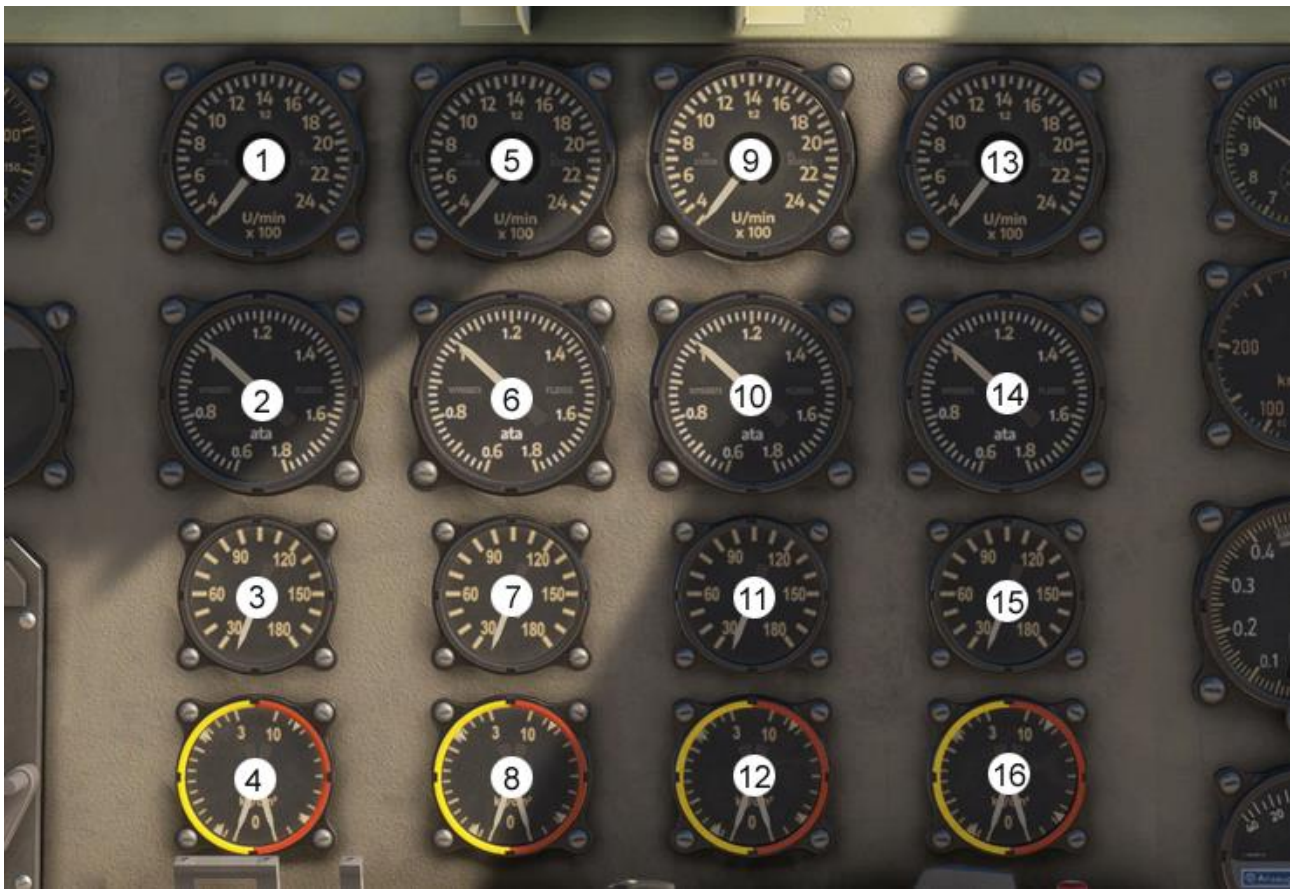
Main Panel:

Primary Instruments				
1		Course Indicator	Indicates whether the aircraft is heading on the course set in the autopilot, or if it is laterally deviating from the course.	
2		Clock with Start / Stop Function		
3		Target flight distance	Indicates distance to or from a VOR station, if a VOR signal is available.	
4		Airspeed Indicator	Km/h	
5		Turn Coordinator		
6		Vertical Speed Indicator	Meters / second	
7		Target flight coupled	Indicates if the aircraft is deviating laterally from a course set to a VOR station. Indicates if airplane flies to or from a VOR station.	
8		Radio Compass (only VOR 1)	Indicates heading to or from a VOR station, if a VOR signal is available.	
9		Altimeter	0 – 1,000 meters	
10		Horizontal Indicator		
11		Instrument Lighting Knob		
12		Altimeter	0 – 10,000 meters	
13		Outside Air Temperature	°C	

Main Instruments				
14		Surface De-Ice Knob		
15		Windshield De-Ice Knob		
16		Floodlight Knob		
17		Cabin Light Knob		
18		Autopilot		

Autopilot				
1		Autopilot Heading Compass		
2		Turn Coordinator Ball		
3		Autopilot Master Switch		
4		Autopilot GPS Hold Switch		
5		Autopilot Heading Hold Switch		
6		Autopilot Altitude Hold Switch		
7		Autopilot Vertical Speed Hold Switch	Manual vertical speed adjustment	
8		Autopilot Vertical Speed Set Wheel		
9		Headings set Lever	Manual heading adjustment	
10		Compass		

Autopilot				
1		Autopilot Current Altitude Set Knob	Synchronize to current altitude.	
2		Autopilot Altitude Set Knob	Manual altitude adjustment	
3		Autopilot Altitude Needle		



Main Instruments				
Engine 1 Instruments:				
1		RPM Indicator		
2		Manifold Pressure	ata	
		ata: absolute pressure, calibrated from the pressure in a vacuum		
3		Oil Temperature	°C	
4		Fuel Pressure (yellow)	Kg / SqCm	
		Oil Pressure (orange)	Kg / SqCm	
Engine 2 Instruments:				
5		RPM Indicator		
6		Manifold Pressure	ata	
		ata: absolute pressure, calibrated from the pressure in a vacuum		
7		Oil Temperature	°C	
8		Fuel Pressure (yellow)	Kg / SqCm	
		Oil Pressure (orange)	Kg / SqCm	

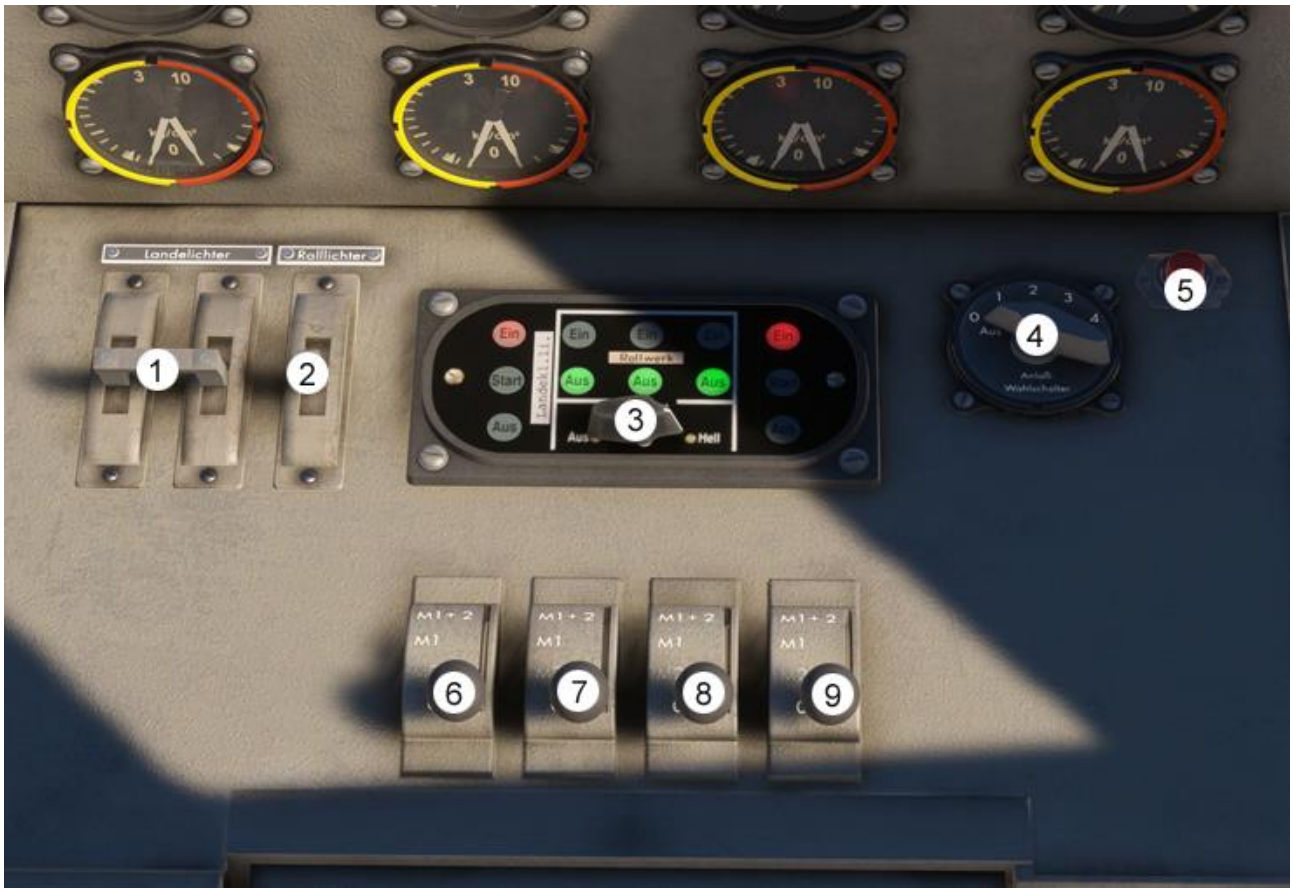
Main Instruments				
Engine 3 Instruments:				
9		RPM Indicator		
10		Manifold Pressure	ata	
		ata: absolute pressure, calibrated from the pressure in a vacuum		
11		Oil Temperature	°C	
12		Fuel Pressure (yellow)	Kg / SqCm	
		Oil Pressure (orange)	Kg / SqCm	
Engine 4 Instruments:				
13		RPM Indicator		
14		Manifold Pressure	ata	
		ata: absolute pressure, calibrated from the pressure in a vacuum		
15		Oil Temperature	°C	
16		Fuel Pressure (yellow)	Kg / SqCm	
		Oil Pressure (orange)	Kg / SqCm	

Main Instruments				
1		Clock		
2		Course Indicator	Indicates whether the aircraft is heading on course set in the autopilot, or if it is laterally deviating from the course.	
3		Pitot Heat Knob	Pitot Heat Off = Pitot State Light On Pitot Heat On = Pitot State Light Off	
4		Airspeed Indicator	Km/h	
5		Turn Coordinator		
6		Vertical Speed Indicator	Meters / second	
7		Cylinder Heat Temperature	°C	
8		Cylinder Temperature Selector		
9		Altimeter	0 – 1,000 m	
10		Horizontal Indicator		
11		Radio Compass (VOR 1 and VOR 2)	Indicates heading to or from a VOR station, if a VOR signal is available.	
12		Outside Air Temperature	°C	
13		Anti- Ice Engine 1 Knob		
14		Anti- Ice Engine 3 Knob		
15		Anti- Ice Engine 2 Knob		
16		Anti- Ice Engine 4 Knob		

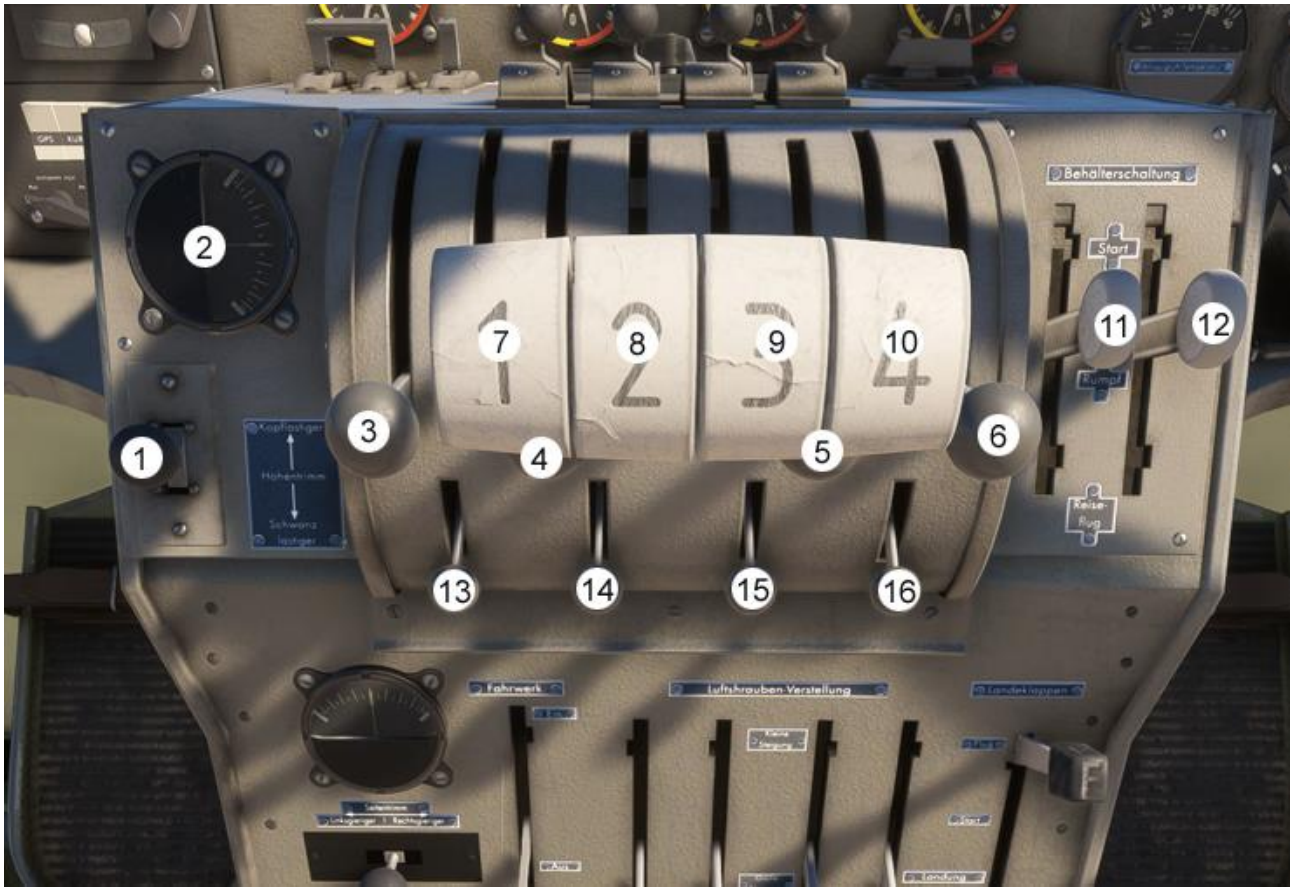
Main Instruments				
	Fuel Tank Quantity Indicators			
		Note: If fuel quantity is low, an amber light will shine.		
17		Fuselage Tank Fuel Quantity Indicator		
18		Fuselage Fuel Tank Selector		
19		Travel Tank Fuel Quantity Indicator		
20		Travel Fuel Tank Selector		
21		Start Tank Fuel Quantity Indicator		
22		Start Fuel Tank Selector		

Main Instruments				
1		Engine Starter Cover		
2		Engine Starter Clutch	Needed to start all engines.	
3		Exterior Lights Panel	From left to right: Navigation Lights Navigation Light Rear Strobe Light Wings	
4		Cowl flaps Lever	Engine 1 - 4	

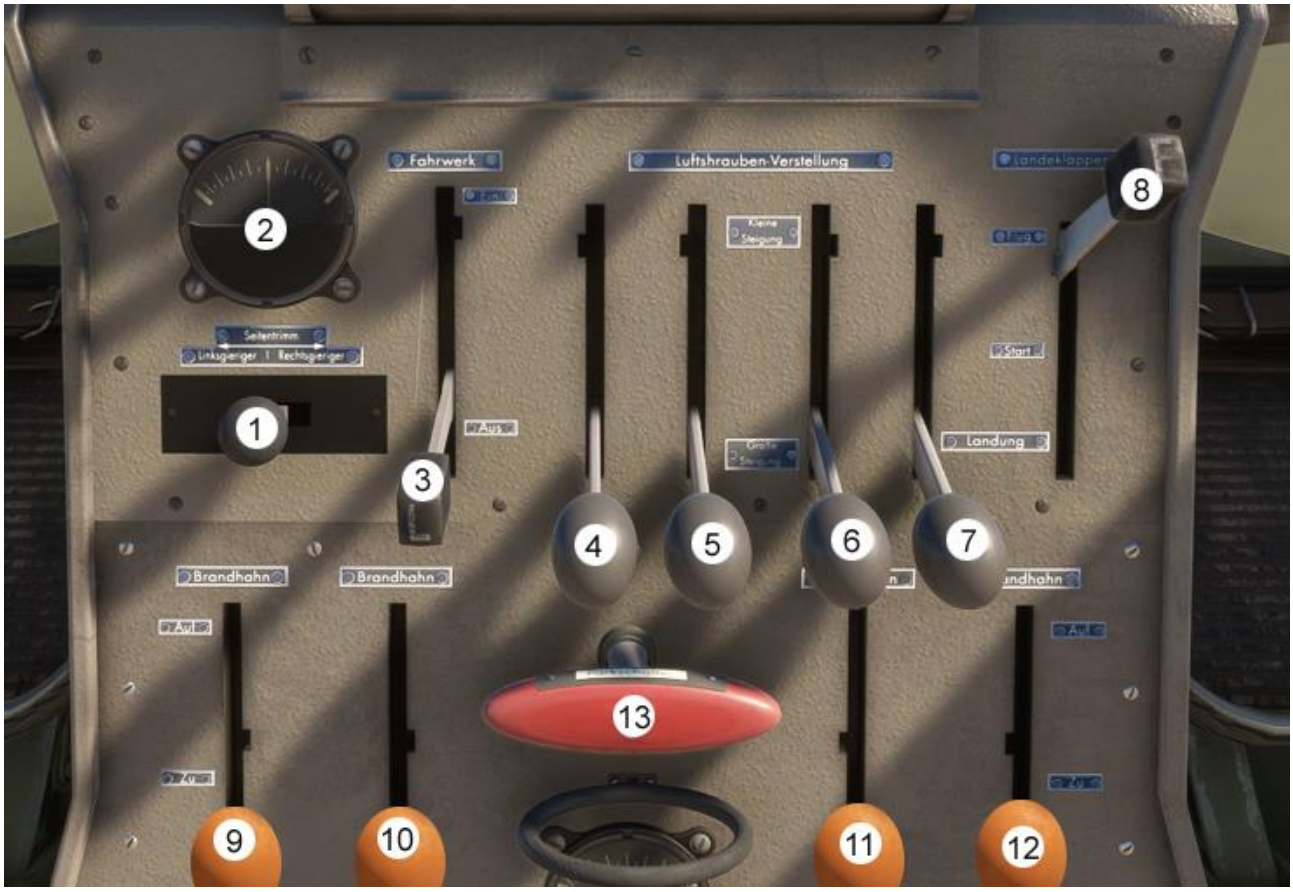
Middle Console:



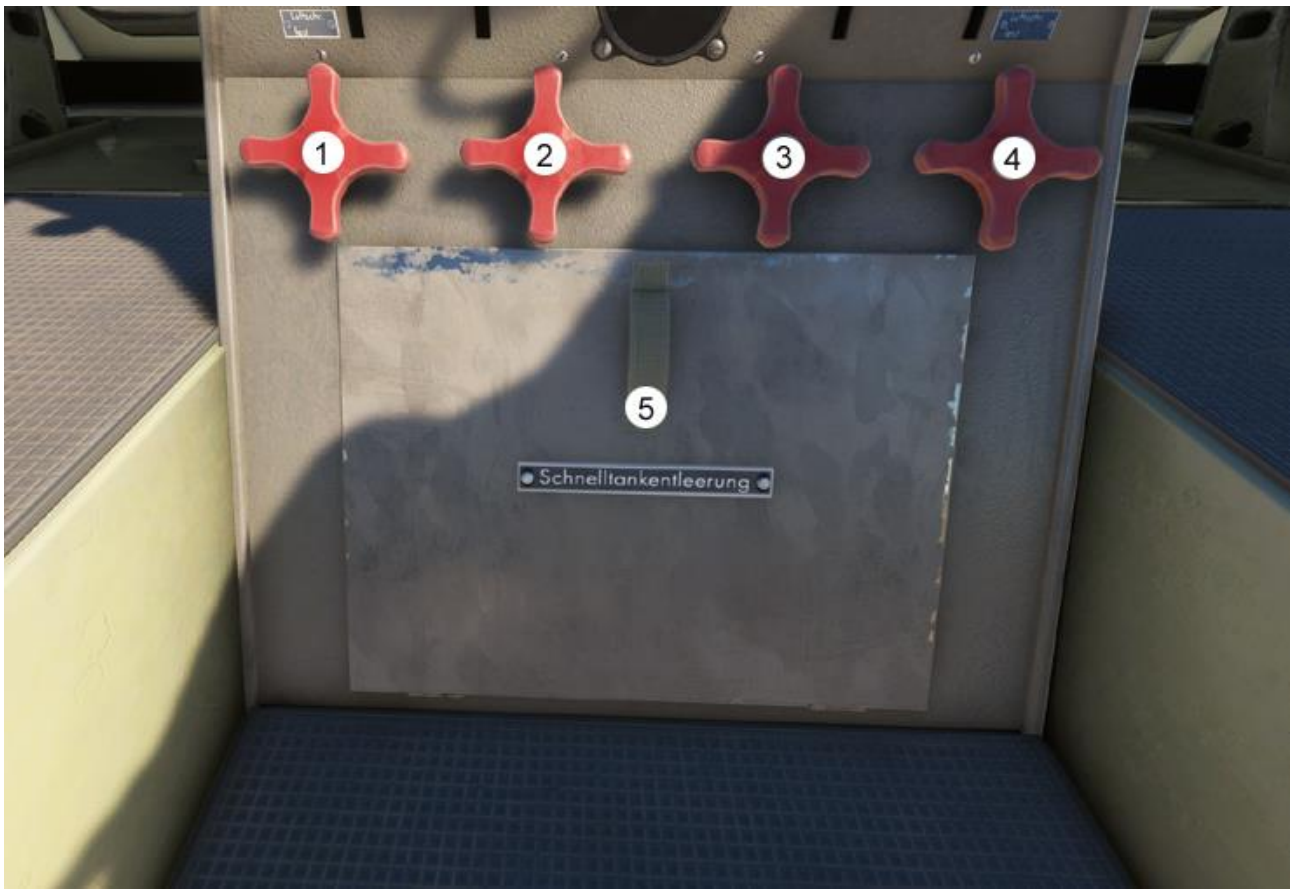
1		Left and Right Landing Light Switch		
2		Taxi Light Switch		
3		Landing Gear and Flaps Panel Lighting Intensity Knob		
		Landing Gear Warning Lights	No Lights = Landing Gear retracted	
			Red Lights = In Transit	
			Green Lights = Landing Gear down	
		Flaps	Red Lights = Flaps retracted	
			Yellow Lights = Flaps in take-off position	
			Green Lights = Flaps in landing position	
4		Engine Start Selector	Off = No engine selected	
			1 = Engine 1 selected	
			2 = Engine 2 selected	
			3 = Engine 3 selected	
			4 = Engine 4 selected	
5		Engine Start Selector Light	Shines when the Engine Start Selector switch is selected.	
6		Engine 1 Magneto		
7		Engine 2 Magneto		
8		Engine 3 Magneto		
9		Engine 4 Magneto		



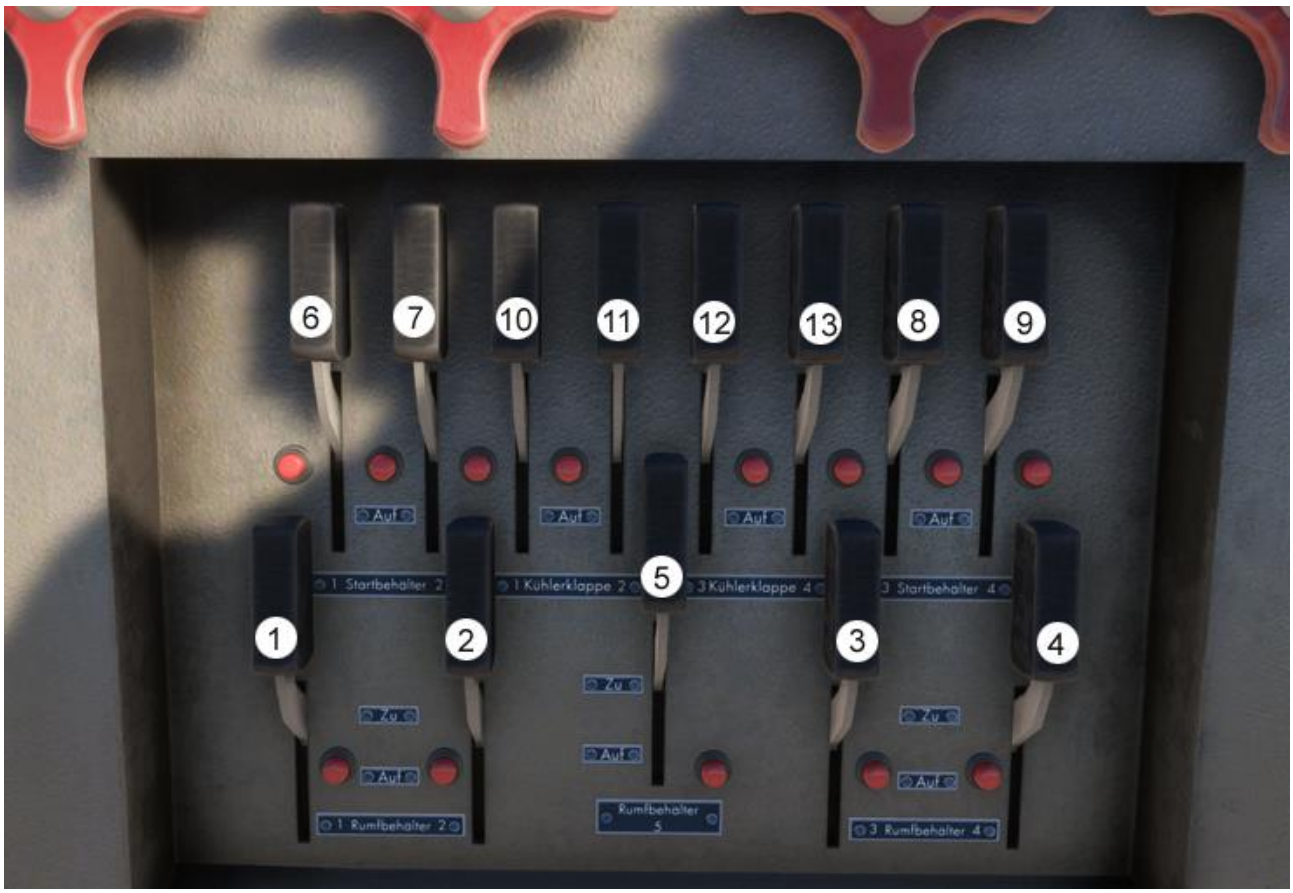
1		Pitch Trim Knob		
2		Pitch Trim Indicator		
3		Engine 1 Mixture Lever		
4		Engine 2 Mixture Lever		
5		Engine 3 Mixture Lever		
6		Engine 4 Mixture Lever		
7		Engine 1 Throttle Lever		
8		Engine 2 Throttle Lever		
9		Engine 3 Throttle Lever		
10		Engine 4 Throttle Lever		
11		Left Fuel Selector		
12		Right Fuel Selector		
13		Engine 1 Throttle Lock Lever	Locks the throttle at idle.	
14		Engine 2 Throttle Lock Lever	Locks the throttle at idle.	
15		Engine 3 Throttle Lock Lever	Locks the throttle at idle.	
16		Engine 4 Throttle Lock Lever	Locks the throttle at idle.	



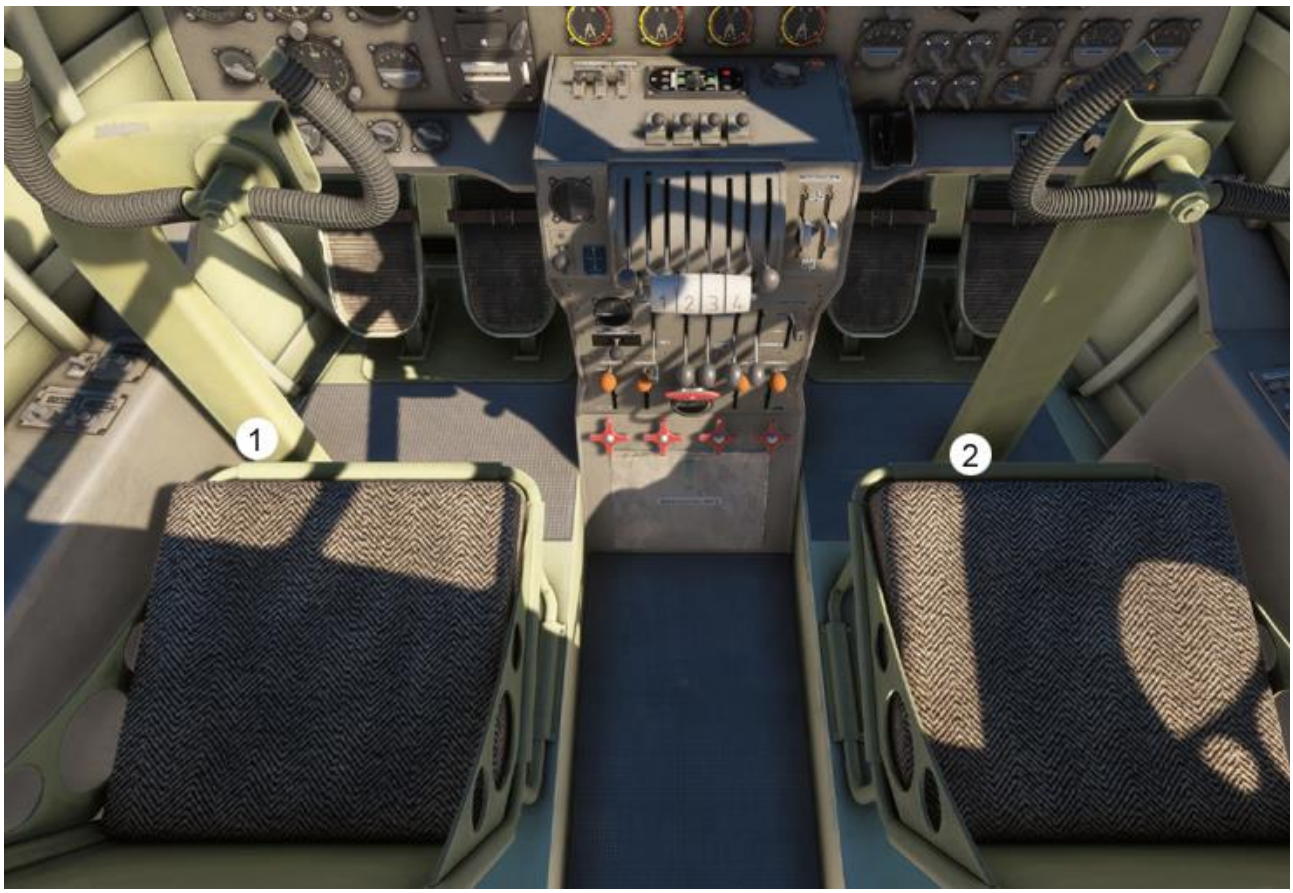
1		Rudder Trim Knob		
2		Rudder Trim Indicator		
3		Landing Gear Lever		
4		Engine 1 Propeller RPM Adjustment		
5		Engine 2 Propeller RPM Adjustment		
6		Engine 3 Propeller RPM Adjustment		
7		Engine 4 Propeller RPM Adjustment		
8		Flaps Lever		
9		Engine 1 Main Fuel Valve		
10		Engine 2 Main Fuel Valve		
11		Engine 3 Main Fuel Valve		
12		Engine 4 Main Fuel Valve		
13		Parking Brake Lever		



1		Engine 1 Fire Extinguisher		
2		Engine 2 Fire Extinguisher		
3		Engine 3 Fire Extinguisher		
4		Engine 4 Fire Extinguisher		
5		Fuel Dump Flap		



Fuel Dump				
	Fuel can be drained from each individual tank if necessary. When a Fuel Dump Lever is opened, a red light illuminates to indicate that fuel is being drained.			
1		Fuselage Tank 1 Fuel Dump Lever		
2		Fuselage Tank 2 Fuel Dump Lever		
3		Fuselage Tank 3 Fuel Dump Lever		
4		Fuselage Tank 4 Fuel Dump Lever		
5		Fuselage Tank 5 Fuel Dump Lever		
6		Start Tank 1 Fuel Dump Lever		
7		Start Tank 2 Fuel Dump Lever		
8		Start Tank 3 Fuel Dump Lever		
9		Start Tank 4 Fuel Dump Lever		
10		Travel Tank 1 Fuel Dump Lever		
11		Travel Tank 2 Fuel Dump Lever		
12		Travel Tank 3 Fuel Dump Lever		
13		Travel Tank 4 Fuel Dump Lever		



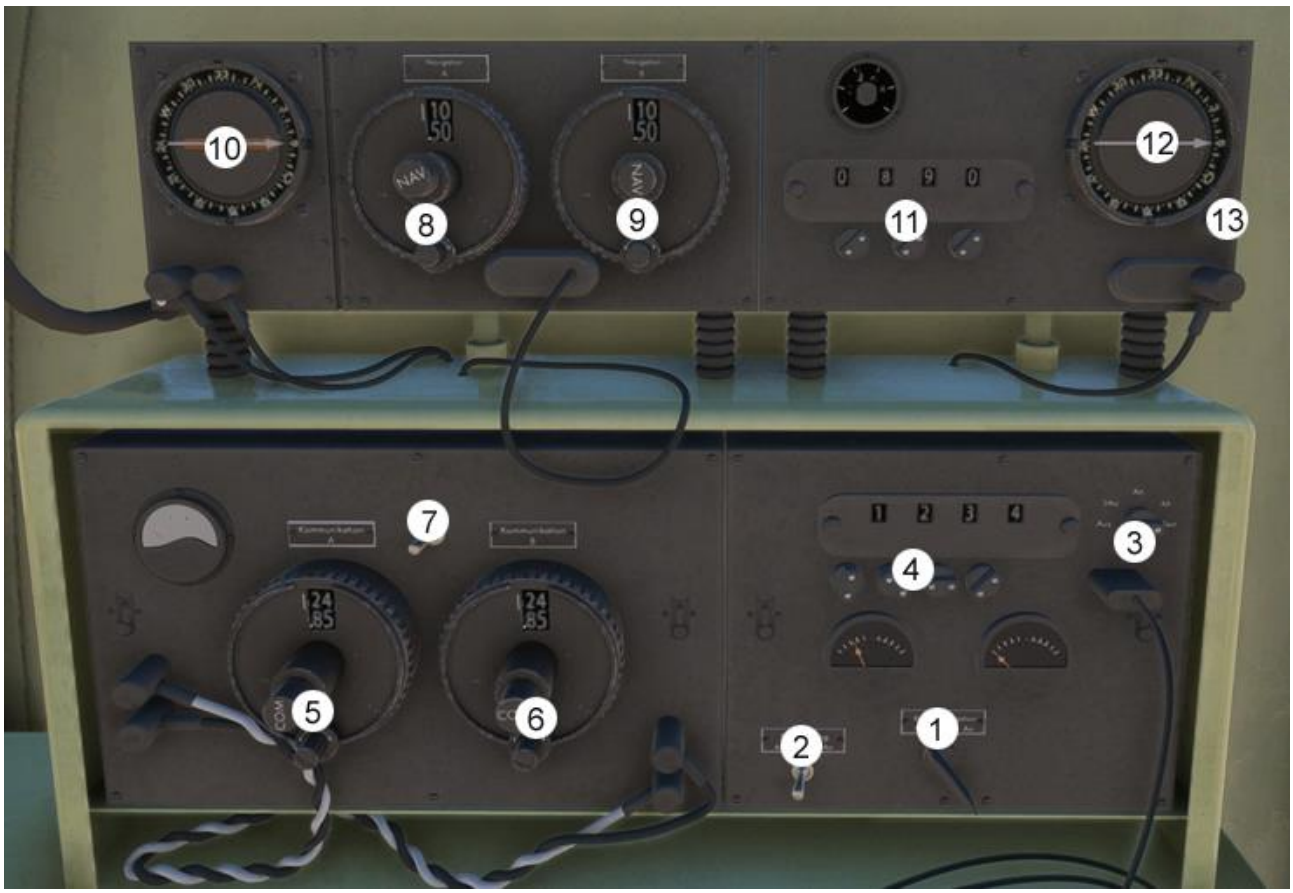
1		Yoke Visibility	Show/Hide Pilot Yoke	
2		Yoke Visibility	Show/Hide Copilot Yoke	

3. Radio Operator:

The radio console is located on the right side for accessibility, where Com 1, Nav 1, and Nav 2 frequencies can be set.

1		Com 1 Radio		
2		Nav 1 and Nav 2 Radio		
3		Tablet Visibility Switch		

The Radio Operator console is located in the rear of the flight deck.



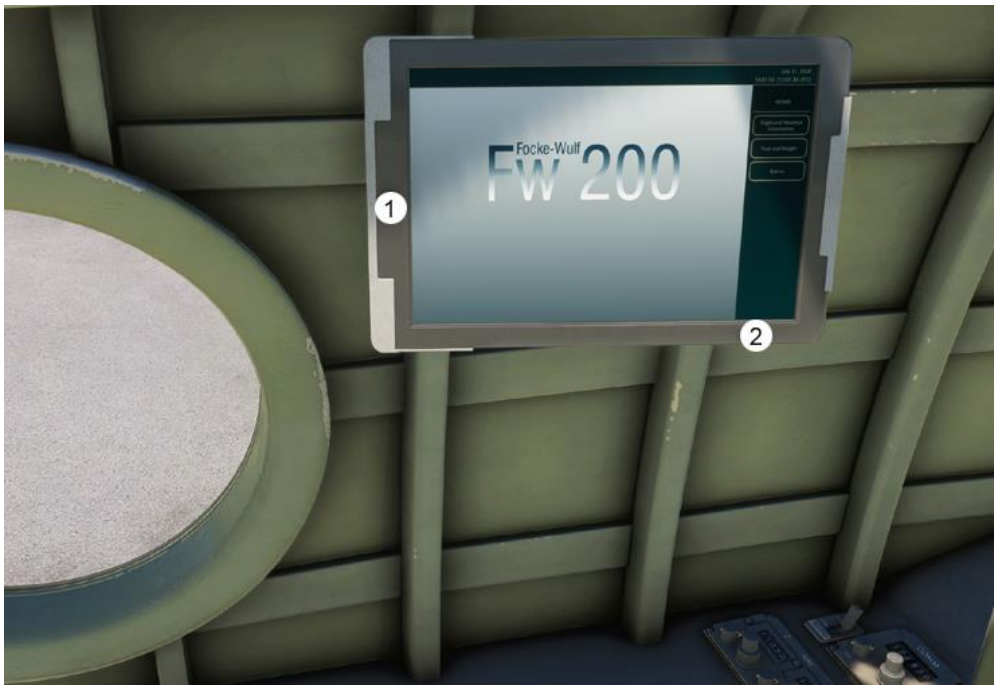
1		Avionics Master Switch		
2		Avionics Brightness Switch		
3 4		Transponder Mode Knob Transponder Code Setting Knobs		
5		Com 1 Radio		
6		Com 2 Radio		
7		Transmitter	Toggle between Com 1 and Com 2	
8		Nav 1 Radio		
9		Nav 2 Radio		
10		Dual Radio Magnetic Indicator		
11 12 13		ADF Frequency Setting Knobs ADF Radio Compass ADF Radio Volume Adjustment Knob		

4. Checklist:

A detailed checklist of all aircraft functions and procedures is available in the simulator.
We recommend using this to familiarize yourself with the operation of the aircraft.

5. Extra Features:

Tablet with integrated GPS:



1		Tablet Power Knob		
2		GPS Toggle Knob	Toggle between Tablet Information and GPS