

## Dassault Falcon 20-5 Jet



### AIRFRAME TIMES

**TSN: 14060      CSN: 11994**

**Year of Manufacture: 1974**

### ENGINES

	Type	TSN	CSN
1.	TFE731-5AR-2C	5857	5374
2.	TFE731-5AR-2C	4360	3029
	APU Saphir 4-2	467	1967

### AVIONICS

#### Collins Proline 2 Avionics System

<b>A/P</b>	Collins	APS85
<b>COM</b>	Collins	VHF 22D Dual with 8.33
<b>HFCOM</b>	Collins	HF9030
<b>NAV</b>	Collins	VIR-32 Dual
<b>ADF</b>	Collins	ADF-60 Dual
<b>XPNDR</b>	Collins	TDR-94D Dual
<b>DME</b>	Collins	DME-42 Dual
<b>RADAR</b>	Collins	RTA 858
<b>Altimeter</b>	Collins	ALT 55B
<b>CVR</b>	Sunstrand	AV 557B
<b>ELT</b>	Artex	455-0427 (406 MHz)
<b>GPS I</b>	Allied Signal	UNS 1K
<b>GPS II</b>	Universal	GNS-X
<b>EGPWS</b>	Honeywell	Mark V with wind shear detection
<b>FDR</b>	Fairchild	F1000
<b>TCAS</b>	Collins	TTR4000 (TCAS II with Change 7)
<b>RVSM</b>		Certified

## 10 Seat Passenger Capacity



**MAINTENANCE STATUS**

Inspection Type	Maintenance Center	Date C/W	Hrs C/W	Landings (cycles) C/W
A	COBHAM Aviation Services UK	10.JUL.2012	14044	11986
2A	COBHAM Aviation Services UK	10.JUL.2012	14044	11986
2A+	COBHAM Aviation Services UK	10.JUL.2012	14044	11986
Z	COBHAM Aviation Services UK	10.JUL.2012	14044	11986
B	COBHAM Aviation Services UK	10.02.2011	13830	11828
2B	ELBE AIR, Germany	04.03.2005	12463	10979
3B	ELBE AIR, Germany	04.03.2005	12463	10979
4B	ELBE AIR, Germany	04.03.2005	12463	10979
C	ELBE AIR, Germany	18.12.2007	12947	11264
2C	COBHAM Aviation Services UK	10.JUL.2012	14044	11986
3C	SECA, France	06.07.1993	8026	7026
Major Corrosion inspection	COBHAM Aviation Services UK	10.JUL.2012	14044	11986

<b>ENGINES</b>			
<b>#1: TFE731-5AR-2C</b>			
	Date C/W	HRS C/W	HRS Remain
MPI	03.FEB.2005	4277	4377
Overhaul	03.FEB.2005	4277	4377
<b>#2: TFE731-5AR-2C</b>			
	Date C/W	HRS C/W	HRS Remain
MPI		4082	1821
Overhaul		4082	3921
<b>APU Saphir 4-2</b>			
	Date C/W	HRS C/W	CYCLES C/W
Inspected	29.MAR.2012	1240	4410
Overhauled	11.NOV.1998	1143	4150

## Description

Although formally introduced in 1989, the Falcon 20-5 is the result of tweaking and perfecting the existing Falcon 20 midsize business jet. When first manufactured, Dassault's line of Falcon 20's fell short on power. Dassault re-engined the Falcon 20's not once, but twice. The first conversion took the Falcon 20 from the General Electric CF700 series to TFE-731-5AR engines, each with 4,500 lbs of thrust. However, with the second upgrade in 1989, the aircraft improved across the board, becoming the Falcon 20-5.

The Falcon 20-5 employs a pair of Allied Signal (Garrett) TFE-731-5AR engines. They produce 4,750 lbs of thrust, an additional 250 lbs from the previous iteration. However, almost more noteworthy is the 20-5's improved performance in other areas (as a result of its evolved engine).

The Falcon 20-5 boasts an additional 850 lbs maximum take-off weight (MTOW) to 30,325 lbs.

Both runway and climb performance improved; the 20-5 climbs to 39,000 feet in 27 minutes, seven minutes less than with the previous engine. At sea level, the 20-5 requires 5,085 feet to take off.

Additional improvements seen in the 20-5 include increased range (nearly double its predecessors) and up to 10% greater speed. The jet is able to cruise at 480 ktas (high speed) or 411 ktas (long range). Its certified flight ceiling is 42,000 feet.

The Falcon 20-5's original analogue /mechanical panel is almost always upgraded at the same time it is re-engined. A typical avionics suite includes the Collins Pro Line 4, dual VHF 20, four-tube EFIS, APS 30 autopilot, Dual VIR 30, dual ADF 60 and dual DME 40. Other included systems are Universal UNS-1M or Global GNS-X FMS and a Sperry Primus 400 colour weather radar.

The inside of the Falcon 20-5 is identical to Dassault's 731 Falcon 20B. The cabin measures 5.7 feet in height, 6.1 feet in width and 24 feet in length. Able to accommodate eight to ten passengers, the space is configured in either a double-club arrangement or a club-divan-individual combo. A forward galley and full-width aft lavatory are included.

By employing a better engine option, the Falcon 20-5 corrects all of the original 20's shortcomings in power and performance. Dassault's ability to evolve and perfect their aircraft makes the Falcon 20-5 a high-performing, competitive option in its class of midsize business jets.

## Performance

Takeoff at Sea Level, feet	5,085
Takeoff at 5000' 25°C, feet	9,400
Landing Distance, feet	2,570
Certified Ceilings, feet	42,000
Fuel Consumption, gallons per hour	280
Total Variable Cost	\$1,907
High Speed Cruise, knots	480
Ranges, Four Pax, Nautical Miles (NM)	2,258
600 NM Mission, Flight Time	1+35
1000 NM Mission, Flight Time	2+35