

WORLD TURBINE ENGINE DIRECTORY

SATURN

Saturn's AL-31F, which powers the Sukhoi Su-27 Flanker, has been selected to power the Chinese Chengdu Super-7, which is due to be flown in 1994. The Super-7 is a development of the F-7, Chengdu's version of the Mikoyan MiG-21 Fishbed.

The Super-7 was to have been powered by the General Electric F404, but use of the engine was blocked by a US trade embargo. The Russian powerplant was selected over the Turbo-Union RB.199, marketed by R-R.

The AL-31F may only be earmarked for Chinese air force Super-7s, with export

versions possibly being offered with a version of the Klimov RD-33, which powers the Mikoyan MiG-29 Fulcrum.

SNECMA

Snecma was awarded a contract to build four M88-2 Dassault Rafale powerplants at the beginning of this year. This deal launches a Fr1.5 billion (\$260 million) industrialisation programme for the two-shaft afterburning turbofan.

TEXTRON LYCOMING

Textron Lycoming is anxiously awaiting the final completion of the deal to set up Avro Aerospace, the British Aerospace/

Taiwan Aerospace joint venture. The company's LF507 powers the Avro RJ70, 85, 100 and 115 regional jets.

TURBO-UNION

The near-future for the Panavia Tornado's RB.199 powerplant has been secured with the January order of 48 Tornado IDS by Saudi Arabia. The first aircraft is scheduled for delivery in early 1996.

WILLIAMS ROLLS-ROYCE

Deliveries of the Williams Rolls-Royce FJ44-powered Cessna CitationJet began earlier this year and Swearingen continues to flight-test the FJ44-powered SJ30.

COMMERCIAL TURBOFANS

Manufacturer	Engine	Thrust		sfc (lb/h/lb)	Dimensions (m)		Configuration fan/comp/turb	Application
		kN	lb		length	fan dia		
AlliedSignal (Garrett)	TFE731-4	18.15	4,080	*0.79	1.47	-	1/5/1+3	Cessna Citation VII, Citation X
AlliedSignal (Garrett)	TFE731-5	19.1	4,300	*0.8	1.66	-	1/5/1+3	BAe 125-800, CASA C-101
Allison	GMA3007	32	7,200	*0.39	2.7	1.1	1/14/2+3	Embraer EMB-145
AO 'Aviadvigatel'	PS90A	156.6	35,200	0.58	4.9	1.9	1/2+13/2+4	Tupolev Tu-204, Ilyushin Il-86-300
BMW Rolls-Royce	BR710	62	15,890	-	2.21	1.11	1/10/2+2	Gulfstream V, Global Express
BMW Rolls-Royce	BR715	83.8	18,821	-	2.46	1.34	1/2+10/2+3	Regional Jets
CFE	CFE738-1	24.9	5,600	0.37	1.83	-	1/6/2+3	Dassault Falcon 2000
CFM International	CFM56-3B/C	89-105	20,000-23,500	0.38-0.39	2.36	1.52	1/3+9/1+4	Boeing 737-300/-400/-500
CFM International	CFM56-5A	111-118	25,000-26,500	0.326-0.330	2.42	1.73	1/3+9/1+4	Airbus A320/A319
CFM International	CFM56-5B	118-138	26,500-31,000	0.337-0.354	2.51	1.73	1/3+9/1+4	Airbus A320/A321
CFM International	CFM56-5C	139-151	31,200-34,000	0.321-0.331	2.62	1.84	1/4+9/1+5	Airbus A340-200, -300
General Electric	CF34-3A1	42	9,400	0.36	2.615	1.24	1/14/2+4	
General Electric	CF6-80A	213	48,000	0.35	4	2.19	1/3+14/2+4	Airbus A310, Boeing 767
General Electric	CF6-80C2	233-273	52,500-61,500	0.32-0.33	4.09	2.36	1/4+14/2+5	Boeing 747-300/-400, Boeing 767, Airbus A300-600, A310, McDonnell Douglas MD-11
General Electric	CF6-80E1	300-320	67,500-72,000	0.32-0.33	4.17	2.44	1/4+14/2+5	Airbus A330 Canadair Regional Jet
General Electric	GE90-85B	377	84,700	-	4.88	3.35	1/3+10/2+6	Boeing 777
International Aero Engines	V2500-A1	111.21	25,000	-	3.2	1.6	1/3+10/2+5	Airbus A320
International Aero Engines	V2500-A5	98-133	22,000-30,000	-	3.2	1.613	1/4+10/2+5	Airbus A319, A320, A321
International Aero Engines	V2500-D5	111-125	25,000-28,000	-	3.2	1.613	1/4+10/2+5	McDonnell Douglas MD-90-30, MD-90-50
Pratt & Whitney	JT8D-200	77-96.6	17,400-21,700	0.51-0.66	3.92	1.17 [†]	1/6+7/1+3	McDonnell Douglas MD-80, -81, -82, -83, -87, -88
Pratt & Whitney	PW2037/2040	170/185	38,250-41,700	0.33/0.34	3.73	1.99	1/4+12/2+5	Ilyushin Il-96M, Boeing 757 [†]
Pratt & Whitney	PW4052 to PW4460	231-267	52,000-60,000	0.34-0.37	3.37	2.38	1/4+11/2+4	Boeing 747-400, Boeing 767, Airbus A300-600, Airbus A310, McDonnell Douglas MD-11
Pratt & Whitney	PW4168	302	68,000	-	3.37	2.54	1/5+11/2+5	Airbus A330
Pratt & Whitney	PW4084	376	84,600	-	3.37	2.84	1/6+11/2+7	Boeing 777
Pratt & Whitney Canada	JT15D-4	11.12	2,500	0.56	1.53	0.69	1/1/1+2	Cessna Citation II
Pratt & Whitney Canada	JT15D-5	13.1	2,965	0.55	1.53	0.69	1/1/1+2	Cessna Citation V/Beech 400A Beechjet
Pratt & Whitney Canada	PW305	23.24	5,225	0.40	2.07	0.93	1/4/2+3	Learjet 60, Hawker 1000
Rolls-Royce	Tay 611/620	61.6	13,850	*0.71	2.40	1.11	1/3+12/2+3	Gulfstream IV, Fokker 70, Fokker 100
Rolls-Royce	Tay 650/651	67.2/68.5	15,000-15,400	*0.69	2.41	1.14	1/3+12/2+3	Fokker 100, Boeing 727 re-engineing
Rolls-Royce	Tay 670	80.1	18,000	*0.68	2.84	1.27	1/4+12/2+3	Boeing 727-200, 737-200, McDonnell Douglas MD-95, DC-9 re-engineing