MDC for installation on the pre
MD-90 at the end of this year.
The company's fiercely competitive
with CFMI ovef the A320/321 may
extended to include the enhanced
737 if existing negotiations are succ
R-R scored a major coup in winn

Engine

ALF502R-5
GMA3007
CF34-3A1
Spey 512
Tay 611
Tay 620
BR710
D-36
JT8D-9/11

Tay 650

JT8D-15/17

RTF180

Tay 671
D-436

JT8D-17R/AR

Tay 670

BR715
CFM56-3C1

JT8D-209
CFM56-3B1/
-3B2/
-3C1
JT8D-217
JT8D-219
CFM56-2C1/
-2C2
V2522-D5
D-30K
CFM56-5A1/
-5A3
V2500-A1
V2525-D5
CFM56-5B4
V2527-A5
V2528-D5
NK-86
CFM56-5B1/
-5B2/
-5B4
V2530-A5
CFM56-5C2/
-5C3/
-5C4

Manufacturer

Textron Lycoming
Allison
GE Aircraft Engines
Rolls-Royce
Rolls-Royce
Rolls-Royce
BMW Rolls-Royce
Progress
Pratt & Whitney

Rolls-Royce

Pratt & Whitney

MTU/Pratt & Whitney

Rolls-Royce
Progress

Pratt & Whitney

Rolls-Royce

BMW Rolls-Royce .
CFM International

Pratt & Whitney
CFM International

Pratt & Whitney
Pratt & Whitney
CFM International

COMMERCIAL TURBOFAN DIRECTORY

itotype

battle
also be
Boeing
essful.
ing an

order fro m United Parcel Services i n 1990 to re-engine 40 Boeing 727s (plus 40 options) wit h Tays. A Tay-powered aircraft made its first flight on 18 April.
The small-turbofan market, aimed partic-ularly at the new generation of regional jets, is now becoming easier to define. The major

Thrust
kN (lb)

31 (6,970)
32 (7,200)
42 (9,400)
55.8 (12,550)
62 (13,850)
61.6 (13,850)
62 (15,893)
63.7 (14,330)
64.5 (14,500)
66.8 (15,000)
67.2 (15,100)

69 (15,500)
71 (16,000)
72 (16,000)
98 (22,000)
73 (16,500)
74 (16,550)

77 (17,400)

80 (18,000)

83.8 (18,821)
82 (18,500)
104 (23,500)
85.6 (19,250)
89 (20,000)
98 (22,000)
105 (23,500)
93 (20,850)
96.6 (21,700)
98 (22,000)
107 (24,000)
International Aero Engines 98 (22,000)
Soloviev
CFM International

108 (24,250)
111 (25,000)
118 (26,500)
International Aero Engines 111 (25,000)
International Aero Engines 111 (25,000)
CFM International 118 (26,500)
International Aero Engines 118 (26,500)
International Aero Engines 125 (28,000)
Kuznetsov
CFM International

128 (28,660)
133 (30,000)
138 (31,000)
118 (26,500)
International Aero Engines 133 (30,000)
CFM International 139 (31,200)
144 (32,500)
151 (34,000)

sfc
Ib/h/lb

0.408
0.39
0.36
0.8
0.69
0.69
0.414
0.36
0.6-0.62

0.69

0.59-0.65

0.69
0.63

0.66-0.61

0.69

0.367
0.37
0.38
0.5
0.38
0.39
0.39
0.5
0.51
0.36

0.33
0.49
0.326
0.330
0.33-0.34
0.33
0.32
0.34
0.34

0.351
0.354
0.337
0.34
0.321
0.325
0.331

contenders for a place o n the soon-to-be-defined competitors to the Canadair RJ, the British Aerospace 146 and Fokker's 100 are the BM W Rolls-Royce BR700, P&W/MT U RTF180, the Allison GMA3014, the Textron Lycoming LF514, the GE CF34 and the GE/Snecma CFM88.

Dimensions Configuration
length/fan dia (m) fan, comp/turb

1.45/1.2
2.7/1.1
2.09/1.12
2.92/0.82

2,1/2,2
1,14/2,3
1,14/2,4
5,12/2,2
2.41/1.12 1,3,12/2,3
2.41/1.12 1,3,12/2,3
2.21/1.11 10/2,2
3.45/1.4 1,6,6/1,1,2
3.14/1.01 2,4,7/1,3

2.41/1.14 1,3,12/2,3

3.14/1.01 2,4,7/1,3

-/- 1,3,8/1,4

2.82/1.27 1,4,12/2,3
3.03/1.39 1,6,7/1,1,3

3.14/1.01 2,4,7/1,3

2.82/1.27 1,4,12/2,3

2.46/1.34
2.36/1.52

3.92/1.17
2.36/1.52

3.92/1.17
3.92/1.17
2.43/173

2,10/2,3
,3,9/1,4

,6,7/1,3
,3,9/1,4

,6,7/1,3
,6,7/1,3
,3,9/1,4

3.2/1.63 1,4,10/2,5
5.7/1.46
2.42/173

3,11/2,4
,3,9/1,4

3.2/1.63 1,3,10/2,5
3.2/1.63 1,4,10/2,5
2.5/173 ,4,9/1,4
3.2/1.63 1,4,10/2,5
3.2/1.63 1,4,10/2,5
5.2/1.1
2.51/173

2,2,6/1,2
,4,9/1,4

3.2/1.63 1,4,10/2,5
2.62/1.84 ,4,9/1,5

Application

BAe 146
Embraer EMB-145
Canadair Regional Jet
BAe One-Eleven
Gtilfstream IV
Fokker 100, Fokker 70
Regional jets
Antonov An-72/74; Yakovlev Yak-42
Aerospatiale Caravelle; Boeing 727,737;
McDonnell Douglas DC-9
Boeing 727, BAe Tay One-Eleven
re-engining; Fokker 100
Boeing 727, 737; McDonnell Douglas DC-9

Regional jets

McDonnell Douglas MD-95
Antonov An-72/74; Tupolev Tu-334;
Yakovlev Yak-42M
Boeing 727 (-17R); McDonnell Douglas
MD-80 (-17AR)
Boeing 727, 737, McDonnell Douglas DC-9
re-engining; McDonnell Douglas MD-95
Regional jets
Boeing 737-400,-400,-500

McDonnell Douglas MD-81
Boeing 737-300/-500,(-3B1);
737-300/-400, (-3B2);
737-300/-400/-500, (-3C1)
McDonnell Douglas MD-82/87
McDonnell Douglas MD-83/87/88
Boeing C-135FR/KC-135, E-3/KE-3, E-6;
McDonnell Douglas DC-8-70
Airbus A321
llyushin II-62M; Tupolev Tu-154M
Airbus A320, A319

Airbus A320
McDonnell Douglas MD-90-30
Airbus A320
Airbus A320
McDonnell Douglas MD-90-50
llyushin II-86
Airbus A321 (-5B1.-5B2);

A320 (-5B4)
Airbus A321
Airbus A340-200, -300;
llyushin II-86

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