This data sheet, which is part of Type Certificate No. A8SW, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

**Type Certificate Holder**
Fairchild Aircraft, Inc.
San Antonio, Texas  78279-0490

**I - Model SA226-TC, 22 PCLM, Normal Category, Approved June 11, 1970, Restricted Category Approved February 10, 1978, SFAR 41 Approval September 25, 1980 (See Note 8).**
(See note 7 for Restricted Category Operation at 14,000 lbs. gross weight)

**Engines**
2 Garrett (AiResearch) TPE331-3U-303G or 304G Turboprop
or 2 Garrett (AiResearch) TPE 331-3UW-303G or -304G Turboprop

**Fuel**
AVJET A, A-1, and B.  JP-1, JP-4, and JP-5 fuels conforming to AiResearch Report No. PE-5064-R.  (Fuels shall conform to the specification as listed or to subsequent revisions thereof.) (See Note 3.)

**Oil**
MIL-L-23699A conforming to Garrett Turbine Engine Company (AiResearch) Report No. PE-5065-R.  (Oil shall conform to the specification as listed or subsequent revisions thereof.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off (5 min.) Dry-Static</td>
<td>840</td>
<td>41730</td>
<td>2000</td>
<td>923</td>
</tr>
<tr>
<td>Take-off (5 min.) Wet</td>
<td>940</td>
<td>41730</td>
<td>2000</td>
<td>944</td>
</tr>
<tr>
<td>Max. Continuous</td>
<td>840</td>
<td>41730</td>
<td>2000</td>
<td>923</td>
</tr>
<tr>
<td>Starting Limit (1 sec.) (Below 50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Oil Temps**
Minus 40°C to 110°C (normal operations)
Minus 40°C to 127°C (ground idle only)

**Propeller and Propeller Limits**
2 Hartzell HC-B3TN-5( )/T10282HB or T10282B.
Diameter 102 inches. No reduction permitted.
Pitch at 30 in. station.
Start locks +2.0°
Flight Idle +13.0°
Feathered +89.0°
Reverse -6.0°
**Airspeed Limits**

<table>
<thead>
<tr>
<th>(Knots CAS)</th>
<th>Normal</th>
<th>Restricted</th>
<th>Normal (SFAR 41)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Operating Speed</td>
<td>248</td>
<td>238</td>
<td>248</td>
</tr>
<tr>
<td>Decrease maximum operating speed 5 knots per 1000 ft. above:</td>
<td>17,000 ft.</td>
<td>19,000 ft.</td>
<td>17,000 ft.</td>
</tr>
<tr>
<td>Maneuvering</td>
<td>194</td>
<td>152</td>
<td>200</td>
</tr>
<tr>
<td>Flaps Full Extended</td>
<td>153</td>
<td>153</td>
<td>163</td>
</tr>
<tr>
<td>1/2 Extended</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>1/4 Extended</td>
<td>215</td>
<td>215</td>
<td>215</td>
</tr>
<tr>
<td>Landing Gear Extended</td>
<td>176</td>
<td>176</td>
<td>176</td>
</tr>
<tr>
<td>Landing Gear Operating</td>
<td>176</td>
<td>176</td>
<td>176</td>
</tr>
<tr>
<td>Landing Lights Extended</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

*Serial No. TC-398 through TC-418. (See Note 8.)*

**C.G. Range**

<table>
<thead>
<tr>
<th>(Inches aft of datum)</th>
<th>Normal (13.7% MAC) to 277.1 (36% MAC) at 14,000 lbs.*</th>
<th>Normal (12.7% MAC) to 277.1 (36% MAC) at 13,230 lbs.***</th>
<th>Normal (11.6% MAC) to 277.1 (36% MAC) at 12,500 lbs. **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear Down</td>
<td>260.1</td>
<td>259.3</td>
<td>258.5</td>
</tr>
<tr>
<td></td>
<td>(13.7% MAC) to 277.1 (36% MAC) at 14,000 lbs.*</td>
<td>(12.7% MAC) to 277.1 (36% MAC) at 13,230 lbs.***</td>
<td>(11.6% MAC) to 277.1 (36% MAC) at 12,500 lbs. **</td>
</tr>
<tr>
<td>Gear Down</td>
<td>259.3</td>
<td>258.5</td>
<td>254.4</td>
</tr>
<tr>
<td></td>
<td>(12.7% MAC) to 277.1 (36% MAC) at 13,230 lbs.***</td>
<td>(11.6% MAC) to 277.1 (36% MAC) at 12,500 lbs. **</td>
<td>(6.2% MAC) to 277.1 (36% MAC) at 8,500 lbs.</td>
</tr>
<tr>
<td></td>
<td>258.5 (11.6% MAC) to 277.1 (36% MAC) at 12,500 lbs.</td>
<td>254.4 (6.2% MAC) to 277.1 (36% MAC) at 8,500 lbs.</td>
<td>254.9 (6.9% MAC) to 277.1 (36% MAC) at 6,500 lbs.</td>
</tr>
</tbody>
</table>

*Straight line variation between points given.*

**NOTE:** Gear retraction will not move the c.g. beyond approved limits if the airplane is loaded within the gear-down envelope.

**Empty weight C.G. Range**

None

**Maximum Weight (lbs.)**

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Normal (SFAR 41)***</th>
<th>Restricted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp</td>
<td>12,600</td>
<td>13,330</td>
<td>14,100*</td>
</tr>
<tr>
<td>Take-off</td>
<td>12,500</td>
<td>13,230</td>
<td>14,000</td>
</tr>
<tr>
<td>Landing</td>
<td>12,500**</td>
<td>12,900**</td>
<td>12,500**</td>
</tr>
</tbody>
</table>

*Serial No. TC-398 through TC-418. (See Note 8.)*

**Maximum Operating Altitude**

25,000 feet (31,000 feet per AFM Supplement 12 dated December 1, 1976).

*May be operated at 14,000 lbs. max. takeoff weight in Restricted Category only after complying with Note 7.*

**Minimum Crew**

One Pilot except as otherwise required by the Airplane Flight Manual.

**No. of seats**

Maximum 22 (Crew at +111.0)

See loading instructions for passenger loading.

**Maximum Baggage and/or Equipment**

Rear Compartment: 600 lbs. (+473.4)

Nose Compartment: 800 lbs. (600 lbs. with nose AWI tank installed) (+46.7)

Local loading on cargo floor: 150 lbs./sq. ft.

**Fuel Capacity**

652 gal. total (324 gal. usable in each of 2 wing tanks (+281.4)), or 558 gal. total (277 gal. usable in each of two wing tanks (+282.0)).

See Note 1(A) for data on unusable fuel.

**Oil Capacity**

16.5 qt. total (5 qt. usable in each engine oil tank (+205.0)).

See Note 1(A) for data on unusable oil.
I - Model SA226-TC
(Cont'd)

Control Surface

Wing Flaps 36° ± 1°

Main Surface

Aileron 18.5° ± 1° up 21.5° ± 1° down
Elevator 30° ± 1° up 15° ± 1° down
Rudder 19° ± 1° right 19° ± 1° left

Stabilizer (mechanical stops):
2.40° ± .20° L.E. up 7.80° ± .20° L.E. down
(electrical stops):
0.2° ± .05° before mechanical stops

Tabs (Main surface in Neutral)

Aileron 20° ± 2°, -1° up 20° ± 2°, -1° down
Rudder 25° ± 1.5° right 25° ± 1.5° left

Serial Nos.

Datum
Located 274.1 inches forward of wing main (forward) spar centerline.

Leveling Means
Lateral: Nose baggage compartment door sill.
Longitudinal: Nose baggage compartment floor.

Certification Basis

Production Basis
Production Certificate No. 3SW (spares only) expired October 4, 1990.
Current Certificate No. 6SW (spares only).

Equipment
The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. Fairchild Drawing No. 27-10010 "Master Equipment List," contains listing of all additional required equipment as well as optional installations approved by the FAA. See Fairchild Report 2601-R429, "Metro Required Equipment Lists," an FAA approved report, for required systems and equipment for operating in specified environmental conditions.
(See Note 8 for Serial No. TC-398 through TC-418.)

II - Model SA227-AC (C-26A), 22PCLM. Normal Category, SFAR 41. Approved 8 May 1981 (See Note 10 & 18).

Engines
2 Garrett (AiResearch) TPE331-IIU-601G or -611G (with Dowty Rotol propellers) or 2 Garrett (AiResearch) TPE 331-IIU-602G or -612G (with McCauley propellers)

Fuel
Aviation turbine fuels
AiResearch Specification
Type A EMS53111
Type A-1 EMS53112
Class A-JP4 and Class B-Type B EMS53113
Type JP-5 EMS53116
Type JP-8 EMS53112
(Fuel shall conform to the specification as listed or to subsequent revisions thereof.)
(See Note 3.)
**II - Model SA227-AC (C-26A) (Cont’d)**

Oil MIL-L-23699B conforming to Garrett Turbine Engine Company (AiResearch) Specification EMS53110 Type II.

### Engine Limits

<table>
<thead>
<tr>
<th>Static Sea Level Ratings</th>
<th>Shaft Horse Power (S.H.P.)</th>
<th>Gas Gen. Speed (R.P.M.)</th>
<th>Prop Shaft Speed (R.P.M.)</th>
<th>Exhaust Gas Temp. (EGT) (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off (5 min.) Dry</td>
<td>1,000</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Take-off (5 min.) Wet</td>
<td>1,100</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Max. Continuous-Dry</td>
<td>1,000</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Starting Limit (1 sec.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>770</td>
</tr>
</tbody>
</table>

*(See Note 4(B))*

### Oil Temps

- Minus 40°C to 110°C (normal operations)
- Minus 40°C to 127°C (ground operations only)

### Propeller and Propeller Limits

<table>
<thead>
<tr>
<th>Number</th>
<th>2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make</td>
<td>Dowty Rotol</td>
<td>McCauley</td>
</tr>
<tr>
<td>Model</td>
<td>R.32/4-82-F/8</td>
<td>4HFR34C652/8-L106LA-0</td>
</tr>
<tr>
<td>Diameter</td>
<td>106 inches</td>
<td>106 inches</td>
</tr>
</tbody>
</table>

### Airspeed Limits (Knots CAS)

<table>
<thead>
<tr>
<th>Altitude (ft)</th>
<th>Basic</th>
<th>Increased GW (See Note 11)</th>
<th>Optional (Increase)GW (See Note 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Operating</td>
<td>17,800</td>
<td>248</td>
<td>248</td>
</tr>
<tr>
<td>Speed Up to</td>
<td>18,000</td>
<td>247</td>
<td>247</td>
</tr>
<tr>
<td>20,000</td>
<td>237</td>
<td>237</td>
<td>237</td>
</tr>
<tr>
<td>23,000</td>
<td>223</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>26,000</td>
<td>209</td>
<td>209</td>
<td>209</td>
</tr>
<tr>
<td>29,000</td>
<td>196</td>
<td>196</td>
<td>196</td>
</tr>
<tr>
<td>31,000</td>
<td>188</td>
<td>188</td>
<td>188</td>
</tr>
</tbody>
</table>

- Maneuvering: 174 176 186
- Flaps Full Extended: 156 159 or 166** 166
- ½ Extended: 180 180 180
- ¼ Extended: 215 215 215
- Landing Gear Extended: 176 176 176
- Landing Gear Operating: 176 176 176

**159 KCAS with Dowty Rotol propellers and 166 KCAS with McCauley propellers.

### C.G. Range

- Gear Down
  - 262.3 (15.72% MAC) to 277.0 (36% MAC) at 16,000 lbs. (See Note 14)
  - 260.7 (13.50% MAC) to 277.0 (36% MAC) at 14,500 lbs. (See Note 11)
  - 260.0 (12.54% MAC) to 277.0 (36% MAC) at 14,000 lbs.
  - 258.5 (10.47% MAC) to 277.0 (36% MAC) at 12,500 lbs. (See Note 10)
  - 257.0 (8.4% MAC) to 277.0 (36% MAC) at 11,000 lbs.
  - 257.0 (8.4% MAC) to 277.0 (36% MAC) at 8,225 lbs.

Note: Gear retraction will not move the c.g. beyond approved limits if the airplane is loaded within the gear-down envelope.
II - Model SA227-AC (C-26A), 22PCLM. Normal Category. SFAR 41. Approved 8 May 1981 (See Note 10 & 18).

(Cont'd)

Empty weight C.G. Range

<table>
<thead>
<tr>
<th>Category</th>
<th>Normal (with SFAR 41)</th>
<th>Normal (without SFAR 41)</th>
<th>Normal (Incr.GW with SFAR 41) (See Note 11)</th>
<th>Normal (Optional Incr. GW with SFAR 41)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp</td>
<td>14,100</td>
<td>12,600</td>
<td>14,600</td>
<td>16,100</td>
</tr>
<tr>
<td>Take-off</td>
<td>14,000</td>
<td>12,500</td>
<td>14,500</td>
<td>16,000</td>
</tr>
<tr>
<td>Landing</td>
<td>14,000</td>
<td>12,500</td>
<td>14,000</td>
<td>15,500</td>
</tr>
<tr>
<td>Max 0 Fuel</td>
<td>13,130**</td>
<td>13,130**</td>
<td>13,130**</td>
<td>13,900**</td>
</tr>
</tbody>
</table>

*(See Note 14)
**See Note 17)

Maximum Operating Altitude

- 31,000 feet

Minimum Crew

- One pilot except as otherwise required by the Airplane Flight Manual.

No. of seats

- Maximum 22 (Crew at +111.O) (Maximum of 19 passengers per SFAR 41C)
- See AFM loading instructions for crew and passenger loading.

Maximum Baggage and/or Equipment

- Rear Compartment: 850 lbs. (+473.4)
- Nose Compartment: 800 lbs. (600 lbs. with nose CAWI tank installed) (+46.7)
- Local loading on cargo floor: 150 lbs./sq. ft.

Fuel Capacity

- 652 Gal. total (324 gal. usable in each of 2 wing tanks (+281.4)).
- See Note 1(B) for data on unusable fuel.

Oil Capacity

- 14.1 quarts total (3.8 quarts usable in each engine oil tank (+205.0)).
- See Note 1(B) for data on unusable oil.

Control Surface

<table>
<thead>
<tr>
<th>Wing Flaps</th>
<th>36° ± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Surface</td>
<td></td>
</tr>
<tr>
<td>Aileron</td>
<td>18.5° ± 1° up</td>
</tr>
<tr>
<td>Elevator</td>
<td>30° ± 1° up</td>
</tr>
<tr>
<td>Rudder</td>
<td>25° ± 1° right</td>
</tr>
<tr>
<td>Stabilizer (mechanical stops):</td>
<td>2.40° ± .20° L.E. Up</td>
</tr>
<tr>
<td>(electrical stops):</td>
<td>0.2° ± .05° before mechanical stops</td>
</tr>
<tr>
<td>Tabs (Main surface in Neutral)</td>
<td></td>
</tr>
<tr>
<td>Aileron</td>
<td>20° ± 2° up</td>
</tr>
<tr>
<td>Rudder</td>
<td>25° ± 1.5° right</td>
</tr>
</tbody>
</table>

Serial Nos.

- AC 420 through AC 510 (See Note 10 and 11).
- AC 514 and UP (See Note 10 and 11).
- AC 398, 399, 401, 402, 404, 406, 408, 409, 411-413, 415, 416, 418 (See note 13).

Datum

- Located 274.1 inches forward of wing main (forward) spar centerline.

Leveling Means

| Lateral: Nose baggage compartment door sill. |
| Longitudinal: Nose baggage compartment floor. |
II - Model SA227-AC (C-26A) (Cont’d)

Certification Basis
FAR 23 effective February 1, 1965, through Amendments 23-6; Special Conditions
outlined in FAA letters November 19, 1965, August 22, 1967, February 5, 1968, and
April 4, 1968; SFAR 23; SFAR 27 through Amendment 3; and Amendment C of
SFAR 41 including paragraph 4(c) and the compartment interior requirements of 25.853
(a), (b), (b-1), (b-2), and (b-3) in effect on September 26, 1978; FAR 23.175(d) of
Amendment 23-14; and FAR 36 Appendix F. through Amendment 36-6. Approved for
flight into known icing in accordance with Rule 34 of SFAR 23 and SFAR 41.

Production Basis
Production Certificate No. 3SW expired October 4, 1990. Current Certificate No. 6SW.
(Spares Only)

Equipment
The basic required equipment, as prescribed in the applicable airworthiness regulations
(See Certification Basis) must be installed in the aircraft for certification. Fairchild
Drawing No. 27-10026 “Master Equipment List,” contains listing of all additional
required equipment as well as optional installations approved by the FAA.


Engines
2 Pratt & Whitney Aircraft of Canada, Ltd. PT6A-45R

Fuel
Per Pratt & Whitney Service Bulletin 3044, including the following:

<table>
<thead>
<tr>
<th>Fuel Grade</th>
<th>Specification</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet A</td>
<td>ASTM D1655</td>
<td></td>
</tr>
<tr>
<td>Jet A-1</td>
<td>ASTM D1655</td>
<td></td>
</tr>
<tr>
<td>Jet B(JP-4)</td>
<td>MIL-T-5624</td>
<td>Contains icing inhibitor per MIL-I-27686</td>
</tr>
<tr>
<td>JP-5</td>
<td>MIL-T-5624</td>
<td>Contains icing inhibitor per MIL-I-27686</td>
</tr>
<tr>
<td>JP-8</td>
<td>MIL-T-83133</td>
<td></td>
</tr>
<tr>
<td>100LL Avgas</td>
<td>MIL-G-5572</td>
<td>Emergency use only (See Note 16.)</td>
</tr>
</tbody>
</table>

Fuel shall conform to the listed specifications or to subsequent revisions thereof.
Anti-icing additives conforming to specification MIL-I-27686 are the only approved fuel
additives.

Oil
Per Pratt & Whitney Service Bulletin 3001, including Aero Shell Turbine Oil 500,
Mobil Jet Oil II, Mobil Jet Oil 254, Stauffer Jet II, Castrol 5000, Esso Turbo Oil 2380,
and Exxon Turbo Oil 2380.

Engine Limits
Static Sea Level Ratings

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff (5 min.) 1100</td>
<td>38967</td>
<td>1700</td>
<td>845 (Torque is permitted to increase as RPM is reduced. 1400 RPM minimum flight)</td>
</tr>
<tr>
<td>Max. Continuous 906</td>
<td>38967</td>
<td>1700</td>
<td>812</td>
</tr>
<tr>
<td></td>
<td>38967</td>
<td>1600</td>
<td>812</td>
</tr>
<tr>
<td></td>
<td>38967</td>
<td>1500</td>
<td>812</td>
</tr>
<tr>
<td></td>
<td>38967</td>
<td>1400</td>
<td>812</td>
</tr>
</tbody>
</table>

Propeller and Propeller Limits
2 McCauley 4HFR34C752(-()/()-106LA-0
Diameter 106 inches.
Pitch at 30.0 in. station.

Feathered 89.0 ± 0.5°
Beta rest 24.0 ± 0.5
Flight idle 17.0 ± 0.2°
Ground idle 9.0 ± 0.5°
Full reverse -7.0 ± 0.5° (Reverse restricted to ground operation between 90 and approximately 40 KIAS.)
### III - Model SA227-PC, 22 PCLM, Normal Category, SFAR 41, Approved October 24, 1985

#### Airspeed Limits

- **Max. operating speed**: 248 Knots CAS
- Decrease maximum operating speed 4.6 knots per 1,000 ft. above: 14,700 ft.
- **Maneuvering**: 176
- **Flaps fully extended**: 169
- **1/2 extended**: 184
- **1/4 extended**: 219
- **Landing gear extended**: 179
- **Landing gear operating**: 179

#### C.G. Range

- **260.7 (13.5% MAC) to 273.45 (31.1% MAC) at 14,500 lbs.**
- **257.0 (8.4% MAC) to 272.13 (29.3% MAC) at 11,000 lbs.**
- **257.0 (8.4% MAC) to 271.38 (28.3% MAC) at 9,000 lbs.**

#### Gear Down

- 257.0 (8.4% MAC) to 272.13 (29.3% MAC) at 11,000 lbs.
- 257.0 (8.4% MAC) to 271.38 (28.3% MAC) at 9,000 lbs.

#### NOTE:

- Gear retraction will not move the c.g. beyond approved limits if the airplane is loaded within the gear down envelope.

#### Empty Weight C. G. Range

- **None**

#### Maximum weight (lbs.)

- **Ramp**: 14,600
- **Takeoff**: 14,500
- **Landing**: 14,000
- **Max. Zero Fuel**: 13,130 (See Note 17.)

#### Maximum Operating Altitude

- 25,000 ft.

#### Minimum Crew

- One pilot except as otherwise required by the Airplane Flight Manual.

#### No. Seats

- Maximum 22 (crew at + III.0). (Maximum of 19 Passengers per SFAR 41.) See AFM for loading instructions.

#### Maximum Baggage and/or Equipment

- **Rear Compartment**: 850 lbs. (+473.4)
- **Nose Compartment**: 800 lbs. (+46.7)
- Local loading on cargo and passenger compartment floor: 150 lbs./sq. ft.

#### Fuel Capacity

- 652 U.S. gallons total (324 gal. usable in each of 2 wing tanks (+281.4))
- See Note I(C) for unusable fuel

#### Oil Capacity

- 18.4 U.S. quarts, total (6.0 quarts usable in each engine (+229.0))
- See Note I(C) for unusable oil.

#### Control Surface

- **Wing Flaps**: 36° ± 1° down
- **Main Surface**
  - Aileron: 18.5° ± 1° up, 21.5° ± 1° down
  - Elevator: 30° ± 1° up, 15° ± 1° down
  - Rudder: 25° ± 0° right, 25° ± 0° left
  - ± 1°
- Stabilizer (mechanical stops):
  - 2.1° ± .20° L.E. up, 8.1° ± .20° L.E. down
- (electrical stops):
  - 0.2° ± .05° before mechanical stops
- **Tabs (Main surface in Neutral)**
  - Aileron: 20° ± 2°, -1° up, 20° ± 2°, -1° down
  - Rudder: 25° ± 1.5° right, 25° ± 1.5° left

#### Serial Nos.

- PC-436, PC-562 and up.

#### Datum

- Located 274.1 inches forward of wing main (forward) spar centerline.
III - Model SA227-PC, 22 PCLM, Normal Category. SFAR 41, Approved October 24, 1985. (Cont’d)

Leveling Means
Lateral: Nose baggage compartment door sill.
Longitudinal: Nose baggage compartment floor.

Certification Basis
FAR 23 effective February 1, 1965, through Amendment 23-6; Special Conditions No. 23-ACE-6, SFAR 23, FAR 23.175(d) and FAR 23.153 of Amendment 23-14; SFAR 41 through Amendment C and the compartment interior requirements of FAR 25.853(a), (b), (b-1), (b-2), and (b-3) in effect on September 26, 1978; FAR 36 Appendix F through Amendment 36-6: SFAR 27 through Amendment 4. Approved for flight into known icing in accordance with Rule 34 of SFAR 23 and SFAR 41.

Production Basis
Type Certificate only.

Equipment
The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. Fairchild Drawing No. 32-10003 "Master Equipment List" contains listing of all additional required equipment as well as optional installations approved by the FAA.

IV - Model SA227-BC (Military C-26A) 22 PCLM, Normal Category. SFAR 41. Approved September 25, 1989 (See Notes 18 and 19).

Engines
2 Garrett (AiResearch) TPE331-12UA-701G,
TPE331-12UAR-701G,
TPE331-12UHR-701G

Fuel
Aviation turbine fuels AiResearch Specification
Type A EMS53111
Type A-l EMS53112
Class A-JP4 and Class B-Type B EMS53113
Type JP-5 EMS53116
Type JP-8 EMS53112
(Fuel shall conform to the specification as listed or to subsequent revisions thereof.)
(See Note 3.)

Oil
MIL-L-23699B conforming to Garrett Turbine Engine Company (AiResearch) Specification EMS53110 Type II.

Engine Limits
Static Sea Level Ratings

<table>
<thead>
<tr>
<th></th>
<th>Shaft Power (S.H.P.)</th>
<th>Gas Gen. Speed (R.P.M.)</th>
<th>Prop Shaft Speed (R.P.M.)</th>
<th>Exhaust Gas Temp. (EGT) (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-off (5 min.) Dry</td>
<td>1,000</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Take-off (5 min.) wet</td>
<td>1,100</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Max. Continuous-Dry</td>
<td>1,000</td>
<td>41730*</td>
<td>1591*</td>
<td>650</td>
</tr>
<tr>
<td>Starting Limit (1 sec.)*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>770</td>
</tr>
</tbody>
</table>
*(See Note 4(B))

Oil Temps
Minus 40°C to 110°C (normal operations)
Minus 40°C to 127°C (ground operations only)
IV - Model SA227-BC (Military C-26A) 22 PCLM, Normal Category. SFAR 41. Approved September 25, 1989 (See Notes 18 and 19). (Cont’d)

<table>
<thead>
<tr>
<th>Propeller and Propeller Limits</th>
<th>Number</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make</td>
<td>McCauley</td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>4HFR34C652(/()-L06LA-0</td>
<td></td>
</tr>
<tr>
<td>Diameter</td>
<td>106 inches</td>
<td></td>
</tr>
<tr>
<td>Pitch At</td>
<td>30 in. station</td>
<td></td>
</tr>
<tr>
<td>Start Locks</td>
<td>$9^\circ \pm 0.5^\circ$</td>
<td>$6^\circ \pm 0.5^\circ$</td>
</tr>
<tr>
<td>Flight Idle</td>
<td>$15^\circ \pm 0.2^\circ$</td>
<td>$15^\circ \pm 0.2^\circ$</td>
</tr>
<tr>
<td>Feather</td>
<td>$88.9^\circ \pm 2^\circ$</td>
<td>$88.5^\circ \pm 0.5^\circ$</td>
</tr>
<tr>
<td>Reverse</td>
<td>$-5^\circ \pm 0.5^\circ$</td>
<td>$-5^\circ \pm 0.5^\circ$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Airspeed Limits (Knots CAS)</th>
<th>Altitude (ft)</th>
<th>Basic</th>
<th>Increased GW (See Note 11)</th>
<th>Optional (Increase) GW (See Note 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Operating</td>
<td>17,800</td>
<td>248</td>
<td>248</td>
<td>248</td>
</tr>
<tr>
<td>Speed up to</td>
<td>18,000</td>
<td>247</td>
<td>247</td>
<td>247</td>
</tr>
<tr>
<td>20,000</td>
<td>237</td>
<td>237</td>
<td>237</td>
<td>237</td>
</tr>
<tr>
<td>23,000</td>
<td>223</td>
<td>223</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>26,000</td>
<td>209</td>
<td>209</td>
<td>209</td>
<td>209</td>
</tr>
<tr>
<td>29,000</td>
<td>196</td>
<td>196</td>
<td>196</td>
<td>196</td>
</tr>
<tr>
<td>31,000</td>
<td>188</td>
<td>188</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td>Maneuvering</td>
<td>174</td>
<td>176</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>Flaps Full Extended</td>
<td>156</td>
<td>166</td>
<td>166</td>
<td></td>
</tr>
<tr>
<td>1/2 Extended</td>
<td>180</td>
<td>180</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>1/4 Extended</td>
<td>215</td>
<td>215</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Landing Gear Extended</td>
<td>176</td>
<td>176</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td>Landing Gear Operating</td>
<td>176</td>
<td>176</td>
<td>176</td>
<td></td>
</tr>
</tbody>
</table>

| C.G. Range                    | 262.3 (15.72%MAC) to 277.0 (36%MAC) at 16,000 lbs. (See Note 14) |
| Gear Down                     | 260.7 (13.50%MAC) to 277.0 (36%MAC) at 14,500 lbs. (See Note 11) |
| (Inches aft of datum)         | 260.0 (12.54%MAC) to 277.0 (36%MAC) at 14,000 lbs. |
|                               | 258.5 (10.47%MAC) to 277.0 (36%MAC) at 12,500 lbs. (See Note 10) |
|                               | 257.0 (8.4%MAC) to 277.0 (36%MAC) at 11,000 lbs. |
|                               | 257.0 (8.4%MAC) to 277.0 (36%MAC) at 8,225 lbs. |
| Straight line variation between points given. | |

NOTE: Gear retraction will not move the c.g. beyond approved limits if the airplane is loaded within the gear down envelope.

| Empty weight C.G. Range       | None |
| Maximum weight (lbs.) *(See Note 14) | Normal | Category | Normal | (Incr. GW with SFAR 41) | (Optimal Incr. GW with SFAR 41)* |
| Ramp                          | 14,600 | 16,100 |
| Take-off                      | 14,500 | 16,000 |
| Landing                       | 14,000 | 15,500 |
| Max. Zero Fuel                | 14,000 | 14,000 |

| Maximum Operating Altitude    | 31,000 feet |
| Minimum Crew                  | One pilot except as otherwise required by the Airplanes Flight Manual. |
| No. Seats                     | Maximum 22 (crew at + 111.0). (Maximum of 19 passengers per SFAR 41C.) See AFM for loading instructions for crew and passenger loading. |
### IV - Model SA227-BC (Military C-26A) 22 PCLM, Normal Category, SFAR 41. Approved September 25, 1989 (See Notes 18 and 19). (Cont'd)

<table>
<thead>
<tr>
<th>Maximum Baggage and/or Equipment</th>
<th>Rear Compartment: 850 lbs. (+473.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nose Compartment: 800 lbs. (600 lbs. with nose CAWI tank installed) (+46.7)</td>
<td></td>
</tr>
<tr>
<td>Local loading on cargo and passenger compartment floor: 150 lbs./sq. ft.</td>
<td></td>
</tr>
</tbody>
</table>

**Fuel Capacity**
652 gal. total (324 gal. usable in each of 2 wing tanks (+281.4))
See Note 1(B) for data on unusable fuel.

**Oil Capacity**
14.1 qt. total (3.8 qt. usable in each engine oil tank (+205.0))
See Note 1(B) for data on unusable oil.

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>Wing Flaps</th>
<th>36° ± 1° down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Surface</td>
<td>Aileron</td>
<td>18.5° ± 1° up</td>
</tr>
<tr>
<td></td>
<td>Elevator</td>
<td>30° ± 1° up</td>
</tr>
<tr>
<td></td>
<td>Rudder</td>
<td>25° ± 1° right</td>
</tr>
<tr>
<td>Stabilizer (mechanical stops):</td>
<td>2.40 ± .20° L.E. up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(electrical stops):</td>
<td>0.2° ± .05° before mechanical stops</td>
</tr>
<tr>
<td>Tabs (Main surface in Neutral)</td>
<td>Aileron</td>
<td>20° ± 2° up</td>
</tr>
<tr>
<td></td>
<td>Rudder</td>
<td>25° ± 1.5° right</td>
</tr>
</tbody>
</table>

**Serial Nos.**
BC-420 and up. See Note 19.

**Datum**
Located 274.1 inches forward of wing main (forward) spar centerline.

**Leveling Means**
Lateral: Nose baggage compartment door sill.
Longitudinal: Nose baggage compartment floor.

**Certification Basis**
FAR 23 effective February 1, 1965, through Amendment 23-6: Special Conditions No. 23-ACE-6, SFAR 23, FAR 23.175(d) and FAR 23.153 of Amendment 23-14; SFAR 41 through Amendment C and the compartment interior requirements of FAR 25.853(a), (b), (b-1), (b-2), and (b-3) in effect on September 26, 1978: FAR 36 Appendix F through Amendment 36-6; SFAR 27 through Amendment 4. Approved for flight into known icing in accordance with Rule 34 of SFAR 23 and SFAR 41.

**Production Basis**
Production Certificate No. 3SW expired October 4, 1990. Current Certificate No. 6SW. (Spares Only)

**Equipment**
The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. Fairchild Drawing No. 27-10043 "Equipment List, Model SA227-BC" contains listing of all additional required equipment as well as optional installations approved by the FAA.

### NOTE 1.
Current weight and balance report, together with list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The airplane must be loaded so that the C.G. is within the specified limits at all times. Empty weight and corresponding center of gravity location must include:

- **(A) SA226-TC**
  - Unusable Fuel: 27 lbs. (+282)
  - Unusable Oil: 12 lbs. (+205)

- **(B) SA227-AC and SA227-BC**
  - Unusable Fuel: 27 lbs. (+282)
  - Unusable Oil: 12 lbs. (+205)
NOTE 1. (Cont'd)

(C) SA227-PC
Unusable Fuel 30 lbs. (+282)
Unusable Oil 12.8 lbs. (+229)

NOTE 2. All placards required in the approved AFM must be installed in the appropriate locations.

NOTE 3. Emergency use of MIL-G-5572D, 80/87, aviation gasoline permitted not to exceed 1,000 gallons per engine for each 100 hours of engine operation. Emergency use of MIL-G-5572D, Grade 100/130 (low lead) aviation gasoline permitted not to exceed 250 gallons per engine for each 100 hours of engine operation with the total use limited to 7,000 gallons during any 3,000-hour period. Jet fuel and aviation gasoline may be mixed in any proportion. If 25% or more aviation gasoline is used, add 1 quart of MIL-L-6082 specification grade 1065 or 1100 piston engine oil per 100 gallons of aviation gasoline to provide fuel pump lubrication.

NOTE
The amount of aviation gasoline used must be recorded in the Engine Log Book. Fuel System Icing Inhibitor MIL-I-27686E fuel additive approved not to exceed 0.15 percent by volume. No fuel system anti-icing credit is allowed.

NOTE 4. (A) The maximum allowable propeller shaft speed is 2100 RPM (105%) for a transient period not to exceed 5 seconds and 2020 RPM (101%) for 5 minutes. Normal propeller shaft speed is 2000 RPM (100%). Dry static take-off SHP is not to exceed 840 SHP (2206 ft. lbs. torque max.) but may increase to 900 SHP (2363 ft. lbs. torque max.) due to ram for a period not to exceed 5 minutes. See Airplane Flight Manual for alcohol-water injection system operation and limitations.

(B) For SA227-AC and SA227-BC: The maximum propeller shaft overspeed limit is 1686 RPM (106%) for 5 seconds and 1615 RPM (101.5%) for 5 minutes. 100% is defined as 1591 RPM.

NOTE 5. For Model SA226-TC, S/N TC-203 and up and earlier serial numbers modified per Swearingen Service Bulletin 79-10-2021 or 79-003, the oil capacity is reduced to 13.7 quarts total (3.6 quarts usable in each oil tank (+205.0)). Unusable oil is unchanged.

NOTE 6. Model SA226-TC airplanes to be exported to France must comply with the additional equipment requirements listed on Fairchild Drawing 27-13074, Revision A. Model SA227-AC airplanes to be exported to France must comply with the requirements of Drawing 27-13074, Revision B or Drawing 27K14051.

NOTE 7. Model SA226-TC is eligible for operation in the Restricted Category at 14,000 lbs. maximum take-off gross weight when modified with structural beef-up and special purpose equipment per Drawing 27-13146 and operated in accordance with the basic Airplane Flight Manual and the Flight Manual Supplement applicable to the special purpose of patrol or aerial photography survey missions. Some parts or all of the following FAR 23 sections are inappropriate for the special purpose: 23.1, 23.337, 23.345, 23.397, 23.473.

NOTE 8. Compliance with SFAR 41 including paragraph 4(b) and the compartment interior requirements of 25.853(a), (b), (b-1), (b-2), and (b-3) in effect on September 26, 1978, has been shown for S/N's TC-398 through TC-418. Exemption No. 3256 dated June 17, 1981, applicable for S/N's TC-398 through TC-418. The following are required equipment for S/N TC-398 through TC-418: 19.5 X 6.75-8 main wheel tires and an instantaneous vertical speed indicator (IVSI), and supplement 26 to FAA approved Airplane Flight Manual at weights above 12,500 lbs. The airworthiness certificate shall be endorsed "This airplane at weights in excess of 5,700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation."

NOTE 9. Station J-J is station 36.278 inches on the Dowty Rotol (c) R.321/4-82-F/8 propellers.

NOTE 10. An "A" designation following the serial number signifies that the airplane is not eligible for SFAR 41 approval of weights greater than 12,500 lbs. Certification basis same as noted herein except omit SFAR 41 approval.

NOTE 11. The increased ramp and takeoff gross weight applies to aircraft S/N's AC 514 and subsequent. Aircraft with S/N's AC 420 through AC 510 may be operated at the increased ramp and takeoff gross weight noted after modification in accordance with Fairchild Service Bulletin SB 11-001, revised December 11, 1981.
NOTE 12. The Airworthiness Limitations ST-UN-M001 Manual contains overhaul times, replacement times, and special inspections required for continued airworthiness.

NOTE 13. Serial Nos. 398, 399, 401, 402, 404, 406, 408, 409, 411-413, 415, 416, and 418 eligible to be licensed as SA227-AC aircraft when modified in accordance with Fairchild Drawing 27-13451.

NOTE 14. Airplanes with a 14,500 lbs. maximum gross takeoff weight can be modified for a 16,000 lb. maximum takeoff weight if the modification is performed in accordance with ECP 437 "Compilation of changes 16,000 lb. airplane." After modification, affix a letter "B" at the end of the serial number on the data plate.

NOTE 15. Airplanes for which the serial number on the data plate is followed by the letter "B" have ECP 437 changes incorporated and are eligible for a 16,000 lbs. maximum gross takeoff weight. These airplanes can be converted to a 14,500 lbs. maximum gross takeoff weight configuration if performed in accordance with Fairchild Drawing 27-13946 and returned to 16,000 lbs. maximum gross takeoff weight configuration in accordance with Fairchild Drawing 27K13000.

NOTE 16. Emergency use of MIL-G-5572 grade 100/130 (low lead) aviation gasoline permitted not to exceed 150 hours use between engine overhauls.

NOTE
The amount of aviation gasoline used must be recorded in the Engine Log Book.

NOTE 17. 13,900 lbs. zero fuel weight approved for airplanes S/N AC, AT, or PC-624 and up and for earlier S/N airplanes with P/N 27-13900-65, -66, -67, and -69 installed per Drawing 27-13900, by ECP 441. by Kit Drawing 27K20004, or by Service Bulletin 227-08-001; 14,000 lbs. for airplanes with additional modifications per Kit Drawing 27K31017.

NOTE 18. The C-26A is an SA227-AC airplane modified in accordance with ECP 567 or an SA227-BC modified per ECP 592. The FAA Approved Airplane Flight Manual Supplement for the C-26A configuration must be used.

NOTE 19. SA227-AC airplanes may be converted to SA227-BC airplanes by incorporating ECP 563.

NOTE 20. Model SA227-AC aircraft to be exported to Italy must comply with the requirements noted on Fairchild Drawing 27-14068.