# UNITED KINGDOM
# CIVIL AVIATION AUTHORITY

**FA 21**
**Issue 4**
**August 1996**
**FOKKER F28**
**Mk 4000**
**Mk 0100**
**Mk 0070**

## TYPE CERTIFICATE DATA SHEET No. FA21

This data sheet which is part of CAA Type Certificate No. FA21 prescribes conditions and limitations under which the product, for which the type certificate was issued, meets the airworthiness requirements of the Civil Aviation Authority.

| | | |
|---|---|---|
| **TYPE CERTIFICATE HOLDER:** | FOKKER SERVICES<br>P O BOX 75047<br>SCHIPOL<br>THE NETHERLANDS | |
| **MANUFACTURER:** | As above | |
| **AIRCRAFT TYPE/<br>MODEL NUMBER(S):** | **Fokker F28 Fellowship**<br>Mk 4000<br>Mk 0100<br>Mk 0070 | |
| **TYPE DESIGN DEFINITION:** | Mk 4000<br>Mk 0100<br>Mk 0070 | AAN 16575<br>TD F28 : PL004<br>CS-EBCM/Fo70-RLD-0 |

**CERTIFICATION BASIS:**

The following requirements were the basis of certification of the type design:

**MK 4000**

CAR 4B, dated September 1962 amendments 4B-1 through 4B-16.

RLD Special Conditions

Special retro-active requirements of FAR amendment 25-15.

FAA Special Conditions.

FAR amendments 25-1 through 25-21.

FAR part 36 including amendment 36-1.

Optional requirement CAR 46.640 (FAR 25.1419)

*Note: CAR 4b.603f rate of turn indicator not installed but accepted by RLD on basis equivalent safety, i.e. a third vertical reference unit is provided.*

UK Special Conditions for Fokker F28 Mk 4000 for certification in the Transport Category.

**Mk 0100**

JAR 25 as amended by Change 9 dated November 30, 1982, Amendment 83/1 as far as adopting FAR Amendment 25-54, Amendment 86/1 dated 16.06.86, as far as adopting FAR Amendments 25-58, 25-59 and 25-60 except for the following sections which are limited to showing compliance with FAR Part 25 with the Amendments as noted:

| | |
|---|---|
| 25.109 | Amendment 25-41 |
| 25.775(d) | Amendment 25-56 (cockpit windows only) |
| 25.1309 | Amendment 25-22 for unmodified systems. |

Exceptions : None
Special Conditions were issued for:

- Lightning strike protection from indirect effects in relation to JAR 25.1309 (a) (c) (d) (g).
- Thrust reverser loads.
- Static ground load conditions in relation to JAR 25X 519 (b)(2)
- Anti-collision light system in relation to JAR 25.1401(b)
- Operation without normal electrical power in relation to JAR 25 ACJ 25.1351 (d).

ICAO Annex 16, Volume 1, Chapter 3, Amendment 5

ICAO Annex 16, Volume 11.

FAR Part 121 Amendment 121-185

JAR AWO Change 1, dated 27 November 1985 and NPA 25F-160 to JAR 25 and the interpretations laid down in RLD Issue G-5.

RLD certification criteria for Electronic displays laid down in RLD document L1/LW/85-059 incorproated in Issue E-3.

Compliance with the optional Ice Protection Requirements as stated in JAR 25.1419 Change 9 has been established.

Smoke and toxicity requirements as specified in Issue G13.

Compliance with AR 25.783 Change 10 has been shown for all doors except the pax door with integral stair.

UK Additional Requirements for Certification, Issue 1, dated November 14 1990.

**Mk 0070**

JAR-25 Change 9 plus Amendment 83/1 as far as adopting FAR Amendment 25-54 and Amendment 86/1 as far as adopting FAR Amendments 25-58, 25-59 and 25-60.

In addition the following paragraphs of Change 13 and Orange Papers 90/1 and 91/1 are applicable to components and areas affected by the change from the Mk 0100:

| | |
|---|---|
| Performance | JAR 25.101 through JAR 25.125, JAR 25.1587 and JAR 25X1-591 as amended by NPA 25B, D, G244 |
| Flight Handling | JAR 25.143 through JAR 25X261 |
| Flight Manual | JAR 25.1581 through JAR 25X1591 as amended by NPA 25B, D, G244 |

JAR-AWO Change 1

Special Conditions:

Stickpusher System
Lightning Strike Protection, Indirect Effects
Software Certification
Display Systems
Flight Management System Certification
AFCAS Certification
Accelerate Stop
Pressurised Cabin Loads
Continuous Turbulence, Lateral
Fuselage Doors, Hatches and Exits
Braking Performance
Flap Handle Gates
Powerplant Ice Protection
Protection from HIRF
Operation without Normal Electrical Power
AFCAS Certification
Braked Roll Conditions
Composite Aircraft Structures
Miscellaneous Electrical Requirements
Discrete Gust
Discrete Source Damage due to Rotor Burst

Exemptions:

JAR 25.775 (d). For cockpit window only, compliance to be shown with FAR 25.775(d) Amendment 25-56.

JAR 25.1309 Equipment, systems and installations. For unmodified systems, subject to a satisfactory record being shown on earlier versions of the F28, the requirements of BCAR Section D Issue 8 may apply. In reviewing the service record, a full safety assessment will not be required. The decision tree of NPA 25F-180 will be used to allow a sensible judgement as to the degree of analysis to be required.

JAR 25.979(b)(2) Pressure fuelling system. Compliance with the relevant parts of BCAR Section D is acceptable because of unchanged design from earlier versions of the F28 and satisfactory in-service experience.

Elect to Comply Airworthiness Requirements:

JAR-25 Change 13 plus Amendment 90/1, 91/1 and 93/1 for those paragraphs listed below:

JAR 25.020, 021, 025, 027, 029 and 031.
JAR 25. 365(e). (f) and (g) for flight deck internal door
JAR 25.561 for passenger, flight deck and cargo compartments and engine mounting.
JAR 25.772, 783, 785, 787,789, 791*, 793, 803, 807, 809, 810, 811**, 812, 813, 815, 819, 853, 854, 855 (CRI D-8) and 857.

* Including FAR 25.791(e) Amendment 25-72
** JAR 25.811(e)(2) at JAR-25 Change 14

ICAO Annex 16 Volume 1, Aircraft Noise 3rd Edition 1993

ICAO Annex 16 Volume 11, Aircraft Engine Emissions Revised 1988

UK Additional Requirements for Import, Issue 1, April 1995

**CERTIFICATION CATEGORY:** UK: Transport Category (Passenger)

**PERFORMANCE CATEGORY:** UK: Group A.

**FLIGHT MANUAL:**

The limitations, recommended procedures and information required are contained in the following documents:

**Mk 4000**

RLD Approved Fokker - VFW F28 Flight Handbook Mk 4000.

**Mk 0100**

RLD Approved Fokker Aircraft BV F28 Airplane Flight Manual Mk 0100.

**Mk 0070**

RLD Approved Fokker Aircraft BV F28 Airplane Flight Manual Mk0070.

**ENGINE:**

Mk 4000 Two Rolls-Royce RB 183 Mk 555-15H engines.
Mk 0100 Two Rolls-Royce Tay Mk 620-15 or 650-15 engines.
Mk 0070 Two Rolls-Royce Tay Mk 620-15 engines.

**MAXIMUM WEIGHTS:**

| **Mk 4000** | Lb | Kg |
|---|---|---|
| Maximum Taxying weight | | |
| Maximum take-off weight | 73,000 | 33,113 |
| Maximum landing weight | 64,000 | 29,030 |
| Maximum zero fuel weight | 57,500 | 25,082 |

| **Mk 0100** | Lb | Kg |
|---|---|---|
| Maximum Taxying weight | 95,500 | 43,320 |
| Maximum take-off weight | 95,000 | 43,090 |
| Maximum landing weight | 85,500 | 38,780 |
| Maximum zero fuel weight | 79,000 | 35,835 |

| NB: ***Aircraft modified in accordance with approved Service Bulletin F100 51-001*** | | |
|---|---|---|
| ***Mk 0100 :*** | Lb | Kg |
| Maximum Taxying weight | 98,500 | 44,680 |
| Maximum take-off weight | 98,000 | 44,455 |
| Maximum landing weight | 88,000 | 39,920 |
| Maximum zero fuel weight | 81,000 | 36,740 |

| **Mk 0070** | Lb | Kg |
|---|---|---|
| Maximum Taxying weight | 84,500 | 38,325 |
| Maximum take-off weight | 84,000 | 38,100 |
| Maximum landing weight | 81,000 | 36,740 |
| Maximum zero fuel weight | 72,000 | 32,653 |

**DIMENSIONS:**

| **Mk 4000** | Ft | M |
|---|---|---|
| Length | 97.1 | 29.6 |
| Wingspan | 82.3 | 25.1 |
| Height | 27.9 | 8.5 |
| Wing area | 850.0 | 79.0 |

| **Mk 0100** | Ft | M |
|---|---|---|
| Length | 116.6 | 35.53 |
| Wingspan | 92.1 | 28.1 |
| Height | 27.9 | 8.5 |
| Wing area | 1006.5 | 93.4 |

| **Mk 0070** | Ft | M |
|---|---|---|
| Length | 101.4 | 30.9 |
| Wingspan | 92.1 | 28.1 |
| Height | 27.9 | 8.5 |
| Wing area | 1006.5 | 93.4 |

**MINIMUM CREW:**

UK: Two pilots.

**MAXIMUM OCCUPANTS/PASSENGERS:**

The total number of occupants, including crew, shall not exceed:

| | |
|---|---|
| Mk 4000 | 91 |
| Mk 0100 | 115 |
| Mk 0070 | 84 |

The maximum number of passengers is:

| | |
|---|---|
| Mk 4000 | 85 |
| Mk 0100 | 109 |
| Mk 0070 | 79 |

In each case the number shall not exceed that for which seating accommodation approved for take-off and landing is provided.

**OPERATING LIMITATIONS:** Refer to appropriate Flight Manual.

**MANDATORY MAINTENANCE INSTRUCTIONS**: Refer to appropriate Maintenance Manual.

**NOISE:**

| | |
|---|---|
| Mk 0100 | Noise Type Certiticate No. 129 issued 27 February 1990 |
| Mk 0070 | Noise Type Certificate No. 191 issued 7 April 1995. |

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