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SECTION A: SIAT 223 V

A.I. General

1. Type/ Model/ Variant
   1.1 Type SIAT 223
   1.2 Model SIAT 223 V
   1.3 Variant N/A

2. Airworthiness Category
   Normal
   Utility

3. Manufacturer
   Waggon- und Maschinenbau AG
   Siebelwerke ATG GmbH
   Donauwörth, Germany

4. EASA Type Certification Application Date
   15 October 2014 (see note 2)

5. State of Design Authority
   Germany (see note 2)

6. State of Design Authority Type Certificate Date
   03 April 1968 (see note 2)

7. EASA Type Certification Date
   02 February 2015 (see note 2)

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements N/A

2. Airworthiness Requirements
   FAR 23 incl. Amendment 23.1 and 23.2

3. Special Conditions N/A

4. Exemptions N/A

5. (Reserved) Deviations N/A

6. Equivalent Safety Findings N/A

7. Environmental Protection
   ICAO Annex 16, Vol. I; for details see TCDSN.A.554

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   Set of drawings, specifications and reports

2. Description
   Single engine, cantilever low-wing aircraft, all metal construction, non-retractable landing gear in nose wheel configuration

3. Equipment
   Minimum equipment pursuant to airworthiness requirements
Details concerning minimum equipment as well as possible additional equipment can be found in the equipment list in the maintenance manual.

4. Dimensions
   - Wing Span: 8,28m
   - Length: 7,43m
   - Height: 2,70m

5. Engine
   - 5.1 Model: Lycoming IO-360-C1B
   - 5.2 Type Certificate: EASA.IM.E.032
   - 5.3 Limitations: Maximum speed 2700rpm

6. Load factors
   - Normal: \( n = -1.52 \) to \( +3.8 \)
   - Utility: \( n = -1.76 \) to \( +4.4 \)

7. Propeller
   - 7.1 Model: Hartzell HC-C2YK-1B/7660 A-2
   - 7.2 Type Certificate: EASA.IM.P.130
   - 7.3 Number of blades: 2
   - 7.4 Diameter: 188cm (74inch)
   - 7.5 Sense of Rotation: Clockwise

8. Fluids
   - 8.1 Fuel: Aviation fuel 100/130 octane
   - 8.2 Oil
     - unalloyed: above \( +16^\circ C \) SAE 50, below \( -18^\circ C \) SAE 20
     - alloyed: from \( -1^\circ C \) to \( +32^\circ C \) SAE 40 or 50, from \( -18^\circ C \) to \( +21^\circ C \) SAE 40 or 20W-30

9. Fluid capacities
   - 9.1 Fuel: Max fuel quantity: 220l, Usable fuel quantity: 216l
   - 9.2 Oil: 7.6l
   - 9.3 Coolant system capacity: N/A

10. Air Speeds
    - Never Exceed Speed \( V_{NE} \): 165kts, 177kts
    - Manoeuvring Speed \( V_{A} \): 122kts, 126kts
    - Normal Operating Speed \( V_{NO} \): 131kts, 100kts

11. Flight Envelope
    - Not specified

12. Approved Operations Capability
    - VFR Day, no icing

13. Maximum Masses
    - Maximum Take-off mass
      - Normal: 1050kg
      - Utility: 980kg

14. Centre of Gravity Range
    - Normal: Max. FWD: 2352mm @ 1050kg linear to
15. Datum

Reference plane is 2000mm FWD of leading edge of wing

16. Control surface deflections

- **Aileron**
  - Up: 22° (+/-1°)
  - Down: 22° (+/-1°)

- **Rudder**
  - 25° (+/-1°)

- **Elevator**
  - Up: 25° (+/-1°)
  - Down: 30° (+/-1°)

- **Flaps**
  - Up: 0°
  - Down: 40° (+/-1°)

- **Aileron Trim Tabs**
  - +/-18° (+/-1°)

- **Elevator Trim Tabs**
  - +/-17° (+/-1°)

- **Vertical Trim Tab**
  - +/-17° (+/-1°)

17. Levelling Means

Top stringer of cockpit dome horizontal

18. Minimum Flight Crew

1

19. Maximum Passenger

- **Seating Capacity**
  - Normal: 2
  - Utility: 1

20. Baggage/Cargo Compartments

Normal: max. load 77kg on rear seat row

21. Wheels and Tyres

6.00 – 6

22. (Reserved)

---

**A.IV. Operating and Service Instructions**

1. **Flight Manual**
   - Flug-Handbuch SIAT-223-FLAMINGO Baureihe: V, LBA-approved 15 March 1968 (TF-1D1) incl. revisions

2. **Maintenance Manual**
   - Betriebshandbuch SIAT 223 FLAMINGO (V1-V4) date of issue 15 June 1967 (TF-3D1) incl. revisions
   - Wartungshandbuch SIAT 223 FLAMINGO (V1-V4) date of issue 01 July 1967 (TF-4D1) incl. revisions

3. **Structural Repair Manual**
   - Not specified

4. **Weight and Balance Manual**
5. Illustrated Parts Catalogue  
Ersatzteilkatalog SIAT 223, date of issue 15 August 1972 incl. revisions

A.V. Notes

1. Serial Numbers 001 to 004
2. The EASA TCDS is based on the LBA TCDS No. 679/SA for SIAT 223 V at Issue 9, dated 12 April 2005
SECTION B: SIAT 223 A1

B.I. General

1. Type/ Model/ Variant
   1.1 Type SIAT 223
   1.2 Model SIAT 223 A1
   1.3 Variant N/A

2. Airworthiness Category
   Normal
   Utility

3. Manufacturer
   Waggon- und Maschinenbau AG
   Siebelwerke ATG GmbH
   Donauwörth, Germany
   La Hispano Aviacion S.A.
   Sevilla, Spain

4. EASA Type Certification Application Date
   15 October 2014 (see note 2)

5. State of Design Authority
   Germany (see note 2)

6. State of Design Authority Type Certificate Date
   12 April 1968 (see note 2)

7. EASA Type Certification Date
   02 February 2015 (see note 2)

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements N/A

2. Airworthiness Requirements FAR 23 incl. Amendment 23.1 and 23.2

3. Special Conditions N/A

4. Exemptions N/A

5. (Reserved) Deviations N/A

6. Equivalent Safety Findings N/A

7. Environmental Protection ICAO Annex 16, Vol. I; for details see TCDSN.A.554

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition Set of drawings, specifications and reports

2. Description Single engine, cantilever low-wing aircraft, all metal construction, non-retractable landing gear in nose wheel configuration
3. Equipment
Minimum equipment pursuant to airworthiness requirements
Details concerning minimum equipment as well as possible additional equipment can be found in the equipment list in the flight manual.

4. Dimensions
Wing Span: 8.28m
Length: 7.43m
Height: 2.70m

5. Engine
5.1. Model
Engine 1: Lycoming IO-360-C1B
Engine 2: Lycoming IO-360-C1D6

5.2 Type Certificate
Engine 1 & 2: EASA.IM.E.032

5.3 Limitations
Maximum speed 2700rpm

6. Load factors
Normal: n = -1.52 to +3.8
Utility: n = -1.76 to +4.4

7. Propeller
7.1 Model
Hartzell HC-C2YK-1B/7660 A-2

7.2 Type Certificate
EASA.IM.P.130

7.3 Number of blades
2

7.4 Diameter
188cm (74inch)

7.5 Sense of Rotation
Clockwise

8. Fluids
8.1 Fuel
Aviation fuel 100/130 octane

8.2 Oil
unalloyed
above +16°C SAE 50 SAE 40 or 50
from -1°C to +32°C SAE 40 SAE 40
from -18°C to +21°C SAE 30 SAE 40 or 20W-30
below -12°C SAE 20 20W-30

8.3 Coolant
N/A

9. Fluid capacities
9.1 Fuel
Max fuel quantity: 170l
Usable fuel quantity:
Normal : 170l
Utility : 50l + 50l = 100l

9.2 Oil
7,6l

9.3 Coolant system capacity
N/A

10. Air Speeds
Never Exceed Speed $V_{NE}$ 165kts
Manoeuvring Speed $V_{A}$ 122kts
Normal Operating Speed $V_{NO}$ 131kts
Maximum Flap Extended Speed $V_{FE}$ 100kts

11. Flight Envelope
Not specified

12. Approved Operations Capability
VFR, no icing
### 13. Maximum Masses

<table>
<thead>
<tr>
<th>Type</th>
<th>Normal:</th>
<th>Utility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Take-off mass</td>
<td>1050kg</td>
<td>980kg</td>
</tr>
</tbody>
</table>

### 14. Centre of Gravity Range

<table>
<thead>
<tr>
<th>Type</th>
<th>Normal:</th>
<th>Utility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. FWD:</td>
<td>2352mm @ 1050kg linear to 2262mm @ 1000kg linear to 2224mm @ 821kg or less</td>
<td>Max. FWD: 2258mm @ 980kg linear to 2224mm @ 821kg or less</td>
</tr>
<tr>
<td>Max. AFT:</td>
<td>2392mm</td>
<td>2322mm</td>
</tr>
</tbody>
</table>

### 15. Datum

Reference plane is 2000mm FWD of leading edge of wing.

### 16. Control surface deflections

<table>
<thead>
<tr>
<th>Surface</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aileron</td>
<td>22° (+/-1°)</td>
<td>22° (+/-1°)</td>
</tr>
<tr>
<td>Rudder</td>
<td>25° (+/-1°)</td>
<td></td>
</tr>
<tr>
<td>Elevator</td>
<td>25° (+/-1°)</td>
<td>30° (+/-1°)</td>
</tr>
<tr>
<td>Flaps</td>
<td>0°</td>
<td>40° (+/-1°)</td>
</tr>
<tr>
<td>Aileron Trim Tabs</td>
<td>+/-18° (+/-1°)</td>
<td></td>
</tr>
<tr>
<td>Elevator Trim Tabs</td>
<td>+/-20° (+/-1°)</td>
<td></td>
</tr>
<tr>
<td>Vertical Trim Tab</td>
<td>+/-17° (+/-1°)</td>
<td></td>
</tr>
</tbody>
</table>

### 17. Levelling Means

top stringer of cockpit dome horizontal

### 18. Minimum Flight Crew

1

### 19. Maximum Passenger

<table>
<thead>
<tr>
<th>Type</th>
<th>Normal:</th>
<th>Utility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating Capacity</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### 20. Baggage/ Cargo Compartments

Normal: max. load 77kg on rear seat row or cabin floor

### 21. Wheels and Tyres

6.00 - 6

### B.IV. Operating and Service Instructions

1. Flight Manual

Flight Manual SIAT 223 FLAMINGO Production Series: A1, LBA-approved 15 March 1968 (TF-1D1 or TF-1E1) incl. revisions

Checklist SIAT 223 A1/K1 I and II (TF-2D1 or TF-2E1)
   Operator’s Handbook SIAT 223 FLAMINGO (A1/K1) date of issue 30 January 1970 (TF-3D1 or TF-3E2) incl. revisions
   Maintenance Manual SIAT 223 FLAMINGO (A1/K1) date of issue 30 January 1970 (TF-4D1 or TF-4E2) incl. revisions

   Not specified


5. Illustrated Parts Catalogue
   Ersatzteilkatalog SIAT 223, date of issue 15 August 1972 incl. revisions

B.V.  Notes

1. Serial Numbers
   Siebelwerke ATG GmbH, Donauwörth, Germany: 011 to 050
   La Hispano Aviacion S.A., Sevilla, Spain: 051 and higher

2. The EASA TCDS is based on the LBA TCDS No. 679/SA for SIAT 223 A1 at Issue 9, dated 12 April 2005
SECTION C: SIAT 223 K1

C.I. General

1. Type/ Model/ Variant
   1.1 Type SIAT 223
   1.2 Model SIAT 223 K1
   1.3 Variant N/A

2. Airworthiness Category
   Normal
   Utility
   Aerobatic

3. Manufacturer
   Waggon- und Maschinenbau AG
   Siebelwerke ATG GmbH
   Donauwörth, Germany
   La Hispano Aviacion S.A.
   Sevilla, Spain

4. EASA Type Certification
   Application Date 15 October 2014 (see note 3)

5. State of Design Authority
   Germany (see note 3)

6. State of Design Authority
   Type Certificate Date 28 August 1968 (see note 3)

7. EASA Type Certification Date
   02 February 2015 (see note 3)

C.II. EASA Certification Basis

1. Reference Date for determining
   the applicable requirements N/A

2. Airworthiness Requirements
   FAR 23 incl. Amendment 23.1 and 23.2

3. Special Conditions
   N/A

4. Exemptions
   N/A

5. (Reserved) Deviations
   N/A

6. Equivalent Safety Findings
   N/A

7. Environmental Protection
   ICAO Annex 16, Vol. I; for details see TCDSN.A.554

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition
   Set of drawings, specifications and reports
2. Description
Single engine, cantilever low-wing aircraft, all metal construction, non-retractable landing gear in nose wheel configuration

3. Equipment
Minimum equipment pursuant to airworthiness requirements
Details concerning minimum equipment as well as possible additional equipment can be found in the equipment list in the flight manual

4. Dimensions
Wing Span: 8.28m
Length: 7.43m
Height: 2.70m

5. Engine
5.1. Model
Engine 1: Lycoming AIO-360-A1A
Engine 2: Lycoming AIO-360-A1B
5.2 Type Certificate
Engine 1 & 2: EASA.IM.E.032
5.3 Limitations
Maximum speed 2700rpm

6. Load factors
Normal: $n = -1.52$ to $+3.8$
Utility: $n = -1.76$ to $+4.4$
Aerobatic: $n = -4.0$ to $+6.0$

7. Propeller
7.1 Model
Hartzell HC-C2YK-1B/7660 A-2
7.2 Type Certificate
EASA.IM.P.130
7.3 Number of blades
2
7.4 Diameter
188cm (74inch)
7.5 Sense of Rotation
Clockwise

8. Fluids
8.1 Fuel
Aviation fuel 100/130 octane
8.2 Oil
unalloyed
above $+16^\circ$C SAE 50 SAE 40 or 50
from $-1^\circ$C to $+32^\circ$C SAE 40 SAE 40
from $-18^\circ$C to $+21^\circ$C SAE 30 SAE 40 or 20W-30
below $-12^\circ$C SAE 20 20W-30
8.3 Coolant
N/A

9. Fluid capacities
9.1 Fuel
Max fuel quantity: 170l
Usable fuel quantity:
Normal: 170l
Utility: $50l + 50l = 100l$
Aerobatic: $30l + 30l = 60l$
9.2 Oil
7.6l
9.3 Coolant system capacity
N/A
10. Air Speeds

<table>
<thead>
<tr>
<th>Type</th>
<th>Never Exceed Speed $V_{NE}$</th>
<th>Manoeuvring Speed $V_A$</th>
<th>Normal Operating Speed $V_{NO}$</th>
<th>Maximum Flap Extended Speed $V_{FE}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Utility</td>
<td>165kts</td>
<td>122kts</td>
<td>131kts</td>
<td>100kts</td>
</tr>
<tr>
<td>Aerobatic</td>
<td>177kts</td>
<td>126kts</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>183kts</td>
<td>135kts</td>
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<td></td>
</tr>
</tbody>
</table>

11. Flight Envelope
Not specified

12. Approved Operations Capability
VFR, no icing

13. Maximum Masses
Maximum Take-off mass
Normal: 1050kg
Utility: 980kg
Aerobatic: 821kg

14. Centre of Gravity Range

<table>
<thead>
<tr>
<th>Type</th>
<th>Normal: Max. FWD 2352mm @ 1050kg linear to 2262mm @ 1000kg linear to 2224mm @ 821kg or less</th>
<th>Utility: Max. FWD 2258mm @ 980kg linear to 2224mm @ 821kg or less</th>
<th>Aerobatic: Max. FWD 2224mm</th>
<th>Max. AFT 2392mm</th>
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<td>Max. AFT 2392mm</td>
<td>Max. AFT 2322mm</td>
<td>Max. AFT 2266mm</td>
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<td></td>
<td>Max. AFT 2392mm</td>
<td>Max. AFT 2322mm</td>
<td>Max. AFT 2266mm</td>
<td></td>
</tr>
</tbody>
</table>

15. Datum
Reference plane is 2000mm FWD of leading edge of wing

16. Control surface deflections

<table>
<thead>
<tr>
<th>Surface</th>
<th>Up</th>
<th>Down</th>
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<tr>
<td>Elevator Trim Tabs</td>
<td>+/-20° (+/-1°)</td>
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<tr>
<td>Vertical Trim Tab</td>
<td>+/-17° (+/-1°)</td>
<td></td>
</tr>
</tbody>
</table>

17. Levelling Means
top stringer of cockpit dome horizontal

18. Minimum Flight Crew
1

19. Maximum Passenger

| Seating Capacity | Normal: 2 | Utility: 1 | Aerobatic: 0 |

20. Baggage/Cargo Compartments
Normal: max. load 77kg on rear seat row
C.IV. Operating and Service Instructions

1. Flight Manual
   Flight Manual SIAT 223 FLAMINGO Production Series: K1, LBA-approved 15 August 1968 (TF-1D1/K or TF-1E2/K) incl. revisions
   Checklist SIAT 223 A1/K1 I and II (TF-2D1 or TF-2E1)

   Operator’s Handbook SIAT 223 FLAMINGO (A1/K1) date of issue 30 January 1970 (TF-3D1 or TF-3E2) incl. revisions
   Maintenance Manual SIAT 223 FLAMINGO (A1/K1) date of issue 30 January 1970 (TF-4D1 or TF-4E2) incl. revisions

   Not specified


5. Illustrated Parts Catalogue
   Ersatzteilkatalog SIAT 223, date of issue 15 August 1972 incl. revisions

C.V. Notes

1. Serial Numbers
   Siebelwerke ATG GmbH, Donauwörth, Germany: 011 to 050
   La Hispano Aviacion S.A., Sevilla, Spain: 051 and higher

2. Type certificate was issued on 28 August 1968 on application of Siebelwerke ATG GmbH, Donauwörth, Germany and expanded to include Spanish production on 12 April 1972

3. The EASA TCDS is based on the LBA TCDS No. 679/SA for SIAT 223 K1 at Issue 9, dated 12 April 2005
SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>FAR</td>
<td>Federal Aviation Regulations</td>
</tr>
<tr>
<td>FWD</td>
<td>Forward</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>LBA</td>
<td>Luftfahrt Bundesamt</td>
</tr>
<tr>
<td>N/A</td>
<td>Not applicable</td>
</tr>
<tr>
<td>SAE</td>
<td>Society of Automotive Engineers</td>
</tr>
<tr>
<td>TCDS</td>
<td>Type Certificate Data Sheet</td>
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<tr>
<td>VFR</td>
<td>Visual Flight Rules</td>
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II. Type Certificate Holder Record

<table>
<thead>
<tr>
<th>Day of Entry</th>
<th>Company Name (Legal Entity)</th>
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<tbody>
<tr>
<td>18.11.1952</td>
<td>Siebelwerke ATG GmbH</td>
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<tr>
<td>(09.12.1964)</td>
<td>Taken over by Boelkow Entwicklungen KG</td>
</tr>
<tr>
<td>(01.01.1966)</td>
<td>Contract with SIAT – WMD</td>
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<tr>
<td>29.06.1972</td>
<td>Messerschmitt-Bölkow-Blohm GmbH*</td>
</tr>
<tr>
<td>01.04.1992</td>
<td>Messerschmitt-Bölkow-Blohm AG</td>
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<tr>
<td>30.09.1992</td>
<td>Deutsche Aerospace AG</td>
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<tr>
<td>02.01.1995</td>
<td>Daimler-Benz Aerospace AG</td>
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<td>17.11.1998</td>
<td>Daimler Chrysler Aerospace AG</td>
</tr>
<tr>
<td>10.07.2000</td>
<td>EADS Deutschland GmbH</td>
</tr>
<tr>
<td>01.07.2014</td>
<td>Airbus Defence and Space GmbH</td>
</tr>
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</table>

* Siebelwerke ATG GmbH ceased to exist as a legal entity by amalgamation into Messerschmitt-Bölkow-Blohm GmbH on 29 June 1972

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue No. &amp; Date</th>
</tr>
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<tbody>
<tr>
<td>01</td>
<td>02 February 2015</td>
<td>Initial Issue after TC transfer</td>
<td>01, 02 February 2015</td>
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<tr>
<td>02</td>
<td>22 June 2015</td>
<td>Type Certificate Holder Record revised</td>
<td>01, 02 February 2015</td>
</tr>
<tr>
<td>03</td>
<td>13 November 2018</td>
<td>Change of TC holder address</td>
<td>02, 13 November 2018</td>
</tr>
<tr>
<td>04</td>
<td>15 October 2020</td>
<td>Minor updates to wording and content</td>
<td>02, 13 November 2018</td>
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