TYPE-CERTIFICATE
DATA SHEET

EASA.A.591

for
AS202 - Series

Type Certificate Holder
ACC Columbia Jet Service GmbH
Benkendorffstraße 38
30855 Langenhagen
Germany

For models:  AS202/15, AS202/15-1
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SECTION A: AS202/15

A.I. General

1. a) Type: AS202  
b) Model: AS202/15  
c) Marketing Designation: Bravo

2. Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH  
Benkendorffstraße 38  
D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

4. Manufacturer: From: 15 August 1972 to 1980:  
FLUG- UND FAHRZEUGWERKE AG  
ALTENRHEIN (FFA)  
Flugplatz  
CH-9423 Altenrhein

5. Certification Application Date: Not applicable

6. National Certifying Authority: Swiss Federal Office of Civil Aviation

7. National Authority Type Certificate Date: 15 August 1972

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: Not applicable

2. Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.001

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions: Wing Span 9,78 m  
Total Length 7,50 m  
Maximum Height 2,81 m  
Wing Area 13,86 m²

5. Engine: 
5.1.1 Model: Lycoming O-320-E2A
5.1.2 Type Certificate: Federal Aviation Administration (FAA) Type Certificate Data Sheet (TCDS) E-274

5.1.3 Limitations: For all operations: 2700 PRM (150 HP)

6. Load factors:

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3,8 g</td>
<td>+ 4,4 g</td>
<td>+ 6,0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1,9 g</td>
<td>- 2,2 g</td>
<td>- 3,0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
</tr>
</tbody>
</table>

7. Propeller:

7.1 Model: McCauley 1C172/MGM 7458

7.2 Type Certificate: FAA TCDS P-910

7.3 Number of blades: 2

7.4 Diameter: Not over 74 inch, not under 72,5 inch

7.5 Sense of Rotation: Clockwise

8. Fluids:

8.1 Fuel: 80/87 minimum grade aviation gasoline

8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils

8.3 Coolant: Not applicable

9. Fluid capacities:

9.1 Fuel: Total capacity 140 litres

         Total usable capacity 130 litres

         Two 70 litres in wings at (+832)

         9.2 Oil: Max. 7.6 litres at (-590)

         Min. 4.7 litres

9.3 Coolant system capacity: Not applicable

10. Air Speeds:

    VNE (Never Exceed speed) 200 mph

    VNO (Maximum structural cruising speed) 150 mph

    VA (Manoeuvring speed) 150 mph

    VFE (Maximum Flap Extended) 110 mph
11. Maximum Operating Altitude: 14’000 feet

12. All-weather Operations Capability:
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. Masses
   13.1 Maximum Take-off Mass (MTOM)
       Normal and Utility Category: 999 kg
       Aerobatic Category: 885 kg

   13.2 Maximum Landing Mass (MLM)
       Normal and Utility Category: 999 kg
       Aerobatic Category: 885 kg

14. Centre of Gravity Range:
    Normal and Utility Category: 999 kg (+895) to (+980)
    885 kg (+810) to (+980)
    700 kg (+800) to (+980)

    Aerobatic Category:
    885 kg (+810) to (+895)
    700 kg (+800) to (+895)

15. Datum: Front face of firewall

16. Control surface deflections:

<table>
<thead>
<tr>
<th></th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>Up</td>
<td>0°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>41°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>15°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>20°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>26°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

17. Levelling Means: Upper edge cabin frame, 5.63 inch above fuselage reference line

18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity: 2 seats
   1 (+900) to (+1100)
20. Baggage/Cargo Compartments: 100 kg at (+1840)
   Above 50 kg consult AFM for loading instructions

21. Wheels and Tyres: Nose Gear SK-1020.19.200
   Main Gear L SA-19.010-01
   Main Gear R SA-19.010-02

22. Serial Numbers Eligible: S/N 001 to S/N 014
   S/N 016 to S/N 022
   S/N 034
A.IV. **Operating and Service Instructions**

1. Airplane Flight Manual:

2. Technical Manual:
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

A.V. **Notes**

For notes see **Section H, Notes**
SECTION B: AS202/15-1

B.I. General

1. a) Type: AS202
   b) Model: AS202/15-1
   c) Marketing Designation: Bravo

2. Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH
     Benkendorffstraße 38
     D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

   FLUG- UND FAHRZEUGWERKE AG
   ALTENRHEIN (FFA)
   Flugplatz
   CH-9423 Altenrhein

5. Certification Application Date: Not applicable

6. National Certifying Authority: Swiss Federal Office of Civil Aviation

7. National Authority Type Certificate Date: 15 September 1978

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: Not applicable

2. Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
3. Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.201

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>9.78 m</td>
</tr>
<tr>
<td>Total Length</td>
<td>7.50 m</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>2.81 m</td>
</tr>
</tbody>
</table>
Wing Area 13,86 m²

5. Engine:

5.1.1 Model: Lycoming O-320-E2A
5.1.2 Type Certificate: FAA TCDS E-274
5.1.3 Limitations: For all operations: 2700 PRM (150 HP)

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3,8 g</td>
<td>+ 4,4 g</td>
<td>+ 6,0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1,9 g</td>
<td>- 2,2 g</td>
<td>- 3,0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
</tr>
</tbody>
</table>

6. Load factors:

7. Propeller:

7.1 Model: McCauley 1C172/MGM 7458
7.2 Type Certificate: FAA TCDS P-910
7.3 Number of blades: 2
7.4 Diameter: Not over 74 inch, not under 72.5 inch
7.5 Sense of Rotation: Clockwise

8. Fluids:

8.1 Fuel: 80/87 minimum grade aviation gasoline
8.2 Oil: MIL-L-60828 normal oils or
MIL-L-22851 multi-grade oils
8.3 Coolant: Not applicable

9. Fluid capacities:

9.1 Fuel: Total capacity 174 litres
Total usable capacity 160 litres
Two 87 litres in wings at (+837)

9.2 Oil: Max. 7,6 litres at (-590)
Min. 4,7 litres

9.3 Coolant system capacity: Not applicable
10. Air Speeds:  
   VNE (Never Exceed speed)  200 mph  
   VNO (Maximum structural cruising speed) 150 mph  
   VA (Manoeuvring speed)  150 mph  
   VFE (Maximum Flap Extended)  110 mph  

11. Maximum Operating Altitude:  
   14'000 feet  

12. All-weather Operations Capability:  
   - Flights under Visual Flight Rules  
   - Aerobatic Flying  

13. Masses  
   13.1 Maximum Take-off Mass (MTOM)  
      Normal and Utility Category:  999 kg  
      Aerobatic Category:  885 kg  
   13.2 Maximum Landing Mass (MLM)  
      Normal and Utility Category:  999 kg  
      Aerobatic Category:  885 kg  

14. Centre of Gravity Range:  
   Normal and Utility Category:  
      999 kg (+895) to (+980)  
      885 kg (+810) to (+980)  
      700 kg (+800) to (+980)  
   Aerobatic Category:  
      885 kg (+810) to (+895)  
      700 kg (+800) to (+895)  

15. Datum:  
   Front face of firewall  

16. Control surface deflections:  
<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>40°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>16°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>20°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>26°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>
17. Levelling Means: Upper edge cabin frame, 5.63 inch above fuselage reference line

18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity: 2 seats
   1 (+900) to (+1100)
   1 (+1840)

20. Baggage/Cargo Compartments: 100 kg at (+1840)
    Above 50 kg consult AFM for loading instructions

    Main Gear L 202-19.633
    Main Gear R 202-19.634

22. Serial Numbers Eligible: S/N 107 to S/N 109
    S/N 112
    S/N 123 to S/N 124
    S/N 126 to S/N 127
    S/N 129 to S/N 130
B.IV. **Operating and Service Instructions**

1. **Airplane Flight Manual:**

2. **Technical Manual:**
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

B.V. **Notes**

For notes see **Section H, Notes**
SECTION C: AS202/18A

C.I. General

1. a) Type: AS202
   b) Model: AS202/18A
   c) Marketing Designation: Bravo

2. Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH
    Benkendorfstraße 38
    D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

   FLUG- UND FAHRZEUGWERKE AG
   ALTENRHEIN (FFA)
   Flugplatz
   CH-9423 Altenrhein

5. Certification Application Date: Not applicable

6. National Certifying Authority: Swiss Federal Office of Civil Aviation

7. National Authority Type Certificate Date: 11 December 1975

C.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: Not applicable

2. Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
   14 CFR FAR Part 23 of 1 February 1965 including amendments 23-1 through 23-14, effective
   20 December 1973
3 Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.601

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions:
   - Wing Span 9,78 m
   - Total Length 7,50 m
   - Maximum Height 2,81 m
   - Wing Area 13,86 m²

5. Engine:
5.1.1 Model: Lycoming AEIO-360-B1F
5.1.2 Type Certificate: FAA TCDS 1E10
5.1.3 Limitations: For all operations: 2700 PRM (180 HP)

6. Load factors:

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3,8 g</td>
<td>+ 4,4 g</td>
<td>+ 6,0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1,9 g</td>
<td>- 2,2 g</td>
<td>- 3,0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
<td>+ 2,0 g</td>
</tr>
</tbody>
</table>

7. Propeller:
7.1 Model: Hartzell HC-C2YK-1BF
7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
7.3 Number of blades: 2
7.4 Diameter: Not over 74 inch, not under 72 inch
7.5 Sense of Rotation: Clockwise

8. Fluids:
8.1 Fuel: 91/96 minimum grade aviation gasoline
8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils
8.3 Coolant: Not applicable

9. Fluid capacities:
9.1 Fuel: Total capacity 140 litres
Total usable capacity 130 litres
Two 70 litres in wings at (+832)
9.2 Oil: Max. 7,6 litres at (-590)
Min. 4,7 litres
9.3 Coolant system capacity: Not applicable

10. Air Speeds:
VNE (Never Exceed speed) 200 mph
VNO (Maximum structural cruising speed) 150 mph
VA (Manoeuvring speed) 150 mph
VFE (Maximum Flap Extended) 110 mph
11. Maximum Operating Altitude: 18'000 feet

12. All-weather Operations Capability:
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. Masses
   13.1 Maximum Take-off Mass (MTOM)
       Normal and Utility Category: 1050 kg
       Aerobatic Category: 950 kg
   13.2 Maximum Landing Mass (MLM)
       Normal and Utility Category: 1050 kg
       Aerobatic Category: 950 kg

14. Centre of Gravity Range:
    Normal and Utility Category:
    1050 kg (+852) to (+936)
    950 kg (+768) to (+936)
    700 kg (+740) to (+936)
    Aerobatic Category:
    950 kg (+768) to (+852)
    700 kg (+740) to (+852)

15. Datum: Front face of firewall

16. Control surface deflections:

<table>
<thead>
<tr>
<th></th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>Up</td>
<td>0°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>41°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>15°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>26°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder tab</td>
<td></td>
<td>± 2°</td>
<td></td>
</tr>
</tbody>
</table>

17. Levelling Means: Upper face of top fuselage longerons along the sliding canopy rails
18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity: 2 seats
   1 (+900) to (+1100)
   1 (+1840)

20. Baggage/Cargo Compartments: 100 kg at (+1840)
    Above 50 kg consult AFM for loading instructions

    Main Gear L 202-19.633
    Main Gear R 202-19.634

22. Serial Numbers Eligible: S/N 023 to S/N 026
    S/N 029 to S/N 030
C.IV. **Operating and Service Instructions**

1. Airplane Flight Manual:

2. Technical Manual:
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

C.V. **Notes**

For notes see **Section H, Notes**
SECTION D: AS202/18A1

D.I. General

1. a) Type: AS202
   b) Model: AS202/18A1
   c) Marketing Designation: Bravo

2. Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH
    Benkendorfstraße 38
    D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

4. Manufacturer: From: 10 January 1978 to 1980

   FLUG- UND FAHRZEUGWERKE AG
   ALTENRHEIN (FFA)
   Flugplatz
   CH-9423 Altenrhein

5. Certification Application Date: Not applicable

6. National Certifying Authority Swiss Federal Office of Civil Aviation

7. National Authority Type Certificate Date: 10 January 1978

D.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: Not applicable

2. Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
14 CFR FAR Part 23 of 1 February 1965 including amendments 23-1 through 23-14, effective 20 December 1973

3. Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.701

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions:
   - Wing Span 9,78 m
   - Total Length 7,50 m
   - Maximum Height 2,81 m
Wing Area 13,86 m²

5. Engine:
   5.1.1 Model: Lycoming AEIO-360-B1F
   5.1.2 Type Certificate: FAA TCDS 1E10
   5.1.3 Limitations: For all operations: 2700 PRM (150 HP)

6. Load factors:

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3.8 g</td>
<td>+ 4.4 g</td>
<td>+ 6.0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1.9 g</td>
<td>- 2.2 g</td>
<td>- 3.0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
</tr>
</tbody>
</table>

7. Propeller:
   7.1 Model: Hartzell HC-C2YK-1BF
   7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
   7.3 Number of blades: 2
   7.4 Diameter: Not over 74 inch, not under 72 inch
   7.5 Sense of Rotation: Clockwise

8. Fluids:
   8.1 Fuel: 91/96 minimum grade aviation gasoline
   8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils
   8.3 Coolant: Not applicable

9. Fluid capacities:
   9.1 Fuel: Total capacity 174 litres
   Total usable capacity 160 litres
   Two 87 litres in wings at (+837)
   9.2 Oil: Max. 7.6 litres at (-590)
             Min. 4.7 litres
   9.3 Coolant system capacity: Not applicable
10. Air Speeds:
   - VNE (Never Exceed speed) 200 mph
   - VNO (Maximum structural cruising speed) 150 mph
   - VA (Manoeuvring speed) 150 mph
   - VFE (Maximum Flap Extended) 110 mph

11. Maximum Operating Altitude:
   18'000 feet

12. All-weather Operations Capability:
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. Masses
   13.1 Maximum Take-off Mass (MTOM)
       - Normal and Utility Category: 1050 kg
       - Aerobatic Category: 950 kg
   13.2 Maximum Landing Mass (MLM)
       - Normal and Utility Category: 1050 kg
       - Aerobatic Category: 950 kg

14. Centre of Gravity Range:
   - Normal and Utility Category:
     1050 kg (+852) to (+936)
     950 kg (+768) to (+936)
     700 kg (+740) to (+936)
   - Aerobatic Category:
     950 kg (+768) to (+852)
     700 kg (+740) to (+852)

15. Datum:
    Front face of firewall

16. Control surface deflections:

<table>
<thead>
<tr>
<th>Surface</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>0°</td>
<td>41°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>22°</td>
<td>16°</td>
</tr>
<tr>
<td>Elevator</td>
<td>30°</td>
<td>30°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>22°</td>
<td>26°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td>28°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
</tr>
</tbody>
</table>
17. Levelling Means: Upper face of top fuselage longerons along the sliding canopy rails

18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity:
   2 seats
   1 (+900) to (+1100)
   1 (+1840)

20. Baggage/Cargo Compartments:
    100 kg at (+1840)
    Above 50 kg consult AFM for loading instructions

21. Wheels and Tyres:
    Nose Gear 202-19.200
    Main Gear L 202-19.633
    Main Gear R 202-19.634

22. Serial Numbers Eligible:
    S/N 027 to S/N 028
    S/N 101 to S/N 106
    S/N 110 to S/N 111
    S/N 113 to S/N 122
    S/N 125
    S/N 128
    S/N 134 to S/N 135
D.IV. **Operating and Service Instructions**

1. Airplane Flight Manual:

2. Technical Manual:
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

D.V. **Notes**

For notes see *Section H, Notes*
### SECTION E: AS202/18A2

#### E.I. General

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1. | a) Type: | AS202  
|   | b) Model: | AS202/18A2  
|   | c) Marketing Designation: | Bravo |
| 2. | Airworthiness Category: | Normal, Utility and Aerobatic Category |
| 3.a) | Type Certificate Holder: | ACC Columbia Jet Service GmbH  
|   | Benkendorfstraße 38  
|   | D- 30855 Langenhagen |
| 3.b) | Contracted DOA Holder: | - |
|   | FLUG- UND FAHRZEUGWERKE AG  
|   | ALTENRHEIN (FFA)  
|   | Flugplatz  
|   | CH-9423 Altenrhein |
| 5. | Certification Application Date: | Not applicable |
| 6. | National Certifying Authority | Swiss Federal Office of Civil Aviation |
| 7. | National Authority Type Certificate Date: | 18 June 1979 |

#### E.II. EASA Certification Basis

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reference Date for determining the applicable requirements:</td>
</tr>
</tbody>
</table>
| 2. | Airworthiness Requirements: | Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness  
|   | 14 CFR FAR Part 23 of 1 February 1965 including amendments 23-1 through 23-14, effective  
|   | 20 December 1973 |
3. Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

E.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.702

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions: Wing Span 9,78 m
    Total Length 7,50 m
    Maximum Height 2,81 m
    Wing Area 13,86 m²

5. Engine:
5.1.1 Model: Lycoming AEIO-360-B1F
5.1.2 Type Certificate: FAA TCDS 1E10
5.1.3 Limitations: For all operations: 2700 PRM (150 HP)

6. Load factors:

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3.8 g</td>
<td>+ 4.4 g</td>
<td>+ 6.0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1.9 g</td>
<td>- 2.2 g</td>
<td>- 3.0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
</tr>
</tbody>
</table>

7. Propeller:

7.1 Model: Hartzell HC-C2YK-1BF
7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
7.3 Number of blades: 2
7.4 Diameter: Not over 74 inch, not under 72 inch
7.5 Sense of Rotation: Clockwise

8. Fluids:

8.1 Fuel: 91/96 minimum grade aviation gasoline
8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils
8.3 Coolant: Not applicable

9. Fluid capacities:

9.1 Fuel:
- Total capacity: 174 litres
- Total usable capacity: 160 litres
- Two 87 litres in wings at (+837)

9.2 Oil:
- Max. 7.6 litres (-590)
- Min. 4.7 litres

9.3 Coolant system capacity: Not applicable

10. Air Speeds:

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>VNE (Never Exceed speed)</td>
<td>200 mph</td>
</tr>
<tr>
<td>VNO (Maximum structural cruising speed)</td>
<td>150 mph</td>
</tr>
<tr>
<td>VA (Manoeuvring speed)</td>
<td>150 mph</td>
</tr>
<tr>
<td>VFE (Maximum Flap Extended)</td>
<td>110 mph</td>
</tr>
</tbody>
</table>
11. Maximum Operating Altitude: 18'000 feet

12. All-weather Operations Capability:
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. Masses
   13.1 Maximum Take-off Mass (MTOM)
       Normal and Utility Category: 1080 kg
       Aerobatic Category: 980 kg
   13.2 Maximum Landing Mass (MLM)
       Normal and Utility Category: 1050 kg
       Aerobatic Category: 980 kg

14. Centre of Gravity Range:
    Normal and Utility Category:
    1080 kg (+852) to (+936)
    980 kg (+771) to (+936)
    700 kg (+740) to (+936)
    Aerobatic Category:
    980 kg (+771) to (+852)
    700 kg (+740) to (+852)

15. Datum: Front face of firewall

16. Control surface deflections:

<table>
<thead>
<tr>
<th></th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>41°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>16°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>26°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Left</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder tab</td>
<td></td>
<td></td>
<td>± 2°</td>
</tr>
</tbody>
</table>
17. Levelling Means: Upper face of top fuselage longerons along the sliding canopy rails

18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity: 2 seats
1 (+900) to (+1100)
1 (+1840)

20. Baggage/Cargo Compartments: 100 kg at (+1840)
Above 50 kg consult AFM for loading instructions

Main Gear L 202-19.633
Main Gear R 202-19.634

22. Serial Numbers Eligible: S/N 136 to S/N 183
E.IV. **Operating and Service Instructions**

1. **Airplane Flight Manual:**

2. **Technical Manual:**
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

E.V. **Notes**
For notes see *Section H, Notes*
SECTION F:  AS202/18A3

F.I.  General

1. a) Type: AS202
   b) Model: AS202/18A3
   c) Marketing Designation: Bravo

2. Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH
    Benkendorffstraße 38
    D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

4. Manufacturer:
   From: 14 May 1981 to 1982:
   FLUGZEUGWERKE ALTENRHEIN AG (FWA)
   Flugplatz
   CH-9423 Altenrhein

   From: 1983 to 1986:
   FFA FLUG- UND FAHRZEUGWERKE AG
   Flugplatz
   CH-9423 Altenrhein

5. Certification Application Date: Not applicable

6. National Certifying Authority: Swiss Federal Office of Civil Aviation

7. National Authority Type Certificate Date: 14 May 1981

F.II.  EASA Certification Basis

1. Reference Date for determining the applicable requirements: Not applicable
2. Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
   14 CFR FAR Part 23 of 1 February 1965 including amendments 23-1 through 23-14, effective
   20 December 1973

3. Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

F.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Doc. No. 202-10.703

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions: Wing Span 9,78 m
   Total Length 7,50 m
   Maximum Height 2,81 m
   Wing Area 13,86 m²

5. Engine:
5.1.1 Model: Lycoming AEIO-360-B1F
5.1.2 Type Certificate: FAA TCDS 1E10
5.1.3 Limitations: For all operations: 2700 PRM (150 HP)

6. Load factors:

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Utility</th>
<th>Aerobatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up positive</td>
<td>+ 3.8 g</td>
<td>+ 4.4 g</td>
<td>+ 6.0 g</td>
</tr>
<tr>
<td>Flaps up negative</td>
<td>- 1.9 g</td>
<td>- 2.2 g</td>
<td>- 3.0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
</tr>
</tbody>
</table>

7. Propeller:
7.1 Model: Hartzell HC-C2YK-1BF
7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
7.3 Number of blades: 2
7.4 Diameter: Not over 74 inch, not under 72 inch
7.5 Sense of Rotation: Clockwise

8. Fluids:
8.1 Fuel: 91/96 minimum grade aviation gasoline
8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils
8.3 Coolant: Not applicable

9. Fluid capacities:
9.1 Fuel:
- Total capacity 174 litres
- Total usable capacity 160 litres
- Two 87 litres in wings at (+837)
9.2 Oil:
- Max. 7.6 litres (-590)
- Min. 4.7 litres
9.3 Coolant system capacity: Not applicable

10. Air Speeds:
- VNE (Never Exceed speed) 200 mph
- VNO (Maximum structural cruising speed) 150 mph
### VA (Manoeuvring speed) 150 mph

### VFE (Maximum Flap Extended) 110 mph

11. **Maximum Operating Altitude:** 18'000 feet

12. **All-weather Operations Capability:**
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. **Masses**
   
   
   13.1 **Maximum Take-off Mass (MTOM)**
   
   Normal and Utility Category: 1080 kg
   Aerobatic Category: 980 kg

   13.2 **Maximum Landing Mass (MLM)**
   
   Normal and Utility Category: 1050 kg
   Aerobatic Category: 980 kg

14. **Centre of Gravity Range:**
   Normal and Utility Category:
   - 1080 kg (+852) to (+936)
   - 980 kg (+771) to (+936)
   - 700 kg (+740) to (+936)

   Aerobatic Category:
   - 980 kg (+771) to (+852)
   - 700 kg (+740) to (+852)

15. **Datum:** Front face of firewall

16. **Control surface deflections:**

<table>
<thead>
<tr>
<th>Wing flaps</th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>41°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ailerons</th>
<th>Up</th>
<th>22°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>16°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elevator</th>
<th>Up</th>
<th>30°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>30°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elevator tab</th>
<th>Up</th>
<th>22°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Down</td>
<td>26°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rudder</th>
<th>Left</th>
<th>28°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
</tbody>
</table>

   | Rudder tab | | | ± 2° |
17. Levelling Means: Upper face of top fuselage longerons along the sliding canopy rails

18. Minimum Flight Crew: 1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity: 2 seats
   1 (+900) to (+1100)
   1 (+1840)

20. Baggage/Cargo Compartments: 100 kg at (+1840)
    Above 50 kg consult AFM for loading instructions

    Main Gear L 202-19.633
    Main Gear R 202-19.634

22. Serial Numbers Eligible: S/N 184 to S/N 223
F.IV. Operating and Service Instructions

1. Airplane Flight Manual:

2. Technical Manual:
   AS202 BRAVO Airplane Maintenance Manual and Illustrated Parts Catalogue according ATA Specification No. 100 for serial numbers 1 to 223.

F.V. Notes

For notes see Section H, Notes
SECTION G: AS202/18A4

G.I.  General

1.  a) Type: AS202
    b) Model: AS202/18A4
    c) Marketing Designation: Bravo

2.  Airworthiness Category: Normal, Utility and Aerobatic Category

3.a) Type Certificate Holder: ACC Columbia Jet Service GmbH
    Benkendorffstraße 38
    D- 30855 Langenhagen

3.b) Contracted DOA Holder: -

    FFA FLUGZEUGWERKE ALTENRHEIN AG
    Flugplatz
    CH-9423 Altenrhein

5.  Certification Application Date: Not applicable

6.  National Certifying Authority: Swiss Federal Office of Civil Aviation

7.  National Authority Type Certificate Date: 14 December 1987

G.II.  EASA Certification Basis

1.  Reference Date for determining the applicable requirements: Not applicable

2.  Airworthiness Requirements: Order 748.215.1 of 14 April 1970 regarding aircraft airworthiness
    14 CFR FAR Part 23 of 1 February 1965 including amendments 23-1 through 23-14, effective
    20 December 1973
3 Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

G.III. **Technical Characteristics and Operational Limitations**

1. Type Design Definition: Doc. No. 202-10.705

2. Description: Single-engine, metallic construction, three seater, low-wing aeroplane, conventional tail, fixed tricycle landing gear

3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

4. Dimensions:
   - Wing Span 9,78 m
   - Total Length 7,50 m
   - Maximum Height 2,81 m
   - Wing Area 13,86 m²

5. Engine:
   - 5.1.1 Model: Lycoming AEIO-360-B1F
   - 5.1.2 Type Certificate: FAA TCDS 1E10
   - 5.1.3 Limitations: For all operations: 2700 PRM (180 HP)

6. Load factors:
   - Normal
   - Utility
   - Aerobatic
7. Propeller:
   7.1 Model: Hartzell HC-C2YK-1BF
   7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
   7.3 Number of blades: 2
   7.4 Diameter: Not over 74 inch, not under 72 inch
   7.5 Sense of Rotation: Clockwise

8. Fluids:
   8.1 Fuel: 91/96 minimum grade aviation gasoline
   8.2 Oil: MIL-L-60828 normal oils or MIL-L-22851 multi-grade oils
   8.3 Coolant: Not applicable

9. Fluid capacities:
   9.1 Fuel: Total capacity 174 litres
   Total usable capacity 160 litres
   Two 87 litres in wings at (+837)
   9.2 Oil: Max. 7.6 litres (-590)
   Min. 4.7 litres
   9.3 Coolant system capacity: Not applicable

10. Air Speeds:
   VNE (Never Exceed speed) 200 mph
   VNO (Maximum structural cruising speed) 150 mph
   VA (Manoeuvring speed) 150 mph
   VFE (Maximum Flap Extended) 110 mph

11. Maximum Operating Altitude: 18'000 feet

12. All-weather Operations Capability:
   - Flights under Visual Flight Rules
   - Aerobatic Flying

13. Masses
   13.1 Maximum Take-off Mass (MTOM)
   Normal and Utility Category: 1080 kg
   Aerobatic Category: 1010 kg

   13.2 Maximum Landing Mass (MLM)
   Normal and Utility Category: 1050 kg
   Aerobatic Category: 1010 kg

<table>
<thead>
<tr>
<th>Flaps up positive</th>
<th>+ 3.8 g</th>
<th>+ 4.4 g</th>
<th>+ 6.0 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaps up negative</td>
<td>- 1.9 g</td>
<td>- 2.2 g</td>
<td>- 3.0 g</td>
</tr>
<tr>
<td>Flaps down</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
<td>+ 2.0 g</td>
</tr>
</tbody>
</table>
14. Centre of Gravity
   Range:
   Normal and Utility Category:
   1080 kg (+824) to (+936)
   1010 kg (+775) to (+936)
   700 kg (+740) to (+936)

   Aerobatic Category:
   1010 kg (+775) to (+852)
   700 kg (+740) to (+852)

15. Datum:
    Front face of firewall

16. Control surface deflections:

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>Up</th>
<th>0°</th>
<th>± 1°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>Up</td>
<td>0°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>41°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>16°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Down</td>
<td>30°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Elevator tab</td>
<td>Up</td>
<td>22°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Dow</td>
<td>26°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>28°</td>
<td>± 1°</td>
</tr>
<tr>
<td>Rudder tab</td>
<td>Left</td>
<td>14°</td>
<td>± 2°</td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>5°</td>
<td>± 2°</td>
</tr>
</tbody>
</table>

17. Levelling Means:
    Upper face of top fuselage longerons along the sliding canopy rails

18. Minimum Flight Crew:
    1 (Pilot) (+900) to (+1100)

19. Maximum Passenger Seating Capacity:
    2 seats
    1 (+900) to (+1100)
    1 (+1840)

20. Baggage/Cargo Compartments:
    100 kg at (+1840)
    Above 50 kg consult AFM for loading instructions

21. Wheels and Tyres:
    Nose Gear  202-19.200
    Main Gear L 202-19.641
Main Gear R 202-19.642

22. Serial Numbers Eligible: S/N 224 to S/N 238
G.IV. **Operating and Service Instructions**

1. Airplane Flight Manual:

2. Technical Manual:
   AS202/18A4 BRAVO Airplane Maintenance Manual FV-901 for serial numbers 224 and up.

3. Spare Parts Catalogue:
   AS202/18A4 BRAVO Illustrated Parts Catalogue FV-902 for serial numbers 224 and up.

G.V. **Notes**

For notes see *Section H, Notes*
SECTION H: NOTES PERTINENT TO ALL MODELS

Equipment
The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification for operation.

Note 1
Current weight and balance report, including 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 certificated empty weight and corresponding center of gravity location of models AS202/15 and 18A must include unusable fuel of 10 l (7,2 kp) at (+832) and full oil of 7,6 l (6,1 kp) at (-590). For AS202/15-1 and 18A1, AS202/18A2 and 18A3 and AS202/18A4 models an unusable fuel of 14 l (10,1 kp) at (+837) must be taken into account.

Note 2
Required placards for basic aircraft see approved Airplane Flight Manual section “limitations”.

Note 3
Optional equipment

A. 1.) The airplane may be operated with a Whelen Anti-Collision Strobelight System Model HD T3 (14 Volts) with two lights A429 on the wing tips and one light A470R/W on the rudder fairing. This installation according to drawing 202-18.560 meets the requirements of FAR23.1401 (b) according to the Supplemental Type Certificates SA 615 EA and SA 800 EA. The following placards must be installed in the airplane:

1.1.) Whelen Part No. A421

Warning
To avoid optical illusion and severe vertigo, turn anti-collision lights of upon entering clouds, fog or haze.

1.2.) Whelen Part No. A421-1
Warning
Turn off strobe lights when taxiing in vicinity of other aircraft or during flight through clouds, fog or haze. Standard position lights to be on for all night operations.

2.) If approved anti-collision System “Flight Components ACL 800” or ACL 900 is installed, the following placard is required:

Warning
Turn off strobe lights when taxiing in vicinity of other aircraft or during flight through clouds, fog or haze.

B. Airplanes S/N 001 – 014 and further airplanes AS202/15 with Lycoming engine O-320-E2A (S/N 016 and up) are eligible for installation of muffler system “Balmer” in accordance with FAA-kit 202-15.100. Carburators MA4-SPA 10-5009 (on airplanes S/N 012 – 014, 016 and up) must be adapted to setting 10-5009N by Balmer muffler system is installed.

C. Additional canopy stop SK 202-1252 allows flight with partly open canopy. The following placard is required:

“Close canopy for acrobatics"
“Do not move canopy above 70 kts (80 mph)"


E. Removable ferry tank installation on rear seat SK 202-1280 is RESTRICTED to ferry flights only. Approved AFM-Supplement No. 7 required for operation in overweight condition.


L. Electrical rudder trim system available for AS202/18A4.

**Note 4**

Approved AFM-Supplements

- AFM-S1 issue December 1980, approved 28 January 1981
  Navomatic 200A autopilot

- AFM-S2 issue December 1980, approved 22 January 1981
  Removal Auxiliary Fuel Tank Installation – 120 liters

- AFM-S3 issue November 1975, approved 15 June 1979
  Failure in the Audio System

  Audio System with Intercom IC-765A

- AFM-S5 issue December 1980, approved 22 January 1981
  Removable Auxiliary Fuel Tank Installation – 155 liters

- AFM-S6 issue December 1980, approved 22 January 1981
  Glider Towing System

- AFM-S7 issue December 1980, approved 22 January 1981
  Ferry Flights at Overload with Removable Auxiliary Fuel Tank Installation – 155 liters

  Alternate Static Air Source

- AFM-S9 issue December 1980, approved 22 January 1981
  Fire warning and Extinguisher System
**Note 5**

The following Service Bulletins are applicable to all Serial Numbers of Model under SECTION G (AS202/18A4).

<table>
<thead>
<tr>
<th>SB_2023-03*</th>
<th>SB_2023-04</th>
<th>SB_2023-05  (VFR Basic)</th>
<th>SB_2023-06  (VFR Plus)</th>
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<td><strong>Baseline:</strong></td>
<td><strong>Baseline:</strong></td>
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<tr>
<td>Propeller Modification Exhaust Modification</td>
<td>Cabin Interior refurbishment</td>
<td>- 28V Electrical System Upgrade</td>
<td>- 28V Electrical System Upgrade</td>
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<td><strong>Options:</strong></td>
<td><strong>Options:</strong></td>
<td><strong>Options:</strong></td>
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<tr>
<td>None</td>
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<td>- Lights Modification</td>
<td>- 2023-05-01 New Generation Livery</td>
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<td></td>
<td>- Avionic System Upgrade (Garmin G3X Touch, GTN650, G5)</td>
<td>- 2023-05-02 SB_2023-03*</td>
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<td>- 2023-05-03 SB_2023-04</td>
<td>- 2023-05-06 SB_2023-03*</td>
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<td>- 2023-06-07 SB_2023-04</td>
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</table>

The modified aircraft must be modified, operated and maintained in accordance with the following documents (or later EASA approved revisions). These documents are supplements to the baseline aircraft documentation. Associated required Drawings and/or OEM installation documents are listed as part of each single service bulletin.

<table>
<thead>
<tr>
<th><strong>Installation:</strong></th>
<th><strong>ICA:</strong></th>
<th><strong>Flight Manual Supplement:</strong></th>
<th><strong>Installation:</strong></th>
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(*) This modification affects the noise level of the aircraft.
ADMINISTRATIVE SECTION

I. Acronyms

None

II. Type Certificate Holder Record

From 15-Aug-1972 to 1980:
Flug- und Fahrzeugwerke AG Altenrhein (FFA)
Flugplatz
CH-9423 Altenrhein
Switzerland

From 1981 to 1982:
Flugzeugwerke Altenrhein AG (FWA)
Flugplatz
CH-9423 Altenrhein
Switzerland

From 1983 to 1986:
FFA Flug- und Fahrzeugwerke AG
Flugplatz
CH-9423 Altenrhein
Switzerland

From 1987 to 11 June 2002:
FFA Fahrzeugwerke Altenrhein AG
Flugplatz
CH-9423 Altenrhein
Switzerland

From 03-Nov-2009 to 02-Apr-2012:
EASA.SAS.A.067

From 03-Apr-2012:
FFA AIRCRAFT BRAVO AG
Flughafenstrasse 11
CH-9423 Altenrhein
Switzerland
From 05 May-2015 to 29 Nov-2021
GOMOLZIG FLUGZEUG- UND MASCHINENBAU GMBH
Eisenwerkstrasse 9
D-58332 Schwelm

Since 29 Nov-2021
ACC Columbia Jet Service GmbH
Benkendorffstraße 38
D- 30855 Langenhagen

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
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<tr>
<td>01</td>
<td>03 Apr 2012</td>
<td>Transfer from EASA.SAS.A.067 (FOCA TCDS F 72-05) to the EASA Type Design</td>
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<td>New TC-Holder</td>
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<td>02</td>
<td>05 May 2015</td>
<td>Change from contracted DOA Holder to TC Holder; correction of history for</td>
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<td>TC and Manufacturer</td>
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<tr>
<td>03</td>
<td>16 Feb 2022</td>
<td>Transfer to new TC Holder ACC Columbia Jet Service GmbH as of Nov 29,</td>
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<tr>
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<td>2021</td>
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<tr>
<td>04</td>
<td>22 Sep 2023</td>
<td>With added Note 5 in Section H new modifications to Avionics, Power</td>
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<td></td>
<td>Plant, Cabin Interior, Aircraft Lighting and the Electrical System have</td>
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<td>been introduced.</td>
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