Type Certificate Holder: Cessna Aircraft Company  
P.O. Box 7704  
Wichita, Kansas 67277  
USA

Models:  
172R  
172S

Issue 1, 03 August 2012

This Data Sheet which is integral part of Type Certificate № TL 0056 prescribes the conditions and limitations under which the product(s) for which the Type Certificate was issued meet(s) the airworthiness requirements and environmental protection requirements, stated in Certification basis mentioned in this Data Sheet.
SECTION I: Data Pertinent to All Models

A. General
B. Certification Basis
C. Technical Characteristics and Operational Limitations
D. Continued Airworthiness Instructions
E. Notes (applicable to both Model 172R and Model 172S)

SECTION II: Model 172R

A. General
B. Certification Basis
C. Technical Characteristics and Operational Limitations
D. Operating and Continued Airworthiness Instructions
E. Notes (applicable to Model 172R)

SECTION III: Model 172S

A. General
B. Certification Basis
C. Technical Characteristics and Operational Limitations
D. Operating and Continued Airworthiness Instructions
E. Notes (applicable to Model 172S)
SECTION I: Data pertinent to both Model 172R and Model 172S

A. General

1. Manufacturer: Cessna Aircraft Company P.O. Box 7704 Wichita, Kansas 67277 U.S.A.

2. Airworthiness Category: Normal and Utility

3. SAAU Certification Application date: 05 May 2010

4. SAAU Type Certification date: 03 August 2012

B. Certification Basis

1. FAA Certification Basis: As defined in FAA TCDS 3A12

2. SAAU Certification Basis:
   2.1. Airworthiness Requirements: Airworthiness Standards for Civil Light Aeroplanes AR-23
   2.2. Environmental Requirements: ICAO Annex 16, Volume I
   2.3. SAA Equivalent Safety Findings:
       AR 23.607 Fasteners (ref. SAAU CRI D-2)
       AR 23.562(c)(5) Emergency landing dynamic conditions (ref. SAAU CRI CW-1)
       AR 23.1093 Induction system icing protection (ref. SAAU CRI E-05)
       AR 23.1143(g) Engine controls (ref. SAAU CRI E-06)
       AR 23.1147(b) Mixture controls (ref. SAAU CRI E-06)
       AR 23.1521(b)(5), (c)(4); 23.1583(b)(1) Powerplant limitations (ref. SAAU CRI E-07)
       AR 23.1326(b) Pitot heat indication system (ref. SAAU CRI A-2)
       AR 23.1353(A) Storage battery design and installation (ref. SAAU CRI A-3)
       AR 23.F.8.7.3.5.4 Crew cockpit layout (ref SAAU CRI A-14A and A-14B)
       AR 23.F.8.4.3.2 Radio communication equipment (ref. SAAU CRI A-15)
       AR 23.1309(b)(1) Equipment, systems, and installation (ref. SAAU CRI A-09)

C. Technical Characteristics and Operational Limitations

1. Description: Single-engine, 4 place (Normal Category) or 2 place (Utility Category), all-metal, high-wing landplane with fixed tricycle landing gear (see Note 1).
2. **Basic dimensions:**
   - Span: 11.0 m (36.08 ft.)
   - Length: 8.2 m (26.92 ft.)
   - Height: 2.35 m (7.73 ft.)
   - Wing Area: 16.3 m² (175.5 ft²)

3. **Engine:**
   - Lycoming IO-360-L2A
   - SAAU engine certification status: SAAU TC No.TD0007

4. **Equipment:**
   For available approved equipment (see Note 1) refer to Comprehensive Equipment List, Weight and Balance / Equipment List section of the corresponding Pilot’s Operating Handbooks, and Logs of Ukraine Approved Supplements of the corresponding POHs’ Supplements for Ukrainian certified airplanes.

   The following equipment is mandatory for airplanes registered in Ukraine:
   - Doors external handle placard installation (refer to Required Placards and Markings subsections of the corresponding POHs’ Supplements for Ukrainian certified airplanes);
   - Flight Data Recorder (FDR) - for commercial transportation;
   - HF radio - for areas where VHF radio communication cannot be kept.
   - Portable COSPAS-SARSAT (406MHz) Emergency Radio Beacon (ELT) - for flying over difficult of access and rarely populated regions and large water surfaces.

5. **Approved fuel grades:**
   - 100LL (ASTM-D910)
   - 100 (Formerly 100/130) (ASTM-D910)
   - B91/115 (GOST 1012-72)
   For further fuels limitations refer to the corresponding Pilot’s Operating Handbooks and POHs’ Supplements for Ukrainian certified airplanes.

6. **Fuel capacity:**
   - Total: 212 litres (56 US gal) in two wing tanks
   - Usable: 200.6 liters (53 US Gallons)

7. **Minimum Flight Crew:**
   - One (1) Pilot (flying from left seat)

8. **Seating configuration:**
   - maximum number of seats: Four (4, including flight crew) - see Note 2
   - maximum number of passengers: Three (3) Passengers - see Note 2

9. **Cargo Compartment loading:**
   - 54.5 kg (120 lbs) - see Note 2

10. **Maximum Operating Altitude:**
    - with passengers on board: 3000 m (9800 feet)
    - flight crew only: 3600 m (11800 feet) - 30 minutes maximum

11. **Outside Air Temperature:**
    - ground operations: minus 40°C ÷ plus 40°C

12. **Kinds of Operation:**
    - Day and night VFR operations, day and night IFR operation.
    - Flight into known icing conditions is prohibited.
Kinds of Operation (continued): For the equipment required to be operational for airplane airworthiness in the mentioned kinds of operations refer to Kinds of Operations Limits subsections of the corresponding Pilot's Operating Handbooks and POHs' Supplements for Ukrainian certified airplanes.

13. Other Operating Limitations: Operation over water beyond the Maximum Glide Distance from shore is prohibited (refer to the corresponding Pilot’s Operating Handbooks, Section 3, Figure 3-1).

For further operating limitations refer to the corresponding Pilot’s Operating Handbooks and POHs’ Supplements for Ukrainian certified airplanes.

D. Continued Airworthiness Instructions

1. Instructions for Continued Airworthiness:
   - Maintenance Manual, Model 172 Series 1996 & on (172RMM), Revision 18 or later;
   - Structure Repair Manual, Single Engine Models 172, 182, T182, 206, and T206 1996 and on (SESR), Revision 4 or later;
   - Wiring Diagram Manual, Model 172R Serial Numbers 17280001 and on and Model 172S Serial Numbers 172S8001 and on (172RWD), Revision 10 or later.

2. Airworthiness Limitations: There are no airworthiness limitations (mandatory replacement times or inspection intervals for structures components - see the Section 5-00-10 of the Maintenance Manual).

For components time limits refer to the Section 5-11-00 of the Maintenance Manual.

3. Maintenance Schedule: For the inspection time intervals and inspection time limits refer to the Sections 5-10-00 and 5-10-01 of the Maintenance Manual.


E. Notes (applicable to both Model 172R and Model 172S)

Note 1: The Models 172R and 172S each have two basic configurations for flight instrumentation and avionics:

1) Mechanical flight instruments arranged in the standard “T” configuration. This configuration has, as an option, the KAP140 AFCS. These aircraft are colloquially known as Nav I/II for different levels of equipment grouped in marketing “packages”;

2) Garmin G1000 Integrated Cockpit System featuring PFD/MFD in lieu of mechanical flight instruments. This configuration may have, depending on serial number, the option of either KAP140 AFCS or GFC700 AFCS. These aircraft are colloquially known as Nav III.

Note 2: For Utility Category the rear seat must not be occupied and baggage compartment must be empty.
SECTION II: Model 172R

A. General
1. Eligible serial numbers: 172080004 and on (see Note 1)

B. Certification Basis
see Section I of this TCDS

C. Technical Characteristics and Operational Limitations
1. **Type Design Definition:** Top Assembly 0500530-2 (current drawing revision BI / parts list revision DX) “AIRPLANE ASSY-172R” (see Note 2)

2. **Engine Rating:**
   When modified by Cessna Modification Kit MK172-72-01: 180 hp (See Note 1)

3. **Engine Limits:**
   When modified by Cessna Modification Kit MK172-72-01: 2 700 RPM for all operations (See Note 1)

4. **Propeller:**
   1 × 1C235/LFA7570 McCauley aluminium mono-block 2-blade, fixed pitch
   SAA propeller certification status: SAAU TC No.TG0021
   Propeller Limits:
   maximum diameter: 1.905 m (75 inches)
   minimum diameter: 1.880 m (74 inches)
   When modified by Cessna Modification Kit MK172-72-01:
   1 × 1A170E/JHA7660 McCauley aluminium mono-block 2-blade, fixed pitch (See Note 1)
   SAA propeller certification status: SAAU TC No.TG0020
   Propeller Limits:
   maximum diameter: 1.930 m (76 inches)
   minimum diameter: 1.905 m (75 inches)

5. **Power-plant limitations:**
   static RPM at full throttle: maximum: 2 165
   minimum: 2 065
   When modified by Cessna Modification Kit MK172-72-01:
   static RPM at full throttle: maximum: 2 400
   minimum: 2 300

6. **Weights:**
   Normal Category
   Maximum Ramp 1 115 kg (2 457 lbs.)
   Maximum Takeoff and Landing 1 112 kg (2 450 lbs)
   Utility Category
   Maximum Ramp 1 002 kg (2 207 lbs.)
   Maximum Takeoff and Landing 999 kg (2 200 lbs.)
   When modified by Cessna Modification Kit MK172-72-01:
   (See Note 1)
   Normal Category
   Maximum Ramp 1 161 kg (2 558 lbs.)
   Maximum Takeoff and Landing 1 158 kg (2 550 lbs)
   Utility Category
   Maximum Ramp 1 002 kg (2 208 lbs.)
   Maximum Takeoff and Landing 999 kg (2 200 lbs.)
7. Air Speeds:

   Manoeuvring $V_A$ (MTOW): 99 KIAS (97 KCAS)
   Maximum Cruising $V_{NO}$: 129 KIAS (126 KCAS)
   Maximum Operating $V_{NE}$: 163 KIAS (160 KCAS)
   Flaps Full Extended $V_{FE}$: 85 KIAS (84 KCAS)

When modified by Cessna

Modification Kit MK172-72-01: (See Note 1)

   Manoeuvring $V_A$ (MTOW): 105 KIAS (102 KCAS)
   Maximum Cruising $V_{NO}$: 129 KIAS (126 KCAS)
   Maximum Operating $V_{NE}$: 163 KIAS (160 KCAS)
   Flaps Full Extended $V_{FE}$: 85 KIAS (84 KCAS)

For further air speed limitations refer to the corresponding Pilot's Operating Handbooks.

8. ICAO Noise Level:

   76.3 dB(A) per ICAO Annex 16 Chapter 10, through Amendment 4.

When modified by Cessna

Modification Kit MK172-72-01: 78.2 dB(A) per ICAO Annex 16 Chapter 10, through Amendment 4 (See Note 1).

D. Operating and Continued Airworthiness Instructions

1. Operating Instructions: The latest approved revisions of the following Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (POH) and POH Supplements for Ukrainian certified airplanes:

<table>
<thead>
<tr>
<th>Model</th>
<th>POH</th>
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<tbody>
<tr>
<td>172R Nav I/II</td>
<td>172RPHUS</td>
<td>172RPHUS-S18</td>
</tr>
<tr>
<td>172R Nav I/II with MK172-72-01</td>
<td>172R180PHUS</td>
<td>172RPHUS-S18</td>
</tr>
<tr>
<td>172R Nav III with G1000 and with KAP140 AFCS</td>
<td>172RPHAUS</td>
<td>172RPHAUS-S14</td>
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<tr>
<td>172R Nav III with G1000 and with GFC700 AFCS</td>
<td>172RPHBUS</td>
<td>172RPHBUS-S14</td>
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</tbody>
</table>

2. Continued Airworthiness Instructions: see Section I of this TCDS

E. Notes (applicable to Model 172R)

Note 1: The following serial numbers:

17280159, 17280242, 17280251, 17280253, 17280257, 17280262, 17280281,
17280292, 17280301, 17280305, 17280426, 17280488, 17280606, 17280607,
17280608, 17280609, 17280610, 17280613, 17280614, 17280616, 17280621,
17280622, 17280623, 17280624, 17280631, 17280632, 17280633, 17280634,
17280638, 17280639, 17280640, 17280646, 17280647, 17280648, 17280652,
17280653, 17280659, 17280660, 17280661, 17280662, 17280664, 17280667,
17280668, 17280669, 17280670, 17280672, 17280673, 17280674, 17280675,
17280701, 17280707

are eligible for installation of modification kit MK172-72-01 and use POH 172R180PH.
Note 1: Serials numbers 17281241 thru 17281496 are eligible for installation of G1000 integrated cockpit system with KAP-140 AFCS optional and use POH 172RPHAUS
Serials numbers 17281497 & on are eligible for installation of the G1000 integrated cockpit system with GFC-700 AFCS optional and use POH 172RPHBUS

Note 2: The definition Skyhawk is used for marketing only.

SECTION III: Model 172S

A. General
1. Eligible serial numbers: 172S08001 and on (see Note 1)

B. Certification Basis
see Section I of this TCDS

C. Technical Characteristics and Operational Limitations
1. Type Design Definition: Top Assembly 0500531-1 (current drawing revision BA / parts list revision DC) “AIRPLANE ASSY - 172S” (see Note 2)

2. Engine Rating: 180 hp

3. Engine Limits: 2 700 RPM for all operations

4. Propeller:
   - 1 x 1A170E/JHA7660 McCauley aluminium mono-block 2-blade, fixed pitch
   - SAA propeller certification status: SAAU TC No.TG0020
   - Propeller Limits:
     - maximum diameter: 1.930 m (76 inches)
     - minimum diameter: 1.905 m (75 inches)

5. Power-plant limitations:
   - Static RPM at full throttle:
     - maximum: 2 400
     - minimum: 2 300

6. Weights:
   - Normal Category
     - Maximum Ramp 1 161 kg (2 558 lbs.)
     - Maximum Takeoff and Landing 1 158 kg (2 550 lbs)
   - Utility Category
     - Maximum Ramp 1002 kg (2 208 lbs.)
     - Maximum Takeoff and Landing 999 kg (2 200 lbs.)

7. Air Speeds:
   - Manoeuvring $V_A$ (MTOW): 105 KIAS (102 KCAS)
   - Maximum Cruising $V_{NO}$: 129 KIAS (126 KCAS)
   - Maximum Operating $V_{NE}$: 163 KIAS (160 KCAS)
   - Flaps Full Extended $V_{FE}$: 85 KIAS (84 KCAS)
   - For further air speed limitations refer to the corresponding Pilot’s Operating Handbooks.

8. ICAO Noise Level:
   - 78.2 dB(A) per ICAO Annex 16 Chapter 10 (through Amendment 4).
D. Operating and Continued Airworthiness Instructions

1. Operating Instructions: The latest approved revisions of the following Pilot’s Operating Handbook and FAA Approved Airplane Flight Manual (POH) and POH Supplements for Ukrainian certified airplanes:

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<td>and with KAP140 AFCS</td>
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<td>172SPHBUS</td>
<td>172SPHBUS-S16</td>
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<tr>
<td>and with GFC700 AFCS</td>
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2. Continued Airworthiness Instructions: see Section I of this TCDS

E. Notes (applicable to Model 172S)

Note 1: Serials numbers 172S9810 thru 172S10467, 172S10469 thru 172S10506, 172S10508 thru 172S10639, 172S10641 thru 172S10655 are eligible for installation of G1000 integrated cockpit system with KAP-140 AFCS optional and use POH 172SPHAUS. Serials numbers 172S10468, 172S10507, 172S10640, 172S10656 & on are eligible for installation of the G1000 integrated cockpit system with GFC-700 AFCS optional and use POH 172SPHBUS.

Note 2: The definition Skyhawk SP is used for marketing only.

Head of Aeronautical Products
Type Certification Department

Sergii Gaidenko