

Interstate Aviation Committee
Aviation Register

Data Sheet

Type Certificate №CT289-PA-44

Revision 01

21 November, 2008

Airplane:
PA-44-180 (Seminole)

Type Certificate Holder:
Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida 32960, USA

Courtesy translation of TCDS
In case of misinterpretation the Russian text shall prevail.

This data sheet is the integral part of Type Certificate №CT289-PA-44 , defines Type Design and prescribes the conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of Certification Basis, which is prescribed in this Data Sheet.

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Designer and Manufacturer Piper Aircraft, Inc.
2926 Piper Drive, Vero Beach, Florida 32960

Model PA-44-180 (Seminole)

(S/n: 4496174, 4496224 and subsequent)

- 1. Brief Aircraft Description** Normal category airplane with two reciprocating engines.
- 2. Type Design Definition** Type Design is defined by:
a) original Type Design according to Type Certificate №A19SO issued by FAA, described by Aircraft General Assembly Drawing № VB-1940 (with Supplement incorporated upon IAC AR requirement, see section 17).
b) Operational documentation:
 - FAA approved Airplane Flight Manual VB-1942 with Supplement VB-2027 for CIS operators.
 - Maintenance Manual №761-892.
- 3. Engines** Left engine: Lycoming O-360-A1H6 with carburetor setting 10-5219 or 10-6019.
Right engine: Lycoming LO-360-A1H6 with carburetor setting 10-5219 or 10-6019.

IAC AR Type Certificate № CT158-AMД/Д-01 dated 08.11.2007.
- 3.1 Engine limitations** Engine performance and operating limitations see in IAC AR Type Certificate Data Sheet № CT158-AMД/Д-01 dated 08.11.2007.
- 4. Propeller** Left engine: Hartzell, Hub model HC-C2Y(K,R) -2CEUF, Blade Model FC7666A-2R
Right engine: Hartzell, Hub model HC-C2Y(K,R) -2CLEUF, Blade Model FJC7666A-2R

IAC AR Type Certificate № CT88-B dated 31.03.2008.
- 4.1 Propeller limitations** Propeller performance and operating limitations see in IAC AR Type Certificate Data Sheet № CT88-B dated 31.03.2008r
- 5. Approved fuel** CIS fuels: avgas 95/130 (GOST 1012-72)

Foreign fuel types:
100/100 LL aviation grade fuel
- 6. Fuel Capacity** All: 415.8 liters (110 gallons) (2 nacelle tanks)
Usable – 408.2 liters (108 gallons)
- 7. Minimum flight crew** One pilot
- 8. Maximum number of seats** 4
- 9. Maximum weight**

| | kg. | lb. |
|------------------------|------|------|
| Maximum ramp weight | 1731 | 3816 |
| Maximum takeoff weight | 1724 | 3800 |
| Maximum landing weight | 1724 | 3800 |

- 10. Maximum baggage weight** 90 kg (200 lb.)
- 11. C.G. range (landing gear extended)** See in FAA approved AFM VB-1942 with Supplement VB-2027 for CIS operators.
- 12. . Maximum operating altitude** 4270 meters (14000 feet)
- 13. Aerodrome class and category** Airplane is capable to operate on paved runways. The aerodrome elevation must not exceed 2440 meters (8000 feet).

14. Airspeed limits (IAS)

| | knots |
|--|-------|
| Never exceed speed (V_{NE}) | 202 |
| Maximum Structural Cruise(V_{NO}) | 169 |
| Maneuvering (V_A) (1724 kg) (3800 lb) | 135 |
| Maneuvering (V_A) (1225 kg) (2700 lb) | 112 |
| Maximum flaps extended (V_{FE}): | 111 |
| Maximum landing gear operation (V_{LO}): | |
| Extension | 140 |
| Retraction | 109 |
| Maximum Landing Gear Extended (V_{LE}): | 140 |
| Minimum control speed (V_{MC}) | 56 |

- 15. Outside ambient temperature** Outside ambient temperature on the ground is minus 15 °C to +35 °C.
- 16. Airworthiness limitations** Life limits and airworthiness limits see in FAA approved Chapter 4 : “Airworthiness Limitations” of the Maintenance Manual №761-892.
- 17. Mandatory equipment**
1. All placards and inscriptions inside and outside the airplane related to emergency and safety equipment and to the firefighting means except for “EXIT” signs in English must be bilingual: in English and in a language agreed on with CIS operator.
 2. In addition to the standard equipment, approved by FAA, for flights in CIS airspace airplane should be equipped with the following equipment
 - P855A1 Russian-made emergency VHF radio (installed by operator);
 - one PFD (with baro correction in hPa);
 - one MFD
 - Stand-by altimeter indicating flight altitude in meters ;
 - FDR (for commercial flights);
 - ADF;
 - Autopilot (for one-pilot operation and flights under IFR).
- 18. Other limitations**
- Flights are prohibited in predicted icing conditions.
 - Flights are not allowed in the routes if breaks in VHF fields exceed 5 minutes.
 - Airplane operations are allowed only on paved runways.
 - Flights in CIS aerospace are performed only in the routes, where ATC is functioning in RBS mode.
 - Overwater flights are allowed on the conditions prescribed in operational regulations.
- 19. Noise requirements** Noise Type Certificate № CIII177-PA-44 issued November 21, 2008.

20. Certification basis

1. Airworthiness requirements:
Aviation Regulations, Part 23 (AP-23) “Airworthiness Standards: Normal, Utility, Acrobatic and Commuter category airplanes” with Amendment 4 (See CRI – A1) and Special Technical Conditions issued by FAA and prescribed in FAA Type Certificate Data Sheet № A19SO.
2. Environmental requirements:
Aviation Regulations, Part 36 (AP-36) Section F “Noise requirements”.
ICAO Annex 16, Volume 1, Chapter 10.

*Original in Russian language
signed by*

Vladimir Putilin
Chief of Branch
Small Aircraft