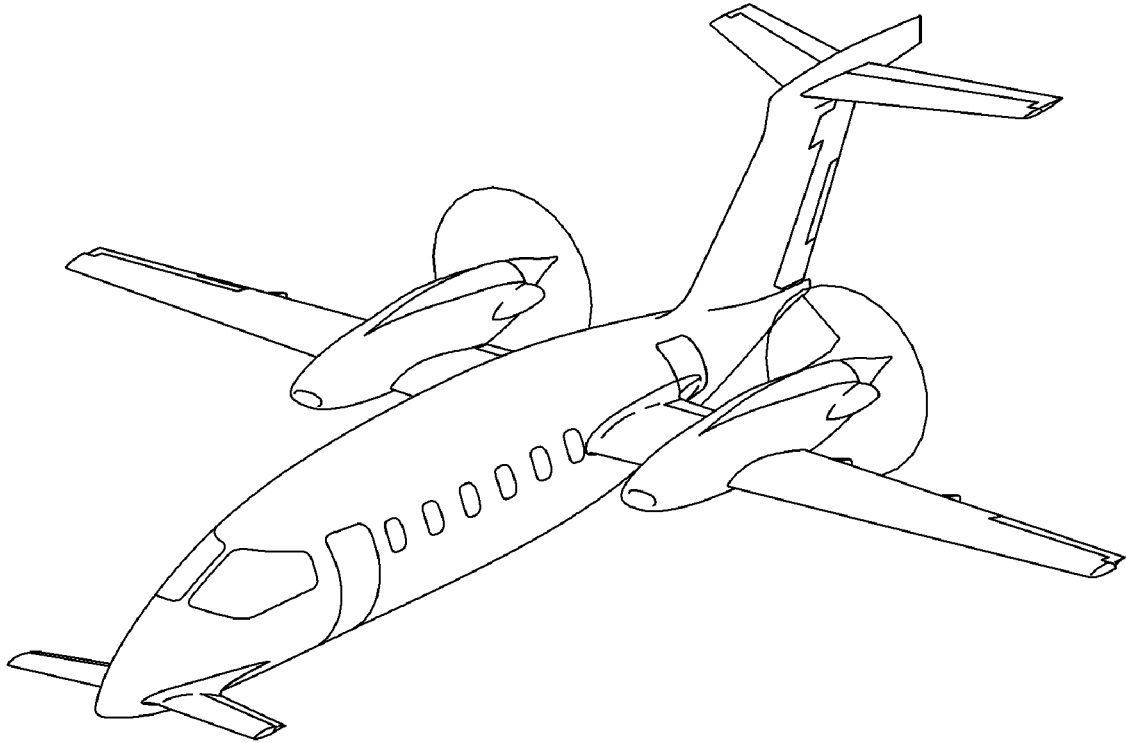


# *P.180 AVANTI II*

## *Chapter 04 Airworthiness Limitations*



Report No. 180-MAN-0200-01109

Issue No. A0  
Issue Date: Oct. 21/05

Revision No. A4  
Revision Date: Mar. 21/12

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CHAPTER 04 - AIRWORTHINESS LIMITATION  
LIST OF EFFECTIVE PAGES

CHAPTER SECTION SUBJECT	PAGE	DATE
04-LOEP	1	Rev. A4: Mar. 21/12
	2	Rev. A3: May 08/09
04-TOC	1	Rev. A3: May 08/09
	2	Rev. A3: May 08/09
04-INTRO	1	Rev. A3: May 08/09
	2	Rev. A3: May 08/09
04-LOR	1	Rev. A4: Mar. 21/12
	2	Rev. A3: May 08/09
04-TR LIST	1	Rev. A3: May 08/09
	2	Rev. A3: May 08/09
04-00-00	1	Rev. A4: Mar. 21/12
	2	Rev. A3: May 08/09
	3	Rev. A4: Mar. 21/12
	4	Rev. A3: May 08/09
	5	Rev. A4: Mar. 21/12
	6	Rev. A4: Mar. 21/12

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## AIRWORTHINESS LIMITATIONS

### 1. General

- A. This Manual includes Chapter 4 of the P180 AVANTI II MAINTENANCE MANUAL (ATA 100 Specification).
- B. Chapter 4 lists the Airworthiness Limitations of the airplane and is approved by the European Aviation Safety Agency (EASA) and by Federal Aviation Administration (FAA). Variations must also be approved.
- C. This Manual forms an entity and the operations described in one of the sections take into account the correct accomplishment of all the operations described in the other sections.

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LOG OF REVISIONS

Rev. N.	Rev. Pages	Description of Revision	Approval Document and Date
A0 (CH4)	-	Chapter 4 Original Issue	Approval EASA.A.059 Approval Date: October 21, 2005
A1 (CH4)	-	Updated Title Page Report 180-MAN-0200-01109	
A2 (CH4)	LOEP Pag.3  Pag.4	Updated Title Page Report 180-MAN-0200-01109 Updated List of Effective Page - Chapter 4 Addition P/N's Main Landing Gear (Dowty) Addition P/N's Main Landing Gear -Shock Absorbers (Dowty) Addition P/N Nose Landing Gear - Upper Link (Dowty)	
A3 (CH4)	Title Pages  Cover  LOEP  INTRO  LOR  TR Pages  04-00-00 From Page 1 to Page 6  Page 1  Pages 3 and 4  Page 5	Change position of Report Number Move to LOR pages the Approval data  Change position of Report Number  Updated List of Effective Page  Updated step "B" and Change position of Report Number  Updated LOR, addition the Approval data and change position of Report Number  Change position of Report Number  Change position of Report Number  Update Approval Statement  Update Components P/N's  Update ATA 51 for S/N 1002 airplane.	Approval EASA.A.C.11823 Approval Date: June 04, 2009
A4 (CH4)	04-00-00 Page 3 Page 5 Page 6	Update Components P/N's	Approval EASA 10040011 Approval Date: June 08,2012

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## TEMPORARY REVISION LIST

The following list identifies the Temporary Revisions affecting the Report 180-MAN-0200-01109 issue A0 and subsequent revisions/reissues.

**NOTE:** All succeeding Temporary Revisions, to those listed, must be retained in your printed manual until directed otherwise by subsequent revision activity.

TR N.	Approval	Page	Reference	TR Status
070		3	04-00-00	Incorporated

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## AIRWORTHINESS LIMITATIONS

The **Airworthiness Limitations - Chapter 4**, is approved and set mandatory by the European Aviation Safety Agency (EASA) under Appendix G, Section G 23.4 of EASA CS23, and by Federal Aviation Administration (FAA).

For US registered airplanes, the Airworthiness Limitations are FAA approved, under the provisions of 14 CFR Part 21, Section 21.29.

The Airworthiness Limitations Section is FAA approved and specifies maintenance required under § 43.16 and § 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

### 1. General

- A. This Chapter sets forth mandatory replacement time, life limited structural items and the inspection intervals and procedures necessary to maintain the airworthiness conditions required for Type Certification.  
Items in the chapter are subject to airworthiness approval.
- B. The items requiring inspection / retiring are presented by Air Transport Authority (ATA) numerical sequence, description of inspection or item to be overhauled / retired, what action is required and the frequency of such action.

<b>Placards &amp; Markings (Chapter 11)</b>			
Ref.	Item	Requirement	Limit
11-10-00	Composite part exterior paint	No paints other than those listed on item 05-006 (Chap. 91-00-00, Chart 201) can be used.	-
11-10-00	Logo color, paint and dimension allowable limits for composites parts	No more than 20% of the external surface of each composite component can be covered with paints other than those listed on item 05-006 (Chap. 91-00-00, Chart 201) or decals. Application of paints other than those listed on item 05-006 (Chap. 91-00-00, Chart 201) or decals to more than 20% of a composite surface area could result in excessive absorption of radiation, with subsequent damage to the component. The composite areas are shown in Chap. 51-00-00.	-

<b>Fire Protection (Chapter 26)</b>			
Ref.	Item	Requirement	Limit
26-20-00	Portable Fire Extinguisher Amerex Corp.-352T (if installed)	Hydrostatic test (ref. to vendor documentation).	5 Years from Assy Date.
26-20-00	Engine Fire Extinguisher Container P/N 30104100 (if installed)	Overhaul and hydrostatic test.	5 Years from Assy Date or last test.

<b>Landing Gear (Chapter 32)</b>				
Ref.	Item	Requirement	Limit (a)	
32-10-00	Main Landing Gear Dowty - P/N's 201416003 / 004 and 201416005 / 006 Components	Life limit	30000 Ldgs	
	Exceptions:			
	Component	P/N		
	Lever Hinge Fitting (LH)	201034320	Life limit	8250 Ldgs
	Lever Hinge Fitting (RH)	201034321	Life limit	8250 Ldgs
	Wheel Lever (LH)	201034312	Life limit	10900 Ldgs
	Wheel Lever (RH)	201034313	Life limit	10900 Ldgs
	Axle	201034641	Life limit	7350 Ldgs
	Hinge Pin	201034637	Life limit	13150 Ldgs
	Pintle Pin	201034635	Life limit	22500 Ldgs
	Pin (Shock Absorber Upper Attachment)	201034604	Life limit	25150 Ldgs
32-10-00	Main Landing Gear Shock Absorbers Dowty - P/N 201417002 (with P/N 201416003/004) - P/N 201417003 (with P/N 201416005/006) - P/N 201417004 (with P/N 201416005/006) and components	Life limit	22200 Ldgs	
	Exceptions:			
	Component	P/N		
	Cylinder	201068600	Life limit	13100 Ldgs
	Piston	201068601 201068621 201068622	Life limit Life limit Life limit	10100 Ldgs 10100 Ldgs 10100 Ldgs
32-10-00	Main Landing Gear Drag Braces Dowty - P/N's 201418003 / 004 Components	Life limit	30000 Ldgs	
	Exceptions:			
	Component	P/N		
	Upper Link	201035311	Life limit	14050 Ldgs
	Upper Link	201035312	Life limit	14050 Ldgs
	Lower Link	201035308	Life limit	18500 Ldgs
	Center Pin	201035652	Life limit	6700 Ldgs
	Upper Pin (LH)	201035676	Life limit	7200 Ldgs
Upper Pin (RH)	201035677	Life limit	7200 Ldgs	

Landing Gear (Chapter 32) - (cont.)			
Ref.	Item	Requirement	Limit (a)
32-20-00	Main Landing Gear Actuators Dowty - P/N 114346001 / 002 or 114346003/004	Life limit	10250 Ldgs
	Nose Landing Gear Dowty - P/N 201033002 Components	Life limit	30000 Ldgs
	Exceptions:		
	Component	P/N	
	Main Fitting	201033300	Life limit 6850 Ldgs
	Pin (Drag Brace to Main Fitting)	201033649	Life limit 24750 Ldgs
32-20-00	Nose Landing Gear Drag Brace Dowty - P/N 201050002 Components	Life limit	30000 Ldgs
	Exceptions:		
	Component	P/N	
	Upper Link	201050301	Life limit 10600 Ldgs
	Clevis - Lower link	201050608	Life limit 18600 Ldgs
32-20-00	Nose Landing Gear Actuator Dowty - P/N 114067003 and 114067004 Components	Life limit	26500 Ldgs
<b>NOTE:</b>	(a) When operating on unpaved runways, each landing is equivalent to <b>four</b> (4) cycles.		
	(b) Except otherwise stated, odd P/N's refer to LH components, even P/N's to RH components		



<b>Oxygen (Chapter 35)</b>			
Ref.	Item	Requirement	Limit
35-20-00	Oxygen Cylinder Assembly Scott Aviation - P/N 89511040	Overhaul and hydrostatic test (ref. to DOT-SP8162 Procedure).	5 Years from Assy Date or from last Overhaul and hydrostatic test*.
35-20-00	Portable Oxygen Cylinder and Pressure Regulator Assy: Scott Aviation- P/N 900019-01 (if installed)	Overhaul and hydrostatic test.	5 Years from Assy Date or from last Overhaul and hydrostatic test.
35-20-00	Oxygen Cylinder Scott Aviation - P/N 89511040	Replacement (ref. to CTC/ DOT-E8162-1850 procedure).	15 Years from Assy Date.
* 3 years for cylinders offered for transport in or to Canada, with the mark TC-SU4237 (all units) or with the mark TC-SU9209 (manufactured before Feb.05/2007)			

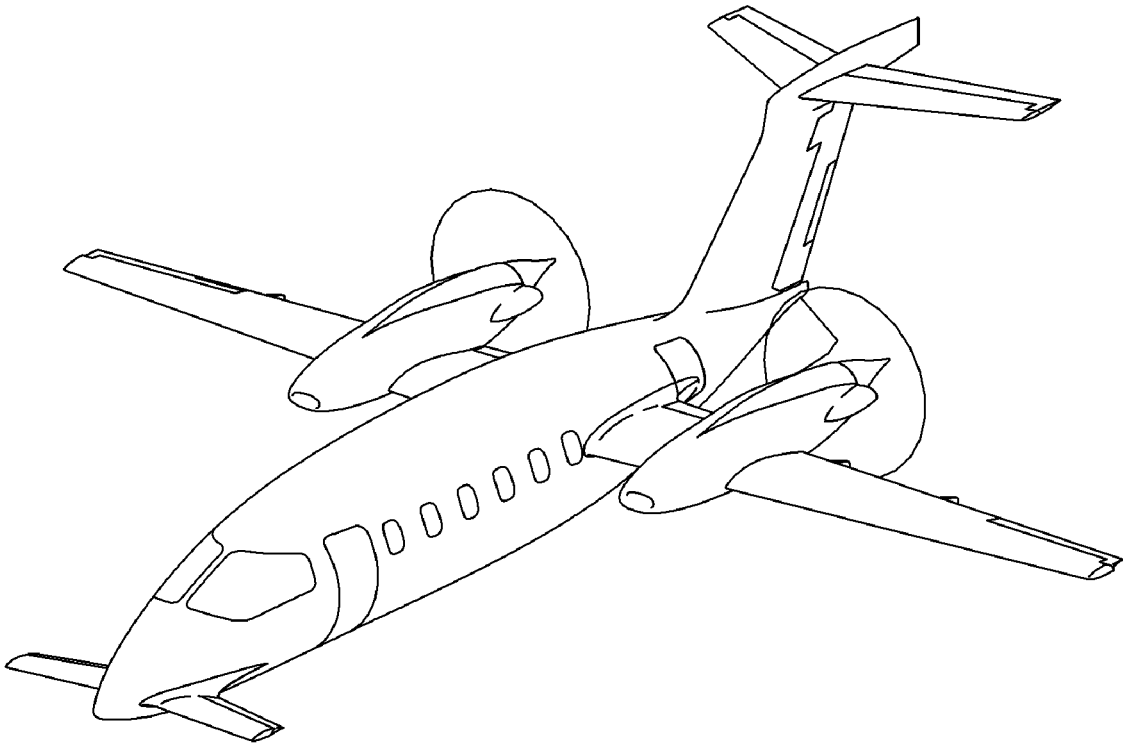
<b>Structures (Chapter 51)</b>			
Ref.	Item	Requirement	Limit
51-00-00	Airplanes S/N 1002; S/N 1105 and subsequents.	Life limit	15000 FH (a)
<b>NOTE:</b>	(a) Total FH to be accounted since original certification date, recorded in the airplane logbook.		

<b>Propellers (Chapter 61)</b>			
Ref.	Item	Requirement	Limit
61-10-00	Propellers Hartzell - P/N HC-E5N-3 (A) (L) / (H, L) E8218	Service Life	1500 h (a), 3000 h (b), 9000 h (c) from installation.
<p><b>NOTE:</b></p> <p>(a) Hub and Blades of HC-E5N-3 ( ) ( ) Propeller, are life limited at 1500 hours and must be retired from service if they have ever been installed on an airplane with Rear Nacelle Panels P/N 80-336005-801 (LH) and 80-336006-801 (RH) and Exhaust Stacks P/N 80-336013-801 (airplanes 1001, 1002 and S/N 1004 prior to embodiment of SB-80-0022).</p> <p>(b) Hub and Blades of HC-E5N-3 ( ) ( ) Propeller, are life limited at 3000 hours and must be retired from service if they have ever been installed on an airplane with Rear Nacelle Panels P/N 80-336213-801 (LH) and 80-336214-801 (RH) and Exhaust Stacks P/N 80-336013-801 (airplanes S/N 1006 thru 1017 prior to embodiment of SB-80-0022).</p> <p>(c) Propeller Hub is life limited to 18000 FH while Blades are life limited at 9000 hours and must be retired from service if they have been installed <u>since new</u> on:</p> <ul style="list-style-type: none"> <li>- airplanes 1001, 1002 and 1004 after embodiment of SB-80-0022 to update the Rear Nacelle Panels P/N 80-336005-801 (LH) and 80-336006-801 (RH) and to install the Exhaust Stacks P/N 80-336013-803.</li> <li>- airplanes S/N 1006 thru 1017 after embodiment of SB-80-0022 to update the Rear Nacelle Panels P/N 80-336213-801 (LH) and 80-336214-801 (RH) and to install the Exhaust Stacks P/N 80-336013-803.</li> <li>- airplanes S/N 1018 and subsequents which already incorporate the Rear Nacelle Panels P/N 80-336213-803 (LH) and 80-336214-803 (RH) and the Exhaust Stacks P/N 80-336013-803.</li> </ul>			

<b>Power Plant (Chapter 71)</b>			
Ref.	Item	Requirement	Limit
71-00-00	Engine Turbine / Turboprop Rotor Components	Service Life	Ref. to P&WC SB 14002 latest issue.

# *P.180 AVANTI II*

## *Chapter 05 Time Limits and Maintenance Schedule*



Report No. 180-MAN-0200-01491

Issue No. C0  
Issue Date: Jan.16/12

Revision No. C1  
Revision Date: Sep.21/12

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