

Model	(cont'd)	Olympus 593 Mk. 610-14-28		
Oil		Approved Types (See NOTE 7)	Mobil RM.193A-3; Snell ASTO 555; Esso ETO 25; B.P. Energet 523.	
		Total Capacity (U.S. Quarts)	26	
		Integral Oil Tank, Max. Capacity (U.S. Quarts)	16	
		Usable oil (U.S. Quarts)	Min. 12.5	
Principal Dimensions, Inches		Length (Flange to Flange)	148.4 (3.77m)	
		Diameter (At Intake Flange)	47.8 (1.220m)	
Weight (dry) Pounds		Dry weight of flange engine with all required equipment including air starter but excluding reheat components and no residual fuel or oil.	6510	
		Weight of optional external equipment - fuel flowmeter.	5	
		Estimated weight of residual fuel & oil	39	
Center of Gravity (dry) Inches		Forward of main engine mounting trunnion center line.	13.4	
		Below engine horizontal center line	2.0	
Ignition		Ignition Unit	Lucas Aerospace Ltd.	NB 10705
		Igniters (2)	Champion Sparking Plug Co. Ltd.	CBS 112-3 & 112-4
Certification Basis	<p>FAR 21.29 and FAR 33 effective February 1, 1965, as amended by Amendment 33-1 through 33-3, plus Special Conditions No. 33-40-EU-10 and Amendment No. 1 thereto, dated December 6, 1974.</p> <p>Type Certificate No. E20EU issued March 17, 1978. Effective date of application for type certification: January 19, 1967.</p> <p>Pursuant to FAR 21.29(a)(ii) type certificate was issued in validation of the Anglo/French certification of compliance with Special Conditions No. 33-40-EU-10 including Amendment No. 1; and Anglo/French TSS Standards which were found to provide a level of safety equivalent to the above FAR 33 regulations as follows: The Anglo/French Supersonic Transport TSS Standards as defined in Contents List No. 29, dated March 26, 1976, Part 0, Number 0-0, 0-1, and Appendix; Part 6 Number 6-5, 6-6, 6-8, 6-9, and Appendices to each and 6-7.</p>			
Import Requirements	<p>Each individually imported engine unit must be accompanied by a Rolls-Royce Limited, Aero Division-Bristol/Societe Nationale d'Etudes et de Construction de Moteurs d'Aviation, CAA or Bureau Veritas approved "Inspection and Test Certificate" signed by a person authorized by CAA or B.V. as appropriate and containing the following statement: "The engine unit covered by this certificate conforms to the type certificate and is in condition for safe operation, and has been subjected by the manufacturer to a final operational check".</p>			
Additional Requirements	<p>SFAR 27 as amended by Amendments 1 and 2 thereto.</p>			

NOTE 5. Accessory drive provisions:

Drive	*Rotation	Speed Ratio to HP		Torque (in. -lb.)		Overhang Moment (in. -lb)
		Turbine Shaft	Cont.	Static		
Starter	cc	.805:1	7800(stall)	22700 (shear neck)		216
I.D.G.	c	.805:1	1547	8905		203
Hydraulic Pump (Main)	cc	.4355:1	1690	3617		127
Hydraulic Pump (Standby)	c	.4355:1	900	2179		82
First Stage Fuel Pump	cc	1.414:1	425	2751		141
Fuel Control	c	.526:1	40	230		349
Unit with Second Stage Pump (air driven)	c					

*Clockwise (c) or counterclockwise (cc) looking on the drive face of the accessory.

NOTE 6. Maximum permissible air bleed extraction:

Maximum RPM for air bleed extraction - unrestricted.

Max Bleed for Eng. & Airplane Services	Air Mass Flow Lb/Sec.	% Total No-Bleed Mass Flow
Cabin Conditioning - Normal Max.	1.2	--
Emergency Max.	2.4	--
Engine Anti-icing, Max.	--	0.52
Fuel Heating (below 5°C fuel temp) Max.	--	0.52

NOTE 7. A. Approved fuels & fuel additives, approved lubricating oils and limitations appropriate to each are listed in Technical Publication No. TP.178/B.E.D., Olympus 593 Mk. 610-14-28 Operating Instructions, Ch. 2 and Appendix 3, dated May 28, 1975 or later approved revision.

B. For wide-cut type (AVTAG JP.4) or mixture of wide-cut and Kerosene type (AVTUR JP.1) fuels the following limitations apply:

1. Minimum fuel inlet pressure - 20 psia.
2. Maximum fuel temperature 50°C. Refer to Engine Operating Instructions for techniques to avoid exceeding this limit.
3. Use of Maximum Contingency Power is prohibited.

NOTE 8. Life limited parts are identified in Chapter 5 of the Olympus 593 Mk. 610-14-28 Engine Maintenance Manual, TP 181/1/R/SN.

NOTE 9. Olympus 593 Mk. 610-14-28 manuals approved by the Anglo/French Authorities accepted as equivalent to FAR 33.5 requirements are as follows:

- Operating Instructions TP.178/B.E.D.
- Maintenance Manual TP.181/1/RR/SN
- Installation Manual See NOTE 10.
- Overhaul Manual TP.187/1/RR/SN and TP.187/1/RR/SN

NOTE 10. The Olympus 593 Mk. 610-14-28 is limited to installation on the French/British Concorde airplane.

NOTE 11. This engine approval includes the engine unit, primary and secondary nozzle with reverser as defined on RR DIS 843, issue 1, or later, for the Mk 610-14-28 as approved by the CAA.

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