

**PART 2**  
**CHAPTER 2—ENGINE LIMITATIONS**

**Contents**

	<b>Para</b>
Engine Limitations ... ..	1
Oil Pressure ... ..	2
Minimum Starting Temperature ... ..	3
Approved Fuels ... ..	4

**Engine Limitations**

1. The Avon 302 engine is cleared for use subject to the limitations in Table 1 and the relevant Notes.

**Table 1 — Avon 302 Engine Limitations**

<i>Power Rating</i>	<i>Time Limit per Flight or per Hour</i>	<i>RPM (per cent)</i>	<i>Max JPT °C</i>
Maximum cold power (or any degree of reheat — see Note 3)	15 min (combined)	102.5 max (see Note 1)	795 (see Note 2)
Intermediate	30 min	98.0 max	755
Max continuous	Unrestricted	97.0 max	720
Approach	Unrestricted	60.0 min	—
Slow idle	Unrestricted	31.0 to 34.0	750 (see Note 4)
Ground fast idle	Unrestricted	58.0 min	750 (see Note 4)
During starting	—	—	800

Note 1: During climbs at maximum power conditions the governed speed may be permitted to rise to 104% RPM but the maximum JPT is not to be exceeded. During reheat selections and cancellations, transient overswings (5 seconds) are permitted up to 106% RPM.

Note 2: During certain engine accelerations, temperatures in excess of the limiting JPT may be experienced. Full control should be established by the JPT controller within 5 seconds. If, owing to a malfunction, control is not established within this period, temperatures up to 850°C may be tolerated for a further period of 10 seconds while manual control is being taken.

Note 3: The maximum continuous reheat running time is 15 minutes; if further time is required, the reheat is to be cancelled and re-selected. This limitation applies to all degrees of reheat and included in this period is any time spent with maximum cold power selected.

Note 4: Under adverse conditions of high ambient temperature and/or tailwind while at slow idle or ground fast idle, the JPT may be allowed to exceed the limit of 750°C but is not to exceed 800°C.

**Oil Pressure**

2. The oil pressure warning captions are to be out at 45% RPM and above.

**Minimum Starting Temperature**

3. The minimum ambient temperature for engine starting is minus 20°C. In temperatures below this value, the engine is to be heated as necessary before starting.

**Approved Fuels**

4. The following fuels are approved for use:

<i>NATO Code</i>	<i>UK Joint Service Desig</i>	<i>UK Specification</i>	<i>US Designation</i>
F34	AVTUR/FSII	DERD 2453	JP-8
F40	AVTAG/FSII	DERD 2454	JP-4
F44	AVCAT/FSII	DERD 2452	JP-5
F35	AVTUR	DERD 2494	—
—	AVTAG	DERD 2486	—
F43	AVCAT	DERD 2498	—

Note: FSII (DERD 2451) may be added to the fuels above which are not designated with FSII, in the proportion 0.10% to 0.15% by volume. A corrosion inhibitor/lubricity improving additive (DERD 2461) should be used with any of the fuels listed.

UK RESTRICTED

*Intentionally Blank*

UK RESTRICTED

This file was downloaded  
from the RTFM Library.

Link: [www.scottbouch.com/rtfm](http://www.scottbouch.com/rtfm)

Please see site for usage terms,  
and more aircraft documents.

