

## PART 2

### CHAPTER 2—ENGINE LIMITATIONS

#### Contents

|                                     | Para |
|-------------------------------------|------|
| Engine Limitations ... ..           | 1    |
| Oil Pressure ... ..                 | 2    |
| Minimum Starting Temperature ... .. | 3    |
| Approved Fuels ... ..               | 4    |

#### Engine Limitations

- 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<br/>or per Hour</i> | <i>RPM<br/>(per cent)</i> | <i>Max JPT<br/>°C</i> |
|---|--|---------------------------|-----------------------|
| Maximum cold power<br>(or any degree of<br>reheat — see Note 3) | 15 min<br>(combined)                         | 102.5 max<br>(see Note 1) | 795<br>(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<br>(see Note 4)   |
| Ground fast idle  | Unrestricted                                 | 58.0 min                  | 750<br>(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

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

#### Minimum Starting Temperature

- 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

- The following fuels are approved for use:

| <i>NATO<br/>Code</i> | <i>UK Joint<br/>Service Desig</i> | <i>UK<br/>Specification</i> | <i>US<br/>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.

