TYPE-CERTIFICATE
DATA SHEET

No. P.020

For Propeller
AV-804 series propellers

Type Certificate Holder
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

For Models:
AV-804-1
Intentionally left blank
# TABLE OF CONTENTS

## I. General

1. Type/ Models ........................................................................................................... 4  
2. Type Certificate Holder ......................................................................................... 4  
3. Manufacturer .......................................................................................................... 4  
4. Date of Application ................................................................................................. 4  
5. EASA Type Certification Date ................................................................................ 4  

## II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements ............. 4  
2. EASA Certification Basis .......................................................................................... 4  
   2.1. Airworthiness Standards .................................................................................... 4  
   2.2. Special Conditions ............................................................................................ 4  
   2.3. Equivalent Safety Findings ............................................................................... 4  
   2.4. Deviations ....................................................................................................... 4  

## III. Technical Characteristics

1. Type Design Definition ............................................................................................. 5  
2. Description ............................................................................................................... 5  
3. Equipment ............................................................................................................... 5  
4. Dimensions ............................................................................................................. 5  
5. Weight ..................................................................................................................... 5  
6. Hub/ Blade- Combinations ...................................................................................... 5  
7. Control System ........................................................................................................ 5  
8. Adaptation to Engine .............................................................................................. 5  
9. Direction of Rotation .............................................................................................. 5  

## IV. Operating Limitations

1. Approved Installations ............................................................................................ 6  
2. Maximum Take Off Power and Speed ..................................................................... 6  
3. Maximum Continuous Power and Speed ................................................................. 6  
4. Propeller Pitch Angle ............................................................................................. 6  

## V. Operating and Service Instructions

........................................................................................................................................ 6  

## VI. Notes

........................................................................................................................................ 7  

### SECTION: ADMINISTRATIVE

1. Acronyms and Abbreviations .................................................................................... 9  
2. Type Certificate Holder Record ............................................................................... 9  
3. Change Record ....................................................................................................... 9
I. General

1. Type/ Models
AV-804 / AV-804-1

2. Type Certificate Holder
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

Design Organisation Approval No.: EASA.21J.072

3. Manufacturer
Avia Propeller Ltd.
Beranových 65/666
199 00 Praha 9
Czech Republic

4. Date of Application

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AV-804-1</td>
<td>20 May 2015</td>
</tr>
</tbody>
</table>

5. EASA Type Certification Date

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AV-804-1</td>
<td>08 February 2018</td>
</tr>
</tbody>
</table>

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements
20 May 2015

2. EASA Certification Basis

2.1. Airworthiness Standards
CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006 except the CS-P 550 and CS-P 560 as allowed by CS-P 10(b), see note 1.

2.2. Special Conditions
None

2.3. Equivalent Safety Findings
None

2.4. Deviations
None
III. Technical Characteristics

1. Type Design Definition

Each design configuration is defined by a main assembly drawing and an appropriate parts list.

The AV-804-1-{ }-C-F-R(W) propeller model covers the following design configurations.
Design Configuration “Constant Speed, Feather, Reverse (System Walter )”
Drawing No. 117-0000 dated May 5, 2015 (*1)
Parts List No. R-117-0000 dated May 5, 2015 (*1)
(*1)effective is the declared issue or a later approved revision.

2. Description

The AV-804-1 propeller model is 4-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation “Constant speed”, “Feather”, and “Reverse”.
The hub is milled out of aluminium alloy.
The blades are forged and milled out of aluminium alloy.
Optionally the propeller may have installed a spinner and ice protection equipment.

3. Equipment

Spinner: according to Avia Propeller Service Bulletin No. 2M and all later approved versions.
Governor: according to Avia Propeller Service Bulletin No. 3N and all later approved versions.
Ice Protection: according to Avia Propeller Service Bulletin No. 4J and all later approved versions.

4. Dimensions

Propeller diameter: max. 2500 mm (98,4 in)

5. Weight

AV-804-1 Propeller Design Configuration
“Constant speed, Feather, Reverse”,
propeller spinner incl.: approx.. 80,0 kg (176,4 lb)

6. Hub/ Blade- Combinations

<table>
<thead>
<tr>
<th>Hub</th>
<th>Blade - Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV-804-1</td>
<td>-441</td>
</tr>
</tbody>
</table>

7. Control System

Propeller governors as listed in Avia Propeller Service Bulletin No. 3N and all later approved versions.
All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer.

8. Adaptation to Engine

ARP 880 Flange.

9. Direction of Rotation

Right-hand tractor (viewed in flight direction)
IV. Operating Limitations

1. Approved Installations
Specific installation not yet defined. The general suitability of all AV-804 propeller models for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

Refer to Avia Propeller Service Bulletin No.5G and all later approved versions.

2. Maximum Take Off Power and Speed
635 kW (850 HP)
1950 RPM

3. Maximum Continuous Power and Speed
635 kW (850 HP)
1950 RPM

4. Propeller Pitch Angle
Maximum pitch change range 105° - measured at 75% radius station

V. Operating and Service Instructions

<table>
<thead>
<tr>
<th>Operation and Installation Manual</th>
<th>P/N EN-1320</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Latest Issue/Revision</td>
<td></td>
</tr>
<tr>
<td>Issue 4, Rev. July 27, 2018 (*)</td>
<td></td>
</tr>
</tbody>
</table>

| Overhaul Manual                   | P/N EN-1291 |
| Date of Latest Issue/Revision     |             |
| Issue 4, Rev. June 25, 2018 (*)   |             |

| Overhaul Manual for Metal Blades  | P/N EN-1370 |
| Date of Latest Issue/Revision     |             |
| Issue 5, Rev. March 12, 2018 (*)  |             |

| Service Bulletins                | as noted in the current List of Service Bulletins |

(*') effective is the declared issue or a later approved revision
VI. Notes

1. This Propeller has been certificated in accordance with CS-P subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has not yet been demonstrated.

2. The EASA approved Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness is published in the applicable “Propeller Operation and Installation Manual” document, chapter 1 “Airworthiness Limitations”.

3. The suitability of a propeller for certain aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

4. Propeller designation system:

```
Hub / Blade
AV - 804 - 1 - E - ( ) - ( ) - ( ) - ( ) - ( ) / ( ) ( ) 250 – 441 ( )
1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5
```

Hub

1  Avia Propeller (manufacturer)

2  V - Variable Pitch Propeller

3  Blade Root Type

4  Number of Blade

5  No. of variant of the propeller model

6  code letter for flange type
   B  = AS-127-D, SAE No.2 mod., ½ inch - 20 UNF bolts
   D  = ARP 502
   E  = ARP 880
   K  = M14 Flange

7  code letter for counterweights
   blank  = no or small counterweights for pitch change forces to decrease pitch
   C  = counterweights for pitch change forces to increase pitch

8  code letter for feather provision
   blank  = no feather position possible
   F  = feather position installed

9  code letter for reverse provision
   blank  = no reverse position possible
   R  = reverse position installed
10 code letter for reverse system
   (W) = System Walter

11 code letter for design changes
   small letter for changes which do not affect interchangeability
   capital letter for changes which restrict or exclude interchangeability

**Blade**

1 code letter for position of pitch change pin
   blank = pitch change pin position for pitch change forces to decrease pitch
   C = pitch change pin position for pitch change forces to increase pitch
   CF = pitch change pin position for feather provision; pitch change forces to increase pitch
   CR = pitch change pin position for reverse provision; pitch change forces to increase pitch
   CFR = pitch change pin position for feather and reverse provision; pitch change forces to increase pitch

2 code letter for blade design and installation
   blank = right-hand tractor
   RD = right-hand pusher
   L = left-hand tractor
   LD = left-hand pusher

3 propeller diameter in cm

4 No. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade – combinations

5 code letter for design changes
   small letter for changes which do not affect interchangeability of blade set
   capital letter for changes which restrict or exclude interchangeability of blade set
SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations
n/a

II. Type Certificate Holder Record
Avia Propeller Ltd.

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 01</td>
<td>08 February 2018</td>
<td>Initial Issue</td>
<td>Initial Issue, 08 February 2019</td>
</tr>
</tbody>
</table>

-END-