



# **Pilot Operating Handbook And Aircraft Flight Manual**

## **DHC-6 Series 400 (Twin Otter) and Variants**

(Serial Numbers 845 and Subsequent)  
Type Certificate A-82 (Canada)

Manufactured by Viking Air Limited  
Type Certificate held by Viking Air Limited

Aircraft Serial Number \_\_\_\_\_  
Aircraft Registration \_\_\_\_\_

Sections 1 through 10 inclusive of this document comprise the Pilot Operating Handbook (POH) for the DHC-6 Series 400 Twin Otter. Sections 1, 2, 3, 4, 5 and any supplement in Section 9 are Transport Canada Civil Aviation approved and constitute the approval Aircraft Flight Manual. Compliance with Section 2, Limitations, is mandatory.

Sections 0, 6, 7, 8 and 10 are not approved and are provided for information only.

**This document meets General Aviation Manufacturer (GAMA) Specification No. 1, Specifications for Pilot Operating Handbook, issued February 15, 1975 and revised October 18, 1996.**

### **PSM 1-64-1A Aircraft Flight Manual**

Approved by Chief, Flight Test  
Transport Canada: \_\_\_\_\_

Date: 8 February 2017

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Please cite the revision number of this manual anytime excerpts are reproduced in training materials or quick reference checklists.

**Contents (Major Sections of this Handbook)**

This handbook (Section 0 through 10 inclusive) forms the Pilot Operating Handbook (POH); Viking Air Limited publication PSM1-64-POH.

PSM 1-64-POH contains Section 0 - Introduction, Section 7 - Aircraft and Systems Description, Section 8 - Handling Servicing and Maintenance, and Section 10 - Safety and Operational Tips. The Supplementary Operating Data is contained in Sections 7 & 10.

PSM 1-64-POH also contains the approved Aircraft Flight Manual PSM 1-64-1A (Sections 1 through 5 inclusive, and Section 9) plus an excerpt from the Weight and Balance Manual PSM 1-64-8 (Section 6). This excerpt has been included in the POH to enable the flight crew to easily refer to it. However, PSM 1-64-8 continues to be produced in complete form as stand-alone publication, the content in this POH does not replace this manual.

|    |                                    |
|----|------------------------------------|
| 0  | INTRODUCTION                       |
| 1  | GENERAL                            |
| 2  | LIMITATIONS                        |
| 3  | EMERGENCY AND ABNORMAL PROCEDURES  |
| 4  | NORMAL PROCEDURES                  |
| 5  | PERFORMANCE                        |
| 6  | WEIGHT AND BALANCE                 |
| 7  | AIRCRAFT AND SYSTEMS DESCRIPTION   |
| 8  | HANDLING SERVICING AND MAINTENANCE |
| 9  | SUPPLEMENTS                        |
| 10 | SAFETY AND OPERATIONAL TIPS        |

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## LOG OF REVISIONS

Revisions are applicable to all Twin Otter Series 400 Flight Manuals. This Manual is valid only when it incorporates all revisions issued. The revised portion of a given page is indicated by a vertical black line in the margin. Transport Canada Approval of each revision is recorded below.

| Rev. No. | Pages Affected | Subject                                                                                                                                                                                                                                     | TCCA Approval by/Date                                                                                                                                                                                       |
|----------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | All pages.     | <p>Outstanding Temporary Amendments (TAs) 01 through 08 &amp; 10 incorporated.</p> <p>Section 5 - Incorporated TA-04 Power Charts. Clarification provided for preamble and performance charts.</p> <p>Miscellaneous changes throughout.</p> | <br><b>Chief, Flight Test<br/>for Director, National Aircraft<br/>Certification<br/>TRANSPORT CANADA</b><br>4 April 2014 |
|          | Page v         | To correct TA reference for Section 5 from TA-04 to TA-03.                                                                                                                                                                                  | <br><b>Chief, Flight Test<br/>for Director, National Aircraft<br/>Certification<br/>TRANSPORT CANADA</b><br>140731     |

| Rev. No. | Pages Affected                                                                                                                                                                                                                                                                                             | Subject                                                                                                                                                                                   | TCCA Approval by/Date                                                                                                                                                                                                         |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2        | <p>Pages 2-13, 2-15, 2-16, 2-34, 2-41 &amp; 2-42</p> <p>Pages 3-22, 3-25, 3-37, 3-45, 3-51, 3-57, 3-59, 3-98, 3-116 to 3-119 &amp; 3-122</p> <p>Pages 4-12, 4-18 to 4-20, 4-22, 4-23, 4-26, 4-27, 4-28, 4-30, 4-34, 4-42 &amp; 4-48</p> <p>Pages 5-48 &amp; 5-49</p> <p>Page 9-1-15</p> <p>Page 9-8-10</p> | <p>Outstanding Temporary Amendments (TAs) 12 through 15 and 18 incorporated.</p> <p>Incorporated Mod 6/2314 to multiple sections throughout.</p> <p>Miscellaneous changes throughout.</p> |  <p><b>Chief, Flight Test<br/>for Director, National Aircraft<br/>Certification<br/>TRANSPORT CANADA</b></p> <p><i>13 October 2015</i></p> |
|          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                           |                                                                                                                                                                                                                               |

| Rev. No. | Pages Affected                                                                                                                                                                                                                            | Subject                                                                                                                                                                                                                                                      | TCCA Approval by/Date                                                                                                                                                                                                 |
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| 3        | Page 2-33<br><br>Pages 3-60 & 3-61<br><br>Page 4-18<br><br>Pages 4-42 & 4-23<br><br>Pages 3-58, Pg 3-78 to 3-82, Pg 3-85 to 3-126, Pages 4-18, 4-19, 4-22, 4-23, 4-42 & 4-43<br><br>Pages 4-45-9 & 4-45-10<br><br>Pages 9-50-66 & 9-50-67 | TA-16 Incorporated<br><br>TA-24 Incorporated<br><br>TA-17 Incorporated<br><br>TA-22 Incorporated<br><br>Sections 3 & 4 incorporated Mod 6/2315.<br><br>Supplement 45 incorporated Mod 6/2315.<br><br>Supplement 50 full reprint and incorporated Mod 6/2315. | <br><b>Chief, Flight Test<br/>for Director, National Aircraft<br/>Certification<br/>TRANSPORT CANADA</b><br><i>8 February 2017</i> |

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# DHC-6 SERIES 400 PILOT OPERATING HANDBOOK

## REVISION INDEX

This index is for recording PSM1-64-POH, Sections 0, 7, 8 & 10. The revised portion of a given page is indicated by a vertical black line in the margin.

| Revision No. | Revision Date | Insertion Date | Inserted by | Details                                   |
|--------------|---------------|----------------|-------------|-------------------------------------------|
| 1            | 30/May/2014   | AUG 6, 2014    | ATP/FN      | Complete rewrite of Sections 0, 7, 8 & 10 |
| 2            | 16/Oct/2015   | OCT 19, 2015   | ATP/RLL     | Change Pages only                         |
| 3            | 08/Feb/2017   | FEB 13, 2017   | ATP/RLL     | Changed Pages only                        |
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**DHC-6 SERIES 400 PILOT OPERATING HANDBOOK****REVISION INDEX**

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### LOG OF TEMPORARY AMENDMENTS

Retain this LOG at the front of the manual. When Temporary Amendments are issued or removed (cancelled, superseded or incorporated into a Revision), enter the relevant information in the columns below.

| TA No. | Date Inserted                            | Date Removed | Subject:<br>Page No (s).                                         |
|--------|------------------------------------------|--------------|------------------------------------------------------------------|
| 01     | 29/09/2010                               | 30/05/2014   | Section 5 – Noise Levels<br>page 5-10                            |
| 02     | Not Issued                               |              |                                                                  |
| 03     | 30/04/2012                               | 30/05/2014   | Section 5 – Power Charts<br>Pages 5-34 to 5-39                   |
| 04     | <b>Superseded by TA-09</b><br>19/09/2014 |              | Section 2 – FAA Exemption<br>page 2-8                            |
| 05     | 19/08/2013                               | 30/05/2014   | Section 2 – Limitations<br>After page 2-20                       |
| 06     | 19/08/2013                               | 30/05/2014   | Section 3 – Emergency & Abnormal<br>Procedures, Facing page 3-19 |
| 07     | 19/08/2013                               | 30/05/2014   | Section 4 – Normal Procedures<br>After Page 4-20                 |
| 08     | 19/08/2013                               | 30/05/2014   | Section 4 – Normal Procedures<br>Facing page 4-25                |
| 09     | <b>Superseded by TA-11</b><br>19/09/2014 |              | Section 2 – Limitations<br>After page 2-8                        |
| 10     | 16/10/2013                               | 30/05/2014   | Section 4 - Normal Procedures<br>Facing page 4-23                |
| 11     | <b>Superseded by TA-21</b><br>07/10/2015 |              | Section 2 – Limitations<br>After page 2-8                        |
| 12     | 08/12/2014                               | 16/10/2015   | Section 4 - Normal Procedures<br>After page 4-48                 |
| 13     | 16/01/2015                               | 16/10/2015   | Section 2 - Limitations<br>Facing page 2-17                      |
| 14     | 16/01/2015                               | 16/10/2015   | Section 5 - Performance<br>After page 5-48                       |
| 15     | 26/02/2015                               | 16/10/2015   | Section 4 - Normal Procedures<br>Facing page 4-21                |

| TA No. | Date Inserted                              | Date Removed | Subject:<br>Page No (s).                                     |
|--------|--------------------------------------------|--------------|--------------------------------------------------------------|
| 16     | 29/03/2016                                 | 08/02/2017   | Section 2 - Limitations<br>After page 2-32                   |
| 17     | 29/03/2016                                 | 08/02/2017   | Section 4 - Normal Procedures<br>Facing page 4-19            |
| 18     | 27/03/2015                                 | 16/10/2015   | Section 3 - Emergency Procedures<br>After page 3-24          |
| 19     | 20/07/2015                                 | 16/10/2015   | Section 2 - Limitations<br>After page 2-44                   |
| 20     | 20/07/2015                                 | 16/10/2015   | Section 2 - Limitations<br>After page 2-51                   |
| 21     | <b>(Superseded by TA-23)</b><br>21/07/2016 |              | Section 2 – Limitations<br>After page 2-8                    |
| 22     | 29/03/2016                                 | 08/02/2017   | Section 4 - Normal Procedures<br>Facing page 4-43            |
| 23     | <b>(Superseded by TA-23)</b><br>16/10/2017 |              | Section 2 - Limitations<br>After Page 2-8 (Supersedes TA-21) |
| 24     | 25/10/2016                                 | 08/02/2017   | Section 3 - Emergency Procedures<br>After Page 3-60          |
| 27     | 07/03/2017                                 |              | Section 2 - Limitations<br>After Page 2-44                   |
| 25     | <b>(Superseded by TA-34)</b><br>13/12/2017 |              | Section 1 - General<br>Facing Page 1-13                      |
| 26     | 06/04/2017                                 |              | Section 5 - Performance<br>After Page 5-16                   |
| 29     | 06/04/2017                                 |              | Section 2 - Limitations<br>Facing Page 2-27                  |
| 28     | 05/05/2017                                 |              | Section 3 - Emergency Procedures<br>Facing Page 3-59         |
| 30     | 10/05/2017                                 |              | Section 4 - Normal Procedures<br>After Page 4-18             |
| 31     | 02/10/2017                                 |              | Section 4 - Normal Procedures<br>Facing Page 4-35            |
| 32     | 02/10/2017                                 |              | Section 4 - Normal Procedures<br>Facing Page 4-37            |
| 33     | 16/10/2017                                 |              | Section 2 - Limitations<br>after Page 2-8                    |



# AIRCRAFT FLIGHT MANUAL

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# DHC-6 SERIES 400 PILOT OPERATING HANDBOOK

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**DHC-6 SERIES 400 PILOT OPERATING HANDBOOK****REVISION INDEX**

| <b>Revision<br/>No.</b> | <b>Revision<br/>Date</b> | <b>Insertion<br/>Date</b> | <b>Inserted<br/>by</b> | <b>Details</b> |
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**LIST OF AVAILABLE SUPPLEMENTS**

The following is a list of TCCA approved Supplements available for the Series 400 A/C. If you require any of the following Supplements for your A/C please contact Viking Air Limited.

| <b>Supplement No.</b> | <b>Issue Status</b> | <b>Subject</b>                                                         | <b>Remarks</b>            |
|-----------------------|---------------------|------------------------------------------------------------------------|---------------------------|
| 1                     | 4                   | De-Icing System<br>(S.O.O.s 6004, 6202 & 6187)                         | TC Approved<br>07/03/2017 |
| 5                     | 3                   | Intermediate Flotation Gear<br>(S.O.O. 6048)                           | TC Approved<br>25/04/2014 |
| 8                     | 4                   | Auxiliary Wing Tanks<br>(S.O.O. 6247)                                  | TC Approved<br>13/10/2015 |
| 10                    | 4                   | Wheel-Skiplane Operation<br>(S.O.O. 6001)                              | TC Approved<br>07/03/2017 |
| 19                    | 3                   | Operation with Autofeather<br>Inoperative                              | TC Approved<br>25/04/2014 |
| 37                    | 3                   | Supplemental Performance<br>Data                                       | TC Approved<br>25/04/2014 |
| 38                    | 6                   | IAC AR Certified Airplanes<br>(S.O.O. 6271)                            | TC Approved<br>09/11/2016 |
| 39                    | 1                   | Barra Beach Performance<br>(S.O.O. 6329)                               | TC Approved<br>26/02/2015 |
| 40                    | 1                   | Reduced Ground Roll –<br>20 Deg Flap Take-Off<br>(S.O.O. 6401)         | TC Approved<br>20/06/2018 |
| 42                    | 1                   | Cold Weather Operations<br>Kit (S.O.O.s 6276 or 6287)                  | TC Approved<br>13/03/2013 |
| 43                    | 3                   | Upgraded Performance<br>(S.O.O. 6319)                                  | TC Approved<br>15/05/2019 |
| 44                    | 2                   | Upgraded Performance –<br>Autofeather Inoperative                      | TC Approved<br>22/05/2017 |
| 45                    | 2                   | Cabin Auxiliary Power<br>Outlets (S.O.O.s 6272,<br>6281, 6282 or 6283) | TC Approved<br>08/02/2017 |

| Supplement No. | Issue Status | Subject                                             | Remarks                |
|----------------|--------------|-----------------------------------------------------|------------------------|
| 46             | 1            | Float Mounted Depth Sounder (S.O.O. 6295)           | TC Approved 21/06/2013 |
| 47             | 1            | VHF-FM Transceiver (S.O.O. 6296)                    | TC Approved 21/06/2013 |
| 48             | 2            | CAAC Certified Airplanes (S.O.O. 6302)              | TC Approved 11/04/2016 |
| 50             | 5            | Phase 2 - Avionics Upgrade                          | TC Approved 13/02/2018 |
| 51             | 2            | JCAB Certified Airplanes (S.O.O. 6326)              | TC Approved 07/03/2017 |
| 52             | 1            | Stretcher Installation (S.O.O. 6208)                | TC Approved 16/02/2015 |
| 53             | 1            | Alternate Engine Display Colours (S.O.O. 6280)      | TC Approved 27/11/2015 |
| 54             | 1            | ANAC Registered Airplanes (S.O.O. 6363)             | TC Approved 18/10/2016 |
| 55             | 2            | Apex Super-Lite Avionics                            | TC Approved 13/02/2018 |
| 57             | 1            | FATA Certified Airplanes (S.O.O. 6410)              | TC Approved 21/02/2017 |
| 58             | 1            | ANAC (Argentina) Registered Airplanes (S.O.O. 6412) | TC Approved 26/05/2017 |
| 59             | 2            | Operations Without Flight Data Recorder             | TC Approved 13/02/2018 |
| 60             | 1            | DGCA (India) Registered Airplanes (S.O.O. 6414)     | TC Approved 22/06/2017 |
|                |              |                                                     |                        |
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