

# ARCHER II

## PA-28-181

# PILOT'S OPERATING HANDBOOK

AND

## FAA APPROVED AIRPLANE FLIGHT MANUAL

AIRPLANE  
SERIAL NO. 2890095

AIRPLANE  
REGIST. NO. HB-PLY

A-28-181

REPORT: VB-1120 FAA APPROVED BY:

Ward Evans

DATE OF APPROVAL:  
JULY 2, 1979

WARD EVANS  
D.O.A. NO. SO-1  
PIPER AIRCRAFT CORPORATION  
VERO BEACH, FLORIDA

FAA APPROVED IN NORMAL AND UTILITY CATEGORIES BASED ON CAR 3. THIS HANDBOOK INCLUDES THE MATERIAL REQUIRED TO BE FURNISHED TO THE PILOT BY CAR 3 AND CONSTITUTES THE APPROVED AIRPLANE FLIGHT MANUAL AND MUST BE CARRIED IN THE AIRPLANE AT ALL TIMES.

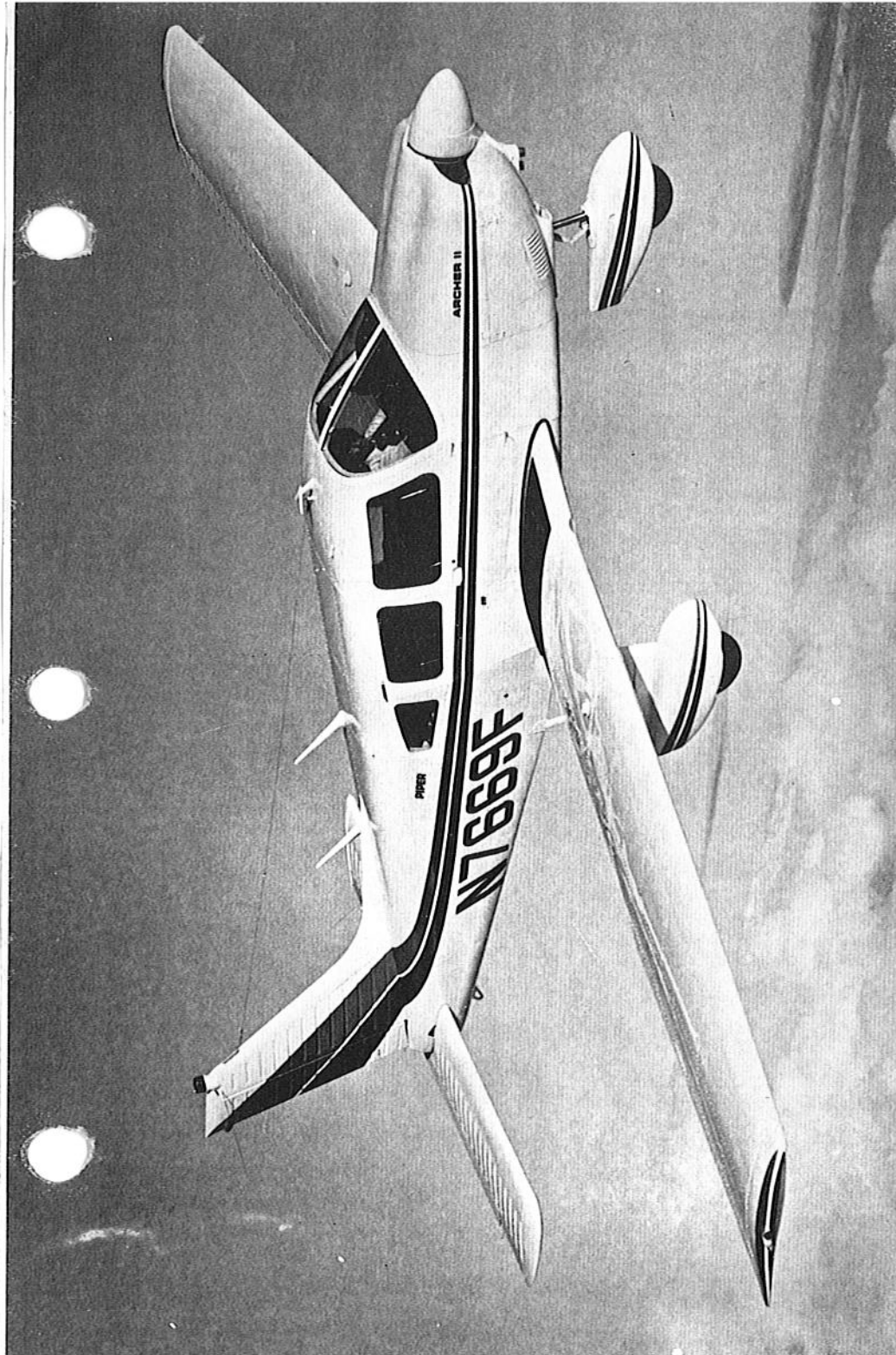


***WARNING***

**EXTREME CARE MUST BE EXERCISED TO LIMIT THE USE OF THIS HANDBOOK TO APPLICABLE AIRCRAFT. THIS HANDBOOK IS VALID FOR USE WITH THE AIRPLANE IDENTIFIED ON THE FACE OF THE TITLE PAGE. SUBSEQUENT REVISIONS SUPPLIED BY PIPER AIRCRAFT CORPORATION MUST BE PROPERLY INSERTED.**

Published by  
**PUBLICATIONS DEPARTMENT**  
Piper Aircraft Corporation  
Issued: July 2, 1979

**REPORT: VB-1120**



## APPLICABILITY

Application of this handbook is limited to the specific Piper PA-28-181 model airplane designated by serial number and registration number on the face of the title page of this handbook.

This handbook cannot be used for operational purposes unless kept in a current status.

## REVISIONS

The information compiled in the Pilot's Operating Handbook, with the exception of the equipment list, will be kept current by revisions distributed to the airplane owners. The equipment list was current at the time the airplane was licensed by the manufacturer and thereafter must be maintained by the owner.

Revision material will consist of information necessary to update the text of the present handbook and/or to add information to cover added airplane equipment.

### I. Revisions

Revisions will be distributed whenever necessary as complete page replacements or additions and shall be inserted into the handbook in accordance with the instructions given below.

1. Revision pages will replace only pages with the same page number.
2. Insert all additional pages in proper numerical order within each section.
3. Page numbers followed by a small letter shall be inserted in direct sequence with the same common numbered page.

### II. Identification of Revised Material

Revised text and illustrations shall be indicated by a black vertical line along the outside margin of the page, opposite revised, added or deleted material. A line along the outside margin of the page opposite the page number will indicate that an entire page was added.

Black lines will indicate only current revisions with changes and additions to or deletions of existing text and illustrations. Changes in capitalization, spelling, punctuation or the physical location of material on a page will not be identified.

### **ORIGINAL PAGES ISSUED**

The original pages issued for this handbook prior to revision are given below:

Title, ii through vii, 1-1 through 1-21, 2-1 through 2-10, 3-1 through 3-15, 4-1 through 4-21, 5-1 through 5-29, 6-1 through 6-43, 7-1 through 7-24, 8-1 through 8-18, 9-1 through 9-14, and 10-1 through 10-2.

## PILOT'S OPERATING HANDBOOK LOG OF REVISIONS



Current Revisions to the PA-28-181 Archer II Pilot's Operating Handbook,  
REPORT: VB-1120 issued July 2, 1979.

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 1 (PR800529)	1-3	Revised para. 1.7 (c).	
	2-3	Revised para. 2.7 (d) (8).	
	2-4	Revised para. 2.9 (a).	
	2-10	Added placards.	
	3-3	Revised wording.	
	3-10	Revised wording.	
	4-8	Corrected spelling.	
	4-11	Revised para 4.9.	
	4-20	Revised wording.	
	6-i	Revised Table of Contents.	
	6-6	Revised Figure 6-5.	
	6-12	Revised Figure 6-15.	
	6-12a thru 6-12d	Added pages and added new info.	
	6-13	Revised para. no.	
	6-22	Added item 97 b.	
	6-23	Added item 105.	
	6-25	Relocated items to pg. 6-26; added new item 145.	
	6-26	Relocated items to pg. 6-27; added new items 147, 149; re-numbered items.	
	6-27	Relocated items to pg. 6-28; renumbered items.	
	6-28	Relocated items to pg. 6-29b and pg. 6-29a.	
6-29 6-29a	Relocated items to pg. 6-29a. Added new pg.; relocated items from pg. 6-29 and item 203 from pg. 6-28.		
6-29b	Added new pg. and new items 219, 227, 229.		

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 1 (cont)	6-29c	Added new pg. and new items 231 thru 241.	
	6-29d	Added new pg. and new item 243; relocated and renumbered items from pg. 6-30.	
	6-30	Relocated and renumbered items from pg. 6-31.	
	6-31	Relocated items from pg. 6-32; added new items 265 and 267.	
	6-32	Relocated item from pg. 6-33; renumbered items.	
	6-33	Relocated and renumbered items from pg. 6-34; added new item 285.	
	6-34	Renumbered items; added new items 289, 291, 295.	
	6-35	Renumbered items; relocated item to pg. 6-36; added item from pg. 6-34.	
	6-36	Renumbered items; relocated item to pg. 6-37.	
	6-37	Renumbered items; relocated item to pg. 6-38.	
	6-38	Renumbered items; relocated item from pg. 6-37.	
	6-39	Renumbered items.	
	6-41	Relocated item to pg. 6-42; added new item 429.	
	6-42	Relocated item to pg. 6-43; renumbered items; added items 431 and 433.	
	6-43	Added item from pg. 6-42.	
	7-i	Added para. 7.39 to Table of Contents.	
	7-20	Revised material.	
	7-24	Added para. 7.39.	

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 1 (cont)	7-25 8-12 8-12a 8-12b  8-13 8-14 8-15 10-2	Added pg.; added new info. Revised para. 8.21 (a) (b). Added pg.; added new info. Added pg.; relocated material from pg. 8-12 and 8-13; added cautions and revised info. (c). Relocated info. to pg. 8-12; added info. from pg. 8-14. Relocated info. to pg. 8-13; added info. from pg. 8-15. Relocated info. to pg. 8-14. Added para. 10.3 (j).	 Ward Evans May 29, 1980
Rev. 2 (PR800822)	9-i  9-15 thru 9-18	Added supplement 5 and pages Added supplement 5 (Century 21 Autopilot).	 Ward Evans Aug. 22, 1980
Rev. 3 (PR810114)	Title ii 2-3 2-4 3-i  3-6  3-7  3-8	Revised approval. Revised warning. Revised para. 2.7 (d) (6). Revised para. 2.9 (c). Changed para. 3.23 title, page nos. Changed alternator failure to electrical failures; add info., moved info. to pg. 3-7. Relocated info. from pg. 3-6; moved info. to pg. 3-8. Relocated info. from pg. 3-7.	



## PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 3 (cont)	3-13	Revised, retitled para. 3.23 with added info.	
	3-14	Added para. 3.24; moved para. 3.25 and 3.27 to pg. 3-15, and para. 3.29 to pg. 3-16.	
	3-15	Relocated para. 3.25 and 3.27 from pg. 3-14; moved para. 3.31 to pg. 3-16.	
	3-16	New page, relocated para. 3.29 from pg. 3-14 and para. 3.31 from pg. 3-15.	
	3-17	New page, added relocated info.	
	6-19	Added item 61.	
	6-29a	Added item 204.	
	6-31	Revised item 267.	
	6-33	Added item 274; revised item 275; moved items 283 and 285 to pg. 6-34.	
	6-34	Relocated items 283 and 285 from pg. 6-33; moved items 291 thru 295 to pg. 6-35.	
	6-35	Relocated items 291 thru 295 from pg. 6-34; moved items 301 and 303 to pg. 6-36.	
	6-36	Relocated items 301 and 303 from pg. 6-35; moved item 309 to pg. 6-37.	
	6-37	Relocated item 309 from pg. 6-36; moved items 317 and 319 to pg. 6-38.	
	6-38	Relocated items 317 and 319 from pg. 6-37; moved item 327 to pg. 6-39.	
	6-39	Relocated item 327 from pg. 6-38; moved items 333 thru 337 to pg. 6-40.	

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 3(cont)	6-40	Relocated items 333 thru 337 from pg. 6-39; moved items 409 thru 417 to pg. 6-41.	
	6-41	Relocated items 409 thru 417 from pg. 6-40; moved items 423 thru 429 to pg. 6-42.	
	6-42	Relocated items 423 thru 429 from pg. 6-41; moved items 435 thru 441 to pg. 6-43.	
	6-43	Relocated items 435 thru 441 from pg. 6-42; moved info. to pg. 6-44.	
	6-44	New page; relocated info. from pg. 6-43.	
	7-7	Revised para. 7.13.	
	7-10	Revised para. 7.15.	
	7-11	Revised figure 7-11.	
	7-12	Cont. para. 7.15 revision.	
	7-13	Cont. para. 7.15 revision.	
	7-20	Revised para. 7.25.	
	9-i	Added supplement 6.	
	9-15 thru 9-18	Retyped supplement 5.	
	9-19 thru 9-20	Added supplement 6 (Piper Control Wheel Clock)	
	Rev. 4 (PR810625)	1-4	
5-1		Moved info. to pg. 5-2.	
5-2		Relocated info. from pg. 5-1; added Warning.	
6-6		Revised Figure 6-5.	
6-16		Revised item 21.	

## PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 4 (cont)	6-21	Revised items 85 and 87; moved item 95 to pg. 6-22.	<div style="font-family: cursive; font-size: 1.2em; margin-bottom: 5px;">Ward Evans</div> Ward Evans June 25, 1981
	6-22	Relocated item 95 from pg. 6-21.	
	6-25	Revised item 137.	
	6-31	Renumbered and moved item to pg. 6-31b.	
	6-31a	New page.	
	6-31b	Added items 268 and 269; relocated renumbered item from pg. 6-31.	
	6-33	Added item 276; moved item 281 to pg. 6-34.	
	6-34	Relocated item 281 from pg. 6-33.	
	6-35	Revised item 291.	
	6-42	Revised items 427, 429 and 431; moved item 433 to pg. 6-43.	
	6-43	Relocated revised item 433 from pg. 6-42.	
	6-44	Removed info.	
	7-7	Revised para. 7.11.	
7-10	Revised para. 7.15.		
Rev. 5 (PR811116)	3-i, 4-i	Revised Table of Contents.	
	4-4,	Revise Normal Procedure checklist.	
	4-7,		
	4-8		
	4-12	Relocated para. 4.13 info. to pg. 4-13; added Note; revised info.	
	4-13	Relocated Note to pg. 4-14; added para. 4.13 info. from pg. 4-12.	
4-14	Relocated para. 4.17 info. to pg. 4-15; added Note from pg. 4-13.		

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 5 (cont)	4-15	Relocated para. 4.21 to pg. 4-16; added para. 4.17 info. from pg. 4-14.	
	4-16	Relocated para. 4.23 and para. 4.25 to pg. 4-17; added para. 4.21 from pg. 4-15; added Note; revised info.	
	4-17	Relocated para. 4.27 info. to pg. 4-18; added para. 4.23 and para. 4.25 from pg. 4-16.	
	4-18	Relocated para. 4.29 info. to pg. 4-19; relocated para. 4.31 to pg. 4-19 and pg. 4-20; added para. 4.27 info. from pg. 4-17.	
	4-19	Relocated info. to pg. 4-20; added para. 4.29 and para. 4.31 info. from pg. 4-18; revised para. 4.31.	
	4-20	Relocated para. 4.37 and para. 4.39 to pg. 4-21; added info. from pg. 4-18 and pg. 4-19.	
	4-21	Relocated para. 4.41 to pg. 4-22; added para. 4.37 and para. 4.39 from pg. 4-20.	
	4-22	Added pg.; added para. 4.41 from pg. 4-21.	
	6-i	Revised Table of Contents.	
	6-13	Revised para. 6.11.	
	6-33	Relocated item 279 to pg. 6-34; renumbered old item 277; added new item 277.	
	6-34	Relocated item 289 to pg. 6-35; added item 279 from pg. 6-33.	

## PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)




Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 5 (cont)	6-35	Relocated items 297 and 299 to pg. 6-36; added items 289 from pg. 6-34.	
	6-36	Relocated item 307 to pg. 6-37; added items 297 and 299 from pg. 6-35.	
	6-37	Relocated items 313 and 315 to pg. 6-38; added item 307 from pg. 6-36.	
	6-38	Relocated item 325 to pg. 6-39; added items 313 and 315 from pg. 6-37.	
	6-39	Relocated item 329 to pg. 6-40 and renumbered item; relocated item 331 to pg. 6-40; revised item 328; added new item 329.	
	6-40	Relocated items 405 and 407 to pg. 6-41; added re-numbered items 330 and 331 from pg. 6-39.	
	6-41	Relocated items 419 and 421 to pg. 6-42; added revised item 405 from pg. 6-40; added item 407 from pg. 6-40.	
	6-42	Relocated item 431 to pg. 6-43; added items 419 and 421 from pg. 6-41.	
	6-43	Relocated item 443 to pg. 6-44; added item 431 from pg. 6-42.	
	6-44	Added item 443 from pg. 6-43; added new item 445.	
	7-20	Revised info.	
	9-18	Revised item (c) (4).	
	9-19	Revised item (a).	

*Ward Evans*  
 Ward Evans  
 Nov. 16, 1981

### PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 6 (PR820721)	iii	Revised handbook info.	
	1-i	Removed para. 1.21 - conversion factor index.	
	1-4	Added info. to para. 1.11.	
	2-1	Revised para. 2.1.	
	2-4	Added info. to para. 2.11.	
	2-9	Corrected placard error.	
	3-i	Expanded emerg. procedure index; moved info. to new pg. 3-ii.	
	3-ii	New pg.; relocated info. from pg. 3-i.	
	4-i	Expanded normal procedure index; moved info. to new pg. 4-ii.	
	4-ii	New pg.; relocated info. from pg. 4-i.	
	4-1	Revised para. 4.1.	
	6-i	Revised index pg.	
	6-6	Revised fig. 6-5 info.	
	6-7	Revised fig. 6-7 info.	
	6-9	Added info. to fig. 6-9.	
	6-10	Added info. to fig. 6-11.	
	6-12a	Revised para. 6.9.	
	7-20	Revised para. 7.25.	
	7-21	Revised para. 7.31; moved para. 7.33 info. to pg. 7-22.	
	7-22	New pg.; relocated info. from pg. 7-21.	
9-i	Updated Supplement index pg.		
9-13	Revised Supplement 4 (pitch trim).		

## PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)

Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 6(cont)	9-21 thru 9-40	Added new Supplement 7.	 Ward Evans July 21, 1982
	9-41 thru 9-66	Added new Supplement 8.	
Rev. 7 (PR821115)	1-12 thru 1-21	Deleted para. 1.21 and pages.	
	5-3 thru 5-7	Revised para. 5.5.	
	7-12 7-13	Relocated info. from pg. 7-13. Moved info. to pg. 7-12, added Caution.	
	8-2	Revised para. 8.3.	
	8-3	Revised para. 8.3 and 8.5, relocated info. from pg. 8-4.	
	8-4	Moved revised para. 8.5 to pg. 8-3, relocated info. from pg. 8-5.	
	8-5	Moved info. to pg. 8-4.	
	8-5	Moved info. to pg. 8-4.	
Rev. 8 (PR830720)	1-9	Deleted MEA.	 Ward Evans Nov. 15, 1982
	1-12	Deleted pg. 1-12, para. 1.21.	
	2-10	Moved fuel placards to pg. 2-11.	
	2-11	Added new page (GAMA placard).	
	6-9	Revised fig. 6-9.	
	8-2	Revised para. 8.3.	
	8-3	Revised para. 8.5.	
	9-67 thru 9-70	Added Supplement 9.	
	9-70	Added Supplement 9.	
			 Ward Evans July 20, 1983

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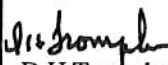
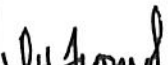
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**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

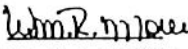

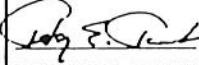
Revision Number and Code	Revised Pages	Description of Revision	FAA Approval Signature and Date
Rev. 9 (PR840629)	vii 1-3 1-7, 1-8 2-3 3-1 4-4, 4-6 4-11 4-15 5-29 6-1 6-2 6-5 6-16 7-3 7-8 7-10 7-14 7-21 8-12 10-i 10-1, 10-2	Revised Table of Contents. Revised para. 1.7. Revised item (b). Revised para. 2.7. Revised para. 3.1. Revised procedures. Revised para. 4.9. Revised para. 4.19. Revised Fig. 5-37. Revised para. 6.1. Revised para. 6.3. Revised para. 6.5. Revised item (b). Revised para. 7.7. Revised para. 7.13. Revised para. 7.15. Revised para. 7.17. Revised para. 7.33. Revised para. 8.21. Revised Table of Contents. Changed Safety to Operating.	<i>Ward Evans</i> Ward Evans June 29, 1984
Rev. 10 (PR850705)	4-18 5-20 thru 5-25 7-7 7-9  7-10 7-20	Added info. to para. 4.27. Revised charts.  Revised para. 7.11. Relocated info. from pg. 7-10. Added info. to para. 7.15. Added info. to para. 7.25.	<i>D.H. Trompler</i> D.H. Trompler Sept. 16, 1985
Rev. 11 (PR861020)	9-i 9-71 thru 9-76	Revised Table of Contents. Added Supplement 10. (Aux. Vac. System)	<i>D.H. Trompler</i> D.H. Trompler  <u>12/3/86</u> Date



PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)

Revision Number and Code	Revised Pages	Description of Revisions	FAA Approval Signature and Date
Rev. 12 (PR881215)	8-1	Revised para. 8.1.	 D.H.Trompler Jan. 10, 1989
	8-2	Revised para. 8.1 and 8.3.	
	8-3	Revised para. 8.3.	
	8-12	Revised para. 8.19.	
	9-i	Added Supplement 10 to T.O.C.	
	9-9	Revised Section 3, para. (a).	
Rev. 13 (PR900202)	vi-j	Added Rev. 13 to Log of Revisions.	 D. H. Trompler Mar. 26, 1990
		1-6 &	
	1-7		
	4-6	Revised para. 4.5.	
	5-4	Revised para. 5.5.	
	6-10	Revised fig. 6-11.	
	6-12b	Revised para. 6.9.	
	6-12c	Added fig. 6-17 title.	
	7-24	Moved para. 7.39 to pg. 7-26.	
	7-25	Revised para. 7.37. Added Narco ELT 910 information.	
		Added page. Relocated para. 7.39 from pg. 7-24. Revised para. 7.39.	
	8-12	Revised para's. 8.19 & 8.21.	
	8-12a	Revised Fuel Grade Chart.	
	9-5	Added Sec. 6 & 7.	
	9-10	Revised Preflight (b)(1).	
	9-35	Revised item 10.	
	9-37	Revised item 4.	
	9-53	Removed text.	
9-54	Revised item 13.		
9-61	Revised item 10.		

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revisions	FAA Approval Signature and Date
Rev. 14 (PR930107)	vi-k vi-l 9-i  9-77	Added log of revision page Added log of revision page Added Supplement II to T.O.C. Added Supplement II	 W. R. MOREU Jan. 07, 1993
Rev. 15 (PR940329)	7-i 7-26  7-26  7-27 7-28	Revised T.O.C. Relocated para. 7.39 from pg. 7-26 to page 7-27 Revised para. 7.37 added ELT info. Added page. Added Page.	 W. R. MOREU March 29, 1994
Rev. 16 (PR980402)	vi-k 2-3 3-6 7-9 7-10 9-75	Added Rev. 16 to L of R. Revised Para. 2.7. Revised Para. 3.3. Revised Fig. 7-9. Revised Para. 7.15. Revised illustration.	 PETER E. PECK April 2, 1998

**PILOT'S OPERATING HANDBOOK LOG OF REVISIONS (cont)**

Revision Number and Code	Revised Pages	Description of Revisions	FAA Approval Signature and Date

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<b>SECTION 5</b>	<b>PERFORMANCE</b>
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