

# **PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL**

**PA-30 TWIN COMANCHE**

3600 POUNDS GROSS WEIGHT

1963 THROUGH 1969 (NORMALLY ASPIRATED MODEL ONLY)

APPLICABLE TO AIRPLANES WITH SERIAL NUMBERS:  
30-1 THROUGH 30-2000

**SECOND ISSUE**

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Published By: Douglas L. Killough, d.b.a. Aircraft Publications  
Austin, Texas

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THIS DOCUMENT IS COMPOSED OF A COMPILATION OF INFORMATION INCLUDING INFORMATION PROVIDED BY THE AIRCRAFT MANUFACTURER AND CONSTITUTES THE PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL. ONLY SECTION 2 (LIMITATIONS) WITHIN THIS HANDBOOK IS FAA APPROVED.

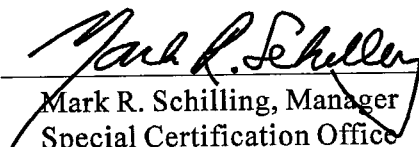
This Handbook is modeled on GAMA Specification No. 1, *Specification for Pilot's Operating Handbook*, issued February 15, 1975, and revised September 1, 1984 .

The airplane is FAA approved in the Normal category based on CAR Part 3.

THIS DOCUMENT OR PIPER REPORT 1269 OR 1515 MUST BE CARRIED IN THE AIRPLANE AT ALL TIMES AND MUST BE ACCESSIBLE TO THE PILOT DURING FLIGHT.

Approved by the Federal Aviation Administration

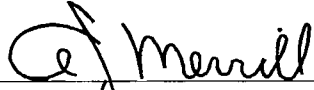
By: \_\_\_\_\_

  
Mark R. Schilling, Manager  
Special Certification Office  
Federal Aviation Administration  
Fort Worth, Texas 76193-0190

Date: December 15, 1993

### AIRPLANE FLIGHT MANUAL LOG OF REVISIONS

This Log of Revisions page is used to maintain a listing of all revised pages in Section 2, which is the FAA Approved Airplane Flight Manual.

Revision Number	Pages Revised	Description of Revision	FAA Approval Signature & Date
Rev. 1	2-1	Revised Table of Contents	 A. J. Merrill, Manager Special Certification Office Federal Aviation Administration Fort Worth, Texas 76193-0190 Date: December 31, 1996
	2-2	Revised IAS-CAS	
	2-3	Added Airspeed Note CAS	
	2-5	Added PAC Drawings	
	2-6	Revised Other and Placards	
	2-7	Revised Placards	
	2-8	Added Procedures	
	2-9	Added Procedures	
	2-10	Added Procedures	
	2-11	Added Procedures	



# **PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL**

PA-30 \* 3600 LBS GROSS WEIGHT

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## INTRODUCTION

*This Pilot's Operating Handbook may be used as the FAA approved Airplane Flight Manual only if kept current. When this Handbook is used for airplane operational purposes, it is the responsibility of the owner/pilot to maintain it in a current status and to ensure that all pertinent data (including weight and balance and required supplements) are recorded in this Handbook.*

## APPLICABILITY

Application of the information contained in this Handbook is limited to the specific group of Piper PA-30 airplanes as designated on the title page of this Handbook.

## NOTICE TO ALL PILOTS

This Handbook is intended to be used as a guide for the pilot in the operation of the airplane. It is not meant to be a substitute for adequate and competent flight instruction.

Information contained herein is designed to provide the pilot with a general knowledge of the airplane, and specific suggested Normal and Emergency Operating Procedures. It is intended to promote safety and is presented to enable the pilot to form, in advance, a plan of action for coping with the most probable situations that could occur in the operation of the airplane.

Assurance that the aircraft is maintained in an airworthy condition is the responsibility of the owner. The pilot-in-command is responsible for determining that the aircraft is safe for flight.

## SCOPE

This Handbook is divided into 10 numbered sections. Each section can be equipped with a tab divider for easier access to information that may be required in flight. With few exceptions, information presented herein does not consider any modifications that may have been made to the original aircraft.

Section 1 is information of **General** interest. The information presented is an overview of basic physical data, and performance specifications. Included also is an extensive glossary to clarify specific terms, some of which have conflicting usage or definitions that are different from contemporary usage. A table of conversion factors is included to address international usage and distribution.

Section 2 is operating **Limitations**. This section of the Handbook includes material required to be furnished to the pilot by Federal Aviation Regulations. Section 2 is the FAA approved part of this Handbook, and constitutes the Airplane Flight Manual. The pilot is by law responsible for remaining within the operating limitations as directed by instrument markings and placards located in the airplane and outlined in this section.

Section 3 is **Emergency Procedures**. This section can be equipped with a red tab divider for instant identification. The procedures are suggested as a course of action for coping with the particular condition described, but are not intended to be a substitute for sound judgment and common sense. It is recommended that the pilot review standard emergency procedures periodically with a Certified Flight Instructor to remain proficient in them.

Section 4 is **Normal Procedures**. This section can be equipped with a blue tab divider for instant identification. The procedures are intended as a source of reference and review, and to provide information on procedures that are not the same for all PA-30 aircraft. All of the procedures necessary for operation, as determined by the design features of the airplane, are presented.

Section 5 is airplane **Performance**. The information presented in this section is based on measured flight test data provided by Piper Aircraft. The data is presented in tabular and/or graphical form to illustrate the effect of different variables. A flight planning example is given which utilizes this data.

Section 6 is **Weight and Balance**. A procedure for calculating the weight and moment as well as a list of all equipment is provided. The aircraft owner can obtain the aid of an A&P mechanic to fill in this section with proper data. The pilot must ensure that the airplane is loaded within the approved weight and balance envelope before takeoff.

Section 7 is **Systems Description**. This section provides a text type description of the operation of the airplane's controls and its systems. Some equipment described within this part is optional.

Section 8 is **Maintenance** information. Recommended procedures for routine care and servicing of the aircraft are outlined in this section.

Section 9 is **Supplemental** information. This section covers miscellaneous information and optional equipment installed on the aircraft.

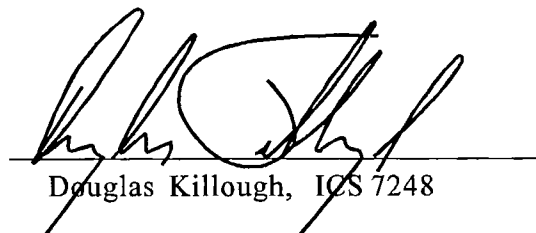
Section 10 is **Safety Information**. This section covers general information related to the safe and efficient operation of any aircraft.

## REVISIONS

Immediately following the title page of this Handbook are the "Log of Revisions" pages. When a revision to any information in this Handbook is made by the publisher, a new Log of Revisions will be issued. All revisions must be retained in the Handbook to provide a current record until a reissue is made. Revisions to Section 2 will be FAA approved prior to issue.

## ACKNOWLEDGMENTS

I would like to express my gratitude to the many contributors to this Handbook for their advice, criticism and encouragement. I particularly want to recognize former ICS President Bill Creech, and ICS Technical Director Maurice Taylor, for without their leadership this Handbook would never have become a reality. I also want to acknowledge the International Comanche Society for their support. Keep the Spirit!



Douglas Killough, ICS 7248

## REFERENCES

PA-30 & Multi-Engine Flying - Fuchs	Advanced Pilot's Flight Manual - Kershner
Jane's Aerospace Dictionary - Gunston	Piper Twin Comanche Owner's Handbook
Piper Report 1284 - British Airplane Flight Manual	Aerodynamics For Naval Aviators - Hurt
Piper Report 1000 - Substantiation of Model PA-24	Piper Twin Comanche Service Manual
Piper Report 1269 or 1515 - PA-30 Airplane Flight Manual	Hartzell Propeller Owner's Manual
Lycoming Operator's Manual - IO-320 Series Aircraft Engines	Aircraft Specification No. A1EA
Airplane Performance Stability and Control - Perkins and Hage	Lycoming Flyer Key Reprints
Flight Training Handbook - US Department of Transportation	

## PILOT'S OPERATING HANDBOOKS AVAILABLE FOR THE COMANCHE

This Handbook is one of **sixteen** modern format, GAMA style, manuals available for the Piper Comanche and Twin Comanche. The table below is provided to allow the owner to identify by year, model and serial number which Handbook is appropriate for each version of the airplane.

This Handbook is applicable **ONLY** to aircraft shown in bold type.

### Singles:

Manual Number	Model	Gross Weight	Year(s) Mfg.	Flight Manual Report Number	SN Begin	SN End
01.)	180	2550	1957-64	1047	24-1	3687
02.)	250	2800	1958-60	997	103	2298
03.)	250	2900	1961	1127	2299	2843
04.)	250	2900	1962-64	1179	2844	3687
05.)	250	2900	1962-64	1220 (FI)	2844	3687
06.)	260	2900	1965	1334	4000	4299
07.)	260	2900	1965	1333 (Carb)	4000	4299
08.)	<b>260B</b>	3100	1966-68	1359	4300	4803
09.)	<b>260B</b>	3100	1966-68	1358 (Carb)	4300	4803
10.)	260C	3200	1969-72	1545	4804	5028
11.)	260T	3200	1970-72	1640 (Turbo)	4901	5028
12.)	400	3600	1964-65	1295	26-3	148

### Twins:

Manual Number	Model	Gross Weight	Year(s) Mfg.	Flight Manual Report Number	SN Begin	SN End
<b>13.)</b>	<b>PA30</b>	<b>3600</b>	<b>1963-68</b>	<b>1269</b>	<b>30-2</b>	<b>1744</b>
			<b>1969</b>	<b>1515</b>	<b>1745</b>	<b>2000</b>
14.)	PA30T	3725	1964-68	1269 (Turbo)	143	1744
			1969	1515 (Turbo)	1745	2000
15.)	PA39	3600	1970-72	1605	39-1	155
16.)	PA39T	3725	1970-72	1605 (Turbo)	1	155

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The superior pilot uses his superior judgment to avoid those situations which require the use of his superior skill.

Frank Borman

Commander: Gemini 7; Apollo 8  
President: Eastern Airlines