

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	
CHECKED		
APPROVED	REPORT VB-163	PAGE _____

AIRPLANE FLIGHT MANUAL

MODEL PA-28-180

SERIAL NOS. 671 THRU 5600

FAA IDENTIFICATION NO. N7824W

SERIAL NO. 28-1835

THIS DOCUMENT MUST BE KEPT IN AIRPLANE AT ALL TIMES.

FAA APPROVED: Original signed by Walter R. Haldeman *
Walter R. Haldeman
 Chief, Engineering & Manufacturing Branch
 Southern Region - - - Atlanta, Georgia

DATE: August 3, 1962

* FAA APPROVED: Gene Dearing For Retype Or
Gene Dearing
 Aerospace Engineer
 DATE: August 12, 1964

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED	REPORT VB-163	PAGE 1 of 6

Piper Model PA-28-180
Normal and Utility Categories

AIRPLANE FLIGHT MANUAL

1. Limitations Section The following limitations must be observed in the operation of this airplane.
 - Engine Lycoming O-360-A3A or O-360-A4A
 - Engine Limits Maximum permissible RPM for takeoff, 2475. For all other operations, 2700 rpm, 180 hp, (A/C S/N 28-671 to 1760A).
For all operations, 2700 rpm, 180 hp, (A/C S/N 28-1571, 1573, 1761 and up).
 - Fuel 91/96 minimum octane aviation fuel.
 - Propeller Sensenich M76 EMM or 76EM8 (S/N 671 to 1760A)
Sensenich M76 EMMS or 76EM8S5 (S/N 1571, 1573, 1761 & up).
Maximum diameter 76 inches, minimum diameter 76 inches.
Static RPM at maximum permissible throttle setting. Not over 2450, not under 2275. No additional tolerance permitted.
 - Power Instruments Oil temperature: GREEN arc (normal operating range) 120°F to 245°F; YELLOW arc (caution range) 60°F to 120°F; RED line (maximum) 245°F (S/N 671 to S/N 1760A)

Oil Temperature: GREEN arc (normal operating range) 75°F to 245°F; RED line (maximum) 245°F (S/N 1571, 1573, 1761 & up).

Oil Pressure: GREEN arc (normal operating range) 60 psi to 90 psi; YELLOW ARC (caution range) 25 psi to 60 psi; RED line (minimum) 25 psi when installed or 60 psi when installed; RED line (maximum) 90 psi.

Fuel Pressure: GREEN arc (normal operating range) .5 psi to 5 psi; RED line (minimum) .5 psi; RED line (maximum) 5 psi (S/N 671 to S/N 1760A)

Fuel Pressure: GREEN arc (normal operating range) .5 psi to 8 psi; RED line (minimum) .5 psi; RED line (maximum) 8 psi (S/N 1571, 1573, 1761 and up)

Tachometer: GREEN arc (normal operating range) 500 to 2700 rpm; RED line (maximum continuous power) 2700 rpm.

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED	REPORT VB-163	PAGE 2 of 6

Airspeed Limits Never exceed 171 mph
 Maximum structural cruise 140
 Maneuvering 129
 Flaps extended 115
 Maximum positive load factor 3.8 Normal Category
 Maximum positive load factor 4.4 Utility Category
 Maximum negative load factor No inverted maneuvers
 approved.

Maximum Weight 2400 lbs - Normal Category; 150 lbs - Utility Category.

Baggage Capacity 200 lbs

C. G. Range The datum used is 78.4 inches ahead of wing leading edge at the intersection of the straight and tapered section.

1. Normal Category

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
2400	92.1	94.5
2200	89.2	95.9
1975	85.9	95.9
1650	84.0	95.9

2. Utility Category

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
1950	85.8	86.5
1650	84.0	86.5

Straight line variation between points given.

NOTE: It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded. See weight and section for proper loading instructions.

Maneuvers 1. Normal Category - All acrobatic maneuvers including spins prohibited.
 2. Utility Category - Approved maneuvers for Utility Category only.

	<u>Entry Speed</u>
Spins (Flaps Up)	Stall
Steep Turns	129 mph
Lazy Eights	129
Chandelles	129

FAA APPROVED 8/3/62

REVISED 9/14/70 Rev. No. 21

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED	REPORT VB-163	PAGE 3 of 6

Placards

1. In full view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL OR UTILITY CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS.

ALL MARKINGS AND PLACARDS ON THIS AIRPLANE APPLY TO ITS OPERATION AS A UTILITY CATEGORY AIRPLANE. FOR NORMAL AND UTILITY CATEGORY OPERATIONS, REFER TO THE AIRPLANE FLIGHT MANUAL.

FOR SPIN RECOVERY, USE FULL RUDDER AGAINST SPIN, FOLLOWED IMMEDIATELY BY FORWARD WHEEL.

NO ACROBATIC MANEUVERS (INCLUDING SPINS) ARE APPROVED FOR NORMAL CATEGORY OPERATIONS. "
2. Adjacent to upper door latch:

"ENGAGE LATCH BEFORE FLIGHT. "
3. On the inside of the baggage compartment door:

"MAXIMUM BAGGAGE 125 LBS." (S/N 671 to 1760A)
(MAXIMUM BAGGAGE MAY BE INCREASED TO 200 LBS. IN ACCORDANCE WITH PIPER SERVICE SPARES LETTER NO. 242)

UTILITY CATEGORY OPERATION - NO BAGGAGE OR AFT PASSENGERS ALLOWED. NORMAL CATEGORY OPERATION - SEE AIRPLANE FLIGHT MANUAL WEIGHT AND BALANCE SECTION FOR BAGGAGE AND AFT PASSENGER LIMITATIONS.
4. In full view of the pilot:

"ROUGH AIR OR MANEUVERING SPEED 129 MPH. "

"UTILITY CATEGORY OPERATION - NO AFT PASSENGERS ALLOWED. "
5. On the instrument panel in full view of the pilot when the oil cooler winterization kit is installed:

"OIL COOLER WINTERIZATION PLATE TO BE REMOVED WHEN AMBIENT TEMPERATURE EXCEEDS 50° F. "
6. On the instrument panel in full view of the pilot when the autoflite is installed:

"FOR HEADING CHANGES: PRESS DISENGAGE SWITCH ON CONTROL WHEEL. CHANGE HEADING, RELEASE DISENGAGE SWITCH.

FAA APPROVED 8/3/62

REVISED 4/2/68 Rev. No. 13

PIPER

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED	REPORT VB-163	PAGE 4 of 6

Placards (Cont'd) 7. In full view of the pilot: "UTILITY CATEGORY ONLY."
Acrobatic maneuvers are limited to the following:

Entry Speed

Spins (Flaps Up).....	Stall
Steep Turns.....	129 mph.
Lazy Eights.....	129
Chandelles.....	129

Airspeed	RED radial line	Never exceed	171 mph (148 knots)
Instrument	YELLOW arc	Caution Range	140 to 171 mph (121
Markings		(Smooth Air Only)	to 148 knots)
	GREEN arc	Normal Operating	67 to 140 mph (58
		Range	to 121 knots)
	WHITE arc	Flap Down Range	57 to 115 mph (50
			to 100 knots)

2. Procedures
Section
- The stall-warning system is inoperative with the master switch off.
 - Electric fuel pump must be on for both landing and takeoff.
 - The PA-28-180 airplane is approved under FAA Regulation CAR 3 which prohibits intentional spins for normal category operation. The following information is noteworthy:
 - The stall characteristics of the PA-28-180 are normal with the nose pitching down moderately following the stall, occasionally with a moderate roll which can be corrected by normal use of ailerons and rudder against the roll.
 - Prolonged use of full rudder during stall practice may result in a rapid roll followed by a spin and should be avoided. Recovery from an incipient spin may be effected in less than one additional turn by use of opposite rudder followed by full forward control wheel.
 - In the event that a fully developed spin is inadvertently experienced, recovery is best made by using full opposite rudder followed by full forward wheel and full opposite aileron. The control positions against the spin should be maintained during the entire recovery, which may require several turns and a substantial loss of altitude if the airplane is loaded heavily with a rearward center of gravity.
 - Except as noted above, all operating procedures for this airplane are normal.

FAA APPROVED 8/3/62

REVISED 4/2/68 Rev. No. 13

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA 28-180
CHECKED		
APPROVED		REPORT VB-163 PAGE <u>5 of 6</u>

Procedures Section
(Cont'd.)

5. (Electric Pitch Trim Installation Only)
The following emergency information applies in case of electric pitch trim malfunction:

- a. In case of malfunction, disengage electric pitch trim by pulling out circuit breaker on instrument panel.
- b. In emergency, electric pitch trim may be overpowered using manual pitch trim.
- c. In cruise configuration, malfunction results in 10° pitch change and 30 Ft. altitude variation.

6. (Autoflite Installation Only)
The following emergency information applies in case of autoflite malfunction:

- a. In case of malfunction PRESS disconnect switch on pilot's control wheel.
- b. Rocker switch on instrument panel - OFF.
- c. Unit may be overpowered manually.
- d. In cruise configuration malfunction, 3 seconds delay results in 60° bank, and 100 Ft. altitude loss.
- e. In approach configuration malfunction, 1 second delay results in 10° bank and 0 Ft. altitude loss.

7. (AutoControl III Installation Only)

- I. Limitations:
Pilot off during take off and landing.
- II. Procedures:
 - a. Normal Operation
Refers to Manufacturer's Operation Manual.
 - b. Emergency
 - 1. In case of malfunction, disengage manual controls.
 - 2. In emergency, pilot may be overpowered manually.
 - 3. In cruise configuration malfunction, 3 seconds delay results in 60° bank and 100 Ft. altitude loss.
 - 4. In approach configuration malfunction, 1 second delay results in 10° bank and 0 Ft. altitude loss.

FAA APPROVED 8/3/62
REVISED 7/15/66 Rev. No. 8

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED		REPORT VB-163 PAGE 6 of 6

3. Performance Section

The following performance figures were obtained during FAA Type tests and may be realized under conditions indicated with the airplane and engine in good condition and with average piloting technique. All performance is given for 2400 pounds.

Loss of altitude during stalls varied from 125 to 200 feet, depending on configuration and power.

Stalling speeds, in mph, power off, versus angle of bank (Calibrated Airspeed):

Angle of bank	0	20	40	50	60
Flaps Up	67	69	76	83	94
Flaps Down	57	--	--	--	--

FAA APPROVED 8/3/62
 REVISED 7/15/66 Rev. No. 8

This document is the property of Piper Aircraft Corporation. It is to be used only for the purpose for which it was issued. It is not to be distributed outside the organization to which it was issued.

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual
CHECKED		Supplement
APPROVED	REPORT VB-261	Model PA-28-180
		PAGE 1 of 2

PIPER MODEL PA-28-180
NORMAL AND UTILITY CATEGORIES

AIRPLANE FLIGHT MANUAL SUPPLEMENT

This supplement must be attached to the Airplane Flight Manual dated August 3, 1962 or August 12, 1964 or later. It is to be used in conjunction with the Airplane Flight Manual. The information contained herein supplements the information of the Basic Airplane Flight Manual; for limitations, procedures, and performance data not contained in this document, consult the manual proper.

1. Limitations Section The following limitations must be observed in the operation of this airplane with this center of gravity range:

Maximum Weight 2400 lbs.

C. G. Range The datum used is 78.4 inches ahead of wing leading edge at the intersection of the straight and tapered section.

1. Normal Category

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
2400	91.0	94.5
2200	87.8	95.9
2150	87.0	95.9
1950	84.0	95.9

2. Utility Category

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
1950	85.8	86.5
1850	84.0	86.5

2. Procedures "No Change"

3. Performance "No Change"

FAA APPROVED 9/11/70

REVISED

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Supplement Model PA-28-180
CHECKED		
APPROVED		REPORT VB-261 PAGE <u>11</u>

PIPER MODEL PA-28-180

List of Revisions

REVISION NO.	PAGE	DESCRIPTION	APPROVED	DATE
-----------------	------	-------------	----------	------

FAA APPROVED 9/14/70

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED		REPORT VB-163
		PAGE II

Log of Revisions

<u>REVISION NO.</u>	<u>PAGE</u>	<u>DESCRIPTION</u>	<u>APPROVED</u>	<u>DATE</u>
1	1	Deleted Propeller Pitch Information. Added Static R.P.M. Information	<i>H. E. Waterman</i> for H. E. Waterman Supervisor SO-EMDO-42	5/25/64
2	2	Placards Section: Added Placard No. 5	<i>H. E. Waterman</i> H. E. Waterman Supervisor SO-EMDO-42	7/8/64
3	2	Added to Placard No. 3 to read: "BAGGAGE, MAX. 200 LBS., SEE WEIGHT AND BALANCE DATA FOR BAGGAGE LOADINGS BETWEEN 150 LBS. AND 200 LBS."	<i>H. C. Faller</i> for H. C. Faller Supervisor SO-EMDO-43	8/5/64
	1	Added Sensenich M76EMMS		
4	3	Item 5 added to Procedures Section.	<i>H. C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	10/20/64
5	1	Limitations Section: Revised Oil Temperature and Fuel Pressure Range	<i>Robert H. Faller</i> for H. C. Faller Supervisor, SO-EMDO-43	6/23/65
6	1	Limitation Section: Add note to Engine Limits	<i>H. C. Faller</i> H. C. Faller Supervisor, SO-EMDO-43	1/5/66
7	2	C. G. Range: 1975 lbs. 85.9 In. 95.9 In. 1650 lbs. 84.0 In. 95.9 In. Was 18.50 lbs. 85.1 In. 95.9 In.		
	4	Added Procedures Section And Item 6		
	2	Added Placard No. 6	<i>H. C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	5/20/66

FAA APPROVED 8/3/62

Log of Revisions

<u>Revision No.</u>	<u>Page</u>	<u>Description</u>	<u>Approved</u>	<u>Date</u>
8	1	Revised Oil Temperature, Oil Pressure and Fuel Pressure Limitations		
	2,3	Revised Placards No. 3 and No. 5		
	5	Added Page 5		
		Procedures Section - Added Item 7		
	6	Added Page 6	<i>Henry C. Faller</i> Henry C. Faller Supervisor SO-EMDO-43	7/15/66
9	1	Limitations Section Add "or 0-360-A4A	<i>Henry C. Faller</i> Henry C. Faller Supervisor SO-EMDO-43	8/2/66
10	2,3	C.G. Range - Placard No. 1 and Placard No. 3 revised to include utility category operations. Added utility category max. wt. and approved maneuvers		
	4	Procedures Section - Added to Item 3 "For Normal Category Operation". Added Placard No. 7.		
	3	Placards Section - Added utility category operation to Item 4.		
	1	Added Utility Category		
	2	Added maximum positive load factor for Utility Category. Added Baggage Capacity.	<i>Henry C. Faller</i> Henry C. Faller Supervisor SO-EMDO-43	12/6/66

FAA APPROVED 8/3/62

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED		REPORT VB-163 PAGE <u>IV</u>

Log of Revisions

REVISION NO.	PAGE	DESCRIPTION	APPROVED	DATE
11	3	Placards Section: Revised Placard No. 1 to read, "In Full View of the Pilot"	<i>H.C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	5/12/67
12	2	Revised C.G. Range	<i>H.C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	9/25/67
13	3, 4	Revised Placard No. 4 and No. 7 to read: "In full view of the pilot"	<i>H.C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	4/2/68
14	1	Added Aircraft Serial Numbers 1571 and 1573 to Engine and Propeller Limitations	<i>H.C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	6/3/68
15	1	Added Propeller Designations	<i>H.C. Faller</i> H. C. Faller Supervisor SO-EMDO-43	6/24/68
16	Title	Allocated Piper Report No. VB-163 to this Manual.	<i>H.M. Toomey</i> Herb M. Toomey FAA DOA SO-1	7/11/68
17	Title	Added Applicable Serial Nos. 1 Thru 4377		
	1	Added Supplement No. 1	<i>H.M. Toomey</i> H. M. Toomey FAA DOA SO-1	4/22/69

FAA APPROVED 8/3/62

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28-180
CHECKED		
APPROVED	REPORT VB-163	PAGE <u> V </u>

Log of Revisions

REVISION NO.	PAGE	DESCRIPTION	APPROVED	DATE
18	Title	Changed applicable Serial Nos. from 1 thru 4377 to 1 thru 5600.	<i>H. M. Toomey</i> H. M. Toomey FAA DOA SO-1	7/15/69
19	Title	Changed applicable Serial Nos. from 1 thru 5600 to 571 thru 5600.	<i>H. M. Toomey</i> H. M. Toomey FAA DOA SO-1	9/23/69
20	2	Added Forward Intermediate and Forward Gross Weight Points	<i>H. M. Toomey</i> H. M. Toomey FAA DOA SO-1	5/8/70
21	2	Deleted Forward Intermediate and Forward Gross Weight Points	<i>G. C. Stephen</i> G. C. Stephen FAA DOA SO-1	9/14/70
22	1	Changed oil pressure gauge markings	<i>Ward Evans</i> Ward Evans	7-25-75

PIPER AIRCRAFT CORP.
VERO BEACH, FLA.

FAA APPROVED 8/3/62

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Model PA-28
CHECKED		Supplement No. 1
APPROVED	REPORT VB-163	PAGE <u>1</u>

SUPPLEMENT NO. 1 TO PIPER MODEL PA-28 FLIGHT MANUAL

MODELS AFFECTED: Piper PA-28 models equipped with
Lycoming O-360-A3A engine and
Sensenich M76EMM-0, M76EMMS-0,
76EM8S5-0 or 76EM8-0 propeller.

PROPELLER LIMITS

Avoid continuous operation between 2150 and 2350 RPM.

The aircraft tachometer must be placarded to show a red
arc between 2150 and 2350 RPM in accordance with Piper
Service Letter No. 526.

NOTE: This document must be attached to the Airplane
Flight Manual.

FAA DOA SO-1
APPROVED

H. M. Toomey
H. M. Toomey

DATE

4/22/69

DUPLICATE

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Airplane Flight Manual Supplement Model PA-28-180
CHECKED		
APPROVED	REPORT VB-261	PAGE _____



25 MRS. 1974

AIRPLANE FLIGHT MANUAL

SUPPLEMENT NO. 2

CENTER OF GRAVITY RANGE

FOR

MODEL PA-28-180

THIS AIRPLANE FLIGHT MANUAL SUPPLEMENT IS APPLICABLE TO AIRCRAFT WITH SERIAL NUMBERS 28-3071 TO 28-3072, INCLUSIVE, WHEN PIER PART NO. 68280-00 TUBE-LANDING GEAR STRUT PISTON IS INSTALLED.

SERIAL NUMBERS 28-3073 TO 28-5859 MAY USE THIS SUPPLEMENT WITH NO ADDITIONAL MODIFICATION TO THE AIRCRAFT.

THIS DOCUMENT MUST BE ATTACHED TO THE AIRPLANE FLIGHT MANUAL

FAA APPROVED:

G. C. Stephen
G. C. Stephen, FAA 1, PA 80-1
Piper Aircraft Corporation

DATE: September 14, 1970

ANVÄNDADE AV MOTORBENSIN

- 1 Denna maskin undergår / är utprovad för användande av lägst *..96* oktanic motorbensin.
- 2 Max godkänd flyghöjd med motorbensin är 6000 fot
- 3 Högsta tillåtna temperatur på bränslet är 25 °C.
- 4 Vid tankning från annat än godkänd bränsleanläggning skall bränslet tankas genom trätt försedd med filterelement, alternativt sänkskivan samt i övrigt hanteras enligt föreskrifterna i BCL D 1.12.
- 5 Vid varje tankning av motorbensin skall anteckning i resdagbok göras med angivande av oktantal, fabrikat och mängd.
- 6 Vid användande av motorbensin skall vid daglig tillsyn särskild uppmärksamhet ägnas åt bränslesystemet med avseende på bränsleläckage, föroreningar samt vattenförekomsten i tankarna.

Motorbensin har visat sig kunna ha menlig inverkan på vissa packningar, varför detta är särskilt viktigt.
- 7 Vid eventuell fyllning av fat eller dunkar för vidare användning i luftfartyg skall detta ske genom nätfilter med minst 6000 maskor / cm² eller annat likvärdigt filter.
- 8 Motorbensin skall uppfylla svensk standard SS 155421 eller motsvarande utländsk norm.
- 9 Inträffar störning vid användandet av motorbensin skall störningsrapport insändas till luftfartsinspektionen.
- 10 Kompletterande upplysningar angående motorbensin kan inhämtas i BCL M 1.12.

		Continued Airworthiness			Doc. No. EZU-5-AFMS
					Page 1(2)
Replaces	Revision A	Prep. by Sam Yrlund	Insp. by	Approved by	Date 2017-04-04

AIRPLANE FLIGHT MANUAL SUPPLEMENT

Icom IC-A220TSO COM transceiver

Piper PA28-180 / FAA TCDS 2A13 Rev 56



This airplane flight manual supplement must be attached to the approved Airplane Flight Manual when the Icom IC-A220TSO COM transceiver is installed in accordance with installation work order Samionics WO20170404SEEZU and engineering order 2017/04/04-SEEZU.

This document and the installation is classified as an EASA standard change and approved in accordance with EASA CS-STAN and documented on EASA Form 123.

Section 1 – General

This document describes the operating instructions and limitations (if any) associated with the installation of the Icom IC-A220TSO COM transceiver in the COM2 position.

Section 2 – Limitations

No change

Section 3 – Emergency/abnormal procedures

Icom IC-A220TSO COM transceiver

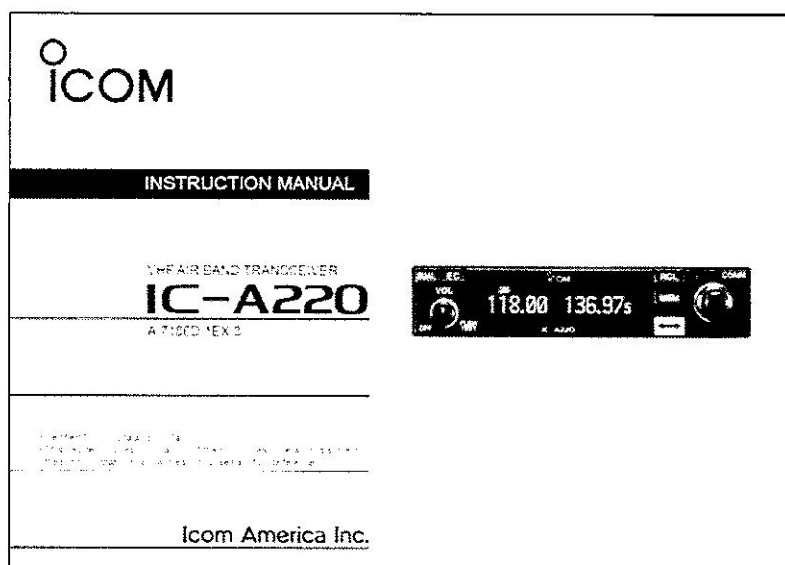
Revert to COM1 radio or if not available select code 7600 on the transponder and land as soon as possible.

		Continued Airworthiness			Doc. No. EZU-5-AFMS
					Page 2(2)
Replaces	Revision A	Prep. by Sam Yrlund	Insp. by	Approved by	Date 2017-04-04

Section 4 – Normal procedures

Refer to following publications:

1. **Icom IC-A220 instruction manual**
p/n A-7186D-1EX-3



Section 5 – Performance

No change.

Section 6 – Weight and balance

No change. See aircrafts current weight and balance data.

Section 7 – System description

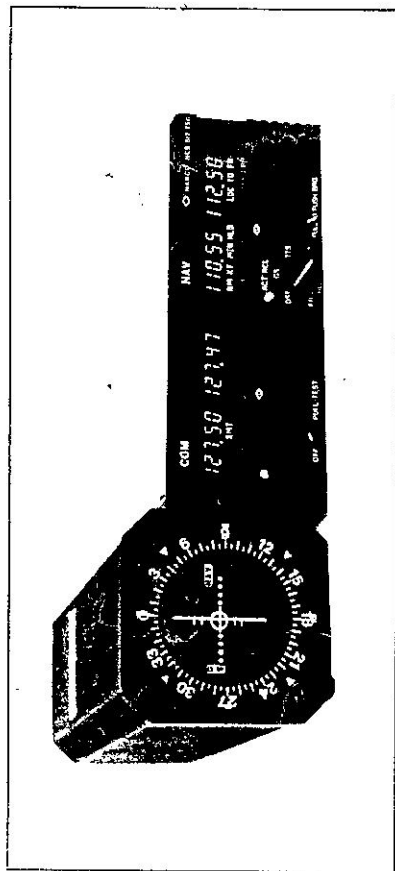
See section 1 and 2.

Section 8 – Handling, service and maintenance

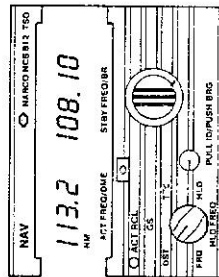
No change.



NCS 812 NAV/COM/DME OPERATING BRIEF (DME Section)



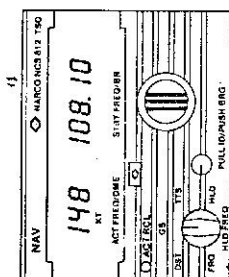
The new, pilot friendly NCS 812, Navigation and communication system, includes a 760-channel COM transceiver, a 200-channel NAV receiver, a 40-channel glideslope receiver, marker beacon lights and full function DME. The NCS 812 system includes the IDME 895, VOR/ILS indicator.



DST

A) DISTANCE (DST)

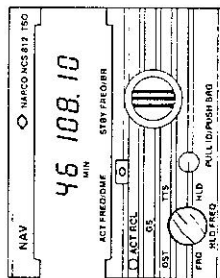
With the DME function switch in the DST position the NCS 812 will display distance from the DME selected by the active NAV frequency. The annunciator NM will be lighted. If the DME is not receiving a valid signal the display will bar. The active NAV frequency can be recalled for two seconds by pressing the ACT RCL (active recall) switch. When a frequency transfer is performed the new active NAV frequency will be displayed for two seconds and then the NCS 812 will revert to distance. Please note the included IDME 895, VOR/ILS indicator operates as all standard indicators during all DME operation.



GS

B) GROUND SPEED (GS)

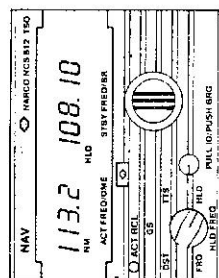
With the DME function switch in the GS position the NCS 812 will display ground speed to the DME selected by the active NAV frequency. The annunciator KT will be lighted.



TTS

C) TIME TO STATION (TTS)

With the DME function switch in the TTS position the NCS 812 will display time to the station selected by the active NAV frequency. The annunciator MN will be lighted.



HLD

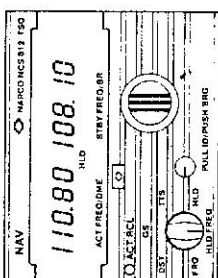
D) DME HOLD (HLD)

With the DME function switch in the HLD position the NCS 812 will continue to display current station, DME distance, allowing the NAV receiver to be rechannelled to a new frequency. In the HLD position the annunciators NM and HLD will be lighted. In the HLD position the active NAV frequency may be displayed by pushing the ACT RCL switch. To change the displayed DME data to the newly channelled NAV station, it is necessary to move the DME function switch to the TTS or FRQ position.

E) DME HOLD FREQUENCY (HLD FREQ)

With the DME function switch in the HLD FREQ position the NCS 812 NAV receiver may be rechannelled without disturbing DME, lock on the current station. (As in the HLD position). In this position the frequency being held will be displayed and the annunciator HLD will be lighted. To change the displayed DME data to the newly channelled NAV station, it is necessary to move the DME function switch to the TTS or FRQ position.

The DME HOLD functions are particularly useful if the pilot has the active NAV channelled to a LOC frequency and is making an ILS approach at an airport that has a VOR on the airport. Thus DME data can be displayed while making the ILS approach using the companion IDME 895 VOR/ILS indicator.



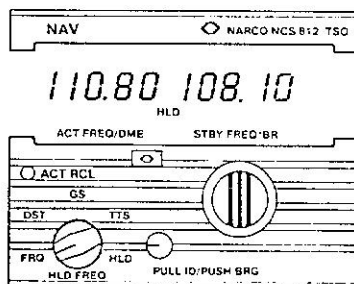
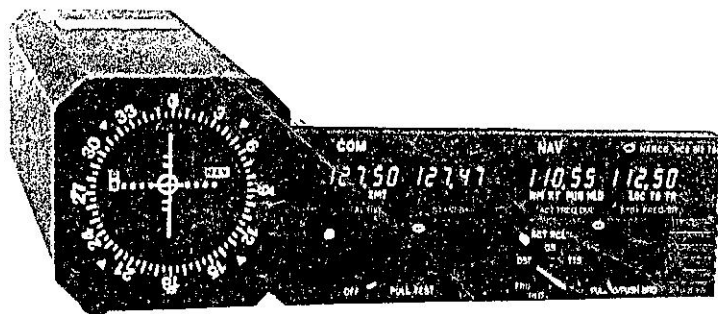
HLD FREQ

For complete details and the name of your nearest participating Narco Dealer, call us toll free at (800) 223-3636.

To assure warranty protection, Narco Avionics must be installed by an authorized dealer.



Fort Washington, PA 19034
(800) 223-3636



FREQ

NORMALLÄGE (Omkopplare i läge FRQ)

Aktuell frekvens visas i ACTIV-fönstret.
Skiftning mellan active och standby frekvens sker med knappen under fönstret. (med pil)

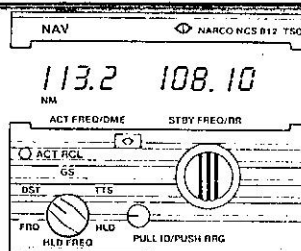
PULL ID / PUSH BRG (Volymknapp för nav-enheten)

Drag ut för att höra Identifieringssignal från fyren.

Tryck 1 ggr för att få bäringen till fyren (TO visas i fönstret)

2 från (FROM)

3 återgång till att visa standby-frekv.

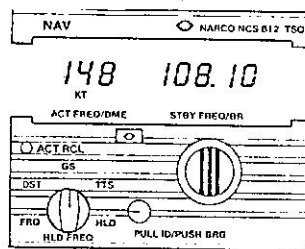


DST

A) DISTANCE (DST)

With the DME function switch in the DST position the NCS 812 will display distance from the DME selected by the active NAV frequency. The annunciator NM will be lighted. If the DME is not receiving a valid signal the display will bar. The active NAV frequency can be recalled for two seconds by pressing the ACT RCL (active recall) switch. When a frequency transfer is performed the new active NAV frequency will be displayed for two seconds and then the NCS 812 will revert to distance.

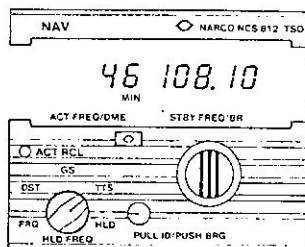
Please note the included IDME 895, VOR/ILS indicator operates as all standard indicators during all DME operation.



GS

B) GROUND SPEED (GS)

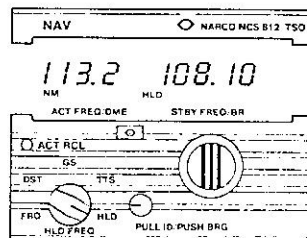
With the DME function switch in the GS position the NCS 812 will display ground speed to the DME selected by the active NAV frequency. The annunciator KT will be lighted.



TTS

C) TIME TO STATION (TTS)

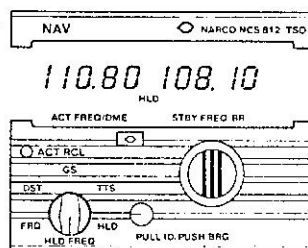
With the DME function switch in the TTS position the NCS 812 will display time to the station selected by the active NAV frequency. The annunciator MIN will be lighted.



HLD

D) DME HOLD (HLD)

With the DME function switch in the HLD position the NCS 812 will continue to display current station, DME distance, allowing the NAV receiver to be rechanneled to a new frequency. In the HLD position the annunciators NM and HLD will be lighted. In the HLD position the active NAV frequency may be displayed by pushing the ACT RCL switch. To change the displayed DME data to the newly channeled NAV station, it is necessary to move the DME function switch to the TTS or FRQ position.



HLD FREQ

E) DME HOLD FREQUENCY (HLD FREQ)

With the DME function switch in the HLD FREQ position the NCS 812 NAV receiver may be rechanneled without disturbing DME lock on the current station. (As in the HLD position). In this position the frequency being held will be displayed and the annunciator HLD will be lighted. To change the displayed DME data to the newly channeled NAV station, it is necessary to move the DME function switch to the TTS or FRQ position.

The DME HOLD functions are particularly useful if the pilot has the active NAV channeled to a LOC frequency and is making an ILS approach at an airport that has a VOR on the airport. Thus DME data can be displayed while making the ILS approach using the companion IDME 895 VOR/ILS indicator.

DME - FUNKTIONER