

AIRPLANE FLIGHT MANUAL

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APPLICABILITY

This manual is applicable to Piper Model PA-28-151 aircraft having serial numbers commencing with 28-7415001. The concluding limit to applicable serial numbers was not available at time of printing. Contact Piper Customer Services for specific information on the application of this manual.

REVISIONS

The information compiled in the Pilot's Operating Manual will be kept current by revisions distributed to the airplane owners.

Revision material will consist of information necessary to update the text of the present manual 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 manual 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 left hand margin of the page, opposite revised, added or deleted material. A line opposite the page number or section title and printing date, will indicate that the text or illustration was unchanged but material was relocated to a different page or 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 by symbols.

III. Original Pages Issued

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

1-1 through 1-3, 2-1 through 2-19, 3-1 through 3-12, 4-1 through 4-6, 5-1 through 5-28, 7-1 through 7-10, 8-1 through 8-2, 9-1 through 9-12, 10-1 through 10-17.

PILOT'S OPERATING MANUAL LOG OF REVISIONS

Current Revisions to the PA-28-151 Cherokee Warrior Pilot's Operating Manual, 761 563, issued July 17, 1973.

Revision	Revised Pages	Description	Date
Rev. 1 - 761 563 (PR730801)	AFM	Added Rev. 1 to Report VB-573	Aug. 1, 1973
Rev. 2 - 761 563 (PR730830)	AFM W/B	Added Rev. 2 to Report VB-573 Added Rev. 1 to Report VB-535	Aug. 30, 1973
Rev. 3 - 761 563 (PR740125)	1-1 2-10 4-6 W/B 7-i 7-5 7-9 7-10 7-11 8-1 9-2	Revised Weights Revised overvoltage relay reset time. Revised Alternator Failure Item 3. Added Rev. 2 to Report VB-535 Added Airspeed Data; revised ELT. Revised Takeoff - Short Field, Soft Field Added Airspeed Data; relocated ELT to Page 7-10. Added ELT from Page 7-9; moved info to Page 7-11. Added Page. Revised Item 6. Revised Takeoff Distance Vs Density Attitude Chart.	Jan. 25, 1974
Rev. 4 - 761 563 (PR740531)	ii iii A F/M W/B	Added PAC Approval Form. Added Applicability and Item III. Original Pages Issued. Added Rev. 3 to Report: VB-573. Added Rev. 3 to Report: VB-535. (NOTE: AIRCRAFT DELIVERED WITH MANUALS PRIOR TO THIS REVISION DO NOT REQUIRE THIS REVISION.)	May 31, 1974
Rev. 5 - 761 563 (PR740614)	1-2 2-10 2-11 2-11a 2-12 2-12a 2-13 2-14 A F/M W/B	Revised Dimensions; revised Wheel Base. Added annunciator panel and footnote. Revised Alternator and Starter Schematic. Added Alternator Starter Schematic. Relocated Circuit Breaker Panel illustration. Added page. Added Annunciator Panel information and footnote. Revised instrument panel illustration. Added Rev. 4 to Report VB-573. Added Rev. 3 to Report VB-535.	June 14, 1974

PILOT'S OPERATING MANUAL LOG OF REVISIONS (cont)

Revision	Revised Pages	Description	Date
Rev. 5 (cont)	7-4 7-7 7-8 8-1 9-i 9-2 9-3 9-4 9-5 9-6 9-7 9-8 9-11 9-12	Added Annunciator Panel check to Ground Check; added footnote. Revised Maneuvers info. Added Maneuvers info; revised Approach and Landing info. Revised Item 6; added footnote. Revised Index. Revised Takeoff Chart. Revised Climb Chart. Revised Engine Chart. Revised Airspeed (Power) Chart. Revised Airspeed (Economy) Chart. Revised Range (Power) Chart. Revised Range (Economy) Chart. Revised Glide Chart. Revised Landing Chart.	
Rev. 6 - 761 563 (PR750117)	A F/M W/B 7-10 8-2	Added Rev. 5 to Report VB-573. Added Rev. 5 to Report VB-535. Revised ELT info. Added item 11.	Jan. 17, 1975
Rev. 7 - 761 563 (PR750714)	1-1 2-1 2-6 2-7 2-8 2-8a 2-8b 2-12 2-14 A F/M W/B 7-8 7-9 8-1 10-9 10-10	Revised Empty Weight and Useful Load. Deleted info. (AIRFRAME) Revised aileron info; added centering spring effectivity. Revised fuel tank info; added ser. no. eff.; added fuel manifold effectivity. Added ser. nos. effectivity to illustration. Added page (fuel system illustration). Added page. Added callout. Added Engine Hour Meter; revised callouts. Added Rev. 6 to Report VB-573. Added Rev. 6 to Report VB-535. Revised Approach and Landing Flaps - set speed; added footnote. Revised Airspeed Correction table. Revised item 3 (Flap Speed); revised item 8 (Fuel Warning Tip); added footnote. Revised Draining Fuel Valve and Lines info; added fuel manifold effectivity. Revised Draining Fuel System info; added fuel manifold effectivity.	July 14, 1975

PILOT'S OPERATING MANUAL LOG OF REVISION (cont)

Revision	Revised Pages	Description	Date
Rev. 8 - 761 563 (PR751201)	A F/M W/B 7-10	Added Rev. 7 to Report: VB-573. Added Rev. 7 to Report: VB-535. Revised ELT infor; relocated info to page 7-11.	Dec. 1, 1975
Rev. 9 - 761 563 (PR760416)	7-11 8-1 1-2 A F/M 7-5 7-6 7-8 8-2 10-i 10-9 10-10 10-11	Added info from page 7-10. Revised item 8. Revised Fuel Specifications. Added Rev. 8 to Report: VB-573. Added note. Revised Cruising info. Revised Approach and Landing item 5. Added items 12, 13 and 14. Revised page nos. for Filling Fuel Tanks, Draining Fuel Valves and Lines, Draining Fuel System and Tire Inflation. Revised Fuel Requirements; relocated Filling Fuel Tanks to page 10-10; revised Draining Fuel Valves and relocated to page 10-10. Added information from page 10-9 and revised and relocated Draining Fuel System to page 10-11; relocated Tire Inflation info to page 10-11. Added info from page 10-10.	April 16, 1976
Rev. 10 - 761 563 (PR760720)	2-i 2-14 W/B 7-10 7-11	Deleted Winterization Plate. Deleted item 21 on Instrument Panel; revised callout nos. Added Rev. 8 to Report: VB-535. Revised pilot's remote switch description; added info from page 7-11; moved info to page 7-11. Added info from page 7-10; moved info to page 7-10.	July 20, 1976

AIRPLANE FLIGHT MANUAL LOG OF REVISIONS

Revision	Revised Pages	Description and Revision	FAA Approved Date
1	All 3-5	Completely revised to printed format for assembly into Pilot's Operating Manual 761 563. Revised spin recovery technique, item 3. c.	<i>H. W. Barnhouse</i> H. W. Barnhouse August 1, 1973
2	3-i 3-1 3-2 3-7 3-9 3-13 3-14 3-15 3-16	Revised Table of Contents Revised Item C. Propeller Limitations Revised Airspeed Range Revised Stall Speed Chart Revised List of Supplements Added page and Supplement B Added page Added page and Supplement C Added page	<i>H. W. Barnhouse</i> H. W. Barnhouse August 30, 1973
3	Title	Added PAC Approval Form. (NOTE: AIRCRAFT DELIVERED WITH MANUALS PRIOR TO THIS REVISION DO NOT REQUIRE THIS REVISION.)	<i>D. H. Trompler</i> D. H. Trompler May 31, 1974
4	3-i 3-9 3-17, 3-18, 3-19, 3-20	Added Item D. Installation of Piper AutoControl IIIB to supplements. Added Item D. Installation of Piper AutoControl IIIB. Added pages (AutoControl IIIB info).	<i>D. H. Trompler</i> D. H. Trompler June 14 1974
5	3-i 3-9	Changed Section IV title from Supplements to Optional Equipment; under Section IV - revised item A.; deleted item B.; revised remaining item nos.; added AutoControl III to new item C. Changed Section IV title from Supplements to Optional Equipment; revised NOTE; revised item A.; deleted item B.; revised remaining item letters; added AutoControl III to new item C.	

AIRPLANE FLIGHT MANUAL LOG OF REVISIONS (cont)

Revision	Revised Pages	Description and Revision	FAA Approved Date
5 (cont)	3-11 3-13 3-15 3-17 3-20	Deleted (With Pitch Trim Switch) from item A. Electric Pitch Trim Installation. Deleted item B. AutoControl III Installation. Changed item C. to B.; added new items 2. b. (1) and (2); revised remaining item nos.; deleted item 3 - Performance. Changed item D. to C.; added AutoControl III to title. Deleted IIIB designation from items c. (1) and (2).	<p><i>Ward Evans</i> Ward Evans Jan. 17, 1975</p>
6	3-2 3-3 3-5	Added ser. no. effectivity to Flaps Extended speed; added new Flaps Extended speed; added ser. no. effectivity to White Arc instrument marking; added new White Arc instrument marking. Added ser. no. effectivity to Landing Check List; added new Landing Check List. Revised item 3. (Spin procedure).	<p><i>Ward Evans</i> Ward Evans July 14, 1975</p>
7	3-20	Revised item c. (1).	<p><i>Ward Evans</i> Ward Evans Dec. 1, 1975</p>
8	3-1	Revised item B. Fuel.	<p><i>Ward Evans</i> Ward Evans April 16, 1976</p>

SECTION I
LIMITATIONS

The following limitations must be observed in the operation of this airplane:

- A. ENGINE
Lycoming O-320-E3D

ENGINE LIMITS
For all operations 2700 RPM, 150 HP

- B. FUEL
80/87 octane aviation fuel minimum grade

- C. PROPELLER
Sensenich 74DM6, maximum diameter 74 inches. Minimum diameter 72 inches. Static RPM at maximum permissible throttle setting: Not over 2375, not under 2275. No additional tolerance permitted.

McCauley 1C160/EGM7653, maximum diameter 76 inches. Minimum diameter 74.5 inches. Static RPM at maximum permissible throttle setting: Not over 2400, not under 2300. No additional tolerance permitted.

- D. POWER INSTRUMENTS

OIL TEMPERATURE

Green Arc (Normal Operating Range)	75° F to 245° F
Red Line (Maximum)	245° F

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
Red Line (Maximum)	90 PSI

FUEL PRESSURE

Green Arc (Normal Operating Range)	.5 PSI to 8 PSI
Red Line (Minimum)	.5 PSI
Red Line (Maximum)	8 PSI

TACHOMETER

Green Arc (Normal Operating Range)	500 to 2700 RPM
Red Line (Maximum Continuous Power)	2700 RPM

CHEROKEE WARRIOR

E. AIRSPEED LIMITATIONS AND AIRSPEED INSTRUMENT MARKINGS (Calibrated Airspeed)

NEVER EXCEED	176 MPH
MAXIMUM STRUCTURAL CRUISE	140 MPH
MANEUVERING	124 MPH
FLAPS EXTENDED (Ser. nos. 7415001 through 7515449)	125 MPH
FLAPS EXTENDED (Ser. nos. 7615001 and up)	115 MPH
MAXIMUM POSITIVE LOAD FACTOR	(Normal Category) 3.8
MAXIMUM POSITIVE LOAD FACTOR	(Utility Category) 4.4
MAXIMUM NEGATIVE LOAD FACTOR	No inverted maneuvers approved

AIRSPEED INSTRUMENT MARKINGS

Red Radial Line (Never Exceed)	176 MPH (153 KTS)
Yellow Arc (Caution Range) (Smooth Air Only)	140 MPH to 176 MPH (122 KTS to 153 KTS)
Green Arc (Normal Operating Range)	64.5 MPH to 140 MPH (56 KTS to 122 KTS)
White Arc (Flap Down Range) (Ser. nos. 7415001 through 7515449)	58 MPH to 125 MPH (50 KTS to 109 KTS)
White Arc (Flap Down Range) (Ser. nos. 7615001 and up)	58 MPH to 115 MPH (50 KTS to 100 KTS)

F. MAXIMUM WEIGHT

Normal Category	2325 LBS
Utility Category	1950 LBS

G. BAGGAGE CAPACITY

200 LBS

H. 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)
2325	87.0	93.0
1950	83.0	93.0

2. Utility Category

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
1950	83.0	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 Balance Section for proper loading instructions.

I. MANEUVERS

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

	Entry Speed
Steep Turns	124 MPH
Lazy Eights	124 MPH
Chandelles	124 MPH

J. PLACARDS

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.

NO ACROBATIC MANEUVERS ARE APPROVED FOR NORMAL CATEGORY OPERATIONS. SPINS ARE PROHIBITED FOR NORMAL AND UTILITY CATEGORIES.”

In full view of the pilot, the following takeoff and landing check lists will be installed:

TAKEOFF CHECK LIST

Fuel on proper tank	Mixture set	Fasten belts/harness
Electric fuel pump on	Seat backs erect	Trim tab - set
Engine gauges checked		Controls - free
Flaps - set		Door - latched
Carb heat off		

1. On aircraft with ser. nos. 7415001 through 7515449.

LANDING CHECK LIST

Fuel on proper tank		Flaps - set (125 mph)
Mixture rich	Seat backs erect	Fasten belts/harness
Electric fuel pump on		

2. On aircraft with ser. nos. 7615001 and up.

LANDING CHECK LIST

Fuel on proper tank		Flaps - set (115 mph)
Mixture rich	Seat backs erect	Fasten belts/harness
Electric fuel pump on		

CHEROKEE WARRIOR

Adjacent to upper door latch:

“ENGAGE LATCH BEFORE FLIGHT.”

On the instrument panel in full view of the pilot:

“DEMONSTRATED CROSSWING COMPONENT 20 MPH.”

On inside of the baggage compartment door:

“BAGGAGE MAXIMUM 200 LBS”
“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.”

In full view of the pilot:

“ROUGH AIR OR MANEUVERING SPEED - 124 MPH.”

“UTILITY CATEGORY OPERATION - NO AFT PASSENGERS
ALLOWED.”

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.”

In full view of the pilot:

“UTILITY CATEGORY ONLY.”

ACROBATIC MANEUVERS ARE LIMITED TO THE FOLLOWING:

	ENTRY SPEED
SPINS PROHIBITED	
STEEP TURNS	124 MPH
LAZY EIGHTS	124 MPH
CHANDELLES	124 MPH

On the instrument panel in full view of the pilot when the supplementary white strobe lights are installed:

“WARNING - TURN OFF STROBE LIGHTS WHEN TAXIING
IN VICINITY OF OTHER AIRCRAFT, OR DURING FLIGHT
THROUGH CLOUD, FOG OR HAZE.”

SECTION II
PROCEDURES

1. The stall warning system is inoperative with the master switch off.
2. Electric fuel pump must be on for both landing and takeoff.
3. Intentional spins are prohibited. In the event that an unintentional spin is encountered, recovery can be accomplished by immediately using the following procedures:
 - a. THROTTLE - IDLE
 - b. AILERONS - NEUTRAL
 - c. RUDDER - FULL OPPOSITE TO DIRECTION OF ROTATION
 - d. CONTROL WHEEL - FULL FORWARD
 - e. RUDDER - NEUTRAL (WHEN ROTATION STOPS)
 - f. CONTROL WHEEL - AS REQUIRED TO SMOOTHLY REGAIN LEVEL FLIGHT ATTITUDE
4. Except as noted above, all operating procedures for this airplane are normal.

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SECTION III
PERFORMANCE

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 2325 pounds.

Loss of altitude during stalls varied from 100 to 275 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	65	67	74	81	92
Flaps Down	58	-	-	-	-

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A. ELECTRIC PITCH TRIM INSTALLATION

The following emergency information applies in case of electric pitch trim malfunction:

1. In case of malfunction, disengage electric pitch trim by pushing pitch trim switch on instrument panel to OFF position.
2. In an emergency, electric pitch trim may be overpowered using manual pitch trim.
3. In cruise configuration, malfunction results in 10° pitch change and 200 ft altitude variation.
4. In approach configuration, a malfunction can result in a 5° pitch change and 50 ft altitude loss.

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B. AUTOFLITE II INSTALLATION

1. LIMITATIONS

- a. Autopilot use is prohibited above 170 MPH-CAS.
- b. Autopilot "OFF" for takeoff and landing.

2. PROCEDURES

- a. Normal Operation
 - Refer to the current AutoFlite II Owner's Handbook.
- b. Emergency Operation
 - (1) In case of malfunction, PRESS disconnect switch on pilot's control wheel.
 - (2) Rocker switch on instrument panel - OFF.
 - (3) Unit may be overpowered manually at either control wheel.
 - (4) An autopilot runaway, with a 3 second delay in the initiation of recovery, while operating in a climb, cruise or descending flight could result in a 60° bank and a 320 foot altitude loss measured at 170 MPH CAS in a descent.
 - (5) An autopilot runaway, with a 1 second delay in the initiation of recovery, during an approach operation, coupled or uncoupled, could result in a 15° bank and a 20 foot altitude loss.

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C. INSTALLATION OF PIPER AUTOCONTROL III AND/OR AUTOCONTROL IIIB

1. LIMITATIONS

- a. Autopilot OFF during takeoff and landing.
- b. Autopilot use prohibited above 140 MPH CAS.

2. PROCEDURES

a. PREFLIGHT

(1) Roll Section

- (a) Place Radio Coupler in "Heading" mode and place A/P ON/OFF switch in the "ON" position to engage roll section. Rotate roll command knob Left and Right and observe control wheel describes a corresponding Left and Right turn, then center knob.
- (b) Set proper D.G. Heading on D.G. and turn Heading Indice to aircraft heading. Engage "Heading" mode switch and rotate Heading Indice right and left. Aircraft control wheel should turn same direction as Indice. While D.G. indice is set for a left turn, grasp control wheel and override the servo to the right. Repeat in opposite direction for right turn.
- (c) If VOR signal available check Omni mode on Radio Coupler by swinging Omni needle left and right slowly. Observe that control wheel rotates in direction of needle movement.
- (d) Disengage by placing the A/P ON/OFF switch to the "OFF" position.

b. IN-FLIGHT

- (1) Trim airplane (ball centered).
- (2) Check air pressure or vacuum to ascertain that the Directional Gyro and Attitude Gyro are receiving sufficient air.
- (3) Roll Section
 - (a) To engage, center Roll Command Knob, place the A/P ON/OFF switch to the "ON" position. To turn rotate roll command knob in desired direction. (Maximum angle of bank should not exceed 30°.)
 - (b) For heading mode, set Directional Gyro with Magnetic Compass. Push directional gyro HDG knob in, rotate to aircraft heading. Place the console HDG ON/OFF switch to the "ON" position. To select a new aircraft heading, push D.G. heading knob IN and rotate, in desired direction of turn, to the desired heading.

NOTE

In HDG mode the maximum bank angles are limited to approximately 20° and single command, heading changes should be limited to 150°. (HDG Indice not more than 150° from actual aircraft heading.)

(4) VOR

(a) To Intercept:

1. Using OMNI Bearing Selector, dial desired course, inbound or outbound.
2. Set identical heading on Course Selector D.G.
3. After aircraft has stabilized, position coupler mode selector knob to OMNI mode. As aircraft nears selected radial, interception and crosswind correction will be automatically accomplished without further switching.

NOTE

If aircraft position is less than 45° from selected radial, aircraft will intercept before station. If position is more than 45°, interception will occur after station passage. As the aircraft nears the OMNI station, (1/2 mile) the zone of confusion will direct an "S" turn in alternate directions as the OMNI indicator needle swings. This alternate banking limited to the standard D.G. bank angle, is an indication of station passage.

(b) To select new course:

1. To select a new course or radial, rotate the HDG indice to the desired HDG (match course).
2. Rotate OBS to the new course. Aircraft will automatically turn to the intercept heading for the new course.

(c) To change stations:

1. If same course is desired, merely tune receiver to new station frequency.
2. If different course is desired, position coupler mode selector to HDG mode. Dial course selector D.G. to new course. Dial OBS to new course and position coupler mode selector to OMNI mode.

(5) VOR Approach

Track inbound to station as described in VOR navigation section.

After station passage:

- (a) Dial outbound course on Course Selector D.G., then dial same course on OBS.
- (b) After established on outbound radial, position coupler mode selector to HDG mode and select outbound procedure turn heading. After 40 seconds to 1 minute select a turn in the desired direction with the Course Selector D.G. to the inbound procedure turn heading.
- (c) Set OBS to inbound course.
- (d) When aircraft heading is 45° to the inbound course, dial Course Selector D.G. to inbound course and position coupler mode selector to OMNI mode.

NOTE

For precise tracking over OMNI station, without "S" turn, position coupler mode selector to HDG mode just prior to station passage. If holding pattern is desired, position coupler mode selector to HDG mode at station passage inbound and select outbound heading in direction of turn. After elapsed time, dial inbound course on Course Selector D.G. When aircraft heading is 45° to radial, position coupler mode selector to OMNI mode.

(6) LOC Approach Only

- (a) To intercept dial ILS outbound course on Course Selector D.G. When stabilized, position coupler mode selector to LOC REV mode.
- (b) After interception and when beyond outer marker, position coupler mode selector to HDG mode and dial outbound procedure turn heading. After one minute, dial inbound procedure turn heading in direction of turn.
- (c) When aircraft heading is 45° to ILS inbound course dial inbound course on Course Selector D.G. and position coupler mode selector to LOC NORM mode.
- (d) At the missed approach point (M.A.P.), or when missed approach is elected, position coupler mode selector to HDG mode and execute missed approach procedure.

(7) LOC Approach - Back Course (Reverse)

- (a) To intercept dial ILS Back Course outbound heading on Course Selector D.G. When stabilized, position coupler mode selector to LOC NORM mode.
- (b) After interception and when beyond fix, position coupler mode selector to HDG and dial outbound procedure turn heading. After one minute, dial inbound procedure turn heading in direction of turn.
- (c) When heading 45° to inbound course, dial inbound course on Course Selector D.G. and position coupler mode selector to LOC REV mode.
- (d) Approximately 1/2 mile from runway, position coupler mode selector to HDG mode to prevent "S" turn over ILS station near runway threshold.
- (e) Missed approach - same as Front Course. (See (6) d)

c. EMERGENCY OPERATION

- (1) In an emergency the AutoControl can be disconnected by placing the A/P ON/OFF switch to the "OFF" position.
- (2) The AutoControl can be overpowered at either control wheel.
- (3) An Autopilot runaway, with a 3 second delay in the initiation of recovery, while operating in a climb, cruise or descending flight could result in a 60° bank and 100 foot altitude loss.
- (4) An Autopilot runaway, with a 1 second delay in the initiation of recovery, during an approach operation, coupled or uncoupled, could result in a 10° bank and 10 foot altitude loss.

3. PERFORMANCE

No change.