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NAVAIR 01-90KDB-1B

NATOPS PILOT'S POCKET CHECKLIST

T-34B AIRCRAFT

THIS PUBLICATION SUPERSEDES NAVAIR 01-90KDB-1B DATED 1 DECEMBER 1978

ISSUED BY AUTHORITY OF THE CHIEF OF NAVAL OPERATIONS AND UNDER THE DIRECTION OF THE COMMANDER, NAVAL AIR SYSTEMS COMMAND

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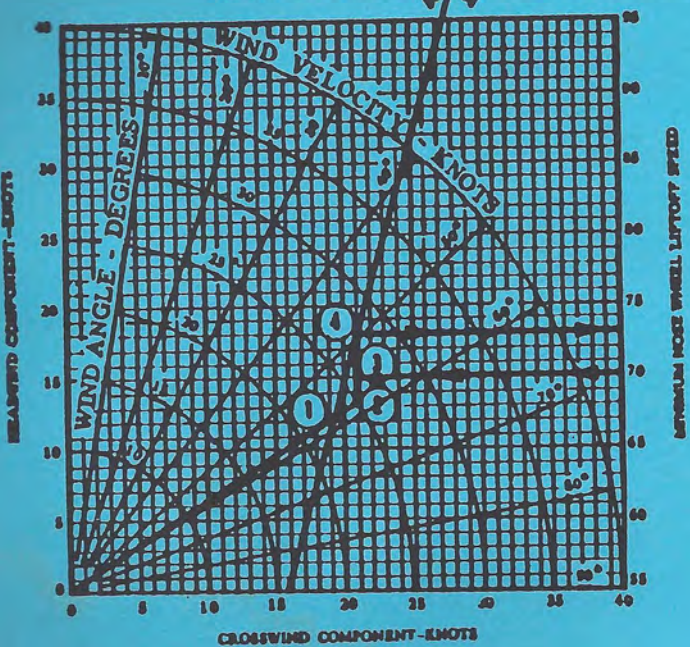
1 MARCH 1981

TAKEOFF CROSSWIND CHART

MODEL T-34B

ENGINE (1)
NO.O-470-4

RECOMMENDED ◆/◆ NOT RECOMMENDED



SAMPLE PROBLEM:

KNOWN:
TAKEOFF RUNWAY – 2
WIND – 070°/28 KNOTS

DETERMINE:
IF TAKEOFF IS RECOMMENDED AT TAKEOFF SPEED OF 70 KNOTS IAS.

NOTE

- MAXIMUM NOSEWHEEL LIFT-OFF SPEED IS 90 KNOTS IAS.
- ENTER CHART AT MAXIMUM GUST VELOCITY.

DATA BASED ON: FLIGHT TEST

SOLUTION:

1. WIND ANGLE IS 70° - 20° = 50° WIND ANGLE TO RUNWAY HEADING.
2. AT WIND VELOCITY OF 28 KNOTS AND 50° WIND ANGLE TO RUNWAY HEADING. FIND CROSSWIND COMPONENT OF 21 KNOTS AND HEADWIND COMPONENT OF 13 KNOTS.
3. PROCEED VERTICALLY TO PREDICTED TAKEOFF SPEED OF 70 KNOTS IAS AND DETERMINE TAKEOFF AS NOT RECOMMENDED.
4. CONTINUE VERTICALLY AND DETERMINE THAT TAKEOFF SPEED MUST BE 73 KNOTS IAS BEFORE TAKEOFF IS RECOMMENDED.

FUEL GRADE: 80/87
FUEL DENSITY: 6 LB/GAL

NAVAIR 01-90KDB-1B

NATOPS PILOT'S POCKET CHECKLIST

T-34B

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LIST OF EFFECTIVE PAGES

Note: Text affected by current change indicated by vertical line in outer margin.

TOTAL NUMBER OF PAGES IN THIS PUBLICATION
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INTERIM CHANGE SUMMARY

The following Interim Changes have been canceled or previously incorporated in this manual:

INTERIM CHANGE NUMBER(S)	REMARKS/PURPOSE
1 thru 8	Previously incorporated

The following Interim Changes have been incorporated in this Change /Revision

INTERIM CHANGE NUMBER	REMARKS/PURPOSE
9	Low altitude engine failure

Interim Changes Outstanding–To be maintained by the custodian of this manual

INTERIM CHANGE NUMBER	ORIGINATOR/DATE (or DATE/TIME GROUP)	PAGES AFFECTED	REMARKS/PURPOSE

DURING START — ENGINE FIRE

*1. Mixture..... IDLE CUTOFF
*2. Fuel shutoff valve handle .....OFF
*3. Throttle.....FULL FORWARD
*4. Continue cranking to clear engine, attempting a start.

NEW

If no start:

*5. Ignition.....OFF
*6. Battery .....OFF
*7. ABANDON AIRCRAFT.

AFTER START ON GROUND

*1. Mixture..... IDLE CUTOFF
*2. Fuel shutoff valve handle .....OFF
*3. Throttle.....FULL FORWARD
*4. Ignition.....OFF
*5. Battery .....OFF
*6. ABANDON AIRCRAFT.

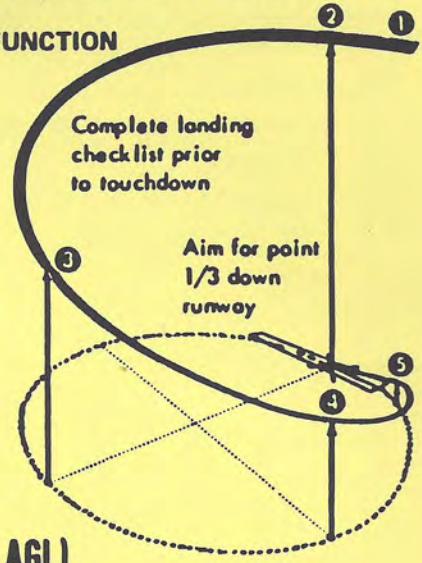
NEW

CONTINUED

*Memory items

EMERGENCY LANDING PATTERN

TO BE USED FOR:
- ENGINE FAILURE OR MALFUNCTION
- PRECAUTIONARY EMERGENCY LANDING
- SIMULATED ENGINE FAILURE



(1) DESCENT

A/S—90 KIAS
GEAR—UP
Flaps—UP
Canopy—CLOSED (open prior to high key)
Prop—HIGH PITCH*

(2) HIGH KEY (1,500 FEET AGL)

Over intended point of landing, 90 KIAS
Begin turn to Low Key, Gear—DOWN for prepared surfaces. Transition to 85 KIAS. Gear—UP for unprepared surfaces or water. Maintain 90 KIAS.

(3) LOW KEY (1,000 FEET AGL)

85 KIAS (if gear down), 90 KIAS (if gear up), wingtip distance abeam intended point of landing.

(4) 90-DEGREE (500-600 FEET AGL)

Complete Landing Checklist
Flaps—AS DESIRED. Adjust to 75 KIAS with flaps down.

(5) FINAL

800 feet straightaway
200 feet AGL
Canopy—BLOW OPEN*

*Only for actual engine failure

HIGH ALTITUDE/PARTIAL ENGINE FAILURE

*1. Assume a safe flight attitude.
*2. Select the best available landing area and turn to intercept the emergency landing pattern at the maximum altitude practicable. If power is available, climb to an altitude from which the aircraft can glide to a high key position.
*3. Gear and flaps ..... AS DESIRED
(aircraft clean will extend a glide).
*4. Fuel boost pump ..... ON
*5. Fuel shutoff valve handle ..... ON
*6. Mixture ..... RICH
*7. Propeller ..... FULL INCREASE
*8. Throttle ..... FULL FORWARD
*9. Ignition ..... ON, BOTH

If engine still not running or altitude cannot be maintained, activate emergency fuel system as follows:

*10. Emergency fuel switch ..... ON
*11. Mixture ..... IDLE CUTOFF

If engine does not start:

*12. Fuel shutoff valve handle ..... OFF
*13. Propeller ..... AS REQUIRED
*14. Ignition ..... OFF
*15. Emergency fuel switch ..... OFF
*16. Gear ..... AS REQUIRED
*17. Flaps ..... AS DESIRED
18. Transmit appropriate radio call
*19. Battery ..... OFF
*20. Generator ..... OFF
*21. Canopy ..... BLOWN
*22. Harness ..... LOCKED

*Memory items

LOW ALTITUDE ENGINE FAILURE

NEW

NEW NEW NEW NEW NEW NEW NEW NEW

If engine fails at or below 1000 feet AGL:

*1. Assume a safe gliding attitude.
*2. Select the best available landing area and turn to intercept the emergency landing pattern at the maximum altitude practicable.
*3. Emergency fuel switch ..... ON

If power is not regained, execute the following prior to landing:

*4. Gear ..... AS DESIRED
*5. Flaps ..... AS DESIRED
*6. Fuel shutoff valve handle ..... OFF
*7. Battery ..... OFF
*8. Canopy ..... BLOWN
*9. Harness ..... LOCKED

*Memory items

GROUND RUN TAKEOFF

ZERO FLAPS — HARD SURFACE RUNWAY

GROUND ROLL DISTANCES

	RUNWAY TEMP. °C	PRESSURE ALTITUDE — FEET						WIND VELOCITY
		SEA LEVEL	1000	2000	3000	4000	6000	
GROSS WEIGHT 2475 POUNDS	0	615	675	745	815	910	1170	0 KNOTS
	15	720	785	865	970	1085	1380	
	30	810	910	1015	1140	1270	1600	
	0	360	400	450	500	570	740	20 KNOTS
	15	425	490	550	610	695	900	
	30	495	570	655	725	820	1040	
	0	280	315	360	390	460	600	30 KNOTS
	15	345	390	425	500	565	725	
	30	395	460	530	590	650	850	
GROSS WEIGHT 2775 POUNDS	0	890	950	1025	1115	1230	1550	0 KNOTS
	15	980	1070	1170	1305	1445	1850	
	30	1105	1230	1355	1520	1695	2170	
	0	550	600	655	710	795	1010	20 KNOTS
	15	596	680	715	840	950	1210	
	30	705	800	870	990	1110	1400	
	0	440	490	540	580	630	830	30 KNOTS
	15	480	560	600	680	775	990	
	30	580	640	705	810	910	1160	
GROSS WEIGHT 2975 POUNDS	0	1060	1140	1230	1350	1490	1880	0 KNOTS
	15	1185	1290	1420	1575	1750	2240	
	30	1315	1500	1630	1840	2050	2620	
	0	655	710	780	860	970	1210	20 KNOTS
	15	730	830	935	1020	1145	1450	
	30	850	970	1070	1195	1340	1640	
	0	550	590	635	700	785	1005	30 KNOTS
	15	595	660	750	830	940	1200	
	30	690	780	875	985	1100	1370	

Ground Run Takeoff

ENGINE FIRE — FIRE IN FLIGHT

*1. Mixture ..... IDLE CUTOFF
*2. Fuel shutoff valve handle ..... OFF
*3. Throttle ..... CLOSED
*4. Ignition ..... OFF
*5. Battery ..... OFF
*6. Generator ..... OFF
7. Do not attempt restart.
8. Execute emergency landing or bail out if fire persists.

ELECTRICAL FIRE

*1. Battery ..... OFF
*2. Generator ..... OFF
3. All circuit breakers ..... PULLED
4. All radio/electrical equipment ..... OFF

If fire persists:

5. Make emergency landing or bail out.

To isolate faulty circuit:

6. Generator circuit breaker ..... IN
7. Generator ..... ON
   (if faulty ..... OFF)
8. Battery ..... ON
9. Check each necessary circuit one at a time by pushing IN circuit breaker and turning ON radio/electrical equipment it services.
10. Secure unnecessary radio/electrical equipment to conserve battery if generator is secured.

CONTINUED

*Memory items

WING FIRE

A fire in the wing could be caused by fuel leakage and/or defective electrical wiring. Perform the following procedure:

NEW NEW NEW

*1. Battery and generator switches ..... OFF
*2. Attempt to extinguish the fire by slipping aircraft away from the fire.
*3. If fire does not extinguish or is obviously fed by aircraft fuel ..... BAIL OUT

FUSELAGE FIRE

*1. Reduce airspeed
*2. Canopy ..... CLOSED
*3. Cockpit air handles ..... FULL OUT (air shut off)
*4. Battery and generator switches ..... OFF
*5. If fire persists ..... BAIL OUT OR LAND

SMOKE/ FUMES

ELIMINATION OF SMOKE

SMOKE/FUMES

*1. Airspeed ..... REDUCE (to minimize spreading of possible fire)
*2. Canopy ..... OPEN
*3. Cockpit air handles ..... FULL OUT
4. Determine source of smoke and execute appropriate emergency procedures.

CARBON MONOXIDE

If carbon monoxide contamination is suspected:

*1. Canopy ..... OPEN
*2. Cockpit air handles ..... FULL OUT

*Memory items

FUEL LEAK/FUEL FUMES

NEW

Check fuel system for secondary indications and proceed as follows:

NEW

*1. Maintain present airspeed.
*2. Land as soon as practicable.
*3. Canopy .....OPEN
*4. Cockpit air handles ..... FULL OUT
*5. Battery and generator switches .....OFF
*6. Utilize landing gear emergency extension system.
*7. Accomplish landing, clear runway, secure engine and ABANDON AIRCRAFT.

PROP FAIL

PROPELLER FAILURE

NEW NEW NEW NEW

*1. Adjust throttle to maintain safe flight while minimizing overspeed.
*2. Climb to put load on propeller.
*3. Manipulate propeller control in an attempt to restore governing.
*4. Land as soon as possible.

*Memory items

50-FOOT OBSTACLE TAKEOFF

ZERO FLAPS — HARD SURFACE RUNWAY

DISTANCE TO CLEAR 50-FOOT OBSTACLE

		PRESSURE ALTITUDE — FEET						
	RUNWAY TEMP. °C	SEA LEVEL	1000	2000	3000	4000	6000	WIND VELOCITY
GROSS WEIGHT 2475 POUNDS	0	780	870	920	1180	1400	2050	0 KNOTS
	15	950	1090	1280	1520	1820	2690	
	30	1145	1375	1640	1970	2370	3480	
	0	450	550	660	740	890	1340	20 KNOTS
	15	580	680	810	970	1170	1800	
	30	725	880	1040	1300	1570	2360	
	0	330	420	520	590	720	900	30 KNOTS
	15	460	550	650	800	960	1520	
	30	570	720	850	1070	1280	1960	
GROSS WEIGHT 2775 POUNDS	0	1000	1140	1300	1540	1800	2640	0 KNOTS
	15	1220	1410	1670	1970	2350	3460	
	30	1490	1780	2110	2540	3060	4540	
	0	645	720	840	980	1170	1750	20 KNOTS
	15	770	990	1060	1310	1570	2350	
	30	970	1160	1370	1680	2030	3220	
	0	510	580	670	800	960	1440	30 KNOTS
	15	610	800	870	1080	1290	1950	
	30	785	960	1120	1380	1660	2720	
GROSS WEIGHT 2975 POUNDS	0	1180	1340	1540	1790	2080	3040	0 KNOTS
	15	1425	1640	1930	2280	2710	4030	
	30	1740	2060	2430	2920	3530	5320	
	0	740	860	990	1160	1360	2040	20 KNOTS
	15	900	1080	1250	1490	1800	2800	
	30	1125	1350	1620	1995	2370	3800	
	0	600	700	810	910	1120	1680	30 KNOTS
	15	730	880	1020	1220	1480	2320	
	30	925	1100	1320	1590	1970	3200	

50-Foot Obstacle Takeoff

DC POWER (GENERATOR) — ELECTRICAL FAILURE

1. Generator .....OFF
   (if warning light is on or voltage exceeds 30 volts)
2. Nonessential electric equipment .....OFF
   (to conserve battery)

If complete electrical system failure:

3. Generator .....OFF
4. Battery .....OFF

AC POWER (INVERTER)

1. Inverter switch .....STANDBY
   (if inverter out light is on)

LOST PLANE — LOST PLANE

1. Confess.
2. Communicate.
3. Climb.
4. Conserve.
5. Comply with enroute procedures.
6. Know any peculiar local area procedures.

*Memory items

LANDING DISTANCE

FULL FLAPS — HARD SURFACE RUNWAY
GROUND ROLL DISTANCE — FEET

	RUNWAY TEMP. °C	HEAD-WIND VELOCITY 0 KN.	10 KN.	20 KN.	30 KN.	40 KN.	PRESSURE ALTITUDE
GROSS WEIGHT 2475 POUNDS	0	345	240	175	130	105	SEA LEVEL
	15	360	245	180	135	110	
	30	375	260	190	145	115	
	0	375	260	190	145	115	3000 FEET
	15	390	270	200	155	125	
	30	400	280	210	160	130	
	0	405	290	215	165	130	6000 FEET
	15	420	295	220	170	135	
	30	435	305	230	180	145	
GROSS WEIGHT 2775 POUNDS	0	390	270	200	155	125	SEA LEVEL
	15	400	280	210	160	130	
	30	420	295	220	170	135	
	0	420	295	220	170	135	3000 FEET
	15	435	305	230	180	145	
	30	455	325	245	190	155	
	0	460	330	250	200	160	6000 FEET
	15	475	345	260	205	165	
	30	490	355	270	210	170	
GROSS WEIGHT 2975 POUNDS	0	410	295	220	170	140	SEA LEVEL
	15	430	305	230	180	145	
	30	450	320	240	190	155	
	0	450	320	240	190	155	3000 FEET
	15	470	340	255	205	165	
	30	490	355	270	210	170	
	0	490	355	270	210	170	6000 FEET
	15	495	360	275	215	175	
	30	530	390	300	240	195	

Landing Distance

AIRBORNE — DAMAGED AIRCRAFT

1. If aircraft is controllable, climb to at least 5000 feet.
2. Communicate – state difficulty, request visual inspection.
3. Check flight characteristics:
   a. Gear and flaps – 85 knots
   b. Gear down, flaps up – 90 knots
4. Fly wide approach, maintaining 10 knots above minimums obtained during flight tests.

BAILOUT — BAILOUT

*1. Make radio distress call, time permitting.
*2. Warn other pilot to prepare to bail out and receive acknowledgment.
*3. Reduce airspeed as much as practicable, with flaps extended, trim slightly nosedown, and head for uninhabited area.
*4. Radio cords.....DISCONNECT
*5. Emergency canopy open.....PULL
*6. Seat.....FULL UP
*7. Parachute straps.....TIGHT
*8. Harness.....RELEASE
*9. Assume crouch position on seat.
*10. Dive for trailing edge of wing.
*11. When clear of aircraft.....PULL D-RING

NEW

FOULED DECK RANGE

CLEAN AIRPLANE

RANGE CLIMB SCHEDULE		
ALTITUDE (FEET)	CLIMB IAS	CRUISE IAS
SEA LEVEL	91	105
5000	85	105
10,000	79	105

DESCENT AIRSPEED 115 KIAS

FLIGHT ALTITUDE (FEET)	FUEL ON BOARD (POUNDS)	DESCEND OR CLIMB TO OPTIMUM ALTITUDE (FEET)	MAXIMUM RANGE (MILES)	START DESCENT MILES FROM DESTINATION	TO ARRIVE AT SEA LEVEL WITH FUEL ON BOARD (POUNDS)
SEA LEVEL	250	5000	670	8	23
SEA LEVEL	200	5000	531	7	20
SEA LEVEL	150	5000	390	7	18
5000	250	5000	686	8	23
5000	200	5000	547	7	20
5000	150	5000	401	7	18
10,000	250	5000	682	8	23
10,000	200	5000	542	7	20
10,000	150	5000	396	7	18

Fouled Deck Range

DITCHING

DITCHING

1. Plan to touch down before all fuel is exhausted, to have power for controlled approach.
2. Make radio distress call.
3. Radio cords.....DISCONNECT
4. Harness.....LOCK
5. Parachute straps.....UNBUCKLE
6. Emergency canopy open.....PULL
7. Landing gear.....UP
8. Flaps.....DOWN
9. Battery.....OFF
10. Make normal approach with power, if possible. Approach stall attitude at a speed under which full control of aircraft can be maintained. Plan landing direction as follows:

    Calm sea – Into wind

    Moderate swells – Parallel to swells

    High swells (25 knots of wind or more) – Into wind, attempting to land on upwind side of swell.

11. Release safety belt ONLY after aircraft has come to full stop.
12. ABANDON AIRCRAFT.

*Memory items

FOULED DECK ENDURANCE

CLEAN AIRPLANE

ENDURANCE CLIMB SCHEDULE	
ALTITUDE	IAS
SEA LEVEL	91
5000	85
10,000	79

LOITER AIRSPEED 70 KIAS

DESCENT 93 KIAS

FUEL ON BOARD (POUNDS)	FLIGHT ALT (FEET)	ENDURANCE (MINUTES)	DESCEND OR CLIMB TO (FEET)	DESCEND WHEN FUEL IS (POUNDS)	FUEL REMAINING AT SEA LEVEL (POUNDS)
250	SEA LEVEL	440	5000	27	23
250	5000	451	5000	27	23
250	10,000	448	5000	27	23
200	SEA LEVEL	348	5000	24	20
200	5000	360	5000	24	20
200	10,000	356	5000	24	20
150	SEA LEVEL	261	5000	22	18
150	5000	268	5000	22	18
150	10,000	265	5000	22	18

Fouled Deck Endurance

ABORTED TAKEOFF — T.O./LDG EMER.

*1. Throttle..... CLOSED
*2. Brakes.....APPLIED

If unable to stop on runway:

*3. Canopy.....BLOW OPEN
*4. Mixture..... IDLE CUTOFF
*5. Fuel shutoff valve handle .....OFF
*6. Ignition.....OFF
*7. Battery .....OFF
*8. ABANDON AIRCRAFT after it stops.

EMERGENCY EXTENSION

1. Landing gear circuit breaker .....OUT
2. Landing gear handle .....DOWN
3. Clutch knob .....UNLOCK
4. Push clutch knob DOWN to engage crank.
5. Crank gear.....DOWN
   (approximately 37 turns)
6. Check gear.....DOWN AND LOCKED

*Memory items

If the gear cannot be lowered successfully, proceed with the emergency procedures for the appropriate gear malfunction.

CAUTION

- If an unsafe gear indication existed and the gear have been successfully lowered, do not attempt to raise the gear.
- Raising the gear after a malfunction could cause further damage.

NEW NEW

GEAR UP LANDING

1. Make normal approach .....FULL FLAPS
2. Emergency canopy open handle .....PULL
3. Harness .....LOCKED

NEW

After touchdown:

4. Mixture ..... IDLE CUTOFF
5. Fuel shutoff valve handle .....OFF
6. Battery .....OFF
7. ABANDON AIRCRAFT as soon as it stops.

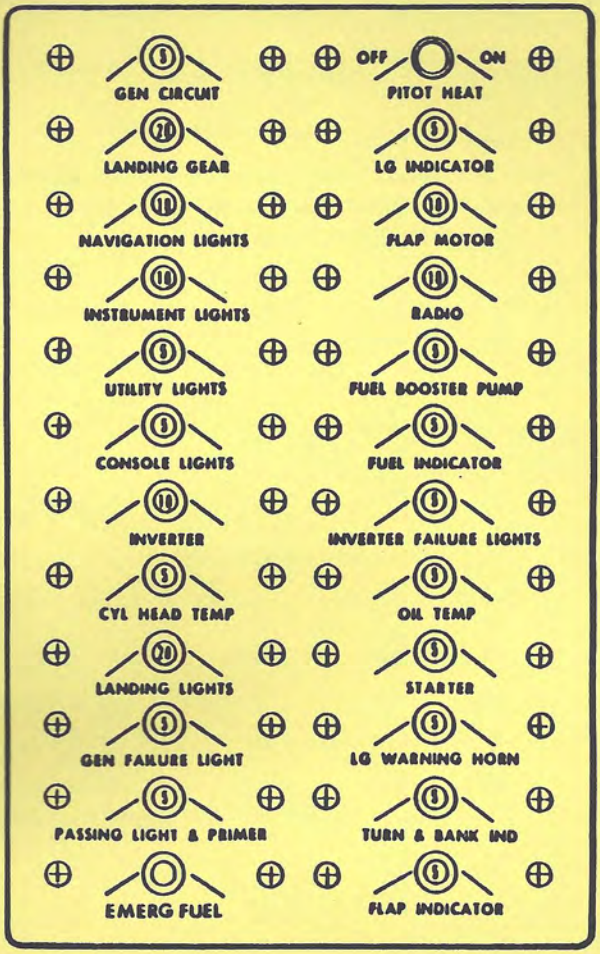
NEW

LDG
EMER

CONTINUED

COCKPIT CIRCUIT BREAKERS

FORWARD COCKPIT ONLY



Cockpit Circuit Breakers

ONE MAIN GEAR RETRACTED

1. Have gear position checked visually by another pilot or by the tower on a flyby, if possible.
2. If verified that one gear is not fully extended and an attempt to retract it is unsuccessful, execute normal approach with full flaps and power on to reduce landing speed, carrying the wing slightly lower on the down and locked side.
3. Emergency canopy open handle .....PULL
4. Touch down smoothly on the down and locked gear. Hold opposite wing up with aileron as long as possible after nosewheel touches down.
5. When wingtip strikes the ground, apply maximum opposite brake pressure.
6. As soon as aircraft stops:
   Mixture..... IDLE CUTOFF
   Fuel shutoff valve handle .....OFF
   Battery .....OFF
7. ABANDON AIRCRAFT.

NOSE GEAR RETRACTED

1. Make a normal approach
2. Emergency canopy open handle .....PULL
3. After touching main wheel down, hold nose up as long as possible with full nose down elevator trim and full backstick.

Before nose settles onto ground:

4. Mixture..... IDLE CUTOFF
5. Fuel shutoff valve handle .....OFF
6. Battery .....OFF
7. ABANDON AIRCRAFT as soon as it stops.

CONTINUED

NOSE GEAR MALFUNCTION

1. Reduce airspeed; lower gear and flaps.
2. Assume slow flight -- 70 knots.
3. Make gentle pitching oscillations (use centrifugal force to swing nose gear into down position).
4. When landing, lower nosewheel to runway gently.
5. Use forward stick to keep nosewheel firmly on runway.

FLAT TIRE

1. Touch down well over opposite side of runway to allow room for a swerve and hold directional control with opposite brake.
2. Avoid hard applications of brake.
3. After landing with a flat tire, perform the Secure Checklist when the aircraft comes to a complete stop and have the aircraft towed clear of the landing area.
4. Do not taxi in with a flat tire.

BRAKE FAILURE

If no brake pressure was evident during landing pattern brake check, land aircraft as short as possible using full flaps to shorten landing roll. After touchdown, secure the engine. When the aircraft comes to a complete stop, complete the remaining items on the Secure Checklist and have the aircraft towed clear of the landing area.

CONTINUED

HARD LANDINGS

If on the runway:

1. Runway permitting, execute a full stop.
2. Do not attempt to taxi the aircraft.

If airborne:

3. Have landing gear checked visually by another pilot or by the tower on a flyby, if possible.
4. If the check reveals no visible damage, execute a normal full flap landing and proceed as in steps 1 and 2.
5. If visual damage is confirmed, execute appropriate emergency procedure.

NORMAL PROCEDURES
TABLE OF CONTENTS

PREFLIGHT INSPECTION

Items marked with an asterisk (*) are to be checked prior to the first flight of the day and may be omitted for subsequent flights that day. NEW

FORWARD COCKPIT

1. Boost pump ..... OFF
2. Fuel shutoff valve handle ..... OFF NEW
3. Trim tabs ..... 0 DEGREES
4. Mixture ..... IDLE CUTOFF
5. Ignition ..... OFF
6. Landing gear handle ..... DOWN
7. Emergency landing gear retract switch ..... OFF (WIRED)
8. Accelerometer limits ..... +4.0 TO -2.0
9. Emergency fuel switch ..... OFF
10. Battery ..... OFF
11. Controls ..... UNLOCKED

*12. Lap belt and shoulder harness:
   a. Webbing ..... CHECK FOR CUTS NEW
   b. Release buckle ..... OPERATION

13.	Parachute/lanyard	CONDITION/ CONNECTED.
*14.	Cockpit/equipment	CLEAN/ SECURED AND STOWED.
*15.	Canopy and windshield	CHECK FOR CRAZING.
*16.	Canopy seal	SECURITY.
*17.	Canopy actuating mechanism (handles, rollers, and tracks)	CHECK PROPER OPERATION.

REAR COCKPIT

1.	Boost pump	OFF
2.	Emergency landing gear retract switch	WIRED
3.	Emergency fuel switch	OFF
4.	Canopy air pressure	2300-3000 PSI
5.	First Aid kit	SECURED
*6.	Lap belt and shoulder harness:	
	a. Webbing	CHECK FOR CUTS
	b. Releasse buckle	OPERATION
7.	Parachute/lanyard	CONDITION/ CONNECTED
8.	Inspect for loose gear.	
*9.	Canopy	CHECK FOR CRAZING
*10.	Canopy seal	SECURITY
*11.	Canopy actuating mechanism	CHECK PROPER OPERATION

If Solo Flight:

12. Shoulder harness, seat belt, seat cushion, parachute and any loose equipment ..... SECURED NEW
13. Radio extension cord ..... SECURED
14. Gyro ..... CAGED
15. Instrument panel ..... SECURED NEW
16. Canopy ..... CLOSED AND LOCKED

EXTERIOR INSPECTION

TRAILING EDGE, PORT WING

1. Top and underside of wing for cracks, deep scratches, tears, wrinkles, popped rivets, and bulges.
2. Movement of aileron, servo action of aileron trim tabs, aileron bellcrank, and trim tab linkage.
3. Trim tab hinge pin anchored to hinge pin hole, actuator bolt not cotter-keyed. NEW
4. Flaps for obvious damage.
5. Static discharge wicks for fraying, deterioration, and proper attachment (min. length 6" overall, 1" exposed). NEW NEW

PORT WINGTIP

Dents, scratches, and condition of navigation light.

LEADING EDGE, PORT WING

1. Breaks, bulges, and proper contour.
2. Landing light for security of lens and bulb.
3. Pitot tube — ensure that pitot tube cover is removed and tube is aligned, secure and unobstructed. NEW

4. Visually check fuel quantity, check chain secure at both ends, and check O ring for deterioration. Replace cap securely.
5. Cockpit air intake screen for obstructions.
6. Undersurface for evidence of fuel leakage.
7. Spar cap for corrosion, adjacent wing skin for bulges.

PORT MAIN LANDING GEAR

1. Condition of main gear doors. Ensure that wheel well is free of obstructions.
2. Uplock bracket spring is attached to uplock bracket and rib of wing.
3. Check small spring inside canvas dust cover attached to uplock cable and the uplock bracket.
4. Uplock mechanism for distortion and security.
5. Roller on landing gear brace for freedom of movement.
6. Shock strut for scoring and pitting; piston for evidence of leakage. Check for approximately 3 inches of polished strut showing.
*7. Clean exposed area with a clean cloth moistened with hydraulic fluid, leaving a thin film of fluid.
8. Hydraulic fittings for condition and leaks.
9. Brake disc for freedom of movement (parking brake off).
10. Brake puck pin for 3/16" clearance maximum.
11. Check wheel nut dust cap free to turn.
12. Tire for condition and proper inflation.

FUEL SAMPLES

1. Open port engine compartment cowl.
2. Front cockpit fuel shutoff valve handle to ON.
3. Boost pump switch to ON.
4. Battery switch to ON.
5. Take fuel sample from AFC 53 drain.
6. Open access panel 4, take fuel sample from fuel sump and close access panel.
7. Open access panel 7, take fuel sample from main fuel strainer drain and close access panel.
8. Battery switch, boost pump, and fuel shutoff valve handle to OFF.

NEW NEW NEW NEW NEW

PORT ENGINE COMPARTMENT

1. Apron beneath engine nacelle for excessive gasoline, oil, or fluid leakage. Underside of fuselage for excessive oil leakage.
2. Fuel filter if AFC 53 installed. Fuel Drain switch in closed position, red plunger flush with top of filter assembly, and prop governor control line not chafing on filter mounting bracket.

WARNING

If the fuel drain switch is not in the closed position, fuel will be pumped overboard when the battery switch is turned on. Fuel discharge will continue in flight, cause rapid depletion and could result in fuel starvation within 20 minutes.

NEW NEW

3. Oil level (minimum of 10 quarts for cold engine; 11 quarts for hot engine).

WARNING

Before re-installing oil filler cap, ensure retaining chain is not broken and is attached at both ends.

4. Engine for loose fittings and leaks.
5. Alternate air door for security.
6. Obstructions in augmentor tube.
7. Ensure that cowling is latched after engine inspection.

NOSE SECTION

1. Wheel centering mechanism, nose gear bracket and retract arm for looseness.
2. Nose gear centering roller free to move.
3. Uplock mechanism for distortion and security.
*4. Nose gear shimmy damper for evidence of leakage and 1/16 to 1/32 inch of polished rod showing when nose wheel is turned to stops in both directions.
5. Shock strut scoring, pitting or leakage and approximately 5 inches of extension.
*6. Clean exposed area of strut with clean cloth moistened with hydraulic fluid, then wipe clean leaving a thin film of hydraulic fluid.
7. Mud scraper for security and obvious damage
8. Grounding wire for security and touching the deck.
9. Nose tire for condition and proper inflation.
10. Propeller for cracks, nicks, pits, and evidence of oil leakage. Inspect security of spinner retention nut.

11. Airscoop screen and hot air overboard inlets for cleanliness and obstructions. Lock fasteners firmly secured.
12. Check passing light for security.

STARBOARD ENGINE SECTION

1. Same as check for port engine section except for oil quantity. Check for double clamp on generator capacitor.
2. Security of external canopy release handle.
*3. Battery for electrolyte leakage, warps and bulges.
*4. Battery and connectors for security.
*5. Vent tubes for obstructions. Ensure vent tube is properly connected to vent elbow.
*6. Drain jar for evidence of contamination.

STARBOARD MAIN LANDING GEAR

Same as port main landing gear.

STARBOARD WING

Same as port wing.

FUSELAGE, STARBOARD SIDE

1. Fuel vent standpipe for dents and for a forward slant of approximately 15 degrees with bias cut facing forward.
2. Wrinkled skin and popped rivets.
3. VOR antenna for security.
4. Static air vent clear.

EMPENNAGE

1. All tail surfaces for cracks, corrosion, dents and tears; control surfaces for freedom of movement, looseness and excessive play between elevators.
2. All visible control linkages and hinge fittings for cracks and security. Rudder trim tab for anti-servo action.

*3. Retaining nut on VHF antenna for security. Antenna for cracks, dents, corrosion and security.

*4. Navigation lights and tail cone for security and cracks.

*5. Static discharge wicks for fraying, deterioration and proper attachment. (Min. length 6", 1" exposed wick).

FUSELAGE, PORT SIDE

Same as starboard side except for ensuring that baggage compartment is checked and securely latched.

WARNING

The baggage compartment must be checked empty for dual flights. A maximum of 100 pounds may be carried in the baggage compartment on solo flights.

AIRCRAFT EXTERIOR

At unmanned fields or fields where ground support personnel are not normally available, the pilot will ensure that the aircraft wheel chocks and tiedowns are removed and the location of the nearest fire bottle is noted.

PRESTART

PRESTART CHECKLIST

1. Seat and rudder pedals ..... ADJUSTED
2. Harness ..... FASTENED
3. Inertia reel lock ..... CHECKED
4. Wing flap lever ..... OFF
5. Landing lights ..... OFF
6. Alternate air ..... IN
7. Inverter ..... OFF
8. Generator ..... ON
9. Cockpit air handles ..... SET
10. Landing gear emergency handcrank ..... DISENGAGED (clutch knob Up and LOCKED)
11. Light switches and rheostats ..... SET
    (The anti-collision switches will normally remain in the ON position at all times).
12. Radios ..... OFF
13. Pitot heat ..... OFF
14. Circuit breakers ..... IN

On night flights only:

15. External power (for lights and gyros) ..... PLUGGED IN (if not available, battery switch ON)
16. Instrument and console lights ..... ON
17. Landing lights, passing light, and pitot heat ..... CHECK (ON momentarily)

18. Navigation lights . . . . . .ON (checked by outside observer)

19. External gear-down indicator lights . . . . . .CHECKED (by outside observer)

STARTING ENGINE (FRONT COCKPIT ONLY)

WARM ENGINE

1. Canopy . . . . . .OPEN
2. Mixture . . . . . .IDLE CUTOFF
3. Fuel shutoff valve handle . . . . . .ON
4. Fuel boost pump . . . . . .ON
5. Throttle . . . . . .SET
6. Propeller control . . . . . .FULL FORWARD
7. Parking brake . . . . . .SET
8. Battery . . . . . .ON (OFF if external power is used)
9. Fuel pressure . . . . . .CHECK
10. Propeller area . . . . . .CLEAR
11. Starter . . . . . .ENGAGED (COUNT 4 BLADES)
12. Ignition . . . . . .BOTH
13. Mixture . . . . . .SLOWLY TO RICH
14. Starter . . . . . .RELEASE (when engine fires)
15. Throttle . . . . . .1200-1400 RPM
16. Oil pressure . . . . . .CHECK (if no rise within 10 seconds or 30 psi in 30 seconds, secure engine)

17. External power (if used) . . . . . .DISCONNECT; Battery – ON
18. Radios/AIMS. . . . . .ON/STBY

If engine fails to start after ~~15~~ 10 seconds: (Flooded Engine)

19. Mixture . . . . . .IDLE CUTOFF
20. Throttle. . . . . .FULL OPEN
21. ~~Ignition . . . . . .OFF~~
22. ~~Crank for 5 seconds to clear engine, then repeat steps 5 through 14. If engine fails to start after 10 seconds, perform steps 23 through 29.~~ ~~10~~ COOL 5 MIN
23. Mixture . . . . . .IDLE CUTOFF
24. Booster pump . . . . . .OFF
25. Battery . . . . . .OFF
26. Ignition . . . . . .OFF
27. Fuel shutoff valve handle . . . . . .OFF
28. Allow starter to cool for 5 minutes, then repeat steps 2 through 14.
29. If engine still fails to start, secure engine and request assistance.

PRETAKEOFF

PRETAXI CHECKLIST

1. Generator warning light and generator voltage. . . . . .OUT AT CUT-IN SPEED (approximately 900 engine rpm), 27.7-28.5 VOLTS
2. Flaps . . . . . .CYCLED/INDICATING UP
3. Trim tabs. . . . . .SET 6R, 3 UP, 0
4. Landing gear warning light . . . . . .CHECKED

5. Landing gear indicators . . . . . .DOWN
6. Fuel quantity . . . . . .NOTED
7. Altimeter and clock. . . . . SET
8. Inverters . . . . . .CHECKED/ON MAIN
9. Gyros . . . . . .UNCAGED/SET
10. Communications equipment . . . . .CHECK OPERATION
11. Instruments. . . . . .CHECK FOR CORRECT INDICATIONS
12. Idle speed . . . . . .THROTTLE CLOSED, 600-750 RPM
13. Ignition ground . . . . . .CHECKED

TAXI

1. Parking brake . . . . . .RELEASE
2. Brakes. . . . . .CHECK
3. Throttle to taxi speed . . . . . .800-1000 RPM
4. Turn-and-slip indicator and directional gyro. . . . . .CHECK FOR PROPER TRACKING

ENGINE RUNUP

1. Instruments. . . . . .CHECK FOR CORRECT INDICATIONS
2. Propeller(recheck). . . . . .FULL INCREASE
3. Mixture (recheck) . . . . . .FULL RICH

Propeller Governor Check:

4. Throttle. . . . . .1800 RPM
5. Propeller lever . . . . . .AFT TO DETENT (drop to 1600-1650 rpm)

KEEP ABOVE 1500 RPMs

6. Propeller lever . . . . . .RETURN TO FULL INCREASE

Exercise propeller by repeating this procedure.

Ignition System Check:

7. Throttle. . . . . .2000 PRM
8. Ignition switch . . . . . .R (Right). (Note rpm drop, then switch to BOTH)
9. Ignition switch . . . . . .L (Left). (Note rpm drop, then switch to BOTH. Maximum drop on either magneto - 100 RPM with a max. split of 50 RPM)

Alternate Air Check:

10. Throttle. . . . . .2000 RPM
11. Alternate air handle. . . . . .FULL OUT (manifold pressure drop - approx. 1/2 inch)
12. Alternate air handle. . . . . .FULL IN

13. Throttle.....FULL OPEN (2475(±75)rpm)
14. Acceleration and deceleration should be smooth without backfire or roughness.
15. Fuel boost pump.....OFF AT 1700 RPM; CHECK PRESSURE FLUCTUATION
16. Fuel boost pump.....ON; CHECK 15-20 PSI
17. Idle mixture:
    Throttle.....CLOSED (600 – 750 rpm)
    Mixture control.....SLOWLY RETARD TO IDLE CUTOFF (5-10 rpm rise)
    Mixture control.....RAPIDLY TO FULL RICH (as soon as rpm starts to fall off)

GROUND BURNOUT

If, after extended taxi or idle time, the ignition system checks out of limits, proceed as follows:

1. Propeller.....FULL INCREASE
2. Mixture.....FULL RICH
3. Throttle.....ADVANCE TO 2,000 RPM
4. Mixture.....LEAN TO 50 RPM DROP BELOW BEST POWER

5. Mixture ..... RETURN TO RICH AFTER 1 MINUTE
6. Ignition system ..... RECHECK
7. If system does not check out. .... DOWN THE AIRCRAFT

TAKEOFF

TAKEOFF CHECKLIST

1. Anti-collision lights ..... ON
2. Fuel ..... ON; CHECK:
   - Fuel boost pump ..... ON
   - Fuel shutoff valve handle ..... ON
   - Fuel pressure ..... NORMAL
   - Fuel quantity ..... CHECK
   - Fuel caps ..... LOCKED
3. Flight controls ..... FREE
4. Trim tabs ..... 6 R, 3 UP, 0
5. Alternate air ..... OFF
6. Generator ..... OPERATING
7. Instruments ..... CHECKED/SET
8. Mixture ..... RICH
9. Propeller ..... FULL INCREASE
10. Ignition ..... CHECKED ON BOTH
11. Flaps ..... SET
12. Harness ..... LOCKED
13. Canopy:
    - Front ..... LOCKED (Open/closed)

Rear ..... LOCKED (Closed)

14. Radios ..... SET
15. AIMS ..... ON

AFTER TAKEOFF CHECKLIST

1. Landing gear ..... UP
2. Flaps ..... UP
3. Fuel caps ..... SECURE (VISUALLY CHECK)

LANDING

LANDING CHECKLIST:

1. Fuel boost pump ..... ON
2. Alt air ..... IN
3. Mixture ..... RICH
4. Harness ..... LOCKED
5. Landing gear ..... DOWN
6. Flaps ..... AS REQUIRED
7. Propeller ..... FULL INCREASE

SECURE CHECKLIST

1. Throttle ..... 800-1000 RPM
2. Flaps ..... UP
3. Radios ..... OFF
4. Inverters ..... OFF
5. Engine instruments ..... WITHIN LIMITS/ TEMPS STABILIZED
6. Throttle ..... CLOSED
7. Ignition ..... GROUND-CHECK
8. Fuel boost pump ..... OFF
9. Mixture ..... IDLE CUTOFF

After propeller stops:

10. Fuel shutoff handle.....OFF
11. Ignition.....OFF
12. Lights.....OFF
13. Battery.....OFF

Before Leaving Aircraft:

1. Flight controls.....LOCKED
2. Wheels.....CHOCKED
3. Parking brake.....RELEASED
4. Canopy.....CLOSED

SPECIAL PROCEDURES

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ACROBATICS

ACROBATIC CHECKLIST

Complete the following prior to performing acrobatics:

1. Fuel boost pump ..... ON
2. Harness ..... TIGHT AND LOCKED
3. Propeller ..... 2,400 RPM
4. Canopy ..... CLOSED AND LOCKED
5. Directional indicator ..... CAGED
6. Loose gear ..... STOWED

NOTE

Complete all acrobatic maneuver recoveries above 3000 feet AGL.

ACROBATIC MANEUVERS

	ENTRY AIRSPEED	RECOVERY AIRSPEED
WINGOVER	130 knots IAS. Air speed should be 70 knots IAS after completing 90° of turn.	Recover 180° from original heading with 130 knots IAS.
BARREL ROLL	130 knots IAS. When inverted, and after 90° heading change, airspeed should be 60-70 knots.	Recover on original heading with 130 knots IAS.
LOOP	150 knots IAS.	150 knots IAS.
HALF CUBAN EIGHT	150 knots IAS.	Recover 180° from original heading at 150 knots IAS.
IMMELMANN	170 knots IAS.	
SPLIT-S	90 knots or less. When inverted, wings level, close throttle.	Recover on opposite heading, 140 knots or less.

STALL RECOVERY

NORMAL STALL RECOVERY

1. Release back pressure on stick immediately and smoothly advance throttle.
2. Roll wings level and return to level flight. Avoid pulling back too severely as a secondary stall or excessive G-loads may result.
3. When level flight is resumed, reduce throttle to cruising power.

LOW ALTITUDE STALL RECOVERY

1. Use power to hold altitude loss to a minimum. The nose of the aircraft should be allowed to drop only slightly below the horizon.
2. Use coordinated aileron and rudder to roll the wings level and return to level flight as rapidly as possible.
3. As soon as control is regained, establish climb.

SPIN RECOVERY

Recovery from normal spins is effected most rapidly if started at the beginning of the steep half of the turn. Recovery is equally positive in the shallow portion, but is somewhat slower.

1. Apply opposite rudder to the neutral position followed by forward stick to the neutral position.
2. When the rotation stops; level the wings. The aircraft will be in a 60-to 80-degree dive. Start a pullout immediately to keep the altitude loss to a minimum, but avoid entering an accelerated stall.
3. With gear and flaps down, make pullout tight enough to keep from exceeding 100 knots IAS.

REFERENCE DATA

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LIMITATIONS

AIRSPEED

In smooth or moderately turbulent air:
Gear and flaps retracted,
canopy open or closed ..... 240 KIAS (max.)

In severe turbulence ..... 120 to 165 KIAS

ACCELERATION

In smooth air at all gross weights ..... +4.0 to -2.0 G's

In moderately turbulent air at all
gross weights ..... +2.5 G's

ENGINE

Minimum speed ..... 1600 RPM

Maximum speed ..... 2600 RPM

Engine overspeeds (2700-3200 rpm) require engine inspection; engine speeds above 3200 rpm require engine change.

Cylinder head temperature:
- Normal operating range ..... 107°C to 240°C
- Maximum continuous ..... 240°C
- Takeoff ..... 240°C

Fuel pressure:
- Continuous operation ..... 15-20 PSI

Oil pressure:
- Normal operating range..... 30 to 80 PSI
- Maximum ..... 80 PSI

Oil temperature:
- Normal operating range ..... 40°C to 107°C
- Maximum ..... 107°C

PROPELLER

Overspeed (maximum) ..... 3380 RPM
Propeller inspection is required between 3050 - 3380 rpm; replacement is required over 3380 rpm.

GROSS WEIGHT

Field takeoff and landing..... 3050 LB. (max.)

SERVICING

ENGINE STARTING UNITS

External (auxiliary) power units may be used which supply 24 volts dc.

OLEO EXTENTIONS

Main landing gear strut – Extended 3 inches (minimum).

Nose gear strut – 3-3/16 to 5-3/16 inches.

Nose gear shimmy damper – Service shimmy damper if indicator wire can be inserted into shimmy damper piston rod 3-1/16 inches or more.

LIMITATIONS CARD

	MIN	MAX
MAP SPLIT		1.5"
OIL TEMP (normal range)	40°C	107°C
OIL PRESSURE (in flight)	30 psi	80 psi
OIL PRESSURE (idle)	10 psi	
OIL CONSUMPTION (1.0 hour normal cruise)		1.5 qts
CYL. HEAD TEMP (normal range)	107°C	240°C
CHT SPLIT		30°C
FUEL PRESSURE (start)	8 psi (normal)	15-20 psi
FUEL SPLIT (must be dipped)		10 gals
RPM SPLIT		20 rpm
RPM FLUX		±25 rpm
RPM (full power on deck)	2400 rpm	2550 rpm
RPM (takeoff)	2570 rpm	2630 rpm
RPM (idle at operating temp)	600 rpm	750 rpm
VOLTMETER (at 1700 rpm)	27.7 V	28.5 V
ALTIMETER SPLIT (below 2000')		100 ft
AIRSPEED SPLIT		4 kts
STALL SPEED (gear, flaps down, power off)		49.3 kts
STALL SPEED (clean, power off)		59.3 kts
GEAR WARNING HORN BLOWING	12"	18"
LANDING GEAR RUN TIME (retract)	7-9 sec	12 sec
FLAP RUN TIME (extension)		15 sec
BRAKE PUCK WEAR		3/16"
AILERON TRIM (normal cruise)		4°
IDLE MIXTURE CHECK		5-10 rpm rise
CRUISE MIXTURE RISE		0-40 rpm rise
MAGNETO DROP		100 rpm
MAGNETO SPLIT		50 rpm
MAXIMUM AIRSPEED (clean)		240 kts
ROLLING PULLOUT		3.5 g.s
GEAR DOWN		110 kts
"G" METER LIMITATION		+4, -2
CANOPY AIR	2300 psi	3000 psi

NOTE: IF A READING IS BELOW THE MINIMUM OR ABOVE THE MAXIMUM, THE AIRCRAFT IS DOWN ON THE YELLOW SHEET.

BATTERY

Capacity: 24 volt, 24 ampere-hour.

Specific gravity, fully charged: 1.275 to 1.300 (recharge or replace when specific gravity is 1.240 or below).

SPECIFICATIONS

MATERIAL	SPECIFICATIONS	QUANTITY OR PRESSURE
FUEL	MIL-F-5572** Grade 80/87, 100LL Alternate Grades 100/130, 115/145	50 Gallons (usable fuel, both tanks)
ENGINE OIL	MIL-L-22851 (Type II)**	3 Gallons
HYDRAULIC FLUID	MIL-H-83282 (Primary) MIL-H-5606 Alternate**	1 Pint Fill brake reservoir to within 3/4 inch of bottom of reservoir neck.
LANDING GEAR STRUTS Hydraulic Fluid Nitrogen*	MIL-H-5606** BB-N-411	———
TIRES Dry Compressed Air or Nitrogen* Main (6.50 X 8–6-ply) Nose (5 X 5–4-ply)	———	 35 psi 40 psi
CANOPY EMERGENCY AIR BOTTLE Nitrogen*	BB-N-411	2,300 - 3,000 psi
BATTERY Distilled Water	———	Electrolyte level must cover plates in each cell.

*If necessary, on a cross country flight, air may be used on a one time basis. Since air is corrosive, the system shall be returned to nitrogen at the next stop or home base as applicable. An appropriate yellow sheet entry shall be made when air is substituted.

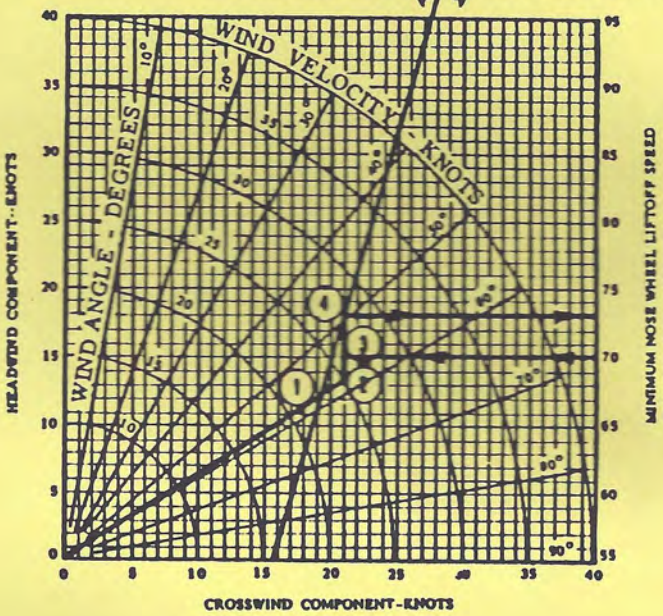
**Commercial – Fuel: 80/87, 100LL; alt: 100/130 or 115/145; Oil: EXXON Aviation Oil E120 or E100, EXXON Aviation Oil AD100, Aeroshell W120 or W100, Mobil AVREX 106 type 120, Mobil AERO Oil 120 or 100, Chevron AERO Oil Grade 120 or 100, Texaco Aircraft Eng. Oil Premium AD120 or AD100 (Lower viscosity aviation grade oils may be utilized during cold weather operations); Hydraulic Fluid: EXXON UNIVIS J43, Mobil AERO HFB, Aeroshell Fluid 4.

TAKEOFF CROSSWIND CHART

MODEL T-34B

ENGINE (1)
NO.O-470-4

RECOMMENDED / NOT RECOMMENDED



SAMPLE PROBLEM:

KNOWN:
TAKEOFF RUNWAY – 2
WIND – 070°/25 KNOTS

DETERMINE:
IF TAKEOFF IS RECOMMENDED AT TAKEOFF SPEED OF 70 KNOTS IAS.

NOTE

- MAXIMUM NOSEWHEEL LIFT-OFF SPEED IS 90 KNOTS IAS.
- ENTER CHART AT MAXIMUM GUST VELOCITY.

SOLUTION:

1. WIND ANGLE IS 78° – 20° = 58° WIND ANGLE TO RUNWAY HEADING.
2. AT WIND VELOCITY OF 25 KNOTS AND 58° WIND ANGLE TO RUNWAY HEADING. FIND CROSSWIND COMPONENT OF 21 KNOTS AND HEADWIND COMPONENT OF 13 KNOTS.
3. PROCEED VERTICALLY TO PREDICTED TAKEOFF SPEED OF 70 KNOTS IAS AND DETERMINE TAKEOFF AS NOT RECOMMENDED.
4. CONTINUE VERTICALLY AND DETERMINE THAT TAKEOFF SPEED MUST BE 73 KNOTS IAS BEFORE TAKEOFF IS RECOMMENDED.

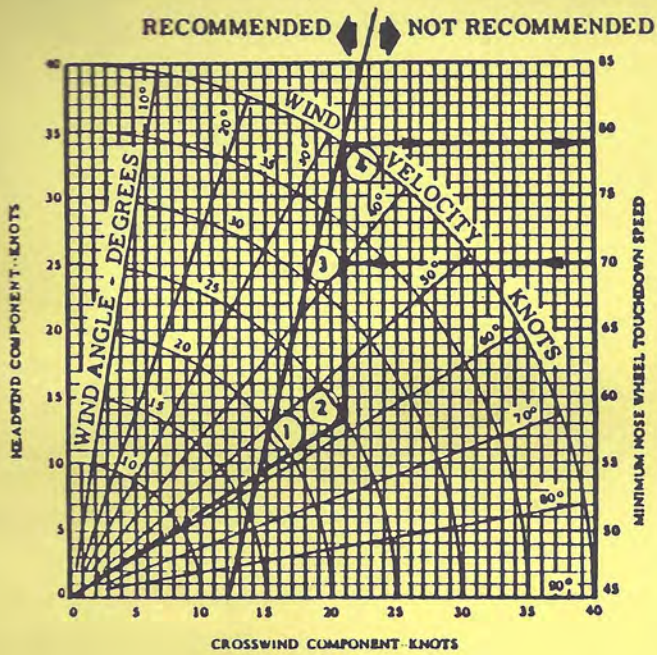
DATA BASED ON: FLIGHT TEST

FUEL GRADE: 80/87
FUEL DENSITY: 6 LB/GAL

LANDING CROSSWIND CHART

MODEL T-34B

ENGINE (1)
NO.0-470-4



SAMPLE PROBLEM.

KNOWN.
LANDING RUNWAY - 2
WIND - 070° 25 KNOTS

DETERMINE.
IF LANDING IS RECOMMENDED AT LANDING SPEED OF 70 KNOTS IAS.

NOTE

- MAXIMUM NOSEWHEEL TOUCHDOWN SPEED IS 90 KNOTS IAS.
- ENTER CHART AT MAXIMUM GUST VELOCITY.

SOLUTION:

1. WIND ANGLE IS 70° - 20° - 50° WIND ANGLE TO RUNWAY HEADING.
2. AT WIND VELOCITY OF 25 KNOTS AND 50° WIND ANGLE TO RUNWAY HEADING, FIND CROSSWIND COMPONENT OF 21 KNOTS AND HEADWIND COMPONENT OF 13 KNOTS.
3. PROCEED VERTICALLY TO PREDICTED LANDING SPEED OF 70 KNOTS IAS AND DETERMINE LANDING AS NOT RECOMMENDED.
4. CONTINUE VERTICALLY AND DETERMINE THAT LANDING SPEED MUST BE 78 KNOTS IAS BEFORE LANDING IS RECOMMENDED.

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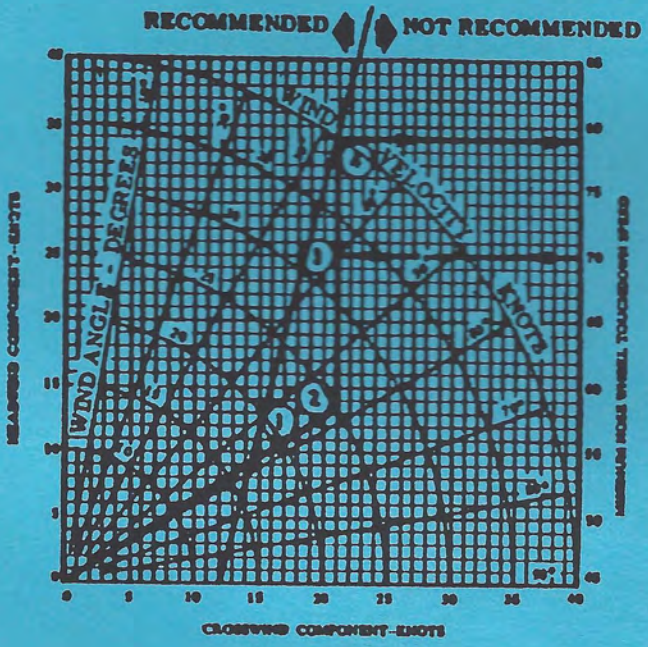
LANDING CROSSWIND CHART

MODEL T-34B

ENGINE (1)
NO.O-470-4



SAMPLE PROBLEM:

KNOWN:
LANDING RUNWAY - 2
WIND - 070° 25 KNOTS

TO DETERMINE:
IF LANDING IS RECOMMENDED AT LANDING SPEED OF 70 KNOTS IAS.

NOTE

- MAXIMUM DEMONSTRATED CROSSWIND SPEED IS 30 KNOTS IAS.
- ENTER CHART AT MAXIMUM GUST VELOCITY.

SOLUTION:

1. WIND ANGLE IS 70° - 20° 50° WIND ANGLE TO RUNWAY HEADING.
2. AT WIND VELOCITY OF 25 KNOTS AND 50° WIND ANGLE TO RUNWAY HEADING, FIND CROSSWIND COMPONENT OF 21 KNOTS AND HEADWIND COMPONENT OF 13 KNOTS.
3. PROCEED VERTICALLY TO PREDICTED LANDING SPEED OF 70 KNOTS IAS AND DETERMINE LANDING AS NOT RECOMMENDED.
4. CONTINUE VERTICALLY AND DETERMINE THAT LANDING SPEED MUST BE 70 KNOTS IAS BEFORE LANDING IS RECOMMENDED.