**NAV AIR 01-30KDB-1B**

**TAKEOFF CROSSWIND CHART**

**MODEL T-34B**

**ENGINE (1)**

**NO. 0-470-4**

---

**Recommended**

**Not Recommended**

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**SAMPLE PROBLEM:**

**KNOWN:**
- Takeoff Runway = 2
- Wind = 070°/23 Knots

**DETERMINE:**
- If takeoff is recommended at takeoff speed of 10 knots IAS.

**NOTE**
- Maximum nosewheel lift-off speed is 10 knots IAS.
- Enter chart at maximum gust velocity.

**SOLUTION:**

1. Wind angle is 70° - 26° - 66° wind angle to runway heading.
2. At wind velocity of 25 knots and 90° wind angle to runway heading, find crosswind component of 25 knots and head wind component of 15 knots.
3. Proceed vertically to predicted takeoff speed of 70 knots IAS and determine takeoff at 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

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*Inside Front Cover*
NAVAIR 01-90KDB-1B

NATOPS PILOT'S POCKET CHECKLIST

T-34B AIRCRAFT

MAR 30 1982

AIAI Publication
COPY NO. ___/___
LOCATION Flying Club

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

___/ MAR 81 ___
CHANGE DATE

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

1 MARCH 1981
**LIST OF EFFECTIVE PAGES**

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

**TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 63 CONSISTING OF THE FOLLOWING:**

<table>
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**ADDITIONAL COPIES:**

Additional copies of this manual and changes thereto may be procured by submitting Form DD 1348 to NPFC Philadelphia in accordance with Introduction to Navy Stock-list of Publications and Forms NAVSUP Publication 2002 (S/N 0533–LP-004-0001).
# INTERIM CHANGE SUMMARY

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

<table>
<thead>
<tr>
<th>INTERIM CHANGE NUMBER(S)</th>
<th>REMARKS/PURPOSE</th>
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The following Interim Changes have been incorporated in this Change /Revision

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<th>INTERIM CHANGE NUMBER</th>
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<td>Low altitude engine failure</td>
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Interim Changes Outstanding—To be maintained by the custodian of this manual

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</table>
**DURING START**

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

**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.

*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

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

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<td>985</td>
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Ground Run Takeoff
ENGINE FIRE

*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.

*Memory items
WING FIRE

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

*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

*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

Check fuel system for secondary indications and proceed as follows:

*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.

PROPELLER FAILURE

*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**

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<thead>
<tr>
<th>Runway Temp. °C</th>
<th>Sea Level</th>
<th>1000</th>
<th>2000</th>
<th>3000</th>
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<th>Wind Velocity</th>
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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

1. Confess.
2. Communicate.
3. Climb.
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**

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<th>Runway Temp. °C</th>
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<tr>
<td>30</td>
<td>440</td>
<td>335</td>
<td>270</td>
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Landing Distance
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**

*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
# FOULED DECK RANGE

**CLEAN AIRPLANE**

<table>
<thead>
<tr>
<th>RANGE CLIMB SCHEDULE</th>
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<tr>
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**DESENT AIRSPEED 115 KIAS**

<table>
<thead>
<tr>
<th>FUEL ON BOARD (POUNDS)</th>
<th>DESCEND OR CLIMB TO OPTIMUM ALTITUDE (FEET)</th>
<th>MAXIMUM RANGE (MILES)</th>
<th>START DESCENT MILES FROM DESTINATION</th>
<th>TO ARRIVE AT SEA LEVEL WITH FUEL ON BOARD (POUNDS)</th>
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<tr>
<td>10,000</td>
<td>150</td>
<td>396</td>
<td>7</td>
<td>18</td>
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**Fouled Deck Range**
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

<table>
<thead>
<tr>
<th>Loiter Airspeed</th>
<th>70 KIAS</th>
<th>Descent</th>
<th>93 KIAS</th>
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</table>

<table>
<thead>
<tr>
<th>Fuel On Board (Pounds)</th>
<th>Flight Alt (Feet)</th>
<th>Endurance (Minutes)</th>
<th>Descend On Climb To (Feet)</th>
<th>Descend When Fuel Is (Pounds)</th>
<th>Fuel Remaining At Sea Level (Pounds)</th>
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**Fouled Deck Endurance**

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<tr>
<td>10,000</td>
<td>79</td>
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</table>
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
GENERAL LANDING EMERGENCY

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.

GEAR UP LANDING

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

After touchdown:

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

LDG EMER

CONTINUED
COCKPIT CIRCUIT BREAKERS

FORWARD COCKPIT ONLY

- GEN CIRCUIT
- LANDING GEAR
- NAVIGATION LIGHTS
- INSTRUMENT LIGHTS
- UTILITY LIGHTS
- CONSOLE LIGHTS
- INVERTER
- CYL HEAD TEMP
- LANDING LIGHTS
- GEN FAILURE LIGHT
- PASSING LIGHT & PRIMER
- EMERG FUEL

+ OFF - ON
- LG INDICATOR
- FLAP MOTOR
- RADIO
- FUEL BOOSTER PUMP
- FUEL INDICATOR
- INVERTER FAILURE LIGHTS
- OIL TEMP
- STARTER
- LG WARNING HORN
- TURN & BANK IND
- FLAP INDICATOR

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

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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.

FORWARD COCKPIT

1. Boost pump ........................................... OFF
2. Fuel shutoff valve handle ................. OFF
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
    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. Release 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
13. Radio extension cord ..................SECURED
14. Gyro ..................................CAGED
15. Instrument panel .....................SECURED
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.
4. Flaps for obvious damage.
5. Static discharge wicks for fraying, deterioration, and proper attachment (min. length 6” overall, 1” exposed).

PORT WING TIP

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.
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).


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.

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.
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.
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.


*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.


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.


*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)

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 ......................... BOTH
8. Battery ................................... ON (OFF if external power is used)
9. Fuel pressure ......................... CHECK
10. Propeller area ......................... CLEAR
11. Starter ................................... ENGAGED (COUNT 4 BLADES)
   THROTTLE FULL (500), OFF
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 seconds:

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.
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)
6. Propeller lever: RETURN TO FULL INCREASE

Exercise propeller by repeating this procedure.

Ignition System Check:

7. Throttle: \(2000\) RPM
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

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NAV A I R 0 1 - 9 0 K D B - 1 8

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

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

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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</tbody>
</table>

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 indica-
tor wire can be inserted into shimmy damper piston rod
3-1/16 inches or more.

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## LIMITATIONS CARD

<table>
<thead>
<tr>
<th>Limitation</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP SPLIT.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OIL TEMP (normal range)</td>
<td>40°C</td>
<td>107°C</td>
</tr>
<tr>
<td>OIL PRESSURE (in flight)</td>
<td>50 psi</td>
<td>90 psi</td>
</tr>
<tr>
<td>OIL PRESSURE (idle)</td>
<td>10 psi</td>
<td></td>
</tr>
<tr>
<td>OIL CONSUMPTION (1.0 hour normal cruise)</td>
<td></td>
<td>1.5 qtf</td>
</tr>
<tr>
<td>CYL. HEAD TEMP (normal range)</td>
<td>107°C</td>
<td>240°C</td>
</tr>
<tr>
<td>CHT SPLIT.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUEL PRESSURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUEL SPLIT (must be dipped)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPM SPLIT.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPM FLUX.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPM (full power on deck)</td>
<td>2400 rpm</td>
<td>2550 rpm</td>
</tr>
<tr>
<td>RPM (takeoff)</td>
<td>2570 rpm</td>
<td>2830 rpm</td>
</tr>
<tr>
<td>RPM (idle at operating temp)</td>
<td>800 rpm</td>
<td>750 rpm</td>
</tr>
<tr>
<td>VOLTMETER (at 1700 rpm)</td>
<td>27.9 V</td>
<td>28.5 V</td>
</tr>
<tr>
<td>ALTIMETER SPLIT (below 2000’)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIRSPEED SPLIT.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STALL SPEED (gear, flaps down, power off)</td>
<td>49.3 kts</td>
<td></td>
</tr>
<tr>
<td>STALL SPEED (clew, power off)</td>
<td>59.3 kts</td>
<td></td>
</tr>
<tr>
<td>GEAR WARNING BORN BLOWING</td>
<td>27°</td>
<td>18°</td>
</tr>
<tr>
<td>LANDING GEAR RUN TIME (retract)</td>
<td>5-8 sec</td>
<td>12 sec</td>
</tr>
<tr>
<td>FLAP RUN TIME (extension)</td>
<td>15 sec</td>
<td></td>
</tr>
<tr>
<td>BRAKE PUCK WEAR</td>
<td>3/16&quot;</td>
<td></td>
</tr>
<tr>
<td>AILERON TRIM (normal cruise)</td>
<td>4&quot;</td>
<td></td>
</tr>
<tr>
<td>IDLE MIXTURE CHECK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRUISE MIXTURE RISE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAGNETO DROP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAGNETO SPLIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAXIMUM ADIPED (clean)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROLLING PULLOUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEAR DOWN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;O&quot; METER LIMITATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANOPY AIR</td>
<td>2300 psi</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** IF A READING IS BELOW THE MINIMUM OR ABOVE THE MAXIMUM, THE AIRCRAFT IS DOWN ON THE YELLOW SHEET.
**NAVAR 01-90KDB-1B**

**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**

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SPECIFICATIONS</th>
<th>QUANTITY OR PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUEL</td>
<td>MIL-F-5572**</td>
<td>50 Gallons (usable fuel, both tanks)</td>
</tr>
<tr>
<td>Grade 80/87, 100LL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternate Grades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100/130, 115/145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGINE OIL</td>
<td>MIL-I-22051 (Type II)**</td>
<td>3 Gallons</td>
</tr>
<tr>
<td>HYDRAULIC FLUID</td>
<td>MIL-I-83282 (Primary)</td>
<td>1 Pint</td>
</tr>
<tr>
<td></td>
<td>MIL-I-5616 (Alternate)**</td>
<td>Fill brake reservoir to within 3/4 inch of bottom of reservoir neck.</td>
</tr>
<tr>
<td>LANDING GEAR STRUTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Fluid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIL-I-3606**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB-N-411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIRES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry Compressed Air or Nitrogen*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main (4.50 X 8-6-ply)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nose (5 X 5-4-ply)</td>
<td>35 psi</td>
<td></td>
</tr>
<tr>
<td>CANOPY EMERGENCY AIR BOTTLE</td>
<td>40 psi</td>
<td></td>
</tr>
<tr>
<td>Nitrogen*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB-N-411</td>
<td>2,300 - 3,000 psi</td>
<td></td>
</tr>
<tr>
<td>BATTERY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distilled Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electolyte level must cover plates in each cell.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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, Oils: 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 HEB, Aeroshell Fluid 4.
NAVAIR 01-90KDB-1B

TAKEOFF CROSSWIND CHART

MODEL T-34B

RECOMMENDED / / NOT RECOMMENDED

SAMPLE PROBLEM:

KNOWN:
TAKEOFF RUNWAY = 2
WIND = 610°/23 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 18°, 25° - 58° WIND ANGLE TO RUNWAY HEADING.

2. AT WIND VELOCITY OF 26 KNOTS AND 58° WIND ANGLE TO RUNWAY HEADING, FIND CROSSWIND COMPONENT OF 41 KNOTS AND HEAD WIND COMPONENT OF 13 KNOTS.

3. PROCEED VERTICALLY TO PRE-DETERMINED 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
SAMPLE PROBLEM:

KNOWN:
- LANDING RUNWAY - 2
- WIND - 010° - 25 KNOTS

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

NOTE:
1. MAXIMUM NOSEWHEEL TOUCHDOWN SPEED IS 90 KNOTS IAS.
2. 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 15 KNOTS AND HEADWIND COMPONENT OF 15 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 75 KNOTS IAS BEFORE LANDING IS RECOMMENDED.
LANDING CROSSWIND CHART

MODEL T-34B
ENGINE (1)
NO.0-470-4

RECOMMENDED / NOT RECOMMENDED

SAMPLE PROBLEM:

KNOWN:
LANDING RUNWAY: 3
WIND: GTP BS 15 KNOTS

FIND:
Determine if landing is recommended at 50 KNOTS L/D.

NOTE:
- Maximum recommended velocity: 100 KNOTS L/D.
- Exceed L/D at maximum gust velocity.

SOLUTION:

1. Wind Angle is 10° - 20°, wind angle to runway heading.
2. At wind velocity of 35 KNOTS and 15° wind angle to runway heading, crosswind component of 25 KNOTS and headwind component of 10 KNOTS.
3. Proceed vertically to predicted landing speed of 10 KNOTS L/D and determine landing as NOT RECOMMENDED.
4. Continue vertically and determine that landing speed must be 75 KNOTS L/D before landing is recommended.