

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-110/1999

Datum vydání: .15 listopadu 1999

LETADLO - PODMÍNKY NÁMRAZY - MODIFIKACE/ÚPRAVA LETOVÉ PŘÍRUČKY

Týká se: letadel vyrobených firmou Raytheon, typu 400, 400T a MU-300-10 všech výrobních čísel a typu 400A majících výrobní čísla - RK-1 až RK-107, certifikovaných v kterékoliv kategorii.

Datum účinnosti: 22. listopadu 1999

Provést v termínech: Jak je popsáno v FAA AD 99-21-26.

Postup provedení prací: Dle FAA AD 99-21-26.

Poznámky: Provedení tohoto PZZ musí být zapsáno do motorové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Stibůrek. Pokud to vyžaduje povaha tohoto PZZ musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 99-21-26.

Ing. Pavel MATOUŠEK
Ředitel technického inspektorátu
Úřad pro civilní letectví

99-21-26 RAYTHEON AIRCRAFT COMPANY (Formerly Beech): Amendment 39-11372. Docket 96-NM-209-AD. Supersedes AD 94-25-10, Amendment 39-9094. Issued October 7, 1999.

Applicability: All Model 400, 400T, and MU-300-10 airplanes; and Model 400A airplanes having serial numbers RK-1 through RK-107 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent uncommanded nose-down pitch at certain flap settings during icing conditions, accomplish the following:

(a) Within 20 days after December 28, 1994 (the effective date of AD 94-25-10, amendment 39-9094), revise the Limitations Section and Normal Procedures Section of the FAA-approved Airplane Flight Manual (AFM) to include the following text. This may be accomplished by inserting a copy of this AD in the AFM.

"ICING CONDITIONS

If icing conditions are encountered during flight, no greater than 10 degrees flaps may be utilized for landing unless the following conditions are met:

1. The icing conditions were encountered for less than 10 minutes, and the Ram Air Temperature (RAT) during such encounter was warmer than -8 degrees C.

Or

2. A RAT of +5 degrees C or warmer is observed during approach and landing.

If either of the above two conditions is met, 30 degrees flaps may be utilized for landing.

Otherwise:

Flaps (landing flaps setting).....10 degrees

Land Select (LAND SEL) SwitchFlaps 10 degrees

Use landing data for 10 degrees flaps from Appendix 1 of this AD."

(b) Within 2 years after the effective date of this AD, accomplish the actions specified in paragraph (b)(1) or (b)(2) of this AD, as applicable.

(1) For Model 400, 400A, and MU-300-10 airplanes: Modify the airplane ice protection system in accordance with Beechcraft Service Bulletin No. 2600, dated November 1995. Accomplishment of this modification constitutes terminating action for the AFM revision required by paragraph (a) of this AD. Following such accomplishment, that AFM revision may be removed from the AFM.

(2) For Model 400T airplanes: Accomplish the actions specified in accordance with either paragraph (b)(2)(i) or (b)(2)(ii) of this AD.

(i) Accomplish the actions specified in paragraph (b)(2)(i)(A) and (b)(2)(i)(B) of this AD.

(A) Revise the Limitations Section and Normal Procedures Section of the FAA-approved Airplane Flight Manual (AFM) to include the following text. This may be accomplished by inserting a copy of this AD in the AFM. Following such accomplishment, the AFM revision required by paragraph (a) of this AD may be removed from the AFM.

"ICING CONDITIONS

If icing conditions are encountered during flight, no greater than 10 degrees flaps may be utilized for landing unless the following conditions are met:

1. The icing conditions were encountered for less than 10 minutes, and the Ram Air Temperature (RAT) during such encounter was warmer than -8 degrees C.

Or

2. A RAT of +5 degrees C or warmer is observed during approach and landing.

If either of the above two conditions is met, 30 degrees flaps may be utilized for landing.

NOTE: Do not operate anti-ice system at ram air temperatures greater than 50 degrees F (10 degrees C) unless in actual icing conditions, as indicated by the illumination of the ICING annunciator or airframe ice accumulation."

(B) Modify the airplane ice protection system in accordance with Raytheon Beech Service Instructions No. T-1A-0064 (undated). Accomplishment of the modification does not constitute terminating action for the requirement to revise the AFM in accordance with paragraph (b)(2)(i)(A) of this AD.

(ii) Modify the airplane ice protection system in accordance with a method approved by the Manager, Wichita Aircraft Certification Office (ACO), FAA, Small Airplane Directorate.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Wichita ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) Except as provided by paragraphs (a), (b)(2)(i)(A), and (b)(2)(ii) of this AD, the actions shall be done in accordance with Beechcraft Service Bulletin No. 2600, dated November 1995, or Raytheon Service Instructions No. T-1A-0064 (undated). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on November 22, 1999.

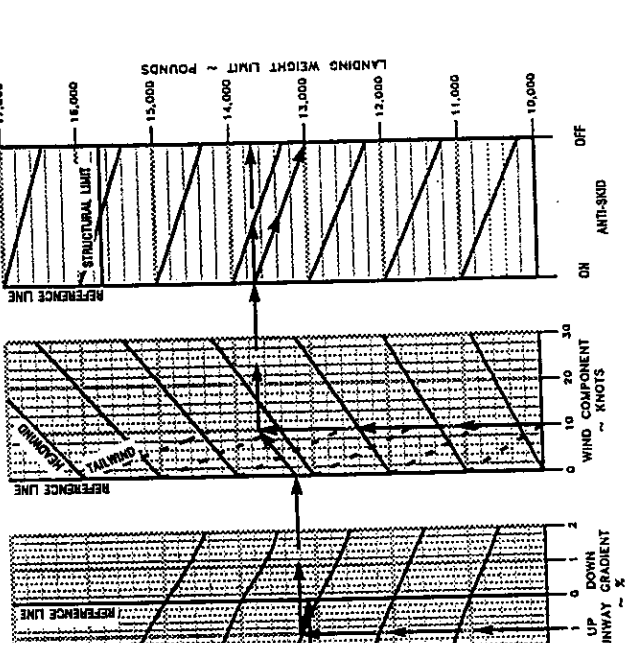
FOR FURTHER INFORMATION CONTACT:

Tina L. Miller, Aerospace Engineer, Flight Test Branch, ACE-117W, FAA, Small Airplane Directorate, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4168; fax (316) 946-4407.

AND AFTER) AND 400T

LIMITED BY MAXIMUM BRAKE ENERGY LAPS 10°

EXAMPLE:
 OAT 20°C
 FIELD PRESSURE ALTITUDE 2000 FT
 RUNWAY GRADIENT 1% UP
 HEADWIND 10 KTS
 LANDING WEIGHT LIMIT:
 ANTI-SKID (ON) 13,715 LBS
 ANTI-SKID (OFF) 13,000 LBS



APPENDIX 1

4 99-21-26

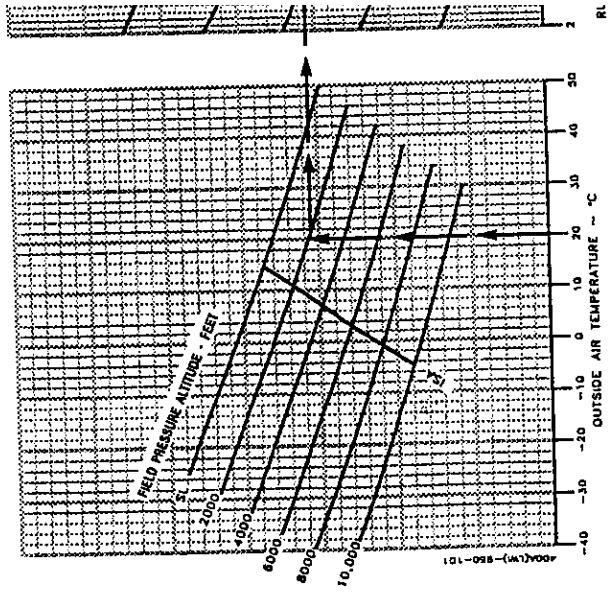
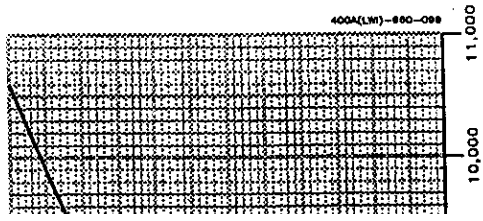
MODEL 400A (RK-24)

MAXIMUM LANDING WEIGHT LIMITS

ASSOCIATED CONDITIONS:
BRAKING . . . MAXIMUM

AWAC
 3020 FT
 3480 FT
 13,000 LBS

AWAC
 3522 FT
 5,560 FT
 118 KTS



MODEL 400A (RK-24 AND AFTER) AND 400T

LANDING DISTANCE - FLAPS 10°

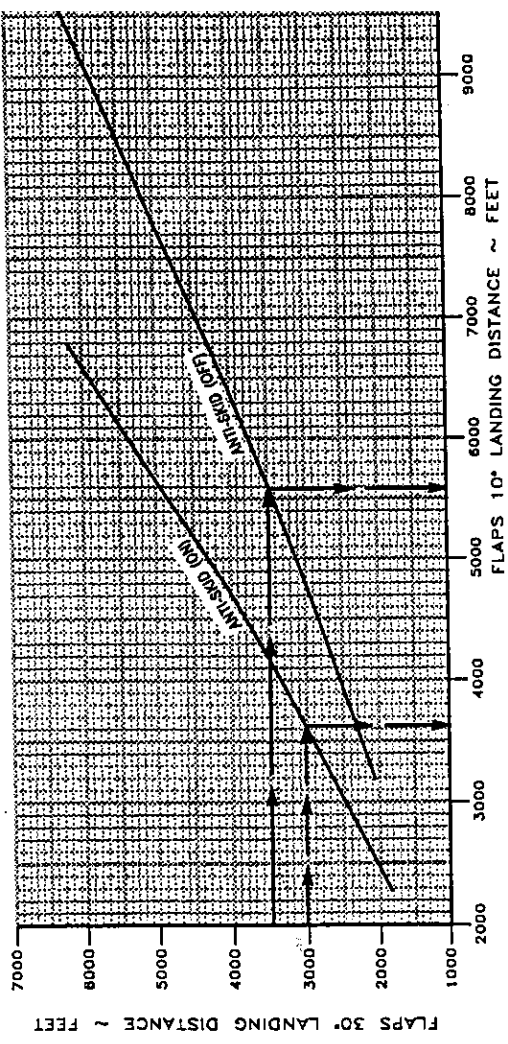
| WEIGHT ~ POUNDS | VREF ~ KNOTS |
|-----------------|--------------|
| 16,100 | 133 |
| 15,700 | 131 |
| 15,000 | 128 |
| 14,000 | 124 |
| 13,000 | 119 |
| 12,000 | 114 |
| 11,000 | 110 |
| 10,000 | 104 |

EXAMPLE:
 FLAPS 30° LANDING DIST
 ANTI-SKID (OH).....
 ANTI-SKID (OFF).....
 LANDING WEIGHT.....
 FLAPS 10° LANDING DIST
 ANTI-SKID (OH).....
 ANTI-SKID (OFF).....
 VREF.....

ASSOCIATED CONDITIONS:

THRUST RETARDED TO MAINTAIN 3°
 APPROACH ANGLE TO 50 FT.
 AT 50 FT, RETARD TO IDLE.
 RUNWAY.....PAVED, DRY SURFACE
 VREF.....KIAS AS TABULATED
 BRAKING ... MAXIMUM

NOTE: TO DETERMINE THE FLAPS 10° LANDING DISTANCE, READ FROM
 THE "LANDING DISTANCE" GRAPH FOR THE APPROPRIATE FLAP 30°
 DISTANCE. THEN ENTER THE GRAPH BELOW WITH THAT VALUE,
 AND READ THE FLAPS 10° LANDING DISTANCE.



MODEL 400A (RK-24 AND AFTER) AND 400T

LANDING BRAKE ENERGY - FLAPS 10°

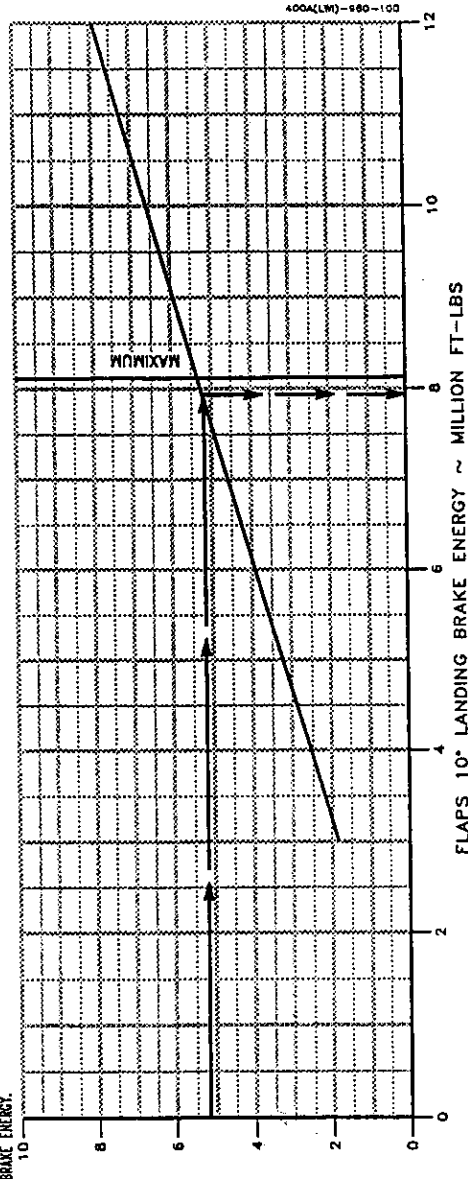
CONDITIONS:

- .. RETARDED TO MAINTAIN 3° APPROACH ANGLE TO 50 FT. AT 50 FT, RETARD TO IDLE.
- .. PAVED, DRY SURFACE
- .. MAXIMUM
- .. (ON) OR (OFF)

MAXIMUM LANDING BRAKE ENERGY = 8.12 MILLION FT-LBS.
 TO DETERMINE THE FLAPS 10° LANDING BRAKE ENERGY, READ FROM THE "LANDING BRAKE ENERGY" GRAPH FOR THE APPROPRIATE FLAP 30° LANDING BRAKE ENERGY. THEN ENTER THE GRAPH BELOW WITH THAT VALUE, AND READ THE FLAPS 10° LANDING BRAKE ENERGY.

EXAMPLE:

| | |
|--------------------------------|-------------------|
| LANDING BRAKE ENERGY | |
| ANTI-SKID (ON)..... | 5.18 MIL. FT-LBS. |
| FLAPS 10° LANDING BRAKE ENERGY | |
| ANTI-SKID (ON)..... | 7.93 MIL. FT-LBS. |



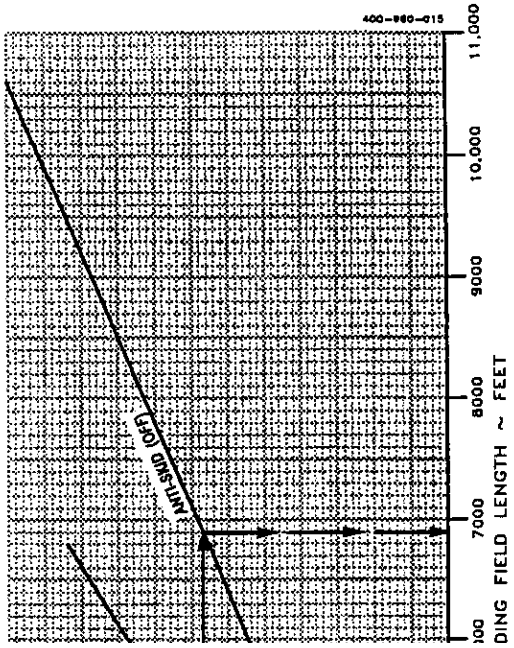
RK-23), 400, AND MU-300-10

LENGTH - FLAPS 10°

| NOS | V _{REF} ~ KNOTS |
|-----|--------------------------|
| | 133 |
| | 126 |
| | 121 |
| | 116 |
| | 112 |
| | 106 |
| | 101 |

EXAMPLE:

| | |
|--------------------------------|------------|
| FLAPS 30° LANDING FIELD LENGTH | |
| ANTI-SKO (04) | 3550 FT |
| ANTI-SKO (07) | 4150 FT |
| LANDING WEIGHT | 11,700 LBS |
| FLAPS 10° LANDING FIELD LENGTH | |
| ANTI-SKO (04) | 4211 FT |
| ANTI-SKO (07) | 6892 FT |
| V _{REF} | 124 KTS |



FLAPS 30° LANDING BRAKE ENERGY
~ MILLION FT-LBS

NOTES: 1. W
2. P

ASSOCIATED
THRUST

RUNWAY...
BRAKING ...
ANTI-SKO ..

MODEL 400A (RK-1 THRU

LANDING FIELD I

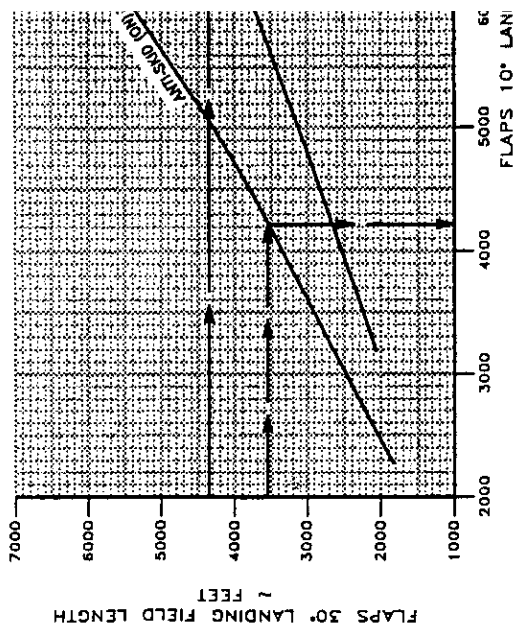
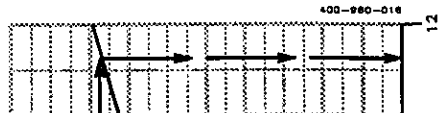
ASSOCIATED CONDITIONS:

- THRUST ... RETARDED TO MAINTAIN 3° APPROACH ANGLE TO 50 FT.
- AT 50 FT, RETARD TO IDLE.
- RUNWAY ... PAVED, DRY SURFACE
- WIND ... MAX AS TABULATED
- BRKING ... MAXIMUM

| WEIGHT -- POU |
|---------------|
| 15,780 |
| 14,220 |
| 13,000 |
| 12,000 |
| 11,000 |
| 10,000 |
| 9,000 |

NOTE: TO DETERMINE THE FLAPS 10° LANDING FIELD LENGTH, READ FROM THE "LANDING FIELD LENGTH" GRAPH FOR THE APPROPRIATE FLAP 30° FIELD LENGTH. THEN ENTER THE GRAPH BELOW WITH THAT VALUE, AND READ THE FLAPS 10° LANDING FIELD LENGTH.

7.75 MIL FT-LBS
EXCEEDS MAXIMUM



MODEL 400A (RK-1 THRU RK-23), 400, AND MU-300-10

LANDING BRAKE ENERGY - FLAPS 10°

ASSOCIATED CONDITIONS:

THRUST RETARDED TO MAINTAIN 3° APPROACH
 ANGLE TO 50 FT. AT 50 FT, RETARD TO
 IDLE.

RUNWAY PAVED, DRY SURFACE

BRAKING MAXIMUM

ANTI-SKID (ON) OR (OFF)

ANTI-SKID (ON) LANDING BRAKE ENERGY = 7.76 MILLION FT-LBS.

- NOTES: 1. MAXIMUM LANDING BRAKE ENERGY, READ
 FROM THE "LANDING BRAKE ENERGY" GRAPH FOR THE APPROPRIATE
 FLAP 30° LANDING BRAKE ENERGY. THEN ENTER THE GRAPH
 BELOW WITH THAT VALUE, AND READ THE FLAPS 10° LANDING
 BRAKE ENERGY.

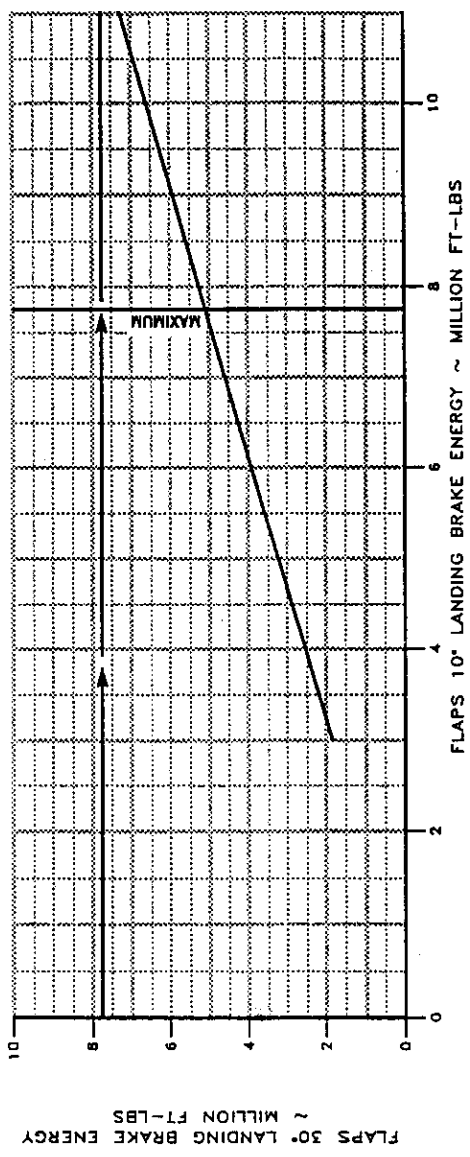
EXAMPLE:

LANDING BRAKE ENERGY

ANTI-SKID (ON)

FLAPS 10° LANDING BRAKE ENERGY

ANTI-SKID (ON)

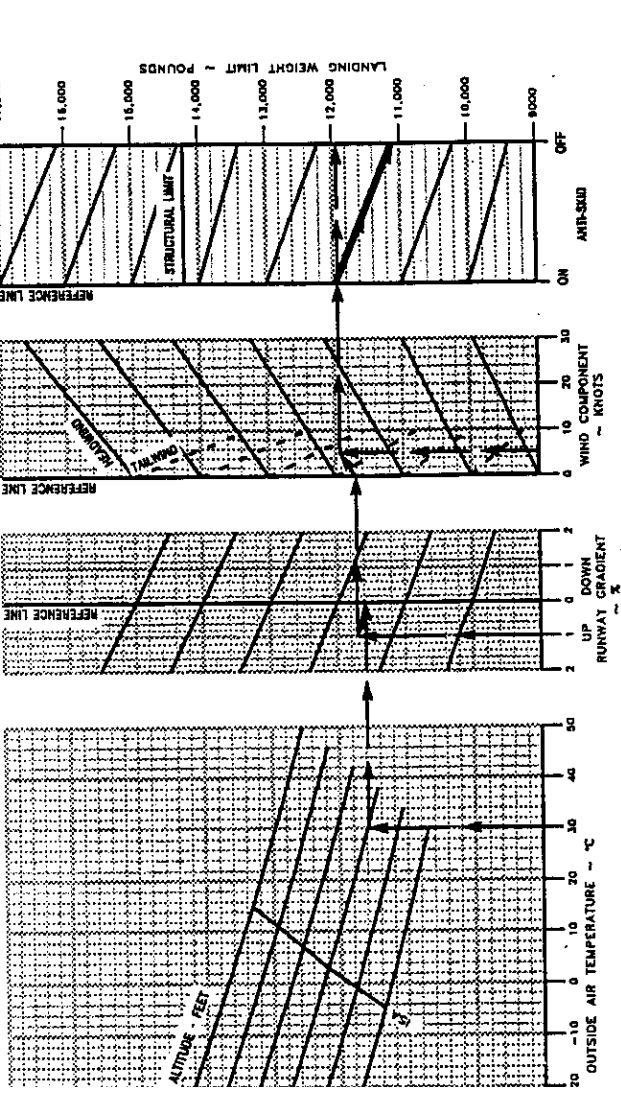


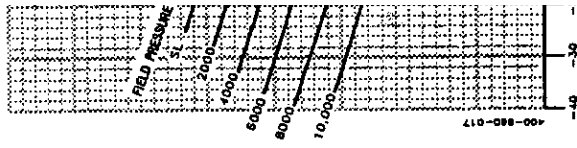
MODEL 400A (RK-1 THRU RK-23), 400, AND MU-300-10

MAXIMUM LANDING WEIGHT LIMITED BY MAXIMUM BRAKE ENERGY FLAPS 10°

CONDITIONS:
MAXIMUM

EXAMPLE:
 OAT 30°C
 FIELD PRESSURE ALTITUDE 6000 FT
 RUNWAY GRADIENT 1% UP
 HEADWIND 5 KTS
 LANDING WEIGHT LIMIT:
 ANTI-SKID (ON) 11,940 LBS
 ANTI-SKID (OFF) 11,100 LBS





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