## LATERAL WEIGHT ASYMMETRY LIMITS

| | |
|---|---|
| Field takeoff | 22,000 ft-lbs |
| Catapult takeoff | |
| Weight board ≤ 36,000 lbs | 6,000 ft-lbs |
| Weight board ≥ 37,000 lbs | 22,000 ft-lbs |
| Inflight conditions | 26,000 ft-lbs |

Asymmetric jettison/normal release of a store from station 2 or 8 that weighs in excess of 2330 pounds (i.e., GBU-24, MK-60, MK-65, Walleye II ER/DL) exceeds the lateral weight asymmetry limitation and is prohibited (even if this is the normal SMS release sequence, except in an emergency).

| | |
|---|---|
| FCLP or Carrier landing with gross wt ≤ 33,000 lbs. (including wingtip AIM-9 and wing fuel) | 17,000 ft-lbs |
| Carrier landing with gross wt > 33,000 lbs. (including wingtip AIM-9 and wing fuel) | 14,500 ft-lbs |
| Field landing (flared) with sink rate at touchdown up to 500 fpm | 26,000 ft-lbs |

## ANGLE-OF-ATTACK LIMITATIONS
**Flaps AUTO**

| CONFIGURATION | AOA LIMIT (°) | CG (% MAC) |
|---|---|---|
| FE | Unrestricted<br>–6° to +25° | 17 to 25%<br>25 to 28% |
| FE plus centerline tanks/stores | Unrestricted<br>–6° to +25° | 17 to 23.5%<br>23.5 to 28% |
| FE plus inboard tanks/ stores (with centerline tank/stores) | –6° to +25° | 17 to 27.5% |
| FE plus inboard tanks/ stores (without centerline tank/stores) | –6° to +35°<br>–6° to +25° | 17 to 24%<br>24 to 27.5% |
| FE plus outboard tanks/ stores (centerline tank/ stores optional) | –6° to +25° | 17 to 27.5% |
| FE plus inboard and outboard tanks/stores (centerline tank/ stores optional) | –6° to +20° | 17 to 27% |

### Lateral Weight Asymmetry AOA Limits.

a. 6,000 to 12,000 ft-lbs asymmetry: –6° to +20°.
b. 12,000 to 26,000 ft-lbs asymmetry: –6° to +12°.
c. 22,000 to 26,000 ft-lbs asymmetry:
   (1) Abrupt lateral stick inputs are prohibited.
   (2) Smooth inputs up to 1/2 stick for rolling maneuvers up to a maximum of 180° bank angle change are authorized.
   (3) Rudder pedal inputs are authorized only as required to maintain balanced flight (Slip indicator ball centered).

### AOA Limits Due to Mach No. (F/A-18B/D)

| MACH | AOA LIMIT |
|---|---|
| 0.7 to 0.8 | –6° to +20° |
| 0.8 to 0.9 | –6° to +15° |
| above 0.9 | –6° to +12° |

### Flaps HALF or FULL

0° to +15° AOA (transitory excursions up to +20° are allowed during catapult launch only).

### WEIGHT LIMITATIONS

The maximum allowable gross weights are:

| Location | Pounds |
|---|---|
| **Field** | |
| Takeoff | 51,900 |
| Landing (Flared) | 39,000 |
| FCLP/Touch-and-go/Barricade | |
| Before AFC 029 | 30,700 |
| After AFC 029 | 33,000 |
| **Carrier** | |
| Catapult | 51,900 |
| Landing | |
| Unrestricted | 33,000 |
| Restricted | 34,000 |

Arrestments above 33,000 pounds are subject to the following restrictions:

(1) Arresting gear - MK 7 MOD 3 Only
(2) Glideslope - 3.5° Maximum
(3) Recovery Head Wind (RHW) -
   (a) 40 knots Minimum - Half flaps allowed
   (b) Less than 40 knots - Full flaps only
(4) Lateral Weight Asymmetry -
   14,500 ft-lb Maximum (External pylon stores, AIM-9 wing tips, and wing fuel)
(5) No MOVLAS recovery

## ACCELERATION LIMITATIONS WITHOUT G LIMITER

| Configuration | Symmetrical | Asymmetrical |
|---|---|---|
| Flaps HALF or FULL | +0.5 g to +2.0 g | +0.5 g to +1.5 g |
| Flaps AUTO | (32,357 pounds or less)<br>−3.0 g to +7.5 g | (32,357 pounds or less)<br>Aircraft thru 161924<br>+0.2 g to +6.0 g<br>Aircraft 161925 and up<br>−1.0 g to +6.0 g |
| Gear Retraction and/or Extension | +0.5 g to +2.0 g | +0.5 g to +1.5 g |

## CATAPULT THROTTLE SETTINGS

| Weight Board (LBS) | Engine Power |
|---|---|
| 44,000 and below | MIL<br>MIL/MAX<br>MAX |
| 45,000 and above | MAX |

### NOTE

MIL/MAX power setting is defined as stabilizing in Military power while in catapult tension, and selecting maximum afterburner at holdback release.

# CV Launch Trim

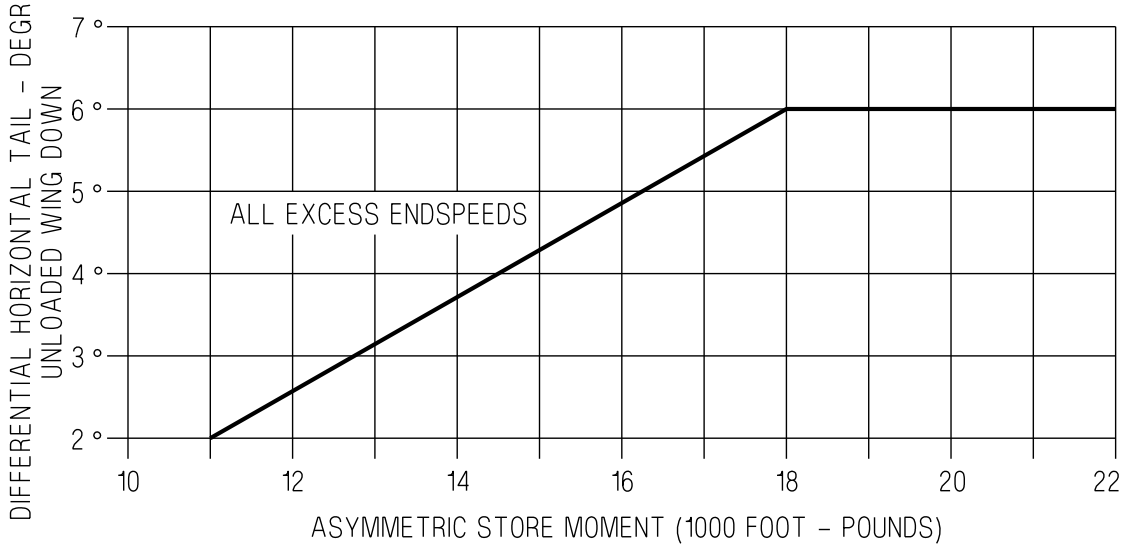
## CATAPULT LONGITUDINAL TRIM

| WEIGHT BOARD | NOSE UP TRIM |
|---|---|
| 44,000 LBS AND BELOW | 16 ° |
| 45,000 – 48,000 LBS | 17 ° |
| 49,000 LBS AND ABOVE | 19 ° |

### NOTE

AIRCRAFT BEING LAUNCHED AT GROSS WEIGHTS OF 43,000 LBS AND ABOVE, SHOULD TRIM BY 3 ° NOSE UP IF ADVISED TO EXPECT 10 KNOTS OR LESS EXCESS ENDSPEED.

## HALF – FLAP – MIL/MAX POWER
## CATAPULT LAUNCH LATERAL TRIM REQUIREMENTS
## ASYMMETRIC EXTERNAL STORES




**WARNING**

FAILURE TO INPUT DIFFERENTIAL STABILATOR TRIM FOR CATAPULT LAUNCHES WITH ASYMMETRIC STORES CAN AGGRAVATE AIRCRAFT CONTROLLABILITY.

### NOTE

REDUCE DIFFERENTIAL TRIM BY 2 °
IF CARRYING A SINGLE GBU-24.

ADA524-26-1-039

# Landing Approach Speed

**AIRCRAFT CONFIGURATION**

FLAPS AS NOTED
GEAR DOWN
SPEED BRAKE IN

**REMARKS**

ENGINE(S): (2)F4O4-GE-4OO
U.S. STANDARD DAY, 1962

## NOTE

- C G AT 25% MAC. APPROACH SPEEDS INCREASE 1 KNOT FOR EACH 2% THE C G IS FORWARD OF 25% MAC AND DECREASE 1 KNOT FOR EACH 2% THE C G IS AFT OF 25% MAC.
- INCREASE APPROACH SPEED BY 2 KNOTS IF WINGTIP AIM-9'S ARE OFF
- INCREASE APPROACH SPEEDS BY 2 KNOTS IF EXTERNAL STORES ON.

DATE: DECEMBER 1984
DATA BASIS: FLIGHT TEST

LANDING APPROACH SPEED (KCAS)

| LANDING CONFIGURATION | | FULL FLAPS 8.1° AOA (Normal Landing) | HALF FLAPS 8.1° AOA (Normal Landing) |
|---|---|---|---|
| GROSS WEIGHT (LB) | 24,OOO | 117 | 126 |
| | 25,OOO | 119 | 129 |
| | 26,OOO | 121 | 131 |
| | 27,OOO | 124 | 134 |
| | 28,OOO | 126 | 136 |
| | 29,OOO | 128 | 139 |
| | 30,OOO | 13O | 141 |
| | 31,OOO | 133 | 144 |
| | 32,OOO | 135 | 146 |
| | 33,OOO | 137 | 148 |
| | 34,OOO | 139 | 151 |
| | 35,OOO | 141 | 153 |
| | 36,OOO | 143 | 155 |
| | 37,OOO | 145 | 157 |
| | 38,OOO | 147 | 159 |
| | 39,OOO | 149 | 161 |

# Landing Approach Speed

**AIRCRAFT CONFIGURATION**

FLAPS AS NOTED
GEAR DOWN
SPEED BRAKE IN

**REMARKS**

ENGINE(S): (2)F404-GE-400
U.S. STANDARD DAY, 1962

## NOTE

- C G AT 25% MAC. APPROACH SPEEDS INCREASE 1 KNOT FOR EACH 2% THE C G IS FORWARD OF 25% MAC AND DECREASE 1 KNOT FOR EACH 2% THE C G IS AFT OF 25% MAC
- INCREASE APPROACH SPEED BY 2 KNOTS IF WINGTIP AIM- 9'S ARE OFF
- INCREASE APPROACH SPEEDS BY 2 KNOTS IF EXTERNAL STORES ON
- MAIN GEAR TIRE LIMITATION - 210 GROUNDSPEED
- NOSE GEAR TIRE LIMITATION - 190 GROUNDSPEED

DATE: DECEMBER 1984
DATA BASIS: FLIGHT TEST

LANDING APPROACH SPEED (KCAS)

| LANDING CONFIGURATION | | HALF FLAPS 7.0° AOA (DEL or MECH) | HALF FLAPS 7.0° AOA 0° LEF (LEF Failure) | HALF OR FULL FLAPS - 10° AOA 0° TEF (TEF Failure) | 7.0°AOA 0° LEF/0° TEF (LEF/TEF Failure) |
|---|---|---|---|---|---|
| GROSS WEIGHT (LB) | 24,000 | 131 | 133 | 161 | 192 |
| | 25,000 | 134 | 135 | 164 | 196 |
| | 26,000 | 136 | 135 | 167 | 200 |
| | 27,000 | 139 | 141 | 170 | 204 |
| | 28,000 | 141 | 143 | 173 | 208 |
| | 29,000 | 144 | 146 | 177 | 212 |
| | 30,000 | 146 | 148 | 180 | 215 |
| | 31,000 | 149 | 151 | 183 | 219 |
| | 32,000 | 151 | 153 | 186 | 222 |
| | 33,000 | 153 | 156 | 188 | 226 |
| | 34,000 | 156 | 158 | 191 | 229 |
| | 35,000 | 158 | 160 | 194 | 232 |
| | 36,000 | 160 | 162 | 197 | 236 |
| | 37,000 | 162 | 165 | 199 | 239 |
| | 38,000 | 165 | 167 | 202 | 242 |
| | 39,000 | 167 | 169 | 205 | 245 |

# Recommended Maximum Single Engine Recovery Weight

REMARKS

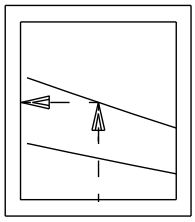
ENGINE(S): (2)404-GE-400

AIRCRAFT CONFIGURATION
HALF FLAPS
GEAR DOWN

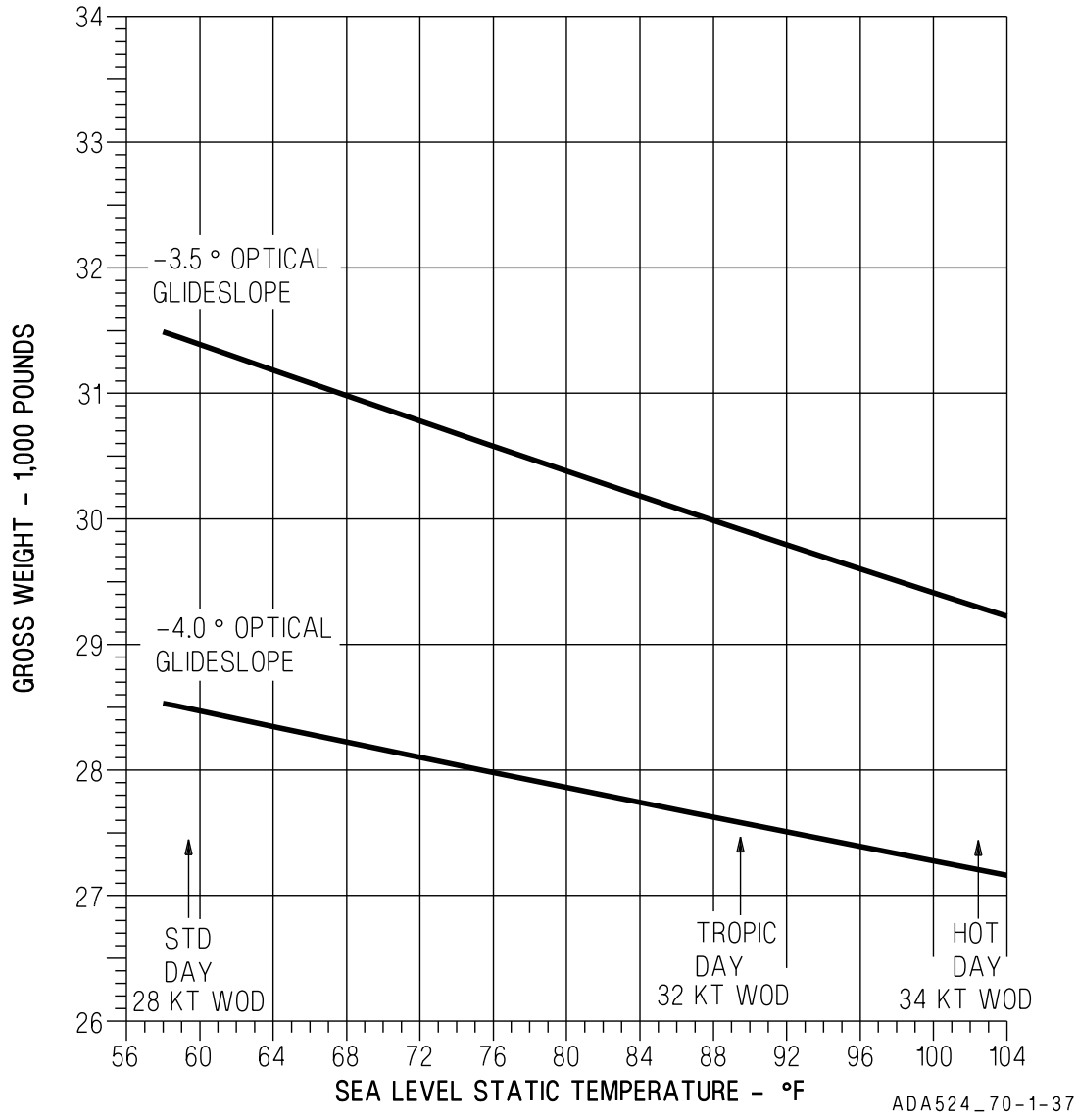
DATE: 15 JANUARY 1993
DATA BASIS: ESTIMATED
(BASED ON FLIGHT TEST)

NOTES

- HALF FLAPS
- LANDING GEAR DOWN
- FAILED ENGINE - WINDMILLING OR SEIZED
- C.G. AT 25%MAC
- INCREASE MAX WEIGHT BY 250 LB FOR EACH 1% THE C.G. IS AFT OF 25%MAC
- DECREASE MAX WEIGHT BY 250 LB FOR EACH 1% THE C.G. IS FWD OF 25%MAC
- GREATER WOD PROVIDES IMPROVED WAVEOFF PERFORMANCE
- ADJUSTING GROSS WEIGHT AT OR BELOW THE RECOMMENDED WEIGHT ENSURES LESS THAN 50 FEET ALTITUDE LOST DURING AN ONSPEED AOA SINGLE ENGINE MILITARY POWER WAVEOFF FROM AN ONSPEED AOA/ON GLIDESLOPE CONDITION. MAXIMUM WAVEOFF ALTITUDE LOST FOR TWO ENGINE OPERATION UNDER IDENTICAL CONDITIONS IS LESS THAN 30 FEET.



FUEL GRADE: JP-5
FUEL DENSITY:
6.8 LB/GAL




ADA524_70-1-37

## INSTRUCTIONS

ENTER THE CHART WITH THE RELATIVE BEARING. MOVE ALONG THE RELATIVE BEARING TO INTERCEPT THE WIND SPEED ARC. FROM THIS POINT, DESCEND VERTICALLY TO READ THE CROSSWIND COMPONENT, FROM THIS INTERSECTION OF BEARING AND WIND SPEED, PROJECT HORIZONTALLY TO THE LEFT TO READ HEADWIND COMPONENT.

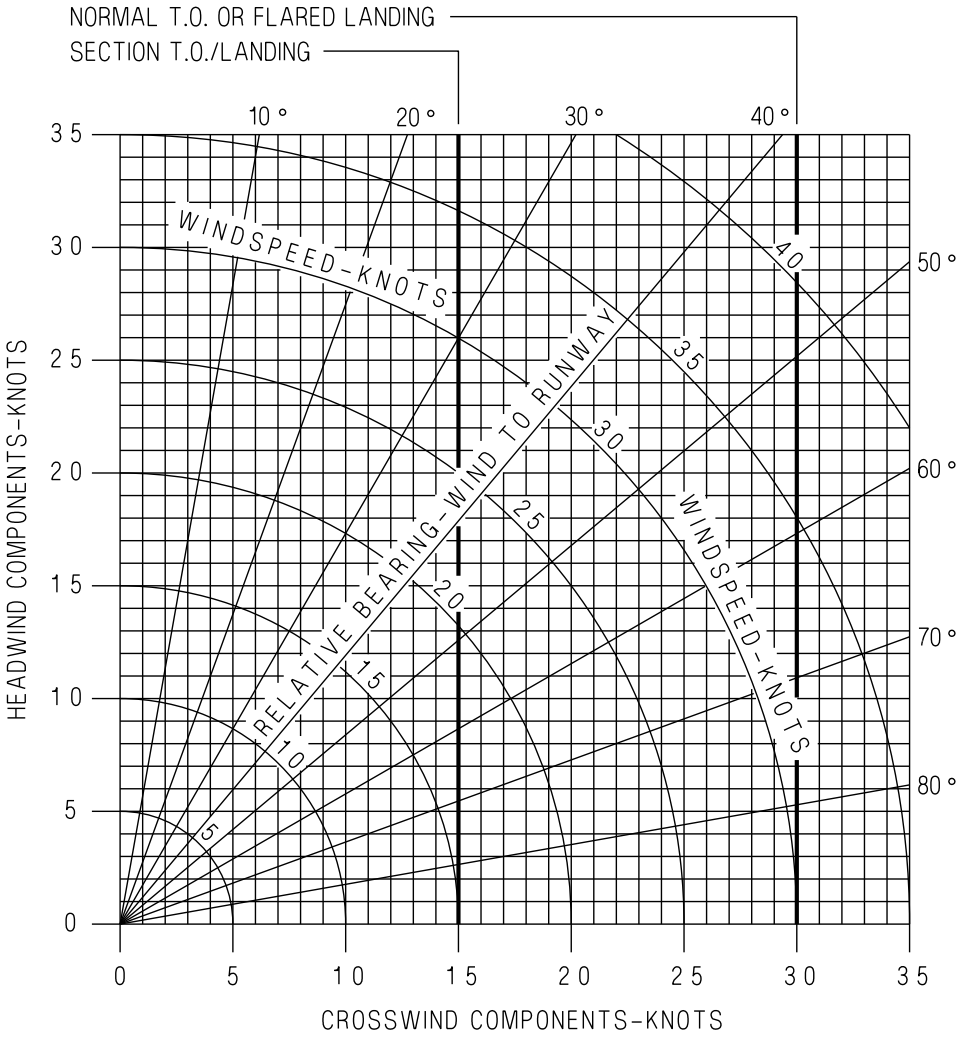
EXAMPLE

REPORTED WIND 050/35, RUNWAY HEADING 030.

| | | |
|---|---|---|
| A. | RELATIVE BEARING | 20 ° |
| B. | INTERSECT WINDSPEED ARC | 35 KT |
| C. | CROSSWIND COMPONENT | 12 KT |
| D. | HEADWIND COMPONENT | 33 KT |

# Wind Components

## CROSSWIND LIMITS:




ADA524-4-1-039

## LATERAL WEIGHT ASYMMETRY LIMITS

| | |
|---|---|
| Field takeoff | 22,000 ft-lbs |
| Catapult takeoff | |
| Weight board ≤ 36,000 lbs | 6,000 ft-lbs |
| Weight board ≥ 37,000 lbs | 22,000 ft-lbs |
| Inflight conditions | 26,000 ft-lbs |

Asymmetric jettison/normal release of a store from station 2 or 8 that weighs in excess of 2330 pounds (i.e., GBU-24, MK-60, MK-65, Walleye II ER/DL) exceeds the lateral weight asymmetry limitation and is prohibited (even if this is the normal SMS release sequence, except in an emergency).

| | |
|---|---|
| FCLP or Carrier landing with gross wt ≤ 33,000 lbs. (including wingtip AIM-9 and wing fuel) | 17,000 ft-lbs |
| Carrier landing with gross wt > 33,000 lbs. (including wingtip AIM-9 and wing fuel) | 14,500 ft-lbs |
| Field landing (flared) with sink rate at touchdown up to 500 fpm | 26,000 ft-lbs |

## ANGLE OF-ATTACK LIMITATIONS
### Flaps AUTO

| CONFIGURATION | AOA LIMIT (°) | CG (% MAC) |
|---|---|---|
| FE | Unrestricted<br>–6° to +25° | 17 to 25%<br>25 to 28% |
| FE plus centerline tanks/stores | Unrestricted<br>–6° to +25° | 17 to 23.5%<br>23.5 to 28% |
| FE plus inboard tanks/ stores (with centerline tank/stores) | –6° to +25° | 17 to 27.5% |
| FE plus inboard tanks/ stores (without centerline tank/stores) | –6° to +35°<br>–6° to +25° | 17 to 24%<br>24 to 27.5% |
| FE plus outboard tanks/ stores (centerline tank/ stores optional) | –6° to +25° | 17 to 27.5% |
| FE plus inboard and outboard tanks/stores (centerline tank/ stores optional) | –6° to +20° | 17 to 27% |

### Lateral Weight Asymmetry AOA Limits

a. 6,000 to 12,000 ft-lbs asymmetry: –6° to +20°.
b. 12,000 to 26,000 ft-lbs asymmetry: –6° to +12°.
c. 22,000 to 26,000 ft-lbs asymmetry:
   (1) Abrupt lateral stick inputs are prohibited.
   (2) Smooth inputs up to 1/2 stick for rolling maneuvers up to a maximum of 180° bank angle change are authorized.
   (3) Rudder pedal inputs are authorized only as required to maintain balanced flight (Slip indicator ball centered).

### AOA Limits Due to Mach No. (F/A-18D)

| MACH | AOA LIMIT |
|---|---|
| 0.7 to 0.8 | –6° to +20° |
| 0.8 to 0.9 | –6° to +15° |
| above 0.9 | –6° to +12° |

### Flaps HALF or FULL

a. 0° to +15° AOA (transitory excursions up to +20° are allowed during catapult launch only)

## WEIGHT LIMITATIONS

**The maximum allowable gross weights are:**

| Location | Pounds |
|---|---|
| Field Takeoff | 51,900 |
| Field landing (flared) | 39,000 |
| FCLP/Touch-and-go/ Barricade | 33,000 |
| **Carrier** | |
| Catapult | 51,900 |
| Landing | |
| Unrestricted | 33,000 |
| Restricted | 34,000 |

Arrestments above 33,000 pounds are subject to the following restrictions:

(1) Arresting gear - MK 7 MOD 3 Only
(2) Glideslope - 3.5° Maximum
(3) Recovery Head Wind (RHW) -
   (a) 40 knots Minimum - Half flaps allowed
   (b) Less than 40 knots - Full flaps only
(4) Lateral Weight Asymmetry -
   14,500 ft-lb Maximum (External pylon stores, AIM-9 wing tips, and wing fuel)
(5) No MOVLAS recovery

## ACCELERATION LIMITATIONS WITHOUT G LIMITER

| Configuration | Symmetrical | Asymmetrical |
|---|---|---|
| Flaps HALF or FULL | +0.5 g to +2.0 g | +0.5 g to +1.5 g |
| Flaps AUTO | (32,357 pounds or less)- −3.0 g to +7.5 g | −1.0 g to +6.0 g |
| Gear Retraction and/or Extension | +0.5 g to +2.0 g | +0.5 g to +1.5 g |

## CATAPULT THROTTLE SETTINGS

| Weight Board (LBS) | Engine Power |
|---|---|
| 44,000 and below | MIL<br>MIL/MAX<br>MAX |
| 45,000 and up | MAX |

### NOTE

MIL/MAX power setting is defined as stabilizing in Military power while in catapult tension, and selecting maximum afterburner at holdback release.

# CV Launch Trim

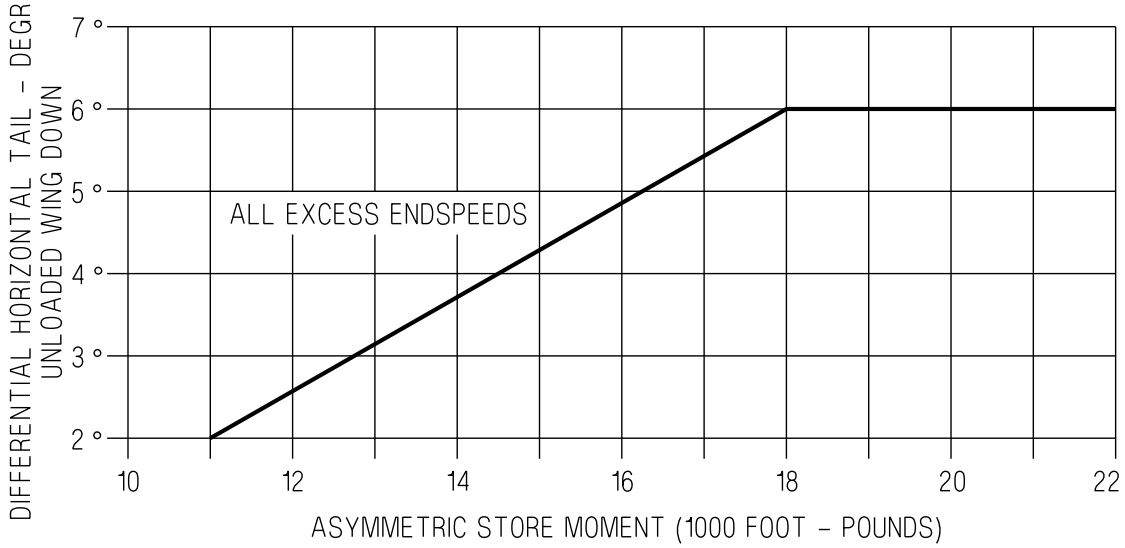
## CATAPULT LONGITUDINAL TRIM

| WEIGHT BOARD | NOSE UP TRIM |
|---|---|
| 44,000 LBS AND BELOW | 16 ° |
| 45,000 – 48,000 LBS | 17 ° |
| 49,000 LBS AND ABOVE | 19 ° |

### NOTE

AIRCRAFT BEING LAUNCHED AT GROSS WEIGHTS OF 43,000 LBS AND ABOVE, SHOULD TRIM BY 3 ° NOSE UP IF ADVISED TO EXPECT 10 KNOTS OR LESS EXCESS ENDSPEED.

## HALF – FLAP – MIL/MAX POWER
## CATAPULT LAUNCH LATERAL TRIM REQUIREMENTS
## ASYMMETRIC EXTERNAL STORES




**WARNING**

FAILURE TO INPUT DIFFERENTIAL STABILATOR TRIM FOR CATAPULT LAUNCHES WITH ASYMMETRIC STORES CAN AGGRAVATE AIRCRAFT CONTROLLABILITY.

### NOTE

REDUCE DIFFERENTIAL TRIM BY 2 °
IF CARRYING A SINGLE GBU-24.

# Landing Approach Speed

**AIRCRAFT CONFIGURATION**

FLAPS AS NOTED
GEAR DOWN
SPEED BRAKE IN

**REMARKS**

ENGINE(S): (2)F4O4-GE-4O2
U.S. STANDARD DAY, 1962

## NOTE

- C G AT 25% MAC. APPROACH SPEEDS INCREASE 1 KNOT FOR EACH 2% THE C G IS FORWARD OF 25% MAC AND DECREASE 1 KNOT FOR EACH 2% THE C G IS AFT OF 25% MAC.
- INCREASE APPROACH SPEED BY 2 KNOTS IF WINGTIP AIM-9'S ARE OFF
- INCREASE APPROACH SPEEDS BY 2 KNOTS IF EXTERNAL STORES ON.

DATE: DECEMBER 1984
DATA BASIS: FLIGHT TEST

LANDING APPROACH SPEED (KCAS)

| LANDING CONFIGURATION | | FULL FLAPS 8.1° AOA (Normal Landing) | HALF FLAPS 8.1° AOA (Normal Landing) |
|---|---|---|---|
| GROSS WEIGHT (LB) | 24,000 | 117 | 126 |
| | 25,000 | 119 | 129 |
| | 26,000 | 121 | 131 |
| | 27,000 | 124 | 134 |
| | 28,000 | 126 | 136 |
| | 29,000 | 128 | 139 |
| | 30,000 | 130 | 141 |
| | 31,000 | 133 | 144 |
| | 32,000 | 135 | 146 |
| | 33,000 | 137 | 148 |
| | 34,000 | 139 | 151 |
| | 35,000 | 141 | 153 |
| | 36,000 | 143 | 155 |
| | 37,000 | 145 | 157 |
| | 38,000 | 147 | 159 |
| | 39,000 | 149 | 161 |

# LANDING APPROACH SPEED

**AIRCRAFT CONFIGURATION**

FLAPS AS NOTED
GEAR DOWN
SPEED BRAKE IN

**REMARKS**

ENGINE(S): (2)F404-GE-402
U.S. STANDARD DAY, 1962

## NOTE

- C G AT 25% MAC. APPROACH SPEEDS INCREASE 1 KNOT FOR EACH 2% THE C G IS FORWARD OF 25% MAC AND DECREASE 1 KNOT FOR EACH 2% THE C G IS AFT OF 25% MAC
- INCREASE APPROACH SPEED BY 2 KNOTS IF WINGTIP AIM-9'S ARE OFF
- INCREASE APPROACH SPEEDS BY 2 KNOTS IF EXTERNAL STORES ON
- MAIN GEAR TIRE LIMITATION - 210 GROUNDSPEED
- NOSE GEAR TIRE LIMITATION - 190 GROUNDSPEED

DATE: DECEMBER 1984
DATA BASIS: FLIGHT TEST

LANDING APPROACH SPEED (KCAS)

| LANDING CONFIGURATION | | HALF FLAPS 7.0° AOA (DEL or MECH) | HALF FLAPS 7.0° AOA 0° LEF (LEF Failure) | HALF OR FULL FLAPS - 10° AOA 0° TEF (TEF Failure) | 7.0°AOA 0° LEF/0° TEF (LEF/TEF Failure) |
|---|---|---|---|---|---|
| GROSS WEIGHT (LB) | 24,000 | 131 | 133 | 161 | 192 |
| | 25,000 | 134 | 135 | 164 | 196 |
| | 26,000 | 136 | 135 | 167 | 200 |
| | 27,000 | 139 | 141 | 170 | 204 |
| | 28,000 | 141 | 143 | 173 | 208 |
| | 29,000 | 144 | 146 | 177 | 212 |
| | 30,000 | 146 | 148 | 180 | 215 |
| | 31,000 | 149 | 151 | 183 | 219 |
| | 32,000 | 151 | 153 | 186 | 222 |
| | 33,000 | 153 | 156 | 188 | 226 |
| | 34,000 | 156 | 158 | 191 | 229 |
| | 35,000 | 158 | 160 | 194 | 232 |
| | 36,000 | 160 | 162 | 197 | 236 |
| | 37,000 | 162 | 165 | 199 | 239 |
| | 38,000 | 165 | 167 | 202 | 242 |
| | 39,000 | 167 | 169 | 205 | 245 |

# Recommended Maximum Single Engine Recovery Weight

**REMARKS**

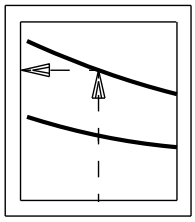
ENGINE(S): (2)404-GE-402

AIRCRAFT CONFIGURATION
HALF FLAPS
GEAR DOWN

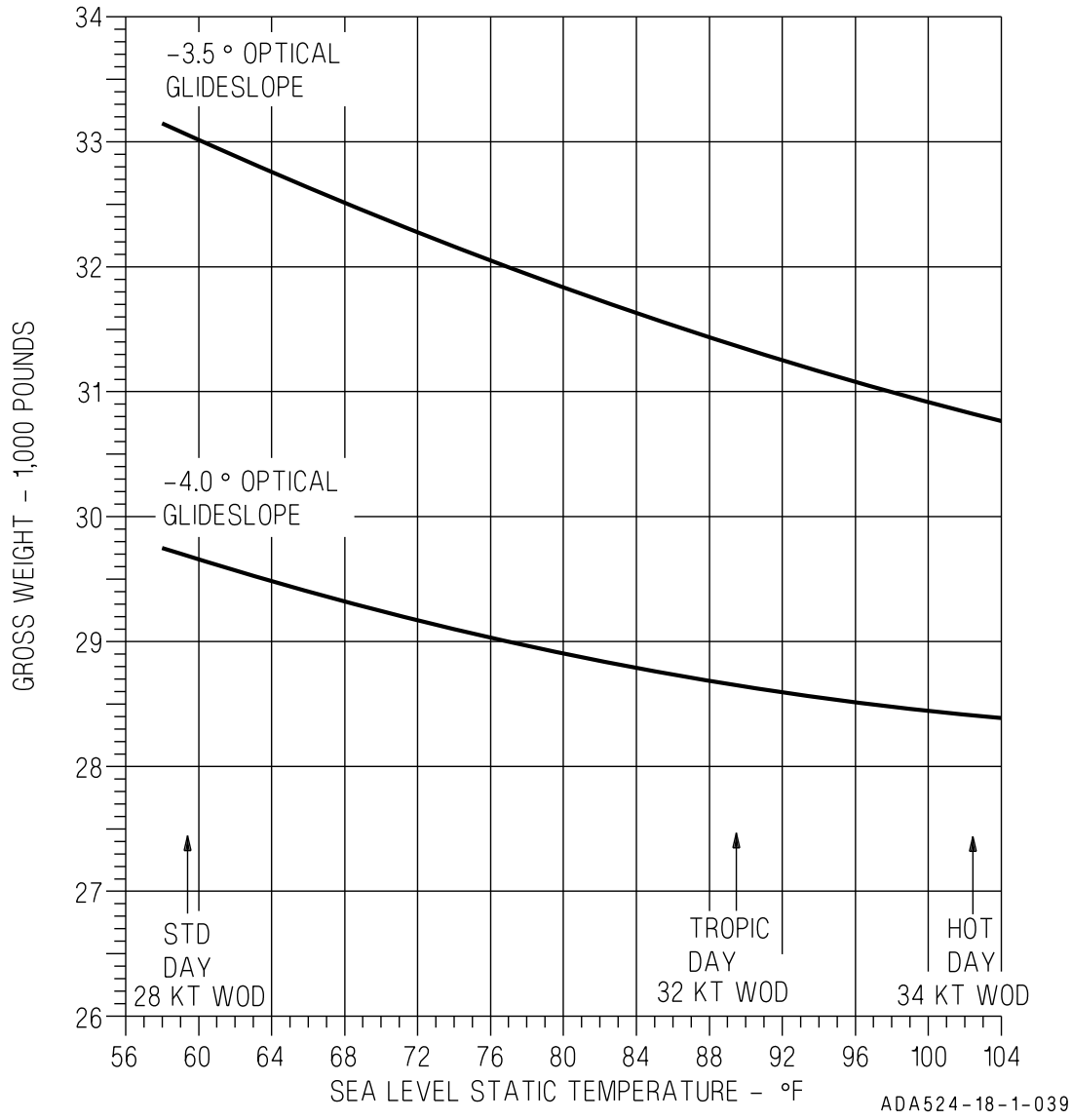
DATE: 15 JANUARY 1993
DATA BASIS: ESTIMATED
(BASED ON FLIGHT TEST)

**NOTES**

- HALF FLAPS
- LANDING GEAR DOWN
- FAILED ENGINE - WINDMILLING OR SEIZED
- C.G. AT 25%MAC
- INCREASE MAX WEIGHT BY 250 LB FOR EACH 1% THE C.G. IS AFT OF 25%MAC
- DECREASE MAX WEIGHT BY 250 LB FOR EACH 1% THE C.G. IS FWD OF 25%MAC
- GREATER WOD PROVIDES IMPROVED WAVEOFF PERFORMANCE
- ADJUSTING GROSS WEIGHT AT OR BELOW THE RECOMMENDED WEIGHT ENSURES LESS THAN 50 FEET ALTITUDE LOST DURING AN ONSPEED AOA SINGLE ENGINE MILITARY POWER WAVEOFF FROM AN ONSPEED AOA/ON GLIDESLOPE CONDITION. MAXIMUM WAVEOFF ALTITUDE LOST FOR TWO ENGINE OPERATION UNDER IDENTICAL CONDITIONS IS LESS THAN 30 FEET.



FUEL GRADE: JP-5
FUEL DENSITY:
6.8 LB/GAL




ADA524-18-1-039

## INSTRUCTIONS

ENTER THE CHART WITH THE RELATIVE BEARING. MOVE ALONG THE RELATIVE BEARING TO INTERCEPT THE WIND SPEED ARC. FROM THIS POINT, DESCEND VERTICALLY TO READ THE CROSSWIND COMPONENT, FROM THIS INTERSECTION OF BEARING AND WIND SPEED, PROJECT HORIZONTALLY TO THE LEFT TO READ HEADWIND COMPONENT.

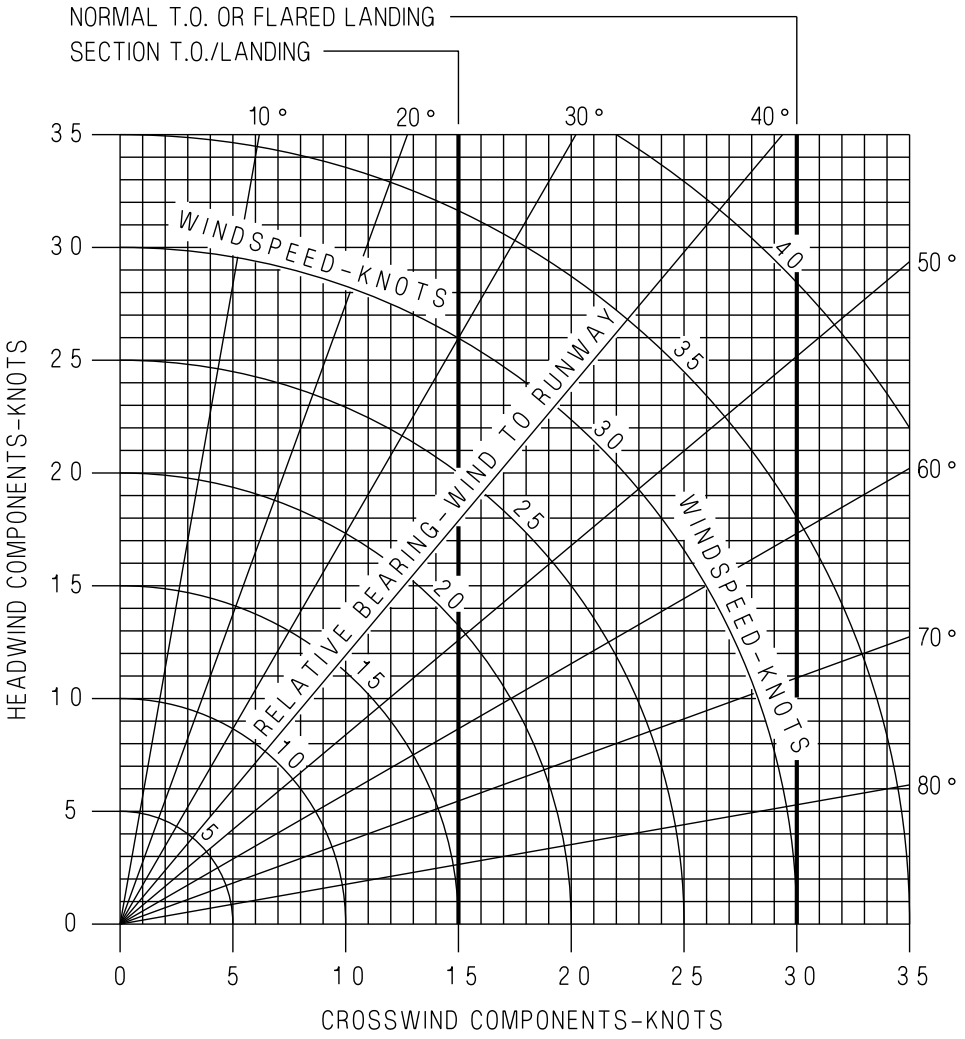
EXAMPLE

REPORTED WIND 050/35, RUNWAY HEADING 030.

| | | |
|---|---|---|
| A. | RELATIVE BEARING | 20 ° |
| B. | INTERSECT WINDSPEED ARC | 35 KT |
| C. | CROSSWIND COMPONENT | 12 KT |
| D. | HEADWIND COMPONENT | 33 KT |

# Wind Components

## CROSSWIND LIMITS:




ADA524-4-1-039