

LR IS REQUIRED FOR LANDING

LOCK ON

- o LR DATA ACCEPTED AND CONVERGED CONTINUOUS TO P64 - CONTINUE MISSION IF LOSS OF LOCK OCCURS IN P64.
- o LR DATA ACCEPTED AND CONVERGED WITH SUBSEQUENT DROPOUT - CONTINUE TO P64.
 - (A) LR REGAINED IN P64.
 - (1) DATA ACCEPTED BY LGC - CONTINUE MISSION.
 - (2) DATA NOT ACCEPTED BY LGC - ATTEMPT MANUAL LANDING IF LR/PGNS $\Delta h < 1500$ FT
 - (B) LR NOT REGAINED IN P64 - ABORT
- o LATE LR LOCK ON WITH DATA BEING INCORPORATED AND CONVERGED - CONTINUE TO P64
 - (A) DATA ACCEPTED BY LGC - CONTINUE MISSION.
 - (B) DATA NOT ACCEPTED BY LGC - ATTEMPT MANUAL LANDING IF LR/PGNS $\Delta h < 1500$ FT

MINIMUM ALTITUDE WITHOUT LR ALTITUDE INCORPORATION

- o PGNS ALTITUDE LESS THAN 22,000 FEET AND PGNS NAVIGATION ERRORS, CONFIRMED BY MSFN OR DOPPLER RESIDUALS, THAT CAUSE THE AGS-PGNS RADIAL VELOCITY DIFFERENCE.
 - (A) RADIAL N69 NOT INCORPORATED AND DIFFERENCE EXCEEDS - 10 FPS - ABORT.
 - (B) RADIAL N69 INCORPORATED AND DIFFERENCE EXCEEDS - 20 FPS - ABORT.
- o PGNS ALTITUDE LESS THAN 18,000 FEET AND PGNS NAVIGATION ERRORS, CONFIRMED BY DOPPLER BUT NOT BY AGS, THAT CAUSE THE MSFN-PGNS RADIAL VELOCITY DIFFERENCE TO EXCEED - 20 FPS - ABORT

o PGNS ALTITUDE LESS THAN 10,000 FEET.

(A) RADIAL N69 NOT INCORPORATED OR RADIAL VELOCITY DIFFERENCE EXCEEDS - 20 FPS - ABORT.

(B) LOSS OF WORKING PGNS (AS DEFINED BY RULE 5-91) - ABORT.

o PGNS ALTITUDE LESS THAN 6,000 FEET - ABORT.

POWERED DESCENT WILL BE TERMINATED FOR THE FOLLOWING:

o PGNS NAVIGATION ERRORS, CONFIRMED BY MSFN OR DOPPLER RESIDUALS, THAT RESULT IN THE FOLLOWING AGS-PGNS VELOCITY DIFFERENCES:

$\Delta \dot{X}$ (DOWNRANGE) GREATER THAN +90 OR -35 FPS.

$\Delta \dot{Y}$ (CROSSRANGE) GREATER THAN ± 90 FPS.

$\Delta \dot{Z}$ (RADIAL) GREATER THAN ± 60 OR -35 FPS.

o PGNS NAVIGATION ERRORS CONFIRMED BY DOPPLER RESIDUALS BUT NOT BY AGS THAT RESULT IN THE FOLLOWING MSFN-PGNS VELOCITY DIFFERENCES:

$\Delta \dot{Y}$ (CROSSRANGE) GREATER THAN ± 200 FPS.

$\Delta \dot{Z}$ (RADIAL) GREATER THAN +45 OR -35 FPS.

o COMMANDED THRUST INCREASING PRIOR TO THROTTLE-DOWN OR $P63 T_G = 80$ SEC.

o GTC GREATER THAN 57 PERCENT BY P63/P64 PROGRAM SWITCH PLUS 15 SEC.

o FAILURE TO ACHIEVE FTP (AUTO OR MANUAL) BY NOMINAL TIG PLUS 31 SEC (ABORT AT GTC DIVERGENCE).

o THE FOLLOWING PGNS PROGRAM ALARMS: 20105, 00214, 20430, 20607, 21103, 01107, 21204, 21302, 1501, 00402, (CONTINUOUS).

- VIOLATION OF THE TIME BIASED DPS ABORT BOUNDARY.

AN ABORT WILL NOT BE PERFORMED FOR PGNS FAILURES AFTER OBTAINING PITCHOVER IN THE APPROACH PHASE

MAXIMUM DOWNRANGE N69

- THE DESCENT TARGET POINT WILL BE SHIFTED DOWNTRACK IF GTC INDICATES NO THROTTLE DOWN BY P63/P64 PROGRAM SWITCH. THE MAXIMUM SHIFT IS AS FOLLOWS:
 - (A) 20,000 FEET DOWNTRACK IF VALID LANDMARK SIGHTINGS WERE OBTAINED.
 - (B) 10,000 FEET DOWNTRACK IF NO VALID LANDMARK SIGNTINGS WERE OBTAINED.
 - (C) NO DOWNTRACK SHIFT WILL BE ALLOWED IF THE APPROACH AZIMUTH IS BETWEEN 95 AND 100 DEGREES.
- ONE MINUTE OF RCS WILL BE USED TO ALLOW LANDINGS WITHIN THE ABOVE LIMITS.

MINIMUM ALTITUDE WITHOUT LR VELOCITY INCORPORATION

- PGNS ALTITUDE LESS THAN 10,000 FEET WITH LANDMARK TRACKING OBTAINED.
 - NAV N69 INCORPORATED AND $\Delta \dot{X}$ EXCEEDS +50 OR -35 FPS OR $\Delta \dot{Y}$ EXCEEDS +90 OR -70 FPS - ABORT.
 - NAV N69 NOT INCORPORATED AND $\Delta \dot{X}$ EXCEEDS ± 20 FPS OR $\Delta \dot{Y}$ EXCEEDS +45 OR -25 FPS - ABORT.
- PGNS ALTITUDE LESS THAN 10,000 FEET WITHOUT LANDMARK TRACKING OBTAINED.
 - NAV N69 INCORPORATED AND $\Delta \dot{X}$ EXCEEDS +35 OR -35 FPS OR $\Delta \dot{Y}$ EXCEEDS +70 OR -25 FPS - ABORT.
 - NAV. N69 NOT INCORPORATED AND $\Delta \dot{X}$ EXCEEDS +15 OR -15 FPS OR $\Delta \dot{Y}$ EXCEEDS +30 OR -10 FPS - ABORT.