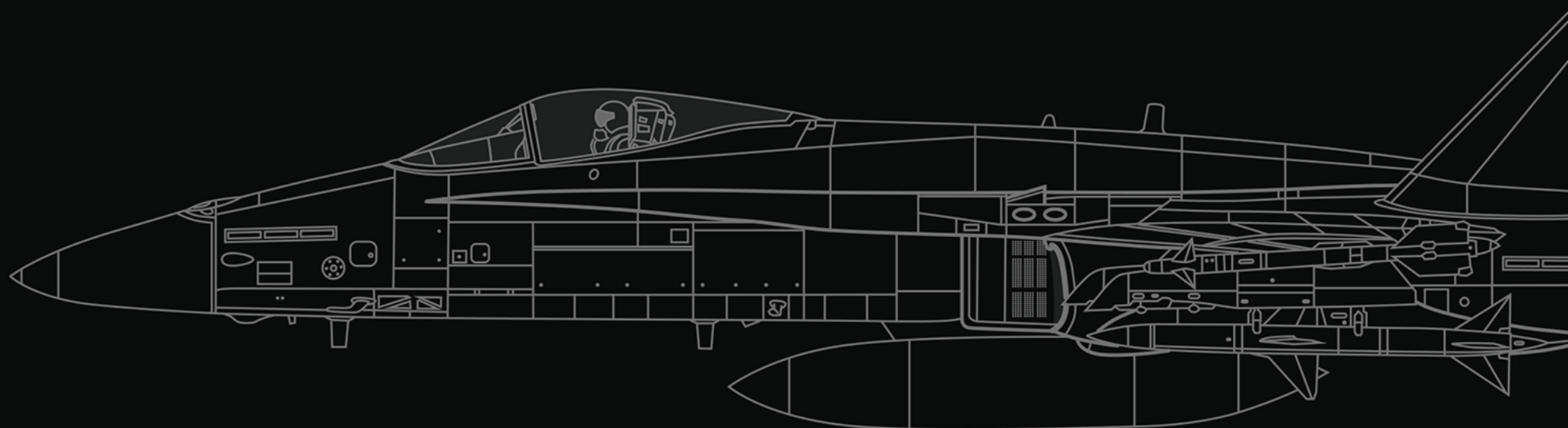


Kneeboard Suite

F/A-18C Hornet



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ENGINE START

- 1 EXT & INTR LT knobs SET
- 2 EXT LTS Master Switch OFF / **FIELD: ON**
- 3 PARK BRK handle SET
- 4 BATT switch (right mouse button) ON
- FIRE WARNING TESTS A & B.
- 5 APU switch ON, wait for READY light
- 6 ENG CRANK switch (rmb) R
- 7 Right throttle (15% rpm minimum) IDLE
- 8 Displays, HUD / HMD ON / As desired
- After fire tests: BLEED AIR KNOB - CYCLE THRU OFF TO NORM. WARN & CAUTION LIGHTS TEST.
- 9 ENG CRANK switch (lmb) L
- 10 Left throttle (15% rpm minimum) IDLE

BEFORE TAXI

HSI > DATA > CHECK WYPT ZERO & MAGVAR.

- 1 INS knob CV / **FIELD: GND**

HSI > box STD HDG for 90 sec align
FPAS > set HOME wypt (58)
- 2 RADAR knob OPR
- 3 WING FOLD **FIELD: SPREAD & LOCK**
- 4 FCS RESET button PUSH
- 5 FLAP switch HALF

Hold the Y key > BIT page > FCS-MC > FCS:
- 6 FCS BIT TEST PERFORM
- 7 HOOK BYPASS switch As required
- 8 ANTI SKID switch OFF / **FIELD: ON**
- 9 T/O TRIM button PUSH

NWS DISENGAGE. FLAP AUTO.
CHECK FLIGHT CONTROLS. FLAP HALF.

- 10 TRIM SET FOR TAKEOFF:

cv	< 44	45 - 48.000 lbs	> 49	FIELD
	16°	17°	19°	12°

Add LAT trim ~3° for asymmetric loadouts

CYCLE: REFUELING PROBE, SPEEDBRAKE,
LAUNCH BAR, HOOK, PITOT HEAT.

- 11 Fuel SET BINGO
- 12 Standby altimeter SET (to QNH or as briefed)
- 13 SARI UNCAGE
- 14 ALT switch (HUD) RDR
- 15 GROUND combat checks As required

BEFORE TAXI (CONTINUED)

- 16 IFF, D/L SET
- 17 ICLS, MODE II check As required
- 18 TACAN ON, SET to BRC or **RWY HDG**
- 19 Radar altimeter bug 40 / **FIELD: 200**
- 20 HMD (canopy down and locked) ALIGN

HSI > verify QUAL OK, then:
- 21 INS knob IFA / GPS restricted: NAV
- 22 OBOGS switch, OXY FLOW knob ON
- 23 Chocks / Parking brake REMOVE / OFF

deck crew: removed by taxi salute
- 24 NWS ON

CHKLST < HSI > FCS.* CHECK BRAKES.

Deck taxiing = canopy closed and seat armed.

BEFORE TAKEOFF / CAT HOOK-UP

- 1 Canopy / Seat CLOSED / ARMED
- 2 WING FOLD SPREAD AND LOCK
- 3 T.O. CHKLST (CV: bottom to top) COMPLETE

HUD < HSI > FCS. CONTROLS WIPEOUT.

AT GW OVER 44.000 lbs USE MAX POWER.

MAX GW, lbs	CV LAUNCH / FIELD TAKEOFF	51.900
	CV RECOVERY UNRESTRICTED / FCLP ...	33.000
	CV RECOVERY RESTRICTED	34.000
	FIELD FLARED LANDING	39.000

	POS.	FORM.	STROBE	LAND.LT
ON DECK - DAY RECOVERY - DAY	OFF			OFF
ON DECK - NIGHT	START, TAXI		OFF	OFF
	SALUTE	ON, BRIGHT		
	NO-GO		OFF ASAP	
	ONCE TRAPPED		OFF	
RECOVERY - NIGHT	ON, BRIGHT			OFF
AAR - NIGHT	ON, BRIGHT		OFF	OFF
FIELD: START, TAXI	AS REQUIRED, NIGHT ONLY		ON	AS DES.
FIELD: RWY ENTRY				ON

AIR REFUELING

Probe speed limits
transition: 300 extended: 400

- 1 Radar STBY / SIL
- 2 MASTER ARM switch SAFE
- 3 INTR WING fuel switch As desired
- 4 Air refuel PROBE switch EXTEND
- 5 Night refueling EXT LTS steady bright

Droque: KC-135 MPRS | S-3B | KC-130 | IL-78

* Pages to open on DDI-L, AMPCD and DDI-R

DESCENT/PENETRATION

FIELD

- 1 ENG ANTI ICE / WINDSHIELD **As desired**
- 2 DEFOG handle **HIGH**
- 3 ANTI SKID **ON**
- 4 Radar and standby altimeters **450 / SET**
- 5 Nav aids / IFF / Lights **As required**

HAIL-R CHECKS

CARRIER (INBOUND)

- HOOK / HEATS *r* **Case 1:**
- ACL / ANTI SKID OFF *a* **450/370**
- Instruments / ICLS *d* **Case 3:**
- Lights / Landing weight *a* **5000 for**
- Radar altimeter *l* **Platform -**
- t* **then 500**

HUD < HSI > FCS (or as needed).

APPROACH

- 1 LAND CHKLST **COMPLETE**
- GROUND IDLE** REQUIRES WEIGHT ON WHEELS. MOVING THROTTLES TO IDLE BEFORE TOUCH-DOWN SETS THE **FLIGHT IDLE** (~6% more RPM).

CLEARING RUNWAY

- 1 Seat **ARMED / FIELD: SAFE**
- 2 FLAP switch **AUTO**
- 3 WING FOLD **As required**
- 4 T/O TRIM knob **PUSH**

BEFORE ENGINE SHUTDOWN

- 1 Parking brake / Chocks **SET / Request**
- 2 INS knob *10+ sec before throttles off* **OFF**
- 3 SARI *lmb + scroll up* **CAGE**
- 4 Radar, Sensors, Avionics, Comms **OFF**
- 5 EXT & INTR LT knobs **OFF**
- 6 OBOGS switch, OXY FLOW knob **OFF**
- 7 Seat / Canopy **SAFE / OPEN**

ENGINE SHUTDOWN

- 1 Nosewheel steering **DISENGAGE**
- 2 FLAP switch **FULL**
- Once spotted/chocked and 5+ min at idle:*
- 3 Throttle **OFF (alternate sides)**
- 4 Displays, HUD, HMD **OFF**
- 5 Throttle **OFF**
- 6 Battery switch **OFF**

If engines are not idled for 5 min prior to shutdown, avoid restart between 15 min and 4 hours.

GROUND

- 1 WYPTS / SEQ / A-A WYPT
- 2 RDR ATTK / AZ-EL — **Setup**
- 3 STORES / Smart weapons check
- 4 Time / RALT / BALT — **SET**
- 5 FLIR — **STBY**

AIRBORNE

- 1 ALR, ALQ — **BIT, ready** / FLIR — **ON**
- 2 Bingo Bug

FENCE IN

- 1 Radar — **OPR (or as required)**
- 2 A-A TACAN / MIDS / RALT / SEL JETT
- 3 Contrails / Environment / G-warm
- 4 ALE — **Setup** / Expendables — **Check**
- 5 Dispenser — **ON/BYPASS**
- 6 Alpha check
- 7 STORES / Smart weapons check

COMMIT / INGRESS

- 1 MASTER ARM — **ARM (check SIM)**
- 2 Master Mode / SENS panel, LTD/R
- 3 IFF
- 4 ALQ — **REC/XMIT**
- 5 EXT Lights
- 6 VTR

RETURN TO FORCE

- 1 EXT Lights
- 2 IFF
- 3 Fuel — **Check** / Bingo Bug — **Reset**
- 4 MASTER ARM — **SAFE**
- 5 SEL JETT
- 6 Dispenser
- 7 Battle damage checks
- 8 ALQ / ALR / FLIR — **OFF**

COMBAT CHECKS

AIRCRAFT FORMAT

DCS EQUIVALENT

LATLN DCML DD°MM.mm'
DEFAULT 42°10.76'

N/A

LATLN DCML DD°MM.mmmm'
PRECISE 42°10.76**96**'

LAT LONG DECIMAL MINUTES
N42°10.769 LLDM

LATLN SEC DD°MM'SS"
42°10'46"

LAT LONG STANDARD
42°10'46"N LL

LATLN SEC DD°MM'SS.ss"
PRECISE 42°10.46.**18**"
REQ-D BY JDAM, JSOW, SLAM/ER

LAT LONG PRECISE
N42-10-46.18 PLL

GRID (MGRS)
PRECISE 5+5 KM 908**74** 728**09**

DCS JTAC 4+4*
KM 908**7** 728**0**

* ADD TRAILING ZEROS FOR PRECISE ENTRY: 9087**0** 7280**0**

14 F-14A •2 123 56	21 MiG-21Bis •1 12 4	34 Su-34 •3 123 23	F5 F-5E •1 2 4
F-14B •3 123 56	23 MiG-23MLD •2 12 12	37 AJS-37 Viggen 2 4	JF JF-17 •3 23 37
15 F-15C •3 123 24	24 Su-24M/MR B 2 2	39 Su-25TM B 2 4	M2 M 2000-5 3 123 20
F-15E •3 23 24	25 MiG-25PD •3 12 26	50 A-50/KJ-2000 A	M 2000C •3 12 19
F-15E S4+ •1 123 24	29 MiG-29A/G •3 12 22	AV AV-8B B 2 4	U AH-64D (MMA) •1 3 5
16 F-16A •3 123 23	MiG-29S •3 123 23	E2 E-2D A	C-101CC 2 4
F-16C •3 23 24	Su-27/33 •3 12 25	E3 E-3A A	H-6J B
18 F/A-18A •3 12 17	J-11A •3 123 25	F1 Mirage F-1 •1 12 16	Tornado IDS •1 2 4
F/A-18C •3 123 23	30 Su-30 •3 123 23	F2 Tornado GR4 •1 2 4	
19 MiG-19P •1 2 3	31 MiG-31 •3 12 25	F4 F-4E-45MC •1 12 14	

B: BOMBER/EW A: AWACS
NO LETTER: FIGHTER/MULTIROLE

SURFACE

I Nebo 1L13 – Nebo 55G6 – AN/FPS-117 EWR	
S Flat Face B P-19 [2-3-5] SR 122	
BB Big Bird 64H6E [10] SR 104	
CS Clam Shell 5N66M [10] low alt SR 103	
DE Dog Ear Sborka [13-15-19] MCC-SR 109	
FC SON-9 Fire Can •1 AAA fire support TR 131	
HQ HQ-7 [7] SP STR 128	
SD Snow Drift 9S18M1 [11] SR 107	
TS Tin Shield 19J6 [5-10] SR 130	
U Silkworm anti-ship SR	
Würzburg-Reise WWII Assets Pack EWR	

2 C 28/++ SA-2 Guideline S-75 •1 Fan Song TR 126	
3 C 13/++ SA-3 Goa S-125 •1 Low Blow TR 123	
5 C 73/++ SA-5 Gammon S-200 •1 Square Pair TR 129	
6 C 22/26 SA-6 Gainful Kub •2 Straight Flush STR 108	
7 E 10/18 HQ-7 •2 SP LN 127	
8 C 09/16 SA-8 Gecko Osa •1 TELAR 117	
10 C 46/++ SA-10 Grumble S-300 •3 Flap Lid A & B TR 110	
11 C 23/++ SA-11 Gadfly Buk •3 TELAR 115	
13 F 05/12 SA-13 Gopher Strela-10M •2 TELAR 118	
15 C 09/20 SA-15 Gauntlet Tor •3 TELAR 119	
19 E 05/12 SA-19 Grison Tunguska SPAAW 120	
A E 02/10 Gepard •1 SPAAA 207	
E 02/05 M163 Vulcan •1 SPAAA 208	
E 02/07 ZSU-23-4 Shilka •1 SPAAA 121	
HK C 25/++ Hawk •2 CWAR 206 SR 203 TR/PRI 204	
NS C 06/30 NASAMS AIM-120B •3 SR 209	
C 06/35 NASAMS AIM-120C •3 SR 209	
P C 48/++ Patriot •3 STR 202	
RO C 06/20 Roland •2 EWR 205 ADS/PRI 201	
RP E 06/10 Rapier with Blindfire Radar •2 TR 124	
RT E 06/10 Rapier with or without Tracker LN 125	
U E 02/05 LPWS Centurion •1 C-RAM	

NAVAL

40 CV LHA-1 Tarawa •2 F 08/13 407	
49 FR Oliver Hazard Perry •3 C 50/++ 401	
AE DE Arleigh Burke IIa •3 C 57/++ 412	
CR Ticonderoga •3 C 55/++ 315	
HN DE Type 052C •1 C 64/++ 410	
CR Pyotr Velikiy •3 C 74/++ 313	
HP VE Grisha / Albatros •3 C 08/17 306	
MR DE Type 052B •1 C 27/48 409	
FR Type 054A •1 C 35/++ 411	
PS TT Type 071 Amphib.dock E 04/09 408	
VE Molniya •3 E 04/09 312	
SC TT LS Ropucha BDK-775 E 08/09 321	
SS CV CVN-71 Roosevelt •2 403	
CV CVN-72 Lincoln •2 404	
CV CVN-73 Washington •2 C 06/16 405	
CV CVN-74 Stennis •2 F 08/13 406	
CV CVN-75 Truman •2 413	
SW CV Kuznetsov 2017 •3 C 09/20 320	
CV Kuznetsov old •3 C 09/20 301	
T2 CR Moskva •3 C 47/++ 303	
TP FR Castle-class E 03/04	
FR Condell-class •3 E 03/07	
FR Leander-class •3 C 07/06	
FR Neustrashimy •3 C 09/20 319	
FR Rezky •3 C 08/17 309	
U CV ARA Veinticinco de Mayo E 03/09	
CV CV-59 Forrestal •1 C 03/12	
CV Essex Class 1944 E 02/07	
CV HMS Invincible •1 C 46/++	

CV CARRIER CR CRUISER DE DESTROYER
FR FRIGATE TT TRANSPORT VE CORVETTE

1 SARH, **2** IR, **3** ARH – SUPPORTED MISSILES, FOLLOWED BY THE MAX LAUNCH RANGE (nm, “ACE” AI)
22/26 – SAM’S MAX FIRING RANGE (nm) AND ALTITUDE (×1000 ft ABOVE GROUND LEVEL) ++ – CAN HIT YOU ABOVE 50.000 ft
122 – HARM CODE COUNTERMEASURES: **C** – CHAFF **F** – FLARES **E** – EVASIVE MANEUVERING (AAA/OPTICAL SAM)
UNFINISHED OR BUGGY ASSET [THE SAM] TO WHICH THIS RADAR IS USUALLY LINKED •X – CMDS “AUTO” PROGRAM

TRACKING SAM AAA SHIP HARM CORREL. HOSTILE AIR UNKN AIR FRIEND AIR JAMMING FLIR CORREL.



- up to 10800 Internal fuel
- up to 330 M61A1 Vulcan 20mm GUN
578 HEI, AP, SAPHEI, or TP rounds
- 0 Chaff and flares (up to 120 cartridges)

BOMBS

82B	500	Mk-82 500 lbs	1 2 N 5 6 8 T A
82XT	550	Mk-82 Snakeye 500 lbs retarded	
82YT	510	Mk-82Y 500 lbs ballute	
83B	1000	Mk-83 1000 lbs	
84	1970	Mk-84 2000 lbs	
RET	490	CBU-99 cluster anti-tank	3 4
RE	490	Mk-20 cluster anti-tank	3
WEDL	2340	AGM-62 Walleye II 2000 lbs + D/L	

BOMBS - LG

Model	Weight	Score	Label
82LG	500 lbs	610	678AL
83LG	1000 lbs	1130	
84LG	2000 lbs	2110	
GB24	2000 lbs penetrator, USN	2400	678L

BOMBS - JDAM

J-82	530	GBU-38(V)1/B 500 lbs	2 N 6 7 8 T A
J-83	1030	GBU-32(V)2/B 1000 lbs, USN	} 2 N 6 7 8 T
J-84	2060	GBU-31(V) 1/B 2000 lbs	
J-84	2060	GBU-31(V) 2/B 2000 lbs, USN	
J-109	2160	GBU-31(V) 3/B 2000 lbs penetrator	6 7 8
J-109	2160	GBU-31(V) 4/B 2000 lbs penetrator, USN	6 7 8

A-G MISSILES

82P	400	ADM-141A TALD glide decoy
JSA	1070	AGM-154A JSOW GPS/INS cluster
JSC	1070	AGM-154C JSOW GPS/INS penetrator
HARM	900	AGM-88C HARM
HPD	1190	AGM-84D Harpoon
SLAM	1390	AGM-84E SLAM GPS/INS + D/L
SLMR	1490	AGM-84H SLAM ER GPS/INS + D/L
MAV	630	AGM-65E 300 lbs las(E)r Maverick
MAVF	670	AGM-65F 300 lbs in(F)rared Maverick

PYLONS, RACKS, LAUNCHERS

ROCKETS

Weapon	Damage	Penetration	Count	Target Type	Notes
Mk 5 HE(AT) anti-tank	68	230	7x	anti-tank	default
M151 HE soft targets	68	250	7x	soft targets	S - SINGLE
M151 HE soft targets	61	600	19x	soft targets	R - RIPPLE
ZUNI Mk 71	10	700	4x		set in ME

A-A MISSILES

7F/7M/7P	510	AIM-7F / -7M and -7MH / -7P Sparrow
9L/9M/9X	190	AIM-9L / -9M / -9X Sidewinder
AB/AC	360	AIM-120B / -120C-5 AMRAAM

MISC

TRAINING

▲ WEIGHT WITHOUT RACKS AND RAILS

— FUZING OPTS —

Underscored = default L = Laser code A = Appearance (USAF or USN coating)

ALL WEIGHTS ARE IN POUNDS

F/A-18C Lot 20 (1997) • F404-GE-402 • BuNo 165407

WAVEOFF

MIL power (MAX if required)

Raise gears and flaps only after a safe climb has been established

At >400 ft AGL and >200 kts turn downwind while climbing to pattern altitude

Break
Over the first half of the runway
or as soon as practical
LEVEL TURN
Gs to meet the abeam distance

VMC ONLY

COMMON PATTERN ALTITUDE

1500 ft AGL

OR AS PUBLISHED / TOLD BY ATC

Overhead

Traffic check

If unable to break:
drag the upwind
leg, or depart
and re-enter3-5 nm
'Initial'

On runway track

Slightly offset away
from the direction
of the break

At pattern altitude

300-400 kts

<250 kts
gears, flaps

Downwind

Runway reciprocal

At pattern altitude

ON-SPEED

Landing checklist

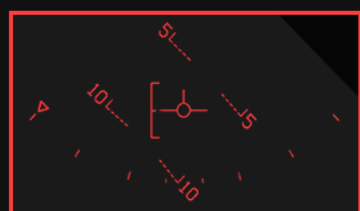
'Base'

Begin turn to final

45° BANK

Nose down -7 VV

Maintain on-speed AOA

Touchdown
Throttles idle1-1,5 nm abeam
the runway,
corrected for
crosswindAt or above 300 ft AGL
3/4 nm, on-speed

Roll-out

450 ft AGL, 1 nm

Final

The '90' — runway check
Adjust the bank angle
and descent rate as needed

1

DESCENT CHECKLIST COMPLETED. SET RADALT TO 450.

SET THE COURSE LINE TO RUNWAY HEADING.

SET THE HEADING BUG RECIPROCAL OF THE RUNWAY HEADING.

FLY THE ⬆ GROUND TRACK POINTER, NOT THE LUBBER LINE.

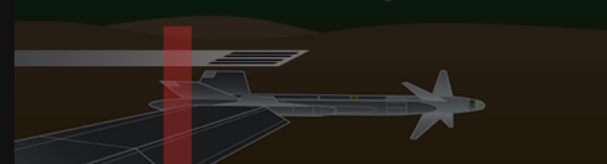
TIGHTEN OR LOOSEN THE BREAK TURN
DEPENDING ON CROSSWIND DIRECTION AND STRENGTH.
CORRECT THE ABEAM DISTANCE, NOT THE BASE TURN:
ADD OR SUBTRACT 0,1 nm FOR EVERY 10 kts OF CROSSWIND
COMPONENT. ABEAM THE RUNWAY ≠ ABEAM THE TACAN.

(Negligible crosswind) Runway above
the wingtip — good abeam distance

LANDING CHECKS

DISPENSER • HARNESS
ANTI SKID • HOOK
FLAPS • WHEELS

MLW (FLARED): 39.000 lbs

Wing passes the touchdown
area — begin turn to final

THERE ARE **NO** STANDARD AND UNANIMOUSLY ACCEPTED PATTERN ALTITUDE AND APPROACH SPEED.
ATC AND PUBLISHED PROCEDURES ALWAYS OVERRULE THE WHATEVER IS SUGGESTED ABOVE OR CONSIDERED "COMMON".

FIELD CARRIER LANDING PATTERN

CARRIER-TYPE BREAKS ARE SIMILAR TO THE CASE I APPROACHES
WITH THE FOLLOWING DIFFERENCES:

- CARRIER BREAK HAS TO BE APPROVED BY ATC ON CHECK-IN.
- A WAYPOINT MAY BE CREATED ON THE RUNWAY TO SIMULATE THE CARRIER BOX AND AID IN THE ABSENCE OF TACAN.
- THE ABEAM DISTANCE ON DOWNWIND SHOULD BE CORRECTED FOR CROSSWIND.
- THE DOWNWIND LEG IS EXTENDED BY 10-15 SECONDS AS THE RUNWAY IS NOT STEAMING FORWARD.
- THERE ARE NO PRESCRIBED WAYS TO FLY THE FINAL.

600 ft AGL, ON-SPEED
30° AOB base turnExtended
downwind leg

450-500 ft AGL

1-1,5 nm,
corrected for
crosswind

3 nm - 'Initial'

Break

On runway track, 800 ft AGL, 350 kts

WHEN FLYING ONLINE AND UNCONTROLLED, ANNOUNCING YOUR POSITION MIGHT HELP TO ENHANCE SITUATIONAL AWARENESS:

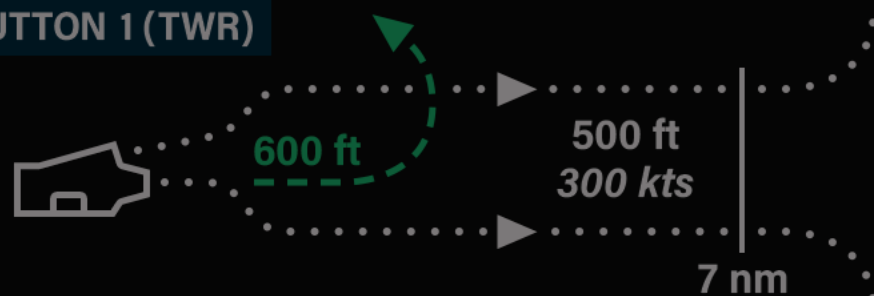
A LEAD REPORTS INITIAL: (Flight callsign), # mile initial, runway #, left (right) overhead.

B LEAD REPORTS BREAK: (Flight callsign), in the break.

C EACH PILOT REPORTS BASE: (Individual callsign), base, gear down, full stop (touch & go).

I Day. Ceiling above 3000 ft and visibility more than 5 miles. Twoship covey launches possible.

BUTTON 1 (TWR)



Zip Lip. Clearing turn. Climb 500 ft, fly 300 kts parallel the BRC until 7 nm. Then climb unrestricted.

For direct entry into the pattern, climb 600 ft, flaps full, hook down. Turn downwind with interval. Do the landing checklist.

**MAX TAKEOFF WEIGHT: 51.900 lbs.
OVER 44.000 lbs USE MAX POWER.**

CLEARING TURN

Waist cats 3 and 4 — left clearing turn.
Bow cats 1 and 2 — right clearing turn.
Once airborne, turn 20° left or right from the current heading. 30° AOB MAX.
Once achieved, turn to parallel the BRC.

All exterior lights must be off while on deck, at all times. **At night**, turn the POSIT, FORM and STROBES ON when ready for launch ("nighttime salute").

II Day. VMC at the ship (ceiling above 1000 ft and visibility more than 5 miles), IMC in climb.

BUTTON 2 (DEP)



Zip Lip. Clearing turn. Climb 500 ft, fly 300 kts parallel the BRC.

At 7 nm turn to intercept the 10 nm arc.

Depart the arc and join the briefed radial. Climb at 300 kts until clear of clouds.

Report **Popeye** if not on top at 18.000 ft.

T.O. CHECKS

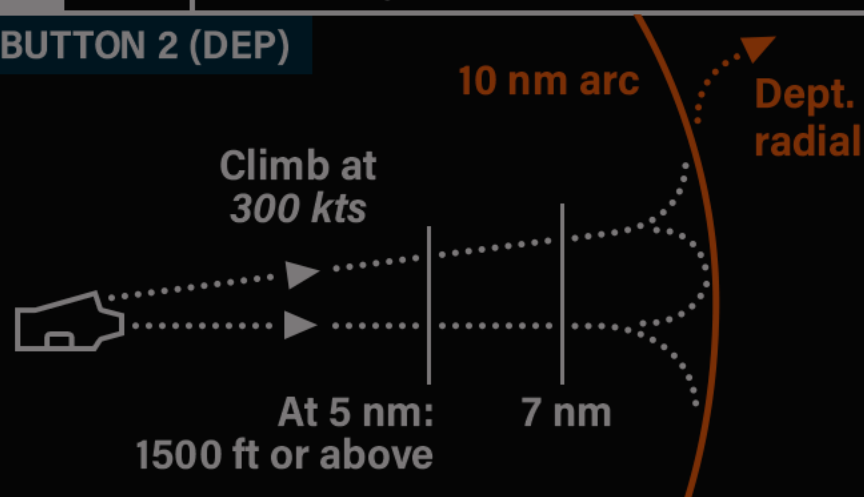
SEAT ARM
NWS LO
WARN LITES
HARNES
HOOK
FLAPS
TRIM
WINGS
CONTROLS

i For CASE II and CASE III, the arc and departure radial are only required during IMC. If skies are clear, or if it's possible to pick a way through holes in the clouds, there is no requirement to arc or fly the radial.

III Night

Day: ceiling below 1000 ft or visibility less than 5 miles.

BUTTON 2 (DEP)



No clearing turn. Report **Airborne**. Climb straight ahead at 300 kts.

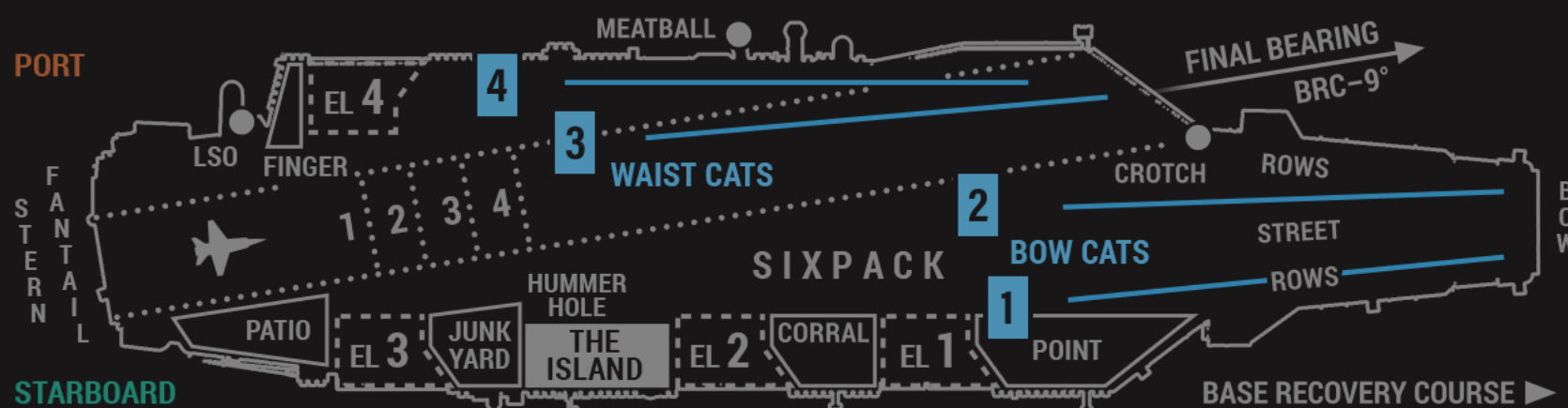
Cross 5 nm at or above 1500 ft. Report **Passing 2,5** on climb through 2500 ft.

At 7 nm turn to intercept the 10 nm arc. Report **Arcing**.

Continue climbing and join the departure radial. Report **Established outbound**.

Report **On top, angels XX** when clear of clouds. Report **Popeye** if not on top at 18.000 ft.

Report **Kilo** when mission-ready.

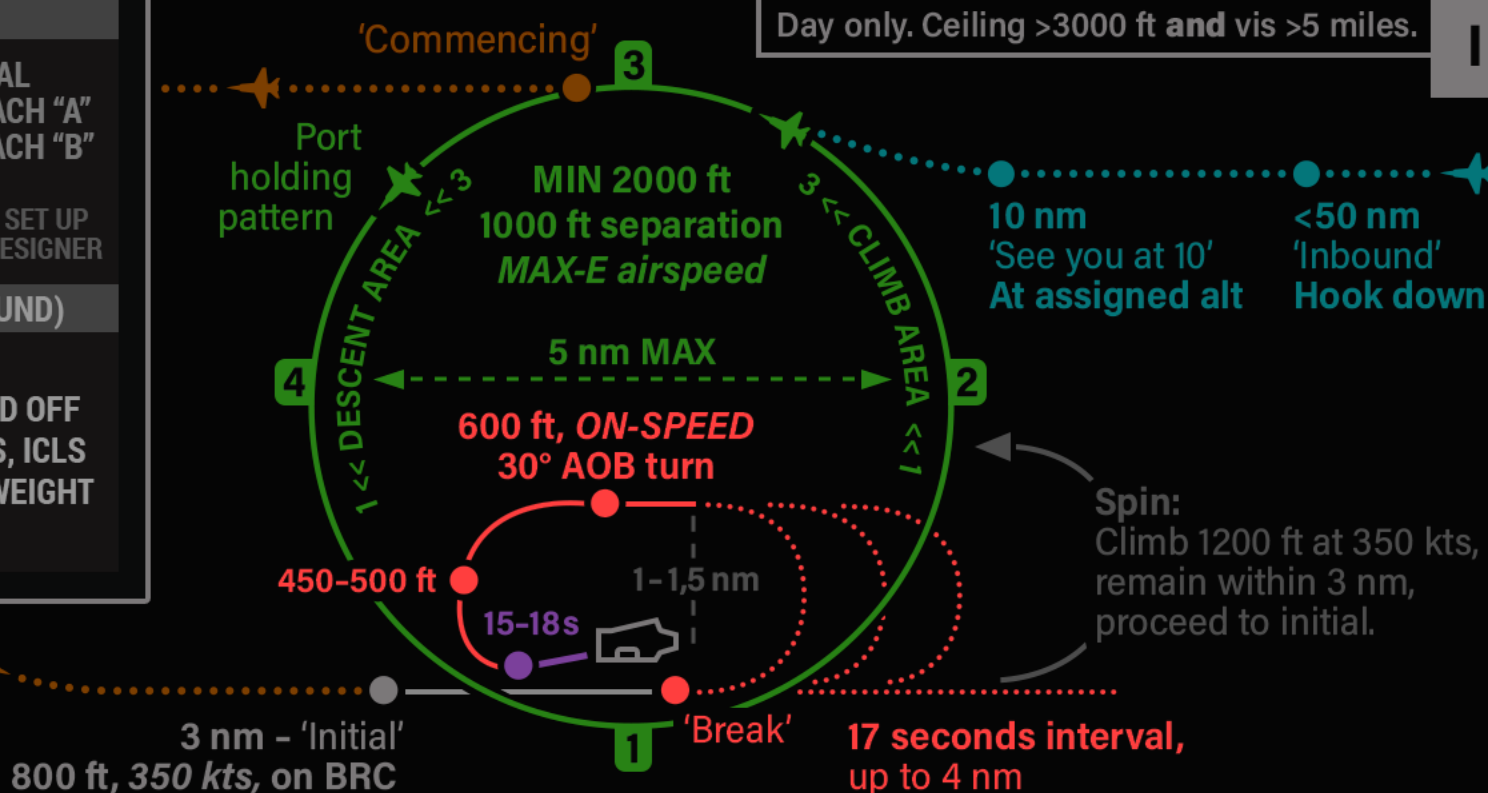


COMMS

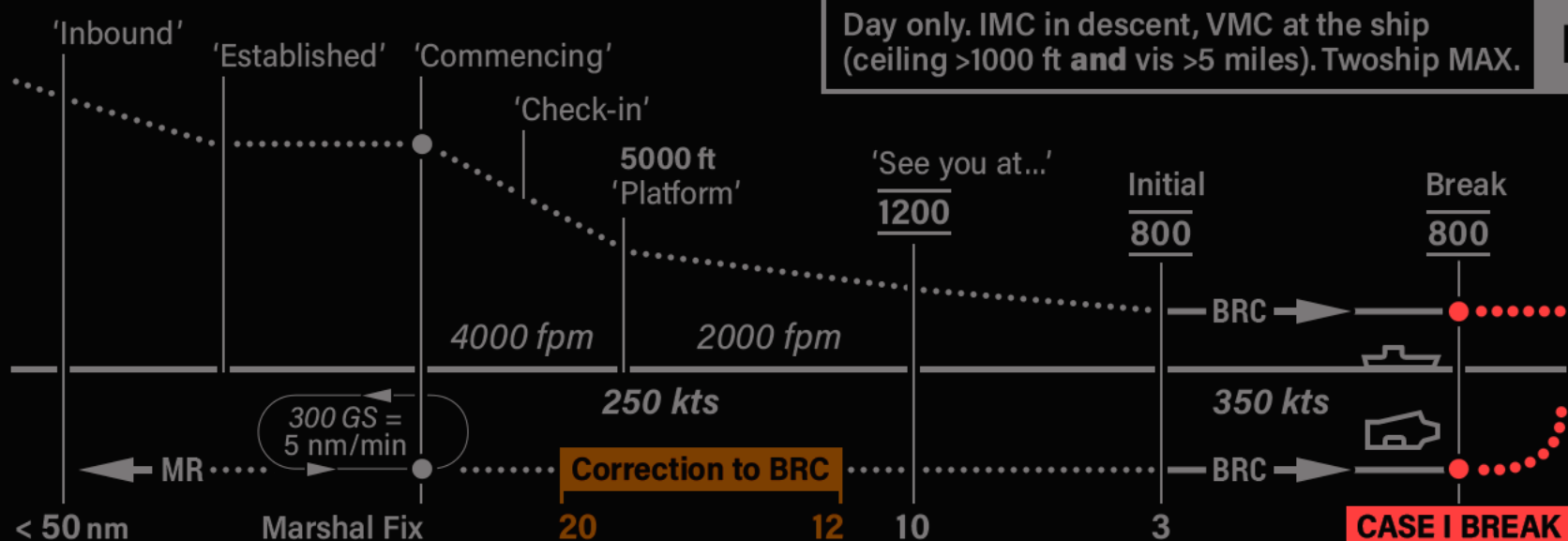
BTN 16 MARSHAL
BTN 15 APPROACH "A"
BTN 17 APPROACH "B"
BTN 1 TOWER
VALID ONLY WHEN SET UP
BY THE MISSION DESIGNER

HAIL-R (INBOUND)

- HOOK, HEATS
- ACL, ANTI-SKID OFF
- INSTRUMENTS, ICLS
- LIGHTS, LDG WEIGHT
- RAD ALT



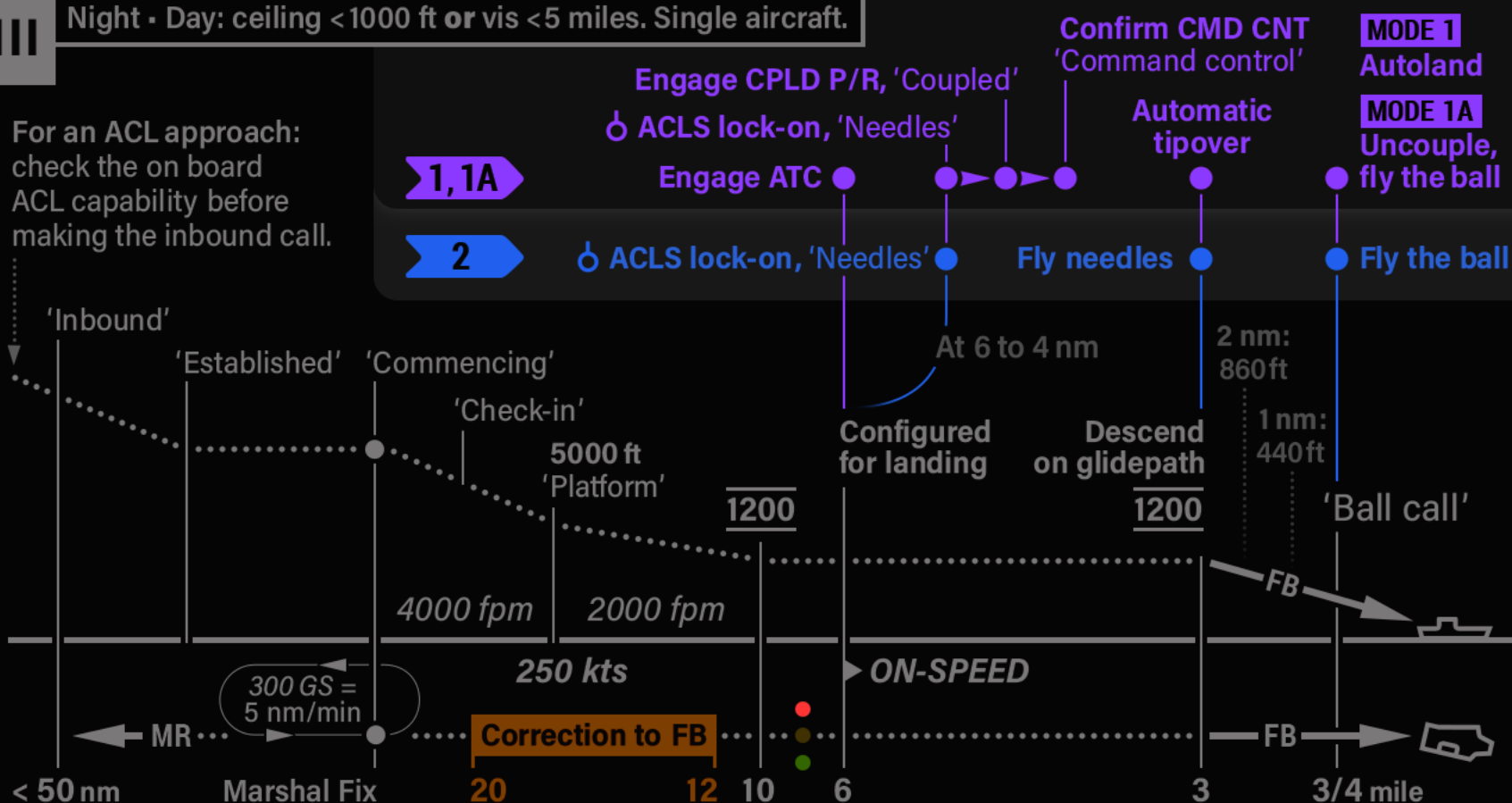
CASE I and CASE II WAVEOFF / BOLTER: Turn to BRC, keep landing configuration, climb 600 ft, turn downwind with interval.



III

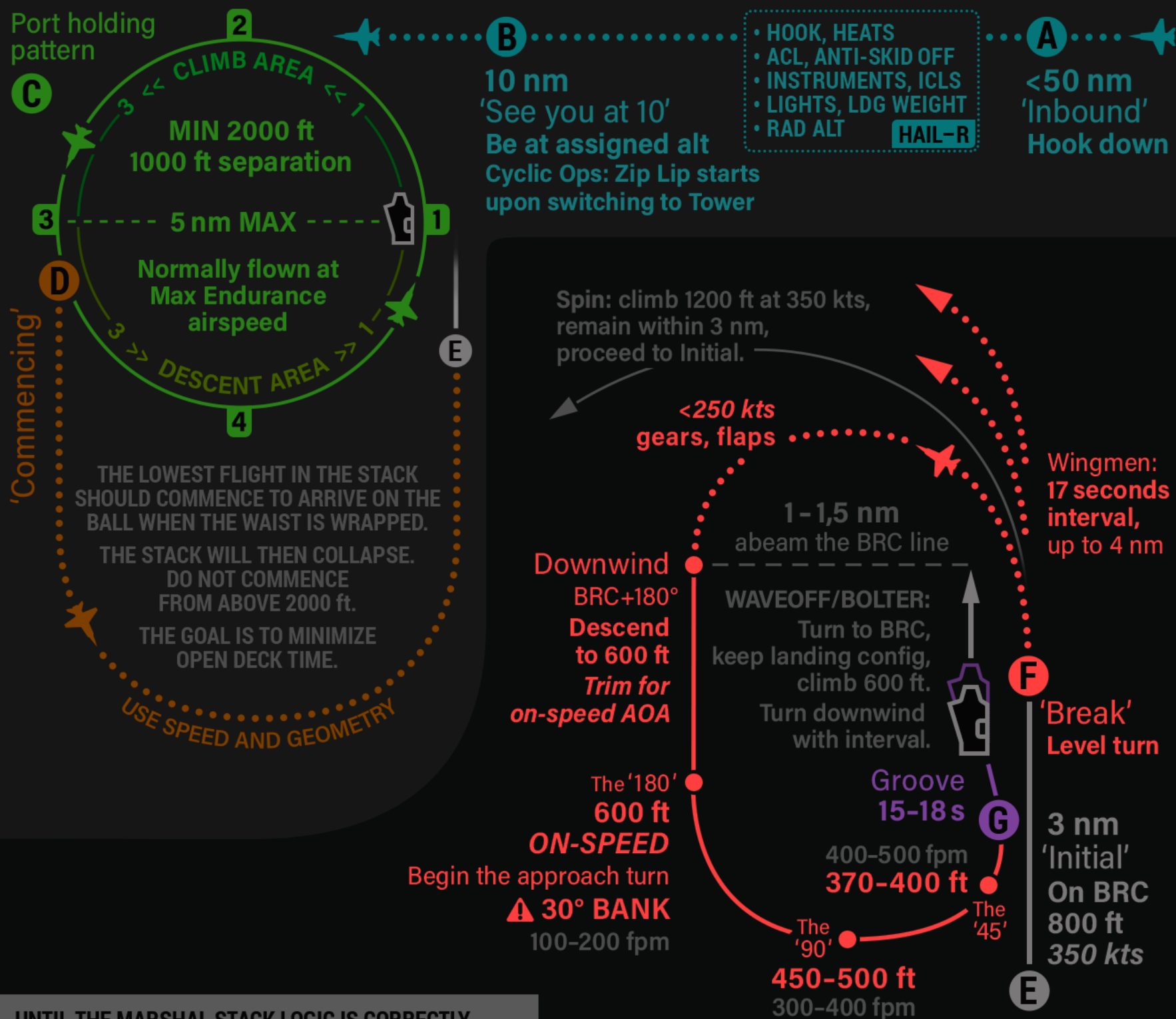
Night - Day: ceiling <1000 ft or vis <5 miles. Single aircraft.

For an ACL approach:
check the on board
ACL capability before
making the inbound call.



WAVEOFF / BOLTER: Gears up, flaps half, 150 kts. Climb 1200ft on FB. If no COMM: turn downwind at 4 DME, turn to FB at 4 DME.

Day only. Ceiling above 3000 ft and visibility more than 5 miles.



UNTIL THE MARSHAL STACK LOGIC IS CORRECTLY IMPLEMENTED IN DCS, OR WHEN FLYING ONLINE AND UNCONTROLLED, CONSIDER THE FOLLOWING:

- APPROACH 10 nm [B] AT 2000 ft OR AT THE NEXT AVAILABLE ALTITUDE (WITH 1000 ft INCREMENTS).
- IF THE STACK IS EMPTY: PROCEED DIRECT INITIAL [E], OR FLY THE PORT HOLDING PATTERN [C] AT 2000 ft AND START TO COMMENCE FROM POSITION [3].
- IF THE STACK IS NOT EMPTY: FLY THE PORT HOLDING PATTERN [C]. DESCENT 1000 ft BETWEEN [3] AND [1] WHEN THE LEVEL BELOW HAS CLEARED, UNTIL REACHING 2000 ft. THEN COMMENCE OUT OF [3].
- WITH LIVE TRAFFIC IN THE PATTERN, ANNOUNCING YOUR POSITION (i.e. 'COMMENCING', 'INITIAL') MIGHT HELP TO ENHANCE SITUATIONAL AWARENESS.

- BREAK IS DETERMINED BY THE LAST AIRCRAFT IN THE LANDING PATTERN (WHEN THEY REACH YOUR 7 O'CLOCK POSITION).
- IF UNABLE TO BREAK BEFORE 4 nm, DEPART AND RE-ENTER. REMAIN CLEAR OF THE PATTERN / STACK. FOLLOW INSTRUCTIONS IF GIVEN, OTHERWISE STATE YOUR INTENTIONS.
- NOTE THAT DEPART AND RE-ENTER MAY OCCUR ANYWHERE IN THE PATTERN.
- THE '180' IS WHERE THE WHITE OF THE ROUND DOWN AT THE STERN IS VISIBLE.
- WHATEVER ABEAM DISTANCE REQUIRES 30° AOB IS THE RIGHT DISTANCE. IF YOU END UP OVER- OR UNDERSHOOTING THE GROOVE, CORRECT THE ABEAM DISTANCE, NOT THE BANK ANGLE, ON YOUR NEXT PATTERN.

A **BUTTON 16** WITHIN 50 nm FROM THE CV, REPORT INBOUND: *Marshal, # (modex), marking Mom's XXX for XX (bearing and distance from the CV), angels XX, state X.X (fuel).*
WITH A WINGMAN: *holding hands with # and low state X.X.*

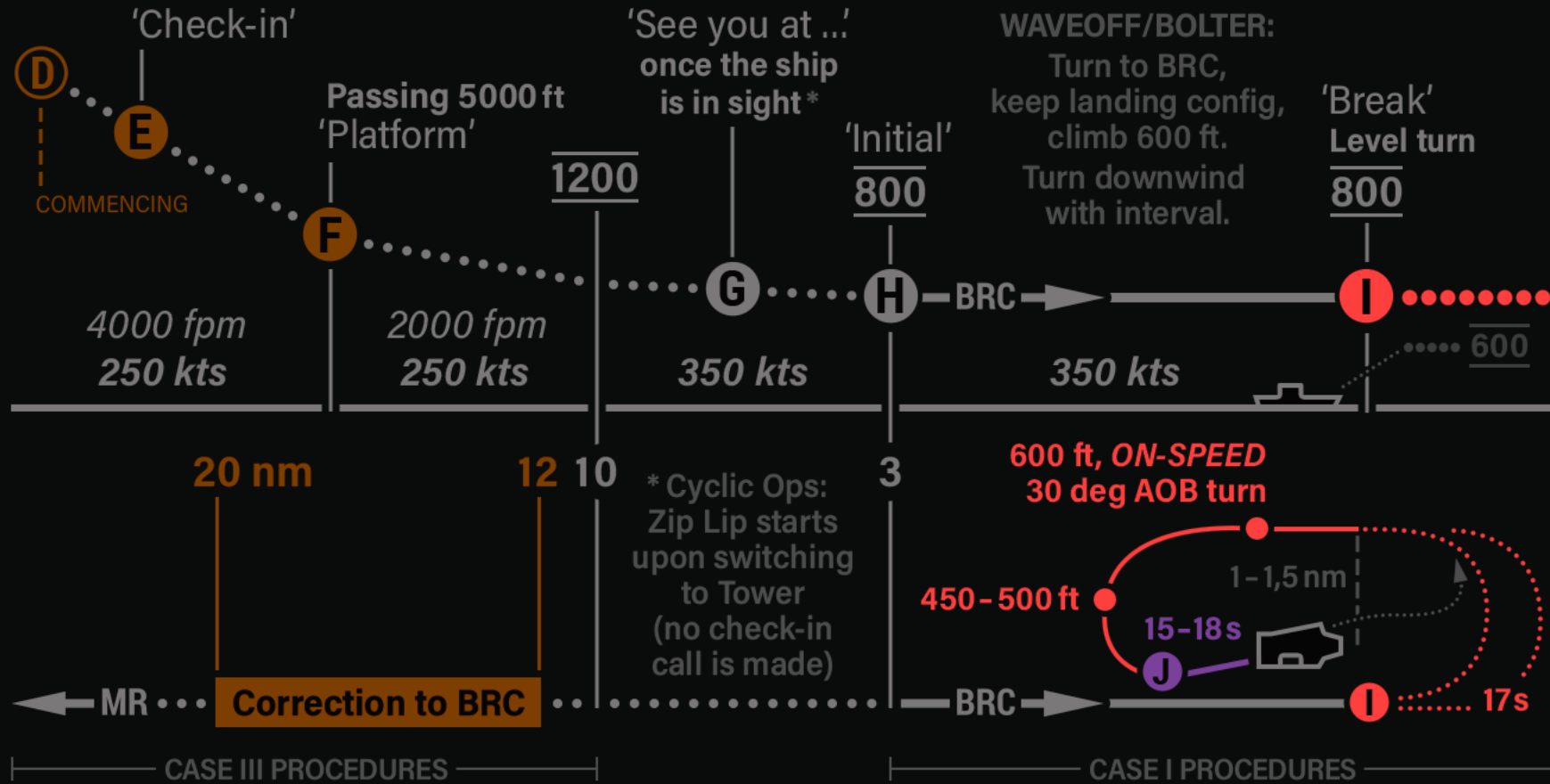
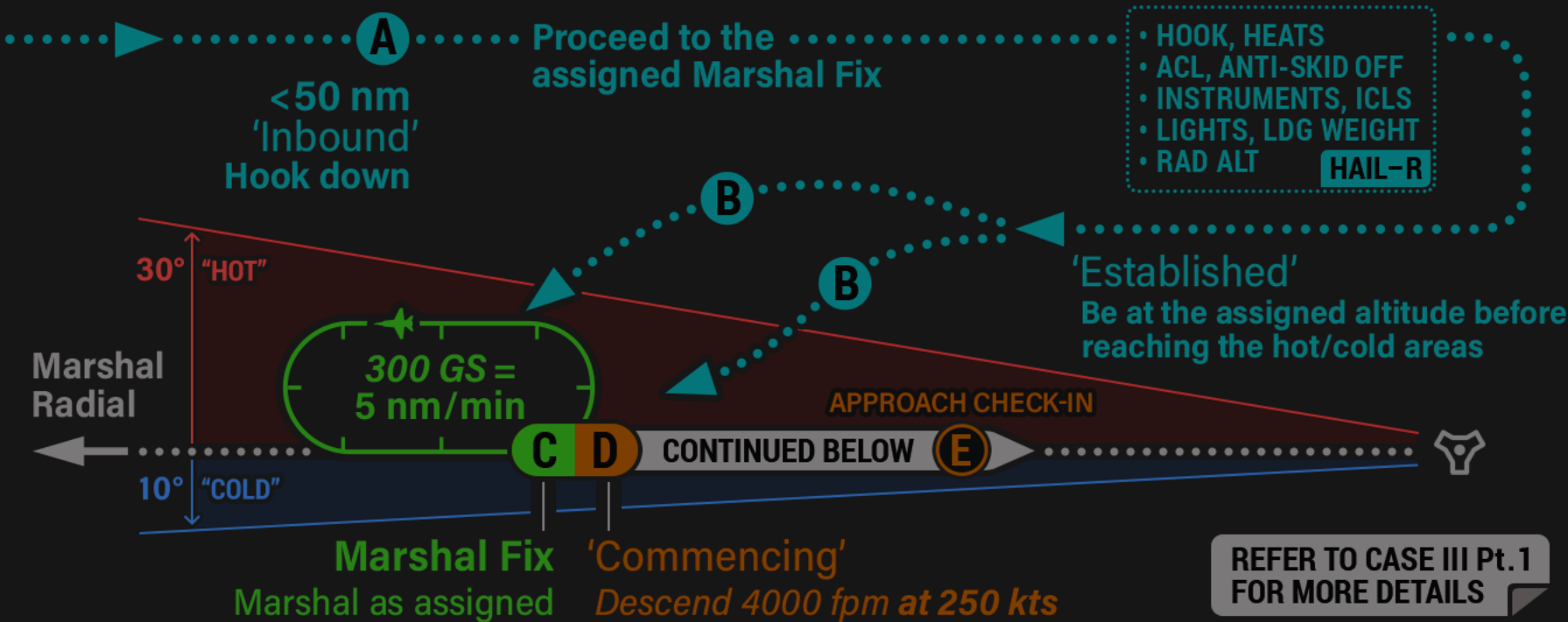
B AT 10 nm, REPORT: *#, see you at 10.* ON HANDOFF, SWITCH TOWER **BUTTON 1**

C **D** **E** **F** – NOT REPORTED DURING CYCLIC OPS (ZIP LIP UNLESS SAFETY CONCERNS OR IMC)
SUPERCARRIER AI: 'OVERHEAD' WILL BE AUTOMATICALLY REPORTED AT 5 nm FROM THE SHIP

G NO 'BALL' CALL DURING CYCLIC OPS – ONLY 'CLARA'

THE PROVIDED BUTTONS ARE ONLY VALID WHEN SET UP CORRECTLY BY THE MISSION DESIGNER. IGNORE IF UNSURE.

Day only. IMC in descent, VMC at the ship (ceiling >1000 ft and visibility >5 miles). Two aircraft max.



- A BUTTON 16** WITHIN 50 nm FROM THE CV, REPORT INBOUND: *Marshal, # (modex), marking Mom's XXX for XX* (bearing and distance from the CV), *angels XX, state X.X* ('low state' if with a wingman) FLIGHT LEAD SHALL RECEIVE AND READBACK THE HOLDING INSTRUCTIONS **EXAMPLE:** *301 (modex), marshal on the 116* (radial from TACAN, deg), *23 DME* (distance from TACAN on given radial), *angels 8* (holding altitude), *expected approach time is 21* (minutes passed the hour, e.g. commence at 16:21. Readback in single digits: 'two one'), *button XX* (Approach channel) **SUPERCARRIER AI WILL READBACK THE INSTRUCTIONS AUTOMATICALLY. THE BUTTON IS NOT PROVIDED.**
- B** WHEN ESTABLISHED AT THE ASSIGNED ALTITUDE, REPORT: *#, established angels X, state X.X*
- D** WHEN STARTING THE APPROACH, REPORT: *#, commencing, altimeter XX.XX, state X.X*
- E BUTTON 15 OR 17** ON HANDOFF, CONTACT THE APPROACH: *#, checking in, XX miles*
- F** PASSING 5000 ft, REPORT: *#, platform*
- G** ONCE THE SHIP IS IN SIGHT, REPORT: *#, see you at XX*. ON HANDOFF, SWITCH TOWER **BUTTON 1**
- H I** – NOT REPORTED DURING CYCLIC OPS (ZIP LIP UNLESS SAFETY CONCERNS OR IMC)
- J** NO 'BALL' CALL DURING CYCLIC OPS – ONLY 'CLARA'
- THE PROVIDED BUTTONS ARE ONLY VALID WHEN SET UP CORRECTLY BY THE MISSION DESIGNER. IGNORE IF UNSURE.

Part 1

MARSHAL

**CHECK THE ON BOARD ACL CAPABILITY
BEFORE MAKING THE INBOUND CALL:
ACL 1 IS CAPABLE OF MODES 1 / 1A / 2.
ACL 2 IS CAPABLE OF MODE 2 ONLY.**

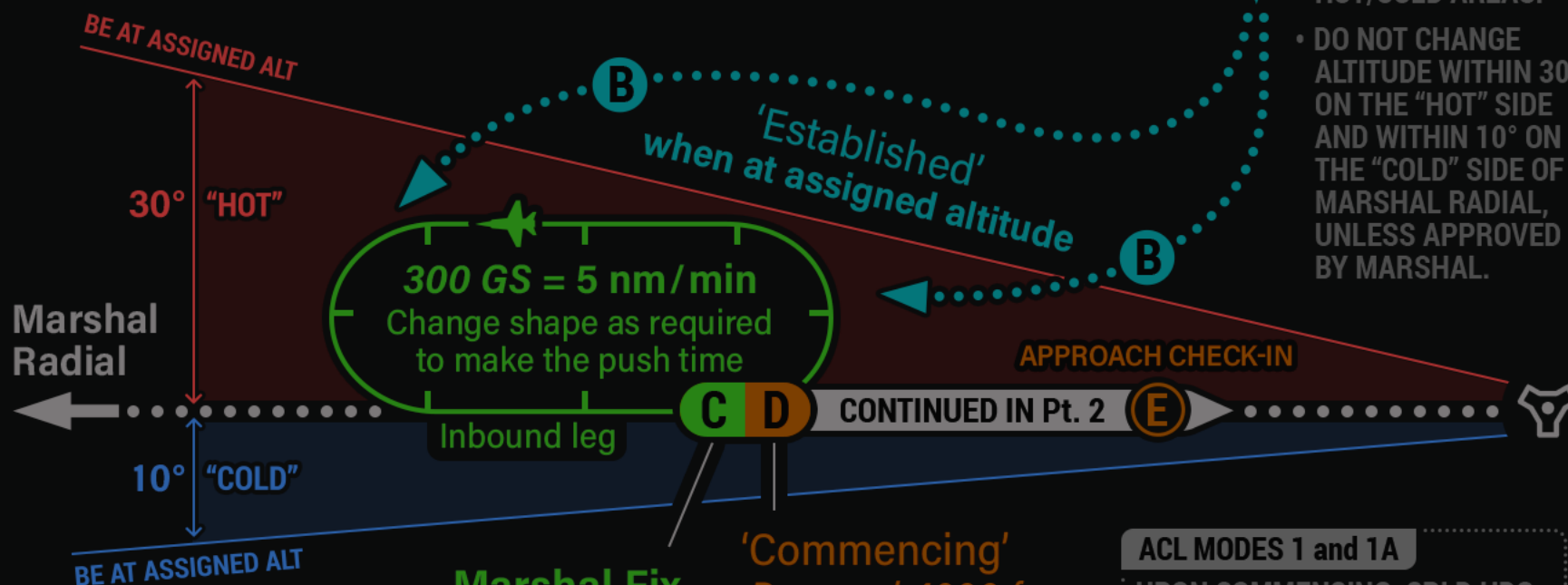
A • • • • •
<50 nm
'Inbound'
Hook down
Check-in as a
twoship MAX,
but proceed
as a single

- SET THE RECIPROCAL OF THE MARSHAL RADIAL ON TACAN COURSE LINE (ARROW POINTING TOWARD THE SHIP).
- NO PRESCRIBED WAY ON HOW TO PROCEED TO THE MARSHAL STACK OR HOW TO ENTER IT.

- HOOK, HEATS
- ACL, ANTI-SKID OFF
- INSTRUMENTS, ICLS
- LIGHTS, LDG WEIGHT
- RAD ALT

- BE AT THE ASSIGNED ALTITUDE BEFORE REACHING THE HOT/COLD AREAS.

- DO NOT CHANGE ALTITUDE WITHIN 30° ON THE "HOT" SIDE AND WITHIN 10° ON THE "COLD" SIDE OF MARSHAL RADIAL, UNLESS APPROVED BY MARSHAL.



Marshal Fix

On assigned radial, at assigned angels,
at assigned DME (assigned angels + 15)

- THE COMMON TECHNIQUE IS TO MARSHAL AT 300 kts GROUND SPEED (~250 kts IAS). THAT WILL EQUATE TO 5 nm A MINUTE AND WILL HELP WITH TIMING.
- DO NOT CHANGE ALTITUDE IN THE MARSHAL STACK.
- BIAS TO REMAIN ON THE "HOT" SIDE OF THE RADIAL.

'Commencing'
Descend 4000 fpm
at 250 kts

ACL MODES 1 and 1A

UPON COMMENCING, CPLD HDG
MAY BE ENGAGED, IF AVAILABLE.

- **CHANGE THE SHAPE OF THE PATTERN TO ACHIEVE THE PUSH TIME (ZIG-ZAG ON THE INBOUND LEG, 360s, FIGURE 8s ARE ALL LEGAL).**
- **INFORM MARSHAL IF UNABLE TO PUSH WITHIN 10 SECONDS OF ASSIGNED TIME.**
- **UPON COMMENCING, MAINTAIN INBOUND HEADING AND SET FINAL BEARING ON TACAN COURSE LINE.**

1 – AUTO APPROACH, AUTO LANDING. **ACL MODES**
1A – AUTO APPROACH, MANUAL AT THE BALL CALL.
2 – MANUAL WITH ACLS GUIDANCE.

- THE F/A-18C IN DCS CAN FLY ANY ACL APPROACH TO ANY CARRIER. HOWEVER, THE SUPERCARRIER'S *PHRASEOLOGY* IS LIMITED TO ACL MODE 2.
- FREE CARRIERS IN DCS OFFER NO PHRASEOLOGY AND NO T/C GUIDANCE. THE PILOT REPORTS INBOUND, THEN ACQUIRES ACL WHEN ON THE FINAL BEARING, AT 1200 ft. AT <6 DME.

IF YOU DON'T OWN THE SUPERCARRIER MODULE, OR ARE FLYING ONLINE AND UNCONTROLLED, CONSIDER THE FOLLOWING:

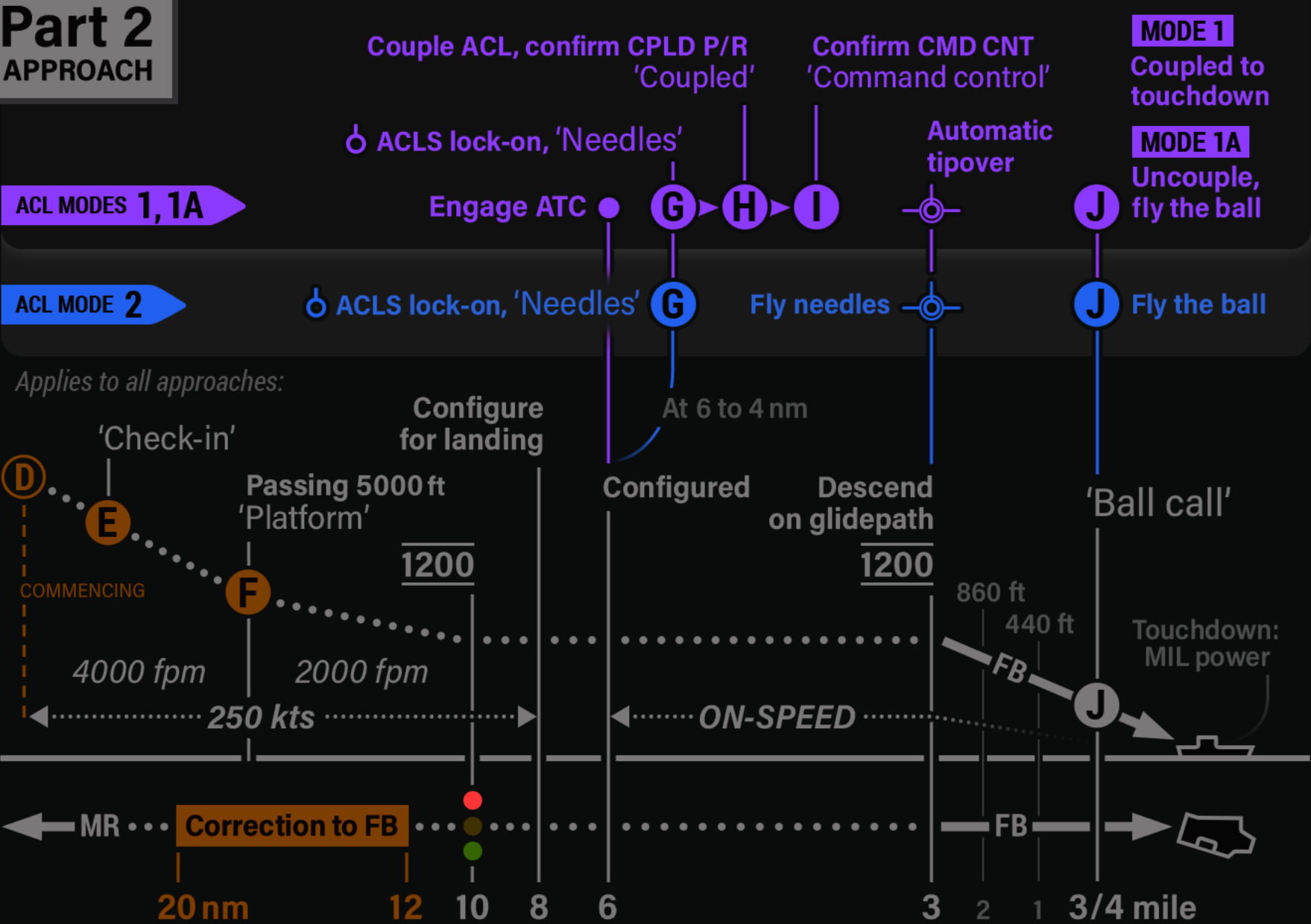
- 1 ASSUME THE HOLDING FIX AT FB + 180°, 21 DME, ANGELS 6, AND ENSURE IT IS EMPTY. OTHERWISE DETERMINE THE NEXT AVAILABLE FIX (DME = ANGELS + 15).
- 2 FLY DIRECTLY TO YOUR HOLDING FIX.
- 3 UPON ENTERING THE HOLDING PATTERN, WAIT FOR AT LEAST ONE MINUTE TO BUILD A SEPARATION BETWEEN AIRCRAFT THAT MIGHT BE CURRENTLY COMMENCING.
- 4 ANNOUNCE 'COMMENCING' AND DESCEND AS DEPICTED.

A **BUTTON 16** WITHIN 50 nm FROM THE CV, REPORT INBOUND: *Marshal*, # (modex), *marking Mom's XXX for XX* (bearing and distance from the CV), *angels XX, state X.X* ('low state' if with a wingman), *mode 1/1A on request* (desired ACL approaches that the pilot **and** the aircraft are able to perform)
RECEIVE AND READBACK THE HOLDING INSTRUCTIONS **EXAMPLE:**

D WHEN STARTING THE APPROACH, REPORT: #, *commencing, altimeter XX.XX, state X.X*

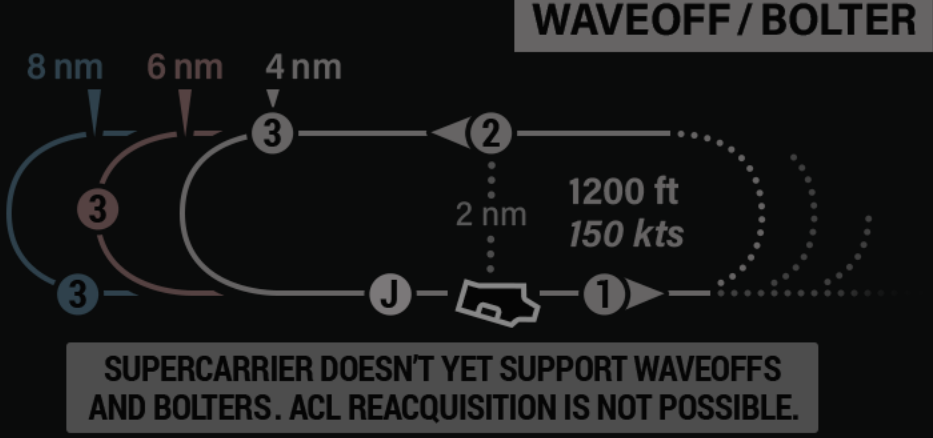
Night - Day: ceiling below 1000 ft or visibility less than 5 miles. Single aircraft only.

Part 2
APPROACH



- AUTOMATIC THROTTLE CONTROL IS NOT REQUIRED FOR ACL APPROACHES, BUT SHOULD BE USED, IF AVAILABLE.
- BELOW 2000 ft, USE THE "MINUTE TO LIVE" RULE: VERTICAL SPEED MUST NOT EXCEED THE CURRENT ALTITUDE.
- ONCE FULLY CONFIGURED, RALT HOLD MAY BE ENGAGED. • ACLS TADPOLE: ○ "NEEDLES". ILS BARS: + "BULLSEYE".

1. Gears up, flaps half, 150 kts.
Report 'Airborne' and fly the Final Bearing.
Climb to 1200 ft and await ATC instructions.
SUPERCARRIER AI: AT 4 DME TURN DOWNWIND.
2. Report 'Abeam' with fuel state.
3. Dirty up depending on DME of the assigned approach turn.
SUPERCARRIER AI: AT 4 DME DIRTY UP, TURN LEFT AND INTERCEPT THE FINAL BEARING.



- E** **BUTTON 15 OR 17** ON HANDOFF, CONTACT THE APPROACH: #, *checking in, XX miles*
- F** **PASSING 5000 ft**, REPORT: #, *platform*
- G G** 'SAY NEEDLES' – REPORT THE TADPOLE'S RELATIVE POSITION: #, *(up/down) and (on/left/right)***
IF ACLS IS INOP: #, *negative needles** – EXPECT TO 'FLY BULLSEYE' (ILS)
- H** **CONFIRM CPLD P/R**, REPORT: #, *coupled**
- I** 'SENDING COMMANDS' – CONFIRM AIRCRAFT RESPONDS, REPORT: #, *command control**
- J J J** **BALL CALL**: #, *Hornet Ball, X.X (state), auto* (if ATC is engaged)
FOR ACLS **MODE 1**: #, *Hornet Ball, X.X, coupled**
IF UNABLE TO SEE THE LINE-UP, OR THE SHIP AT ALL: #, *Clara line-up** OR: #, *Clara ship**

* **SUPERCARRIER AI DOESN'T SUPPORT THIS CALL** ** **SUPERCARRIER AI REPORTS THIS FOR YOU**
THE PROVIDED BUTTONS ARE ONLY VALID WHEN SET UP CORRECTLY BY THE MISSION DESIGNER. IGNORE IF UNSURE.

TRANSCRIPTION:

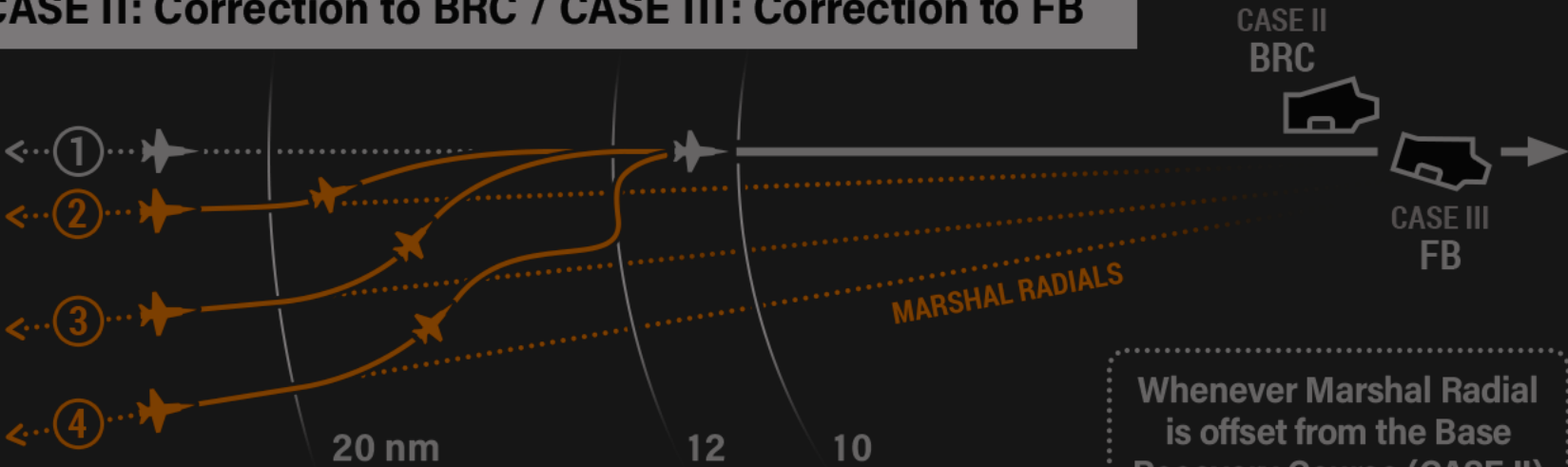
No grade: Drifted way right in close,
Landed a little left in the wires, Caught number 4 wire.

Parentheses () around any symbol signifies "a little". (F) means "a little fast".
Underline _ serves for emphasis. _H_ means "very high".
A square [] indicates that a signal was not answered. [BC] means "no ball call".

---	: _DR_IC (LL)IW	WIRE# 4
Grade	Main errors with error location	Wire caught

ERRORS		LOCATIONS		GRADES			
AFU	All fouled up	N	Nose	BC	Ball call	WO	Waveoff
DL	Drifted left	NERD	Not enough rate of descent		Before first 1/3 of glideslope	OWO	Own waveoff
DR	Drifted right	NSU	Not set up	X	At the start	_OK_	Perfect pass
EG	Eased gun Pulled throttles back to help set the hook for arrestment	P	Power		First 1/3 of glideslope	OK	Reasonable deviations with good corrections
F	Fast	SLO	Slow	IM	In the middle	(OK)	Fair
FD	Fouled deck	TMRD	Too much rate of descent		Middle 1/3 of glideslope		Reasonable deviations
H	High	W	Wings	IC	In close	---	No-grade
LO	Low	LLWD	Landed left wing down		Last 1/3 of glideslope		Below average but safe pass
LL	Landed left	LRWD	Landed right wing down	AR	At the ramp	C	Cut
LR	Landed right	LNF	Landed nose first	TL	To land		Unsafe, gross deviations inside waveoff window
LUL	Lined up left	3PTS	Landed 3 points		Between AR and wire #1	B	Bolter
LUR	Lined up right			IW	In the wires		
				AW	All the way		

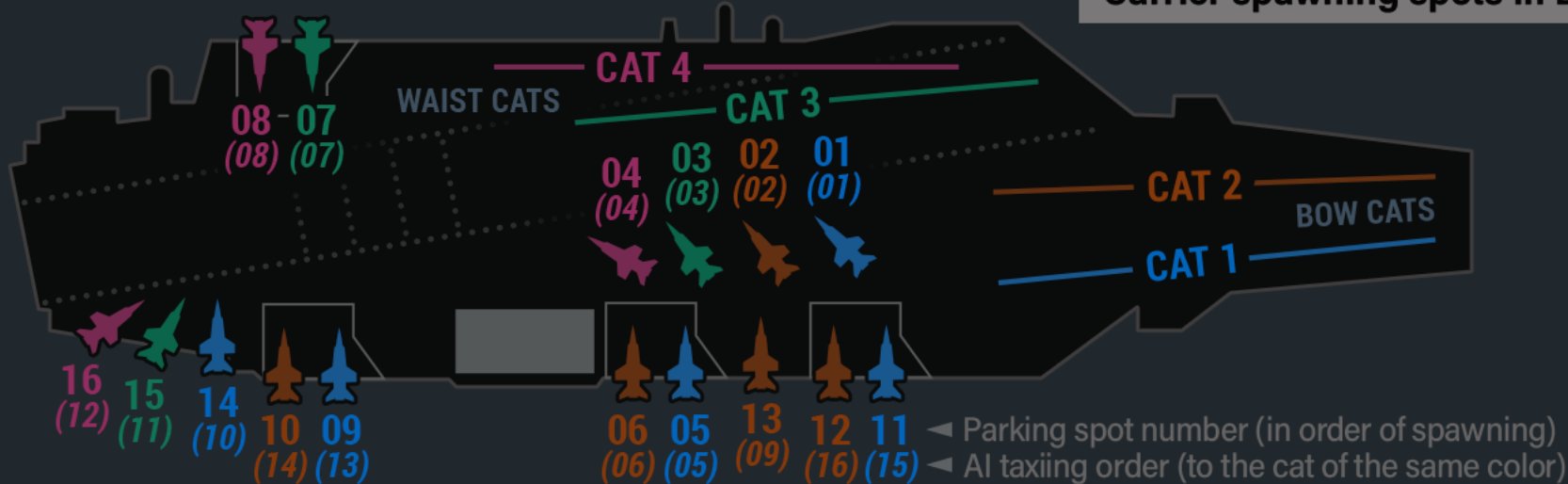
CASE II: Correction to BRC / CASE III: Correction to FB



- ① If MR is reciprocal of the BRC or FB — no correction needed.
- ② If offset is <10 deg — at 20 DME make a gradual correction.
- ③ If offset is >10 deg — at 20 DME turn 30 degrees.
- ④ If not established on BRC or FB by 12 nm, fly the 12 nm arc until intercepting BRC or FB.

Whenever Marshal Radial is offset from the Base Recovery Course (CASE II) or Final Bearing (CASE III), at 20 DME a correction to BRC or FB is made.

Carrier spawning spots in DCS



- E-2D spawns only on elevators
- S-3 spawns anywhere but the sixpack (## 1-4)
- If an E-2D is spawned firstmost, it will prevent other aircraft from spawning on the sixpack, and the flow will begin from # 5.

HAFU SYMBOLOGY

Negative IFF Positive IFF or PPLI
HOSTILE **AMBIGUOUS** **FRIENDLY** **UNKNOWN**



Upper HAFU: onboard track from ownship sensors
Lower HAFU: offboard F/F track from friendly fighters

Full HAFU: onboard and offboard tracks combined. Symbol's color is governed by the upper HAFU.

DCS ROE matrix requires AT LEAST TWO MATCHES to declare a contact **HOSTILE**:

- Negative IFF (no response)
- Hostile NCTR print (enemy coalition)
- Hostile offboard track

FULL HAFU EXAMPLES

Correlated tracks	Declared offboard, but not interrogated onboard	Declared offboard, but overridden with a PLID	Friendly offboard, but ambiguous onboard

PPLI TRACKS

SURV DONOR
Friendly AWACS

F/F DONOR
Friendly fighter

L&S AND DT2 TRACKS
Primary and secondary targets

0.8 ★ 17.0
Mach / Altitude Aspect

ANGLE ONLY TRACK

J A F
Jamming, / FLIR has LOS
deny ranging

RANKED BY THREAT (1-8)

PPLIs ON HMD

Pilot ID: SD11
Own flight: B (A-D)
12.3 0.7 Range

SURV TRACKS

DETECTED BY SURV DONORS
Are hollow and smaller than other HAFU

OPTIMAL PRF MODE...

	0-25 nm	25+ nm
HI		
INTL	For unknown aspect or SA	
MED		

...depending on target's aspect and range.
For a fighter-sized, co-altitude contacts.

THE L&S AND DT2 SYMBOLS ON DIFFERENT DISPLAYS

HUD		FRIEND					FRIEND
HMD							SD11 14.9
RDR							
	L&S ONBOARD: AMBIG/UNKN	L&S ONBOARD: FRIENDLY	L&S ONBOARD: HOSTILE	L&S OFFBOARD HOSTILE	L&S CORRELATED HOSTILE	DT2	L&S PPLI

NO TARGET

BULLSEYE TO CURSOR
84°/14.0 354°

OWNSHIP TO CURSOR
BRA 45°/28.9

BULLSEYE TO OWNSHIP
200°/20.0

DESIGNATED TARGET

BULLSEYE TO TARGET
305°/18.1 354°

OWNSHIP TO TARGET
BRA 345°/30.5

BULLSEYE TO OWNSHIP
200°/20.0

SA WITH TUC/STEP

BULLSEYE TO CURSOR
303/17.6

OWNSHIP TO TARGET
BRA 338/31
BE 307/18

BULLSEYE TO TARGET

- 1 BATT switch rmb ON
- 2 Parking brake  Verify SET
- 3 Rearm and refuel ORDER
*Max takeoff weight: 51.900 lbs.
Note 'Total Weight' for stab trim.*
- 4 APU switch ON
Wait for READY light
- 5 ENG CRANK switch rmb R
Right throttle to IDLE at >18% RPM
- 6 Displays, HUD, HMD ON
- 7 ENG CRANK switch lmb L
Left throttle to IDLE at >18% RPM
- 8 RADAR knob OPR
- 9 INS knob CV / **FIELD: GND**
- 10 HSI page PB19 'STD HDG'
On the bottom display. Verify boxed.
- 11 OBOGS switch ON
- 12 FCS RESET button PUSH
- 13 ANTI SKID OFF / **FIELD: ON**
- 14 FLAP switch HALF
- 15 FCS BIT TEST PERFORM
*Hold the 'Y' key. On the BIT page
(right display): press PB9 'FCS-MC',
then PB9 'FCS'. Release 'Y' and wait
about 20 seconds for the 'GO' signal.*
- 16 T/O TRIM button PUSH
- 17 STAB TRIM SET FOR TAKEOFF
*Left display — press PB18 'MENU'
for 'SUPT' screen, then PB15 'FCS':*

SV1

SV2

→ 30 RUD ← 30

↑ 12 STAB ↑ 12

SV1

SV2

CARRIER:

UNDER 44.000 lbs — 16°

45.000 – 48.000 lbs — 17°

OVER 49.000 lbs — 19°

FIELD:

always 12°

18 IFF and D/L ON
- 19 FLIR switch STBY

20 Bottom display — verify 'QUAL OK'
is displayed on the HSI page. then:
INS knob **IFA (Redfor: NAV)**

21 ALR-67 (RWR) POWER ON

22 ALQ-165 (jammer) ... REC or XMIT

23 Dispenser ON or BYPASS

24 Canopy LCtrl+C CLOSE

25 Ejection seat ARM

26 HMD Align*

27 Chocks Remove
*Field / Carrier (no crew): via the menu
Carrier (deck crew): by taxi salute*

28 Parking brake  OFF

29 Nosewheel steering ON

30 WINGS SPREAD AND LOCK
*CARRIER: Before catapult hook-up
FIELD: Before taxi*
- * HMD alignment
1. 'MENU' > 'SUPT' > 'HMD' > box 'ALIGN'. Move head to superimpose HMD cross over HUD cross, then hold [CAGE/UNCAGE] until 'ALIGN OK' is displayed.

2. Use [TDC] to align DX/DY crosses with HUD cross and press [CAGE/UNCAGE] to confirm.

3. Repeat for DROLL cross.

4. Unbox 'ALIGN' to finish alignment.
- 