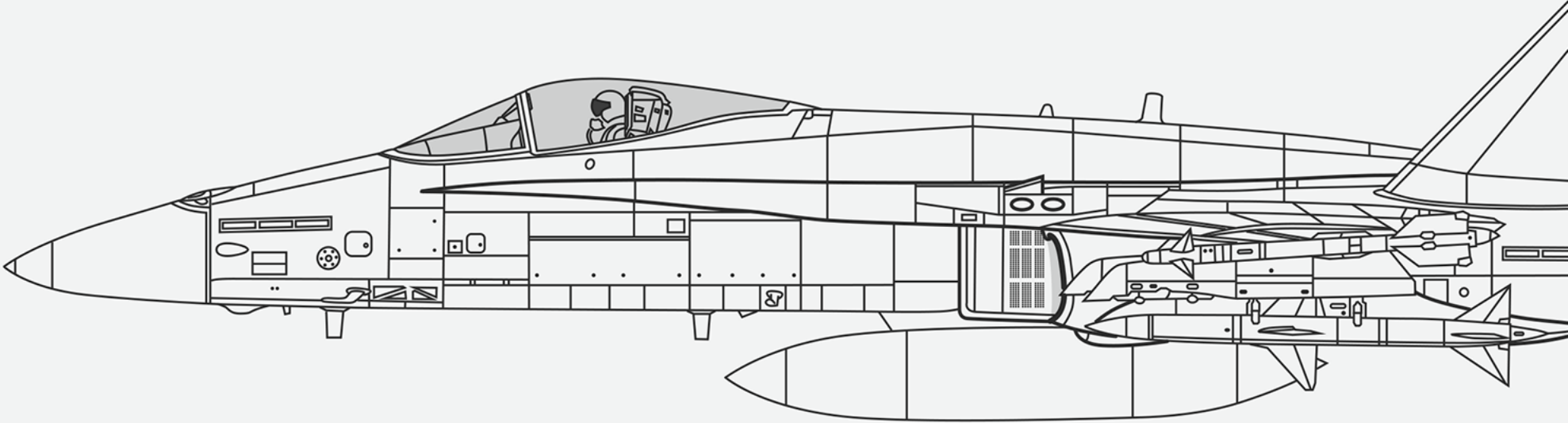


# Kneeboard Suite

## F/A-18C Hornet



**Checklists, Part 1 ..... 2**

**Checklists, Part 2. Combat Checks..... 3**

**RWR Threats. HARM Radar Codes..... 4**

**Ordnance ..... 5**

**Overhead Break ..... 6**

**Departures: CASE I, II, III. The Flight Deck. .... 7**

**Recoveries: CASE I, II, III, ACL ..... 8**

**CASE I Recovery ..... 9**

**CASE II Recovery ..... 10**

**CASE III Recovery and ACL, Part 1 – Marshal ..... 11**

**CASE III Recovery and ACL, Part 2 – Approach ..... 12**

**LSO Grades. Correction to BRC and FB. Spawning..... 13**

**HAFU. BRA..... 14**

**Quickstart ..... 15**

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<br>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,<br>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

## 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

|                                      |            |                         |
|--------------------------------------|------------|-------------------------|
| └ 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            |
|            | 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             |

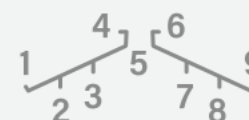
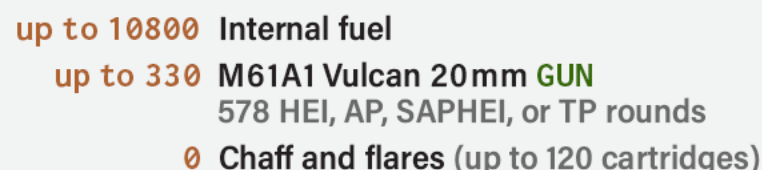
## NAVAL

|                              |    |         |     |
|------------------------------|----|---------|-----|
| 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.



|      |      |                                  |                 |
|------|------|----------------------------------|-----------------|
| 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 |                 |

|      |      |           |                          |             |
|------|------|-----------|--------------------------|-------------|
| 82LG | 610  | GBU-12    | 500 lbs                  | } 6 7 8 A L |
| 83LG | 1130 | GBU-16    | 1000 lbs                 |             |
| 84LG | 2110 | GBU-10    | 2000 lbs                 |             |
| GB24 | 2400 | GBU-24B/B | 2000 lbs penetrator, USN | 6 7 8 L     |

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

|      |      |                                    |
|------|------|------------------------------------|
| 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)ared Maverick |

|    |       |     |     |                       |                                                           |
|----|-------|-----|-----|-----------------------|-----------------------------------------------------------|
| 68 | ..... | 230 | 7x  | Mk 5 HE(AT) anti-tank | } <b>default</b><br>S - SINGLE<br>R - RIPPLE<br>set in ME |
| 68 | ..... | 250 | 7x  | M151 HE soft targets  |                                                           |
| 61 | ..... | 600 | 19x | M151 HE soft targets  |                                                           |
| 10 | ..... | 700 | 4x  | ZUNI Mk 71            |                                                           |

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

|       |       |      |                                        |
|-------|-------|------|----------------------------------------|
| AFLIR | ..... | 370  | AN/ASQ-228 ATFLIR                      |
| FLIR  | ..... | 460  | AN/AAQ-28 Litening                     |
| DL13  | ..... | 440  | AWW-13 D/L pod for Walleye / SLAM / ER |
| FUEL  | ..... | 2540 | FPU-8A fuel tank, 330 gal (2250 lbs)   |

[illegible]

|     |          |                  |
|-----|----------|------------------|
| 140 | SUU-62   | centerline pylon |
| 310 | SUU-63   | underwing pylon  |
| 200 | BRU-33   | cVER             |
| 200 | BRU-55   | cVER             |
| 280 | BRU-41A  | IMER             |
| 120 | BRU-42A  | TER              |
| 120 | LAU-115  | MRL              |
| 120 | LAU-115C | MRL              |
| 200 | LAU-127  | MRL              |
| 130 | LAU-117  | Mav ML           |

▲ WEIGHT WITHOUT RACKS AND RAILS

FUZING OPTS

|                                                                                 |              |                      |                              |                               |                            |
|---------------------------------------------------------------------------------|--------------|----------------------|------------------------------|-------------------------------|----------------------------|
| <b>NOSE:</b>                                                                    | N Nose Plugs | 1 M904E4 <i>mech</i> | 2 DSU-33 <i>prox. sensor</i> | 3 Mk 339 Mod 1 <i>timers</i>  | 4 FMU-140 <i>altimeter</i> |
| <b>TAIL:</b>                                                                    | T Tail Plugs | 5 M905 <i>mech</i>   | 6 FMU-139 <i>elec</i>        | 7 FMU-143 <i>elec penetr.</i> | 8 FMU-152 <i>JPF</i>       |
| Underscored = default    L = Laser code    A = Appearance (USAF or USN coating) |              |                      |                              |                               |                            |

EMPTY WEIGHT: 25100 • MTOW: 51900 • CV MLW, (UN)RESTRICTED: (33)34000 • FIELD MLW, FLARED: 39000

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-enter

3-5 nm  
'Initial'

On runway track

Slightly offset away  
 from the direction  
 of the break

At pattern altitude

300-400 kts

1 A

<250 kts  
gears, flaps

Downwind

Runway reciprocal

At pattern altitude

ON-SPEED

Landing checklist

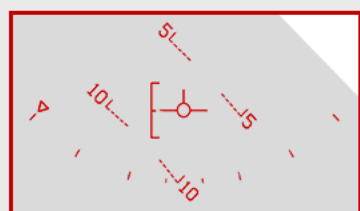
'Base'

Begin turn to final

45° BANK

Nose down -7 VV

Maintain on-speed AOA

Touchdown  
Throttles idle

1-1.5 nm abeam  
 the runway,  
 corrected for  
 crosswind

At 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  $\diamond$  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  $\neq$  ABEAM THE TACAN.

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

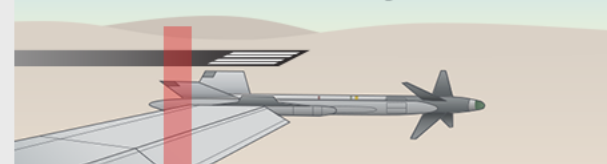


## LANDING CHECKS

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 turn

Extended  
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:

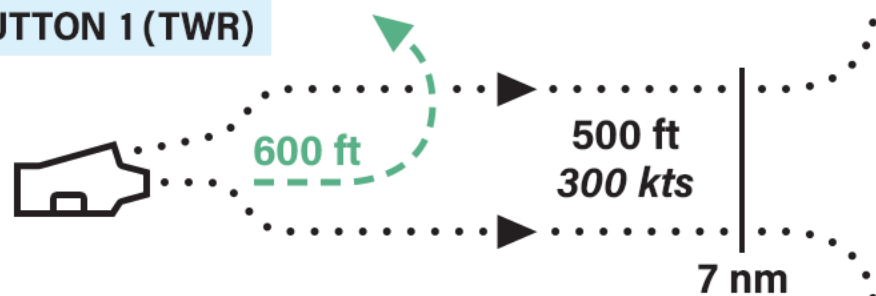
**A** LEAD REPORTS INITIAL: (Flight callsign), # mile initial, runway #, left (right) overhead.

**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.**

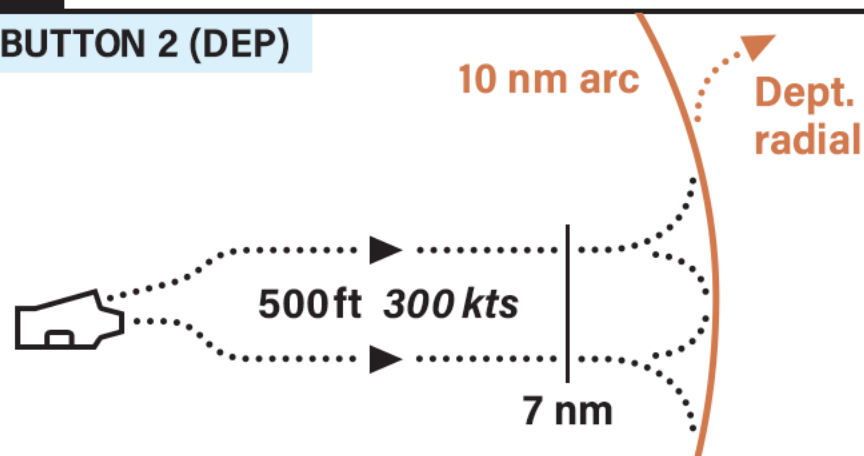
**CLEARING TURN**

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**

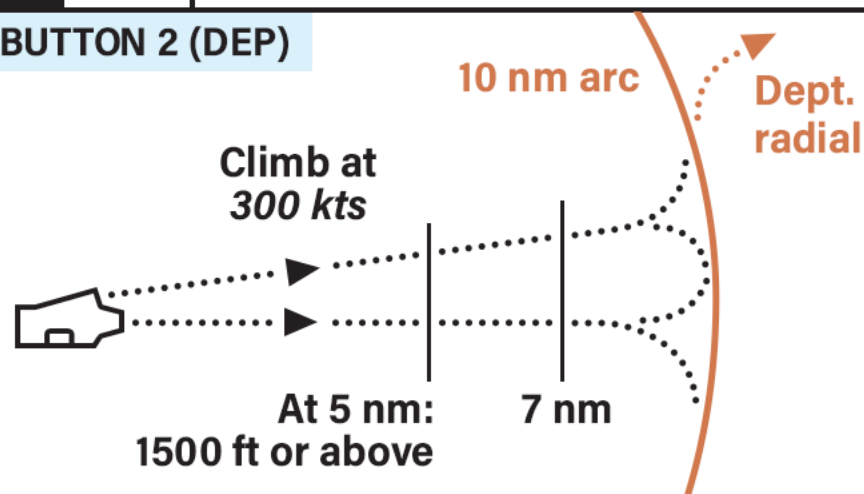
**SEAT ARM  
NWS LO  
WARN LITES  
HARNES  
HOOK  
FLAPS  
TRIM  
WINGS  
CONTROLS**

**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.

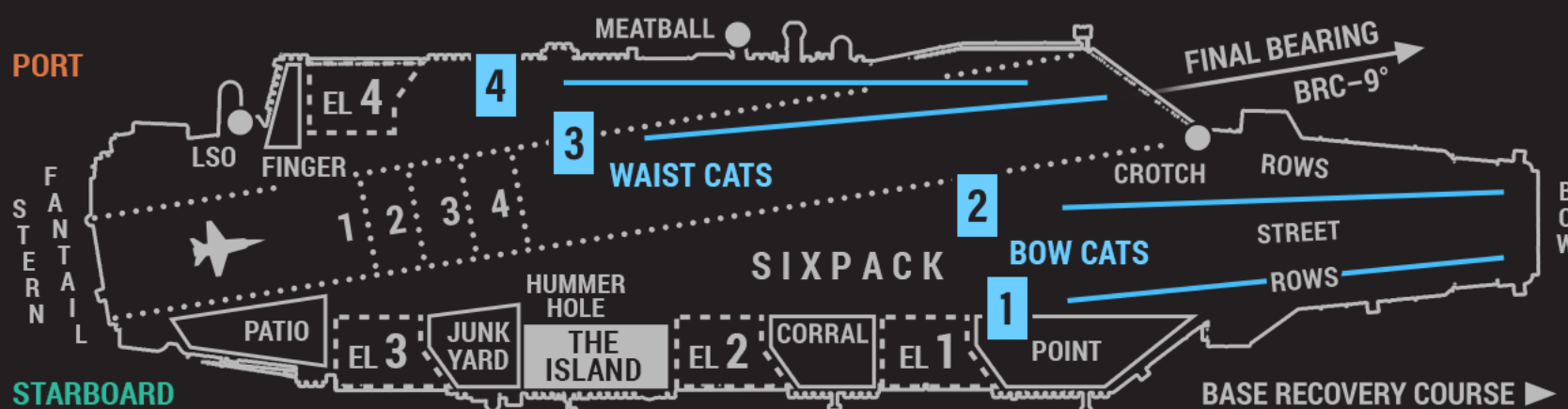
Cross 5 nm at or above 1500 ft. Report **Passing 2,5** on climb through 2500 ft.

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.

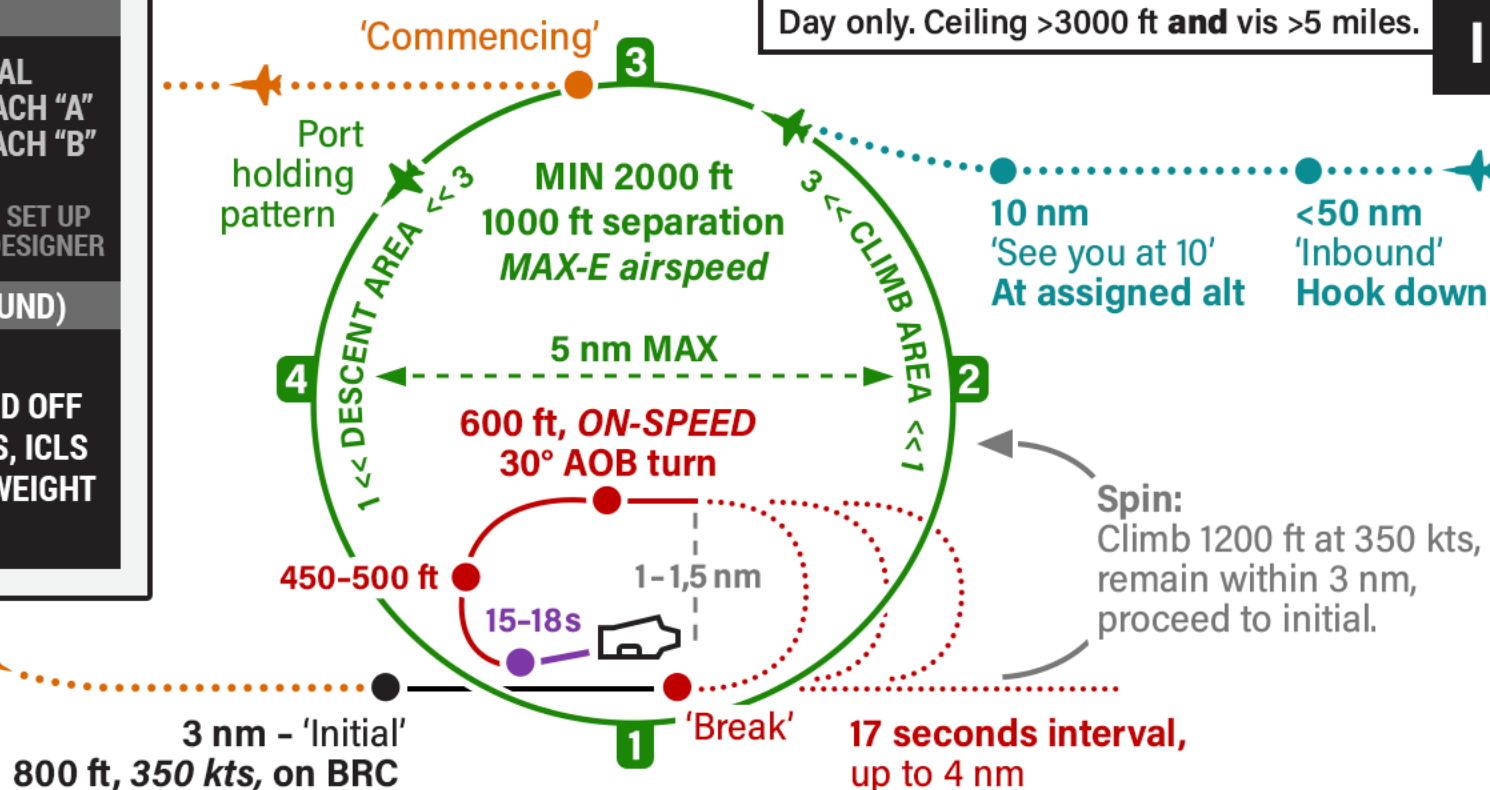


## COMMS

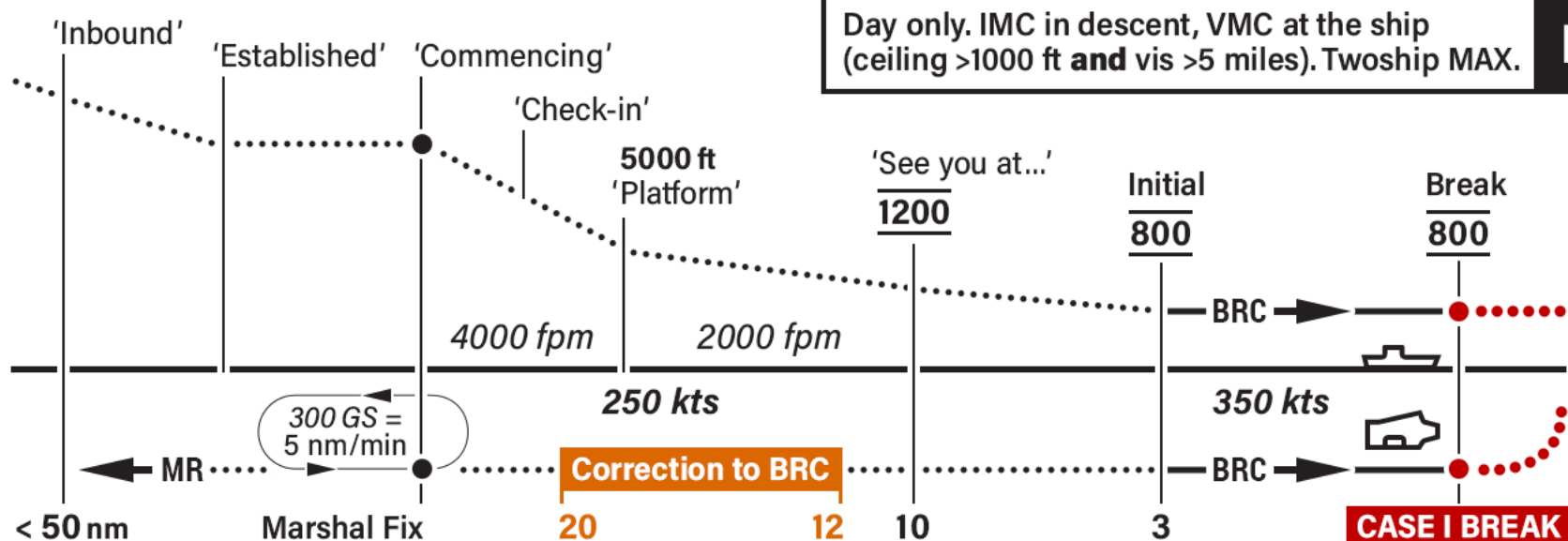
BTN 16 MARSHAL  
BTN 15 APPROACH "A"  
BTN 17 APPROACH "B"  
BTN 1 TOWER  
VALID ONLY WHEN SET UP  
BY THE MISSION DESIGNER

## HAIL-R (INBOUND)

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



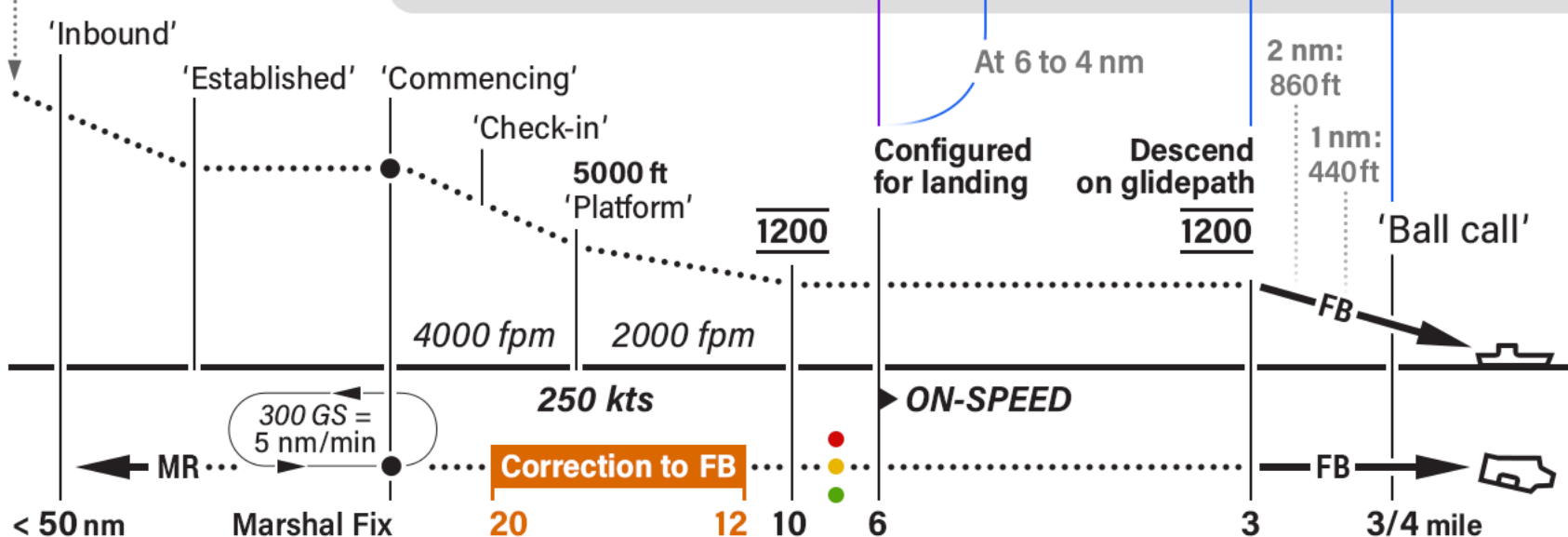
CASE I and CASE II WAVEOFF / BOLTER: Turn to BRC, keep landing configuration, climb 600 ft, turn downwind with interval.



## III

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

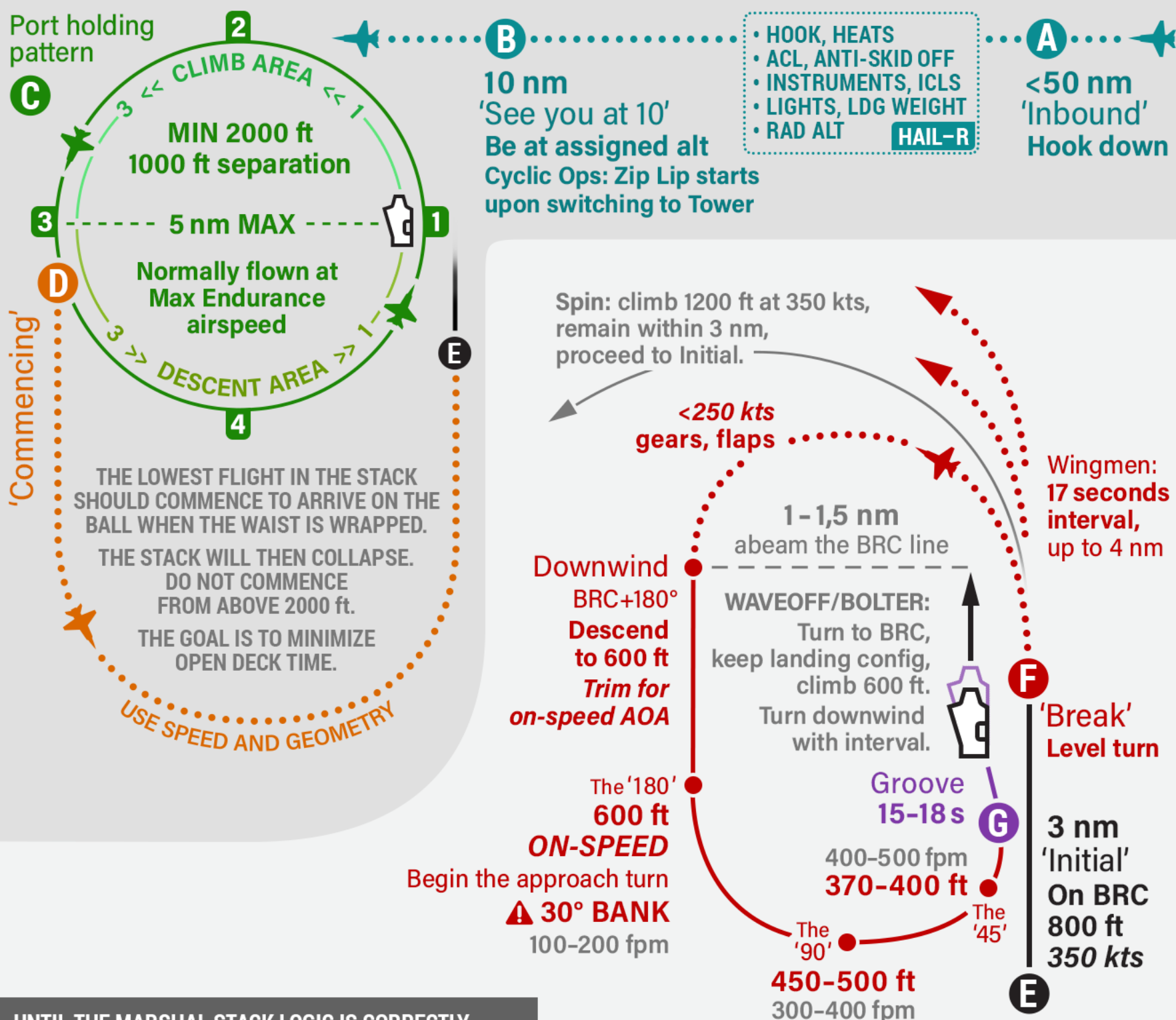
For an ACL approach:  
check the on board  
ACL capability before  
making the inbound call.



WAVEOFF / BOLTER: Gears up, flaps half, 150 kts. Climb 1200 ft 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.*

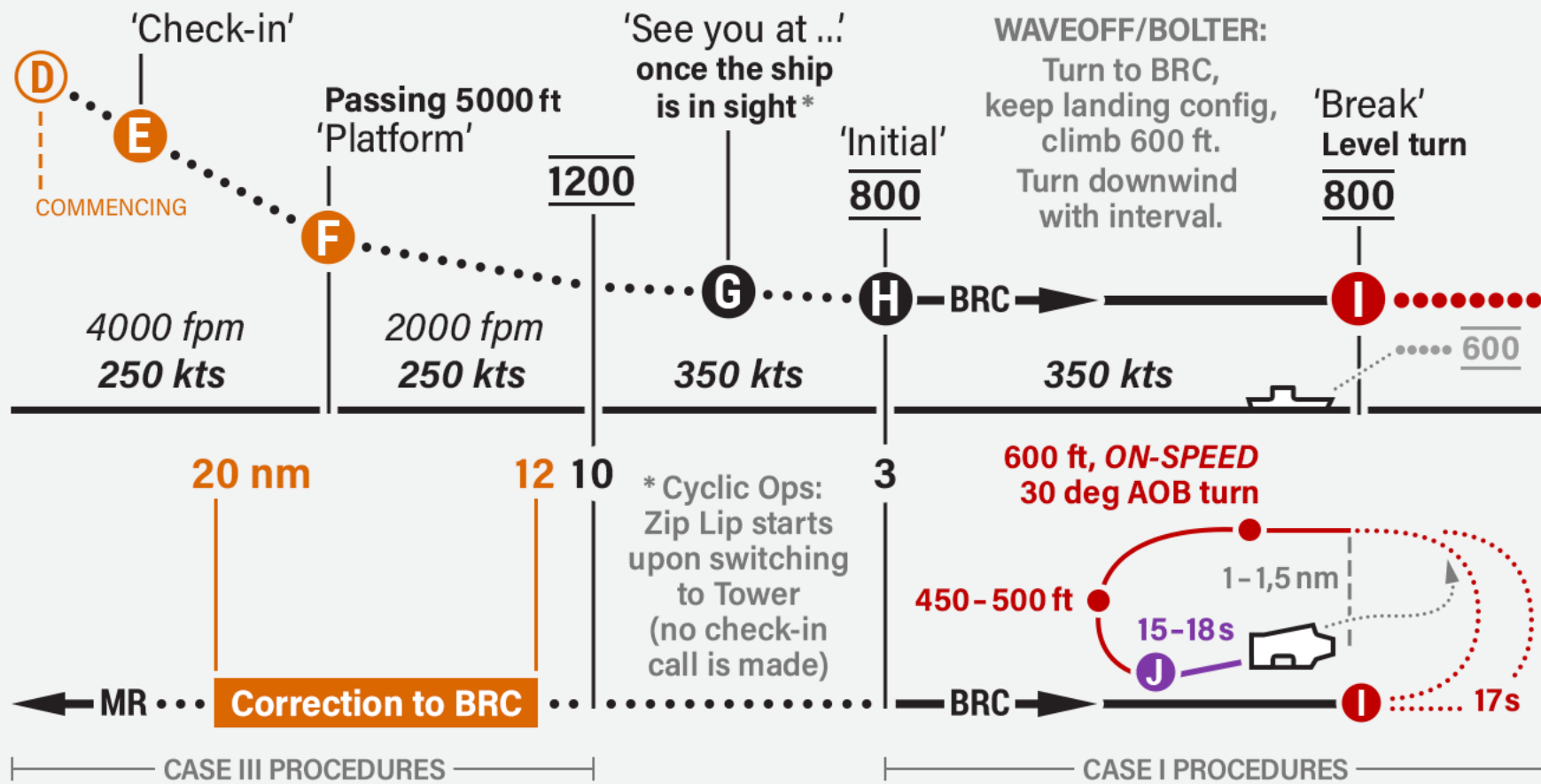
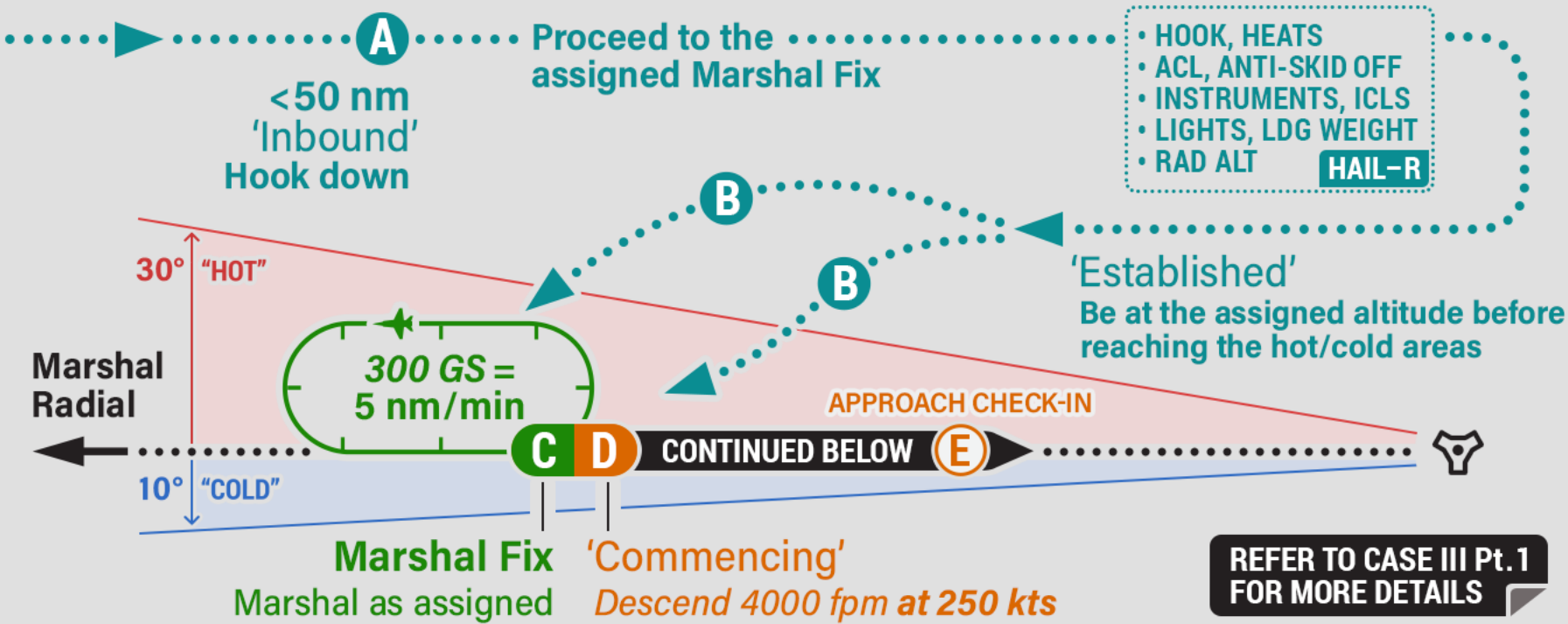
**B** AT 10 nm, REPORT: *#, see you at 10.* ON HANDOFF, SWITCH TOWER **BUTTON 1**

**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

- 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.

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

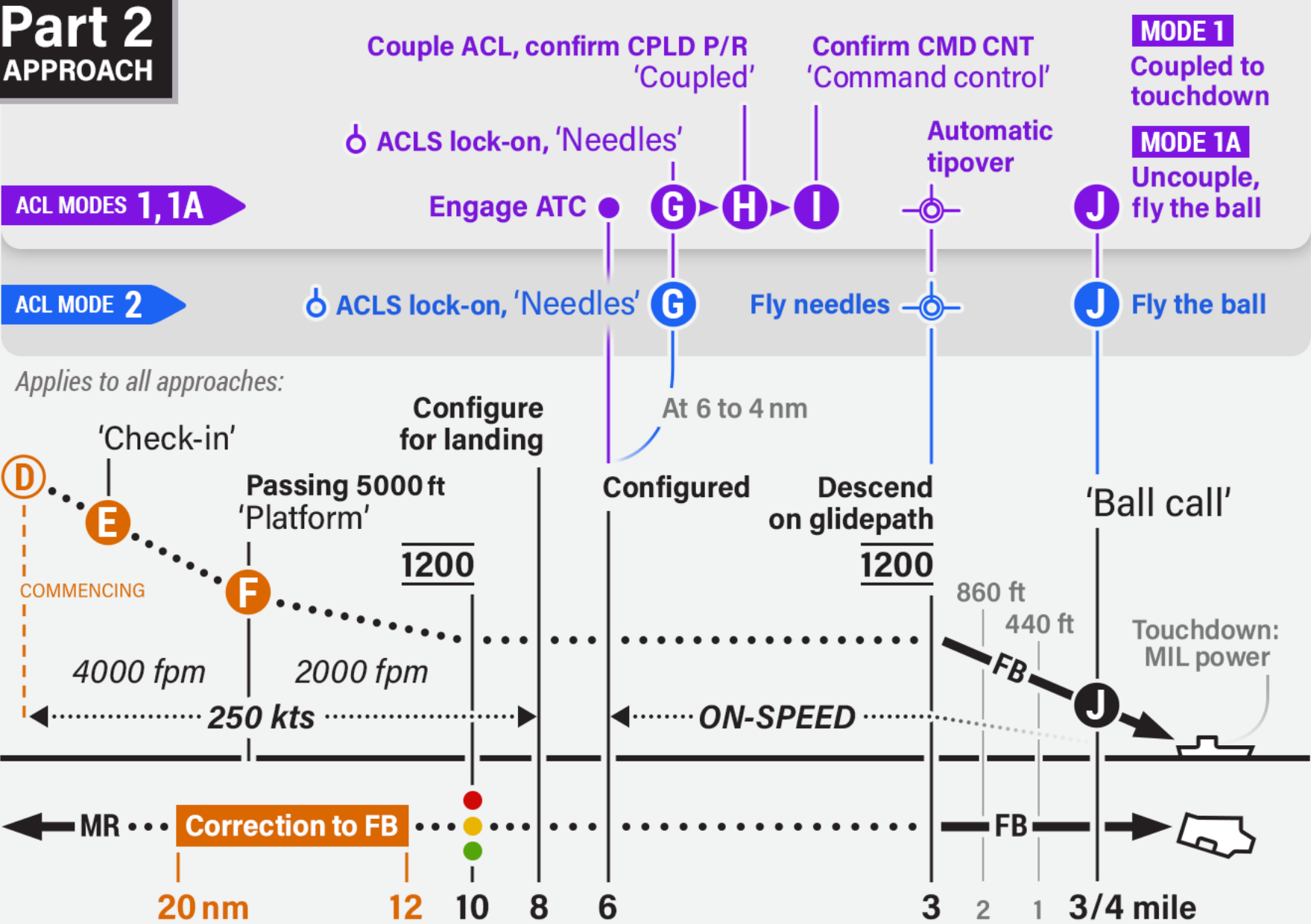


Night • Day: ceiling below 1000 ft or visibility less than 5 miles. Single aircraft only.

Part 2  
APPROACH

ACL MODES 1, 1A

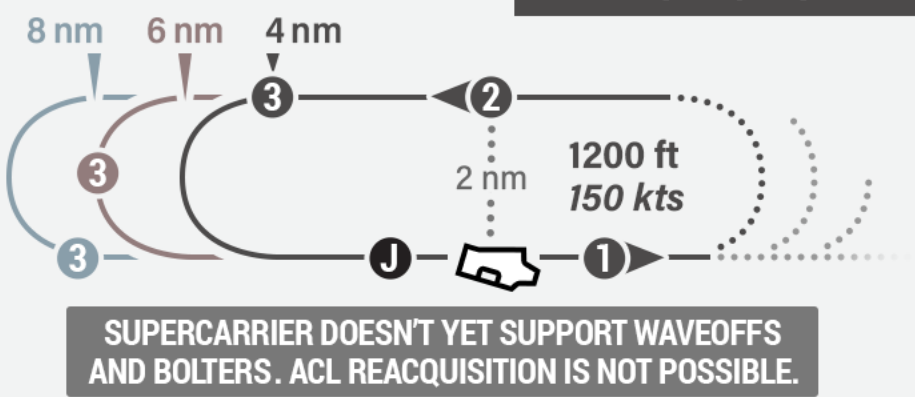
ACL MODE 2



- 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.**

WAVEOFF / BOLTER



- 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.

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”

- WO Waveoff
- OWO Own waveoff
- \_OK\_ Perfect pass
- OK Reasonable deviations with good corrections
- (OK) Fair Reasonable deviations
- No-grade Below average but safe pass
- C Cut Unsafe, gross deviations inside waveoff window
- B Bolter

- 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.

HOSTILE

AMBIGUOUS

FRIENDLY

UNKNOWN

Negative IFF

Positive IFF or PPLI

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

RANKED BY THREAT (1-8)

1

4

ANGLE ONLY TRACK

J

A

F

Jamming, deny ranging

FLIR has LOS

PPLIs ON HMD

Pilot ID

SD11

12.3

Own flight

B (A-D)

0.7 Range

SURV TRACKS

**DETECTED BY SURV DONORS**  
Are hollow and smaller than other HAFU

OPTIMAL PRF MODE...

HI

INTL

MED

0-25 nm

25+ nm

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

| THE L&S AND DT2 SYMBOLS ON DIFFERENT DISPLAYS |                         |                       |                      |                      |                        |     |          |
|-----------------------------------------------|-------------------------|-----------------------|----------------------|----------------------|------------------------|-----|----------|
| HUD                                           |                         |                       |                      |                      |                        |     |          |
| HMD                                           |                         |                       |                      |                      |                        |     |          |
| 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

DESIGNATED TARGET

SA WITH TUC/STEP

BULLSEYE TO CURSOR

84°/14.0 354°

OWNSHIP TO CURSOR

BRA 45°/28.9

BULLSEYE TO OWNSHIP

BULLSEYE TO TARGET

305°/18.1 354°

OWNSHIP TO TARGET

BRA 345°/30.5

BULLSEYE TO OWNSHIP

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.

