CVW-14 INITIAL TRAINING

Week 4: CASE-III

OVERVIEW

- Welcome to Week 4!
- This week, we'll cover:
  - **CASE-III** – Welcome to the boat! (At night)
  - **CASE-III DEPARTURE** – How to get off the boat (At night)
  - **CASE-III ARRIVAL** – How to get back on the boat (At night)
- Questions at this time?
  - If not, don't worry, you'll have some later.

TOPIC 4.1 – CASE-III

"What does 'Case-III' mean?"

CASE-III BASICS

- Case-III is any ***ceiling below 1000ft AGL or visibility less than 5nm*** around Mother.
- ***All night operation***s are conducted as Case-III even with CAVU weather.
- Departure and recovery procedures during Case-III conditions differ greatly from Case-I!

TOPIC 4.2 – CASE-III DEPARTURE

"How does a Case-III departure differ from a Case-I departure?"

CASE III DEPARTURE OVERVIEW

- No clearing turns on a Case-III departure
  - Takeoff and climb straight ahead
- Rather than turning away to whatever course you want at 7 miles, start a turn to intercept a ***10NM arc*** around the boat.
  - Fly around this arc until you reach your ***departure radial***
  - Note: IRL the arc & radial is only required during IMC conditions, but it's something that we do all the time

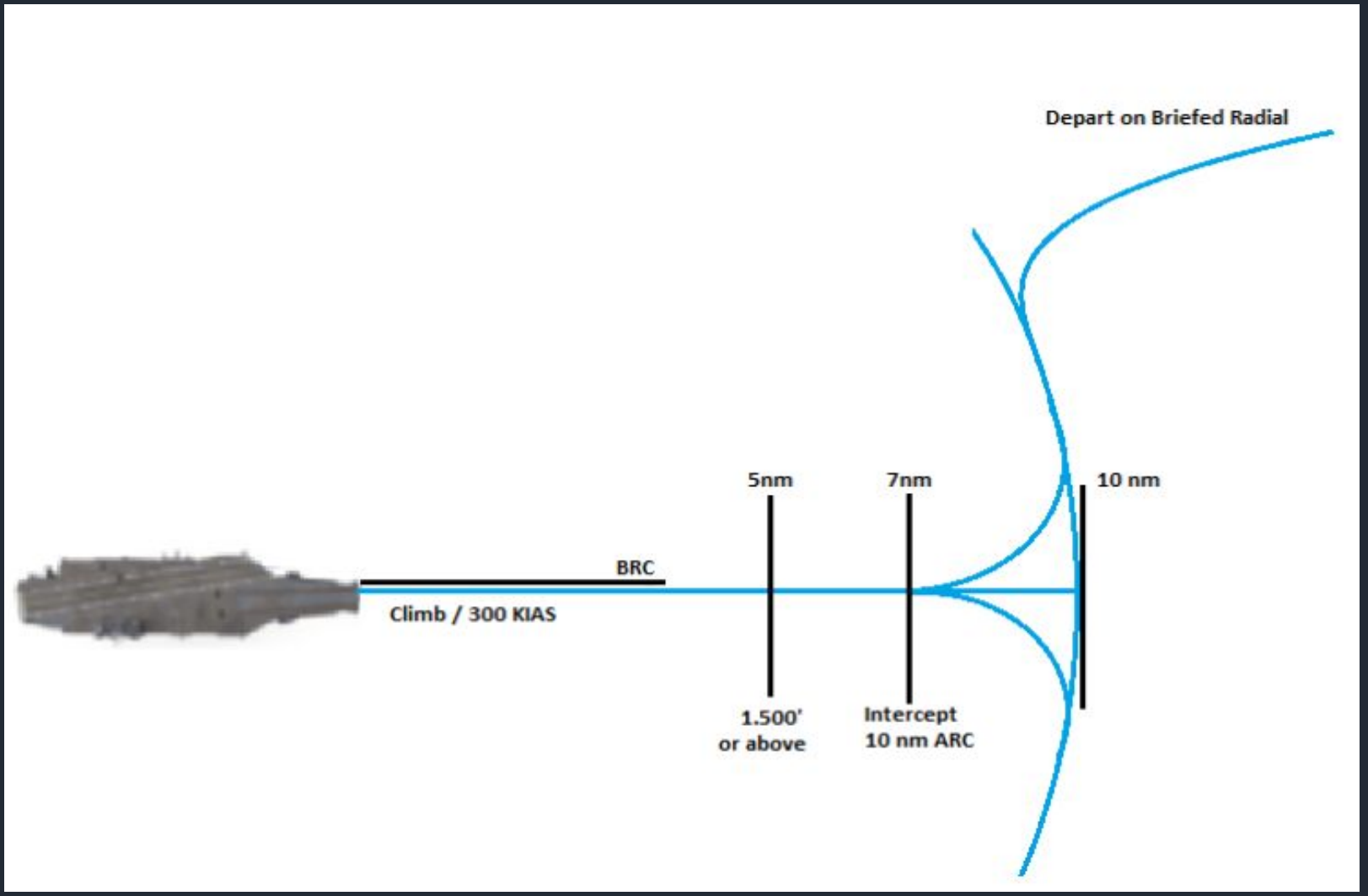
CASE III DEPARTURE OVERVIEW

- Master Light Switch ***OFF*** on startup
  - Position lights preset ***BRT***
  - Strobe Light preset ***ON***
  - Formation Light preset ***ON***
- Box TACAN and set up your ***<u>departure radial</u>*** as the course line
- When ready for launch, Master Light Switch ***ON***
  - IRL this signals the cat shot, but you'll still have to salute in DCS
- Minimum launch interval of 30 seconds between A/C

CASE III DEPARTURE OVERVIEW

- After launch, climb straight ahead at 300 KIAS
  - Report "Departure, 637 Airborne"
- Cross 5DME at or above 1500AGL, continue climbing
- At 7DME, turn to intercept 10DME arc for your departure radial
- At 10DME, be on the 10DME arc, fly this until reaching departure radial, then head off on mission
- Rendezvous with flight on the LEFT SIDE of the departure radial between 20/50 miles at prebriefed altitude

BUT WHAT THE FUCK DOES IT LOOK LIKE?



SYMBOLOGY

- ON THE DECK
- Red Boxes, Top-Bottom
  - Tail of the TACAN needle
  - Bull Symbol in the center is the boat's TACAN symbol
  - Triangle represents TACAN head: always points toward station
- Preset the outbound radial before takeoff; in this example, 230

SYMBOLOGY

- <u>ON DEPARTURE</u>
  - At 7 DME (check the HUD!) start the turn to get onto the 10 DME arc
  - The tail of the needle is at the TOP of the HSI – you're flying away from the station
  - TACAN bull symbol is at the bottom of the HSI

SYMBOLOGY

- <u>ON THE ARC</u>
  - The TACAN needle is slightly aft of the 9:00 position
  - The jet itself is at 9.9DME
    - If you keep your current heading, the DME will climb
    - A slight left turn at 10.0 DME will correct this; place the needle head and the TACAN symbol slightly AHEAD of 9:00

SYMBOLOGY

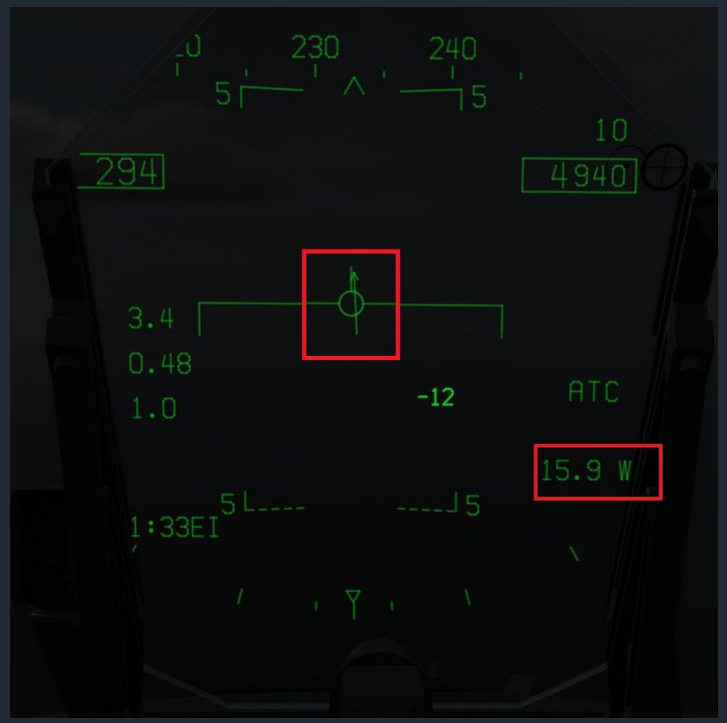
- ON THE ARC
  - Now the Hornet is right on the 10 DME arc and the needle is right at 9:00
    - ~~Fucking parallax~~
  - If a slight left turn isn't made soon, the DME will increase
  - Shoot for 9.9-10.1 to keep the arc right

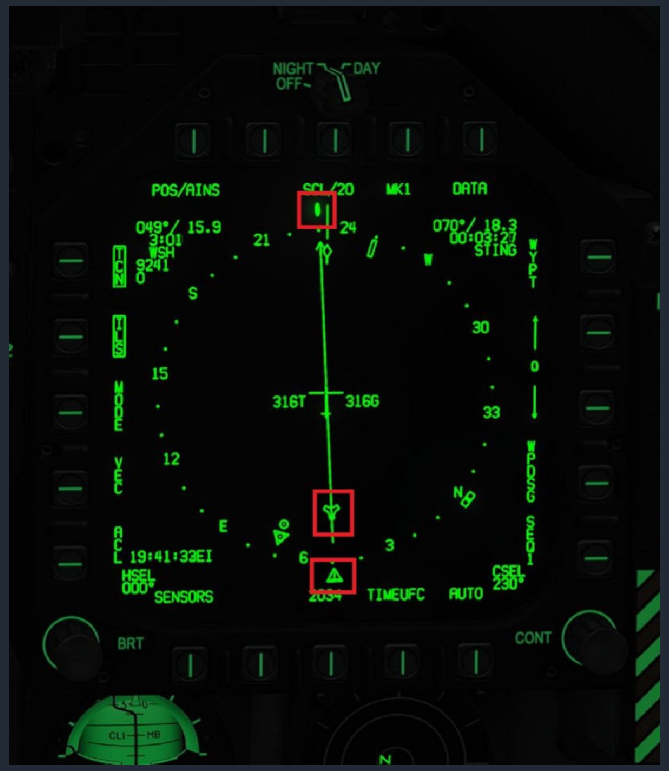
SYMBOLOGY

- <u>APPROACHING RADIAL</u>
  - Watch for the <u>radial course arrow</u> below the heading tape; once this starts moving, you'll need to make a 90 degree (or more) turn right to catch the radial

SYMBOLOGY

- <u>ON OUTBOUND RADIAL</u>
  - The jet is now established on the outbound radial
  - On the HUD, note the course line arrow's in the center of the flight path marker
  - On the HSI, note the tail & head positions of the needle
  - Also, the TACAN symbol is behind us, because…?





TOPIC 4.3 – CASE-III RECOVERY

"How does the Case-III Marshal Stack differ from the Case-I?"

"How does the Case-III recovery flow from commencing all the way to the deck?"

"What happens if you bolter under Case-III conditions?"

CASE III RECOVERY OVERVIEW

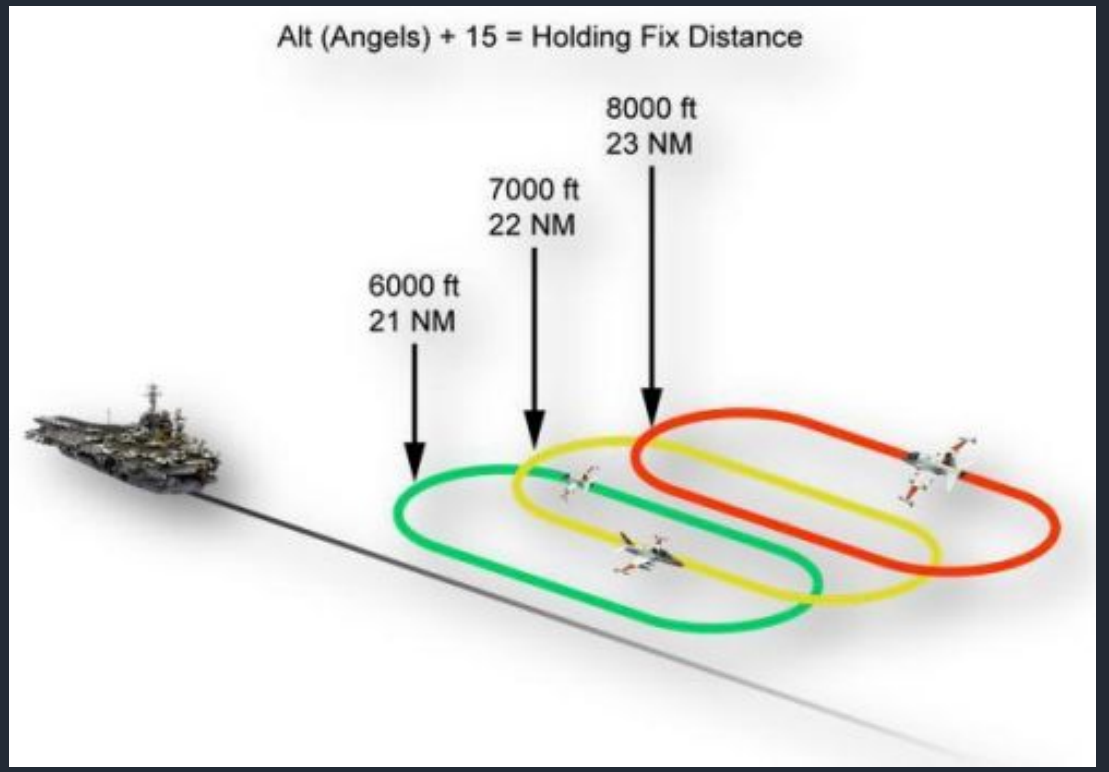
- Case-I recoveries are fast & exciting; do some high-speed, high-G maneuvering around the boat, fly the pattern, land.
- Case-IIIs are a little more sedate; basically it's a long straight-in
  - *Don't take that to mean it's easier.* There are some precise numbers you have to hit to pull a Case-III trap off successfully.
  - Case-IIIs are also flown ***single-ship only***

CASE III RECOVERY CHECKLISTS

- ***Before Inbound Call***
  - TACAN tuned and boxed
  - ILS tuned and boxed
  - RADAR Altimeter turned on, set to preference (370’ or 450’)
  - Scratchpad or paper ready. Grab a pencil.
- ***After Inbound Call***
  - CRS set to Marshal radial
  - Climb/descend to briefed altitude
  - LDDI - HUD
  - RDDI – Checklist
  - Check landing weight…<33000 lbs at the deck

CASE III MARSHAL

- The Case-III Marshal Stack is ***not located directly over the boat***
  - It's up to the controllers to set exactly where it'll be, but usually in DCS we marshal on the reciprocal heading
  - Marshal distance depends on altitude: ***Distance = Assigned Angels + 15***



CASE III MARSHAL – INBOUND CALL

MODEX | RADIAL | RANGE | ALTITUDE | FUEL

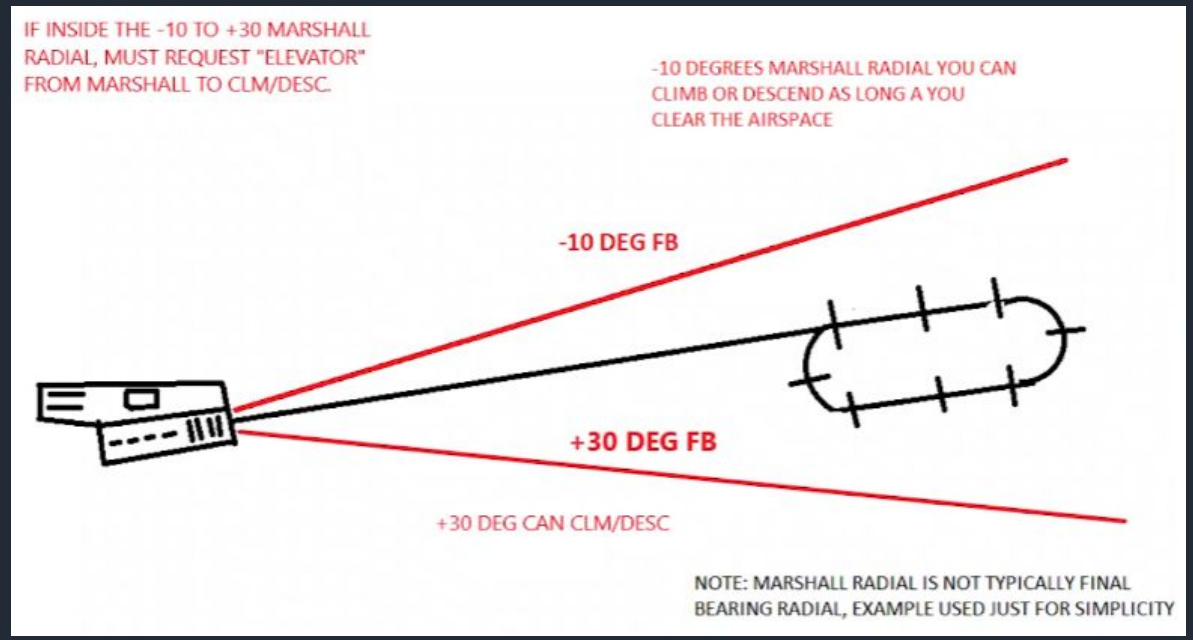
"Marshal, 571, Marking Mom's 152 at 60, Angels 15, state 6.9"

Response:

"571, Marshal, CASE III recovery, CV-1 approach, expected ***final bearing*** 327, altimeter is 29.53, 571, Marshal Mother's 147 radial, 21 DME, Angels 6, expected approach time is 13"

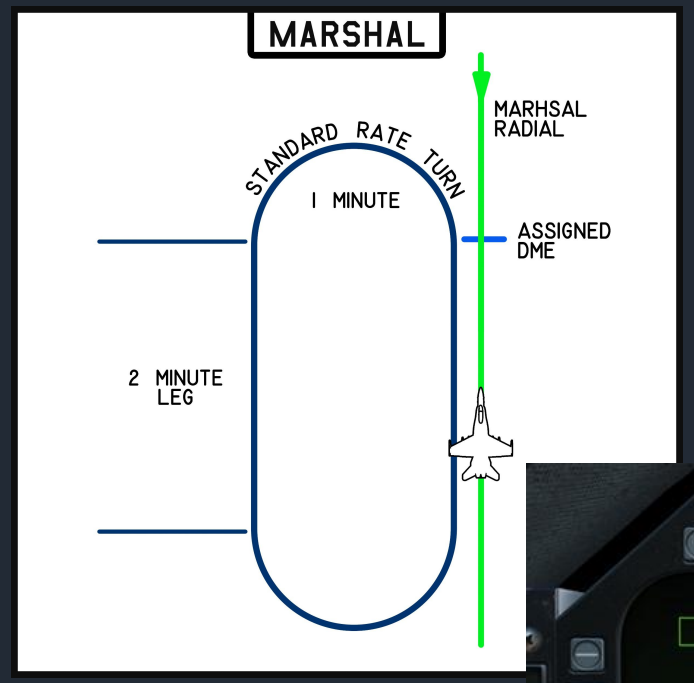
ENTERING THE CASE-III STACK

- Once you receive the Marshal radial, *set this as your TACAN courseline.*
  - Alternatively, you can set the reciprocal so the arrow points towards the boat.
- You can enter the stack from wherever, but ***be on your assigned altitude by the time you reach –10 or +30 degrees from the assigned radial***



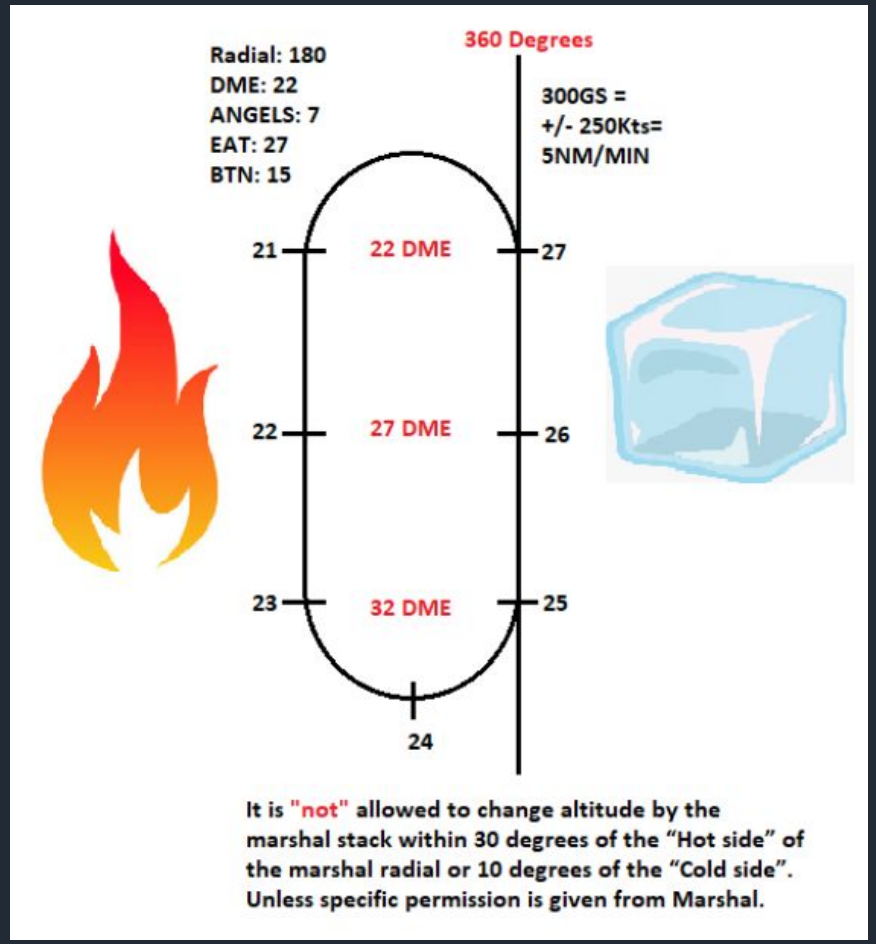
THE CASE-III STACK

- Once you're in the stack, technically you can fly the orbit however you want
  - ***You must stay on your assigned altitude!***
- Most common technique is to fly the pattern according to the chart on the right at 300 knots groundspeed
  - Roughly 250KIAS – watch the HSI
  - Shoot for ***standard rate*** turns & 2 minute hot and cold legs – ***6min tracks***
- Once in the stack, call ***"MODEX Established"***

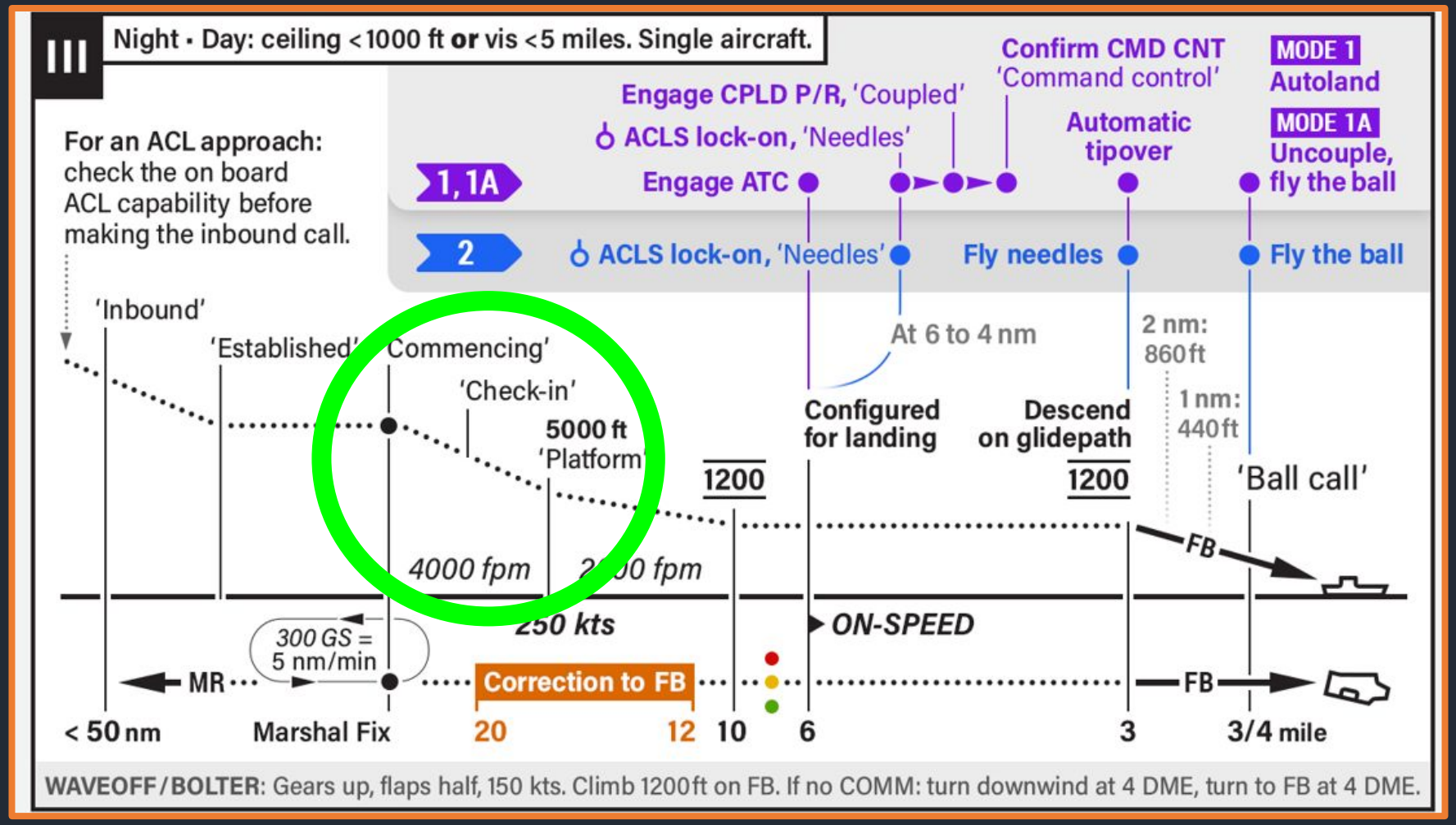


THE CASE-III STACK

- The object is to arrive at the ***holding fix*** (assigned DME on the radial) on airspeed ***(250kts)*** and ready to approach at the ***Expected Approach Time*** (27 in our example) +/-10 sec
  - Approach Time is **minutes after the hour**
  - If unable to make this ***push time***, notify Marshal so adjustments can be made
  - IRL you get the EAT when you call in; here we give it once guys get in the stack, just works better
- Call ***"MODEX Commencing"*** and start descent into the Case-III approach
  - Ensure ***ICLS*** is on and boxed!

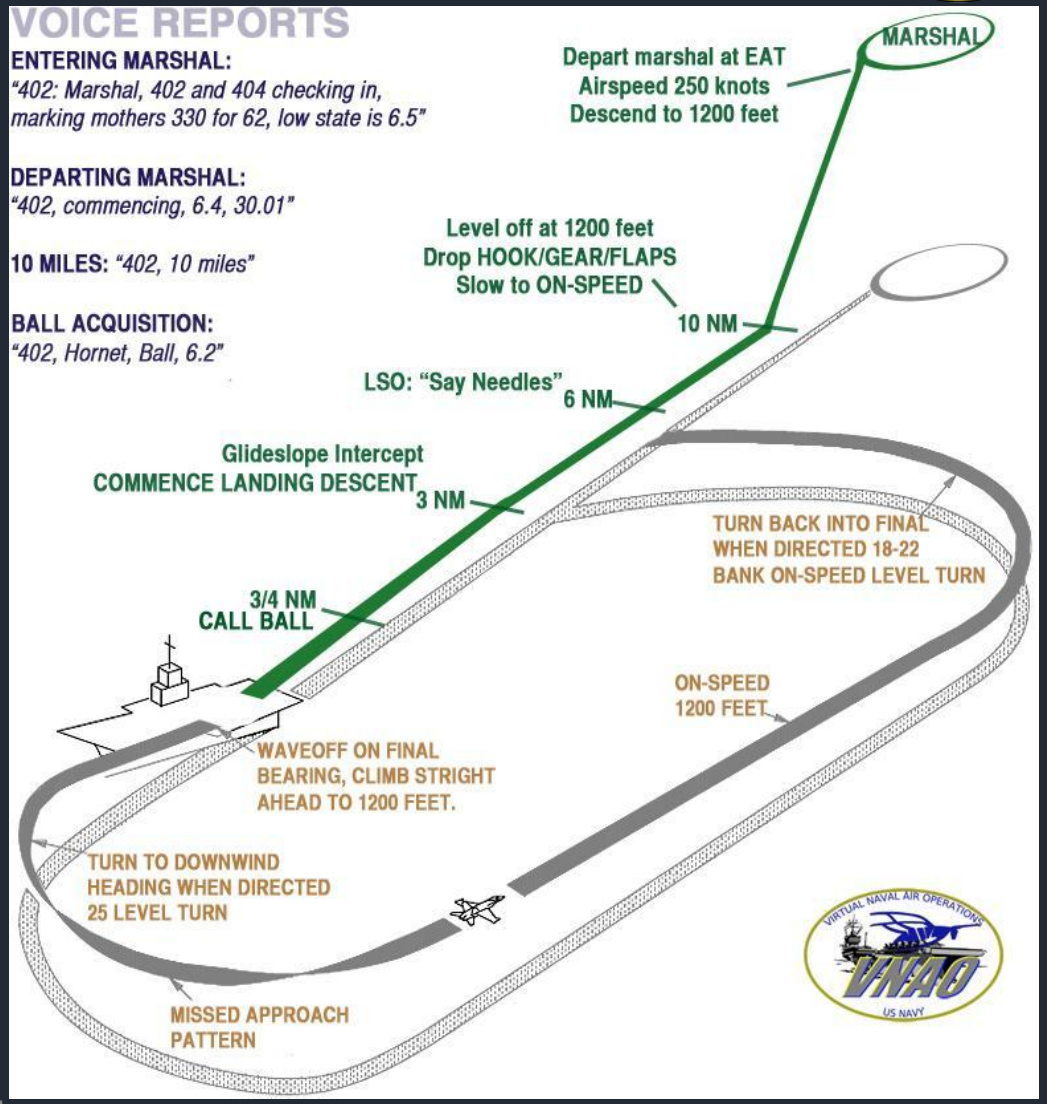


THE CV-1 APPROACH

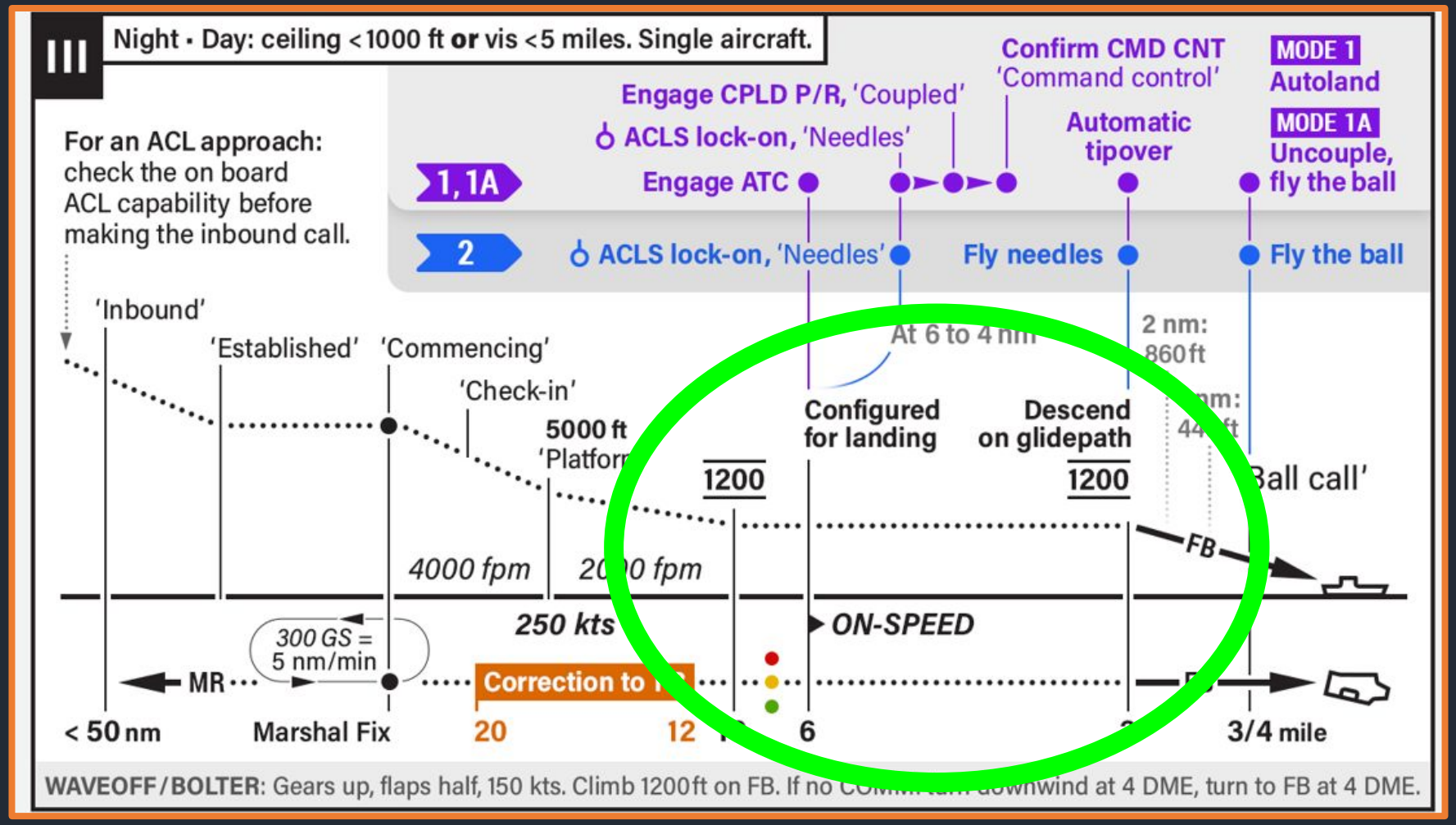


THE CV-1 APPROACH

- Once you ***commence***, establish a 4000FPM descent rate at 250KIAS
  - Power to idle, board out as necessary
- At 5000ft, call "***Platform"*** and cut descent rate to 2000 FPM
  - Board in, power as necessary
  - Below 2000 FPM, "***minute to live***" rule applies; i.e. at 1800 feet, descend no faster than 1800 FPM!
- Level off at 1200ft

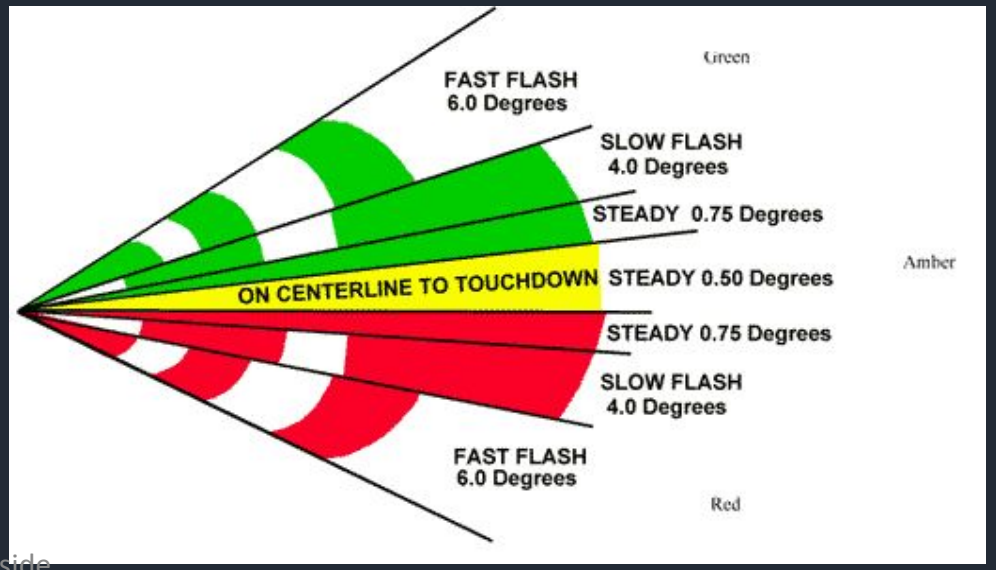


THE CV-1 APPROACH



THE APPROACH

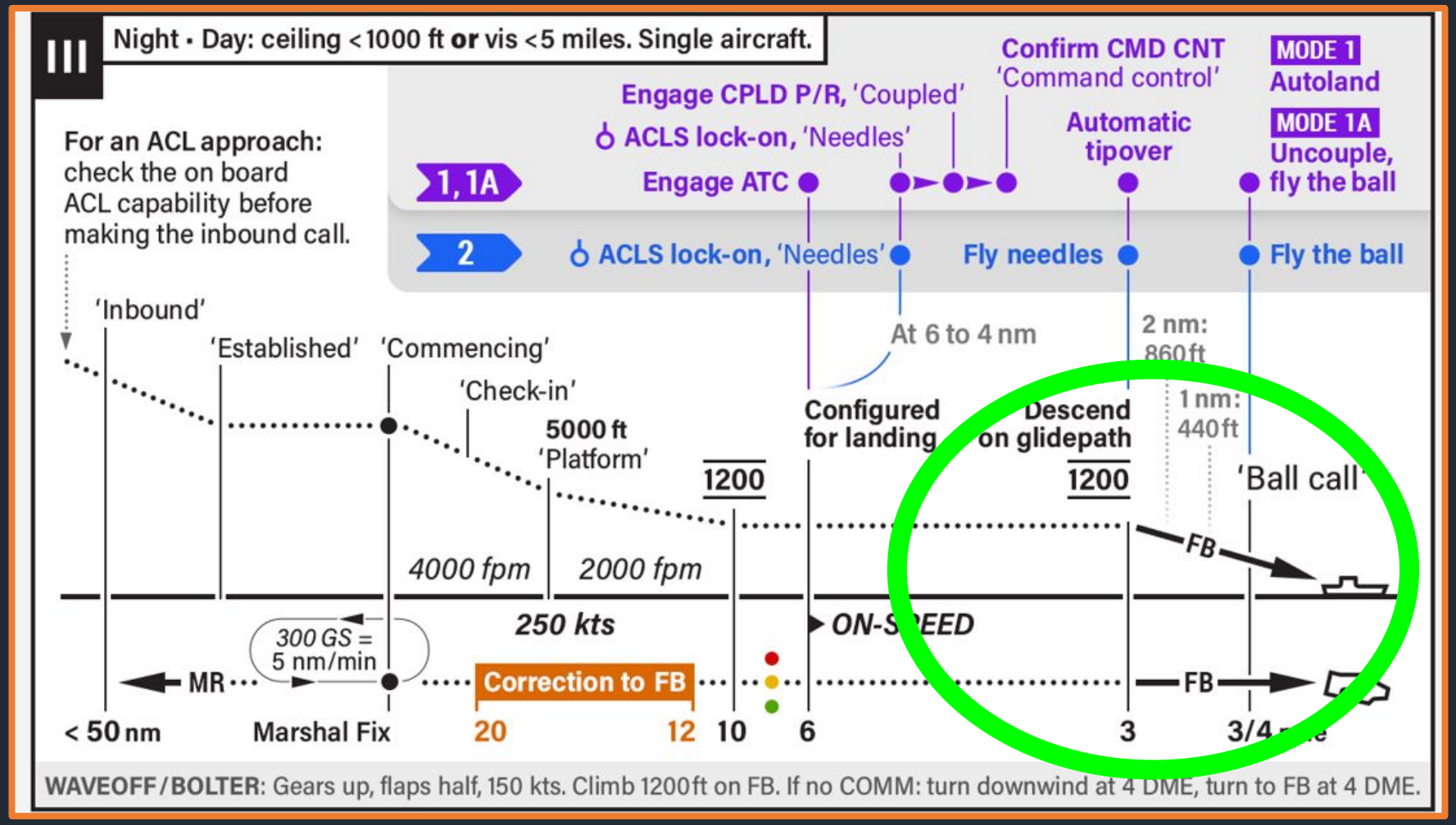
- At 10DME, dirty up
  - Gear down, flaps full
  - Be ***on-speed no later than 6 DME***
- ***Long Range Lineup Lights*** will help keep the jet on the right course
- Between 8 and 4 DME, ***ICLS*** lock-on occurs, listen for "***say needles***"
  - Needles indicate position relative to glideslope & lineup; endeavor to keep them centered with the velocity vector
  - *Don't chase these* – small corrections!



BULLSEYE

- Here's a closer shot of the needles at approx. 4 DME
- A response to "Say Bullseye" here would be "Up & On"
  - The glideslope line is above you (<u>UP</u>) but you are <u>on</u> course
- The TACAN needle is offset from the ICLS crosshair
  - <u>TACAN is less sensitive, fly the needles!</u>

THE CV-1 APPROACH



THE CASE-III APPROACH

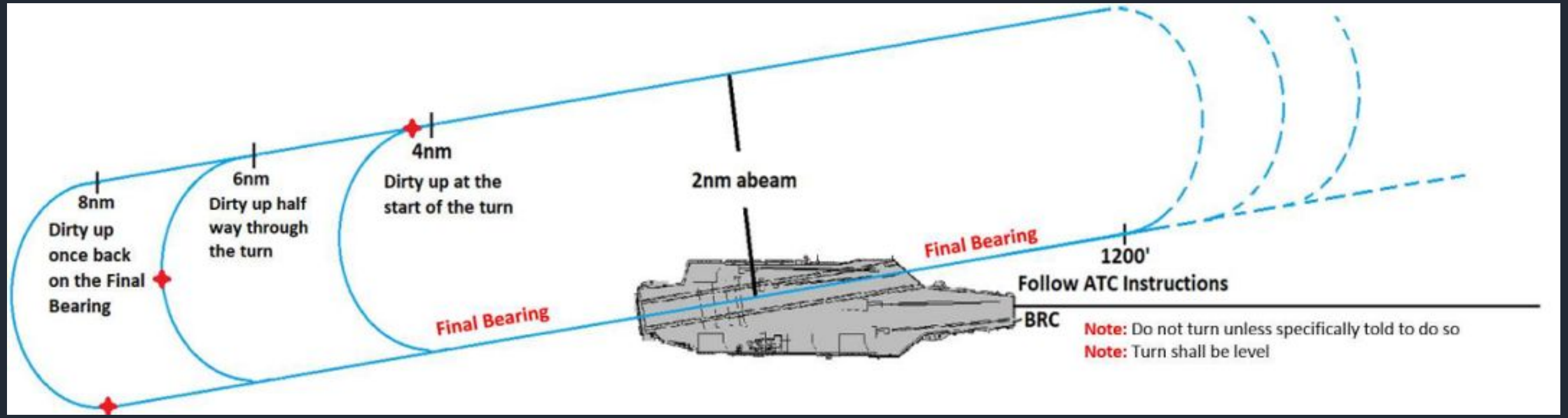
- At 3NM, start your descent to the deck
- Use the glideslope needle as a guide
- At ¾ mile or when prompted, call the ball and fly it to the deck just like Case-I

CASE-III BOLTER/WAVEOFF

BOLTER/WAVEOFF

- FULL MILITARY power
- Maintain wings level, verify positive rate of climb while on-speed
- Fly ***Final Bearing*** (NOT BRC!)
- Gear Up
- Flaps Half
- Speed 150kts
- Climb 1200AGL, await instructions
- Call "MODEX Airborne"
- Controller will direct turn to downwind
- Expect to be vectored back onto final bearing at 4, 6, or 8 DME
  - Dirty up according to distance
  - At 4: D/U at start of turn
  - At 6, D/U halfway through turn
  - At 8, D/U once back on final bearing

CASE-III BOLTER/WAVEOFF



WHAT QUESTIONS DO WE HAVE?