



5 MAR 2021

VIRTUAL NAVAL AIR OPERATIONS

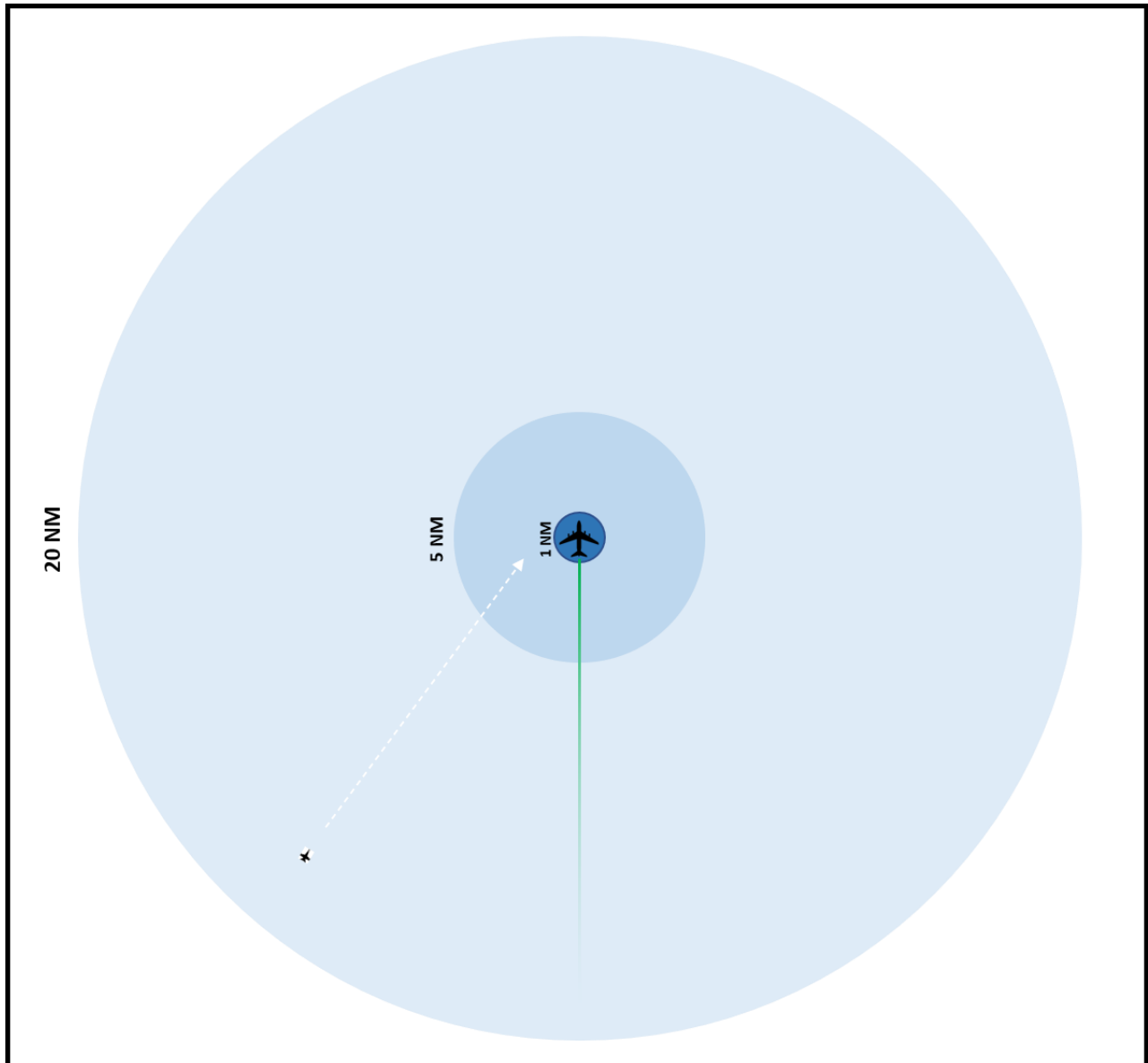


CARRIER AIR WING FOURTEEN (CVW-14)

AIR-TO-AIR REFUELING (AAR) STANDARD OPERATIONS PROCEDURES

Version 1.0

1. INBOUND TO TANKER



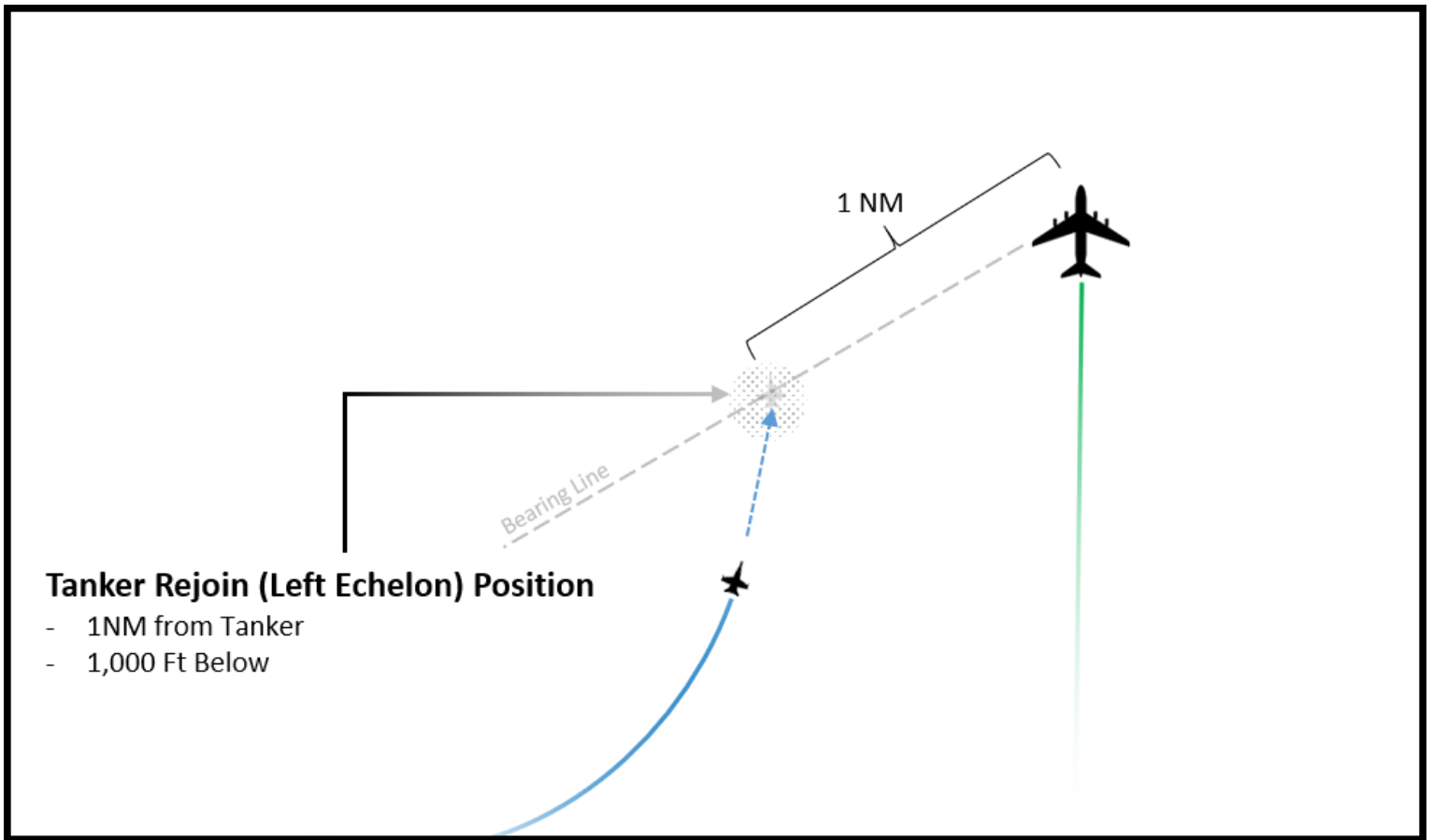
NOTES:

- Establish radar/SA contact within 20 NM of tanker
- Start Rendezvous, Intercept of Tanker by 20 NM
- Set up avionics and displays as desired for refueling operations.
- Establish rejoin from the tanker in Left Echelon approximately 1 NM from the tanker, 1,000 Ft below, on proper port side bearing line. It is important to perform tanker rejoining operations BELOW tanker altitude as altitudes above the tanker are reserved for aircraft departing the vicinity of the tanker.
- To assist with safe, but expediate rejoin, it is recommended to use 10 KTS of closure for every .1 NM away from the carrier. At any point, do not exceed 200 of closure

COMMS:

- Make initial "Inbound" call to the contact with the tanker no later than 20 NM
- Flight Lead: Call "Visual" when tanker is sighted within 5 NM

2. TANKER INTERCEPT



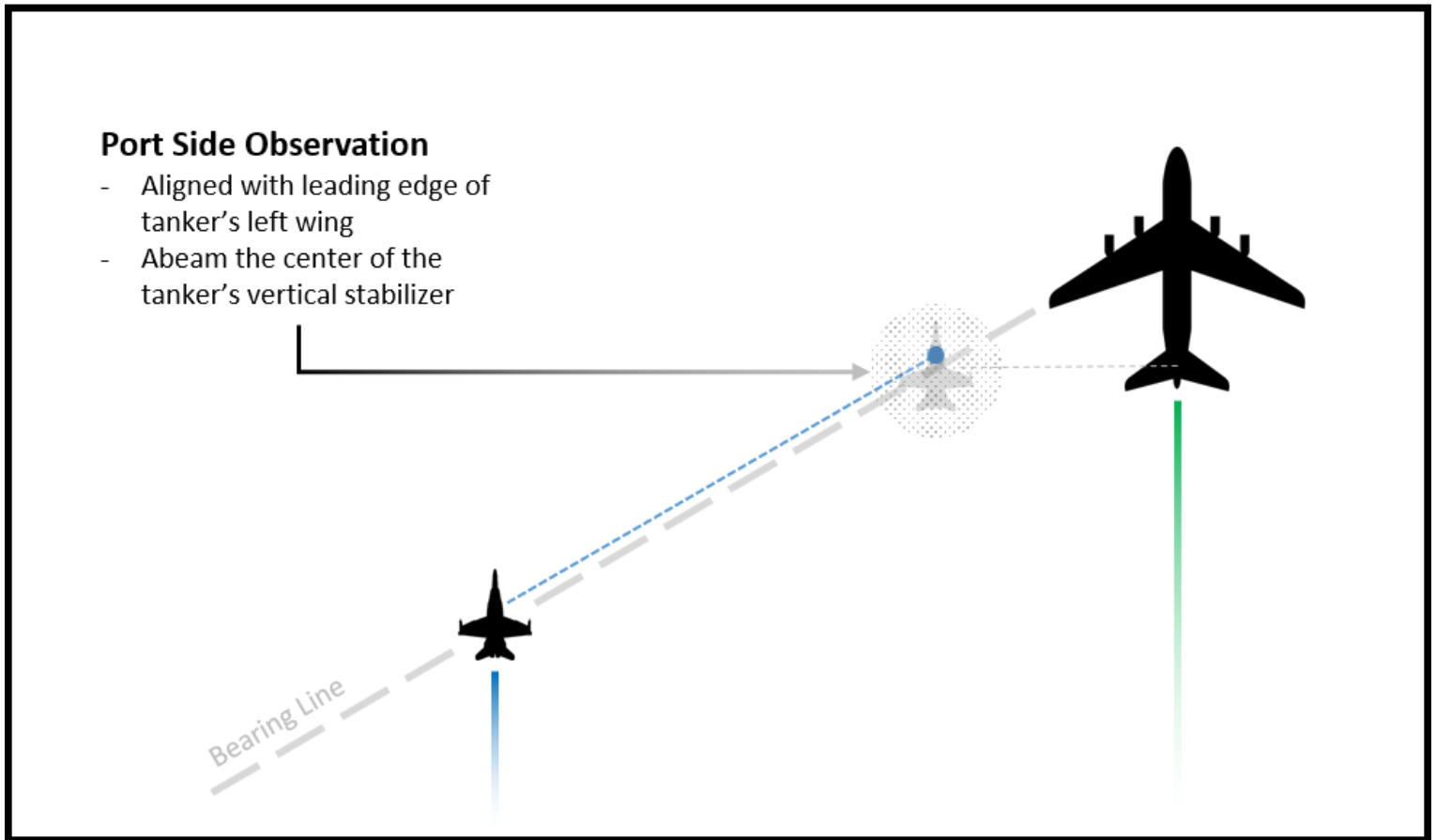
NOTES:

- Tanker Rejoin Position: Approx. 1 NM port side of the tanker, 1000 feet below tanker's orbiting altitude
- Advise use of Air-To-Air Radar to coordinate rejoin to this position
- Once established in Tanker Rejoin Position, configure aircraft for Air-To-Air Refueling Operations by ensuring the following:
 - Radar OFF or STBY
 - Master Arm SAFE
 - Master Mode NAV
 - ECM OFF or STBY
 - Navigation Lights AS REQ.

COMMS:

- Flight Lead: Call "(Flight), Echelon Left" once established in Tanker Rejoin Position.
- Flight Lead: Announce "(Flight) Moving to Port Side Observation" if station is clear, otherwise remain in Tanker Rejoin Position

3. BEARING LINE REJOIN TO PORT OBSERVATION



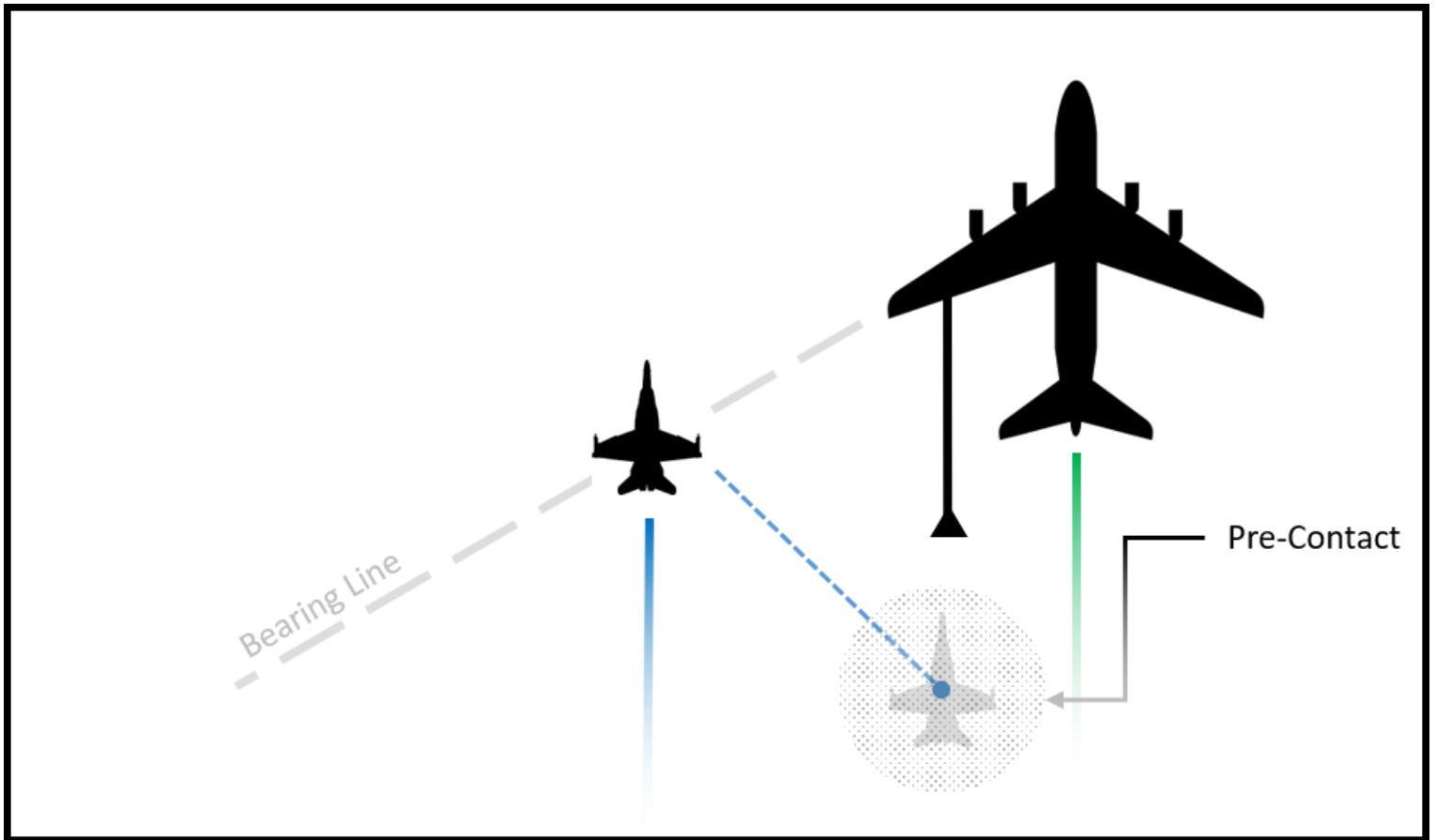
NOTES:

- Portside Observation Position:
 - KC-135: Proper sight picture achieved when in line with tankers leading edge, and abeam with the tanker's horizontal stabilizer
 - KC-130: Proper sight picture achieved when the outboard propeller spinner is superimposed over the last digit of the three-digit MODEX located behind the tanker's cockpit

COMMS:

- Flight Lead: Call "(Flight) Port Side Observation" once properly established in the Port Side Observation Position.
- Once flight is in Port Side Observation, aircraft side numbers will be used for communications

4. CLEARED TO PRE-CONTACT



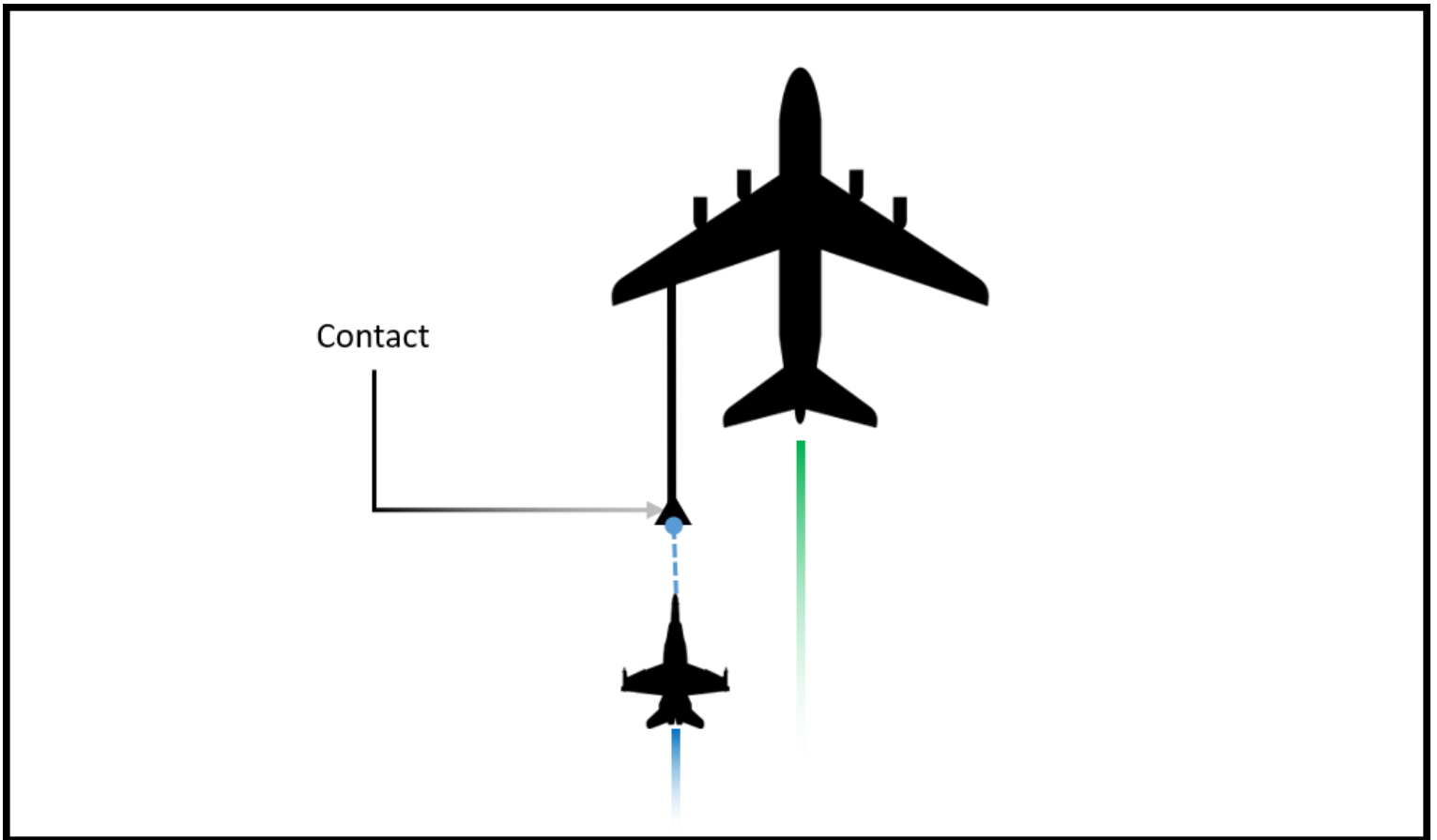
NOTES:

- Once stabilized in Port Side Observation, and the refueling station is clear of refueling aircraft, transition from Port Side Observation to the Pre-Contact position
- Extend the Refueling Probe
- Remaining aircraft in the formation will continue to “collapse” the formation in the Port Side Observation position
- During Night Refueling Operations, delay transitioning from Port Side Observation to Pre-Contact until tanker is straight and level flight. Avoid transitioning during turns, climbs or descents.

COMMS:

- Aircraft in transition: Announce “(Side Number) moving to Pre-Contact”

5. CONTACT



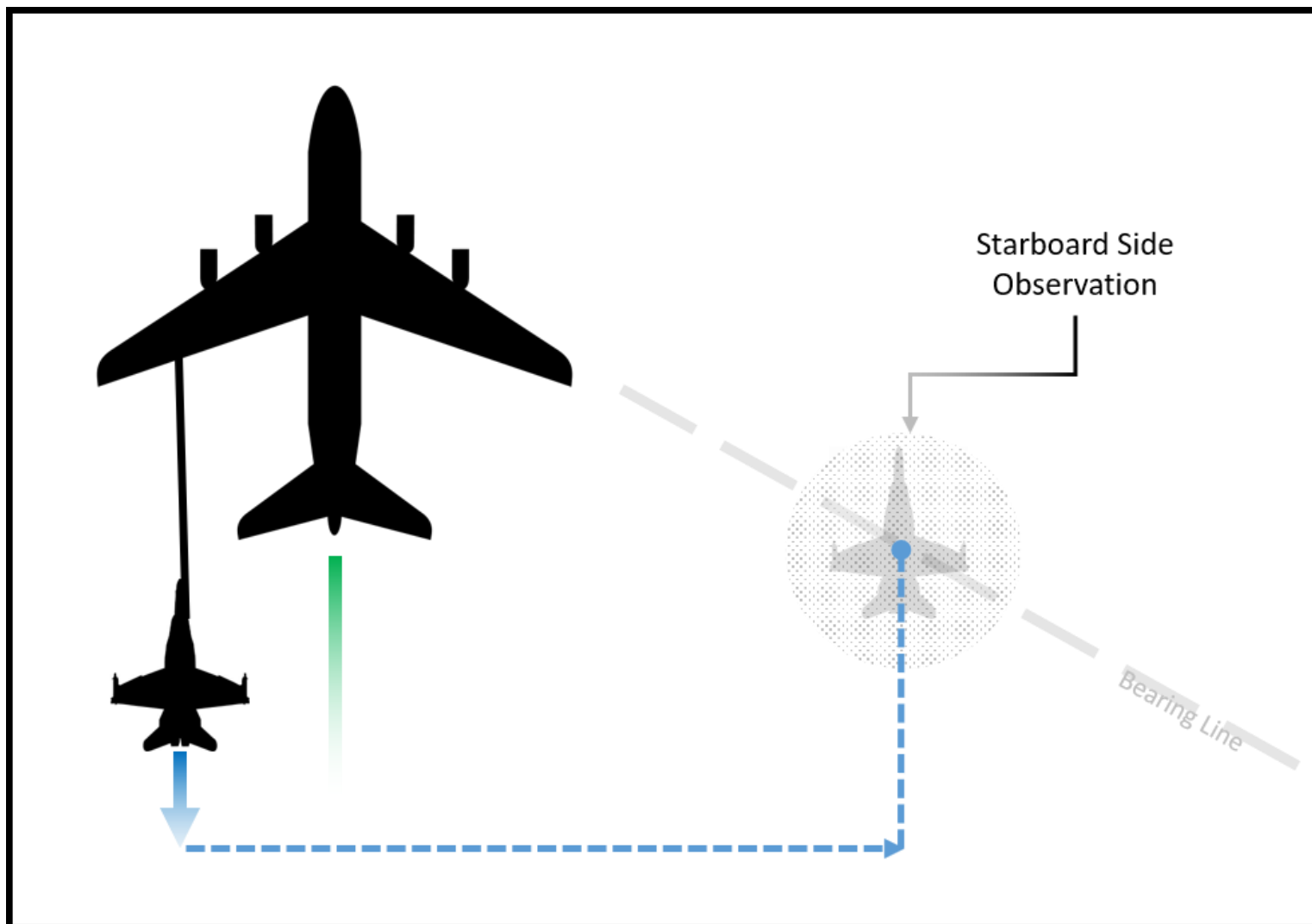
NOTES:

- Once stabilized in the Pre-Contact Position, call “Ready Pre-Contact” via the in-game communications menu. This will cause the tanker to extend the hose and basket
- Proceed to make a connection with the tanker to start refueling
- Once refueling is complete, retract the refueling probe while still connected to the basket. This will abort the refueling process, retract the hose, and re-open the station for the next aircraft. If unable to do this, select the “Abort” option from the refueling communications menu to accomplish the same effect
- Once confirming area is visually clear, retract refueling probe, and transition to the tanker’s Starboard Side Observation Position

COMMS:

- Once refueling is complete, Refueling Aircraft shall announce: “(Side Number), satisfied, moving to Starboard Observation”

6. SATISFIED/ CLEARING TO STARBOARD OBSERVATION



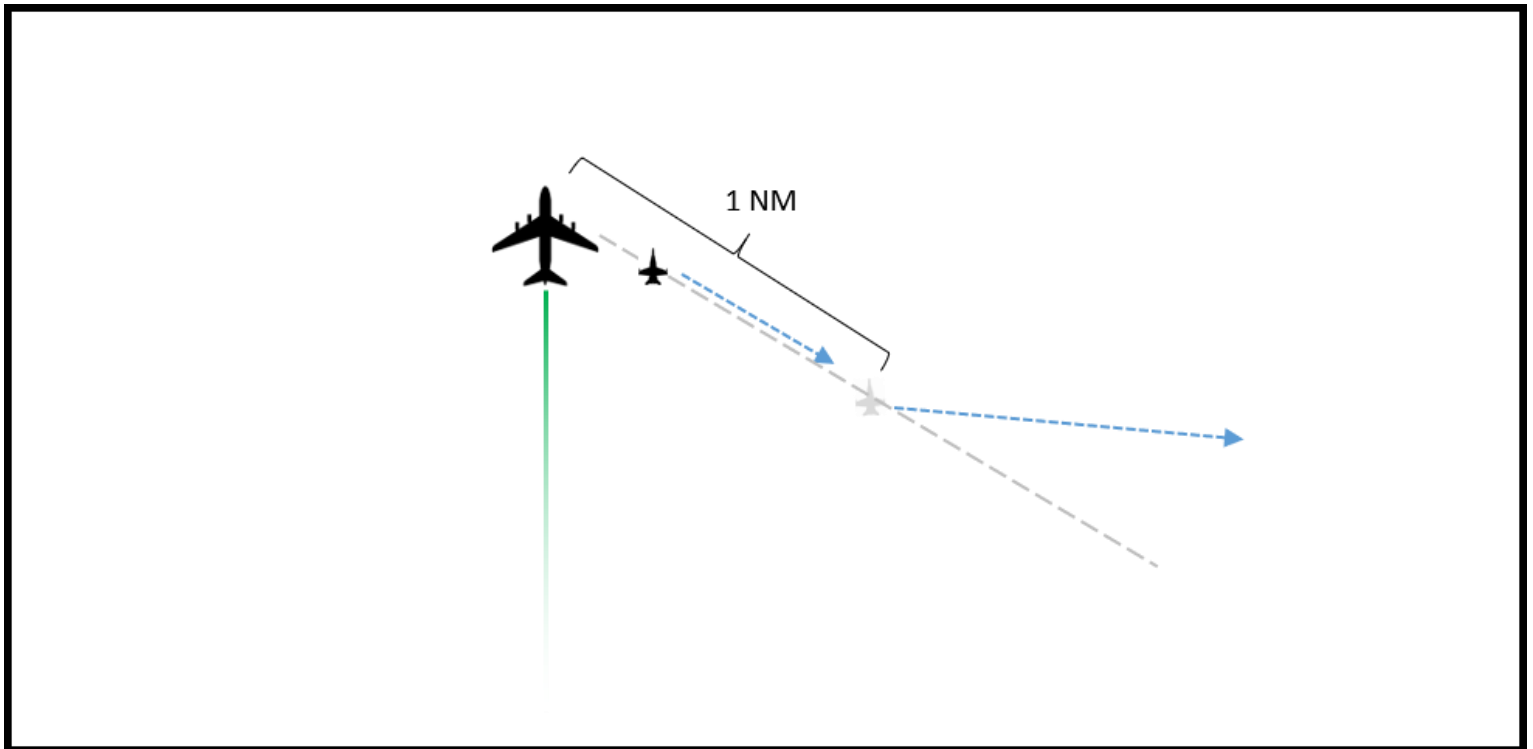
NOTES:

- Why transitioning to Starboard Side Observation, perform a “U” shaped maneuver with the aircraft to clear the refueling post. First ease aft and down of the tanker to create separation. Be sure to descend below any other aircraft that may be refueling on the adjacent basket. Next, slowly transition to the right of the tanker, toward the Starboard Side Observation Position. Lastly, slowly climb and increase speed to establish proper positioning in the Starboard Side Observation Position. The sight picture for Starboard Side Observation is the same as it is for Port Side Observation, but on the other side of the tanker.

COMMS:

- Once in Starboard Side Observation, transitioning aircraft will announce: “(Side Number), Starboard Observation”

7. CLEARING THE TANKER



NOTES:

- Once all aircraft in the flight has completed refueling, Lead will initiate separation from the tanker through the execution of either a level or climbing right turn. Departing aircraft will never descent while clearing the tanker formation, as lower altitudes are reserved for arriving and refueling aircraft.
- The flight is cleared to resume own navigation and operations once it beyond 1 NM from the tanker.
- Outside of 1 NM from the tanker, complete the post refueling checklist:
 - Probe RETRACTED
 - Radar ON
 - Master Arm AS REQ.
 - Master Mode AS REQ.
 - ECM AS REQ.
 - Navigation Lights AS REQ.

COMMS:

- Once refueling has been completed by all aircraft in flight, flight shall transition back to using tactical callsigns. Upon commencing separation, Lead will announce: “(Flight) clearing, starboard side”
- Once 1 NM from the tanker, Lead will announce “(Flight) Clear”