



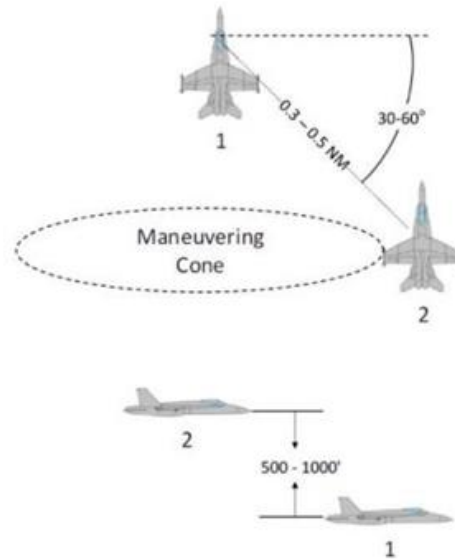
# VIRTUAL CARRIER AIR WING 99



## Tactical Formations

### • Fighter Wing

- Fighter Wing is an extremely fluid formation designed to provide:
  - Reduced workload for the wingman (ease in position keeping)
  - Ease in maneuvering a section through rough terrain
  - Aircraft in close formation can amass firepower while at the same time avoid the fragmentation ("frag") pattern of the other aircraft (e.g., during A/S weapons delivery).
- In the Fighter Wing position, the wingman flies in a cone 30- to 60-degrees off the lead's tail, on either side. Proper nose to tail separation extends from 0.3 NM to 0.5 NM
- Wing will be either co-altitude (maneuvering through terrain) or 500'-1000' above Lead.





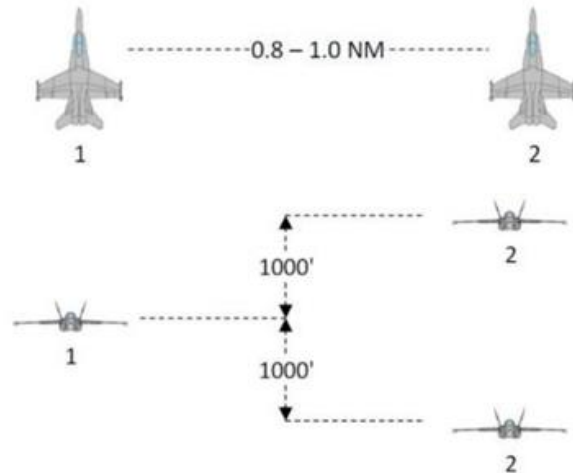
# TACTICAL FORMATIONS



## Tactical Formations

### • Defensive Combat Spread

- Combat spread is a highly effective section formation that offers both maneuverability and mutual support
- In this formation, Wing will fly on Lead's 90-degree bearing line (abeam) at a distance of 0.8 to 1.0 NM with 1000' of vertical separation
- The two aircraft are spaced far enough abeam to maximize maneuverability, yet close enough together to provide mutual support
- Additionally, this positioning allows aircrew the ability to devote more time to cockpit tasks and, more importantly, visual lookout
- A/A TACAN is used to crosscheck for abeam distance

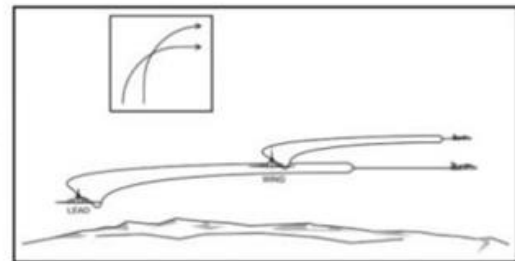


# TACTICAL FORMATIONS



## Tactical (Tac) Turn

- The Tac Turn is an *engaging* turn in which flow heading changes by 90 degrees, and the Fighters swap sides of the formation. A Tac Turn allows the section to maneuver rapidly to engage a threat on the beam. Tac Turns will be performed at 70 degrees AOB (3.0 G), using power as necessary to maintain airspeed. At the completion of the turn, you should be back in Spread on the opposite side. The turn begins immediately following Wing's acknowledgement of Lead's comm.
- Inside jet - Initially you will drive straight and do nothing as the outside jet starts his turn into you. Begin your turn in the called direction just prior to being able to look down the outside jet's intakes (rear AIM-9 fin). About halfway through your turn you should pick up the outside jet over your shoulder as he rolls wings level, with you on bearing line.
- Outside jet - Turn at 70 degrees AOB (3.0 G) using power as necessary to maintain airspeed. Pass approximately 2000' behind the inside jet.



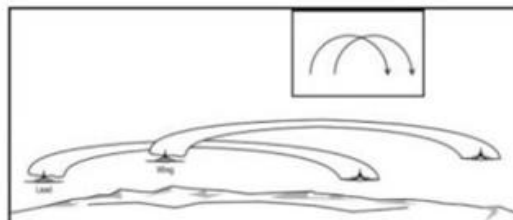


# TACTICAL FORMATIONS



## In-Place Turn

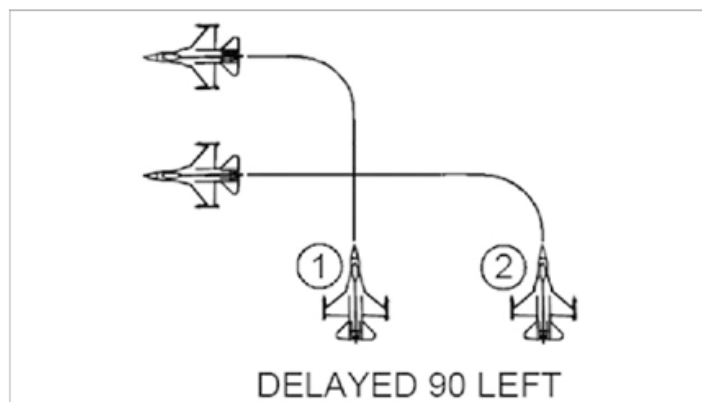
- The In-Place Turn is an engaging turn that changes flow heading by 180 degrees and causes the Fighters to swap sides of the formation
- Both Fighters should begin and finish their turn at the same time. An In-Place Turn is used to engage a bandit that is in the section's rear quarter, in the direction of the turn
- The turn begins immediately following Wing's acknowledgement of Lead's comm.



# TACTICAL FORMATIONS



IN THIS EXAMPLE THE 2 JETS STARTS HIS/HER TURN ON THE LEADS COMMAND TO TURN NOW. THE 1 JET WILL HOLD HIS TURN UNTIL THE 2 JET IS POINTING TOWARD HIM/HER, THEN THE 1 JET WILL COMMENCE HIS/HER TURN





# TACTICAL FORMATIONS



Loose Deuce is the primary combat formation for a pair of jets in both Beyond Visual Range (BVR) and visual. Envision a cone behind the shooter jet. The tailing jet can maneuver behind the shooter left or right, high or low, but NOT in the transition zone. The cover jet must remain behind the shooter at all times, and keep constant visual on both shooter and target.

This allows the cover jet to engage the target if the shooter loses angle. The shooter must break away in the opposite direction of the fight turn.

