

A HAMSTER MINI-TALK

FIRST 15 SECONDS

INTRODUCTION

- ▶ Give a brief bite-sized introduction to a guns only merge
- ▶ Easily grasped
- ▶ Easily practiced
- ▶ Unblock further learning

AIM

- ▶ Provide the tools to
 - ▶ Always reacquire the enemy after the merge
 - ▶ Design practice scenarios to learn this

PRELIMINARIES

- ▶ Merge here in context is two planes passing each other's 3-9 line. This will be defined as time **T+0**.
- ▶ We will cover the timeline T-3 to T+12.
- ▶ We will limit the talk to the blue aircraft performing a level or near level turn at merge.
- ▶ The content of this presentation does not cover anything after the moment of visual reacquisition of the target.

COVERED IN LATER TALKS

- ▶ BFM
- ▶ Energy Management
- ▶ Gunnery
- ▶ High aspect WVR missile environments
- ▶ COMMS (Houndog, Press, Continue, Tally, No-Joy, High Guy, Low Guy, etc.)

CAVEAT EMPTOR

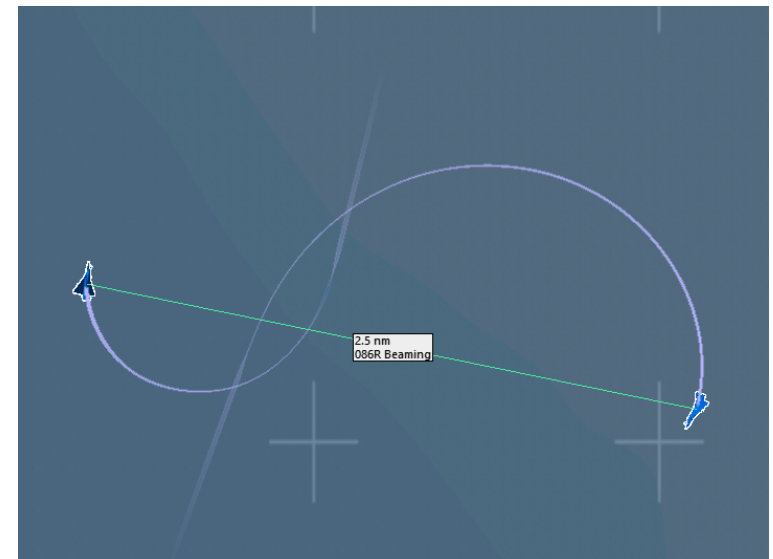
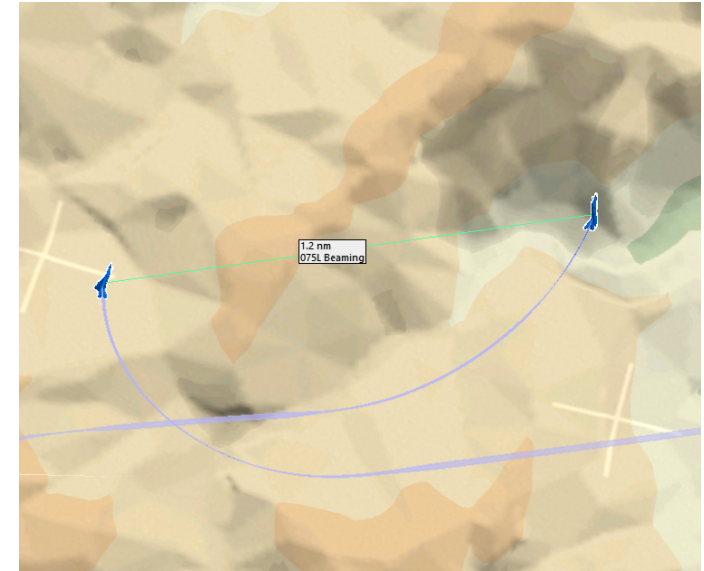
- ▶ The RAZBAM M2K flight model is not complete and it's corner speed is likely to change over time. For this talk we will assume 360 kts.

T-3

- ▶ Speed set to Corner Speed +80 to +100. A simplification for early stage learning. Corner speed around 360 kts for the DCS M2K.
- ▶ Eyes on the enemy
- ▶ Don't be an easy head on target
- ▶ Shoot if you have a good solution

T-1

- ▶ Choose:
- ▶ 1 circle fight if you have a slow speed turning advantage (e.g. vs SU-27)
- ▶ 2 circle fight if you have an energy advantage (e.g. vs F-5 or Mig-21)



T+0

- ▶ Eyes on the HUD (or airspeed indicator and ADI)
- ▶ Bank losing energy down to corner speed

T+3

- ▶ Eyes on the HUD (or airspeed indicator and ADI)
- ▶ Establish a stable energy sustaining turn at or slightly above corner speed (360 kts for the M2K)

T+4

- ▶ Eyes up 45° from the HUD and to both sides.
- ▶ If the enemy accepted a 2 circle and went high / low they will appear here within the next 2 seconds
- ▶ If the enemy accepted or forced a 1 circle fight they will appear 45° in line with your lift vector within the next 2 seconds

T+8

- ▶ Eyes up 90° from the HUD
- ▶ If the enemy accepted a 2 circle level they will appear here within the next 2-4 seconds

T+12 (AND YOU HAVEN'T ACQUIRED THE ENEMY)

- ▶ The fighter is likely below your nose if in a 2 circle
- ▶ Likely behind your 3-9 line otherwise
- ▶ Essentially you have lost the merge

HOW TO PRACTICE

- ▶ Setup an agreed scenario, eg. 1v1 right two circle level
- ▶ Merge
- ▶ When both acquire a positive Tally knock it off and reset
- ▶ If either is No Joy after 12 seconds knock it off and reset
- ▶ Repeat until proficient
- ▶ Choose a new scenario and repeat the above

FIRST SCENARIOS

- ▶ Master the following before proceeding to more advanced scenarios where the blue aircraft goes high or low
 - ▶ Level Merge two circle
 - ▶ Merge two circle, aggressor goes high
 - ▶ Merge two circle, aggressor goes low
 - ▶ Merge one circle

FINAL THOUGHTS

- ▶ The purpose of the presented information is to put you in a position where you can begin your dogfight training. I consider it a prerequisite to enable the learning.
- ▶ Only once you can merge with and find the enemy can you fight. Remember, lose sight: lose the fight!