## BMS Helipack 0.1 Test Mission #1

#### **SCUD HUNT**

Briefing: Wednesday 24, 2021 @ 2000z

## What's Special?

- What? Human-flyable helicopters! Really?
   Yes!
- **How?** We're making BMS think they are airplanes.
- Does the flight model work? No. Yes.
  Kinda. It's a work in progress. We want
  dev support for better flight models. Right
  now, this falls under the category of "hack."
- Can I fly a helicopter? Not in this mission, but you can experiment with the theater if you want. Don't ask us for support, however, until we make an official release. :)





## Background

- North Korea has positioned 6
   SCUDS on the border of South Korea.
- Intel indicates that they will be on the move between Kumgang and Sinan-ni within the hour.
- A package made up of F-16s and AH-64Ds has been ordered to break through the SA-2 wall on the FLOT and take out the SCUD threat immediately.



SA-2 Launcher



Scud



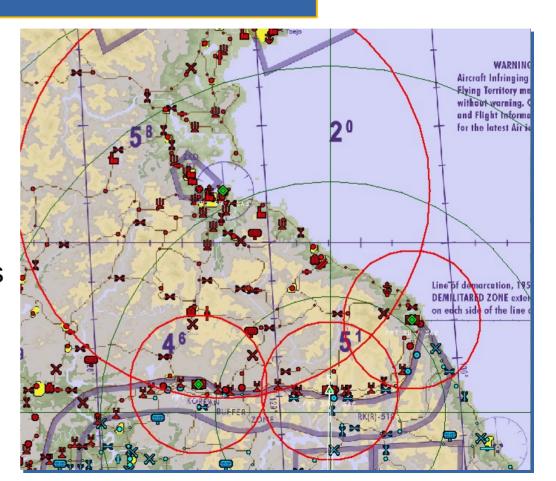
Fan Song



Left: Truck; Right: Spoon Rest

#### Intel: Ground

- SAM Threats:
  - 3x SA-2:
    - West (Wolf)
    - Middle (Mongoose)
    - East (**Eagle**)
  - 1x SA-5: (Rooster)
- Expect AAA and IR SAM threats in North Korea's Mainland.
- 6x SCUD: (Scorpion)



## Intel: Air Threat

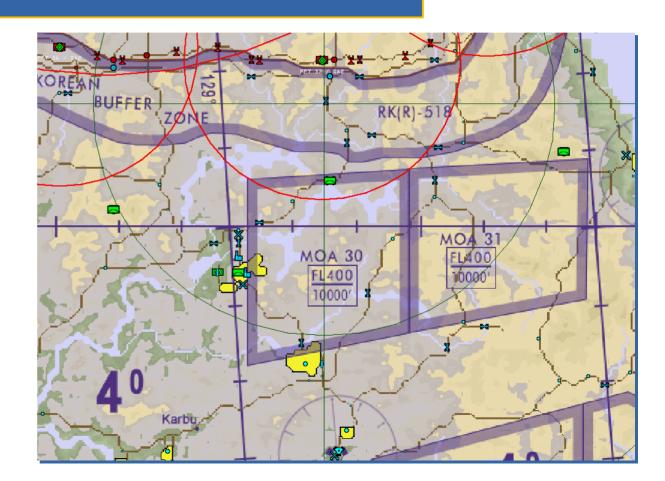
- MiG-21BIS: Kuum-ni
- SU-27: Wonsan

Mig-21bis Fishbed 2	Armament: RWR:	AA-2B, AA-2C, AA-8 18 nm SPO-10 Radar: SOD-57M Up:31 nm Down:N/A ECM:12 nm 1958. Smoke exhaust.	Hard Points: CMDS/ ECM: Vertical: Turn Rate °/sec: Roll:	5/ 4AA or +2 AA-8 Yes / SPS-141 Pod Bad Tumansky R-25-300 (15.7k) 8 - 13/ Instant: 18 (0.3nm Ø) Good
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Su-27 Flanker	27	Type:	Fighter (Flanker-B, Crane, Azure Lightning)	Max Vel. Mach	1.8 MAR:17
		Armament:	AA-8, AA-10A/ B/ C/ D, AA-11, AA-12	Hard Points:	10/10AA Can carry 8 Adders
1	7	RWR:	20 nm SPO-15 Radar:NIIP N001	CMDS/ ECM:	Yes / Sorbtsiya Pod -2AA
200		Radar Range:	Up:50 nm Down:50 nm ECM:15 nm	Vertical:	Good S./Lyulka AL-31F (55.2k)
		Notes:	1986. HMCS. Use ECM, bm, chaff, mnvr to	Turn Rate °/sec:	15 - 17/ Instant: 23 (0.2nm Ø)
		1601-0017-01303	brk lock x>10nm. Long rng. IRST N/I.	Roll:	Good

# Friendly Air Defense

- Hawk Batteries
  - West
  - South West
  - Central
  - East



# Package #2008

#	<u>Flight</u>	<u>Task</u>	<u>Size</u>	<u>Type</u>	TO	<u>VHF</u>	TCN	<u>Laser</u>	Block	Required
1	Hammer 7	Al	4	F-16CM-50	20:59	15	12Y/75	153x	20-21	Yes
2	Mustang 4	BARCAP	4	F-16CM-50	20:55	16	13Y/76	N/A	>=25	Yes
3	Mudhen 4	SEAD	4	F-16CM-50	20:57	17	14Y/77	N/A	22-23	No
4	Rescue 3	Al	2	AH-64D	21:00	18	15Y/78	154x	<2	Yes
N/A	Sensor	TAC C2	1	GCI	N/A	N/A	N/A	N/A	N/A	Yes
N/A	Chalice	TAC C2	1	AWACS	20:29	N/A	N/A	N/A	N/A	Yes
N/A	Overwatch	JTAC	1	JTAC	N/A	N/A	N/A	N/A	N/A	No

- Package Comms will be decided at briefing time. If it is not briefed, assume UHF 6.
- outsiders=all MUST be set in your IVC Client.cfg file.

### Mission Plan

- 1) MUSTANG will establish CAP south of Mongoose.
- 2) When air picture is clear:
  - 1) RESCUE will PUSH and attack Mongoose.
  - 2) MUDHEN will PUSH and cover RESCUE.
- 3) When Mongoose Fan Song is destroyed:
  - 1) MUSTANG will PUSH and maintain CAP.
  - 2) RESCUE will continue to attack Mongoose with the aim of wiping out the battalion.
  - 3) HAMMER will begin SCUD hunt.
  - 4) MUDHEN will provide SEAD cover for package. (ie. Suppress Rooster if necessary.)
- 4) When Mongoose is destroyed:
  - 1) If the SCUDs have NOT been located, RESCUE will join the SCUD hunt.
  - 2) If the SCUDs have been located but NOT destroyed, RESCUE will join the search at the discretion of Package Lead, depending on whether or not HAMMER can finish the mission on their own.
  - 3) If the SCUDs have already been been destroyed, then RESCUE will immediately split and RTB.

### Recommendations

- HARD DECK: 18000
- HAMMER
  - Should NOT go under the hard deck.
  - Should use LGBs, such as GBU-12s.
  - Should request RESCUE's assistance if needed.
- RESCUE
  - Should maintain NOE at all times beyond the FLOT.
  - Should not take any unnecessary chances against enemy air.
- MUSTANG or TAC C2 should be package lead.

## **Emergency Egress Plan**

- RESCUE shall be the first to egress.
- MUSTANG is expected to cover the package egress.
- If MUSTANG is unable to provide CAP for egress, then MUSTANG must alert TAC C2 immediately.
- TAC C2 should seek to find relief for MUSTANG.
- The role of CAP will pass to the other F-16 flights, if possible.
  - MUDHEN will switch to Air-to-Air if able and cover the egress.
  - If MUDHEN is unable to support, HAMMER will switch to Air-to-Air if able and cover the egress.
- If CAP cannot be maintained at any point, the mission shall be aborted.

## **Expected Comms**

- "Air picture is <u>clear</u>." This should be followed up with a directive from Package Lead for the package to PUSH.
- "Mongoose Radar <u>destroyed</u>." This should be followed up with a directive from Package Lead for the package to PUSH. This does NOT mean the entire battalion has been wiped out.
- "Mongoose eliminated." The entire battalion is wiped out.
- "SCUDs/Scorpions located." The SCUD battalion has been found.
- "SCUDs/Scorpions <u>destroyed</u>." The <u>SCUDs</u> within the battalion have been <u>destroyed</u>. This does NOT mean the entire battalion has been wiped out.
- "SCUDs/Scorpions <u>eliminated</u>." The <u>entire</u> battalion is <u>wiped out</u>. Note: This is not a necessary victory condition, but is optional.
- "Miller Time" will be the <u>termination</u> call, perhaps by one of the AI flights for when the last target is destroyed and RTB is expected.
- "RTB" will be package lead's directive to go home.

## Complications

- Coordination is important to maintain proper timing and spacing.
  - AH-64s are slow compared to F-16s.
     (Never exceed speed is 197kts.)
  - Package Lead should direct the helicopters to attack ASAP without sending them into a furball.
  - The F-16s should not bother with the holding points if the skies can be cleared earlier than expected.
- Altitude blocks have been assigned and should be used.
- Non-CAP flights shall ensure they are not in between CAP and hostile aircraft.

- The AH-64Ds will be flying NOE, making radio contact difficult. TAC C2 is expected to maintain radio contact between RESCUE and the rest of the package, relaying essential information as needed. Example:
  - "Package, MUSTANG, Air picture is clear.
     PUSH to Mongoose."
  - "HAMMER."
  - "MUDHEN."
  - <Silence>
  - "RESCUE, SENSOR, Air picture is clear.
     PUSH To Mongoose."
  - "RESCUE"
  - "SENSOR, relayed and acknowledged." (Letting the package know RESCUE has answered.)

## **Event Purpose**

#### Goals

- To test the stability of the theater
- To inspire the community to see that helicopters add a new dimension to Falcon BMS with lots of potential.

#### Future Plans

- We're at a critical point where we need to decide how much work to do on the flight model before release.
- If someone wants to donate some cockpits or some models, let us know.
   We understand not everyone wants to fly with a Viper pit.
- The goal is to make a more official release later on with an actual manual and missions to go with it. We aren't going to support this version right now with the community since this is more or less pre-alpha.

## Project Status

#### Theater Status

- We have next to no documentation and don't really wish to explain to people how to fly the helicopters right now, since the model will almost certainly change. Please don't ask us questions, yet.
- If you want to experiment and explore the theater, go for it. All we'll say is to spawn an AH-64D at an airbase and turn the VTOL angle to 90°.;) Don't ask us about bugs, though. We're working on it.:)
- The Trello board has information on the project status, but is subject to change: https://trello.com/b/C5C9tWjD/helipack
- Theater Download: https://drive.google.com/file/d/1OolkO965Lw\_F314gSePwaLYivooUK8ZS/view?usp=sharing
  - 1) Extract to Falcon BMS\Data
  - 2) Rename the extracted directory to Add-on Helipack
  - 3) Open the file \Falcon BMS 4.35\Data\TerrData\TheaterDefinition\theater.lst.
  - 4) Append Add-On Helipack\Terrdata\theaterdefinition\Helipack.tdf at the end of the file on its own line.