



AIR WEAPONS CONTROLLER CHECKLIST & HANDBOOK



If there are corrections required, help me improve this checklist 😊

-Punyal 447

Compiled by Punyal 447

EMERGENCY CHECKLIST

- ☐ Provide and direct as required:
 - Vectors (nearest emergency airfield as appropriate)
 - Join-up (if requested / required)
 - Squawk Mode 3 / 7700
 - Handoff and recovery
- ☐ Coordinate recovery with ATC as required.

<i>AIRCRAFT CALLSIGN / TYPE</i>	
<i>NATURE OF EMERGENCY</i>	
<i>LOCATION</i>	
<i>SOULS ONBOARD</i>	
<i>FUEL/TIME REMAINING</i>	
<i>ARMAMENT STATUS (LIVE?)</i>	
<i>ANY SPECIAL HANDLING REQUESTS?</i>	

EMERGENCY PROCEDURES

BAILOUT (JET FALL OUT)

- ☐ Mark bailout point
- ☐ Record time of crash/bailout
- ☐ Record position: (reference LATLONG/BRAA from B/E)
- ☐ Determine number of chutes
- ☐ Determine the intention of the Wingman
- ☐ Notify SD for coordination of SAR forces

NON-BAILOUT

➤ **NORDO / Loss of Radio Communication**

LEFT HAND TURN: Complete NORDO

RIGHT HAND TURN: Receive only, No

- ☐ Confirm Squawk Mode 3 / 7600
- ☐ Attempt Radio contact on **Primary (for PAS – 121.5), Secondary (for PAS – 123.4), and Guard Frequencies (121.5 VHF / 243.0 UHF)**
- ☐ Contact Wingman for Communication Relay / Have aircraft for communication relay
- ☐ Join-up as necessary
- ☐ Vector aircraft for RTB
- ☐ Notify SD to coordinate with appropriate agencies

➤ **HYDRAULICS / ELECTRICAL**

▪ **Landing Gear**

- ☐ Squawk Mode 3 / 7700
- ☐ Get Pilot's Intentions
- ☐ Gather info – souls on board, fuel status, etc.
- ☐ If landing gear is stuck or there is partial landing gear down, they may require arresting cables or nets to deploy on the runway.¹
- ☐ Relay all info to SD

▪ **Flaps**

- ☐ Squawk Mode 3 / 7700
- ☐ Clear required airspace
- ☐ Immediately vector aircraft to the nearest airport.
(*Note: Further movement of the flaps may cause flap buckling and aileron damage*)
- ☐ Provide navigational assistance
- ☐ Gather other info – souls on board, fuel status, etc.
- ☐ Hand-off aircraft

¹ Sec E-41 – Pilot Landing Gear Emergency Procedure

➤ **OXYGEN**

- Lost pilot control – Refer to Bailout Procedures (>10,000 ft altitude)
- If responsive, direct pilot to descend ≤10,000ft so as not to suffer hypoxia

➤ **HIJACKED**

- ☐ Confirm Squawk Mode 3 / 7500
- ☐ Alert PADCC to scramble aircraft in a covert manner (stern tactics)
(Note: In this event, National Security is concerned and the military has the definite role.)

➤ **DIVERT / RECALL**

- ☐ Notify aircraft of recall/divert reason
- ☐ Identify alternate airfield suited for the aircraft *(runway requirement, refer to next page)*
- ☐ Notify the receiving aerodrome *(ATC frequency, refer to next page)*
- ☐ Provide aircrew with divert airfield weather and runway status
- ☐ Closely coordinate with PADCC

TOWER FREQUENCIES

AIRFIELD / RUNWAY

ATC	FREQUENCY
LAOAG	122.3
CLARK	119.2
SUBIC	118.2
BASA	128.2
WAS	122.1
NAIA	118.1
FERNANDO	133.0
MACC	119.3
AIRFIELD	RUNWAY LENGTH
LAOAG	9, 134 ft
CLARK	10, 499 ft
SUBIC	9, 003 ft
BASA	8, 433 ft
SAN FERNANDO	6, 955 ft
NAIA	12, 261 ft

COORDINATES

BASA 1458.541 / 12029.213
BASA TACAN 1459.520 / 12029.850

HANDLING OF UNKNOWN TRACK

- ☐ Upon detection of the unknown track, ADCC to correlate the said track to PADCC.
- ☐ If PADCC has negative data, challenge unknown track at **Guard Frequency 121.5 or 243.0** with the following guard call:

***“Attention on Guard. Aircraft at Latitude____,
Longitude____, Heading____ Altitude____
Squawking____. This is the Philippine Air Force, you are
inside the Philippine Air Defense Identification Zone, identify
yourself and say intention.”***

- ☐ If TOI responded and provided flight details, flight direction, intentions and will not go over Territorial Airspace, respond:

“Roger, have a safe flight.”

- ☐ If TOI does not respond but flying within PADIZ and PH EEZ, continue giving guard calls and continue to monitor and document the unknown track.
- ☐ If TOI does not respond and flying towards the Territorial Airspace, call:

“If you do not respond, you will be intercepted.”

- ☐ Subsequently, apply necessary actions in accordance with ROE on Philippine Air Defense.

Guard call within Territorial Airspace (12 NM radius from B/E):

***“Attention on Guard. Aircraft at Latitude____,
Longitude____, Heading____ Altitude____
Squawking____. This is the Philippine Air Force, you
are inside the Philippine Territorial Airspace, identify
yourself and state your intention.”***

- ☐ After monitoring, necessary reports shall be accomplished by the Duty, AWC.

 Note/s:

▪ Monitoring of the unknown track will end if the track exited the PADIZ.

▪ Recommend scramble order if the following conditions are met:²

1. Proximity to Philippine coastline, below 100NM
2. Display of aggressive flight behavior

² Defense-in-Depth Concept

HANDLING OF MASS/MULTIPLE TRACK (at PAS)

□ Upon detection of mass/multiple tracks, the following must be done simultaneously:

- Confirm on the open-source platforms (ex. Twitter, etc) for possible maritime exercises and for the possible identification of aircraft;
- The Duty, AWC must inform the Group Commander, Deputy Commander and Director for Operations, 582nd ACWG in the following format:

Example:

<i>“Track Designator, Time Detected, Squawk Code, Bearing, Range, Altitude, Speed, Heading, Remarks”</i>
“Good morning, Sir. We have detected (6) multiple Tracks: (PAS Monitoring Station) 1 – 1151H SC 5100 at 058deg 148 NM PAS, alt 33k SP 755KTS heading 081– US Military Aircraft / active 2 – 1151H SC 5505 at 059deg 142 NM PAS, alt 34k SP 532KTS heading 092– US Military Aircraft / active 3 – 1152H SC 5404 at 029deg 288 NM PAS, alt 33k SP 149KTS heading 165– US Military Aircraft/ active 4 – 1152H SC 5403 at 030deg 282 NM PAS, alt 33k SP 230KTS heading 133– US Military Aircraft / active 5 – 1153H SC 5207 at 059deg 151 NM PAS, alt 33k 397 heading 102 – US Military Aircraft / active 6 – 1200H SC 1400 (HC 7A 4264) at 060deg 141 NM PAS, alt 23k SP 273 KTS heading 055 – no response / exited 1208H Updates to follow, Sir.”

- Recall all Surveillance Personnel; and
 - Unknown mass/multiple tracks should be correlated to PADCC.
- ❖ Designate other AWCs to monitor multiple tracks. Routine procedures (refer ***Handling of Unknown Track***) will be applied in handling of tracks. The PADCC will provide the identity/flight details of the said mass/multiple tracks.
 - ❖ After correlating with PADCC, if the said mass/multiple tracks have negative data, the unknown mass track that is within the PH Air Defense Identification Zone (PADIZ) must be challenged.

AIR SURVEILLANCE AND WARNING PROCEDURE

Detection Phase

1. Initial Plot (IP)
 "Radar contact bearing _____, Range _____."
2. Established Track after 1-2 minutes
 "Established Track 101, Tracking _____, Altitude _____,
 Speed _____, PENDING, time _____."

Identification Phase

1. Surveillance section will report to PADCC for correlation and identification.
2. If unable to identify within 2 minutes, Surveillance section will classify the aircraft as:

Unknown

- "X101, UNKNOWN, time _____."
- a. Weapons Section will broadcast on Guard Frequency VHF – 121.5, UHF – 243.0 "This is the Philippine Air Force on Guard. Aircraft at Latitude _____, Longitude _____, Heading _____, you now entered the Philippine Air Defense Identification Zone, identify yourself and state your intention."
(2X)

If TOI responds:

"Roger, contact ATC at 119.3 for identification and instructions."

If TOI does not respond:

- Weapons Section to repeat broadcast at Guard UHF 243.0.
 - BD to upgrade **ADEFCON** level and implement **SCATANA** as necessary.
- b. Upon correlation, reclassify track as "**Friendly**", "**Special**" or "**Hostile**".

Interception Phase

Battle Director (BD) to coordinate with PADCC, ADAC and FOBs for Tactical Actions:

- a. **Action Deferred** – No actions required
- b. **Battle Stations** – Pilots into cockpits with appropriate before-engine-start checks completed.
- c. **Runway Alert** – Fighters are on or near the runway with engines running and ready for immediate takeoff.
- d. **Scramble** – Immediate launch of fighters. Give pilots target information/ 9 Line “A”/in-flight briefing.

Neutralization Phase

1. BD to direct Weapons Section of the following Mission Directives:
 - a. **VID** – establish visual contact and attempt communications. Pilots to report all observations.
 - b. **Escort/ Guide** – intercept and move track of interest (TOI) using International Civil Aviation Organization (ICAO) procedures.
 - c. **Headbutt** – divert TOI away from a restricted or prohibited area.
 - d. **Shootdown/ Kill** – destruction of hostile aircraft.
2. Upon JUDY, Pilots to report 9 Line “B”/ observation from TOI.
3. If TOI will inevitably reach the Bomb Release Line (BRL) before an intercept can be made, BD to alert GBADS.
4. Alert all crew for possible “ARM”.
5. If intercept is successful, execute recovery of fighters as necessary.

DEFENSE READINESS CONDITIONS

DEFCON may be implemented progressively or in any sequence. DEFCON 5 can be declared without declaring DEFCON 1-4. In this event, actions required for DEFCON 1 through 4 would be taken in each and may not occur in sequence.

DEFCON 1 – Normal, (FADE OUT)

A normal readiness posture which can be attained indefinitely and which represents an optimum balance between the requirements of readiness and the routine training and equipping of forces for their primary mission.

DEFCON 2 – Increased Intelligence Watch, (DOUBLE TAKE)

A readiness posture requiring increased intelligence watch and a continuing analysis of the political/military situation in the area of tension. Review, modify or formulation of plans are required. Increase in security and anti-sabotage measures. No measures will be taken which could be considered provocative or which might disclose operational plans.

DEFCON 3 – Increased Readiness, (ROUND HOUSE)

All forces and resources will come from within the Command Plans for the next higher condition are reviewed and readied. No measure will be taken which could be considered provocative or which might disclose operational plans.

DEFCON 4 – Further Increased Readiness, (FAST PACE)

Further increase in military force readiness which is less than a maximum readiness. Certain military deployments may be necessary in consonance with the command's mission. Resources may be made available from outside the command. Preliminary measures are taken to permit the most rapid transition to maximum readiness if necessary.

DEFCON 5 – Maximum Readiness, (COCKED PISTOL)

Maximum readiness of military forces, requiring the highest state of preparedness to execute war plans.

AIR DEFENSE EMERGENCY

Any state of events which indicates, to the CG, PAF or higher authority that hostile air action is in progress or imminent or is probable as to require, in the interest of national security, the implementation of any portion or approved plans and agreements for the defense of the Philippines.

Defense Emergency exists when:

a. A major attack is made upon Philippine Forces, or allied forces and is confirmed by the CG, PAF; Commander of a major service or a higher authority. An overt action of any type is made upon the Philippines and is confirmed either by the CG, PAF; Commander of a major service or a higher authority.

b. A condition of DEFCON 5 or Air Defense Emergency is declared by the Chief of Staff, AFP; CG, PAF.

AIR DEFENSE EMERGENCY ALERT STATUS

a. **WHITE (SNOWMAN)** – Attack by hostile aircraft is improbable. May be called either before or after Air Defense Warning YELLOW or RED.

b. **YELLOW (LEMON JUICE)** – Attack by hostile aircraft or missiles are probable. Unknown or Hostile aircraft are enroute towards or are within an air defense sector.

c. **RED (APPLE JACK)** – Attack by hostile aircraft is imminent or is taking place. This means that hostile aircraft are within an air defense sector or are in the immediate vicinity of an air defense sector with high probability of entering the sector.

EXERCISE CONTROL

- a. Air Defense Emergency / BIG NOISE
- b. Defense Emergency / HOT BOX
- c. Nuclear Detonation / CLEAN SWEEP

STATES OF WEAPONS CONTROL

- a. Discreet Fire / DAMP FINGERS
- b. Weapons Tight / WARM TOUCH
- c. Hold Fire / HANDS FOLDED
- d. Cease Fire / COOL FIT

TRACK CLASSIFICATION AND PRIORITY

TRACK CLASSIFICATION

Hostile – tracks designated by ADC or higher authority IAW established ROE.

Pending – tracks detected but not yet identified.

Unknown – tracks that cannot be identified after 2 min

Special – tracks that falls in the following category:

- a. Emergency aircraft
- b. VIP aircraft
- c. Search and rescue aircraft
- d. Hijacked aircraft

Friendly – tracks identified by means of:

- a. Flight plan correlation
- b. IFF/SIF
- c. Prior arrangement (letter of agreement/frag order)
- d. Visual observation by aircrew
- e. Authentication
- f. Tracks originating over land within the Philippine territory.

TRACK PRIORITY

Priority 1 – Hostile tracks, update every 2 min

Priority 2 – Unknown and Pending tracks, update every 2 minutes.

Priority 3 – Emergency tracks, update every 2 minutes.

Priority 4 – Air Defense Fighters, update every 2 minutes

Priority 5 – Special tracks, update every 2 minutes

Priority 6 – PAF aircraft on training mission update every 5 minutes

Priority 7 – Friendly tracks, update every 5 minutes.

DEPLOYMENT AND EXPENDITURE OF FIGHTERS

Deployment of Fighters

1. A minimum of 2 aircrafts will be deployed for air intercept Missions.
2. Except for missions where state of national security is at stake, single launch of fighters may be authorized by the Air Component Commander, Air Defense Commander or their authorized representative.
3. Target engagement must be at optimum radar range with increasing pressure brought to bear on attacking force as it approaches the Bomb Release Line (BRL).
4. Air intercepts shall be done in close coordination with the respective ADDC and PADCC.
5. Fighters will be issued scramble orders and committed against a target or assigned CAP.
6. Engagement priorities:
 - a. Anti-Radiation Missile (ARM)
 - b. ECM Emitters
 - c. High Speed Targets (600 knots or above)
 - d. Pop-up Targets (inside inner STOPs)

Expenditure of Fighters

1. Consideration must be given to avoid needless use of weapons.
2. Fighters on RTB will fly a direct route or as specified by airborne instructions to expedite turnaround.
3. Close coordination within PADS elements must be carried out to avoid friendly fire.

INTERCEPT PROCEDURES FOR MILITARY AIRCRAFT

1. Identification Purposes

- a. Primary tactic is STERN.
- b. Interceptors will be vectored to the most advantageous position to expedite identification.
- c. Check ARMAMENT SAFE
- d. At 6 miles range, the interceptor must be in same level as the target and not more than 300 aspect angle.
- e. High rates of closure within 5 NM should be avoided.
- f. Overtake speed when closer than 2 NM should not exceed 50 knots.
- g. Only one interceptor will perform the actual recognition and will be positioned either at the left or right of the TOI.
- h. The other will be positioned at the 6 O'clock of the TOI ready to launch an immediate attack if the unidentified aircraft is hostile.
- i. Aircraft may be declared hostile in accordance with existing PAF ROE.
- j. During the ID pass, IR weapons and guns should be pointed directly to the unidentified aircraft.
- k. If no tally-ho at 2 NM, break-off and reposition for another attempt. Breakaway will be a gently dive from the target to pick-up speed.
- l. Wingman stays well clear of the target and joins Leader.
- m. The pilot is the final authority in determining whether aircraft numbers or markings can be obtained with safety.

2. Combat Air Patrol (CAP)

When on CAP mission, aircrew will:

- a. Follow Intercept Director (IND) instructions.
- b. Remain on station using optimum speed and altitude until ordered to leave by the IND or until relieved by another aircraft.
- c. Report all sightings of airborne objects, contrails, or suspicious surface vessels to the controlling agency.

3. Trailer Mission

When on trailer mission, aircrew will:

- a. Orient themselves and locate the target to be trailed.
- b. Maintain a position out of the range of the target's defensive armament which will allow observation of target actions.
- c. Employ IFF/SIF as directed.
- d. Continue to trail the target until relieved by the IND.
- e. Give position at frequent intervals or when so directed to include the following information:
 - Call sign
 - Track or raid number and bearing from a prominent land-mark or control point.
 - Type and number of tracks being trailed.
 - Heading, altitude and speed of target.
 - All additional information such as armament, ECM and tactics being used.

4. Attack

- a. An attack may occur if an intruding military aircraft is declared hostile and order to attack is declared by the Air Defense Commander based on the internationally accepted procedures.
- b. Armament checks must be completed not closer than 20 NM range from the target.
- c. Attack speed and altitude must be attained at offset and visual acquisition of target attained.
- d. At initial attack heading, wingman will slide to one side to assist in searching.
- e. At visual contact, wing man will go fighting wing position ready for an attack in case the leader misses; ready to join expeditiously at breakaway.
- f. In case of multiple targets, fighter elements shall employ appropriate air combat tactics that they deemed necessary depending on the situation.
- g. It is desirable that enemy flight leaders be attacked first for maximum damage.
- h. If evasive tactics are employed, interceptor will maneuver to bear their armament into the target.

INTERCEPT PROCEDURES FOR CIVILIAN AIRCRAFT

1. Approach Phase

- a. Primary tactic is STERN.
- b. Check ARMAMENT SAFE
- c. The element leader, or the single intercepting aircraft, should normally take up a position on the left (port) side of the TOI at the same level, within view of the pilot of the TOI and not closer than 300 meters.
- d. The wingman takes the 6 O'clock position of the TOI.

2. Identification Phase

- a. The element leader, or the single intercepting aircraft, should begin closing gently on the TOI at the level close enough to obtain the information needed.
- b. The element leader, or the single intercepting aircraft, should use caution to avoid startling the flight crew or the passengers of the TOI.
- c. Keep in mind that maneuvers considered normal to an intercepting aircraft may be considered hazardous to passengers and crew of civil aircraft.

3. Post Identification Phase

- a. Upon completion, the intercepting aircraft should withdraw immediately from the vicinity of the TOI.
- b. The element leader, or the single intercepting aircraft, should breakaway gently from the TOI.
- c. Any other participating aircraft should stay well clear of the intercepted aircraft and rejoin their leader.

PROCEDURE FOR INTERCEPTED AIRCRAFT

An aircraft which is intercepted by another aircraft is required to immediately:

- a. Follow the instructions given by the intercepting aircraft and respond to visual signals given.
- b. Notify the appropriate air traffic services unit.
- c. Attempt to establish radio communication with the intercepting aircraft or with the appropriate VHF frequency 121.5 MHz; if no contact is established, call on UHF frequency 243.0 MHz.
- d. If equipped with SSR transponder, select Mode A, Code 7700.
- e. If radio contact with the intercepting aircraft is established but communication in a common language is not possible, attempt recovery essential information and acknowledge instructions by using the following phrases and communications.

Phrase	Meaning
WILCO	Understood and will comply
CANNOT	Unable to comply
REPEAT	Repeat your instructions
AM LOST	Position unknown
MAYDAY	I am in distress

- f. If any instructions are received by radio from any sources conflict with those given by the intercepting aircraft by visual signals or by radio, request immediate clarification while continuing to comply with the visual or radio instruction given by the intercepting aircraft

ESCORT OF DV/VIP AIRCRAFT

1. Assumptions:

- a. DV/VIP aircraft submitted flight plan to the air defense units. In which case the mission will be non-tactical.
- b. When no flight plan is submitted, a tactical "Hot Intercept" will be conducted on the DV/VIP aircraft.
- c. The scheduled block time of the DV/VIP aircraft at NAIA will be maintained.

2. Procedures:

PADCC will be the primary command post for both non-tactical and tactical missions.

- a. The flight data will include but not limited to the following:
 - Type of aircraft
 - Callsign
 - Point of departure
 - ETD
 - Flight Level
 - Airspeed
 - Estimate Philippine FIR
 - Route
 - Estimate PADIZ
 - Estimate Jomalig, Lubang, Romblon or Cabanatuan
 - Fix
 - Estimate Manila VOR
 - Block Time NAIA
- b. The intercept and escort of DV/VIP aircraft will be treated as two (2) distinct and separate missions.
- c. The scheduled block time, when the DV/VIP aircraft is parked at NAIA, will be maintained in order not to disrupt the ceremonial schedule.
- d. Airborne time for intercept, escort and fly-by aircraft will be based on the DV/VIP aircraft block time.
- e. Best airborne time of fighters before block time:

- Interceptor – T minus 70 min
- Escorts – T minus 55 min (3) Flyby – T minus 30 Mins
- f. The Frag Order will include but not limited to:
 - DV/VIP aircraft flight data
 - Number of aircraft
 - Callsign
 - Airborne Time
 - Radio frequencies and task assignments
- g. Mission briefing will be conducted on representatives of task elements.
- h. Briefing will emphasize flying safety and procedures for the best accomplishment of the mission.

3. *Arrival Intercept and Escort:*

- a. Intercept and escort mission will be made when the DV/VIP aircraft is on the descent profile and indicating 300 knots airspeed.
- b. Standard air defense interception tactics and techniques will be followed by weapons director and aircrew, and restricted by maximum flying safety precautions.
- c. Intercept points will be 10 NM off Jomalig, 50 NM off Lubang intersection, over Poro Pt. TACAN or at Romblon VOR.
- d. Join-up escort aircraft will be affected at any point between Jomalig and Antipolo, or Lubang and Rosario leg or of Airway Green 9 or between 100 NM and Lipa of Airway Amber 1 South or 100 NM Cabanatuan of Airway Amber 1 North.
- e. Escort will be up to Manila VOR or when the DV/VIP aircraft is commencing a straight-in approach for landing.

4. *Flyby:*

- a. After the escort, a flyby will be made over NAIA. This will be on call of NAIA Tower.
- b. A 2 min IP on the 1300 radial of the NAIA VOR will be established for the flyby.
- c. During arrival, flyby controller will start the 7 minutes countdown for the flyby when the DV/VIP aircraft touches down on the runway.
- d. Time on Target (TOT) for flyby aircraft will be when DV/VIP steps out of the aircraft and proceeds to the ceremonial honors platform.

During departure, flyby controller will start the 5 min countdown for the flyby immediately after the departure honors have rendered. TOT will be made when DV proceeds to board his aircraft.

5. *Departure Escort:*

- a. Escort aircraft will establish an IP on the final approach direction of the runway in use.
- b. When the DV/VIP aircraft takes the active, escort aircraft will be on the way to take position.
- c. Escort will start when the DV/VIP aircraft is on the take-off roll and terminates 100 NM off NAIA or at the discretion of the escort flight leader.

6. *Communications Failure:*

- a. In the event of communications failure with the controlling site, the interceptor flight lead may use his discretion to continue intercept by "Eye Ball" guided by the following precautionary measures:
 - He is sure of safe visual intercept.
 - He has positive radio contact with escort flight.
 - Position of the DV/VIP aircraft can be "Dead Reckoned" (DR) from the last known position or based on the flight plan.
- b. If visual intercept is successful, interceptor flight lead will guide the escort flight through radio towards the DV/VIP aircraft for the join-up.
- c. If visual intercept is not made prior to reaching Lubang, Jomalig, Lipa or Cabanatuan, interceptors will advise escort flight and break off.

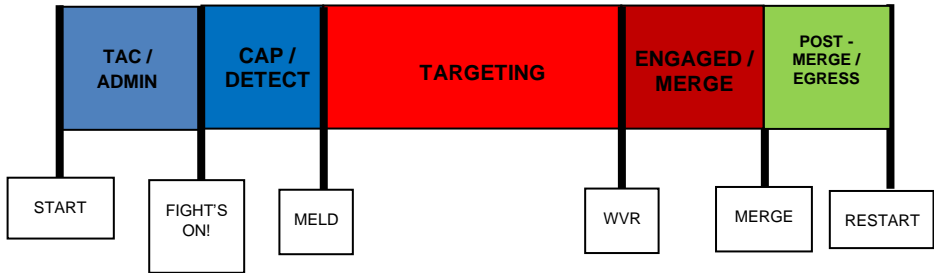
7. Restrictions:

- a. Flying safety will be paramount in the accomplishment of the mission.
- b. No intercepts of DV/VIP aircraft will be made under the following conditions:
 - At night or under IFR conditions.
 - Visibility below 5 miles when under radar control or any degree of restricted visibility when not under radar control.
 - When escort flight commander losses radio contact with all stations except when in condition stated in communications failure.
- c. Escort formation will not fly closer than 500 ft from DV/VIP aircraft.
- d. At no time will the fighter escort cross the path of the DV/VIP aircraft.
- e. Escort formation will not be made at any time DV/VIP aircraft is in approach traffic for landing.

TACTICAL CONTROL INTERCEPTION TACTICS

A mode of control providing information in BRAA, bullseye, or geographic reference.

Phases of Intercept during Tactical Control.



Tactical / Admin

- a. Identify fighter aircraft after take - off.
- b. Check in on communications; Alpha Check.
- c. Pilot alibis and PIREP.
- d. Authentication.

Fight's On!

- a. Fight's On!
- b. Start of Vulnerability Window.
- c. Declare delay or alibis (Rolex).

CAP / Detect

- a. Sanitize Radar Picture.
- b. Detect / Track Target Groups.
- c. Core Information (Picture Call).
 - 1) Number of Groups
 - 2) Location in relevance to Bullseye ;
 - 3) Altitude;
 - 4) Identification and
 - 5) Fill – ins

- d. Anchoring Priorities:
 - 1) Closest to fighters
 - 2) Heaviest
 - 3) Highest
 - 4) Closest to Bullseye
- e. Picture Development
 - 1) Single Group / Inner Groups
 - 2) Two (2) Groups
 - 3) Three (3) or more Groups
- f. Group Maneuvers
- g. New Group / Picture

MELD / Targeting

- a. Know fighter targeting plan (Sorting vs Targeting)
- b. Check fighter targeting plan
- c. Call Untargeted Groups
- d. Pop - up Targets / Groups
- e. Faded Targets / Groups

Engage / Merge

- a. Threat Call (SPIKE, TALLY, MERGE)

Post - Merge / Egress

- a. Threats
- b. Follow on Targeting

RT LIVE INTERCEPT (TACTICAL CONTROL)

BD : SAPAT, THIS IS BD, 2 CHICKS, CHECKING IN FOR YOUR CONTROL.

SAPAT : BD FLIGHT, RADIO CHECK 12345 HOW COPY?

BD : YOU'RE COMING 5 BY, HOW ME?

SAPAT : LIKEWISE, YOU'RE COMING 5 BY.

BD, AUTHENTICATE_____

BD : AUTHENTICATE_____

SAPAT : GOOD AUTHENTICATE

BD : SAPAT, UP AS FRAGGED, ALPHA CHECK.

SAPAT : BD FLIGHT, ALPHA CHECK **CEASAR XYZ** TRACKING____.

BD : GOOD ALPHA CHECK.

BD : BD 11 PROCEEDING SOUTH CAP, BD 12 PROCEEDING NORTH CAP.

SAPAT : ROGER, BD 11 PROCEEDING SOUTH CAP, BD 12 PROCEEDING NORTH CAP, CALL WHEN ESTABLISHED.

IN THIS RT, BD 11 IS THE FTR, BD 12 IS THE TGT (THIS IS SET DURING THE MISSION BRIEFING)

BD 12 : SAPAT, NORTH CAP READY.

CALL SOUTH CAP OR NORTH CAP WHEN NOT YET READY

SAPAT : NORTH CAP READY, SAPAT READY, SOUTH CAP READY?

BD 11 : SOUTH CAP READY.

SAPAT : SOUTH CAP READY, FIGHT'S ON FIGHT'S ON!

(FIGHT'S ON AUTHORITY WILL DEPEND ON THE BRIEFING)

BD : FIGHT'S ON!

BD 11 : SAPAT, REQUEST PICTURE

SAPAT : BD 11, PICTURE **SINGLE GROUP** CEASAR XYZ, TRACKING____, ID, **2 CONTACTS**

BD 11 : ROGER, PICTURE *SINGLE GROUP* CEASAR XYZ,
TRACKING____, HOSTILE, *2 CONTACTS*

SAPAT : BD 11, VECTOR ____.

BD 11 : ROGER, VECTOR ____.

SAPAT : WHEN STEADY ____, TARGET BRAA XYZ,
TRACKING____, HOSTILE, *2 CONTACTS*

BD 11 : ROGER, WHEN STEADY ____, TARGET BRAA XYZ,
TRACKING ____, HOSTILE, *2 CONTACTS*

SAPAT : LEFT / RIGHT ____.

BD 11 : ROGER, LEFT / RIGHT ____.

SAPAT : WHEN STEADY ____, TARGET BRAA XYZ, TRACKING
____, HOSTILE, *2 CONTACTS*

BD 11 : SAPAT, TARGETTED.

SAPAT : ROGER, TARGETTED. COMMIT.

BD 11 : SAPAT, JUDY, JUDY.

SAPAT : ROGER JUDY, YOU'RE CLEAR TO ENGAGE, SAPAT
STANDING BY.

BD 11 : FIRING FOX 3!

SAPAT : BD 11, WHAT LUCK?

BD 11 : SPLASHED ONE FA50.

SAPAT : ROGER, SPLASHED ONE FA50.

BD 11 : TERMINATE.

SAPAT : SAPAT TERMINATE, CALL WHEN
ESTBALISHED. (*FOR NEXT PASS*)

BD : SAPAT, ALPHA CHECK.

SAPAT : BD, ALPHA CHECK CEASAR XYZ, TRACKING ____.

RT LIVE INTERCEPT (CLOSE CONTROL) / SINGLE SIDE OFFSET

BD : SAPAT, BULLDOG

SA : BD, THIS IS SAPAT

BD : HAS YOU LOUD AND CLEAR, AUTHENTICATE,
_____,_____

SA : AUTHENTICATE _____

BD : GOOD AUTHENTICATE

BD : BULLDOG, 2 CHICKS FEET WET, UP AS FRAGGED,
STANDING BY ALPHA CHECK

SA : BD, ALPHA CHECK
__B/E__B__,__R__,__A__,__S__,__TRACKING__

BD : GOOD ALPHA CHECK

SA : BD, SAY INTENTION

BD : SAPAT, WE WILL PERFORM AIR INTERCEPT, BULLDOG
11 WILL BE THE FIGHTER AT SOUTH CAP, BULLDOG
WILL BE THE ADVERSARY AT NORTH CAP

SA : ROGER COPY, CALL WHEN ESTABLISHED

BD : SAPAT, FIGHTER AT SOUTH CAP, READY

SA : ROGER COPY, STANDBY

SA : NORTH CAP, READY?

TGT : SAPAT, NORTH CAP, READY

SA : ROGER COPY, FIGHTS ON!!

SA : BULLDOG, PICTURE SINGLE GROUP __B/E__
__B__,__R__,__A__,__S__, TRACKING____,
BOGEY/HOSTILE

BD : ROGER PICTURE SINGLE GROUP __B/E__
__B__,__R__,__A__,__S__, TRACKING____,
BOGEY/HOSTILE

BD : SAPAT, BULLDOG READY FOR CLOSE CONTROL

SA : BULLDOG LEFT,RIGHT____,CLIMB ANGELS____, SET
SPEED____, FOR VID

BD : ROGER VID, LEFT,RIGHT ____,CLIMB ANGELS ____, SET
SPEED _____

DIRECT FIGHTER UNTIL TALLY HO / JUDY

SA : BULLDOG, 9-LINE ALPHA READY TO COPY?

BD : ROGER READY TO COPY

SA : BULLDOG, 9-LINE ALPHA

LINE 1 – _____

LINE 2 - _____

LINE 3 – _____

LINE 4 - _____

LINE 5 – _____

LINE 6 - _____

LINE 7 - _____

LINE 8 - _____

LINE 9 - _____

BD : 9-LINE ALPHA

LINE 1 – _____

LINE 2 - _____

LINE 3 – _____

LINE 4 - _____

LINE 5 – _____

LINE 6 - _____

LINE 7 – _____

LINE 8 - _____

LINE 9 - _____

DIRECT FIGHTER UNTIL TALLY HO / JUDY

BD : SAPAT, TALLY

SA : ROGER TALLY KEEP TALLY THAT'S YOUR TARGET

BD : SAPAT JUDY

SA : ROGER JUDY SAPAT STANDING BY

BD : TARGET ID HOSTILE, SINGLE SU 35, REQUEST TO
ENGAGE

SA : CLEAR TO ENGAGE

BD : CLEAR TO ENGAGE ,FOX 2

SA : BULLDOG, WHAT LUCK?

BD : SAPAT, KILL 1 SU 35, BULLDOG TERMINATE

TGT : TARGET TERMINATE

SA : SAPAT TERMINATE

BD : SAPAT, SETTING UP FOR ANOTHER PASS, SAME SET UP

SA : ROGER ,CALL WHEN ESTABLISHED

BD : SAPAT, FIGHTER AT SOUTH CAP, READY

SA : ROGER COPY, STANDBY

SA : NORTH CAP, READY?

TGT : SAPAT, NORTH CAP, READY

SA : ROGER COPY, FIGHTS ON!!

BD : SAPAT, KNOCK IT OFF

SA : ROGER RTB, VECTOR ____ FOR HOME PLATE

BD : ROGER VECTOR ____ FOR HOME PLATE

SA : BULLDOG WHEN STEADY ____, PIGEONS TO HOMEPLATE, 12 O'CLOCK, ____ MILES

BD : ROGER PIGEONS TO HOMEPLATE, 12 O'CLOCK, ____ MILES

BD : SAPAT, REQUEST RELEASE

SA : ROGER STATE FINAL FUEL

BD : BD11, __ NORMAL / BINGO, BD 12 __ NORMAL / BINGO

SA : ROGER BD11, __ NORMAL / BINGO, BD 12 __ NORMAL / BINGO, YOU ARE NOW RELEASED FROM MY CONTROL TIME ____ PAST THE HOUR, THANK YOU FOR THE MISSION, HAPPY LANDING.

MARPAT RT PROCEDURES

BD: SAPAT, BULLDOG RADIO CHECK HOW YOU READ?

SA: BULLDOG YOUR COMING LOUD AND CLEAR

BD: LIKEWISE 5X5, UP AS FRAGGED STANDING BY FOR ALPHA CHECK

SA: BULLDOG ALPH CHECK PAREDES _B_, _R_, _A_ TRACKING _____

BD: GOOD ALPHA CHECK

SA: COPY SAPAT, STATE MISSION

BD: BULLDOG WILL CONDUCT MARPAT AT _____

SA: ROGER, SAPAT WILL MONITOR

[GIVE WEATHER, SITUATION STATUS AT MARPAT SITE]

SA: BULLDOG, CLEAR PICTURE AT _____

BD: ROGER, BULLDOG, ADVISE FOR TRACK OF INTEREST/TOIs

SA: ROGER SAPAT WILL ADVISE

[TRACK OF INTEREST ENTERED AT AREA OF MARPAT]

SA: BULLDOG, BE ADVISED, ONE TOI ENTERED PICTURE, STANDBY FOR NEW PICTURE

BD: ROGER, STANDING BY

SA: BD PICTURE SINGLE GROUP, PAREDES ____, ____, ____, TRACKING ____, UNKNOWN

BD: COPY PICTURE SINGLE GROUP, PAREDES ____, ____, ____, TRACKING ____, UNKNOWN

SA: BULLDOG WILL CORRELATE WITH PANA STATUS OF TOI, STANDBY

BD: ROGER, BULLDOG STANDING BY

[ADVISE CHANGE OF REQUENCY FOR GUARD CALL]

SA: BULLDOG, BE ADVISED, SAPAT TO CHANGE FREQUENCY FOR GUARD CALL ON TOI

BD: ROGER, COPY

SA: ROGER, CHANGING FREQUENCY

[*** PERFORM GUARD CALL ON TOI *****]**

[TOI IS FRIENDLY]

SA: BULLDOG, UPON CORRELATION WITH PANA, TOI IS FRIENDLY C/S ____

BD: COPY, FRIENDLY, ____ C/S ____

SA: SAPAT ONGOING MONITORING TOI

[TOI EXITED AREA OF MARPAT]

SA: BULLDOG, BE ADVISED, TOI EXITED AREA OF MARPAT, CLEAR PICTURE THIS TIME

[IF TOI IS UNKNOWN]

SA: BULLDOG, UPON CORRELATION WITH PANA, TOI IS UNKNOWN

SA: BULLDOG CONTINUE PRESENT MISSION / INTERCEPT TOI, STANDBY FOR PICTURE

[RETURN TO BASE]

BD: SAPAT, BULLDOG REQUEST RTB, PIGEONS TO HOME PLATE

SA: ROGER, VECTOR _____, _____ FOR HOMEPLATE

BD: ROGER SAPAT PIGEONS TO HOMEPLATE _____, _____

SA: BULLDOG STATE FINAL FUEL

BD: BINGO

SA: ROGER BINGO

BD: SAPAT REQUEST RELEASE

SA: ROGER, YOU ARE NOW RELEASED FROM MY CONTROL TIME _____

PAST THE HOUR THANK YOU THE MISSION HAPPY LANDING

REPORTING PROCEDURES

9 Line “A” – GCI to Pilots

1	TOI#	Target of Interest (TOI) number	
2	JTN#	Joint Tactical Network Number	
3	Mode 3	Squawk Code	
4	Callsign	Designation for Radio Transmitting	
5	A/C Type	Type of Aircraft if known	
6	Tail#	Aircraft Tail number if known	
7	Markings	Visible aircraft markings if known	
8	Reason	Why needed to be intercepted	
9	Remarks	Type of intercept mission	

9 Line “B” – Pilots to GCI

1	A/C Type	Type of Aircraft	
2	Tail#	Aircraft Tail number	
3	Markings	Any visible markings	
4	Light/elec	Is the aircraft lights/electrical system working?	
5	Shades	Does the a/c window shades are up/down / NA	
6	#Pilots	How many visible pilots on board?	
7	Acknowledge?	Do the pilots acknowledge on signals or on guard calls?	
8	A/C Config	Does the a/c have external stores? What are they?	
9	Remarks	Any information that can help the C2 for decision-making	

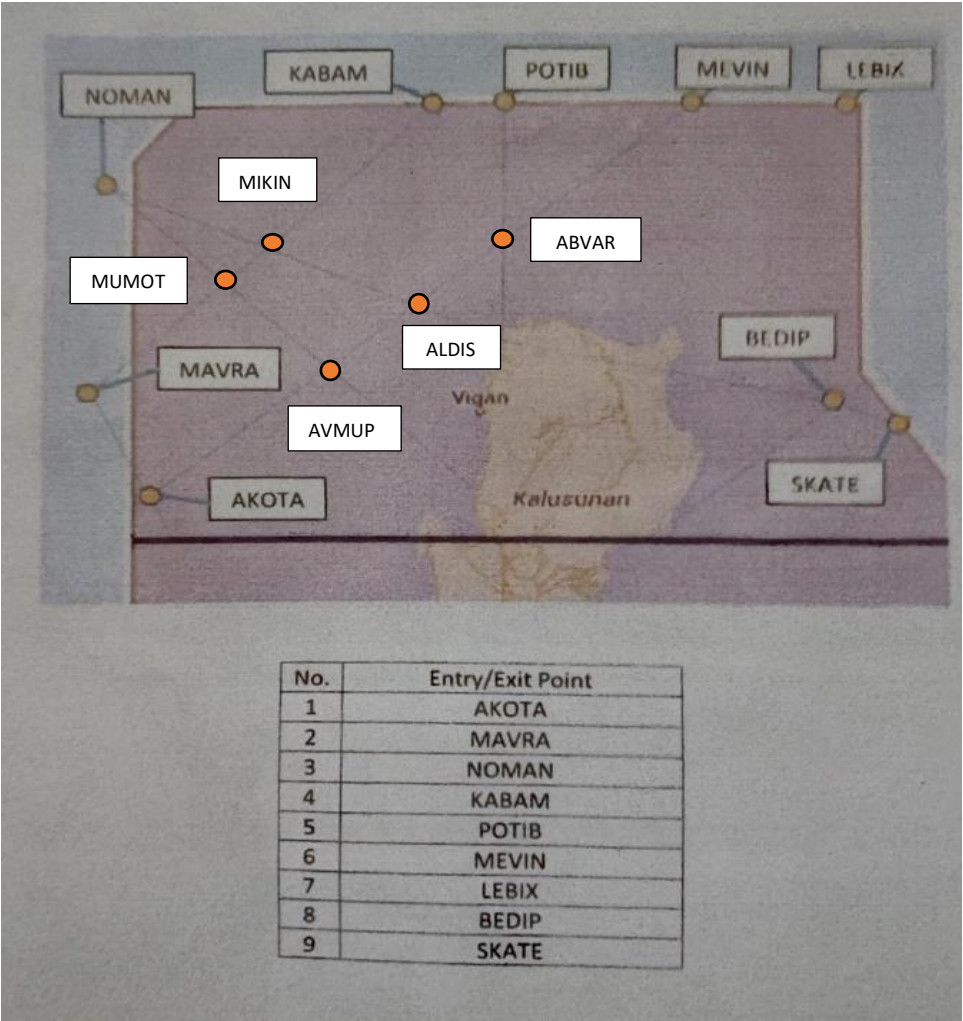
RADIO COMMUNICATION FREQUENCIES

GUARD FREQUENCIES	
VHF	121.5
UHF	243.0

PAREDES	
PRIMARY	125.5
SECONDARY	123.4

BULLDOG / BLACKJACK			
UHF		VHF	
1 UNIFORM	236.600 MHz		
2 UNIFORM	305.400 MHz		
3 UNIFORM			
4 UNIFORM	344.700 MHz		
5 UNIFORM	230.800 MHz		
6 UNIFORM	283.400 MHz		
7 UNIFORM	225.100 MHz		
8 UNIFORM	384.000 MHz		
9 UNIFORM	276.300 MHz		
10 UNIFORM	325.100 MHz		
11 UNIFORM	376.500 MHz		
12 UNIFORM	379.900 MHz		
13 UNIFORM	344.400 MHz		
14 UNIFORM	276.125 MHz		
15 UNIFORM	133.000 MHz		
16 UNIFORM	277.025 MHz		
17 UNIFORM	276.500 MHz		
18 UNIFORM	300.600 MHz		
19 UNIFORM	279.975 MHz		
20 UNIFORM	305.600 MHz		

PAS AOR / REPORTING STATIONS



BREVITY CODE

ACTION—Directive call to initiate a briefed attack sequence or maneuver.

ACTIVE (location/direction)—Referenced emitter is radiating at the stated location or along the stated bearing.

ALLIGATOR—LINK-11/ TADIL-A.

AS FRAGGED—Unit or element will be performing exactly as stated by the air tasking order (ATO)

ATTACKING—Indicates air-to-surface (A/S) attack on a specific ground target.

(weapon) AWAY—Release/launch of specified weapon

BANDIT—An aircraft identified as an enemy IAW theater identification criteria. The term does not necessarily imply direction or authority to engage.

BANZAI—Informative or directive call to execute launch-and-decide tactics.

BIRD—Friendly surface-to-air missile (SAM)

BIRD(S) AFFIRM—Surface-to-air informative call indicating unit is able and prepared to engage a specified target with SAMs (presumes target is within or will enter the SAM engagement envelope).

BRACKET (w/direction)—Directive call to maneuver to a position on opposing sides, either laterally or vertically from the targets.

BUSTER—Directive call to fly at max continuous speed (Mil power).

CHEAP SHOT—AIM-120 missile data link terminated between high pulse repetition frequency (HPRF) and medium pulse repetition frequency (MPRF).

DEFENSIVE—Speaker is under attack, is maneuvering defensively, and is unable to ensure deconfliction or mutual support.

DEFENDING (w/direction)—Aircraft is in a defensive position and maneuvering with reference to a surface-to-air threat.

FAST—Target speed is estimated to be 600 to 900 knots ground speed/Mach 1 to 1.5

FOX—A/A weapons employment.

FOX ONE—Simulated or actual launch of semiactive radar-guided missile.

FOX MIKE—VHF/FM radio.

FOX TWO—Simulated or actual launch of IR-guided missile

FOX 3/SECOND FOX 3—Simulated or actual launch of active radar-guided missiles on the same target. .

FURBALL—Response to a DECLARE request indicating known bandits and friendlies in close proximity.

GADGET—Radar or emitter equipment.

GENIE—Emitter is employing electronic protection measures.

GORILLA—Large force of indeterminable numbers and formation

HIGH—Target is between 25,000 and 40,000 feet MSL

JACKAL—Surveillance network participating group (NPG) of LINK-16/TADIL-J

LOWDOWN—A request to provide tactical ground information pertinent to the mission in a digital bullseye format.

LEAKERS—Airborne threat has passed through a defensive layer. Call should include amplifying information.

LOW—Target altitude is below 10,000 feet MSL.

MADDOG—Visual AIM-120 launch.

MAGNUM (system/location)—Launch of friendly antiradiation missile (ARM).

MANEUVER (AZIMUTH/RANGE/ALTITUDE)—Informative call that said group is maneuvering in azimuth, range, and/or altitude.

MEDIUM—Target altitude between 10,000 and 25,000 feet MSL.

MUSIC—Electronic radar jamming (on air intercept [AI] radar, electronic deception jamming)

NO FACTOR—Not a threat.

OFFSET (w/direction)—Informative call indicating maneuver in a specified direction with reference to the target.

PACKAGE—Geographically isolated collection of GROUPS.

PARROT—IFF/SIF transponder.

POP-UP—Informative call of a group that has suddenly appeared inside of meld/No New Picture/briefed range

PUMP—A briefed maneuver to low aspect to stop closure on the threat or geographical boundary with the intent to reengage. Will be used to initiate a Grinder tactic

ROLEX (+/-time)—Time line adjustment in minutes always referenced from original preplanned mission execution time. Plus means later; minus means earlier

RUMBA—Radar has detected jamming but has not resolved the type.

SCRUB—A low, slow airborne target

SHORT SKATE—Informative or directive call to execute launch-and-leave tactics and be out no later than minimum abort range (MAR)/decision range (DR)

SKATE—Informative or directive call to execute launch-and-leave tactics and be out no later than desired out range (DOR)/minimum out range (MOR).

SLIDE—Directive/informative call to/from high value airborne asset (HVAA) to continue present mission while flowing from station in response to perceived threat; implies intent to RESET.

SLOW—Target with ground speed of less than 300 knots

SORT—Directive call to assign responsibility within a GROUP; criteria can be met visually, electronically (radar), or both

SORTED—SORT responsibility within a group has been met.

SPADES—An interrogated group/radar contact which lacks all of the ATO (or equivalent) IFF/SIF modes and codes required for the identification criteria

STROBE (w/bearing)—Radar indications of noise jamming.

TRESPASS (system, w/position)—The addressed flight is entering the surface-to-air threat ring of a specific (system) at the stated location.

TUMBLEWEED—Indicates limited SA, NO JOY, and BLIND. A request for information

VERY FAST—Target speed greater than 900 knots ground speed/Mach 1.5

VERY HIGH—Target altitude above 40,000 feet MSL.

WEAPONS ()—Fire only:

1. **FREE**—At targets not identified as friendly IAW current ROE.

2. **TIGHT**—At targets positively identified as hostile IAW current ROE.

3. **HOLD (USAF, USMC, USA)/SAFE (USN)**—In self-defense or in response to a formal order

WINCHESTER—No ordnance remaining.

ZAP—Request for data link information.

TERMS AND DEFINITIONS

A-Pole—The distance from the launching aircraft to the target when a missile begins active guidance.

ACA (airspace coordination area)—A 3-dimensional box in the sky defined by grid and/or land references and an altitude block (AGL). The intent of an ACA is to allow simultaneous attack of targets near each other by multiple fire support means, one of which is air.

ACBT (air combat training)—A general term which includes dissimilar basic fighter maneuvers ([D]BFM), dissimilar air combat maneuvers ([D]ACM), and dissimilar air combat training ([D]ACT).

ACM (air combat maneuvering)—Training designed to achieve proficiency in element formation maneuvering and the coordinated application of BFM to achieve a simulated kill or effectively defend against one or more aircraft from a planned starting position.

ACO (airspace control order)—Document that details all approved airspace requests. The ACO will complement the ATO cycle and serve as the single planning document for airspace considerations.

ACT (air combat tactics)—Training in the application of BFM, ACM, and intercept skills to achieve a tactical A/A objective.

advisory control—A mode of control in which the controlling agency has communications but no radar capability.

angle off—The angle formed by the extension of the longitudinal axes of two aircraft. Angle is measured from defender's 6 o'clock. Also called track-crossing angle.

ATO (air tasking order [frag])—Assigns A/A and A/S targets, time on target (TOT), and mission support information.

BFM (basic fighter maneuvers)—Training designed to apply aircraft handling skills to gain proficiency in recognizing and solving range, closure, aspect, angle off, and turning room problems in relation to another aircraft to either attain a position from which weapons may be

employed, deny the adversary a position from which weapons may be launched, or defeat weapons employed by an adversary.

broadcast control—A mode of control that passes target information by referencing a designated location or series of locations.

CAP (combat air patrol)—Refers to either a specific phase of an A/A mission or the geographic location of the fighter's surveillance orbit during an A/A mission prior to committing against a threat.

cell—Two or more tankers flying in formation.

chaff—A passive form of electronic countermeasure used to deceive airborne- or ground-based radar.

defensive maneuvering—Maneuvers designed to negate the attack or ordnance of a threat.

DOR (desired out range)/MOR (minimum out range)—Range from the closest bandit where an aircraft's "out" will defeat any bandit's weapons in the air or still on the jet and preserve enough distance to make an "in" decision with sufficient time to reengage the same group with launch-and-decide tactics. This also gives trailing elements a "clean" picture, reducing identification problems when targeting.

DR (decision range)—Minimum range at which a flight member can execute the briefed Notch maneuver, assess spike status, and execute an abort maneuver remaining outside the threat's maximum stern weapons employment zone (WEZ) once the abort maneuver is completed.

element—A flight of two aircraft.

E-Pole—The range from a threat aircraft that an abort maneuver must be accomplished to kinematically defeat any missile the bandit could have launched or is launching.

F-Pole—F-Pole is the separation between the launch aircraft and the target at missile endgame/impact.

FBR (factor bandit range)/factor range—FBR is the minimum range between threat groups

that allows the fighter to achieve F-Pole on the closest group and still maintain first launch opportunity (FLO) on all groups outside this range. All groups within this range must be targeted. Groups outside FBR can be subsequently engaged or avoided. Groups outside FBR should not be included in initial targeting in order to maximize firepower; FBR is driven by threat weapons capability, fighter weapons capability, closure, and proficiency.

HAVE QUICK—A UHF jam-resistant radio.

lag pursuit—An attack geometry where the attacker's nose points behind the target.

lead pursuit—An attack geometry where the attacker's nose points ahead of the target.

LR (lock range)—The radar LR gives the fighter enough time to lock, identify, make an engagement decision, and still maintain FLO.

meld—The pre-briefed range where radars come out of their primary search responsibilities to find their primary target/sort responsibility, the next highest threat, and the whole picture if able.

minimum abort range (MAR)/E-Pole—The range at which an aircraft can execute a maximum performance out/abort maneuver and kinematically defeat any missiles and remain outside an adversary's WEZ.

MOR (minimum out range)/DOR (desired out range)—Range from the closest bandit where an aircraft's "out" will defeat any bandit's weapons in the air or still on the jet and preserve enough distance to make an "in" decision with sufficient time to reengage the same bandit group with launch-and-decide tactics. This also gives trailing elements a "clean" picture, reducing identification problems when targeting bandits.

Phantom Target - An imaginary target aircraft that is used during Air Combat Manuevers to simulate Group Formations; can be initiated by ABM or pilots based on Mission Briefing.

Pop up (Target) - Group or target that has suddenly appeared inside MELD/MERGE range.

RESAN (re-sanitize)—A range (prior to MELD) at which fighters who have been peeking, reset their radar coverage to search the extremes of their altitude AOR.

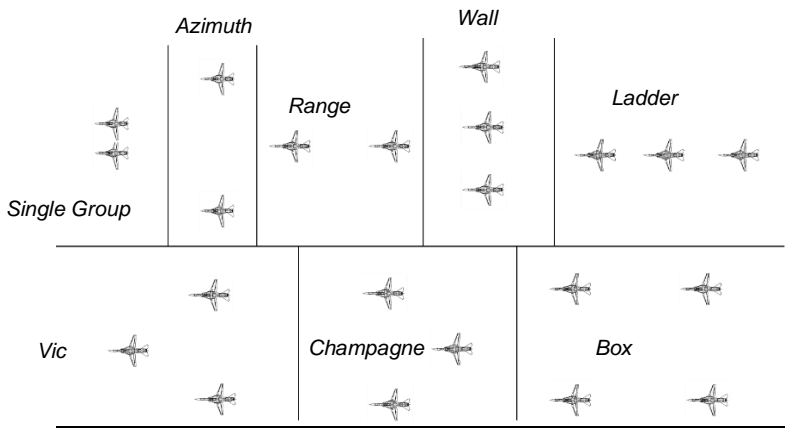
sanitize—Using sensors to search an area for threats.

tactical control—A mode of control providing information in BRAA, bullseye, or geographic reference.

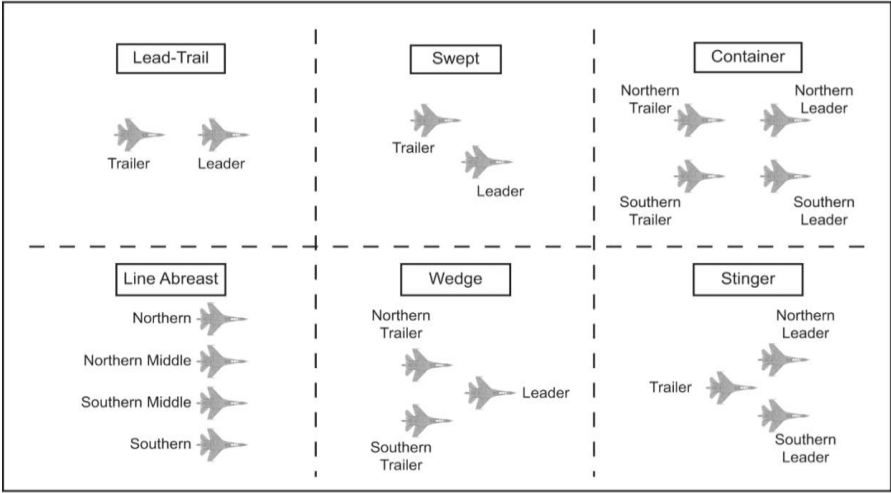
zap zone—Indicates an area of maximum exposure to enemy fire

STANDARD PICTURE LABEL FORMATIONS

GROUP FORMATIONS



INNER GROUP FORMATIONS



COMMUNICATION PRIORITIES

1	Flight safety and aircraft emergencies.
2	KILL verification (in a training environment: range training officer (RTO) communications).
3	DEFENDING, SPIKE, and THREAT calls.
4	Requests for controller and fighter targeting situational awareness (i.e., DECLARE or BOGEY DOPE).
5	Response to electronic attack.
6	PICTURE or fill-ins.
7	Tactical administration (e.g., WORDS update).

A/A INTERCEPT PHASES AND PRIORITY COMMUNICATORS

Phase	Priority Communicators
1. Pre-COMMIT or MARSHAL	1. Controller. 2. Fighters.
2. Post-COMMIT or PUSH	1. Fighters. 2. Controller.
3. Merge	1. Engaged Fighter. 2. Supporting Fighters. 3. Controller.
4. Postmerge	1. Fighter Clearing a Merge. 2. Supporting Fighters. 3. Controller.

MISSION PLANNING

PRE-FLIGHT BRIEFING

- ☐ Mission Profile;
- ☐ Aircraft / Pilots
- ☐ Playing Area
- ☐ Aircraft Control Tactics
- ☐ Coordination Cards;
- ☐ Special Instructions (SPINS);
- ☐ Ladder Cards;
- ☐ Contracts;
- ☐ Contingencies / Emergency Procedures;
- ☐ Weather;
- ☐ Flight Safety; and
- ☐ Other information critical for Mission.

RADAR SCOPE SET-UP

- Detailed AWC must perform proper configuration and Radar set - up based on the Pre - Flight Information (Bullseye, frequencies, playing area, etc.) before flight.

PRE-FLIGHT MONITORING

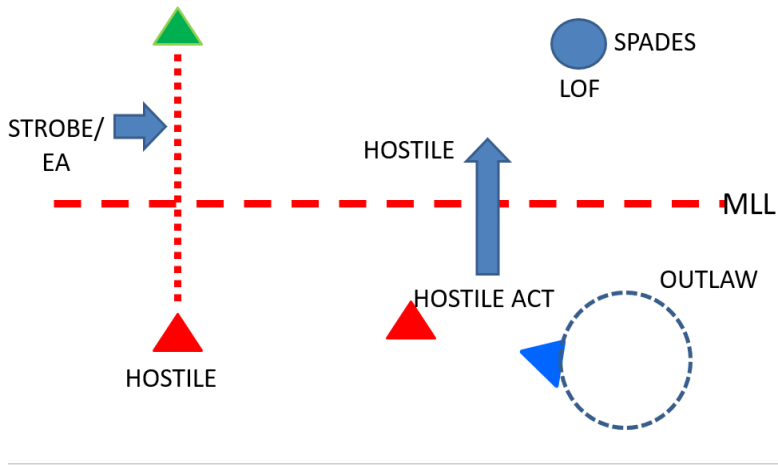
- AWC Final Pre - Flight Briefing will be conducted by detailed AWC to other AWCs and ICTs to finalize Aircraft Tactics, Contracts and contingencies, etc.
- Detailed ICT will monitor for the flight status (Suiting up/ Start Engine/ Taxiing/ Take Off). Any emergencies or discrepancies regarding the scheduled flight will be logged; if none, detailed AWC will standby for Radar and communications pickup of scheduled flight.

DEBRIEFING

- Detailed AWC will conduct AWC Post - Flight Debriefing together with other AWCs with the supervision of the Supervisor AWC to discuss matters such as but not limited to:
 - 1) Aircraft Control Tactics performed;
 - 2) Safety of Aircraft Control;
 - 3) Quality of Radar pick up during Mission Flight;
 - 4) Quality of Communications during Mission Flight;
 - 5) AWC Assessment of Supervisor AWC;
 - 6) Pilot Assessment of detailed AWC; and
 - 7) Other information regarding Mission Flight.

ID MATRIX

- LOF: Not squawking blue air mode 3s= **"SPADES"**
- PEI: South of MLL = **"OUTLAW"**
- LOF+PEI= **"BANDIT"**
- HOSTILE ACT= Crossing the MLL
- LOF+PEI+HA= **"HOSTILE"**



PICTURE CALLS

I. Single Group, Single Contact Tactical Control

1 Bandit versus 1 Fighter aircraft intercept



SA: BULLDOG, PICTURE SINGLE GROUP __B/E__

__B__, __R__, __A__, __S__, TRACKING ____, BOGEY/HOSTILE

BD: ROGER PICTURE SINGLE GROUP __B/E__

__B__, __R__, __A__, __S__, TRACKING ____, BOGEY/HOSTILE

II. Single group, two or more contacts tactical control

LEAD - TRAIL

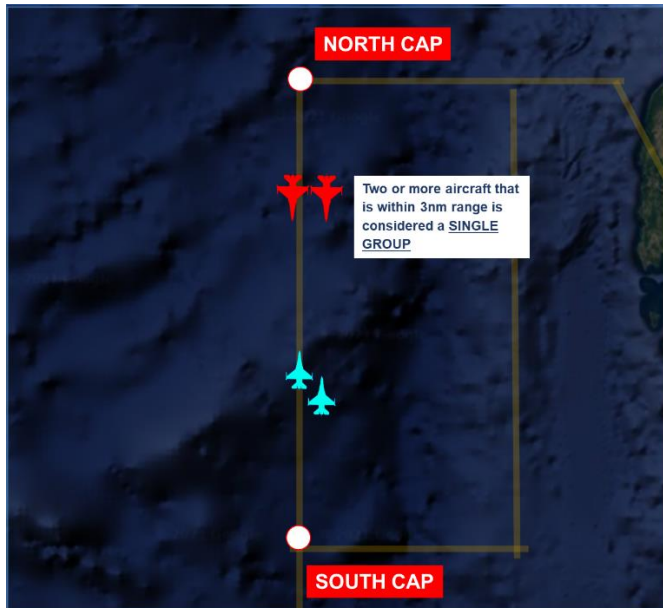


LEAD - TRAIL

SA: BULLDOG, PICTURE SINGLE GROUP **LEAD**
TRAIL __B/E__, __B__, __R__, __A__, TRACKING ____,
BOGEY/HOSTILE, **2 CONTACTS**

BD: ROGER PICTURE SINGLE GROUP LEAD TRAIL
__B/E__, __B__, __R__, __A__, TRACKING ____,
BOGEY/HOSTILE, 2 CONTACTS

LINE ABREAST

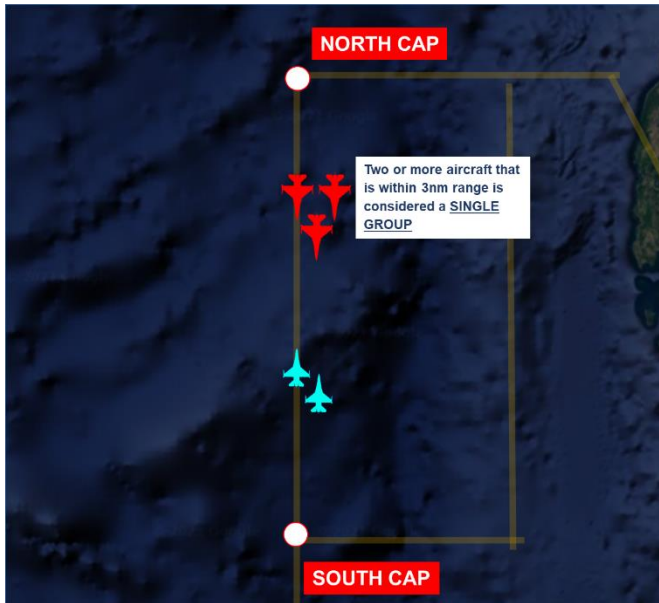


LINE ABREAST

SA: BULLDOG, PICTURE SINGLE GROUP **LINE ABREAST** __B/E__, __B__, __R__, __A__,
TRACKING____, BOGEY/HOSTILE, **2 CONTACTS**

BD: ROGER PICTURE SINGLE GROUP LINE ABREAST
__B/E__, __B__, __R__, __A__, TRACKING____,
BOGEY/HOSTILE, 2 CONTACTS

WEDGE

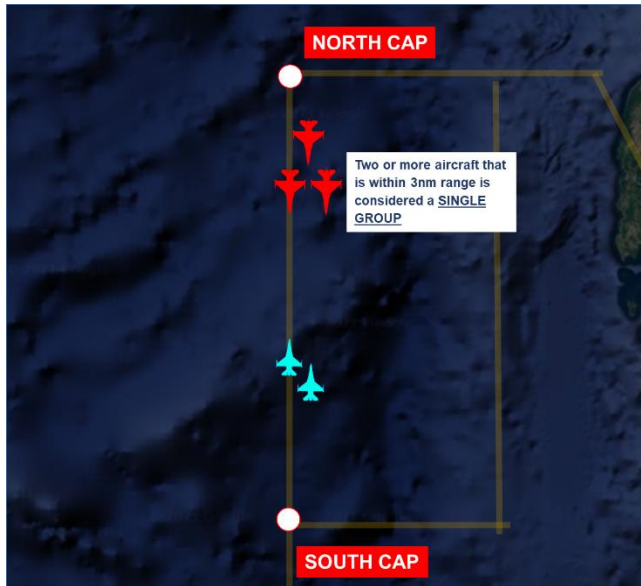


WEDGE

SA: BULLDOG, PICTURE SINGLE GROUP **WEDGE**
__B/E__, __B__, __R__, __A__, TRACKING ____,
BOGEY/HOSTILE, **3 CONTACTS**

BD: ROGER PICTURE SINGLE GROUP WEDGE
__B/E__, __B__, __R__, __A__, TRACKING ____,
BOGEY/HOSTILE, 3 CONTACTS

STINGER

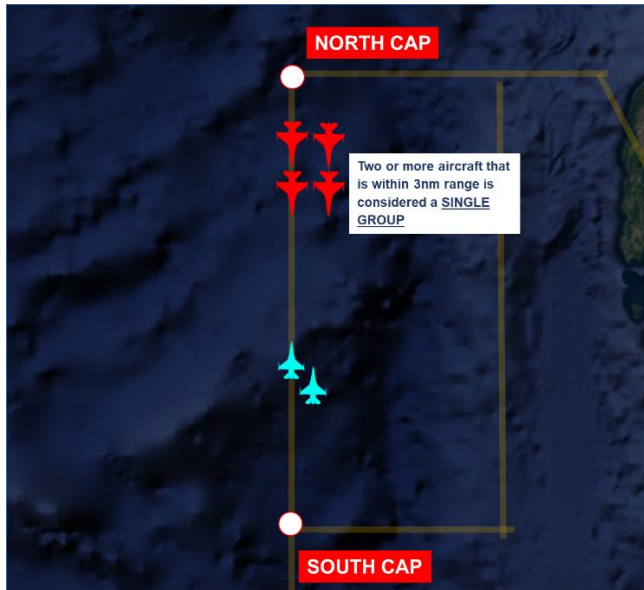


STINGER

SA: BULLDOG, PICTURE SINGLE GROUP **STINGER**
__B/E_, __B_, __R_, __A_, TRACKING ____,
BOGEY/HOSTILE, **3 CONTACTS**

BD: ROGER PICTURE SINGLE GROUP STINGER
__B/E_, __B_, __R_, __A_, TRACKING ____,
BOGEY/HOSTILE, 3 CONTACTS

CONTAINER



CONTAINER

SA: BULLDOG, PICTURE SINGLE GROUP

CONTAINER __B/E__, __B__, __R__, __A__,

TRACKING ____, BOGEY/HOSTILE, **4 CONTACTS**

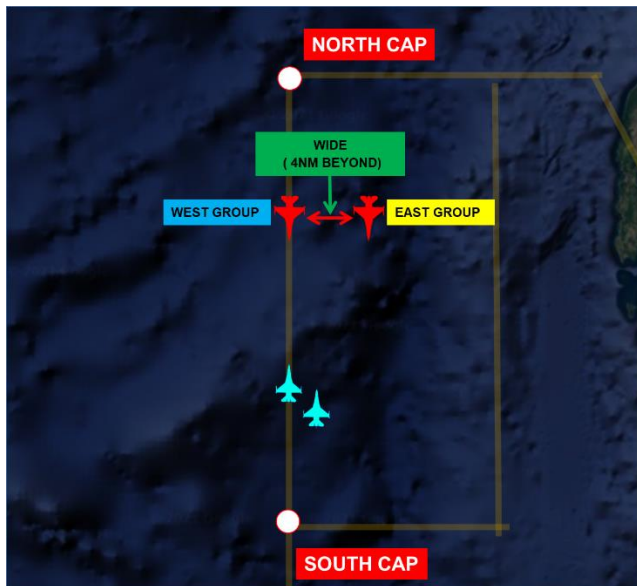
BD: ROGER PICTURE SINGLE GROUP CONTAINER

__B/E__, __B__, __R__, __A__, TRACKING ____,

BOGEY/HOSTILE, 4 CONTACTS

III. Two or more groups tactical control

**2 Actual Bandit Groups
Versus
2 Actual Fighter Groups intercept**



AZIMUTH

SA: BULLDOG, PICTURE TWO GROUPS **AZIMUTH**
W _ WIDE

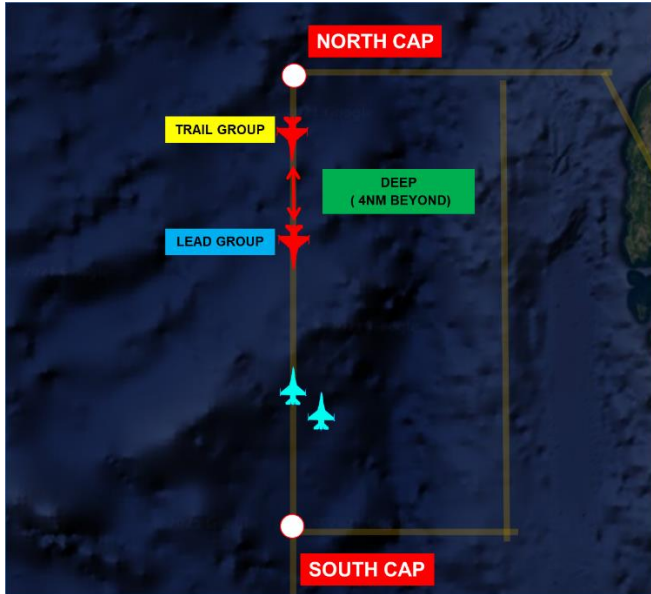
WEST GROUP _ B/E _ _ B _ , _ R _ , _ A _ , _ S _
TRACKING _ , BOGEY/HOSTILE,

EAST GROUP _ A _ , _ S _ , _ TRACKING _ ,
BOGEY/HOSTILE

Note

W - Wide; Horizontal separation of groups

**2 Actual Bandit Groups
versus
2 Actual Fighter Groups intercept**



RANGE

SA: BULLDOG, PICTURE TWO GROUPS RANGE

D__ DEEP

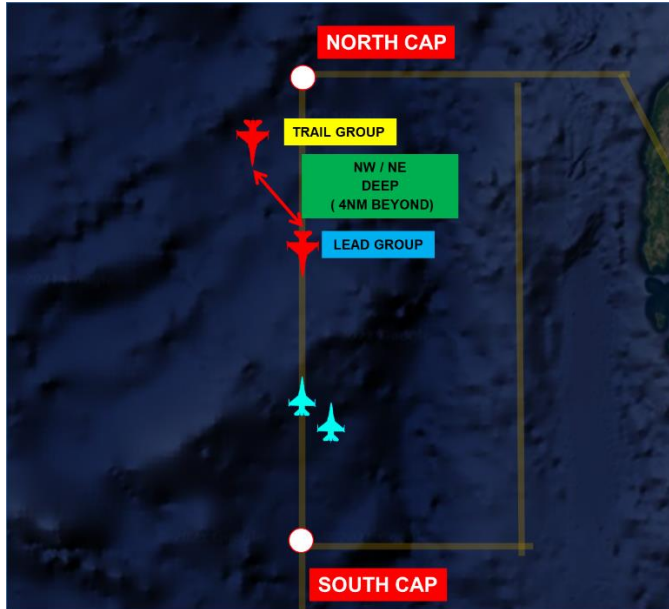
LEAD GROUP __B/E__B__, __R__, __A__, __S__,
TRACKING____, BOGEY/HOSTILE,

TRAIL GROUP __A__, __S__, TRACKING____,
BOGEY/HOSTILE

Note

D - Deep; Vertical separation of groups

2 Actual Bandit Groups Versus 2 Actual Fighter Groups intercept



ECHELON

SA: BULLDOG, PICTURE TWO GROUPS **ECHELON**
NORTH WEST D DEEP

LEAD GROUP __B/E__ __B__, __R__, __A__, __S__,
 TRACKING____, BOGEY/HOSTILE,

TRAIL GROUP __A__, __S__, TRACKING____,
 BOGEY/HOSTILE

Note

D - Deep; Vertical separation of groups

2 V 2 (PHANTOM TARGET) TACTICAL CONTROL

1 Actual + 1 Phantom Bandit Groups versus
2 Actual Fighter Groups intercept



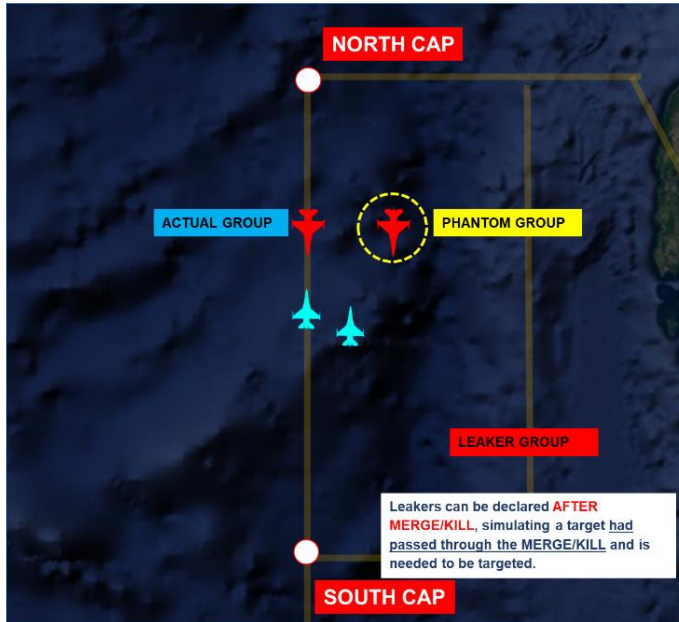
AZIMUTH

SA: BULLDOG, PICTURE TWO GROUPS **AZIMUTH**
W__ WIDE

WEST GROUP __B/E__ __B__, __R__, __A__, __S__
TRACKING ____, BOGEY/HOSTILE,

EAST GROUP __A__, __S__, __ TRACKING ____,
BOGEY/HOSTILE

2 V 2 (PHANTOM TARGET) + 1 PHANTOM (LEAKER) TARGET TACTICAL CONTROL



AZIMUTH

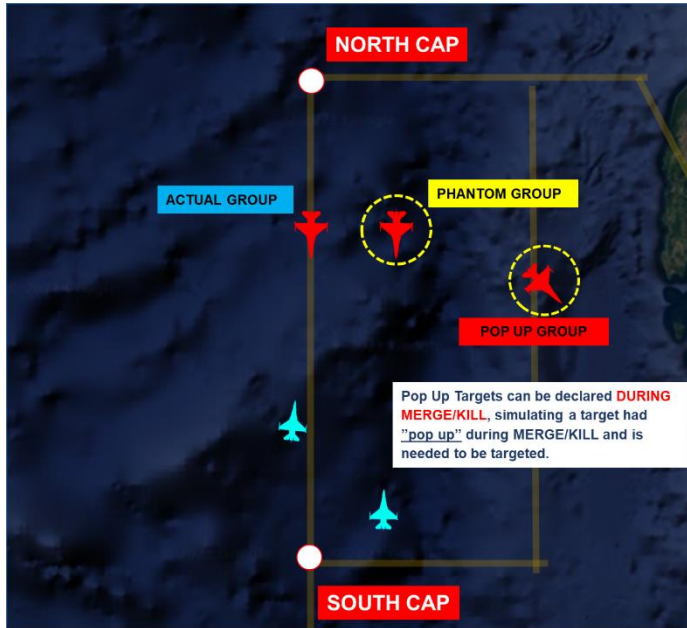
SA: BULLDOG, PICTURE TWO GROUPS **AZIMUTH**
W _ WIDE

WEST GROUP _ B/E _ B _ , R _ , A _ , S _
 TRACKING _ , BOGEY/HOSTILE,

EAST GROUP _ A _ , S _ , _ TRACKING _ ,
 BOGEY/HOSTILE

SA: BULLDOG, LEAKER, PICTURE _ B/E _
 _ B _ , R _ , A _ , TRACKING _ ,
 BOGEY/HOSTILE

2 V 2 (PHANTOM TARGET) + 1 PHANTOM (POP UP) TARGET TACTICAL CONTROL



AZIMUTH

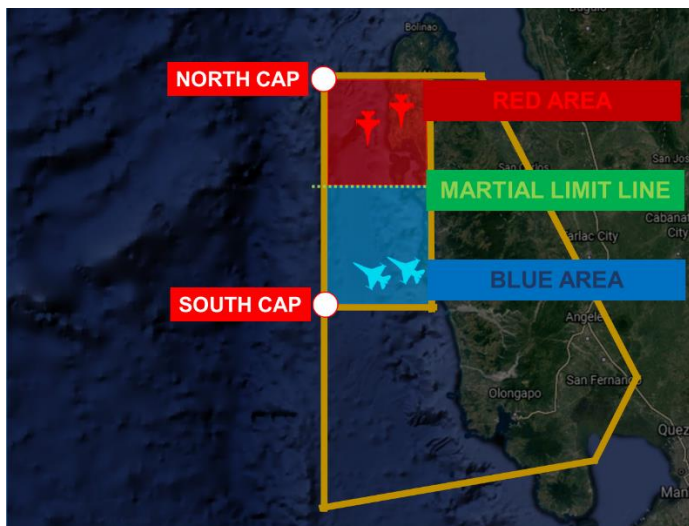
SA: BULLDOG, PICTURE TWO GROUPS **AZIMUTH**
W__ WIDE

WEST GROUP __B/E__ __B__, __R__, __A__, __S__
 TRACKING ____, BOGEY/HOSTILE,

EAST GROUP __A__, __S__, __ TRACKING ____,
 BOGEY/HOSTILE

SA: BULLDOG, **POP UP TARGET**, PICTURE __B/E__
 __B__, __R__, __A__, __S__, TRACKING ____,
 BOGEY/HOSTILE

TARGET IDENTIFICATION



HOSTILE- A contact/group identified as an enemy upon which clearance to fire is authorized.

HOSTILE = ENEMY + AUTHORIZED TO BE KILLED

BANDIT- An aircraft identified as an enemy by identification criteria. The term does not necessarily imply direction or authority to engage.

BANDIT = ENEMY + NO ORDER YET TO BE KILLED

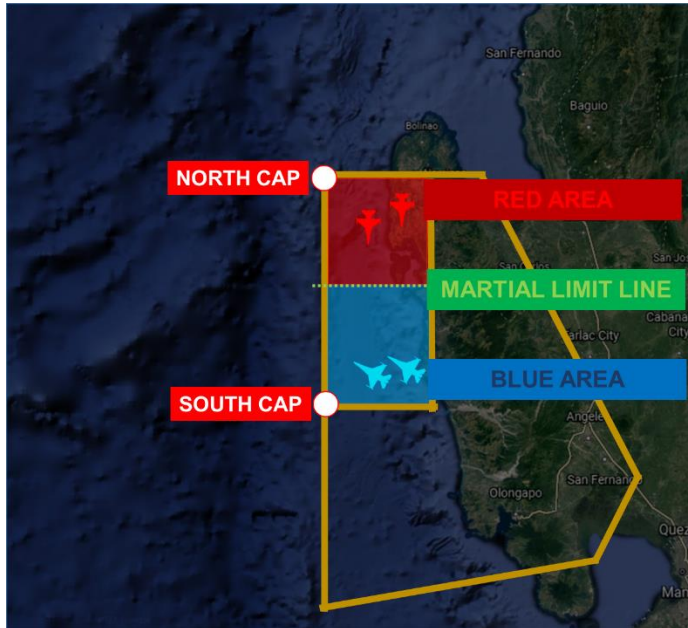
OUTLAW- Informative call that a bogey has met point of origin criteria (i.e. at Red Air Area).

OUTLAW = UNKNOWN + INSIDE ENEMY TERRITORY

BOGEY/SPADES- A radar or visual air contact whose identity is unknown. An interrogated group/radar contact which lacks all of the IFF modes and codes required for the identification criteria.

UNKNOWN AIRCRAFT

IDENTIFICATION MATRIX



HOSTILE ACT

- Crossing the Martial Limit Line (MLL)
- Strobing / Jamming (EA) Friendlies

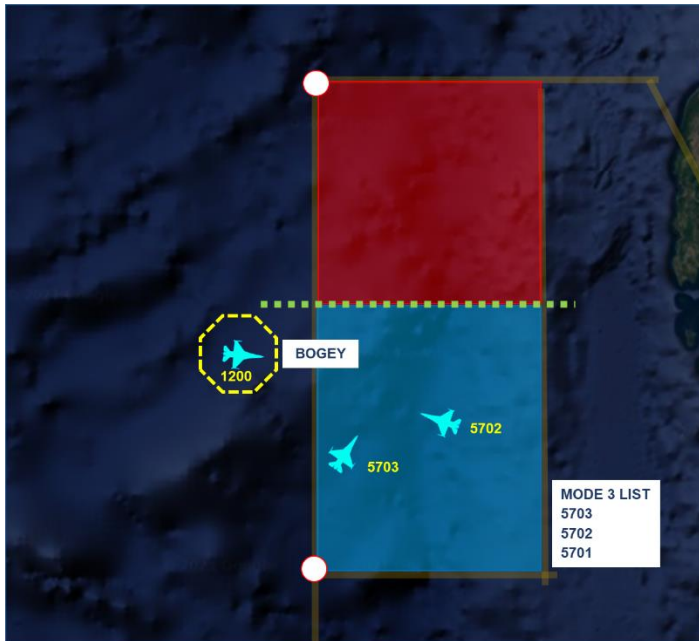
POSITIVE ENEMY INDICATION

- Not squawking pre - briefed Blue Air IFF Mode 3 (Unknown)
- Point of origin is outside Blue Air Area (i.e. Red Air Area)

LACK OF FRIENDLY (LOF)

- Not squawking pre - briefed Blue Air IFF Mode 3 (Unknown)

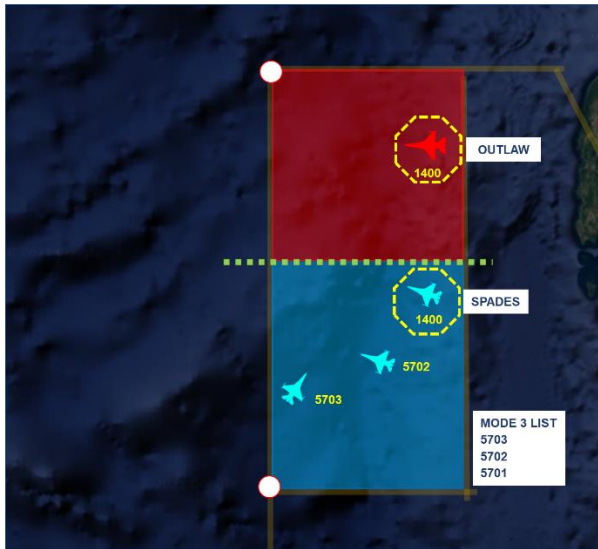
BOGEY



BOGEY

- Lack Of Friendly (LOF)
- Not squawking pre - briefed Blue Air IFF Mode 3
- Point of Origin outside Playing Area
- Unknown

OUTLAW / SPADES



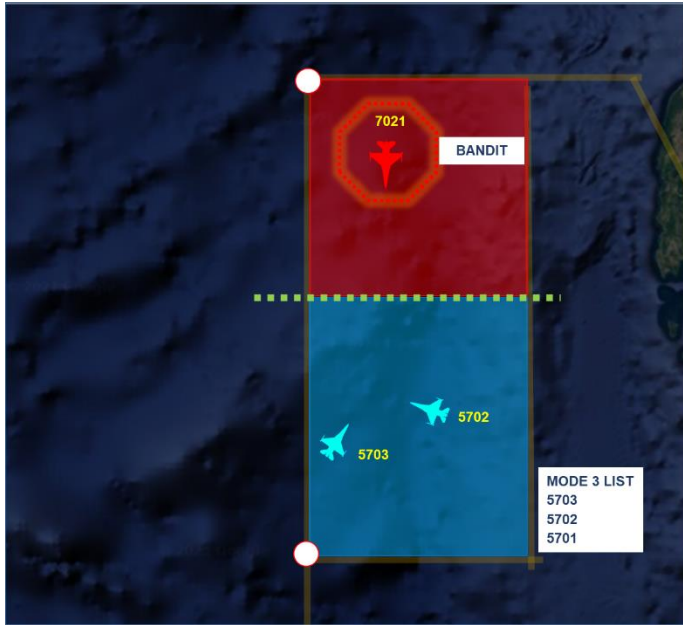
OUTLAW

- Identified BOGEY / Unknown Aircraft
- Point of origin is outside Blue Air Area
- Not crossing the MLL

SPADES

- Identified BOGEY / Unknown Aircraft
- Point of origin is within Blue Air Area

BANDIT

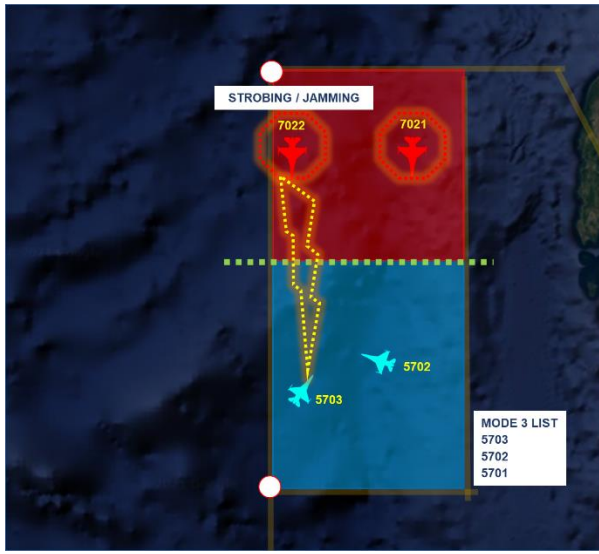


BANDIT

- Identified **ENEMY Aircraft**
- Point of origin is outside Blue Air Area
- Heading to BUT not crossing the MLL

LOF+PEI= "BANDIT"

HOSTILE



HOSTILE

- Lack Of Friendly (LOF)
- Not squawking pre - briefed Blue Air IFF Mode 3
- Point of origin is outside Blue Air Area
- Committing Hostile Acts
 - Crossing the MLL
 - Strobing / Jamming (EA) Friendlies

LOF+PEI+HA="HOSTILE"

MORSE CODE

International Morse Code

--- -- --- -- -- . .

A - -	N - -	1 - - - - -
B - - - -	O - - - -	2 - - - - -
C - - - -	P - - - -	3 - - - - -
D - - -	Q - - - -	4 - - - - -
E -	R - - -	5 - - - -
F - - - -	S - - -	6 - - - - -
G - - - -	T -	7 - - - - -
H - - - -	U - - -	8 - - - - -
I - -	V - - - -	9 - - - - -
J - - - - -	W - - - -	0 - - - - -
K - - - -	X - - - -	
L - - - -	Y - - - - -	SOS
M - - -	Z - - - -	- - - - -

AIRPORT	CLASSIFICATION	LOCATION	AIRPORT CODE
NCR			
NINOY AQUINO INTL	INTERNATIONAL	PASAY CITY, METRO MANILA	RPLL
AREA IV			
FRANCISCO V REYES (BUSUANGA)	PRINCIPAL CLASS 2	CORON ISLAND, PALAWAN	RPVV
CUYO	PRINCIPAL CLASS 2	CUYO ISLAND, PALAWAN	RPLO
PUERTO PRINCESA	INTERNATIONAL	PUERTO PRINCESA, PALAWAN	RPVP
AREA V			
BULAN	COMMUNITY	BULAN, SORSOGON	RPUU
DAET	COMMUNITY	BAGASBAS, DAET, CAMARINES NORTE	RPUD
LEGASPI	PRINCIPAL CLASS 1	LEGASPI CITY, LEGASPI	RPLP
MASBATE	PRINCIPAL CLASS 2	MASBATE, MASBATE	RPVJ
NAGA	PRINCIPAL CLASS 1	SAN JOSE, PILI, CAMARINES SUR	RPUN
SORSOGON (BACON)	COMMUNITY	GUBAO, BACO, SORSOGON	RPLZ
VIRAC	PRINCIPAL CLASS 2	VIRAC, CATANDUANES	RPUV
AREA VIII			
BILIRAN	COMMUNITY	CATMON, BILIRAN, SUB-PROVINCE	RPVQ
BORONGAN	COMMUNITY	PUNTA MARIA, BORONGAN, EASTERN SAMAR	RPVW
CALBAYOG	PRINCIPAL CLASS 2	TRINIDAD, CALBAYOG, WESTERN SAMAR	RPVC
CATARMAN	PRINCIPAL CLASS 2	POBLACIO, CATARMAN, NORTHERN SAMAR	RPVY
DANIEL M ROMUALDEZ (TACLOBAN)	PRINCIPAL CLASS 1	SAN JOSE, TACLOBAN CITY	RPVA
GUIUAN	COMMUNITY	GUIUAN, EASTERN SAMAR	RPVG
HILONGOS	COMMUNITY	HILONGOS, SOUTHERN SAMAR	RPVH
MAASIN	COMMUNITY	PANAN-AWAN, MAASIN, SOUTHERN LEYTE	RPSM
ORMOC	PRINCIPAL CLASS 2	BRGY AIRPORT, ORMOC CITY	RPVO
AREA IX			
CAGAYAN DE SULU	COMMUNITY	MAPUN, CAGAYAN DE SULU, ZAMBOANGA DEL SUR	RPMU
SANGA-SANGA (ARMM)	PRINCIPAL CLASS 2	BANGAO, TAWI-TAWI, SULU	RPMN
JOLO (ARMM)	PRINCIPAL CLASS 2	JOLO, SULU	RPMJ
DIPOLOG	PRINCIPAL CLASS 1	DIPOLOG CITY, ZAMBOANGA DEL NORTE	RPMG
IPIL	COMMUNITY	IPIL, ZAMBANAGA DEL SUR	RPMV
LILOY	COMMUNITY	LILOY, ZAMBOANGA DEL NORTE	RPMX

PAGADIAN	PRINCIPAL CLASS 1	PAGADIAN, ZAMBOANGA DEL SUR	RPMP
SIOCON	COMMUNITY	SIOCON, ZAMBOANGA DEL NORTE	RPNO
ZAMBOANGA	INTERNATIONAL	ZAMBOANGA CITY, ZAMBOANGA DEL SUR	RPMZ

AIRPORT	CLASSIFICATION	LOCATION	AIRPORT CODE
AREA X			
OZAMIS	COMMUNITY	OZAMIS CITY, MISAMIS OCCIDENTAL	RPMO
LAGUINDIAN (CAGAYAN DE ORO)	PRINCIPAL CLASS 1	LAGUINDIAN, OZAMIS OCCIDENTAL	RPML
CAMUIGIN	PRINCIPAL CLASS 2	MAMBAJAO, CAMUIGIN PROVINCE	RPMH
ILIGAN	COMMUNITY	BALO-IL, ILIGAN CITY, LANA DEL NORTE	RPMI
MALABANG (ARMM)	COMMUNITY	MALABANG, LANA DEL SUR	RPMH
AREA XI			
ALLAH VALLEY	COMMUNITY	SURALLAH, SOUTH COTABATO	RPMA
DAVAO INTERNATIONAL (FRANCISCO BANGYO)	INTERNATIONAL	DIVERSION ROAD, BUHANGIN, DAVAO CITY	RPMD
GENERAL SANTOS (TAMBLER)	INTERNATIONAL	GENERAL SANTOS CITY, SOUTH COTABATO	RPMR
COTABATO	PRINCIPAL CLASS 1	AWANG, MAGUINDANAO, COTABATO	RPMC
MATI	COMMUNITY	MATI, DAVAO ORIENTAL	RPMQ
AREA XII (CARAGA)			
BUTUAN	PRINCIPAL CLASS 1	BUTUAN, AGUSAN DEL NORTE	RPME
SIARGAO	PRINCIPAL CLASS 2	SAYAK, DEL CARMEN, SURIGAO DEL NORTE	RPNS
SURIGAO	PRINCIPAL CLASS 2	SURIGAO CITY, SURIGAO DEL NORTE	RPMS
BISLIG	COMMUNITY	BISLIG, SURIGAO DEL SUR	RPMF
TANDAG	PRINCIPAL CLASS 2	TANDAG, SURIGAO DEL SUR	RPMW
AREA VIII			
BILIRAN	COMMUNITY	CATMON, BILIRAN, SUB-PROVINCE	RPVQ
BORONGAN	COMMUNITY	PUNTA MARIA, BORONGAN, EASTERN SAMAR	RPVW
CALBAYOG	PRINCIPAL CLASS 2	TRINIDAD, CALBAYOG, WESTERN SAMAR	RPVC
CATARMAN	PRINCIPAL CLASS 2	POBLACIO, CATARMAN, NORTHERN SAMAR	RPVY
DANIEL M ROMUALDEZ (TACLOBAN)	PRINCIPAL CLASS 1	SAN JOSE, TACLOBAN CITY	RPVA
GUIUAN	COMMUNITY	GUIUAN, EASTERN SAMAR	RPVG
HILONGOS	COMMUNITY	HILONGOS, SOUTHERN SAMAR	RPVH

MAASIN	COMMUNITY	PANAN-AWAN, MAASIN, SOUTHERN LEYTE	RPSM
ORMOC	PRINCIPAL CLASS 2	BRGY AIRPORT, ORMOC CITY	RPVO

INTERNATIONAL AIRPORTS							
Name	ICAO	IATA	Area Served	Actual Location	Usage	Runway Length	Coordinates
Bacolod–Silay International Airport	RPVB	BCD	Negros Island	Silay, Negros Occidental	Civilian	2,002 m (6,568 ft)	10°46'35"N 123°00'55"E
Bohol–Panglao International Airport	RPSP	TAG	Central Visayas	Panglao, Bohol	Civilian	2,500 m (8,200 ft)	09°33'52"N 123°45'57"E
Clark International Airport	RPLC	CRK	Greater Manila Area	Mabalacat, Pampanga	Civilian/Military	3,200 m (10,500 ft)	15°11'09"N 120°33'35"E
Francisco Bangoy International Airport	RPMD	DVO	Davao Region	Davao City	Civilian	3,000 m (9,800 ft)	07°07'31"N 125°38'45"E
General Santos International Airport	RPMR	GES	Soccsksargen	General Santos	Civilian	3,227 m (10,587 ft)	06°03'28"N 125°05'45"E
Iloilo International Airport	RPVI	ILO	Western Visayas	Cabatuan, Iloilo	Civilian	2,500 m (8,200 ft)	10°49'58"N 122°29'36"E
Kalibo International Airport	RPVK	KLO	Western Visayas	Kalibo, Aklan	Civilian	2,500 m (8,200 ft)	11°40'45"N 122°22'33"E
Laguindingan International Airport	RPMY	CGY	Northern Mindanao	Laguindingan, Misamis Oriental	Civilian/Military	2,100 m (6,900 ft)	08°36'43"N 124°27'21"E
Laoag International Airport	RPLI	LAO	Ilocos Region	Laoag, Ilocos Norte	Civilian	2,780 m (9,120 ft)	18°10'41"N 120°31'55"E

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Mactan–Cebu International Airport	RPVM	CEB	Central Visayas	Lapu-Lapu City	Civilian/Military	3,300 m (10,800 ft)	10°18'26"N 123°58'44"E
Name	ICAO	IATA	Area Served	Actual Location	Usage	Runway Length	Coordinates
Ninoy Aquino International Airport	RPLL	MNL	Greater Manila Area	Pasay / Parañaque	Civilian/Military	3,737 m (12,260 ft) 2,258 m (7,408 ft)	14°30'30"N 121°01'11"E
Puerto Princesa International Airport	RPVP	PPS	Palawan	Puerto Princesa	Civilian/Military	2,600 m (8,500 ft)	09°44'31"N 118°45'32"E
Subic Bay International Airport	RPLB	SFS	Greater Manila Area	Morong, Bataan	Civilian	2,744 m (9,003 ft)	14°47'39"N 120°16'15"E
Zamboanga International Airport	RPMZ	ZAM	Zamboanga Peninsula	Zamboanga City	Civilian/Military	2,609 m (8,560 ft)	06°55'20"N 122°03'35"E
Cagayan North International Airport	RPLH	LLC	Cagayan Valley	Lal-lo, Cagayan	Civilian	2,100 m (6,900 ft)	18°10'52"N 121°44'42"E

PRINCIPAL DOMESTIC AIRPORTS							
Name	ICAO	IATA	Actual Location	Province	Classification	Coordinates	
Bancasi Airport	RPME	BXU	Butuan	Agusan del Norte	Principal-Class 1	08°57'04"N 125°28'40"E	
Cotabato Airport	RPMC	CBO	Datu Odin Sinsuat	Maguindanao	Principal-Class 1	07°09'54"N 124°12'34"E	

Dipolog Airport	RPMG	DPL	Dipolog	Zamboanga del Norte	Principal-Class 1	08°36'06"N 123°20'33"E
Dumaguete–Sibulan Airport	RPVD	DGT	Sibulan	Negros Oriental	Principal-Class 1	09°20'01"N 123°18'02"E
Legazpi Airport	RPLP	LGP	Legazpi	Albay	Principal-Class 1	13°09'25"N 123°44'46"E
Naga Airport	RPUN	WNP	Pili	Camarines Sur	Principal-Class 1	13°35'05"N 123°16'12"E
Pagadian Airport	RPMP	PAG	Pagadian	Zamboanga del Sur	Principal-Class 1	07°49'38"N 123°27'30"E
Roxas Airport	RPVR	RXS	Roxas	Capiz	Principal-Class 1	11°35'51"N 122°45'06"E
San Jose Airport	RPUH	SJI	San Jose	Occidental Mindoro	Principal-Class 1	11°13'39"N 125°01'40"E
Daniel Z. Romualdez Airport	RPVA	TAC	Tacloban	<i>Leyte</i>	Principal-Class 1	12°21'41"N 121°02'48"E
Tuguegarao Airport	RPUT	TUG	Tuguegarao	Cagayan	Principal-Class 1	17°38'18"N 121°43'50"E
Antique Airport	RPVS	EUQ	San Jose de Buenavista	Antique	Principal-Class 2	10°45'57"N 121°56'00"E
Loakan Airport	RPUB	BAG	Baguio	<i>Benguet</i>	Principal-Class 2	16°22'30"N 120°37'10"E
Name	ICAO	IATA	Actual Location	Province	Classification	Coordinates
Basco Airport	RPUO	BSO	Basco (Batan Island)	Batanes	Principal-Class 2	20°27'05"N 121°58'47"E
Francisco B. Reyes Airport	RPVV	USU	Coron (Busuanga Island)	Palawan	Principal-Class 2	12°07'17"N 120°06'00"E
Calbayog Airport	RPVC	CYP	Calbayog	Samar	Principal-Class 2	12°04'22"N

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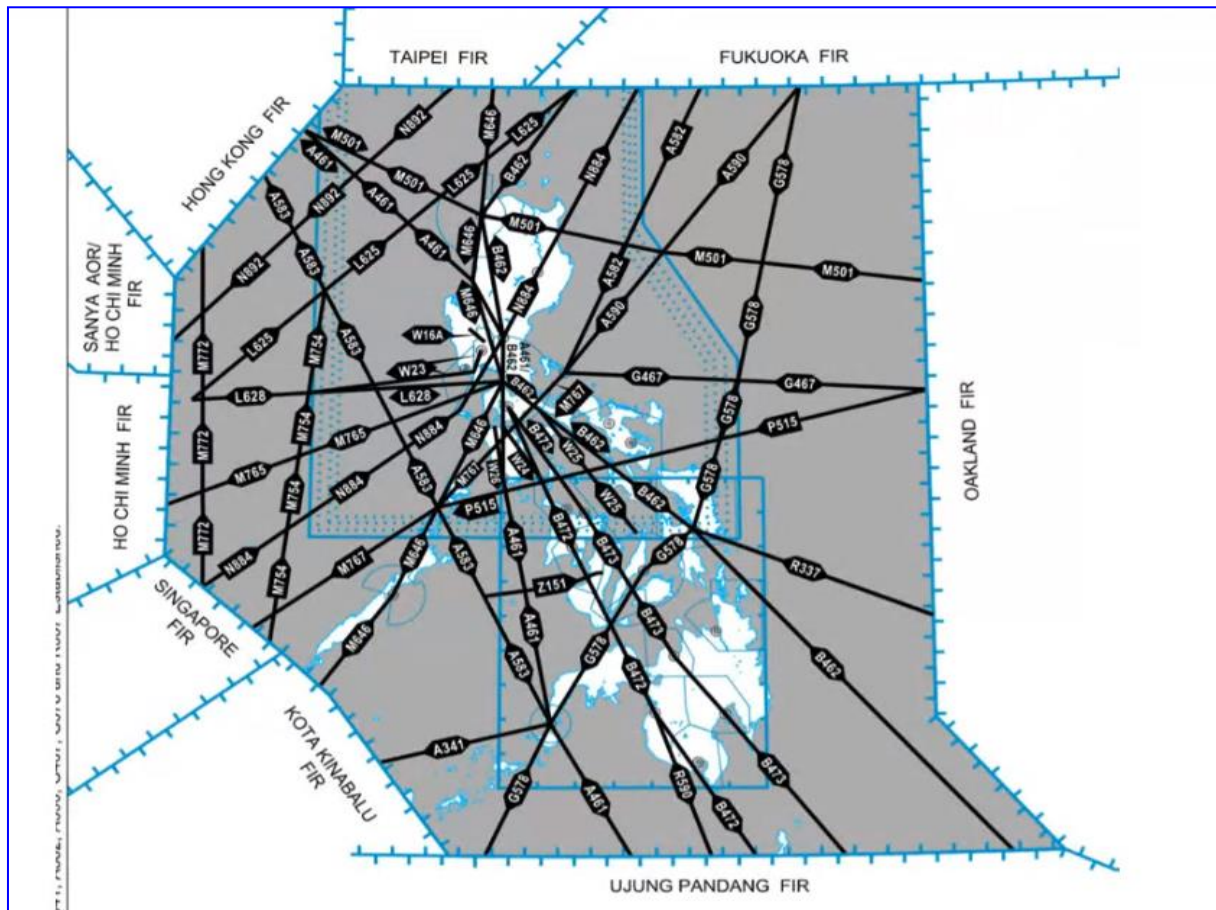
						124°32'42"E
Camiguin Airport	RPMH	CGM	Mambajao	Camiguin	Principal-Class 2	09°15'12"N 124°42'25"E
Catarman National Airport	RPVF	CRM	Catarman	Northern Samar	Principal-Class 2	12°30'09"N 124°38'09"E
Godofredo P. Ramos Airport	RPVE	MPH	Malay / Nabas	Aklan	Principal-Class 2	11°55'29"N 121°57'18"E
Cuyo Airport	RPLO	CYU	Magsaysay (Cuyo Island)	Palawan	Principal-Class 2	10°51'29"N 121°04'10"E
Jolo Airport	RPMJ	JOL	Jolo	Sulu	Principal-Class 2	06°03'13"N 121°00'40"E
Marinduque Airport	RP UW	MRQ	Gasán	Marinduque	Principal-Class 2	13°21'36"N 121°49'31"E
Moises R. Espinosa Airport	RPVJ	MBT	Masbate City	Masbate	Principal-Class 2	12°22'10"N 123°37'45"E
Ormoc Airport	RPVO	OMC	Ormoc	Leyte	Principal-Class 2	11°03'22"N 124°33'56"E
Sayak Airport	RPNS	IAO	Del Carmen (Siargao Island)	Surigao del Norte	Principal-Class 2	09°51'33"N 126°00'55"E
CAAP Surigao Airport	RPMS	SUG	Surigao City	Surigao del Norte	Principal-Class 2	09°45'28"N 125°28'51"E
Tugdan Airport	RPVU	TBH	Alcantara (Tablas Island)	Romblon	Principal-Class 2	12°18'39"N 122°04'46"E
Tandag Airport	RPMW	TDG	Tandag	Surigao del Sur	Principal-Class 2	09°04'20"N 126°10'17"E
Sanga-Sanga Airport	RPMN	TWT	Bongao	Tawi-Tawi	Principal-Class 2	05°02'49"N 119°44'34"E
Virac Airport	RP UV	VRC	Virac	Catanduanes	Principal-Class 2	13°34'35"N

						124°12'20"E
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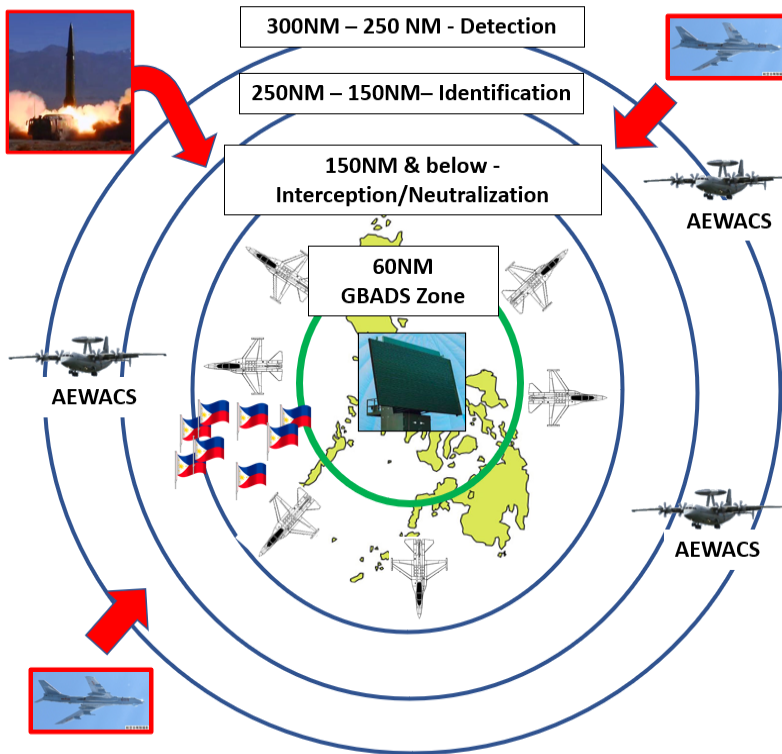
MILITARY AIRFIELD					
Name	ICAO	IATA	Actual Location	Classification	Coordinates
Basilio Fernando Air Base	RPUL		Lipa, Batangas	Military	13°57'17"N 121°07'29"E
Camp Mateo Capinpin Airfield	RPLM		Tanay, Rizal	Military	14°32'05"N 121°21'49"E
Cesar Basa Air Base	RPUF		Floridablanca, Pampanga	Military	14°59'11"N 120°29'33"E
Kindley Landing Field (Corregidor)	RPLX		Cavite City, Cavite	Military	14°23'29"N 120°36'26"E
Danilo Atienza Air Base (formerly U.S. Naval Station Sangley Point)	RPLS	SGL	Cavite City, Cavite	Military	14°29'29"N 120°53'38"E
Ernesto Rabina Air Base (formerly Crow Valley Gunnery Range)	RPLQ		Capas, Tarlac	Military	15°19'03"N 120°25'22"E
Fort Magsaysay Airfield	RPLV		Santa Rosa, Nueva Ecija	Military	15°26'02"N 121°05'24"E
Jose Paredes Air Station Airstrip			Pasuquin and Burgos, Ilocos Norte	Military	18°24'11"N 120°40'00"E
Lumbia Air Base	RPML		Cagayan de Oro	Military	08°24'56"N 124°36'40"E
Wallace Drone Launch Facility within Poro Point (Wallace) Air Station	RPLW		San Fernando, La Union	Military	16°37'05"N 120°17'00"E
Rajah Buayan Air Base	RPMB		General Santos	Military	06°06'20"N 125°14'06"E
Rancudo Airfield	RPPN		Kalayaan, Palawan	Military	11°03'05"N 114°17'01"E
San Vicente Naval Airfield within Naval Base Camilo Osias			Santa Ana, Cagayan	Military	18°30'13"N 122°08'56"E

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Sibutu Airfield			Sibutu, Tawi-Tawi	Military	04°50'35"N 119°27'38"E
Name	ICAO	IATA	Actual Location	Classification	Coordinates
Tarumpitao Point Airfield	<i>RPTP</i>		Rizal, Palawan	Military	09°02'37"N 117°37'59"E
Antonio Bautista Air Base and Puerto Princesa International Airport	RPVP	PPS	Puerto Princesa	Mixed military-civilian use	09°44'31"N 118°45'31"E
Mactan-Benito Ebuen Air Base and Mactan–Cebu International Airport	RPVM	CEB	Lapu-Lapu	Mixed military-civilian use	10°18'48"N 123°58'58"E
Clark Air Base and Clark International Airport	RPLC	CRK	Clark Freeport Zone	Mixed military-civilian use	15°11'09"N 120°33'35"E
Edwin Andrews Air Base and Zamboanga International Airport	RPMZ	ZAM	Zamboanga City	Mixed military-civilian use	06°55'20"N 122°03'34"E
Jesus Villamor Air Base (formerly Nichols Field) and Ninoy Aquino International Airport	RPLL	MNL	Parañaque/Pasay	Mixed military-civilian use	14°30'31"N 121°01'10"E
U.S. Naval Air Station Cubi Point (now Subic Bay International Airport)	RPLB	SFS	Morong, Bataan	Former military use	14°47'40"N 120°16'16"E



MISSION CATEGORY				TYPE OF MISSION				DETAILS	
C	COMBAT			00	OTHERS	23	AEROBATICS	A	NIGHT
T	COMBAT SUPPORT			01	AIR INTERCEPT	24	AIR EVAC	B	DAY
L	UNIT TRAINING			02	BOMBING	25	SEARCH AND RESCUE	C	CIVILIAN
U	UPT			03	ROCKETRY	26	DISASTER RELIEF	D	MILITARY
R	ROUTINE			04	STRAFE	27	REFORESTATION	E	DRY
M	MAINTENANCE FLT			05	AIR ESCORT / COVER	28	SURVEY	F	HOT
Y	DEVELOPMENTAL / PROTOTYPING TEST FLT			06	AIRDROP OF FLARES MARKERS, CHEMICALS	29	FLY - BY	G	SIMULATED
P	PRESIDENTIAL			07	INSERTION / EXTRICATION OF PERS	30	WEATHER	H	MARITIME
V	VIP			08	PATROL	31	FLOWER DROP	I	AERIAL
S	SOCIO / ECONOMIC			09	AERIAL RECON	32	RAINMAKING	J	LAND
Z	OTHERS			10	PHOTO RECON	33	COURIER SERVICE	K	FOREST
TYPE OF AIRCRAFT				11	RESUPPLY	34	ADMIN	L	OTHERS
01	F5 / FA50PH	12	C-130	12	HELILIFT	35	TOW MISSION		
02	AS-211	13	F-27	13	AIRLIFT	36	SIGNAL INTERCEPT		
03	S-76	14	N-22	14	AERIAL PHOTO OP	37	SLING OPERATION		
04	MG-520	15	F-28	15	MOVEMENT OF AIRCRAFT	38	AIRDROP OF PERS, EQPT,SUPPLY		
05	OV-10	16	SA-330	16	BACK-UP AIRCRAFT	39			
06	T-41	17	S-70	17	MOVEMENT OF TROOPS	40	SURVEILLANCE		
07	SF-260	18	B-412	18	MOVEMENT OF PERS	41	PILOT UPGRADE		
08	UH-1H	19	LC-210	19	CONTACT PROFICIENCY	42	AIR COMBAT		
09	B-205	20	C-690	20	NAVIGATION	43	MISSILE FIRING		
10	B-214	21	OTHERS	21	INSTRUMENT	44	AIR TO AIR GUNNERY		
11	B-212			22	FORMATION				



DEFENSE IN-DEPTH

Type	Detection Distance & Altitude
Ballistic Missiles	300NM and above at 100,000 feet
Large Maritime Patrol Aircraft	300NM at 40,000 feet
Fighter-sized target	215NM at 20,000 feet and above
Large UAVs/ Drones	100NM at 10,000 feet

Conditions for recommendation of scramble order to perform Visual Identification:

- Proximity to Philippine Coastline, below 100NM
- Display of aggressive flight behavior

Airspeed	Time to Target (80NM)
400 knots	12 minutes
300 knots	16 minutes
200 knots	24 minutes
150 knots	36 minutes
100 knots	48 minutes

TACADMIN

- a. TACADMIN consists of all processes and procedures that occur in the TAC C2 area of responsibility (AOR). It relates to:
 - 1. Interflight and intraflight procedures.
 - 2. Airborne mission preparation that directly supports executing the tactical mission objective.
 - 3. Examples that include: weapon arming, sensor management, personnel recovery package marshaling, and tactical communication checks.
- b. TACADMIN does not refer to processes and procedures that coordinate air assets outside the managed AOR. Examples are:
 - 1. Navigating in civil airspace under civilian air traffic control.
 - 2. Operating aircraft in the terminal area under military tower or local area air traffic control.
 - 3. Controlling air traffic to facilitate arrival to, or departure from, an operating base.
- c. An example of an exception to 1.b. would be an aircraft launched under scramble orders (e.g., an alert status) but operating in civil airspace.

NET Transmissions

A call sign is associated with every radio transmission.

- a. Directive Transmissions. Aircrew and TAC C2 will use the call sign of the entity being directed.

Directive Transmission

Directed by HORNET 1: *"HORNET 2, TARGET NORTH GROUP."*

- b. Interrogative Transmissions. Calls that are requests for a response will use the "[entity speaking to], [speaking entity]" format.

Interrogative Transmission

Interrogative from SHOWTIME 11: *"MIKE, SHOWTIME 11, DECLARE ADDITIONAL GROUP."*

- c. Descriptive Transmissions. Calls that provide information that does not require a response. Descriptive call will use the same format as interrogative.

Descriptive Transmission

Descriptive from SHOWTIME 11: *"MIKE, SHOWTIME 11, FUEL YELLOW."*

- d. Relaying a Call.

1. The communication format is "[entity speaking to], relay, [call sign of entity call being relayed]".
2. Do not include the relaying entity's call sign.

Relay Transmission

From HOG 1 relayed by SNAKE 11 to MIKE: *"MIKE, RELAY HOG 1. STRIKE PACKAGE MILLER TIME."*

Note: SNAKE 11's call sign is omitted from the transmission.

COMMUNICATION PRIORITIES

Table 1. Communication Priorities	
1	Flight safety and aircraft emergencies.
2	KILL verification (in a training environment: range training officer (RTO) communications).
3	DEFENDING, SPIKE, and THREAT calls.
4	Requests for controller and fighter targeting situational awareness (i.e., DECLARE or BOGEY DOPE).
5	Response to electronic attack.
6	PICTURE or fill-ins.
7	Tactical administration (e.g., WORDS update).

CHECK-IN PROCEDURE

a. Check In

1. The purpose of check in is for aircrew and TAC C2 airspace control elements to establish contact, allow the airspace element to establish accountability of the airborne asset, and to pass critical information to the aircrew before handoff to a final mission controller.
 - (a) TAC C2 will verify position and identity of the aircraft.
 - (b) TAC C2 will route the aircrew to their mission area.
 - (c) The aircrew will gain updated information for the mission area.
 - (d) The aircrew can check secure communication systems.
2. The aircrew should establish communication with TAC C2 on a dedicated check-in NET. Dedicated NETs support TACADMIN without interfering with employment.

➤ Aircrew Check In with TAC C2.

1. The full aircraft check-in format should include mission number and aircraft number and type, position and altitude, ordnance, PLAYTIME, capabilities, and abort code.

Table 3. Aircrew Check-In Brief with TAC C2 (MNPOPCA Format)
Mission Number
Number and Type of Aircraft
Position and Altitude
Ordnance (if applicable)
PLAYTIME
Capabilities (e.g., laser, infrared pod, or data link)
Abort Code

2. AS FRAGGED Check In. AS FRAGGED means the unit or element is performing as briefed, in accordance with the air tasking order (ATO) or air plan.
 - (a) Use an abbreviated aircraft check when aircraft are on a published ATO or air plan.

(b) Check in with the aircrew's mission number, AS FRAGGED, and request an ALPHA CHECK from the assigned BULLSEYE. The ALPHA CHECK provides aircrew a position system check.

Check In AS FRAGGED

Aircraft: **"MISER, HORNET 1, MISSION NUMBER 5-1-1-1, CHECKING IN AS FRAGGED, REQUEST ALPHA CHECK DEPOT."**
TAC C2: **"HORNET 1, MISER, ALPHA CHECK DEPOT 270/30."**

3. Aircrew must check in "with exceptions" if there are deviations.
 - a. Communicate pertinent exceptions to the current mission.
 - b. The following deviations should always be communicated by aircrew and controllers at check in:
 - Number of aircraft (e.g., a three-ship flight when four-ships are anticipated). Ordnance. WEAPONS YELLOW or RED or changes to the tasked loadout.
 - PLAYTIME. FUEL YELLOW or RED.
 - Capabilities (e.g., TIMBER SOUR, NEGATIVE JACKAL, or GADGET BENT).
 - Other pertinent mission-specific exceptions (identify them during mission planning).
 - c. Example of a check in with exceptions:

Example #1: Check In with Exceptions

Aircraft: "MISER, EXXON 1, MISSION NUMBER 6-1-1-1, CHECKING IN WITH EXCEPTIONS, REQUEST ALPHA CHECK BULLSEYE."

TAC C2: "EXXON 1, MISER, ALPHA CHECK BULLSEYE 270/30, CONTINUE WITH CHECK IN."

Aircraft: "EXXON 1, OFFLOAD, FRAG MINUS 30 K."

- d. The following is an example of a check in with controller exceptions:

Example #2: Check-in with TAC C2 Exceptions

Aircraft: "MISER, HORNET 1, MISSION NUMBER 5-1-1-1, CHECKING IN AS FRAGGED, REQUEST ALPHA CHECK BULLSEYE."

TAC C2: "HORNET 1, MISER, ALPHA CHECK BULLSEYE 270/30."

Aircraft: "HORNET 1."

TAC C2: "MISER, TIMBER SOUR."

Aircraft: "HORNET 1."

NEGATIVE JACKAL

Fighters should communicate NEGATIVE JACKAL to controllers during check in or during the mission when they are not receiving accurate surveillance information.

- a. If fighters are NEGATIVE JACKAL, the controller should ensure correlation is met prior to targeting.
- b. If correlation is in question, fighters may request the controller DECLARE a group or request bearing, range, altitude, and aspect (BRAA) to a GROUP prior to weapons employment.

WORDS Procedures

- a. WORDS is a directive or interrogative call for further information or directives pertinent to a mission. WORDS are designated by ATO day, numbered sequentially, and established and deleted individually. For example, WORDS AA01 (pronounced ALPHA ALPHA 0-1) would represent the first WORDS generated on ATO day AA.
 1. WORDS are generated by the TAC C2 agency outlined in the SPINS.
 2. The first WORDS for a new ATO day should incorporate pertinent information from the previous day.
 3. WORDS are limited in scope to each operating area.
- b. Examples of WORDS information are:
 1. Changes to the package.
 2. NET changes (e.g., a new tactical mission NET).
 3. Timing changes.
 4. Threat updates (e.g., a new active threat axis or sector).
 5. Change to threat warning condition or weapons control status.
 6. Weather affecting execution.

IN-FLIGHT REPORT

This report expedites the information flow to the JAOC. It can aid in bomb hit assessments that inform retasking assets (e.g., reattack).

- a. Theater SPINS or local guidance will outline in-flight report procedures.
- b. A dedicated in-flight report frequency may be used to pass this report.

Table 6. In-flight Report Example	
Item	Example Radio Communication
Request from Aircraft	"COWBOY, HOSS 01, IN-FLIGHT REPORT."
Acknowledgment from Tactical Command and Control	"HOSS 01, GO WITH IN-FLIGHT REPORT."
Line 1—Call sign	"HOSS 01 FLIGHT."
Line 2—Mission number	"0552."
Line 3—Location	"N3645 W11523" (latitude and longitude), "10S 0559 4282" (grid), or "GAMECOCK" (place name/operating area).
Line 4—Time-on-target	"1518Z."
Line 5—Result	"5 ENEMY TANKS DESTROYED, 5 LIGHT TRUCKS DISABLED, 30 TROOPS IN THE OPEN."
Remarks	"SIX DIRT NORTH. REMAINING TANKS DISENGAGING WEST. LIGHT SURFACE-TO-AIR FIRE TO 10,000 FEET, 5 MILES SOUTH OF TARGET AREA."

FORCE PACKAGING AND DIRECT AIR SUPPORT COORDINATION

➤ Force Package Accountability and Roll Call

The MC should ensure the required minimum forces are ready. Two techniques are a TAC C2-provided update or a roll call.

- a. TAC C2 Update. TAC C2 should maintain a tally of players that have checked in. At a predetermined time, TAC C2 provides the MC with the current players (for example, "DARKSTAR, PACKAGE BRAVO WHISKEY, MINUS LION 01, MINIMUM FORCES MET").
- b. Roll Call. Roll call is initiated by the TAC C2 or MC, at a predetermined time. Once initiated, each aircraft, flight lead, or package lead (as determined by the MC) will respond with call sign in a predetermined sequence. As a technique, this sequence can follow the call sign order on a coordination card.

Flight Lead Roll Call Example

Package BRAVO WHISKEY Flight Leads: EAGLE, VIPER, BONES, GROWL, MOJO.

MC: "PACKAGE BRAVO WHISKEY, ROLL CALL."

Flight Leads Respond in Sequence: "EAGLE", "VIPER WITH EXCEPTIONS", "BONES", "GROWL", "MOJO".

MC: "VIPER GO WITH EXCEPTIONS."

VIPER: "VIPER MINUS 2."

If a flight does not respond to the roll call, the MC can query TAC C2.

Package Commander (PC) Roll Call Example

Package BRAVO WHISKEY PCs: Escort, Strike, Airlift, TAC C2.

MC: "PACKAGE BRAVO WHISKEY, ROLL CALL."

PCs Respond in Sequence: "ESCORT WITH EXCEPTIONS", "STRIKE", "AIRLIFT", "TAC C2".

MC: "ESCORT GO WITH EXCEPTIONS."

Escort PC: "ESCORT MINUS RAPTOR. MINIMUM FORCES MET."

- c. Times to consider initiating a roll call.
 - 1. Post LOWDOWN.
 - 2. When there are updated WORDS.
 - 3. When forces completed their mission and are returning.
 - 4. When there is a suspected or known loss of an air asset.
 - 5. When there is a timing change to the mission.
 - 6. When the weather plan changes.
 - 7. When there is key mission enabler fallout.
 - 8. Post CHATTERMARK on a new NET.

➤ LOWDOWN

LOWDOWN is a request for the tactical ground picture in an area of interest. TAC C2 should correlate all factor ground systems using the BULLSEYE format.

- a. LOWDOWN is passed at a briefed time (e.g., 5 minutes prior to mission execution) and is immediately followed by a roll call.
- b. An aircrew may request LOWDOWN but should do so in accordance with communication priorities (allow 30 to 60 seconds for TAC C2 to compile LOWDOWN).
- c. For aircraft not in the tactical NET during the initial LOWDOWN, it is passed upon initial check in as part of the WORDS.
- d. LOWDOWN may not be required for each mission set, such as when fighters are conducting a defensive counterair mission in a permissive environment.

- e. LOWDOWN is passed digitally, via Link 16 and tactical chat, or verbally. In order of priority (unless otherwise briefed), the LOWDOWN should include:
 1. Strategic surface-to-air missile (SAM) systems ACTIVE or AWAKE within the last 8 hours that were not a part of the briefed threat defensive missile order of battle. Expect strategic SAMs references using mission planning naming conventions.
 2. Tactical SAMs ACTIVE or AWAKE within the last hour (e.g., enemy naval tactical SAM).
 3. MOVERS/ROTATORS meeting briefed reporting criteria.
 4. Additional entities, events, or areas of interest applicable to the mission.

LOWDOWN Example

“GOLIATH, LOWDOWN. TWO ACTIVE BULLSEYE 090/10, EIGHT ACTIVE BULLSEYE 085/13, SIX AWAKE BULLSEYE 075/14, ROTATOR BULLSEYE 260/15. HOSTILE CONVOY BULLSEYE 270/10 TRACK EAST.”

- f. For tactical SAMs and MOVERS, the order of dissemination is:
 1. Closest MEZ to friendly forces.
 2. Closest MEZ to friendly axis of attack or ingress routes.
 3. Most lethal

➤ Timing Changes

- a. ROLEX. Timeline adjustment in minutes; always referenced from original preplanned mission execution time.
 1. ROLEX is used to adjust the mission timing as a whole.
 2. PLUS is assumed.
 3. If a time on target (TOT) window extension is required to adhere to the ROLEX, TAC C2 agencies should request approval and pass it to the affected flights.
 4. ROLEX is made in 5-minute increments and is not additive.

ROLEX Example

Original package WHISKEY ALPHA mission start time: 1500Z.

“COWBOY, PACKAGE WHISKEY ALPHA, ROLEX 10.”

New mission start time: 1510Z.

“COWBOY, PACKAGE WHISKEY ALPHA, ROLEX 15.”

New mission start time: 1515Z.

- b. SLIP. SLIP is time delay to individual flight or element event. SLIP is not additive.

SLIP Example

Original TOT: 1500Z.

"HARDROCK, HOSS 1, SLIP TOT 6 MINUTES."

New TOT: 1506Z.

"HARDROCK, HOSS 1, SLIP TOT 9 MINUTES."

New TOT: 1509Z.

- c. For changes to training vulnerability times, MCs and TAC C2 should use plain language to avoid confusion.

➤ BATTLESPACE HANDOVER PROCEDURES

- a. A positive handoff is required by the off-going and on-coming lane commander.

PUSH. On-coming aircraft may enter the operating area (e.g., defensive counterair lane).

COMMIT. When directed by the off-going aircraft, this call transitions communication priority to the on-coming aircraft to take over as the lane commander.

Lane Commander Transition. The off-going lane commander will get positive communication lane handoff to the on-coming lane commander.

LANE HANDOFF

Off-going Lane Commander: "HORNET 1, YOU HAVE THE LANE."

On-coming Lane Commander: "HORNET 1, HAS THE LANE."

- b. The off-going lane commander will pass critical mission information to TAC C2 in accordance with theater in-flight report procedures.
 1. TAC C2 will use this information to update WORDS or LOWDOWN.
 2. TAC C2 should pass big-picture information to the oncoming lane commander before pushing assets to the tactical frequency.

Example. **"TEN GROUPS, TWO PACKAGES, NORTH PACKAGE TARGETED BY SWEEP. SOUTH PACKAGE TARGETED BY BIG STICK."**

Example. **"TWELVE GROUPS, LEADING EDGE FOUR GROUP"**

- c. TAC C2 will relay critical information affecting off-going aircraft return-to-base procedures. Pass information on weather and airfield issues (e.g., runway closures).

- d. Refer to other mission-specific publications for positive handoff of mission command roles (e.g., strike coordination and reconnaissance or close air support).

AIR-TO-AIR (A/A) COMMUNICATION FUNDAMENTALS

➤ **Core Information Format**

Controllers and air assets will use the core information format to communicate GROUPs:

- a. Total Number of GROUPs.
- b. GROUP Location (i.e., BULLSEYE, BRAA, or GEOREF).
- c. Altitude (rounded to the nearest thousands of feet).
- d. Track direction or specific aspect (e.g., cardinal/sub-cardinal or HOT/FLANK/BEEHIVE/DRAW).
- e. Declaration.
- f. Fill-ins (as appropriate)

➤ **Controllers will also use the BRAA format when providing a THREAT call to an aircraft.**

THREAT Call Example

“SHOWTIME 11, LEAD GROUP, THREAT BRAA 270/55, THIRTY-NINE THOUSAND, FLANK NORTHEAST, HOSTILE.”

➤ **GROUP Altitude**

- a. Fighters and controllers will round altitudes to the nearest thousand feet indicated on their system.
- b. Controllers will not use LOW or HIGH in place of the altitude and will use “ALTITUDE UNKNOWN” if the controlling platform is capable of determining altitude, but a solution is not available.
- c. Controllers will omit altitude from the communication format if the controlling platform is not capable of generating an altitude.
- d. Altitude STACKS.
 - 1. Altitude separation in a GROUP greater than or equal to 10,000 feet are voiced as a STACK stating the higher altitude first, then the lower altitude.

Altitude Stack Example

“SHOWTIME 11, NORTH GROUP BRAA 300/32, STACK THIRTY-TWO THOUSAND AND EIGHT THOUSAND, HOT, HOSTILE, TWO CONTACTS, FLANKER.”

2. If the STACK has two or more altitude separations of 10,000 feet within the group, then controllers may voice the number of CONTACTs HIGH/MEDIUM/LOW or at specific altitudes as fill-in information.

HIGH/MEDIUM/LOW Altitude Stack Example

“HARDROCK, NORTH GROUP UTAH 300/12, STACK THIRTY-FIVE THOUSAND and TWENTY-FOUR THOUSAND, TRACK WEST, HOSTILE, HEAVY, THREE CONTACTS, TWO HIGH, ONE LOW.”

Specific Altitude Example

“BARNYARD, ADDITIONAL GROUP PEAK 200/12, STACK THIRTY-FIVE THOUSAND, TWENTY-FOUR THOUSAND and TEN THOUSAND, TRACK WEST, HOSTILE, HEAVY, THREE CONTACTS.”

➤ **Track Direction and Specific Aspect**

- a. Track direction will always be used to communicate a GROUP via BULLSEYE and communicated with the cardinal or sub-cardinal direction (e.g., TRACK NORTHEAST, TRACK SOUTH).
- b. PICTURE Exception.
 1. If all GROUPs in a traditional PICTURE, LEADING EDGE, or PACKAGE are tracking the same direction, controllers should use the term TRACK with the cardinal direction following the PICTURE label.

GROUPs TRACK the Same Direction Example

“MIKE, TWO GROUPs RANGE 30, TRACK EAST. LEAD GROUP ROCK 145/60, THIRTY-FIVE THOUSAND, HOSTILE. TRAIL GROUP TWENTY THOUSAND, HOSTILE.”

2. If amplifying the PICTURE with TRACK direction, controllers should not provide a track direction for every GROUP in the picture.
- c. Specific aspects, as depicted in figure 1, are used when correlating a group to a specific fighter and will be used when communicating with the BRAA format.
 1. Specific aspects (i.e., HOT, FLANK, BEAM, and DRAG) are determined by the GROUP target aspect (TA) or aspect angle (AA) to the fighter.
 2. FLANK, BEAM, DRAG are accompanied with a cardinal/sub-cardinal direction (e.g., DRAG WEST).

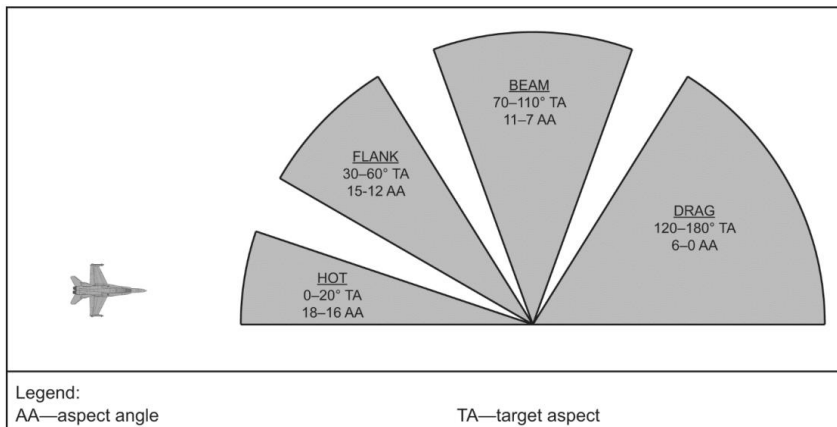


Figure 1. TA and AA

- d. **MANEUVER Description (TRACK Direction or Specific Aspects).**
When controllers assess GROUP maneuvers during the PICTURE call and are unable to determine the TRACK direction or aspect, controllers may use MANEUVER instead of the TRACK direction.

GROUP Maneuvers Example

"TANGO, TWO GROUPS RANGE 25 OPENING. LEAD GROUP BULLSEYE 265/18, THIRTY-FIVE THOUSAND, MANEUVER, HOSTILE. TRAIL GROUP, THIRTY-FIVE THOUSAND, TRACK NORTH, HOSTILE."

➤ **Fill-in Information**

- a. Fill-ins increase descriptive details about a GROUP.
- b. Fill-ins are prioritized as follows:
 1. **HEAVY** and Number of CONTACTs.
 - (a) A GROUP is **HEAVY** if it is known to contain three or more CONTACTs.
 - (b) Provide the number of CONTACTs in a GROUP, if it is determined.
 - (c) Fighters will use **STRENGTH** and controllers will use the term CONTACTs to distinguish who is providing the **STRENGTH** assessment.

CONTACTs versus STRENGTH Example

Controller: "CLUBHOUSE, WEST GROUP FOUR CONTACTS."

Fighter: "SHOWTIME 12, EAST GROUP STRENGTH THREE."

2. Platform/Type. Controllers will provide an aircraft platform (e.g., fighter or bomber) or type (e.g., MiG-29 or J-11B) with PICTURES and requests for SA to that GROUP.
3. HIGH. Contact is greater than 40,000 feet mean sea level. HIGH can be used as a fill-in.
4. FAST or VERY FAST. These definitions are provided as references.
 - (a) FAST. Target speed of 600–900 knots ground speed or 1.0–1.5 mach.
 - (b) VERY FAST. Target speed greater than 900 knots or 1.5 mach.

Fill-ins Example

"DRAGNET, NORTH GROUP, BULLSEYE 270/15, FORTY-TWO THOUSAND, TRACK WEST, HOSTILE, HIGH, VERY FAST."

5. UNTARGETED.
 - (a) If a GROUP has not been targeted inside the briefed targeting range, then the controller should use the fill-in UNTARGETED. Tactics selection per the fighter's targeting game plan will determine the applicability of UNTARGETED."

UNTARGETED Example

"DRAGNET, NORTH GROUP, BULLSEYE 270/15, TWENTY THOUSAND, TRACK WEST, HOSTILE, UNTARGETED."

- (b) UNTARGETED may be used as a fill-in to describe priority GROUPs that are a risk to a mission or force (e.g., an enemy approaching the mission fail line).
 - (c) If a fighter calls TARGETED or acknowledges directive targeting, contracts for UNTARGETED and THREAT calls are cancelled.
6. TARGETED BY, LEANING ON, THREAT TO.
 - (a) TARGETED BY provides SA that a GROUP is already TARGETED.

TARGETED BY Example

Fighter: "MIKE, EAGLE 11, DECLARE NORTH GROUP."

Controller: "EAGLE 11, NORTH GROUP, BULLSEYE 285/35, TWENTY THOUSAND, TRACK EAST, HOSTILE, TARGETED BY HORNET 2."

(b) LEANING ON aids in assessing which aircraft a THREAT is possibly targeting.

- Making an accurate LEANING ON assessment is increasingly difficult with improved THREAT capabilities. For example, a FLANK or BEAM THREAT could be employing ordnance while LEANING ON another fighter.
- LEANING ON assessments are reserved for when fighters are in COLD operations.

LEANING ON Example

"DARKLORD, SINGLE GROUP ROCK 256/49, THIRTY-NINE THOUSAND, TRACK EAST, HOSTILE, FLANKER, LEANING ON EAGLE 1."

(c) THREAT TO is reserved for when fighters are in COLD operations and a fighter does not meet the minimum recommit range.

THREAT TO Example

"MIKE, TWO GROUPS AZIMUTH 25. NORTH GROUP, ROCK 285/35, THIRTY-FIVE THOUSAND, TRACK EAST, HOSTILE, THREAT TO HORNET 1. SOUTH GROUP THIRTY THOUSAND, TRACK EAST, HOSTILE."

➤ **Anchoring a PICTURE**

The following are ways anchoring uses the same priorities as PICTURE.

- a. Anchoring is prioritized communication of GROUPs.
 1. An anchor is a BULLSEYE used to establish the PICTURE and aid in fighter targeting.
 2. Outrigger GROUPs will be anchored with BULLSEYE if the GROUPs are outside 10 nm in azimuth.
 3. Geographic boundaries and the targeting game plan will dictate the maximum GROUPs that are anchored (e.g., dual-lane defensive counterair with a fighter engagement zone that has a defined azimuth boundary).
- b. Force and Mission Anchoring Priority.
 1. Anchoring priorities can shift from the force (e.g., fighters) to the mission. For example, an enemy striker approaches a mission fail line and puts the mission at risk. In this case, the enemy striker may be the anchoring priority.
 2. Anchoring priority for risk to mission can take priority over risk to force.
- c. When risk to force is a higher priority than risk to the mission, controllers will anchor GROUPs referring to the following priorities:

1. The threat that is closest to fighters.
2. The most capable threat (based on combat ID, declaration, aircraft type, flight profile).
3. HIGH GROUPS.
4. The largest GROUP STRENGTH.

➤ **Core Information Concerning a PICTURE**

- a. This label is primarily used:
 1. Pre-COMMIT.
 2. If the PICTURE does not meet a traditional or LEADING EDGE label.
 3. If there are three GROUPS or fewer.
- b. The PICTURE call will include the total number of GROUPS and is anchored in accordance with anchoring priorities. (See figure 3.)
- c. FOUR GROUPS or More.
 1. The call will include the total number of GROUPS.
 2. Communicate only the three highest priority GROUPS.

FOUR GROUPS or More Example

"DARKSTAR, TEN GROUPS. GROUP BULLSEYE 020/25, TWENTY-SEVEN THOUSAND, TRACK EAST, HOSTILE, HEAVY, THREE CONTACTS. GROUP BULLSEYE 270/25, FIFTEEN THOUSAND, TRACK WEST, HOSTILE. GROUP BULLSEYE 290/35, TEN THOUSAND, TRACK WEST, HOSTILE."

Refer to ATP 3-52.4/MCRP 3-20F.10/NTTP 6-02.9/AFTTP 3-2.8 14 FEB 2020 for further knowledge on PICTURE LABELS.

➤ **PACKAGE PICTURE Labeling**

- a. Define bounding limits in mission planning. Some considerations should include:
 1. If defined by a range, the shortest distance between GROUPS must be greater than the bounding limits to meet PACKAGE criteria.
 2. Bounding limits, which can be determined based on geographic separation. For example, if executing dual-lane, defensive counterair and the controller is operating in one lane, the controller does not discuss GROUPS in the other lane.
 3. Elements operating outside the predetermined bounding range are not considered operating in a common formation.

PACKAGE Example

"GOLIATH, TWO PACKAGES AZIMUTH 60, NORTH PACKAGE BULLSEYE 030/45, SOUTH PACKAGE BULLSEYE 110/55."

- b. Within each PACKAGE, there may be a PICTURE that can be labeled.

PACKAGE with a PICTURE Example

"CHALICE, NORTH PACKAGE, TWO GROUPS RANGE 10, TRACK WEST. LEAD GROUP BULLSEYE 045/35, TWENTY-FIVE THOUSAND, HOSTILE, TWO CONTACTS. TRAIL GROUP FIFTEEN THOUSAND, HOSTILE, TWO CONTACTS."

- c. The GROUP name and PACKAGE name are used when referring to GROUPs, if multiple PACKAGES are being TARGETED.

PACKAGE TARGET Example

"VIPER 2, TARGET LEAD GROUP NORTH PACKAGE."

- d. If bounding limits are defined by a known geographic boundary, controllers may use geographic references to describe the relationship between PACKAGES.

LANE with Truncated PICTURE Example

"GOLIATH, NORTH LANE THREE GROUP CHAMPAGNE."

➤ **NEW PICTURE**

- a. Once GROUPs have been named, they only may be changed by using the term NEW PICTURE.
- b. Controllers should not make a NEW PICTURE call inside the targeting range.
- c. If fighters request a PICTURE inside the targeting range (e.g., fighters clear a merge) controllers should use PICTURE labeling criteria unless the nearest GROUP meets THREAT criteria.
- d. Fighters executing COLD operations will request a PICTURE.
- e. The term NEW PICTURE will be used when fighters are HOT.

➤ **ADDITIONAL, POP-UP, and THREAT GROUPs**

- a. ADDITIONAL GROUP.
 - 1. ADDITIONAL GROUP is applied to a GROUP that is newly detected outside the targeting range or does not fit a traditional label.

2. An ADDITIONAL GROUP is anchored using BULLSEYE, in accordance with the defined anchoring priorities.

ADDITIONAL GROUP Example

Controller: "MISER, TWO GROUPS AZIMUTH 20. NORTH GROUP BULLSEYE 360/20, THIRTY-TWO THOUSAND, TRACK WEST, HOSTILE. SOUTH GROUP AT BULLSEYE, EIGHT THOUSAND, TRACK EAST, HOSTILE."

Fighter: "EAGLE 1, ADDITIONAL GROUP BULLSEYE 090/7, 5 THOUSAND, TRACK WEST, HOSTILE FLANKER."

3. If an ADDITIONAL GROUP is part of the LEADING EDGE and the fighters are outside the targeting range, the controller should re-label it as a NEW PICTURE and include the ADDITIONAL GROUP as part of the NEW PICTURE.
 4. If there are multiple ADDITIONAL GROUPs, each ADDITIONAL GROUP is prefaced with a number (e.g., FIRST ADDITIONAL GROUP, SECOND ADDITIONAL GROUP).
- b. POP-UP GROUP
1. If a previously undetected or unreported GROUP appears inside the targeting range and outside the THREAT range, it is named a POP-UP GROUP.
 2. A POP-UP GROUP is anchored using BULLSEYE, in accordance with the defined anchoring priorities.
 3. If there are multiple POP-UP GROUPs, each POP-UP GROUP is prefaced with a number (e.g., FIRST POP-UP GROUP, SECOND POP-UP GROUP).

POP-UP GROUP Example

Controller: "DARKSTAR, FIRST POP-UP GROUP BULLSEYE 270/15, FIVE THOUSAND, TRACK WEST, BOGEY SPADES. SECOND POP-UP GROUP BULLSEYE 300/20, TEN THOUSAND, TRACK NORTHWEST, BOGEY SPADES."

c. THREAT GROUP

1. If an undetected or unreported GROUP meets briefed THREAT criteria, it is named a THREAT GROUP. Controllers should use the BRAA format when issuing a THREAT call to the closest aircraft.

THREAT GROUP Example

Controller: "RAMBO 2, THREAT GROUP BRAA 270/13, ONE THOUSAND, HOT, HOSTILE."

2. If there are multiple THREAT GROUPs, each THREAT GROUP is prefaced with a number (e.g., FIRST THREAT GROUP, SECOND THREAT GROUP).

➤ **Communication Cadence by Intercept Phase**

- a. The A/A communication cadence establishes the flow of information during different phases of a mission. It ensures fighters receive priority information transmitted by the controller.
 1. Communication priorities shift between controllers and fighters during different phases of an intercept.
 2. Priorities shift based on what asset has the most SA to communicate time-sensitive information.

Table 7. A/A Intercept Phases and Priority Communicators	
Phase	Priority Communicators
1. Pre-COMMIT or MARSHAL	1. Controller. 2. Fighters.
2. Post-COMMIT or PUSH	1. Fighters. 2. Controller.
3. Merge	1. Engaged Fighter. 2. Supporting Fighters. 3. Controller.
4. Postmerge	1. Fighter Clearing a Merge. 2. Supporting Fighters. 3. Controller.

➤ **COMMIT**

(NOT FINISHED COMPILING)

7TFS FREQUENCY CARD

FA-50PH FREQUENCY CARD									v 1.0
PRESET FREQUENCY									
CH	STATION	VHF	UHF	TCN	CH	STATION	VHF	UHF	TCN
1	BASA GRND	133.000	236.600		11	MANILA APP	124.800	376.500	
2	BASA TWR (P)	128.200	305.400		12	MANILA TWR	118.100	379.900	85X
3	CLARK TWR	118.700	275.800	78X	13	SANGLEY TWR	126.200	344.400	
4	CLARK APP	119.200	344.700		14	LIPA APP	122.500	276.125	
5	MNLA CTRL (NW)	119.300	230.800		15	LIPA TWR	133.000	225.475	
6	MNLA CTRL (W)	127.500	283.400		16	LAOAG APP	122.300	277.025	
» 7	SUBIC TWR	118.200	225.100		17	LAOAG TWR	118.100	276.500	76X
8	ADAC	123.400	384.000		18	SKYWARRIOR	120.600	300.600	
9	SAPAT	125.500	276.300		19	BLUEJAY	47.000	279.975	
10	PUNYAL	126.800	325.100		20	INTER FLT (S)	123.300	305.600	