#### **ATTACHMENT 1**

# OPERATIONAL BREVITY WORDS, DEFINITIONS, AND COUNTERAIR COMMUNICATION STANDARDS (U)

- **A1.1.** (U) General. This attachment establishes common brevity codes, counterair communications standards, and definitions. Understanding the terms and standards allows minimized radio transmissions while executing tactics described in AFTTP 3-1 series manuals. This common understanding, however, is dependent on the following rules:
  - (U) These lists are not all inclusive.
  - (U) Use plain English when required.
  - (U) Words listed below should be used in lieu of words or phrases with similar definitions.
  - (U) When a flight lead makes directive calls, wingmen must respond with the directed action to the best of their ability.
  - (U) If the wingman uses a "directive" term/word, it is a request and the flight/element lead reserves the right to approve or deny the wingman's requested action.

## A1.2. (U) Layout. This attachment contains four sections.

- (U) Section A1.3., USAF and Joint Operational Brevity Words. This section contains the approved brevity words for the USAF. All USAF aircrews are responsible to understand and use the words listed here. *In addition, multiservice joint brevity words likely to be encountered by USAF aircrews have been merged into the list and are italicized.* This list is not all-inclusive. Reference Joint Publication 1-02, *DoD Dictionary of Military and Associated Terms* (http://www.dtic.mil/jcs); Joint Publication 3-09, *Doctrine for Joint Fire Support*; and AFTTP(I) 3-2.5, *Multiservice Air-to-Air, Air-to-Surface, Surface-to-Air Brevity Codes*; for a complete listing.
- (U) Section A1.4., Categorized Brevity Lists. This listing categorizes words by mission types. These lists provide a quick reference for brevity standards required by aircrews upgrading into unfamiliar missions or integrating with other mission-assigned aircraft.
- (U) Section A1.5., Terms and Definitions. This section is a listing of common terms and their definitions.
- (U) Section A1.6., Air-to-Air Communication Standards. This section establishes commonality between all USAF combat assets in the area of communication formats, control, identification, and integration.

# A1.3. (U) USAF and Joint Operational Brevity Words.

- (U) **ABORT**—Directive call to cease action, attack, event, or mission.
- (U) **ACTION**—Directive call to initiate a briefed attack sequence or maneuver.
- (U) (system) ACTIVE (location/direction)—Referenced emitter is radiating at the stated location or along the stated bearing.

#### **ATTACHMENT 1-2**

- **(U) ADD (system/category)**—Directive call to add a specific system or electronic order of battle (EOB) category to search responsibilities.
- **(U) AJAX**—Landing zone/pick up zone is clear of threats.
- (U) **ALARM**—Directive or informative call indicating the termination of EMCON procedures.
- (U) ALLIGATOR—LINK-11/TADIL-A.
- (U) **ALPHA CHECK**—Request for confirmation of bearing and range from ownship to described point.
- (U) **ANCHORED** (w/location)—Informative call to indicate a turning engagement at the specified location.
- (U) **ANCHOR**—Orbit about a specific point; refueling track flown by tanker.
- (U) ANGELS—Height of friendly aircraft in thousands of feet mean sea level (MSL).
- (U) **ARIZONA**—No ARM ordnance remaining.
- (U) **ARM**—Element resulting from target maneuvers exceeding GROUP criteria.
- (U) ARM/ARMED (SAFE/HOT)—Select armament (safe/hot) or armament is safe/hot.
- (U) **AS FRAGGED**—Unit or element will be performing exactly as stated by the air tasking order (ATO).
- (U) **ATTACKING**—Indicates air-to-surface (A/S) attack on a specific ground target.
- (U) **AUTHENTICATE**—To request or provide a response to a coded challenge.
- (U) AUTOCAT—Any communications relay using automatic retransmissions.
- (U) (weapon) AWAY—Release/launch of specified weapon.
- (U) **AZIMUTH**—A picture label describing two groups separated laterally. See **Figure A1.1.**, Two Groups AZIMUTH.
- (U) **BANDIT**—An aircraft identified as an enemy IAW theater identification criteria. The term does not necessarily imply direction or authority to engage.
- (U) **BANZAI**—Informative or directive call to execute launch-and-decide tactics.
- (U) **BASE**—Reference number used to indicate such information as headings, altitudes, and fuels.
- (U) BEAD WINDOW—Last transmission potentially disclosed unauthorized information.
- **(U) BEAM (w/cardinal direction)**—Target stabilized within 70 to 110 degrees of aspect; generally given in cardinal directions: east, west, north, and south.
- (U) **BEARING** (w/cardinal direction)—Inner group formation with the trailer displaced approximately 45 degrees behind the leader. See **Figure A1.2.**, BEARING (Northwest) Formation.
- (U) (system) BENT—System indicated is inoperative.
- **(U) BINGO**—Fuel state needed for recovery.
- (U) **BIRD**—Friendly surface-to-air missile (SAM).

Figure A1.1. (U) Two Groups AZIMUTH.

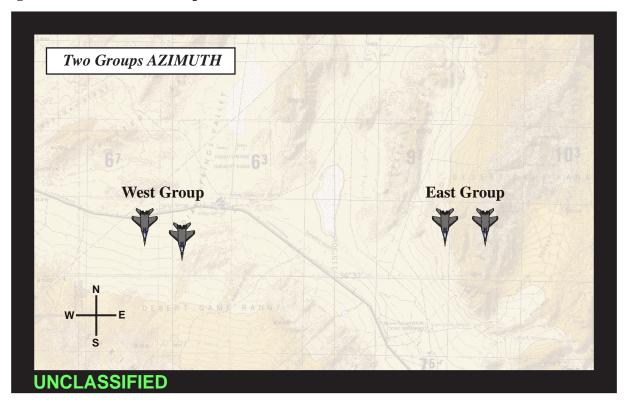
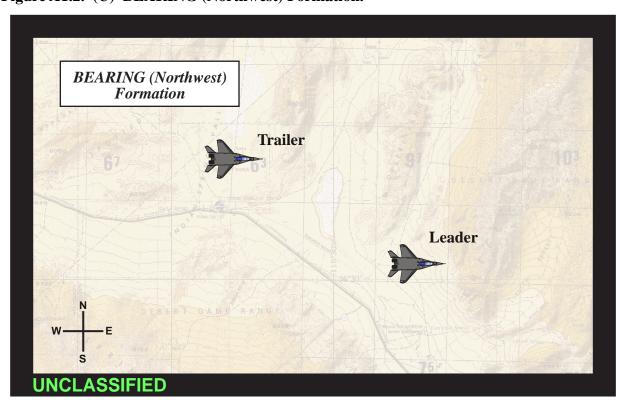


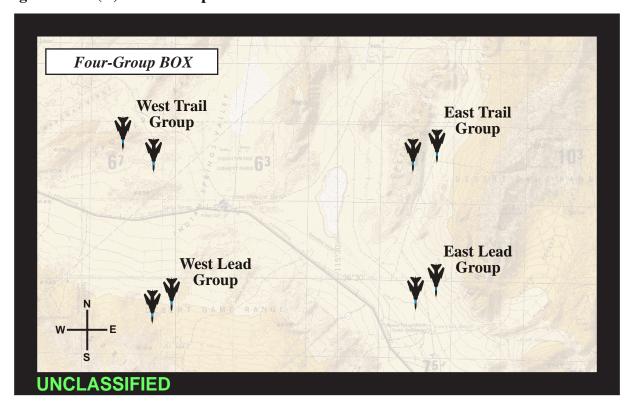
Figure A1.2. (U) BEARING (Northwest) Formation.



#### **ATTACHMENT 1-4**

- (U) **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).
- (U) **BIRD(S) AWAY**—Surface-to-air informative call indicating friendly SAM has been fired at designated target.
- (U) **BIRD(S) NEGATE**—Surface-to-air informative call indicating unit is unable to engage a specified target with SAMs. Opposite of BIRD(S) AFFIRM.
- (U) BITTERSWEET—Notification of possible blue-on-blue (fratricide) situation relative to a designated track or friendly.
- (U) **BLIND**—No visual contact with friendly aircraft/ground position; opposite of VISUAL.
- (U) **BLOW THROUGH**—Directive or informative call that indicates aircraft will continue straight ahead at the merge and not become anchored with target/targets.
- (U) **BOGEY**—A radar or visual air contact whose identity is unknown.
- (U) **BOGEY DOPE**—Request for target information as requested or closest group in BRAA (with appropriate fill-ins).
- (U) BOOMERANG—Aircraft or flight is returning to base.
- (U) **BOX**—A picture label describing four distinct groups with two in front and two behind in a square or offset square orientation. See **Figure A1.3.**, Four-Group BOX.
- (U) **BRAA**—Tactical control format providing target **b**earing, **r**ange, **a**ltitude, and **a**spect, relative to a friendly aircraft. Aspect is only required if other than HOT.
- (U) **BRACKET** (w/direction)—Directive call to maneuver to a position on opposing sides, either laterally or vertically from the targets.
- (U) **BREAK** (w/direction)—Directive call to perform an immediate maximum performance 180-degree turn (or as directed) in the indicated direction. Assumes a defensive situation requiring infrared missile defense (IRMD).
- (U) **BREAK AWAY**—Tanker or receiver call indicating immediate vertical and nose/tail separation between tanker and receiver is required.
- (U) **BREVITY**—Radio frequency is becoming saturated/degraded or jammed and briefer transmissions must follow.
- (U) **BROADCAST**—Request or directive call to switch to broadcast control.
- (U) **BROKE LOCK** Advisory call regarding loss of radar/IR lock-on.
- (U) **BRUISER**—Friendly air launched antiship missile.
- (U) **BUDDY LOCK**—Locked to a known friendly aircraft. Normally a response to a SPIKE or BUDDY SPIKE call.
- (U) **BUDDY SPIKE** (position/altitude/heading)—Friendly aircraft air-to-air (A/A) radar track indication on radar warning receiver (RWR).

Figure A1.3. (U) Four-Group BOX.

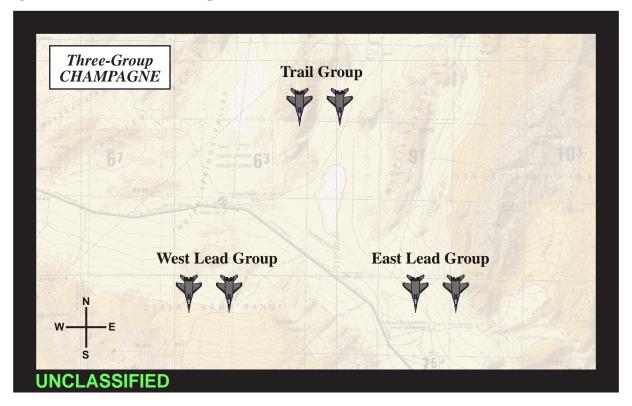


- (U) **BUGOUT** (w/direction)—Separation from that particular engagement/attack/operation; no intent to reengage/return.
- (U) **BULL DOG**—Friendly surface/submarine launched antiship missile.
- (U) **BULLSEYE**—An established reference point from which the position of an object can be referenced.
- **(U) BURN**—Informative call that gated laser illuminator (GLINT) is being used to provide illumination. Typically employed by AC-130 to illuminate surface points of interest.
- (U) **BUSTER**—Directive call to fly at max continuous speed (Mil power).
- (U) **BUZZER**—Electronic communications jamming.
- (U) CANDYGRAM—Informative call to aircraft that electronic warfare (EW) targeting information is available on a pre-briefed secure net.
- (U) CAP (location)—Directive call to establish a combat air patrol at a specified point.
- (U) CAPPING (location)—Descriptive term for aircraft in a CAP.
- (U) **CAPTURED**—Aircrew has acquired and is able to track a specified air-to-ground (A/G) target with an on-board sensor.
- (U) CEASE ENGAGEMENT—In air defense, break the engagement on the target specified. Missiles in flight will continue to intercept.

#### **ATTACHMENT 1-6**

- (U) **CEASE FIRE**—Discontinue firing/do not open fire. Complete intercept if weapons are in flight. Continue to track.
- (U) **CEASE LASER**—Aircraft-to-aircraft directive to stop firing laser. Opposite of LASER ON.
- **(U) CHAMPAGNE**—A picture label describing three distinct groups with two in front and one behind. See **Figure A1.4.**, Three-Group CHAMPAGNE.

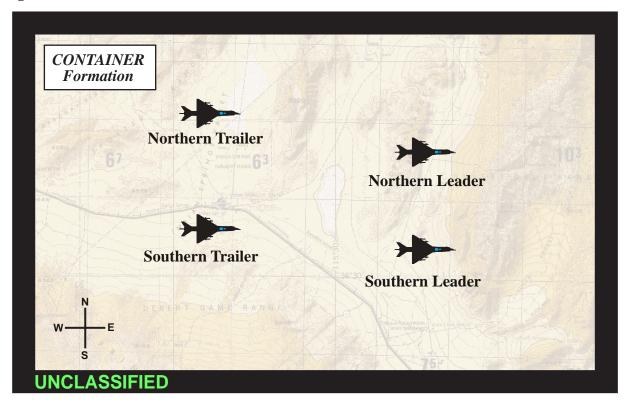
Figure A1.4. (U) Three-Group CHAMPAGNE.



- (U) **CHATTERMARK**—Begin using briefed radio procedures to counter communications jamming.
- **(U) CHEAP SHOT**—AIM-120 missile data link terminated between high pulse repetition frequency (HPRF) and medium pulse repetition frequency (MPRF).
- (U) CHECK (number, left/right)—Turn (number) degrees left or right and maintain new heading.
- (U) **CHECK TIDS/TAD**—Directive call to reference data link display.
- (U) CHERUBS—Altitude of friendly aircraft in hundreds of feet above ground level (AGL).
- (U) CHICKS—Friendly aircraft.
- (U) CLEAN—
  - 1. (U) No sensor information on non-friendly aircraft of interest.
  - 2. (U) No visible battle damage.

- 3. (U) Aircraft not carrying external stores.
- (U) **CLEARED**—Flight lead response. Requested action is authorized. Mutual support may be detached to fulfill briefed contracts (e.g., split criteria, shot doctrine). Wingmen will ensure deconfliction from flight lead.
- (U) **CLEARED HOT**—Ordnance release is authorized.
- (U) **CLOAK**—Directive/informative call to switch from normal/overt external lighting to covert night vision device (NVD) only compatible lighting.
- (U) CLOSING—Decreasing in separation.
- (U) COLD—
  - 1. (U) A descriptive/directive call to initiate a turn in the CAP away from the anticipated threats.
  - 2. (U) Groups heading away from friendly aircraft.
  - 3. (U) Attack geometry will result in a pass or roll out behind the target.
  - 4. (U) Defined area is not expected to receive fire (enemy or friendly).
- (U) **COLOR** (**system, w/position**)—Request for information on a (type) system at stated location; implies a request for ambiguity resolution. May be used with improved data modem (IDM) data message—COLOR DATA.
- (U) **COMEBACK** (w/direction)—Directive call to reverse course.
- (U) COMEOFF (w/direction)—
  - 1. (U) (Air-to-Air) Directive call to maneuver as indicated to either regain mutual support or to deconflict flight paths. Implies both VISUAL and TALLY.
  - 2. (U) (Air-to-Ground) Directive call to maneuver or execute a specific instruction (e.g., COMEOFF DRY).
- (U) **COMMIT**—Directive call to intercept a group of interest.
- (U) **COMPOSITION**—Request for number of contacts within a group.
- (U) CONFETTI—Chaff lane or corridor.
- (U) **CONS/CONNING**—Threat/bogey aircraft leaving contrails.
- (U) CONTACT—
  - 1. (U) Sensor contact at the stated position.
  - 2. (U) Acknowledges sighting of a specified reference point.
  - 3. (U) Individual radar return within a group or arm.
- (U) **CONTAINER**—Inner group formation with four contacts oriented in a square or offset square. See **Figure A1.5.**, CONTAINER Formation.
- (U) **CONTINUE**—Continue present maneuver; does not imply a change in clearance to engage or expend ordnance.
- (U) **CONTINUE DRY**—Ordnance release not authorized.

Figure A1.5. (U) CONTAINER Formation.



- (U) COVER—Directive/informative call to assume a supporting position that will allow engagement of a specified track or threat to the flight if required.
- (U) **CRANK** (w/direction)—F-Pole maneuver; implies illuminating target at radar gimbal limits.
- (U) **CUTOFF**—Request for, or directive to, intercept using cutoff geometry.
- (U) **CYCLOPS**—Any unmanned aerial vehicle (UAV).
- (U) DASH (#)—Aircraft position within a flight. Use if specific call sign is unknown.
- (U) **DATA** (object, w/position)—Standby for data link message concerning object at stated location.
- (U) **DEADEYE**—Informative call by an airborne laser designator indicating the laser/IR system is inoperative.
- (U) **DECLARE**—Inquiry as to the identification of specified tracks, targets, or correlated group.
- (U) **DEEP**—Descriptive term used to indicate separation between the nearest and farthest groups in range in a relative formation; used to describe a LADDER, VIC, CHAMPAGNE, or BOX.
- **(U) DEFENSIVE**—Speaker is under attack, is maneuvering defensively, and is unable to ensure deconfliction or mutual support.
- (U) **DEFENDING** (w/direction)—Aircraft is in a defensive position and maneuvering with reference to a surface-to-air threat.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-9**

- (U) **DELOUSE**—Directive call to detect, identify, and engage (if required) unknown aircraft trailing friendly aircraft.
- (U) **DEPLOY**—Directive call for the flight to maneuver to briefed positioning.
- (U) **DETAILS**—Request for modified J-FIRE 9-Line Brief from Joint Surveillance Target Attack Radar System (Joint STARS).
- (U) **DIVERT**—Proceed to alternate mission/base.
- (U) DOLLY—LINK-4A/TADIL-C.
- (U) **DRAG** (w/cardinal direction)—Target stabilized at 0 to 60 degrees angle from tail or 120- to 180-degree angle from nose.

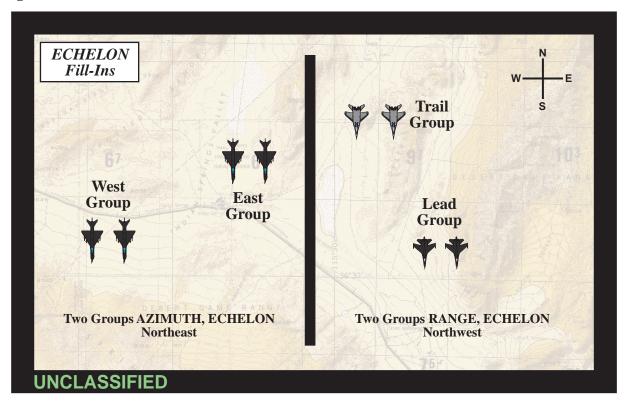
## (U) DROP—

- 1. (U) Directive/informative call to stop monitoring a specific emitter/target and resume search responsibility.
- 2. (U) Remove the emitter/target from the tactical picture/track stores.
- 3. (U) Directive call to remove a specific system or EOB category from search responsibilities.
- (U) **DROP KICK**—Informative to the flight that an intentional deviation from any briefed action is being made.
- (U) **DROPPING**—Informative call that a fighter has discontinued targeting responsibility.
- (U) **DUCK**—Air launched decoy (e.g., TALD/MALD).
- (U) **ECHELON** (w/cardinal direction)—A fill-in describing a RANGE or AZIMUTH presentation, with one group displaced behind and to the side of the other group. See **Figure A1.6.**, ECHELON Fill-Ins.
- (U) **ECHO**—Positive SEESAW/System M/Mode X reply.
- (U) EMPTY—No emitters of interest detected.
- (U) **ENGAGED**—Informative call used to establish engaged and support roles in the visual arena.
- **(U) ESTIMATE**—Provide estimate of the size, range, height, or other parameters of a specified contact; implies degradation.
- (U) **EXTEND** (w/direction)—Short-term maneuver to gain energy, distance, or separation normally with the intent of reengaging.

### (U) EYEBALL—

- 1. (U) Electro-optical (EO)/IR/night vision device (NVD) acquisition of an aircraft normally followed by number of aircraft observed.
- 2. (U) Fighter with primary visual identification responsibility.
- **(U) FADED**—Radar contact (temporally) is lost on a non-friendly aircraft/surface contact and any positional information given is estimated.
- (U) **FAST**—Target speed is estimated to be 600 to 900 knots ground speed/Mach 1 to 1.5.

Figure A1.6. (U) ECHELON Fill-Ins.



- (U) FATHER—Shipboard tactical air navigation (TACAN) station.
- (U) **FEET WET/DRY**—Flying over water/land.
- (U) **FENCE** (**IN/OUT**)—Set cockpit switches as appropriate prior to entering/exiting the combat area.
- **(U) FLANK (w/cardinal direction)**—Contact aspect stabilized at 120- to 150-degree angle from the tail or 30- to 60-degree angle from nose.
- (U) **FLASH** (**system**)—Temporarily activate specified system for identification purposes (e.g., IFF, afterburner, flare, or chaff).
- (U) **FLASHLIGHT**—Directive term for helicopter to turn on IR floodlight (pointed at ground to aid in visual acquisition by escort aircraft).
- (U) **FLOAT**—Directive or informative call to expand the formation laterally within visual limits to maintain radar contact or prepare for a defensive response.
- (U) **FLOW**—Directive call to fly stated heading.
- **(U) FOX**—A/A weapons employment.
- (U) **FOX ONE**—Simulated or actual launch of semiactive radar-guided missile.
- (U) FOX MIKE—VHF/FM radio.
- (U) **FOX TWO**—Simulated or actual launch of IR-guided missile.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-11**

- (U) FOX 3/SECOND FOX 3—Simulated or actual launch of active radar-guided missiles on the same target.
- (U) FOX 3 CLOSE/MEDIUM/LONG—See paragraph 10.2.3., Shot/Kill Communications Brevity.
- (U) FOX 3 (X) SHIP (formation description)—Valid missile shot against (x) separate targets (assumes 1 missile per target).
- (U) **FRIENDLY**—A positively identified friendly aircraft or ground position.
- (U) **FURBALL**—Response to a DECLARE request indicating known bandits and friendlies in close proximity.
- (U) **GADGET**—Radar or emitter equipment.
- (U) GATE—Directive/informative call to fly as quickly as possible, using afterburner/max power.
- (U) **GENIE**—Emitter is employing electronic protection measures.
- (U) GIMBAL (w/BRAA)—Call indicating radar target is approaching azimuth or elevation limits, speaker is approaching formation limits, and SPLIT criteria are not met. Implies a request to flight lead to modify intercept geometry, or direct PRESS/SPLIT/DROP.
- (U) GO ACTIVE—Go to briefed HAVE QUICK net.
- (U) GO CLEAR—Use unencrypted voice communications.
- (U) **GOPHER**—A bogey that has not conformed to safe passage routing, airspeed, or altitude procedures. Will only be used when safe passage or minimum risk routing procedures are part of an ID matrix.
- (U) GO SECURE—Use encrypted voice communications.
- (U) GOGGLE/DEGOGGLE—Directive call to put on/take off NVDs.
- (U) GOGGLES ON/GOGGLES OFF—Informative call that NVDs are on/off.
- (U) GORILLA—Large force of indeterminable numbers and formation.
- (U) GRAND SLAM—All hostile aircraft of a designated track (or against which a mission was tasked) are shot down.
- (U) GREEN (w/cardinal direction)—Direction determined to be clearest of enemy A/A activity.
- (U) **GREYHOUND**—Friendly ground attack cruise missile.
- **(U) GROUP**—Aircraft within 3 NM in azimuth or range.
- (U) **GUNS**—An air-to-air or air-to-surface gunshot.
- (U) **HANDSHAKE**—Link-16 air control NPG initiation between air control unit and controlled aircraft.
- **(U) HARD (w/direction)**—High-G, energy sustaining 180-degree turn (or as directed) in the indicated direction.
- (U) **HEADS UP**—Alert of an activity of interest.

#### **ATTACHMENT 1-12**

## **AFTTP 3-1.1, Change 1, 23 November 2001**

- (U) **HEAVY**—A group or package known to contain three or more entities.
- (U) **HIGH**—Target is between 25,000 and 40,000 feet MSL.
- (U) HITS—
  - 1. (U) (Air-to-Air) Momentary radar returns in search.
  - 2. (U) Indicates approximate target altitude (e.g., "GROUP BULLSEYE 360/10, HITS 15 THOUSAND").
  - 3. (U) (Air-to-Ground) Weapons impact within lethal distance.
- (U) **HOLD DOWN**—Directive call to key transmitter for direction finder (DF) steer.
- (U) **HOLD FIRE**—An emergency fire control order to stop firing on a designated target to include destruction of any missiles in flight.
- (U) **HOLDING HANDS**—Aircraft in visual formation.
- (U) HOLLOW—Data link message not received.
- (U) **HOMEPLATE**—Home airfield or carrier.
- (U) **HOOK** (w/direction)—Directive call to perform an in-place 180-degree turn.
- (U) **HOSTILE**—A contact identified as an enemy upon which clearance to fire is authorized IAW the theater rules of engagement (ROE).

## (U) HOT—

- 1. (U) A descriptive/directive call to initiate a turn in the CAP toward the anticipated threats.
- 2. (U) Groups heading towards friendly aircraft. Opposite of COLD.
- 3. (U) Ordnance employment intended or completed.
- 4. (U) Defined area is expected to receive fire (enemy or friendly).
- 5. (U) Contact aspect stabilized at 160- to 180-degree angle from tail or 0- to 20-degree angle from nose.
- 6. (U) Intercept geometry will result in passing in front of the target.
- (*U*) *HOTDOG*—Informative/directive call that an aircraft is approaching or at a specified standoff distance from the sovereign airspace of a nation (as defined by national boundaries or territorial sea and airspace). (Color may indicate additional standoff distance.) Follow briefed procedures.
- (U) **HOTEL FOX**—HF radio.
- (U) **HUSKY**—Informative call that the AIM-120 is at HPRF active range.
- (U) **ID**—Directive call to identify the target; also aircrew identification accomplished, followed by type aircraft or "FRIENDLY/HOSTILE."
- (U) **IDLE**—Joint STARS call indicating surface vehicles are stationary.
- (U) IN—
  - 1. (U) Informative call indicating a turn toward a known threat. Implies a request for information.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-13**

- 2. (U) Entering terminal phase of an air-to-ground attack. Opposite of OFF.
- (U) **IN PLACE** (w/direction)—Perform indicated maneuver simultaneously.
- (U) INDIA—Mode 4.
- (U) INTERROGATE—Interrogate the designated contact of the identification, friend or foe (IFF)/selective identification feature (SIF) mode indicated.
- (U) JACKAL—Surveillance network participating group (NPG) of LINK-16/TADIL-J.
- (U) **JINK**—Directive call to perform an unpredictable maneuver to negate a gun tracking solution.
- (U) **JOKER**—Fuel state above BINGO at which separation/bugout/event termination should begin.
- (U) **JUDY**—Aircrew has radar or visual contact on the correct target, has taken control of the intercept, and requires only situation awareness (SA) information; weapon director (WD) will minimize radio transmissions.

## (U) KILL—

- 1. (U) Directive call to fire on designated target.
- 2. (U) In training, a fighter call to indicate kill criteria have been fulfilled.
- (U) KNOCK-IT-OFF—Directive call to cease air combat maneuvers/attacks/activities.
- (U) **LADDER**—A picture label describing three or more groups separated in range from a god's eye view. See **Figure A1.7.**, LADDER Pictures.
- (U) LASER ON—Directive call to start laser designation.
- (U) **LASING**—Informative call indicating that the speaker is firing the laser.
- (U) LAST—Command and control ( $C^2$ ) term that provides the last contact altitude from a high fidelity source (fighter radar).
- (U) **LOWDOWN**—A request to provide tactical ground information pertinent to the mission in a digital bullseye format.
- (U) **LEAD-TRAIL**—Inner-group formation of two or more contacts separated in range. See **Figure A1.8.**, LEAD-TRAIL Formation.
- (U) **LEAKERS**—Airborne threat has passed through a defensive layer. Call should include amplifying information.
- (U) LEAN (direction)—Directive/informative call to maneuver in a direction to avoid the threat.
- (U) LIGHTS ON/OFF—Directive to turn on/off exterior lights.
- (U) **LIGHTBULB**—Directive call for flight to turn all position lights to bright.
- (U) **LINE ABREAST**—Inner group formation of two or more contacts separated in azimuth. See **Figure A1.9.**, LINE ABREAST Formation.

Figure A1.7. (U) LADDER Pictures.

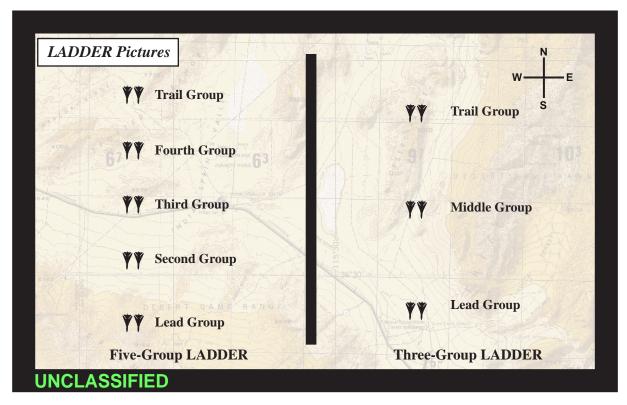


Figure A1.8. (U) LEAD-TRAIL Formation.

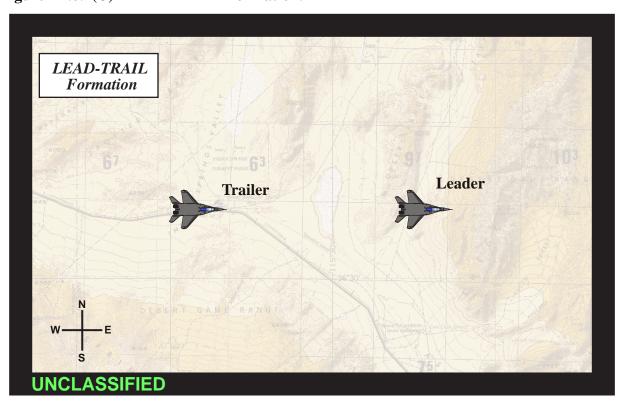
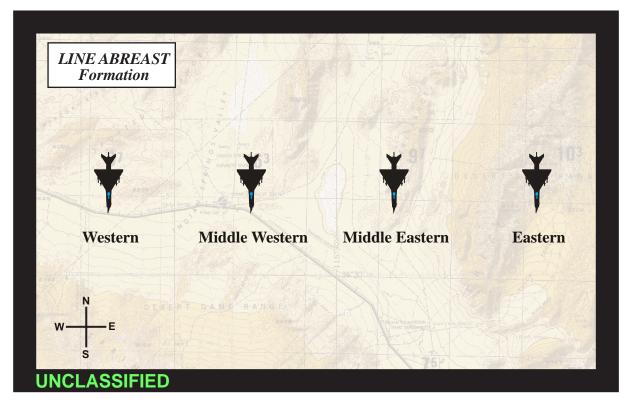


Figure A1.9. (U) LINE ABREAST Formation.



## (U) LOCKED—

- 1. (U) (w/position)—Radar lock-on; correct targeting is not assumed.
- 2. (U) (w/group name)—Radar lock-on; sort is not assumed.
- (U) LOW—Target altitude is below 10,000 feet MSL.
- (U) MADDOG—Visual AIM-120 launch.
- (U) MAGNUM (system/location)—Launch of friendly antiradiation missile (ARM).
- (U) MANEUVER (AZIMUTH/RANGE/ALTITUDE)—Informative call that said group is maneuvering in azimuth, range, and/or altitude.
- (U) MAPPING—Multi-function radar in an A/G mode.

#### (U) MARK—

- 1. (U) Used when aircraft passes over pick up zone (PZ)/landing zone (LZ)/team.
- 2. (U) Directive term to record the location of a ground point of interest.
- (U) MARKING—Friendly aircraft leaving contrails.
- (U) MARSHAL(ING)—Establish(ed) at a specific point.
- (U) MEDIUM—Target altitude between 10,000 and 25,000 feet MSL.
- (U) **MERGE(D)**—Informative call that friendlies and targets have arrived in the same visual arena. Call indicating radar returns have come together.

#### **ATTACHMENT 1-16**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

- (U) MICKEY—HAVE QUICK time-of-day (TOD) signal.
- (U) **MIDNIGHT**—Informative call advising that  $C^2$  radar functions are unavailable due to degradation. Advisory information is still available. Opposite of SUNRISE.

### (U) MILLER TIME—

- 1. (U) Informative call indicating completion of air-to-ground ordnance delivery. Generally used by the last striker in conjunction with a pre-coordinated egress plan.
- 2. (U) Indicates survivors are aboard recovery vehicle (combat search and rescue [CSAR]).
- (U) MONITOR(ING)—Maintain radar awareness on specified group.
- (U) MOTHER—Parent ship.
- (U) MOVER(S)—Unidentified surface vehicles in motion.
- (U) **MUD** (type w/direction)—Indicates radar warning receiver (RWR) ground threat displayed with no launch identification.
- (U) MUSIC—Electronic radar jamming (on air intercept [AI] radar, electronic deception jamming).
- (U) NAILS (w/direction)—RWR indication of AI radar in search.
- (U) **NAKED**—No RWR indications.
- **(U) NEAR-FAR**—Fighter term depicting a radar-apparent description of two or more contacts within a group separated in range.
- (U) **NEGATIVE CONTACT**—Sensor information on a friendly aircraft is lost. (Termination of contact plotting is not warranted.)
- (U) **NEW PICTURE**—Used by controller or aircrew when tactical picture has changed. Supersedes all previous calls and re-establishes picture for all players.
- (U) **NO FACTOR**—Not a threat.
- (U) **NO JOY**—Aircrew does not have visual contact with the target/BANDIT/BOGEY/landmark; opposite of TALLY.
- (U) **NOTCH(ING)** (w/direction)—Directive (informative) for an all-aspect missile defensive maneuver to place threat radar/missile near the beam.
- (U) OCCUPIED—Ground equipment present at tasked target location. Opposite of VACANT.
- (U) **OFF** (w/direction)—Informative call indicating attack is terminated and maneuvering to the indicated direction.
- (U) **OFFSET** (w/direction)—Informative call indicating maneuver in a specified direction with reference to the target.
- (U) ON STATION—Informative call that unit/aircraft has reached assigned station.
- (U) **OPENING**—Increasing in range.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-17**

- (U) **OUT** (w/direction)—Informative call indicating a turn to a cold aspect relative to the known threat.
- (U) **OUTLAW**—Informative call that a bogey has met point of origin criteria.
- (U) PACKAGE—Geographically isolated collection of GROUPS.
- (U) **PADLOCKED**—Informative call indicating aircrew cannot take eyes off an aircraft or ground target without risk of losing tally/visual.
- (U) **PAINT(S)**—An interrogated group/radar contact that is responding with <u>any</u> of the specified IFF/SIF modes and correct codes established for the identification criteria.
- (U) PARROT—IFF/SIF transponder.
- (U) **PASSING**—Descriptive term for when two GROUPS initially separated in range decrease range and pass each other.
- (U) **PICTURE**—A request to provide air information pertinent to the mission in a digital bullseye format.
- (U) **PIGEONS**—Magnetic bearing and range to HOMEPLATE.
- (U) PIGS—Friendly glide weapon (e.g., JSOW).
- (U) **PINCE**—Threat maneuvering for a bracket attack.
- (U) **PITCH/PITCHBACK** (**LEFT/RIGHT**)—Directive call for fighter or flight to execute a nose-high heading reversal.
- (U) **PITBULL**—Informative call that the AIM-120 is at MPRF active range.
- (U) **PLAYMATE**—Cooperating aircraft.
- (U) **PLAYTIME**—Amount of time aircraft can remain on station.
- (*U*) (*freq*) *POGO* (*freq*)—Switch to communication channel number preceding POGO. If unable to establish communications, switch to channel number following POGO. If no channel number follows POGO, return to this channel.

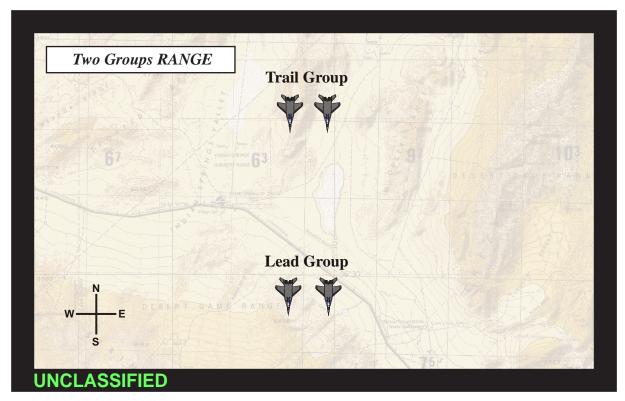
#### (U) **POP**—

- 1. (U) Starting climb for A/S attack.
- 2. (U) Max performance climb out of low-altitude structure.
- (U) **POPEYE**—Flying in clouds or area of reduced visibility.
- (U) **POP-UP**—Informative call of a group that has suddenly appeared inside of meld/No New Picture/briefed range.
- (U) **POSIT**—Request for friendly position; response in terms of a geographic landmark or off a common reference point.
- (U) **PRESS**—Directive call to continue the attack; mutual support will be maintained. Supportive role will be assumed by the speaker.
- (U) **PRINT** (type)—Unambiguous non-cooperative target recognition (NCTR) reply.

#### **ATTACHMENT 1-18**

- (U) **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.
- (U) PURE—Informative call indicating pure pursuit is being used or directive to go pure pursuit.
- (U) **PUSH** (channel)—Go to designated frequency; no acknowledgment required.
- (U) **PUSHING**—Departing designated point.
- (U) **RANGE**—A picture label describing two groups separated in distance along the same bearing. See **Figure A1.10.**, Two Groups RANGE.

Figure A1.10. (U) Two Groups RANGE.



- (U) **RAYGUN** (**position/heading/altitude**)—Indicating a radar lock on to unknown aircraft. A request for a BUDDY SPIKE reply from friendly aircraft meeting these parameters.
- (U) **REPORTED** (information)—Information provided is derived from an off-board source.
- (U) **RESET**—Proceed to a pre-briefed position or area of operation (AO).
- (U) **RESTAKE**—Request for Joint STARS to drive a new STAKE at the target centroid reported with direction of travel and elevation. Initiated by aircrew.
- (U) **RESUME**—Resume last formation/route/mission ordered.
- (U) **RETROGRADE**—Directive/informative call to/from HVAA to withdraw from station in response to a threat, continue mission as able, may RESET if threat is negated.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-19**

- (U) **RIDER**—A bogey that is conforming to safe passage routing, airspeed, or altitude procedures.
- (U) **RIFLE**—Friendly air-to-surface missile launch.
- (U) **RIPPLE**—Two of more munitions released or fired in close succession.
- (U) **ROGER**—Indicates aircrew understands the radio transmission; does not indicate compliance or reaction.
- (U) **ROLEX** (+/-time)—Time line adjustment in minutes always referenced from original preplanned mission execution time. Plus means later; minus means earlier.
- (U) **ROPE**—Circling an IR pointer around an aircraft to help the aircraft identify the friendly ground position.
- (U) **ROTATOR**—Joint STARS moving target indicator (MTI) return that signifies a high probability of a rotating antenna.
- (U) **RUMBA**—Radar has detected jamming but has not resolved the type.
- (U) **SADDLED**—Informative call from wingman or element indicating the return to briefed formation position.
- **(U) SAM (w/direction)**—Visual acquisition of a SAM in flight or a SAM launch, should include position and type if known.
- (U) **SANDWICHED**—A situation where an aircraft or element finds themselves between opposing aircraft or elements.
- (U) **SAUNTER**—Fly at best endurance.
- (U) **SCHLEM**—Simulated high off boresight IR missile launch. Not assessable for simulated kill/kill removal.
- **(U) SCRAM (direction)**—Directive/informative call to egress for defensive or survival reasons; no further HVAA mission support is expected..
- (U) **SCRAMBLE**—Takeoff as quickly as possible.
- (U) **SCRUB**—A low, slow airborne target.
- (U) **SCUD**—Any threat theater ballistic missile (TBM).
- (U) **SEPARATE**—Leaving a specific engagement; may or may not reenter.
- (U) **SHACKLE**—One weave, a single crossing of flight paths; maneuver to adjust or regain formation parameters.
- (U) SHADOW—Follow indicated target.
- (U) SHIFT (w/direction)—Directive call to shift laser illumination.
- (U) **SHOOTER**—Aircraft designated to employ ordnance.
- (U) **SHOPPING**—An aircraft request to Joint STARS for a target.

#### **ATTACHMENT 1-20**

- (U) **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).
- (U) **SHOTGUN**—Pre-briefed weapons state at which separation/bugout should begin.
- (U) (system) SICK—System indicated is degraded/partially operative.
- **(U) SIDE-SIDE**—Fighter term depicting a radar-apparent description of two or more contacts within a group separated in azimuth.
- **(U) SILENT (time)**—System will be unavailable for time indicated.
- (U) **SINGER** (**type w/direction**)—Informative call of RWR indication of surface-to-air missile launch.
- (U) **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).
- (U) **SKINNY**—Current survivor coordinates.
- (U) **SKIP IT**—Veto of fighter commit call, usually followed with further directions.
- (U) **SKOSH**—Aircraft is out of or unable to employ active radar missiles.
- (U) SKUNK—A radar or visual maritime surface contact whose identity is unknown.
- (U) **SLAPSHOT** (**type**, **bearing**)—Directive call for an aircraft to immediately employ a best-available HARM against a specified threat at the specified bearing.
- (U) SLICE/SLICEBACK (LEFT/RIGHT)—Directive call to perform a high-G descending turn in the stated direction, usually 180-degree turn.
- (U) **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.
- (U) **SLOW**—Target with ground speed of less than 300 knots.
- (U) SMASH (ON/OFF)—Directive call to turn on/off anti-collision lights.
- (U) **SMOKE**—Smoke marker used to mark a position.
- (U) **SNAKE**—Directive call to oscillate an IR pointer about a target.
- (U) **SNAP** ( )—Fighter request for immediate BRAA call (with appropriate fill-ins) to the group described. Indicates fighter intent to intercept/join.
- (U) **SNAPLOCK** (w/BRAA)—Indicates fighter has obtained a radar contact inside pre-briefed threat range with beam, flank, or head aspect.
- (U) **SNIFF** (type)—Passive sensor indication of a stated radar emitter.
- (U) **SNIPER** (**type**, **location** [**range**, **bearing**])—Directive call for an aircraft to employ a range-known HARM against a specified threat at the specified location.
- (U) **SNOOZE**—Directive or informative call indicating initiation of emission control (EMCON) procedures.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-21**

- (U) **SORT**—Directive call to assign responsibility within a GROUP; criteria can be met visually, electronically (radar), or both.
- (U) **SORT** (**TAD**, **TIDS**, **etc.**)—Inter-flight directive to execute sorting plan via information displayed on data link system.
- (U) **SORTED**—SORT responsibility within a group has been met.
- (U) **SOUR** (mode/type)—Invalid/no response to an administrative IFF/SIF check. Opposite of SWEET.
- (U) **SPADES**—An interrogated group/radar contact which lacks all of the ATO (or equivalent) IFF/SIF modes and codes required for the identification criteria.
- (U) **SPARKLE**—Target marking by IR pointer or by gunship/forward air control-airborne (FAC[A]) using incendiary rounds.
- (U) **SPIKE** (w/direction)—RWR indication of an AI threat in track or launch.
- (U) **SPIN**—Directive or informative call to execute a timing/spacing maneuver.
- (U) **SPITTER** (w/direction)—An aircraft that has departed from the engagement or is departing the engaged fighter's targeting responsibility.

## (U) SPLASH—

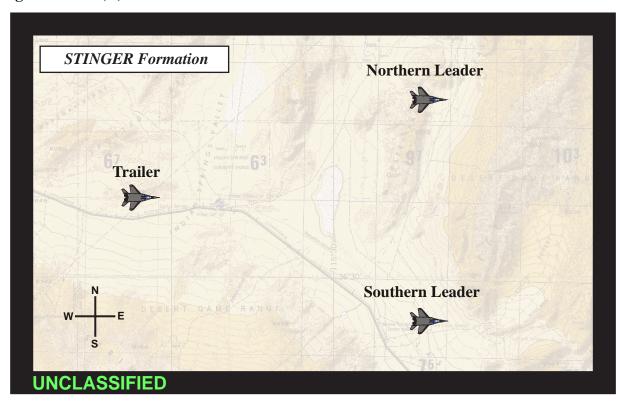
- 1. (U) (Air-to-Air) Target destroyed.
- 2. (U) (Air-to-Surface) Weapons impact.
- **(U) SPLIT**—An informative/directive call that a flight member is leaving formation to pursue a separate attack; visual may not be maintained.
- (U) **SPOOFING**—Informative call that voice deception is being employed.
- (U) **SPOT**—Acquisition of laser designation.
- (U) **SQUAWK** (mode/code)—Operate IFF/SIF as indicated or IFF/SIF is operating as indicated.
- (U) **SQUAWKING** (mode number)—An informative call denoting a bogey is responding with an SIF mode or code other than prescribed by the ATO/identification criteria.
- **(U) STACK**—Two or more contacts or formations with an altitude separation in relation to each other and azimuth/range separation less than or equal to 3 NM.
- (U) **STAKE**—Joint STARS reference point for air-to-ground targeting operations.
- (U) STARE (w/reference point)—Directive call to cue the targeting pod and enable the laser spot search (LSS) function in relation to the specified reference point. Reference point may include the following: INS steerpoint, GEOREF, bearing and range, TAD link, or laser mark.

## (U) STATUS—

- 1. (U) Request for an individual's tactical situation.
- 2. (U) (Group name) Request for a full positional update in digital bullseye format on the specified group.
- (U) **STEADY**—Directive call to stop oscillation of IR pointer.

- (U) **STERN**—Request for or directive to intercept using stern geometry.
- (U) **STINGER**—Three-ship inner group formation with two lead contacts line abreast and the single in trail. See **Figure A1.11.**, STINGER Formation.

Figure A1.11. (U) STINGER Formation.



- (U) **STOP**—Stop IR illumination of a target.
- (U) **STRANGER**—Unidentified traffic that is not a participant with the action in progress.
- (U) STRANGLE (system)—Turn off equipment indicated.
- (U) **STRIPPED**—Informative call that aircraft is out of briefed formation.
- (U) STROBE (w/bearing)—Radar indications of noise jamming.
- (U) **SUNRISE**—Informative call that C<sup>2</sup> radar functions are available. Opposite of MIDNIGHT.
- (U) SUNSHINE—Directive or informative call indicating illumination of target is being conducted with artificial illumination.
- (U) **SWEET**—Valid response to an administrative IFF/SIF check request. Opposite of SOUR.
- (U) **SWITCHED**—Indicates an attacker is changing from one aircraft to another.
- (U) TAG (system, w/location)—Response to an emitter ambiguity resolution request (COLOR).
- (U) TALLY—Sighting of a target, bandit, bogey, or enemy position. Opposite of NO JOY.
- (U) TARGET ( )—A directive call to assign group responsibility.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

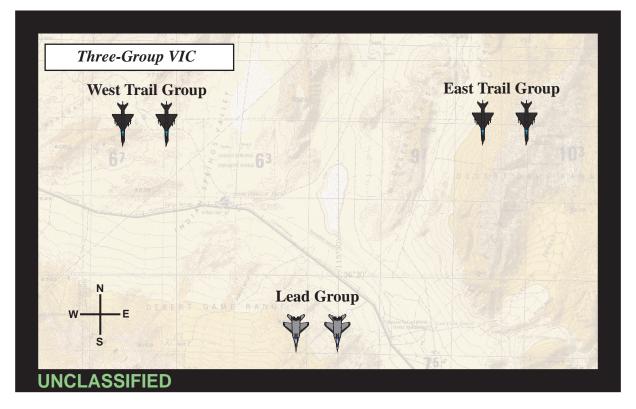
#### **ATTACHMENT 1-23**

- (U) **TARGET** (**TAD**, **TIDS**, **etc.**)—Inter-flight directive to target via information displayed on data link system.
- **(U) TARGETED** ( )—Group responsibility has been met.
- **(U) TEN SECONDS**—Directive to terminal controller to standby for LASER ON call in approximately 10 seconds.

## (U) TERMINATE—

- 1. (U) Stop laser illumination of a target.
- 2. (U) In training, cease local engagement without affecting the overall exercise.
- (U) **THREAT** (w/direction)—Untargeted HOSTILE/BANDIT/BOGEY is within pre-briefed range and/or aspect to a friendly.
- **(U) THROTTLES**—Reminder to set throttles appropriately considering the IR threat and desired energy state.
- (U) **THUNDER**—Informative call 1 minute prior to air-to-surface weapons impact.
- (U) **TIED**—Positive radar contact with element or aircraft.
- (U) TIGER—Enough fuel and ordnance to accept a commit.
- (U) **TIMBER**—Air control NPG of LINK-16/TADIL-J.
- (U) **TOGGLE**—Execute a pre-briefed change of an avionics setting.
- (U) **TOY**—HARM targeting system (HTS) pod.
- (U) **TRACK** (w/direction)—Group/contact flight direction in eight cardinal directions.
- (U) **TRASHED**—Informative call missile has been defeated.
- (U) **TRESPASS** (system, w/position)—The addressed flight is entering the surface-to-air threat ring of a specific (system) at the stated location.
- (U) **TUMBLEWEED**—Indicates limited SA, NO JOY, and BLIND. A request for information.
- (U) UNABLE—Cannot comply as requested or directed.
- (U) UNIFORM—UHF/AM radio.
- (U) VACANT—Ground equipment not present at tasked target location. Opposite of OCCUPIED.
- (U) **VAMPIRE**—Hostile antiship missile launch.
- (U) **VERY FAST**—Target speed greater than 900 knots ground speed/Mach 1.5.
- (U) **VERY HIGH**—Target altitude above 40,000 feet MSL.
- (U) VIC—A picture label describing three groups with a single group closest in range and two trail groups, separated in azimuth from a god's eye view. See Figure A1.12., Three-Group VIC.
- (U) VICTOR—VHF/AM radio.
- (U) **VISUAL**—Sighting of a friendly aircraft or ground position. Opposite of BLIND.

Figure A1.12. (U) Three-Group VIC.



- (U) WALL—A picture label describing three or more groups separated primarily in azimuth from a god 's eye view. See Figure A1.13., Four-Group WALL.
- (U) WARNING (w/color)—Hostile attack is:
  - 1. (U) RED—Imminent or in progress.
  - 2. (U) YELLOW—Probable
  - 3. (U) WHITE—Improbable (all clear).
- (U) **WEAPONS** ( )—Fire only:
  - 1. (U) FREE—At targets not identified as friendly IAW current ROE.
  - 2. (U) TIGHT—At targets positively identified as hostile IAW current ROE.
- 3. (U) HOLD (USAF, USMC, USA)/SAFE (USN)—In self-defense or in response to a formal order.
- (U) WEDGE—Three-ship inner-group formation with a single contact closest in range and two trail contacts line abreast. See Figure A1.14., WEDGE Formation.
- (U) **WEEDS**—Indicates that aircraft are operating close to the surface.
- (U) (system) WELL—System indicated is fully operative.
- (U) WHAT LUCK—Request for results of mission or tasks.

Figure A1.13. (U) Four-Group WALL.

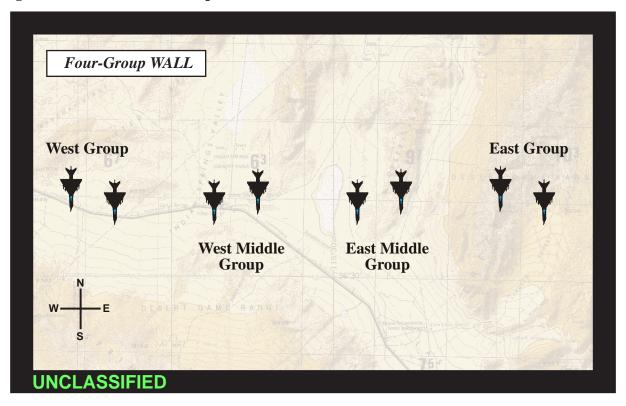
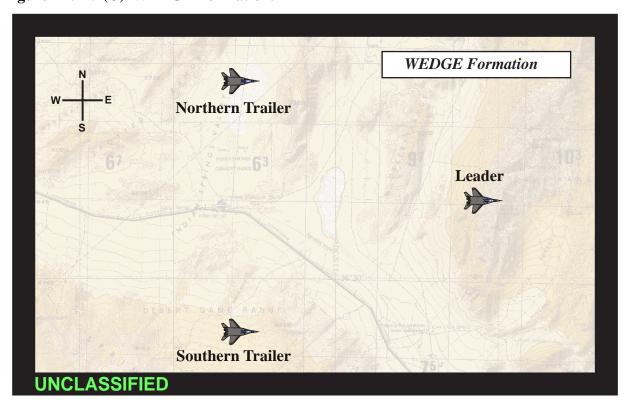


Figure A1.14. (U) WEDGE Formation.



#### ATTACHMENT 1-26

### **AFTTP 3-1.1, Change 1, 23 November 2001**

- (U) WHAT STATE ( )—Report amount of fuel and missiles. Ammunition and oxygen are reported only when specifically requested or critical.
  - 1. (U) ACTIVE—Number of active radar missiles remaining.
  - 2. (U) RADAR—Number of semiactive radar missiles remaining.
  - 3. (U) HEAT—Number of IR missiles remaining
  - 4. (U) FUEL—Pounds of fuel or time remaining.
- (U) **WIDE**—Descriptive term used to indicate the separation between the farthest GROUPS in azimuth in a relative formation used to describe a WALL, VIC, CHAMPAGNE, or BOX.
- (U) WILCO—Will comply with received instructions.
- (U) **WINCHESTER**—No ordnance remaining.
- (U) WINGS LEVEL—Informative call from aircraft to FAC reporting rolled-out on final attack heading.
- **(U) WORDS**—Directive or interrogative call regarding further information or directive pertinent to the mission.

## (U) WORKING—

- 1. (U) (system w/location) Platform gathering EOB on a designated emitter.
- 2. (U) Platform executing electronic identification (EID) on a specific aircraft/group to obtain identification necessary for beyond visual range (BVR) employment.
- **(U) YARDSTICK**—Directive to use A/A TACAN for ranging.
- (U) **ZAP**—Request for data link information.
- A1.4. (U) Categorized Brevity Lists. This listing categorizes words by mission types. Aircrews assigned to specific missions can review the list for words they can expect to use or to hear. See Table A1.1., Basic Air-to-Air Employment; Table A1.2., Basic Air-to-Surface Employment; Table A1.3., Close Air Support; Table A1.4., Combat Search and Rescue; Table A1.5., Command/Control; Table A1.6., SEAD/Rivet Joint Integration; Table A1.7., Laser; Table A1.8., Night Vision Device/IR illuminator; Table A1.9., Data Link; Table A1.10., Joint STARS; and Table A1.11., Joint Maritime Operations.

# **AFTTP 3-1.1, Change 1, 23 November 2001**

**ATTACHMENT 1-27** 

Table A1.1. (U) Basic Air-to-Air Employment.

ARM	CRANK	LEAD-TRAIL	SCRUB	STATUS	
AZIMUTH	CUTOFF	LINE ABREAST	SEPARATE	STINGER	
BANZAI	DECLARE	LOW	SHADOW	TARGET	
BEAM	DEEP	MEDIUM	SHORT SKATE	TARGETED	
BEARING	DELOUSE	MONITOR(ing)	SHOTGUN	TERMINATE	
BOGEY DOPE	DEFENSIVE	NEAR-FAR	SIDE-SIDE	THREAT	
BRAA	DRAG	PICTURE	SKATE	TRASHED	
BRACKET	ECHELON	PITBULL	SKIP IT	VERY FAST	
BUGOUT	ENGAGED	POP-UP	SKOSH	VERY HIGH	
BUSTER	EXTEND	POSIT	SLIDE	VIC	
CHAMPAGNE	FADED	PRESS	SLOW	WALL	
CHEAPSHOT	FAST	PRINT (type)	SNAP	WEEDS	
CHICKS	FURBALL	PUMP	SORT	WIDE	
CLEAN	GOPHER	RANGE	SORTED	WINCHESTER	
CLEARED	GORILLA	RESAN	SOUR		
CONTACT	HIGH	RESET	SPADES		
CONTAINER	HUSKY	RIDER	SNAPLOCK		
CONTINUE	KNOCK-IT-OF	SCHLEM	SPITTER		
	F				
UNCLASSIFIED	UNCLASSIFIED				

# Table A1.2. (U) Basic Air-to-Surface Employment.

ATTACKING	CONTINUE DRY	MILLER TIME	POP	THUNDER	
BRACKET	IN	OCCUPIED	SMOKE	VACANT	
CLEARED HOT	MAPPING	OFF	SPLASH	WINGS LEVEL	
COMEOFF					
UNCLASSIFIED					

# Table A1.3. (U) Close Air Support.

CAPTURE	COME OFF	FRIENDLY	OFF	WINGS LEVEL
CLEARED HOT	CONTACT	HITS	RIFLE	
COLD	CONTINUE DRY	IN	THUNDER	
UNCLASSIFIED				

# **ATTACHMENT 1-28**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

Table A1.4. (U) Combat Search and Rescue.

AJAX	HOLD DOWN	MILLER TIME	POPCORN	SKINNY
FLASHLIGHT	MARK			
UNCLASSIFIED				

# Table A1.5. (U) Command/Control.

ARM	FLANK	MANEUVER	ROLEX	UNIFORM	
AUTHENTICATE	FRIENDLY	MARSHALING	SAUNTER	VERY HIGH	
AZIMUTH	FURBALL	MEDIUM	SCRAM	VERY FAST	
BANDIT	GADGET	MERGE(D)	SKINNY	VIC	
BEAD WINDOW	GO CLEAR	MICKEY	SKIP IT	WALL	
BEAM	GOPHER	MIDNIGHT	SLIDE	WARNING (color)	
BEARING	GORILLA	MILLER TIME	SLOW	WEAPONS FREE	
BENT	GO SECURE	NEGATIVE CONTACT	SOUR	WEAPONS TIGHT	
BITTERSWEET	GREEN	NEW PICTURE	SPADES	WEAPONS HOLD	
BOGEY	GROUP	NO FACTOR	SPITTER	WEAPONS SAFE	
BOX	HEAD	ON STATION	SPOOFING	WEDGE	
BRAA	HEAVY	OPENING	SQUAWK	WEEDS	
BULLSEYE	HIGH	OUTLAW	SQUAWKING	( ) WELL	
CAP	HOSTILE	PACKAGE	STACK	WIDE	
CEASE	НОТ	PAINTS	STATUS	WHAT LUCK	
ENGAGEMENT	HOTDOG	PARROT	STINGER	WHAT STATE	
CHAMPAGNE	HOTEL FOX	PICTURE	STRANGER	WORDS	
COLD	INDIA	PIGEONS	STRANGLE		
COMMIT	JACKAL	POGO	SUNRISE		
CONTACT	KNOCK-IT-OFF	POP-UP	SWEET		
CONTAINER	LADDER	POSIT	TARGET		
DEEP	LAST	PUSH (channel)	TERMINATE		
DOLLY	LEADER(S)	RANGE	TRACK		
DRAG	LEAD-TRAIL	REPORTED	TRESPASS		
ЕСНО	LINE-ABREAST	RETROGRADE	THREAT TIM- BER		
ESTIMATE	LOW	RIDER	UNABLE		
UNCLASSIFIED					

# **AFTTP 3-1.1, Change 1, 23 November 2001**

## **ATTACHMENT 1-29**

# Table A1.6. (U) SEAD/Rivet Joint Integration.

ACTIVE	COLOR	MAGNUM	SINGER	TOY
ADD	DATA	MUD	SNIFF	TRESPASS
ARIZONA	DROP	RETROGRADE	SNIPER	WEAPONS()
ATTACKING	EMPTY	ROTATOR	SPLASH	WORKING
CANDYGRAM	HOLLOW	SAM	TAG	ZAP
CAPTURED	LOWDOWN	SLAPSHOT	THUNDER	
UNCLASSIFIED				

# Table A1.7. (U) Laser.

CAPTURED	DEADEYE	LASING	SPLASH	STARE
CEASE LASER	LASER ON	SHIFT	SPOT	TEN SECONDS
CONTACT				
UNCLASSIFIED				

# Table A1.8. (U) Night Vision Device/IR Illuminator.

BURN	FLASH (system)	LIGHTBULB	SMASH	STOP	
CHRISTMAS TREE	FLASHLIGHT	LIGHTS ON/OFF	SNAKE	SUNSHINE	
CLOAK	GOGGLE	ROPE	SPARKLE	TALLY	
EYEBALL	DEGOGGLE	SHIFT	STEADY	UNPLUG	
UNCLASSIFIED					

# Table A1.9. (U) Data Link.

CHECK TIDS	CAPTURED	HANDSHAKE	TAG DATA	ZAP
CHECK TAD	DATA	HOLLOW	TARGET TAD	
		SORT TAD	TIMBER	
UNCLASSIFIED				

## Table A1.10. (U) Joint STARS.

UNCLASSIFIED					
IDLE	MOVERS	ROTATOR	SILENT		
DETAILS	LOWDOWN	RE-STAKE	SCRUB	STAKE	

# Table A1.11. (U) Joint Maritime Operations.

AUTOCAT	BRUISER	FATHER	ON STATION	SMASH
BEAD WINDOW	BULLDOG	GREYHOUND	PIGEONS	SNIFF
BIRD	CEASE	HOMEPLATE	POGO	STRIP
BIRD AFIRM	ENGAGEMENT	HOT DOG	SCRAM	THROTTLES
BIRD AWAY	DASH (#)	LIGHTS ON/OFF	SINGER	TIGER
BIRD NEGATE	DUCK	MOTHER	SKUNK	VAMPIRE
UNCLASSIFIED				

#### **ATTACHMENT 1-30**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

### A1.5. (U) Terms and Definitions.

- (U) A-Pole—The distance from the launching aircraft to the target when a missile begins active guidance.
- (U) 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.
- (U) 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).
- **(U) ACC** (air component commander)—The commander of a Joint Task Force's (JTF) air components; the air operational commander.
- (U) acceleration maneuver—An offensive or defensive maneuver, flown in the vertical plane, if possible, designed to increase or reduce distance from an object.
- (U) 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.
- (U) 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.
- (U) ACT (air combat tactics)—Training in the application of BFM, ACM, and intercept skills to achieve a tactical A/A objective.
- **(U) advisory control**—A mode of control in which the controlling agency has communications but no radar capability.
- (U) AHC (advanced or aircraft handling characteristics)—Training designed to gain proficiency in and to exploit the flight envelope of the aircraft, consistent with operational and safety constraints.
- (U) airborne order—A command authorization for tactical flight (departure time will be specified).
- (U) air refueling time—Planned lapsed time from air refueling contact time (ARCT) to drop off.
- **(U) 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.
- (U) **AOR** (area of responsibility)—Airspace radar search responsibility of an individual fighter.
- (U) arcing—Flying a circular flight path which allows another aircraft the use of cutoff to gain closure.
- (U) ARCP (air refueling control point)—The planned geographic point over which the receivers arrive in the observation or precontact position with respect to the assigned tanker.
- **(U) ARCT (air refueling control time)**—The planned time that the receiver and tanker will arrive over the ARCP.

- (U) ARIP (air refueling initial point)—The planned point to enter the refueling track.
- (U) **armament safety check**—Action taken by an aircrew to review armament selection switches to preclude the inadvertent launch or release of armament (switches safe).
- (U) **aspect angle**—Angle between defender's longitudinal axis and the line of sight (LOS) to the attacker. The angle is measured from defender's 6 o'clock. Attacker heading is irrelevant.
- (U) ATO (air tasking order [frag])—Assigns A/A and A/S targets, time on target (TOT), and mission support information.
- (U) attack axis—This is an imaginary line which extends from the bandits through the leading element and back to the trailing element. A Grinder is "on axis" if the lead element, trail element, and bandits are all on the same straight-line.
- (U) attack restriction—Ingress, ordnance delivery, or egress restrictions, depending on situation (i.e., threats, weather, terrain, and ROE).
- (U) autonomous—Aircrew is operating without command and control.
- (U) **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.
- (U) BHM (basic helicopter maneuvers)—Training designed to apply helicopter 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 employed, or defeat weapons employed by an adversary.
- (U) **broadcast control**—A mode of control that passes target information by referencing a designated location or series of locations.
- (U) **BZ** (buffer zone)—Airspace of defined dimension and adjacent to or near borders which may have special restrictions.
- **(U) 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.
- (U) CCR (cursor coordination range)—A pre-briefed or standard range where acquisition symbols are initially placed to establish fighter radar altitude coverage.
- (U) **cell**—Two or more tankers flying in formation.
- (U) **chaff**—A passive form of electronic countermeasure used to deceive airborne- or ground-based radar.
- (U) **clock position**—Description of position using the aircraft as a reference: the nose is 12 o'clock and the tail is 6 o'clock.

#### ATTACHMENT 1-32

- (U) **close control**—A mode of control varying from providing vectors to providing complete assistance including altitude, speed, and heading.
- (U) **closure**—Relative velocity of one aircraft in relation to another.
- (U) **collision course**—A flight path which directs an aircraft towards a point where it will collide with another aircraft.
- (U) **combat identification** (CID)—The process of identifying a contact as friendly, bandit, or neutral. A contact that remains unidentified is a bogey (unknown).
- (U) **combat identification system** (CIDS)—Identification systems that exploit physical or electronic characteristics of a contact using cooperative and non-cooperative methods such as signals intelligence (SIGINT) and electronic support measures (ESM).
- (U) combined—Multinational; between two or more forces or agencies of two or more allies.
- (U) **comm jamming**—Attempt to interrupt communications.
- **(U) composite force**—Formations of dissimilar aircraft working in concert to accomplish the same mission.
- (U) **composite force training**—Scenarios employing multiple flights of aircraft, each under the direction of its own flight leader. Requires a minimum of three different types of aircraft in three different mission roles.
- **(U) corner velocity**—The minimum airspeed at which the maximum allowable aircraft G can be generated.
- (U) **defensive maneuvering**—Maneuvers designed to negate the attack or ordnance of a threat.
- (U) **defensive spiral**—A descending, accelerating dive using high G and continuous roll to negate an attack and gain lateral separation.
- (U) **DMC** (**digital maneuvering cue**)—Used to assess kinematic capability of a missile against a maneuvering target.
- (U) **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.
- (U) **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. For the assumptions on Notch and out/abort maneuvers, see AFTTP 3-1.4, *Tactical Employment—F-15A/B/C/D*; AFTTP 3-1.5, *Tactical Employment—F-16C/D*; and AFTTP 3-1.17, *Tactical Employment—F-15E*.
- (U) **DR** (**dead reckoning**)—Navigation technique estimating position based on last known position, heading, speed, and time.

## **AFTTP 3-1.1, Change 1, 23 November 2001**

#### **ATTACHMENT 1-33**

- **(U) DTW (direct threat warning)**—SA/warning of enemy activity from Rivet Joint to friendly assets. This does not imply commit or engage authority or the ability to direct assets.
- (U) EA (electronic attack)—Actions taken to prevent or reduce the effective use of the electromagnetic spectrum, primarily through jamming and deception.
- (U) element—A flight of two aircraft.
- (U) EM (energy maneuverability) diagram—A chart depicting an aircraft's turn rate, radius, and excess power for a specific set of conditions.
- (U) **engagement**—Maneuvers by opposing aircraft attempting to achieve/prevent weapons firing positions.
- (U) EON—AIM-120 engagement order number.
- (U) **EP** (electronic protection)—Actions taken to protect personnel, facility, and equipment from any effects of friendly or enemy employment of electronic warfare that degrades, neutralizes, or destroys friendly combat capability.
- **(U) 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.
- (U) **ES** (**electronic support**)—Actions tasked by or under direct control of an operational commander (OPCON) to search for, intercept, identify, and locate sources of intentional and unintentional radiated electromagnetic energy for the purpose of immediate threat recognition.
- (U) **F-Pole**—F-Pole is the separation between the launch aircraft and the target at missile endgame/impact.
- (U) 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.
- **(U) FSCL** (**fire support coordination line**)—FSCLs facilitate the expeditious attack of surface targets of opportunity beyond the coordinating measure. Short of an FSCL, the appropriate land or amphibious force commander controls all air-to-ground and surface-to-surface attack operations. (See Joint Publication 1-02, *DoD Dictionary of Military and Associated Terms*.)
- (U) **FEBA** (**forward edge of the battle area**)—The foremost limits of an area where ground combat units are deployed. Designated to coordinate fire support, position forces, or maneuver of units. (See Joint Publication 3-09, *Doctrine for Joint Fire Support*.)
- (U) **FLOT** (**forward line of own troops**)—A line indicating the most forward position of friendly forces. (See Joint Publication 3-09, *Doctrine for Joint Fire Support*.)

## (U) frag—

- 1. (U) Fragmentary order (ATO).
- 2. (U) Fragmentation pattern of a weapon.

#### **ATTACHMENT 1-34**

- (U) **fratricide**—Destruction of friendly forces when destruction of enemy forces is intended.
- (U) **HAVE QUICK**—A UHF jam-resistant radio.
- **(U) HCA (heading crossing angle)**—The angle formed by the intersection of the fighter's present heading and the target's present heading.
- (U) high angle (snap) shot—A gunshot made with a high track-crossing angle, normally attempted because a tracking shot was not possible or desired.
- (U) hostile—Operational command ROE definition of an enemy aircraft or action.
- (U) **HOTAS**—Hands on throttle and stick.
- (U) **intercept**—A phase of an A/A mission between the commit and engagement.
- (U) **JAAT** (**Joint Air Attack Team**)—Coordinated employment of attack helicopters and fighters employed against enemy ground vehicles and personnel.
- (U) **jink**—Aircraft maneuvers designed to change the flight path of the aircraft in all planes at random intervals (usually to negate a gun attack).
- (U) **joint**—Activities, operations, or organizations in which elements of more than one service of the same nation participate.
- **(U) Killer Scout**—Aircraft that locates and controls attack of targets in a specific operating area. Usually performed beyond the FSCL and not operating in the FAC(A) role.
- (U) lag pursuit—An attack geometry where the attacker's nose points behind the target.
- (U) lead pursuit—An attack geometry where the attacker's nose points ahead of the target.
- (U) **lethal envelope**—The envelope within which the parameters can be met for successful employment of munitions by a particular weapons system.
- (U) line of sight—A line from a sensor to an object (usually target) being viewed.
- (U) line-of-sight rate—The rate of change in an object's line of sight, usually expressed in degrees per second.
- (U) line up—Fighter briefing to FAC.
- (U) LR (lock range)—The radar LR gives the fighter enough time to lock, identify, make an engagement decision, and still maintain FLO.
- (U) lufberry—A circular, stagnated fight with no participant having an advantage.
- **(U) maximum performance**—The best possible performance without exceeding aircraft limitations.
- (U) **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.
- (U) military crest—A position along a ridge or hill two-thirds the distance from the base to the summit.

- (U) 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.
- (U) 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.
- (U) **mixed force**—Multiple type aircraft operating in the same formation under the direction of the same flight lead.
- **(U) mutual support**—The coordinated efforts of two or more aircraft to provide combined firepower and survivability.
- (U) offensive maneuvering—Maneuvers against an opponent to achieve weapons parameters.
- **(U) off-station**—Not in position.
- **(U) ops check**—Periodic check of aircraft systems performed by the aircrew (including fuel) for safety of flight.
- (U) **peeking**—Used to describe moving a radar coverage out of the briefed AOR to see targets in other flight members' AOR.
- (U) **positive identification** (PID)—The unambiguous label (friendly, bandit, or neutral) given to contacts identified from a combat ID system (CIDS) and/or visual sources.
- (U) **primary force**—The flights that are being protected or escorted.
- (U) **primary locker**—The fighter responsible for multitargeting of a group.
- **(U) procedural identification**—Identification determined solely be track behavior. Examples of this are point of origin, BVR kill zones, boxes or lanes, guilt by association, friendly routes, and lack of IFF/SIF.
- (U) pure pursuit—An attack geometry where the attacker's nose points directly at the target.
- (U) quick flow refueling—Receiver next in line will fly formation off the current receiver to expedite the flow of receivers across the boom.
- (U) red risk (estimate distances)—These distances are reasonable figures for employing weapons near friendly forces in combat and are not minimum safe distances for peacetime training use. (Reference AFTTP 3-1.3, Chapter 10, "Combat Search and Rescue Planning and Execution.")
- (U) **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.
- (U) rule of engagement (ROE)—The ROEs contain the criteria and guidelines for weapons employment against an enemy. ROEs provide direction to the shooter governing what level of identification confidence is required to shoot. ROEs also include, but are not limited to, definitions of weapons control states (hold, tight, and free) and self-defense criteria.

#### **ATTACHMENT 1-36**

- (U) sanitize—Using sensors to search an area for threats.
- (U) **SARDOT**—Search and rescue reference point used only to reference survivor.
- (U) **SARNEG**—Search and rescue number encryption grid.
- **(U) scramble order**—Command authorization for tactical flight establishing an immediate departure time.
- (U) **secondary locker**—Fighters responsible for assisting the primary locker. The secondary locker will shoot into a group when directed or other briefed criteria are met (e.g., SPITTER, primary locker's shot trashed, primary locker calls CLEAN, secondary locker sees untargeted group).
- (U) **semiactive**—A system wherein the receiver uses radiation or reflections from the target that has been illuminated by an outside source.
- (U) **separation**—Distance between an attacker and defender; can be lateral, longitudinal, or vertical.
- (U) **shot depth**—The range behind the closest bandit group within which trailing groups will be shot at.
- (U) situation awareness (SA)—The level the warfighter is able to recognize, process, and react to both external and internal factors in a dynamic environment to increase lethality, survivability, and mission effectiveness.
- (U) **sort**—Briefed responsibility within a group—either visual, radar, or electronic. Used in determining ordnance expenditure assignments in A/A engagements or A/G deliveries.
- (U) sorting—Using any available information (e.g., radar presentation,  $C^2$  information) to determine which bandit to attack.
- (U) specific excess power (PS)—A measure of an aircraft's ability to gain or lose energy in terms of altitude, airspeed, or a combination thereof. Also called energy rate and expressed in feet per second or knots per second.
- **(U) split-plane maneuvering**—Aircraft or elements maneuvering in relation to one another but in different planes and/or altitudes.
- **(U) TAC-A (tactical air coordinator-airborne)**—An airborne agency located far enough away from threats and jamming to provide a communications relay between fighters, FACs, and ground agencies; typically aboard a FAC aircraft, ABCCC, or airborne warning and control system (AWACS).
- (U) tactical control—A mode of control providing information in BRAA, bullseye, or geographic reference.
- (U) targeting depth (TD)—the maximum distance from the leading edge of a targeted group that a flight member must target. Beyond this range, GCI/AWACS owns targeting responsibility.
- (U) **TOF** (time of flight)—The time from weapon release to weapon impact.
- (U) VC—Closure between fighter and target expressed in knots.

- **(U) Willy Pete**—A white phosphorus smoke, rocket, grenade, or artillery round used to provide a ground reference; can be employed as a bomb to provide a smokescreen.
- (U) zap zone—Indicates an area of maximum exposure to enemy fire.
- **A1.6. (U) Air-to-Air Communication Standards.** This section establishes air-to-air comm standards between fighters and command and control. This section governs areas of communication formats, control, identification, and integration. For interflight communications, reference the MDS-specific AFTTP 3-1 volume.
  - **A1.6.1.** (U) Communications Plan. The mission commander will brief the overall communications plan, to include CHATTERMARK procedures, who holds CHATTERMARK authority, and which frequencies will be used.

#### A1.6.2. (U) Communications Fundamentals.

- A1.6.2.1. (U) Alpha Checks. Bullseye is considered correlated if within 2 NM and 3 degrees. The optimum range to perform an Alpha Check is within 60 miles of the bullseye. ABM/WDs and aircrew will call alpha checks from the fighter to the bullseye.
- A1.6.2.2. (U) Group Criteria. Group criteria will be IAW **paragraph A1.3.**, USAF and Joint Operational Brevity Words; aircraft within 3 NM in azimuth and range.
- A1.6.2.3. (U) BRAA or Bullseye. BRAA, BULLSEYE, or assigned ACO code name for BULLSEYE will accompany all calls to reduce or eliminate ambiguity. BULLSEYE will not be truncated to "bull" to avoid it being interpreted as BRAA in heavy comm situations.
- A1.6.2.4. (U) Command and Control (C<sup>2</sup>) Altitude Capability. Early warning and surveillance radar systems can be off by as much as 10,000 feet or more. ABM/WDs will round off to the nearest thousand feet. ABM/WDs will not use LOW, MEDIUM, or HIGH except when it is "reported" from an off-board source. ABM/WDs will use the term "last" to indicate a fighter-provided altitude (e.g., "DARKSTAR, TRAIL GROUP OVER BULLSEYE, 27 THOUSAND LAST").
- A1.6.2.5. (U) Call Sign Usage. A call sign will be associated with every radio transmission. Normally, use your own call sign if being informative or descriptive. If being directive, use the call sign of the aircraft being directed. Finally, if "relaying" a call, include the call sign of the person making the call in addition to your call sign.
  - (U) (Directive): "VIPER 1, TARGET GROUP BULLSEYE 360/10, 25 THOUSAND, HOSTILE."
  - (U) (From Snake 11 relayed by Hog 1): "HOG 1, RELAY, SNAKE 11 IS IP INBOUND."
- A1.6.2.6. (U) General guidance on aircrew requests for adversary information. The primary terms used by aircrews to request adversary information from the ABM/WD are as follows:
  - (U) PICTURE.
  - (U) STATUS.
  - (U) BOGEY DOPE.

#### **ATTACHMENT 1-38**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

- (U) SNAP.
- (U) CUTOFF.

Specific examples of the use of and responses to these calls begin in **paragraph A1.6.4.**, Calling the Picture and Labels. See this section for detailed instructions. General guidance is provided below:

- A1.6.2.6.1. (U) If the aircrew requests PICTURE, with no other modifying remarks, the ABM/WD will respond with the full tactical picture, using standard bullseye format, labeled if possible, and all appropriate fill-ins/ID.
- A1.6.2.6.2. (U) If the aircrew requests STATUS (group name), the ABM/WD will respond with the bullseye, altitude, and appropriate fill-ins (including ID) of the referenced group.
- A1.6.2.6.3. (U) If the aircrew requests BOGEY DOPE, the ABM/WD will respond with BRAA (with fill-ins, ID) to the nearest group. Aircrew can request BRAA to any other group by calling BOGEY DOPE (group label).
- A1.6.2.6.4. (U) If the aircrew requests a SNAP (group name/aircraft call sign), the ABM/WD response will be identical to BOGEY DOPE replies. SNAP may be used to request BRAA to enemy or friendly forces. The only other difference between SNAP and BOGEY DOPE is that BOGEY DOPE is simply a request for information and SNAP conveys aircrew intent to attack/join the referenced group/aircraft.
- A1.6.2.6.5. (U) If the aircrew requires a vector to collision course intercept geometry on a specific group, the aircrew will request CUTOFF (group name). In this case, the ABM/WD will respond with the cutoff vector first, followed by BRAA (with fill-ins, ID) to the specified group. Since the requirement for cutoff geometry naturally implies flank/beam aspect, ABM/WDs should ensure the group's track direction is included in the BRAA fill-ins.

### A1.6.3. (U) Identification Criteria and Rules of Engagement.

- A1.6.3.1. (U) ID Criteria. ID criteria will be theater dependent; however, ID terminology will apply to all theaters of operation. Normally ID criteria will include some combination of lack of friendly (e.g., flight plan, IFF/SIF, safe passage), positive enemy indication (e.g., EID, VID), and point of origin. Application of AFTTP 3-1 ID brevity terms follows.
  - A1.6.3.1.1. (U) BANDIT. A BANDIT is an aircraft identified as an enemy IAW theater ID criteria. The term does not necessarily imply direction or authority to engage. The requirements to satisfy BANDIT ID criteria will be ROE dependent. The identification matrix required to identify a group as "BANDIT" may include a positive enemy indication, lack of friendly indication, or, more normally, both. In addition, a visual identification (VID) may fulfill BANDIT ID criteria as specified in theater ROE. The ability to meet "BANDIT" criteria can come from on-board systems, off-board systems, or a combination of both.
  - A1.6.3.1.2. (U) Positive Enemy Indication. The following may be used to satisfy "positive enemy indication": NCTR, Mode X, or other off-board sensors as defined in theater-specific identification criteria and ROE.

- A1.6.3.1.3. (U) Lack of Friendly Indication. In order to satisfy lack of friendly requirements, completed checks of identification, friend or foe (IFF)/selective identification feature (SIF) codes and/or minimum risk route (MRR) adherence must be accomplished. Specific IFF/SIF mode and code requirements will be theater dependent.
  - A1.6.3.1.3.1. (U) PAINTS. An interrogated group/radar contact that is responding with any of the specified IFF/SIF modes and correct codes established for the ID criteria. PAINTS will be used to describe a group that does not meet lack of friendly criteria (that is, the group is squawking one or more of the required modes and codes as specified in the ATO/ACO).
  - A1.6.3.1.3.2. (U) SPADES. An interrogated group/radar contact which lacks all of the ATO (or equivalent) IFF/SIF modes and codes required for the ID criteria. SPADES will be used to describe a group that does meet the IFF/SIF portion of the lack of friendly criteria (i.e., the group in question is not squawking required Modes 1, 2, 3, 3C, or 4, as specified in the ATO/ACO SPINS-defined requirements).
  - A1.6.3.1.3.3. (U) SQUAWKING (Mode #). An informative call denoting a bogey is responding with an IFF/SIF mode or code other than prescribed by the ATO/ID criteria. SQUAWKING will be used to describe the SIF status of a group that does not meet SPADES or PAINTS criteria but is responding with a Mark X/XII-type SIF reply. For example, ID criteria may specify correct code Mode 1 of 42. A BOGEY squawking an incorrect Mode 1 may be reported as "FOCUS, GROUP BULLSEYE 240/35, 25 THOUSAND, SQUAWKING MODE 1 41."
  - A1.6.3.1.3.4. (U) Minimum Risk Route (MRR). An MRR is usually defined in a theater ACO to aid in the safe return of a friendly aircraft that is unable to communicate and/or cannot verify the working status of its IFF/SIF transponder. If an aircraft is on a published MRR, it will be called a RIDER and will be a BOGEY, requiring additional ID steps prior to being engaged (EID, VID, etc.).
    - A1.6.3.1.3.4.1. (U) MRR Parameters. These may include any or all of the following:
      - (U) Transit level (TL)—altitude bands.
      - (U) Transit corridor (TC)—specified routes of flight.
      - (U) Airspeed.
    - A1.6.3.1.3.4.2. (U) Some theater ROEs may allow engagement of targets not in compliance with MRR. In this case, the term GOPHER will be used to designate targets which are not currently complying with MRR or who previously passed through an MRR zone without complying with MRR requirements.
    - A1.6.3.1.3.4.3. (U) A positive enemy indication (PEI) may override an MRR (i.e., an NCTR can override a TL if so defined by the theater-specific ROE), but it cannot override a PAINTS call if an ambiguity exists.

- A1.6.3.1.4. (U) Guilt by Association. Guilt by association is within group criteria and 5,000 feet in altitude. If a single group, previously declared BANDIT (or HOSTILE), maneuvers to subsequently become two or more groups, all of the subsequent groups will be BANDIT (or HOSTILE). If a single group, previously declared BOGEY, maneuvers to become two or more groups, and one of those groups is subsequently declared BANDIT (or HOSTILE), that declaration applies only to that one group.
- A1.6.3.2. (U) Rules of Engagement (ROE). Meeting identification criteria does not imply clearance to engage. The theater ROE will determine when an aircraft identified as a BANDIT may be engaged. This could come as the result of committing a hostile act as defined by theater commanders (e.g., crossing a political boundary). HOSTILE describes a contact identified as an enemy upon whom clearance to fire is authorized IAW the theater ROE. HOSTILE will be used to describe a BANDIT group that has completed a hostile act or shown hostile intent and may be engaged.
- A1.6.3.3. (U) Clear Avenue of Fire (CAF). Once a BANDIT/HOSTILE declaration has been achieved, the fighter must ensure a clear avenue of fire. MDS ROTs will address the specifics. ABM/WDs will transmit FURBALL when FRIENDLIES are near (ABM/WDs will use a nominal 5-NM bubble) declared BANDIT/HOSTILE groups. FURBALL is a response to a DECLARE request indicating known BANDITS and FRIENDLIES in close proximity.
- A1.6.3.4. (U) Requests for ID. DECLARE requests for ID of groups will follow one of the following formats.
  - A1.6.3.4.1. (U) Bullseye Format. Call sign of control agency, the requesting fighter's call sign, "DECLARE GROUP BULLSEYE," position of the group in digital bullseye format, and altitude. For example, "DARKSTAR, VIPER 1, DECLARE GROUP BULLSEYE 230/12, 12 THOUSAND."
  - A1.6.3.4.2. (U) Group Name Format. A group declaration request can be made after the presentation has been labeled. The format will be call sign of control agency, requesting fighter's call sign, "DECLARE (group name/name)," and altitude. For example, "DARKSTAR, VIPER 2, DECLARE EAST GROUP, 22 THOUSAND."
  - A1.6.3.4.3. (U) Response. Regardless of which DECLARE request format is used, the ABM/WD will respond to the DECLARE inquiry by anchoring the identified group using digital bullseye and altitude. The use of track directions/aspect will be by exception and as a discriminator for ambiguous situations. For headings, information will be passed primarily in exact direction (e.g., "HEADING 360") and secondarily in track direction (e.g., "TRACK NORTH"). For example, "CHALICE, WOLF 1, DECLARE GROUP BULLSEYE 083/27, 17 THOUSAND, HEADING 360."
  - A1.6.3.4.4. (U) Group Location. The digital bullseye response of the ABM/WD might not be exactly the same as the position reported by the fighter due to the group's ground track/maneuvers while the identification process is completed. Criteria or ROTs to confirm group location (match of declare request to ID answer/correlation) should be decided in mission planning or outlined in theater SPINS and briefed accordingly. If a reported altitude of a "declared" group is thought to be below the radar coverage of the

control agency, then pay special attention to the ID response to avoid misidentification. For example, if a known hostile is at 15,000 feet stacked above a friendly at 2,000 feet, Eagle 1 would call: "CHALICE, EAGLE 1, DECLARE GROUP BULLSEYE 125/27, 2 THOUSAND." If the friendly is at 2,000 feet (not within the Chalice's radar coverage, that is directly below the hostile at 15,000 feet, which is on Chalice's radar), Chalice would call: "CHALICE, CLEAN BULLSEYE 125/27, 2 THOUSAND. CHALICE GROUP BULLSEYE 125/29, 15 THOUSAND, TRACK SOUTH (as a discriminator), HOSTILE."

**NOTE:** (U) DECLARE responses might include FRIENDLY, BOGEY, BANDIT, HOSTILE, FURBALL, NON-PLAYER, STRANGER, SPADES, PAINTS, SQUAWKING, ECHO, RIDER, GOPHER, or CLEAN.

#### A1.6.4. (U) Calling the Picture and Labels.

- A1.6.4.1. (U) Core Information. Core information will include the number of groups, location, and altitude. Bullseye will be the primary means to provide location. FRIENDLY/NEUTRAL groups will not be included in total number of groups. If friendly/neutral groups are a factor, they will be addressed in a separate transmission using the same core information format.
  - A1.6.4.1.1. (U) Digital Bullseye and BRAA. Digital bullseye is the only format that will be used for bullseye-referenced calls (the eight cardinal directions will not be used). Fighters and ABM/WDs will use exact bearing and range off bullseye. For BRAA, ABM/WDs will round off the bearing to the nearest 5 degrees.
  - A1.6.4.1.2. (U) Core Information Format. When using core information to anchor the location of groups, the format should be GROUP—no number—and anchor the location. For example, "... GROUP BULLSEYE 360/5 12 THOUSAND, GROUP BULLSEYE 040/15 ..." and not "... FIRST GROUP BULLSEYE 360/5 12 THOUSAND, SECOND GROUP BULLSEYE 040/15 ..." (which is incorrect). By sticking to this rule, fighters and ABM/WDs will avoid ambiguous calls such as "EAGLE 1, HITS SECOND GROUP, 35 THOUSAND" (which is incorrect). If a fighter or ABM/WD has amplifying information on a group already called in core information, provide the group's location prior to providing the amplifying information. For example, EAGLE 1, GROUP BULLSEYE 040/15, HITS 35 THOUSAND" and "BANDSAW, GROUP BULLSEYE 040/15, DRAG WEST."
  - A1.6.4.1.3. (U) Anchoring Three or Less Group Locations. The group closest to the fighters will be anchored off bullseye first, followed by the next closest, and so on. If multiple groups are equally distant from the fighters, the group closest to bullseye will be anchored first. If a group is within 2 NM of bullseye, it will be anchored as "group over bullseye." Up to three groups may be anchored using digital bullseye.
  - A1.6.4.1.4. (U) More than Three Groups.
    - A1.6.4.1.4.1. (U) If an ABM/WD/fighter detects more than three groups, the call will include the total number of groups but will only anchor the three groups closest to the fighters. For example, "DARKSTAR, FOUR GROUPS, GROUP

#### **ATTACHMENT 1-42**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

BULLSEYE 270/25, 15 THOUSAND, TRACK WEST, GROUP BULLSEYE 290/35 10 THOUSAND, GROUP BULLSEYE . . . "

A1.6.4.1.4.2. (U) In order to preserve valuable comm time, the technique of calling three groups in one transmission will only be done prior to the start of an intercept (e.g., pre-push or marshaling). In this case, the ABM/WD must use a slower cadence to ensure the fighters are able to comprehend all of the information. Once the intercept starts, targeting comm will have priority over picture calls.

A1.6.4.1.5. (U) Fill-In Information. Fill-ins are amplifying information that may be added to called groups to increase SA. They may include, but are not limited to, track direction (if ground track direction is not given, hot is assumed), numbers of contacts within a group, the inner-group formation, any IDs or any identification criteria that have been met so far (e.g., SPADES, RIDER), observed EA, maneuvers, or FADED.

A1.6.4.1.6. (U) ID Information. IDs will be provided on the following calls:

- (U) Initial core information calls.
- (U) Anytime bullseye data is given.
- (U) Threat calls.
- (U) Requests made for ID/declaration.

**A1.6.5.** (U) Comm for Groups CAPPING (Pre-Commit Pictures). The adversary CAP location will be anchored from bullseye to the point closest to the friendly fighters. (See Figure A1.15., CAP Comm.) CAP fill-ins include the CAP leg length, the types of CAPs (indicative of bandit S/A, technology, and capabilities), and HEAVY. For building the accurate CAP picture, use the following listed types of CAPs as a basis for speeding the information flow.

- (U) Counteropposing CAPs (**Figure A1.16.**, Counteropposing CAPs).
- (U) Beam CAP (**Figure A1.17.**, Beam CAP).
- (U) Counterrotating CAP (**Figure A1.18.**, Counterrotating CAPs).
- **A1.6.5.1. (U) Marshaling.** If one or more groups appear to be maneuvering within a limited area with no specific intent (that is, they are not CAPPING, just holding), they will be called marshaling. Anchor the closest of the marshaling groups to the fighters off bullseye. (See **Figure A1.19.**, Marshaling Group.)
- **A1.6.5.2.** (U) **Transitioning from Group CAPPING Comm.** As a ROT, CAPs will have demonstrated intent to leave their CAP when two or more consecutive radar returns have passed their previous turn points. If a fighter or WD recognizes when they leave their CAP due to a commit, call them as "committed." For example, "FOCUS, BOTH CAPS COMMITTED." Once the adversaries have committed from their CAP, WDs and fighters will use core information until a picture can be labeled.

Figure A1.15. (U) CAP Comm.

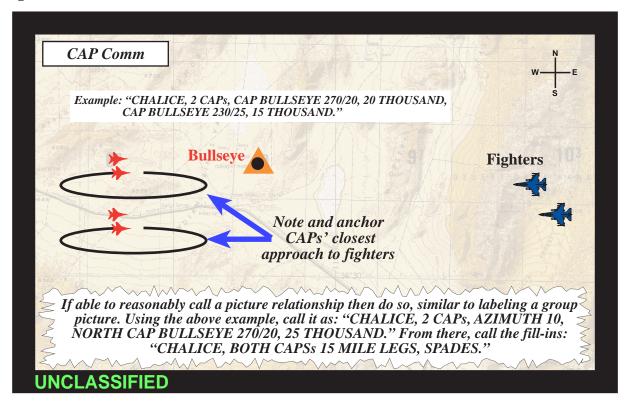


Figure A1.16. (U) Counteropposing CAPs.

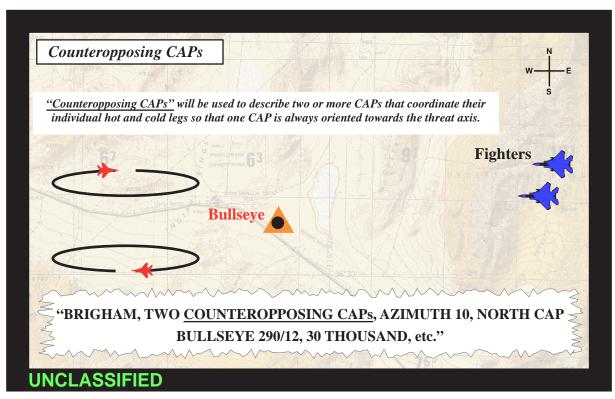


Figure A1.17. (U) Beam CAP.

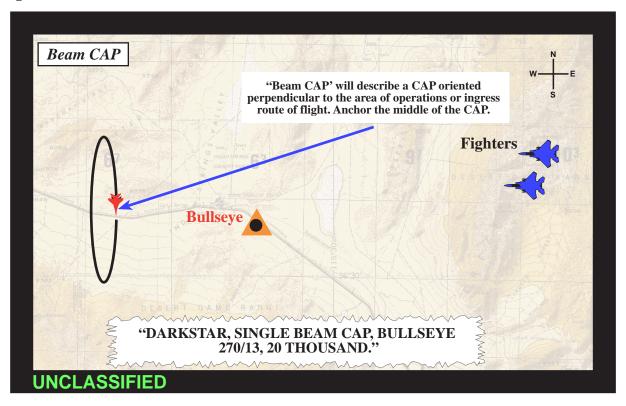
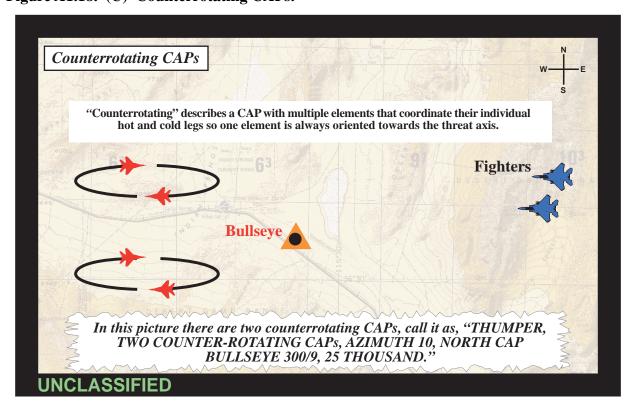
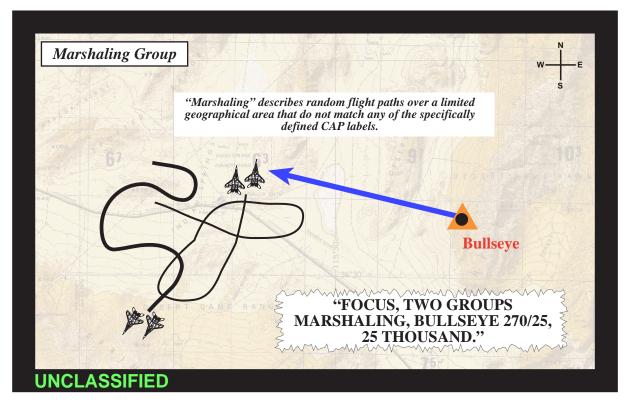


Figure A1.18. (U) Counterrotating CAPs.



### **AFTTP 3-1.1, Change 1, 23 November 2001**

Figure A1.19. (U) Marshaling Group.



**A1.6.6.** (U) **Picture Labeling.** If picture labeling criteria are not met, then the fighters and WDs should continue to use core information. A picture should never be forced as the entire engagement can be fought using only core information and appropriate fill-ins. Label the picture by common sense and the tactical presentation. The four criteria to be used to label a picture are as follows:

- (U) Fighters committing/pushing, and
- (U) Bogies/bandits/hostiles are on a steady heading (greater than 12AA), and
- (U) Formation is determinable and labeling a picture will help build S/A, and
- (U) Groups are within bounding range.

A1.6.6.1. (U) In addition to the criteria above, if a picture cannot be labeled prior to targeting/meld range, labels should not be used. Continue to use only core information.

A1.6.6.2. (U) If groups do not meet labeling criteria, but a plain language group relationship exists and can be passed quickly and clearly, WDs and fighters should attempt to do so. Initially call the groups in core and then follow with a more plain language call. For example, "BANDSAW, TWO GROUPS, EAST-WEST 19, COLLAPSING." This call, while not IAW the ROTs listed earlier, may help drive an intercept tactic better than the core information alone.

A1.6.6.3. (U) Standard Picture Labels. The standard labels used by USAF aircrews and ABM/WDs are SINGLE GROUP, RANGE, AZIMUTH, VIC, CHAMPAGNE, WALL LADDER, and BOX. The term ECHELON is used as a fill-in on two-group pictures

#### **ATTACHMENT 1-46**

**AFTTP 3-1.1, Change 1, 23 November 2001** 

having both RANGE and AZIMUTH components. These labels are depicted in **Figure A1.20.**, AZIMUTH; **Figure A1.21.**, RANGE; **Figure A1.22.**, ECHELON Fill-In; **Figure A1.23.**, CHAMPAGNE; **Figure A1.24.**, VIC; **Figure A1.25.**, WALL and LADDER Presentations; and **Figure A1.26.**, Five Group LADDER.

Figure A1.20. (U) AZIMUTH.

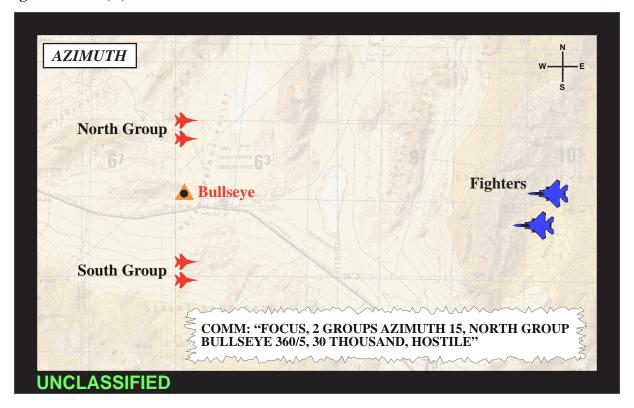


Figure A1.21. (U) RANGE.

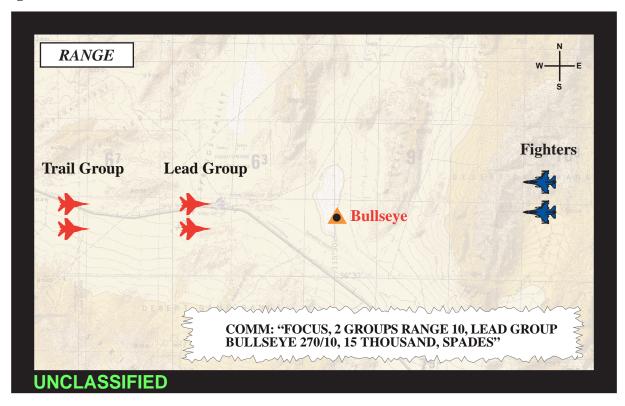


Figure A1.22. (U) ECHELON Fill-In.

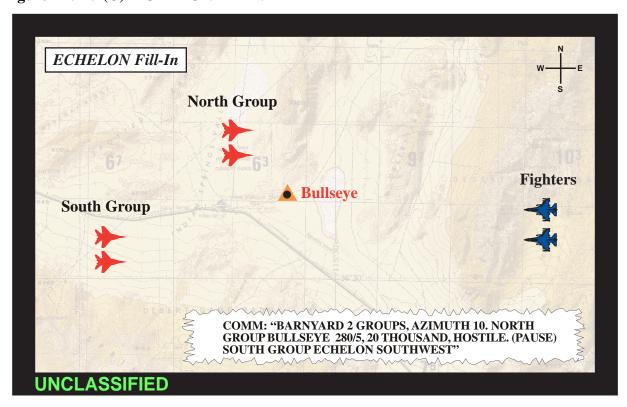


Figure A1.23. (U) CHAMPAGNE.

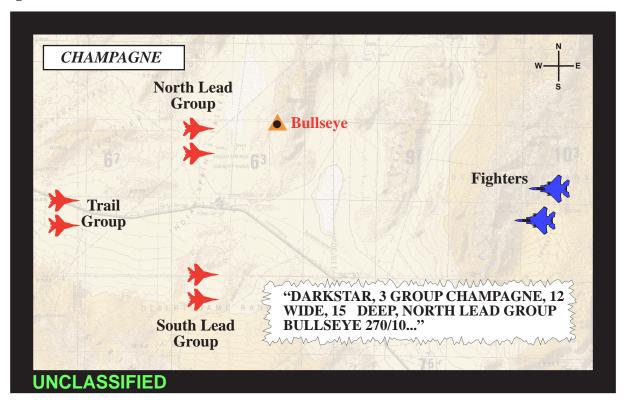


Figure A1.24. (U) VIC.

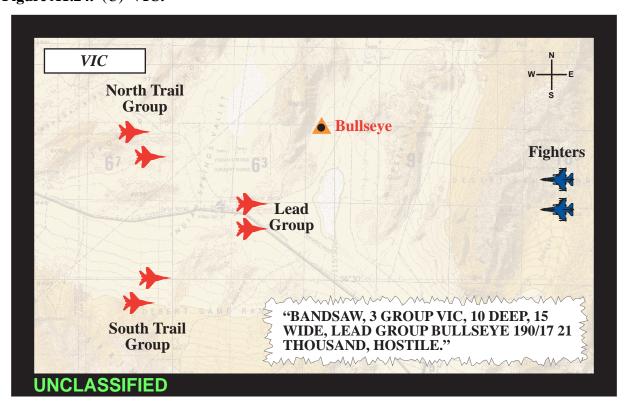


Figure A1.25. (U) WALL and LADDER Presentations.

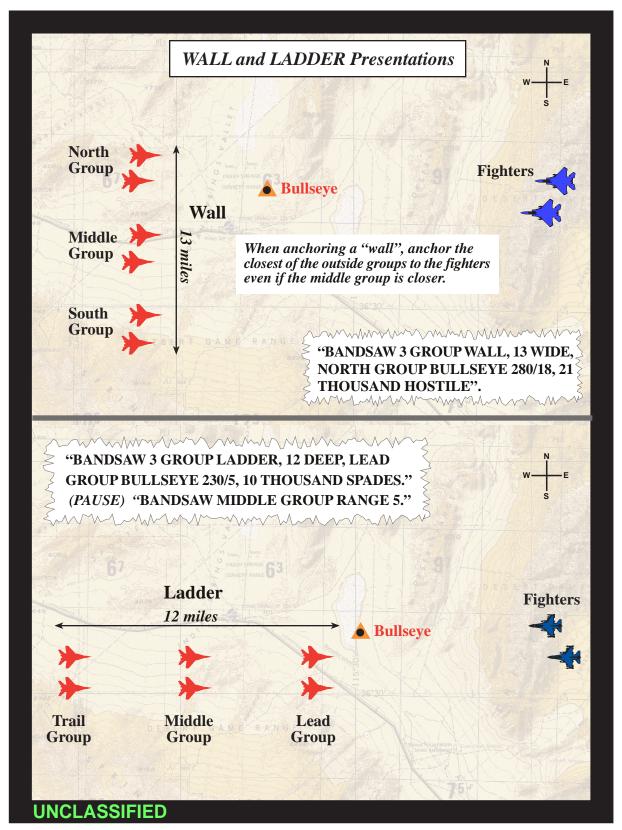
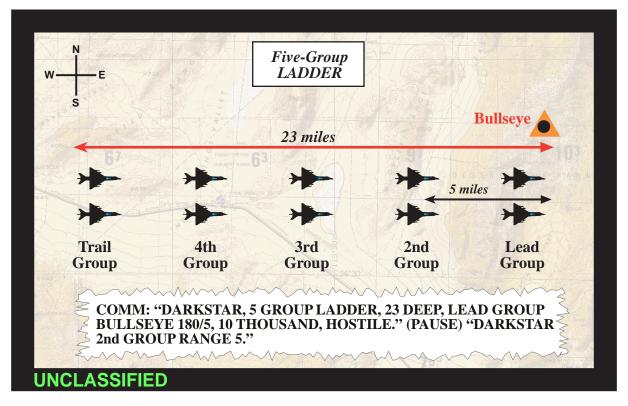


Figure A1.26. (U) Five Group LADDER.



A1.6.6.4. (U) Anchoring the Picture. In an AZIMUTH presentation, anchor the closest group/package to the fighter. If groups are equidistant from the fighters, anchor the nearest group to bullseye. In RANGE or VIC presentations, anchor the lead group. In a WALL or CHAMPAGNE, anchor the outside edge closest to bullseye.

A1.6.6.5. (U) Naming the Groups. Within a labeled picture, each group will have an established name, IAW the figures in this section and in **paragraph A1.1.**, General. In composite force operations with friendly forces operating on multiple axes, consider using cardinal direction names instead of "lead group" or "middle group" to avoid confusion due to differing VSD/MFD apparent presentations.

A1.6.6.6. (U) Specific Picture Labeling Contracts.

A1.6.6.6.1. (U) Single Group. When only one known BOGEY/BANDIT/HOSTILE group exists, the label/name is SINGLE GROUP, and all information is passed in core. For example, " . . . SINGLE GROUP BULLSEYE 360/20, 20 THOUSAND, SPADES."

A1.6.6.6.2. (U) Two Groups. There are two primary ways to describe two-group pictures: AZIMUTH and RANGE. If the groups are in an AZIMUTH relationship, name the groups within the picture using the four cardinal directions (i.e., "north group," "south group"). If the groups are in a RANGE relationship, name the groups using "lead group" and "trail group." See **Figure A1.20.**, AZIMUTH, and **Figure A1.21.**, RANGE.

A1.6.6.6.2.1. (U) ECHELON. A fill-in to a two-group presentation is ECHELON. To describe the group separation, ABM/WDs will measure the exact slant range between groups. If the two ECHELON groups are wider than they are long, they will be labeled azimuth. For example, "DARKSTAR, TWO GROUPS, AZIMUTH 10, SOUTH GROUP BULLSEYE 110/25, GROUPS ECHELON NORTHWEST." If the two ECHELON groups are longer than they are wide, they will be labeled range. For example, "... TWO GROUPS, RANGE 10, LEAD GROUP OVER BULLSEYE, GROUPS ECHELON SOUTHWEST." As a ROT for calling AZIMUTH versus RANGE, use an imaginary 45-degree line from the closest group. See Figure A1.22., ECHELON Fill-Ins.

A1.6.6.6.3. (U) Three or More Groups. The five other labels that may be used to describe pictures with three or more groups are WALL, LADDER, CHAMPAGNE, BOX, and VIC.

A1.6.6.6.3.1. (U) CHAMPAGNE and VIC.

A1.6.6.6.3.1.1. (U) CHAMPAGNE Labels. CHAMPAGNE is a label describing three distinct groups with two in front and one behind from a god's eye view. In a CHAMPAGNE, the two groups closest to the fighters will be named lead groups (north lead group and south lead group in a CHAMPAGNE headed east towards the fighters) and the lead group closest to the fighters will be anchored off bullseye. The third group in the CHAMPAGNE will be named the trail group. When calling the distances between groups in a CHAMPAGNE, the width and then the depth will be called. However, if it looks only slightly like a CHAMPAGNE, it will be called a three-group WALL. As a ROT, the trail group should be swept back approximately 45 degrees or more from the lead groups to be considered a CHAMPAGNE. See **Figure A1.23.**, CHAMPAGNE.

A1.6.6.6.3.1.2. (U) VIC Labels. A VIC label describes three groups with a single group closest in range and two trail groups, separated in azimuth. In a VIC, the group closest to the fighters will be named the lead group; the other two are trail groups. When calling the distances between groups in a VIC, the depth and width will be called. However, if it looks only slightly like a VIC, it will be called a three-group WALL. As a rule of thumb, the trail groups should be swept back approximately 45 degrees or more from the lead group to be considered a VIC. See **Figure A1.24.**, VIC.

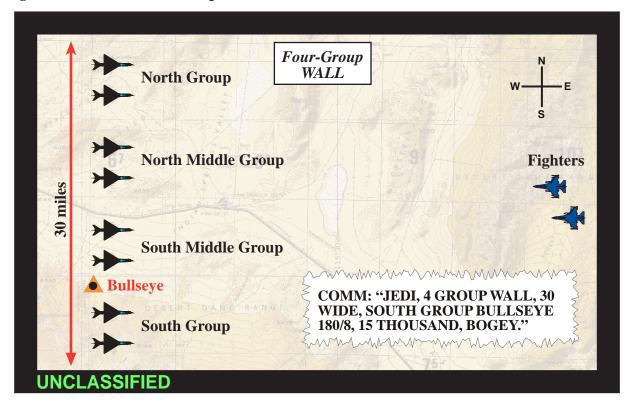
A1.6.6.6.3.2. (U) WALL and LADDER.

A1.6.6.6.3.2.1. (U) Three-Group WALL or LADDER. In a three-group WALL or LADDER, call the group in the middle the "middle group." In a three-group LADDER, the last group will be called the "trail group." The range between the "lead group" and the "middle group" in a three-group LADDER will be provided in a second transmission. The azimuth from the anchor to the middle group in a WALL will only be provided if the distance is drastic or the tactical situation warrants. See **Figure A1.25.**, WALL and LADDER Presentations.

A1.6.6.6.3.2.2. (U) Four or More Group LADDER. In a range problem with four or more groups (four-group LADDER), name the groups after the lead group as "second, third, and so on," but the last group in the LADDER will always be named the "trail group." See **Figure A1.26.**, Five-Group LADDER.

A1.6.6.6.3.2.3. (U) Four-Group WALL. In a four-group WALL, name the outside groups with the cardinal directions, like in a two-group azimuth, "north group" and "south group." The other groups inside the WALL will be named "south middle group" and "north middle group." (See **Figure A1.27.**, Four-Group WALL.) For example, "EAGLE 1 LOCKED BULLSEYE 270/10, 25 THOUSAND." By using the names mentioned above, the WD could respond, "EAGLE 1, LOCKED NORTH GROUP, NORTH MIDDLE GROUP BULLSEYE 230/14, 28 THOUSAND HOSTILE."

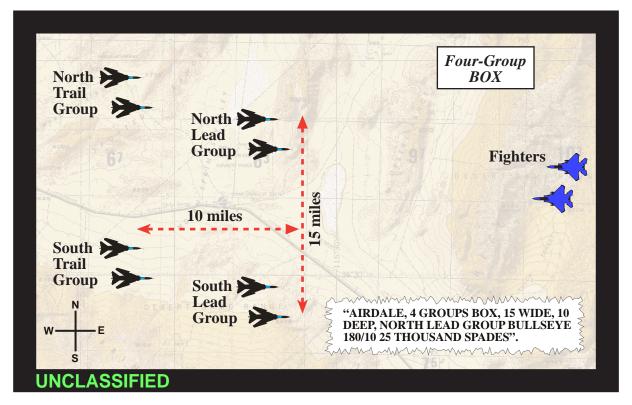
Figure A1.27. (U) Four-Group WALL.



A1.6.6.6.3.3. (U) Four-Group BOX. A four-group BOX presentation is initially labeled in the same manner as a three-group CHAMPAGNE. The azimuth spacing between the trail groups will be filled in with a subsequent transmission, as comm pacing permits. (See **Figure A1.28.**, Four-Group BOX.)

A1.6.6.7. (U) PICTURE Requests. ABM/WDs will not transmit the word "picture" when describing a presentation. For example, "... PICTURE, 3 GROUP CHAMPAGNE...." Fighters can request PICTURE at any time and the WD response can be in the form of CAP comm, core information, or a labeled picture, depending on the phase of the mission and situation, but it will be communicated relative to bullseve location.

Figure A1.28. (U) Four-Group BOX.



### A1.6.7. (U) Bounding.

- A1.6.7.1. (U) Bounding limits the use of group labels to situations where the group picture is related. Individual groups (or CAPs) operating outside of a briefed bounding range are not considered as orchestrating one specific tactic and will not be described using group labels; they will be called "packages." To describe groups outside of bounding range, use core information. For example, using a briefed bounding range of 30 miles, the call would be as follows: "DARKSTAR, TWO PACKAGES, PACKAGE BULLSEYE 360/45, PACKAGE BULLSEYE 270/10."
- A1.6.7.2. (U) Packages can be labeled with a cardinal direction if doing so will help facilitate targeting. For example, "DARKSTAR, TWO PACKAGES, NORTH PACKAGE BULLSEYE 030/45, SOUTH PACKAGE BULLSEYE 110/55."
- A1.6.7.3. (U) If a common sense relationship between the packages exists that will aid in targeting the packages, then it can be used. For example, "DARKSTAR, TWO PACKAGES, NORTH-SOUTH 35, NORTH PACKAGE BULLSEYE 360/45..."
- A1.6.7.4. (U) Azimuth and range should not be used to describe groups outside of the briefed bounding range. An incorrect call would be "BANDSAW, TWO GROUPS AZIMUTH 35, NORTH GROUP BULLSEYE . . . "
- A1.6.7.5. (U) Within these packages, there may be a multi-group picture that can be labeled. For example, "CHALICE, NORTH PACKAGE, TWO GROUPS, RANGE 10, LEAD GROUP BULLSEYE 045/35 . . . "

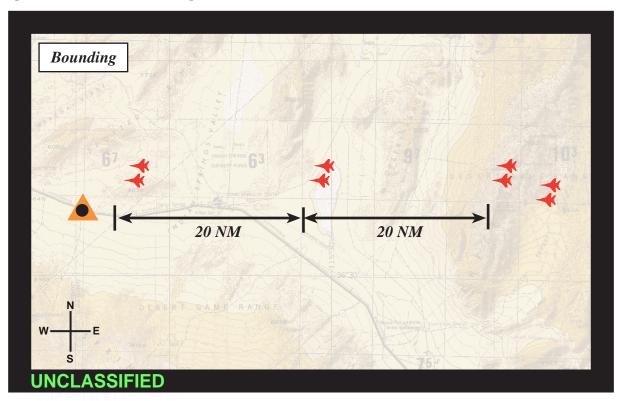
#### **ATTACHMENT 1-54**

#### **AFTTP 3-1.1, Change 1, 23 November 2001**

A1.6.7.6. (U) After the "inner package" picture has been labeled, both the package name and group name will be used when referencing groups. This is to avoid confusion as there might be two or more groups with the same group name. For example, "EAGLE 1 TARGETED LEAD GROUP NORTH PACKAGE."

A1.6.7.7. (U) The shortest distance between groups must be greater than bounding range in order to meet package criteria. For example, if bounding range was 30 NM, the following would be called: "COWBOY, THREE GROUP LADDER, 40 DEEP, LEAD GROUP BULLSEYE..." See **Figure A1.29.**, Bounding.

Figure A1.29. (U) Bounding.



**A1.6.8. (U) Inner-Group Formation.** ABM/WDs and aircrew should label the inner-group formation when this call will enhance mission success. This is particularly important when fighters are committed to a visual merge. Fighters should not attempt to label the inner-group formation at ranges beyond the reasonable expectations of accurate inner-group radar resolution nor at times when higher priority radio calls should take precedence.

A1.6.8.1. (U) Since the inner-group label will be used to primarily to define sort priorities and build a mental picture of the group's formation for WVR employment, it will be called in god's eye view format, based on the actual formation the targets are flying, not their radar-apparent orientation.

A1.6.8.2. (U) When describing an inner-group formation, use the labels LINE ABREAST, LEAD-TRAIL, BEARING, WEDGE, STINGER, or CONTAINER.

- A1.6.8.2.1. (U) If the fighters need a radar-apparent label to facilitate a sort for BVR ordnance employment, fighters can use the terms NEAR/FAR or SIDE/SIDE. However, ABM/WDs will use the god's eye view labeling contract.
- A1.6.8.3. (U) If an ABM/WD determines through comm or radar that a group has an altitude stack of at least 15,000 feet, the ABM/WD will communicate it using the term "high/low STACK," stating the higher altitude first then the lower altitude. For example, "DARKSTAR, NORTH GROUP HIGH/LOW STACK 30 THOUSAND, 10 THOUSAND."
- A1.6.8.4. (U) When naming individual contacts within the groups, use combinations of leader, trailer, western, eastern, and so on. See **Figure A1.30.**, Inner-Group Formations.
- A1.6.8.5. (U) Heavy. A group is "heavy" if it contains at least three contacts. If the number of contacts in a group can be accurately determined, the group will be called heavy and the number of contacts provided. For example, "CHALICE, WEST GROUP, HEAVY, FOUR CONTACTS, CONTAINER."

# A1.6.9. (U) Maneuvering Groups.

- A1.6.9.1. (U) When ABM/WD or aircrews recognize a maneuver by a group, they will call the maneuver only and wait for the next sweep/cycle/hit to add amplifying information.
  - (Using Group Name) "DARKSTAR LEAD GROUP MANEUVER."
  - (Using Core Information) "DARKSTAR GROUP BULLSEYE 270/15 MANEUVER."
- A1.6.9.2. (U) Once the true nature of the maneuver is determined, the terms "maneuver azimuth" and "maneuver range" will be used if the group continues to separate and has not settled.
  - (Using Group Name) "DARKSTAR LEAD GROUP MANEUVER RANGE."
  - (In Core Information) "DARKSTAR, GROUP BULLSEYE 270/15, MANEUVER AZIMUTH."
- A1.6.9.3. (U) When the maneuvering appears to have ceased and the group is on a steady heading, it may be described with flank, beam, drag, heading, or tracking direction. This scenario may be followed with a "new picture" call in core information or labeled picture format.
- A1.6.9.4. (U) Maneuvering Groups Inside "Meld/No New Picture" Range.
  - A1.6.9.4.1. (U) For groups that maneuver inside of meld/no new picture range, maneuvering groups (paragraph A1.6.9., Maneuvering Groups) still applies, with the following addition. Due to time constraints, the threat, the need to pass information quickly and clearly, and the need to facilitate the targeting of the closest threat, an additional label "arms" may be used to discriminate between different entities of a maneuvering group. (See Figure A1.31., Maneuvering Groups Inside "Meld/Targeting No New Picture" Range.)

Figure A1.30. (U) Inner-Group Formations (Labels and Names).

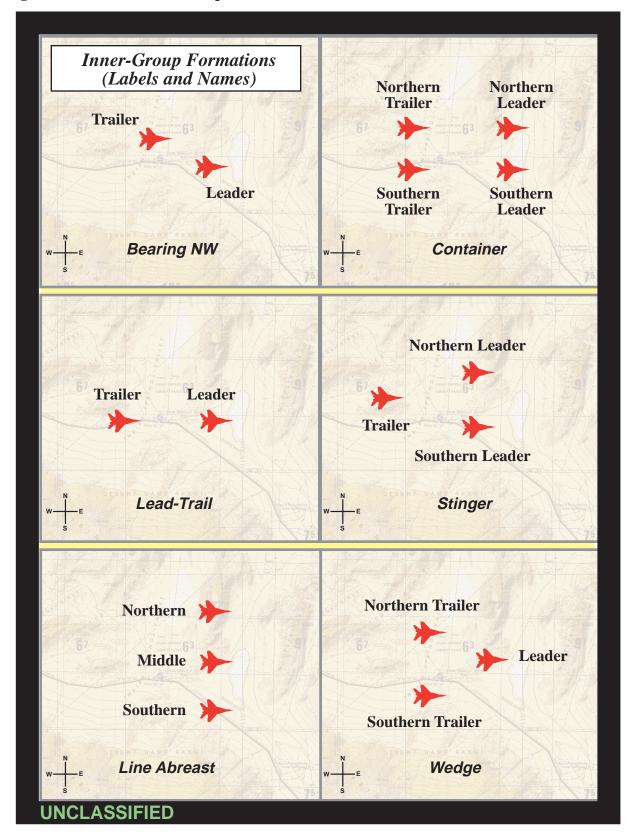
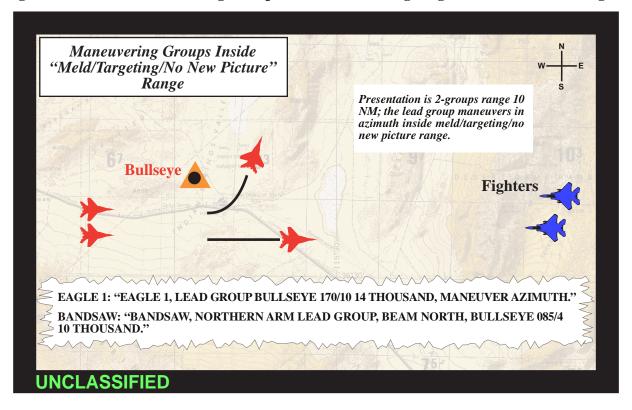


Figure A1.31. (U) Maneuvering Groups Inside "Meld/Targeting No New Picture" Range.



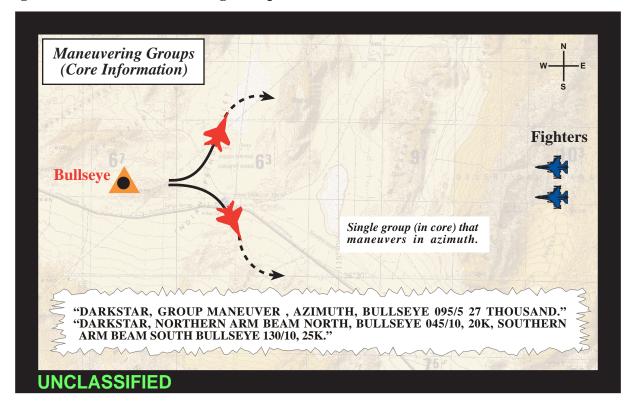
A1.6.9.4.2. (U) Once the maneuver has been completed and comm time/priority exists, the relationship of the maneuvering group can be provided. AZIMUTH and RANGE will not be used to describe the resulting formation when the maneuver occurs inside of meld/no new picture range. If the maneuver has occurred and does not appear to be complete, a relationship can still be provided as long as it makes sense, builds SA, and will aid in the targeting/sort decision process.

A1.6.9.4.3. (U) If the picture was not a labeled picture (core information), this same concept would still apply. See **Figure A1.32.**, Maneuvering Groups (Core Information).

#### A1.6.10. (U) Faded Comm and Techniques.

A1.6.10.1. (U) In general, if a previously reported group is not processed for two consecutive sweeps/cycles on an ABM/WD's scope, it will be reported by the ABM/WD as FADED. The faded call's bullseye location will be anchored at the position of the last contact (last radar hit) with a last known heading given (if known). For example, "BANDSAW, NORTH GROUP FADED, BULLSEYE 270/27, TRACK NORTH."

Figure A1.32. (U) Maneuvering Groups (Core Information).



A1.6.10.2. (U) By calling the group as FADED, the ABM/WD is informing the fighters C<sup>2</sup> can no longer accept targeting responsibility on that group. The ABM/WD will attempt to dead reckon (DR) the FADED group's location for SA but will make no calls based on DR location. If the fighter puts a radar on the FADED group and calls its location with a heading, the ABM/WD will update the DR process again. After the initial FADED call, if the group remains unaccounted for (either untargeted or unreported), then the group will be called FADED with the "last known" radar hit location anchored off bullseye. For example, "BANDSAW, NORTH GROUP FADED, LAST KNOWN BULLSEYE 270/27."

A1.6.10.3. ABM/WDs will use "negative contact" to report a friendly aircraft that is not processed on a scope. For example, "EAGLE 1, DARKSTAR, NEGATIVE CONTACT."

**A1.6.11.** (U) Electronic Attack.  $C^2$  will respond to STROBE calls with range to the closest group along that azimuth and any follow-on groups along that azimuth. If  $C^2$  is clean along that azimuth, then that should be reported for SA. This may indicate that the contact may be below command and control's coverage or may be a ground-based jammer. MUSIC calls should be responded to with number of contacts in that group (if able), aspect (if not hot), and any maneuvers that are seen.

### **A1.6.12.** (U) New Groups.

A1.6.12.1. (U) Prior to a fighter reaching meld/no new picture range, any group previously undetected/unreported will be referred to as a "new group." If either a fighter or WD is describing a picture in core information and someone else detects a group that was

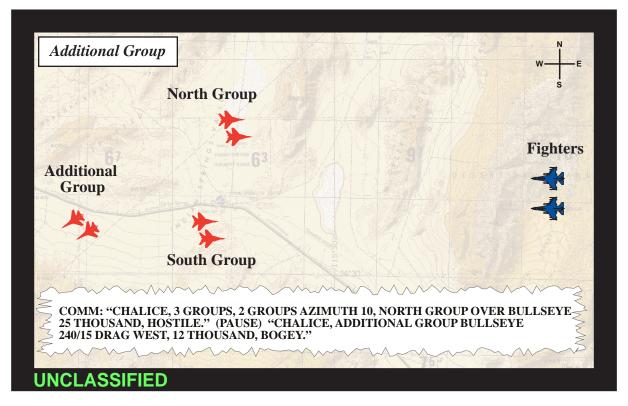
omitted in the core picture call, that group will be called a "new group" and anchored off bullseye—usually with the very next comm call. For example, "CHALICE, TWO GROUPS, GROUP BULLSEYE 360/10, GROUP OVER BULLSEYE, MANEUVERING" and then "EAGLE 1, NEW GROUP BULLSEYE 190/7, HITS 5 THOUSAND."

- A1.6.12.2. (U) If the "new group" is detected/reported after labels have been applied, the priority is to first anchor that group off the bullseye, then if it makes sense, make a new picture call. Anchor the new picture using standard anchoring criteria. For example, "VIPER 1 NEW GROUP BULLSEYE 275/15, 5 THOUSAND." Next, call a new picture if it fits. For example, "HOSS 1, NEW PICTURE, THREE-GROUP LADDER, 10 DEEP, LEAD GROUP BULLSEYE . . .."
- A1.6.12.3. (U) If a "new group" appears within 5 NM of meld/no new picture range and time does not allow the normal "new group," "new picture" progression, then a new picture can be labeled using the "new group" as the anchor.
- **A1.6.13. (U) Additional Groups.** "Additional group" is used only when applying labels to a presentation when there is a group, within bounding criteria, that does not fit within the previously discussed group labels. It does not matter whether this group is a factor for targeting. The fighter/ABM/WD will first state the total number of groups, provide the presentation label, and finally in the next transmission anchor the "additional group" off bullseye. See **Figure A1.33.**, Additional Group.

# A1.6.14. (U) Pop-Up Groups.

- A1.6.14.1. (U) Once a flight gets to meld/no new picture range from their closest group, any previously undetected/unreported group detected with the meld/no new picture range will be called a "pop-up group."
- A1.6.14.2. (U) If the fighters are not within visual range of each other (nominally 3 miles), the pop-up group will be anchored off bullseye unless it meets threat criteria, where it will be called as a pop-up threat in BRAA format.
- A1.6.14.3. (U) If the fighters are within visual range of each other, the pop-up group should be anchored using a BRAA format. ABM/WDs will provide the BRAA call using the following priorities:
  - (U) A fighter threatened by the pop-up group.
  - (U) The flight lead (in order to target the pop-up group).
  - (U) A fighter not currently tasked with targeting a group. Because the "pop-up group" was detected inside meld/targeting range, the pop-up group will not normally be used to call a new picture.
- **A1.6.15.** (U) **Fighter Cold Ops.** This applies when all elements are cold to the threat; all communications will comply with the briefed priorities and occur on the primary frequency.
  - A1.6.15.1. (U) Unless briefed otherwise, the comm priorities are as follows:
    - (U) Two-ship mutual support.

Figure A1.33. (U) Additional Group.



- (U) Spikes/threat within a stern WEZ.
- (U) Four-ship mutual support.
- (U) Picture.

A1.6.15.2. (U) When all elements are cold, the ABM/WD will minimize comm. Until a picture is requested, the only comm from the ABM/WD should be responses to spikes and threat calls on either threat groups stabilized inside a briefed stern WEZ (altitude dependent) or previously unreported/undetected groups inside of briefed threat criteria. When cold, one fighter per element (or four-ship) will call a spike on the primary frequency if the spike cannot be correlated to a previously targeted group. When a picture is requested, there is no requirement to meet the standard labeling criteria, the ABM/WD responsibility is to build a relationship for all the groups behind the elements within factor bandit range/factor range. In order to facilitate high fighter SA and targeting of the closest threats on the recommit, non-standard comm and labeling may be necessary and is acceptable as long as it makes sense, builds SA, and enables the targeting of the factor groups. For example, "BARNYARD FIVE GROUPS, LEADING EDGE IS A TWO GROUP AZIMUTH 15, NORTH GROUP BULLSEYE . . . " If fighters require BRAA to a group, BOGEY DOPE can be requested. For example, "BARNYARD, BOGEY DOPE NORTH GROUP FOR SNAKE 1 AND SOUTH GROUP FOR SNAKE 3."

A1.6.15.3. (U) The audibled targeting and flow plan will be briefed on the primary frequency.

## A1.6.16. (U) New Picture Comm.

A1.6.16.1. (U) Once labels have been put on the groups, they may only be changed by use of a "new picture" call. "New picture" calls will not normally be made inside a briefed "no new picture" or meld range. A new picture should be called if the picture labeling criteria discussed earlier have been met and the fighters have not closed inside of the briefed "no new picture" or meld range. The three things that can cause a new picture are as follows:

- (U) Groups maneuver.
- (U) Groups split.
- (U) A group is destroyed.
- (U) A previously undetected group appears (i.e., a new group).

A1.6.16.2. (U) New picture calls should be prefaced with the words NEW PICTURE and then follow standard bounding and anchoring rules. If no such range is briefed, use the briefed meld/targeting range as the cutoff. (The exception is when the trail element turns hot in a grinder, new pictures may be called even though the lead element is inside of meld range.) During AMRAAM operations (particularly the "grind" option), ABM/WDs will wait approximately 24 seconds after the cold element/fighter calls IN. This allows ABM/WDs to prioritize comm and control and to provide information to the flight/element in the following priority:

- (U) Spike ranges/threats to the element calling OUT.
- (U) Provide the picture or bogey dope to the IN element.
- (U) Assist in gaining mutual support (as required).

A1.6.16.3. (U) Aircrews will make an IN call and then initiate the turn. This will account for the approximate 24 seconds and allow the ABM/WD to prioritize information flow.

**A1.6.17. (U) Untargeted Group.** If any group is recognized to be (or perceived to be) untargeted—and is approaching or inside the briefed targeting range, the group name—followed by "untargeted"—will be used, and the group will be anchored off of bullseye. For example, "CHALICE, NORTH GROUP UNTARGETED BULLSEYE 270/15, 20 THOUSAND, HOSTILE."

### A1.6.18. (U) Final Lock Comm.

A1.6.18.1. (U) Final Lock Comm Format. Final locks should be called in BRAA or bullseye depending on whom you are talking to. If a fighter owns a group, then the fighter should call the final lock in bullseye. If a fighter is sharing an unsortable group with a fighter that is in visual formation (less than 3 NM apart), then BRAA may be appropriate to resolve a "locked same" condition. This is primarily intended for F-15 or other aircraft with a digital BRAA display. F-16s should use bullseye data to resolve "locked same" conflicts.

A1.6.18.2. (U) Final Locked Calls. There are three types of final locked calls:

A1.6.18.2.1. (U) First Type: Fighter is on the correct group and has an inner-group sort. For example, "EAGLE 2 SORTED SIDE, WEST GROUP, BULLSEYE 270/5, 20 THOUSAND."

#### **ATTACHMENT 1-62**

## **AFTTP 3-1.1, Change 1, 23 November 2001**

- A1.6.18.2.2. (U) Second Type: Fighter is on the correct group but has no inner-group sort. For example, "EAGLE 2 LOCKED WEST GROUP BRAA 285/20, 20 THOUSAND."
- A1.6.18.2.3. (U) Third Type: Fighter does not know which group he is locked to or targeting is occurring without a labeled picture (i.e., still in core information). For example, "EAGLE 2 LOCKED GROUP BULLSEYE 270/5, 20 THOUSAND."
- A1.6.18.3. (U) "Locked Same" Resolution. If two fighters are sharing a group, the following should be the flow of the comm to determine if fighters have a sort based on altitude/range or heading.
  - A1.6.18.3.1. (U) ROTs for deciding a sorted condition are range, PRF, and aircraft (beam width) dependent and should be covered in MDS-specific standards and/or during the flight/mission/element briefing.
    - (U) First to Lock: "EAGLE 2 LOCKED LEAD GROUP BRAA 270/20, 15 THOUSAND."
    - (U) Second to Lock: "EAGLE 1 LOCKED SAME HEADING 180."
    - (U) First to Lock: "EAGLE 2 SORTED HEADING 240" or "EAGLE 2 SAME."
  - A1.6.18.3.2. (U) In this case, the flight lead will normally be directive as to who holds or breaks lock unless it is briefed otherwise.
- A1.6.18.4. (U) Comparative Comm Techniques.
  - A1.6.18.4.1. (U) If a fighter calls "locked" to a group but does not attach a name (after the picture has been labeled), ABM/WDs will respond by attempting to provide the name of the locked group and whatever fill-ins are available (such as inner-group formation) and practical to pass in a timely manner. For example, "EAGLE 1, LOCKED GROUP BULLSEYE 250/35, 29 THOUSAND." ABM/WD's call would be: "EAGLE 1 LOCKED NORTH GROUP, HEAVY, THREE CONTACTS."
  - A1.6.18.4.2. (U) If a fighter calls locked with a name, the ABM/WD will respond by providing fill-ins available (and practical to pass in a timely manner). For example, "VIPER 1, LOCKED NORTH GROUP BULLSEYE 250/35, 29 THOUSAND." ABM/WD's call would be: "FOCUS, NORTH GROUP, HEAVY, THREE CONTACTS" or "FOCUS, NORTH GROUP MANEUVER."
- **A1.6.19. (U) Engaged Comm.** When an aircraft calls engaged, it is maneuvering WVR. The call should anchor the group engaged by the fighter to bullseye to allow appropriate deconfliction and increase the overall SA of other package aircraft. For example, "VIPER 1, ENGAGED SOUTH GROUP, BULLSEYE 180/20, 25 THOUSAND, BOGEY."

#### A1.6.20. (U) Threat Calls.

A1.6.20.1. (U) When aircraft position is known, threat information will be provided to a specific aircraft call sign either in BRAA or cardinal direction, followed by range, group name, and ID, to untargeted groups meeting specified threat criteria. Threat information

## **AFTTP 3-1.1, Change 1, 23 November 2001**

**ATTACHMENT 1-63** 

called in a BRAA format will include BRAA in the transmission. For example, "EAGLE 1, THREAT BRAA 340/14, 14 THOUSAND LAST, EAST GROUP, HOSTILE."

A1.6.20.2. (U) If exact fighter location is not known, threat information may be provided using a bullseye reference, and the word BULLSEYE will immediately follow the word THREAT. If a specific fighter receives a THREAT BULLSEYE call, the fighter should respond with call sign and posit so the threat call can be upgraded to BRAA. Examples include the following:

- (U) ABM/WD: "EAGLE 1, THREAT BULLSEYE 295/26, 20 THOUSAND, HOSTILE."
- (U) Fighter: "EAGLE 1 BULLSEYE 280/10, ANGELS 5."
- (U) ABM/WD: "EAGLE 1 THREAT BRAA 260/15, 20 THOUSAND, HOSTILE."

A1.6.20.3. (U) The following threat criteria will be used as the standard:

- (U) Heat threat—10 NM hot, 5 NM any aspect.
- (U) Short radar threat—15 NM hot, 10 NM any aspect.
- (U) Long radar threat—20 NM hot, 15 NM any aspect.

A1.6.20.4. (U) Hot is assumed for all threat calls. If threat is beam/drag aspect, the ABM/WD will provide an aspect with the threat call to prevent aircrews from making unnecessary changes to intercept options/engagement decisions. Threat calls should include altitude and ID, if available. For example, "VIPER 1, THREAT BRAA 260/12, 8 THOUSAND, BEAM NORTH, SPADES."

A1.6.20.5. (U) When working with F-16s, due to MDS constraints and employment considerations, after providing the BRAA threat call with a hostile declaration, the ABM/WD will provide a bullseye-anchored call with the appropriate ID (e.g., "VIPER 1, THREAT BRAA 090/10, 20 THOUSAND, HOSTILE") followed by a different comm call (e.g., "VIPER 1, THREAT GROUP BULLSEYE 100/15, 20 THOUSAND, HOSTILE"). The follow-up bullseye call should only be made if the fighter is able to use the information to employ ordnance. For example, if an F-16 is anchored and a hostile meets threat criteria, only the BRAA format is needed. This will be based on good judgment, depending on phase of the intercept/engagement and comm priorities.

## **A1.6.21.** (U) **BOGEY DOPE.**

- A1.6.21.1. (U) In the postmerge environment or if C<sup>2</sup> has reported "negative contact" on the formation, fighters should preface BOGEY DOPE or SPIKE calls with their posit and altitude. For example, "THUMPER, EAGLE 1 BULLSEYE 110/22, ANGELS 5, WESTBOUND, BOGEY DOPE."
- A1.6.21.2. (U) Normal ABM/WD's response is a BRAA-formatted call from the requesting fighter to the requested group or nearest threat aircraft. Digital bullseye may be used if fighter location is unknown. If a specific fighter requests BOGEY DOPE to a group and the fighter's location is not known or is not given as part of the BOGEY DOPE request,

#### ATTACHMENT 1-64

**AFTTP 3-1.1, Change 1, 23 November 2001** 

the ABM/WD will request the fighter's position (POSIT). Acceptable "POSIT" responses by priority are in digital bullseye or in pre-coordinated GEOREFs.

#### **A1.6.22.** (U) **SPIKE Comm.**

A1.6.22.1. (U) When a fighter calls spiked, use digital magnetic bearing or one of the eight cardinal directions. When notching, use digital magnetic heading or cardinal direction. Also, add bullseye position if able. The ABM/WD will attempt to correlate the SPIKE to a group displayed on the scope and call the range, altitude, and group label. For example, "VIPER 1, SPIKED 270 NOTCH NORTH, BULLSEYE 240/15." The ABM/WD's response will be formatted as: "VIPER 1, SPIKE RANGE 17, 35 THOUSAND."

A1.6.22.2. (U) If ambiguity exists as to the location of a group (e.g., a group is not along that azimuth but another group is nearby), the ABM/WD should respond with a CLEAN call along that azimuth and BRAA to the nearest group to that azimuth. The bearing and range to that group will be prefaced with THREAT or "nearest group" as appropriate. For example, "VIPER 1, SPIKED 310, NOTCH NORTHEAST BULLSEYE 090/15." The ABM/WD response would be: "VIPER 1, DARKSTAR CLEAN 310, NEAREST GROUP BRAA 240/15, 15 THOUSAND." If the ABM/WD does not see any groups near the azimuth the fighter called or the group faded for a prolonged period of time, the ABM/WD will be unable to call a reasonably accurate range and should respond with "UNABLE SPIKE RANGE."