

CHAPTER 22

ESTABLISHMENT AND OPERATION OF A DROP ZONE

Four methods may be used to establish or operate a drop zone. Three of these require markings to be placed on the DZ: CARP, GMRS, and VIRS. The wind streamer vector count method requires no markings on the DZ.

22-1. COMPUTED AIR RELEASE POINT

CARP is used only by USAF aircraft in conjunction with CCT or a qualified DZST.

a. **CARP Points of Impact** (Figures 22-1 and 22-2). The PIs for CARP operations are as follows:

- (1) **Personnel.** For personnel, drops at the PI are 300 yards (day) and 350 yards (night) from the leading edge.
- (2) **CDS.** For CDS bundles, drops at the PI are 200 yards (day) and 250 yards (night) from the leading edge.
- (3) **HE.** For heavy equipment, drops at the PI are 500 yards (day) and 550 yards (night) from the leading edge.

NOTE: On most USAF surveyed DZs, the PI for a particular type load is predetermined. Its surveyed location can be found on AF Form 3823 or MAC Form 339. (Use of MAC Form 339 is authorized until supplies are exhausted. USAF is converting all MAC Forms 339 to AF Form 3823 when a DZ comes due for recertification.) (All MAC forms belong to the AMC.)

b. **No-Drop Communication to Aircraft.** No-drop conditions are relayed to the aircraft in the following ways: red smoke, red flares, forming the code letter into two parallel bars perpendicular to flight, or the absence of a planned signal. Forming the code letter into an X indicates mission cancellation.

NOTE: The type of marking used is coordinated in the premission briefing.

c. **Control Center.** Control center locations (location of DZSTL) are as follows:

- (1) **Personnel drops.** Personal drops are normally located at the PI.
- (2) **CDS drops.** CDS is located 150 yards to the 6 o'clock position of the PI.

(3) **HE, free drops, high velocity, AWADS.** Heavy equipment, free drops, high velocity, and AWADS with a ceiling of less than 600 feet are off the DZ.

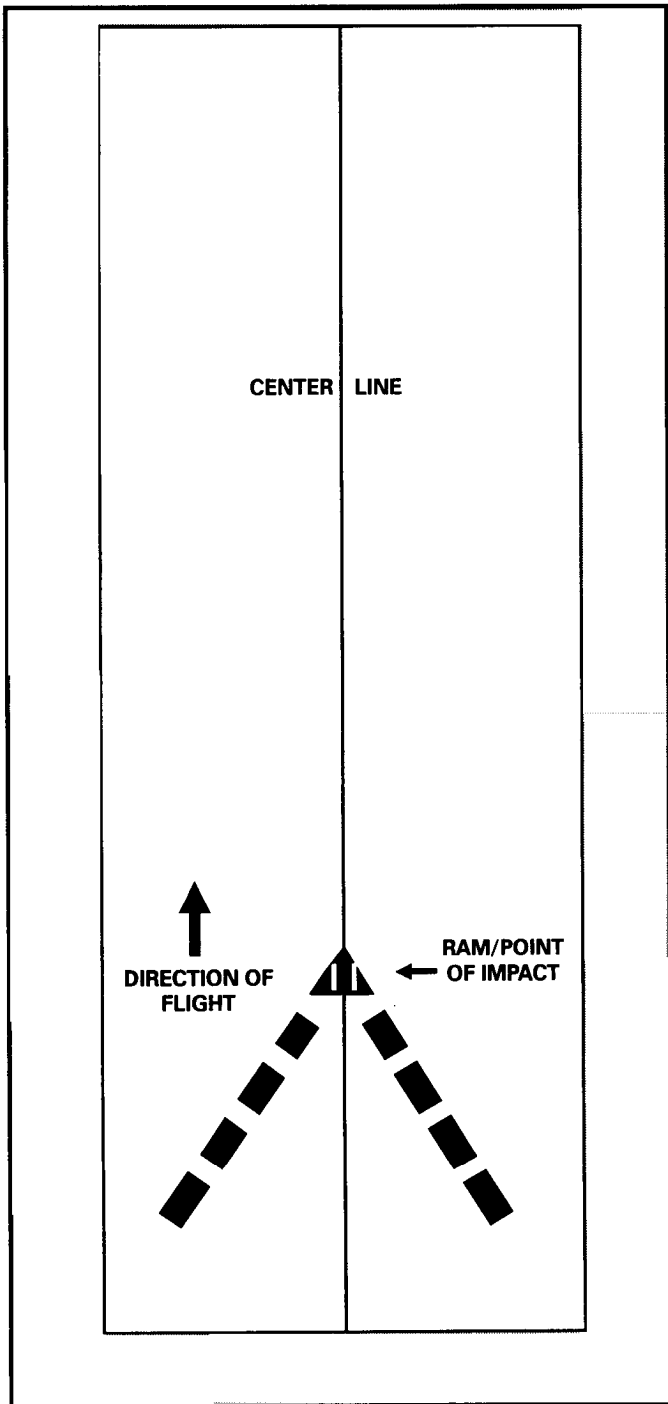


Figure 22-1. Day CARP drop zone markings.

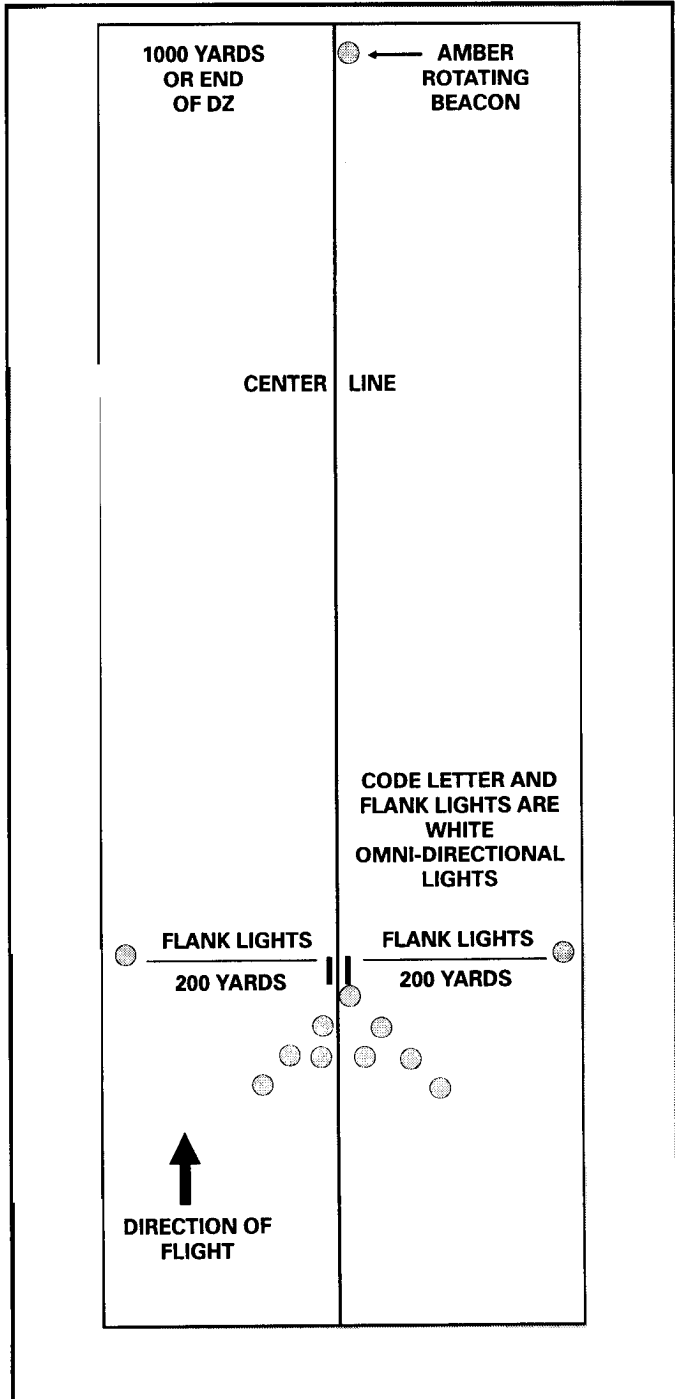


Figure 22-2. Night CARP drop zone markings.

22-2. GROUND MARKING RELEASE SYSTEM

The GMRS uses markings known as the four-panel inverted L, six-panel T, or seven-panel H. The T or H pattern is recommended for C-141/C-5 airdrops due to aircraft side angle vision limitation (Figure 22-3).

a. **Inverted L Marking.** When the drop aircraft is 100 meters directly to the right of the corner (A) panel, the drop is executed.

b. **Marking Placement for Inverted L.** Markings (four panels) are placed as follows:

(1) From the RP, move 100 meters to the left (90 degrees) of drop heading for the location of the corner (A) panel. Emplace a VS-17G panel with the long axis of the panel parallel with the drop heading. Elevate the panel at a 45-degree angle toward the approaching aircraft. This aids the aircrew and the JM in visual identification of the DZ.

(2) From the corner (A) panel, move in the same direction as above for 50 meters for the location of the alignment (B) panel. Emplace this panel as described above.

(3) From the alignment(B) panel, move 150 meters in the same directional above for the location of the flanker (C) panel. Emplace this panel as described above.

(4) From the corner (A) panel, move 50 meters on a back azimuth of the drop heading for the location of the approach (D) panel. Emplace this panel the same as described above.

(5) At night, replace all panels with a white light. Lights may be shielded on three sides or placed in pits.

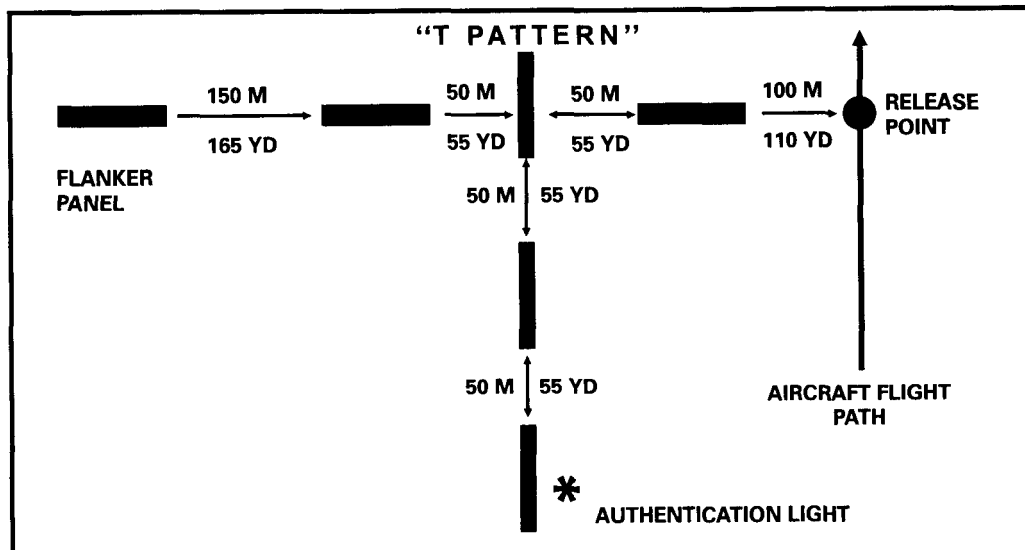


Figure 22-3. GMRS panel emplacement.

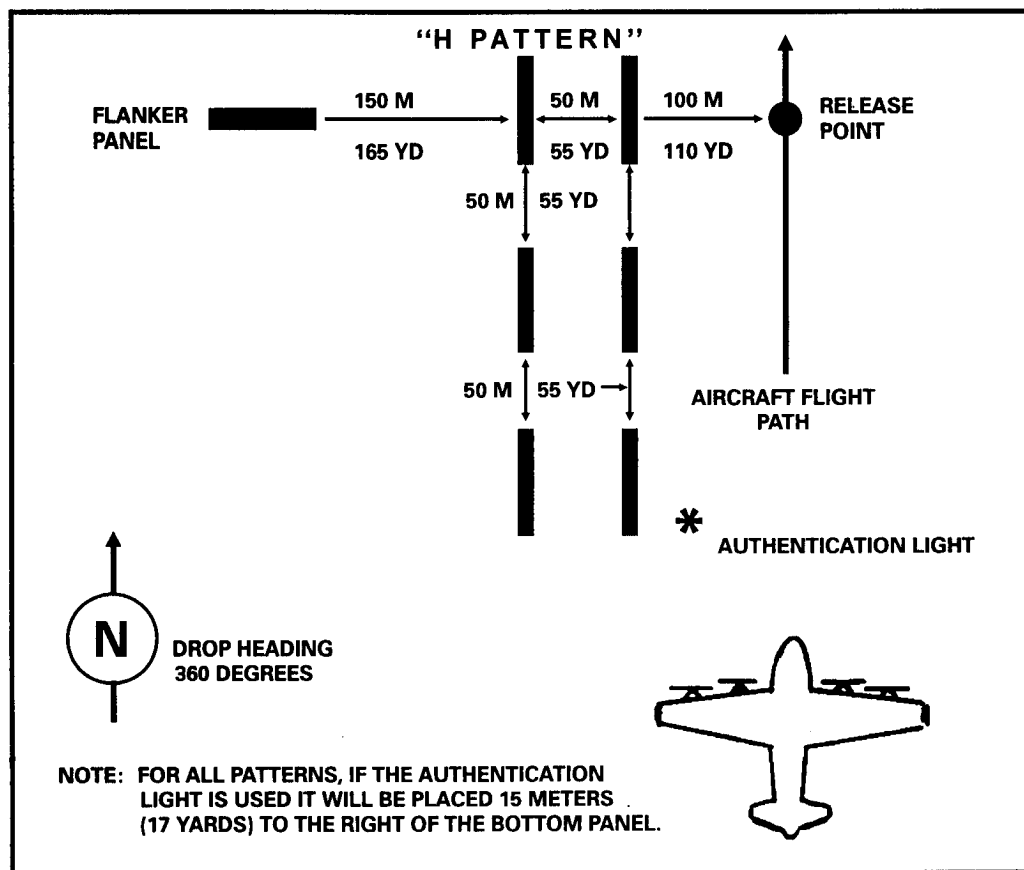


Figure 22-3. GMRS panel emplacement (continued).

(6) During day operations, smoke may be displayed at the RP. During night operations, a white air traffic control light may be used to mark the RP.

(7) NO DROP may be signaled to the aircraft by red smoke, red flares, scrambled panels, or the absence of a planned signal.

Since the aircraft is required to fly along the markings on the DZ, these markings must be visible to the aircrew. The markings are placed where obstacles will not mask the pilot's line of sight. As a guide, a mask clearance ratio of 1:15 is used, that is, one unit of vertical clearance for every 15 units of horizontal clearance. For example, if a DZ marker must be positioned near a terrain mask, such as the edge of a forest that is on the DZ track, and the trees are 10 meters high (33 feet), the markings would require 150 meters (492 feet) of horizontal clearance from the trees (Figure 22-4). This applies to static line jumps only. If the GMRS markings fall into the 1:15 mask clearance ratio on a DZ established for static line jumpers, then the markings must be moved forward of the 1:15 mask clearance ratio.

If any portion of the inverted L falls within a 15 to 1 (15:1) mask clearance ratio of obstacles on the approach end of the DZ, a code letter (H, E, A, T) or far panel may be placed on the departure end of the DZ for CDS or bundle drop, if coordinated during DZST/aircrew mission briefing. This far marking is on line with the corner (A) panel to allow the aircrew to begin alignment on the release point until the inverted L comes into view. If a code letter is used, it can be used to distinguish the DZ from other DZs in the area.

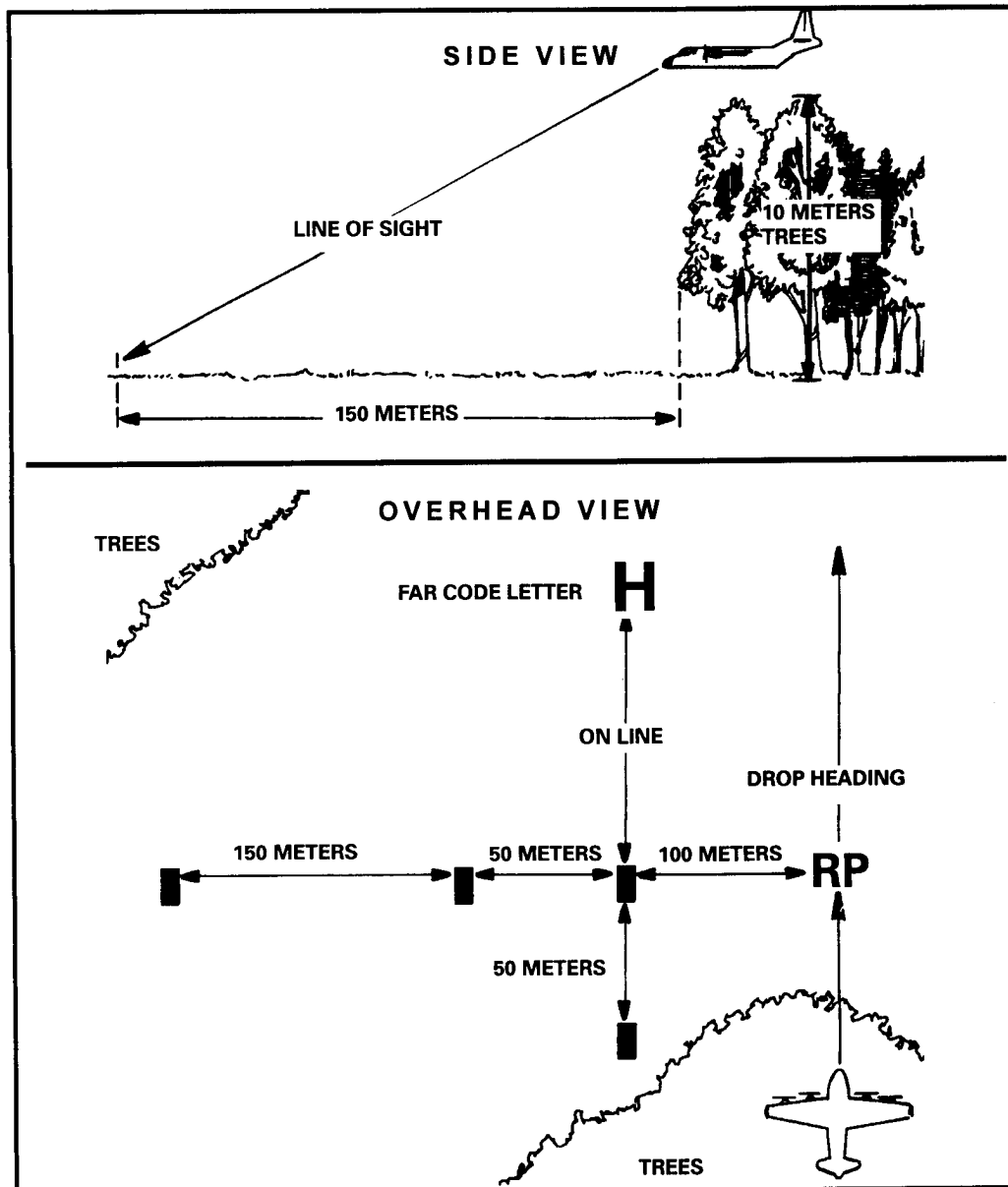


Figure 22-4. The 15:1 mask clearance ratio.

22-3. VERBALLY INITIATED RELEASE SYSTEM FOR ARMY ROTARY-WING AIRCRAFT

VIRS is used to execute a drop over the RF by GTA verbal command. This method allows the conduct of the operation with a minimum amount of prior DZ information and coordination. The aircraft flies the given direction until the DZST/DZSO sees the aircraft. A code letter (H, E, A, T) marks the RP. Once the crew identifies the DZ, the radio operator directs the aircraft over the drop heading RF. When the aircraft is directly over the RP, the command EXECUTE, EXECUTE, EXECUTE initiates the drop (Figure 22-5).

a. Day DZ Markings.

(1) **Determination of release point.** The DZSO then places the code letter on the drop heading, with the base panel of the letter at the release point. The code letter is formed by VS-17G panels placed together. Each letter is two panels high and one panel wide.

(2) **Placement of flank panel.** The flank panel is placed parallel to the code letter and aligned with the base panel. It is placed 200 meters (or at the edge of the DZ, whichever is less) to the left of the code letter.

(3) **Placement of far panel.** The far panel is placed 500 meters from or at the edge of the DZ, whichever is closer to the base panel, and on line with the drop heading.

(4) **Panel construction.** Both the far and flank panels consist of a single VS-17G panel. These panels may also be elevated at a 45-degree angle to improve visibility.

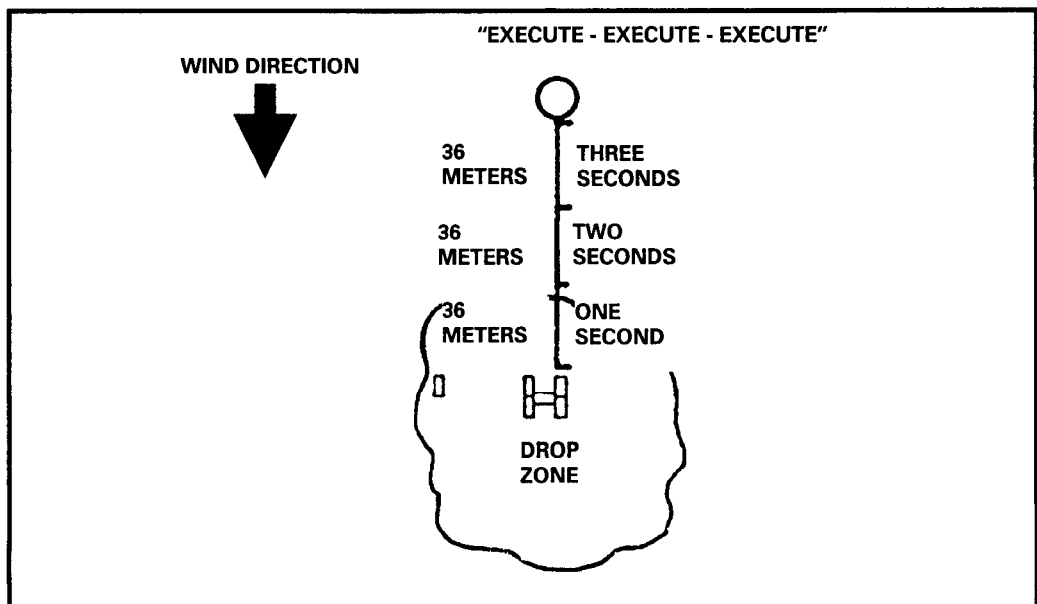


Figure 22-5. Army VIRS offset.

b. Night DZ Markings.

(1) **Use of lights.** The procedures for establishing the DZ are the same for night operations except that white light is used for the code letter and far/flank markings.

(2) **Code letter construction.** Each code letter is four lights high and three lights wide. There is a distance of 5 meters between each light in the code letter. The far and flank lights are signal lights. Also, a white-and-red lens ATC (SE-11) light should be located at the RP.

(3) **Security.** Lights may be shielded on three sides or placed in pits to prevent enemy ground observation.

22-4. GUIDANCE PROCEDURES

During Army DZ operations, the GTA is responsible for guiding the jump aircraft to the DZ, over the DZ on the proper drop heading, and at the proper altitude and drop speed. He ensures the parachutists exit the aircraft at the proper release point. Once the parachutists have exited the aircraft, the GTA must then clear the aircraft from the control zone.

EXAMPLE:

Pilot: C3D36, this is A2A22, over.

GTA: A2A22, this is C3D36, over.

Pilot: D36, this is A22, CCP inbound for a personnel parachute drop, over.

GTA: A22, this is D36, state type and number, over.

Pilot: D36, A22 is a single UH-1H, over.

GTA: A22, this is D36, (GTA controller reads entire ATC block* to the pilot and ends the transmission with CONTINUE APPROACH FOR VISUAL IDENTIFICATION, OVER).

*ATC block (air traffic control):

Heading _____ Distance _____ (from CCP)

Drop heading _____

Drop altitude _____ (feet indicated)

Drop speed _____

Number jumpers/bundles that can be accepted _____

Pilot: Wilco.

Upon sighting aircraft, the GTA tells the pilot:

GTA: A22, this is D36, I am at your 11 o'clock, 500 meters, signal out, can you identify, over.

Pilot: D36, A22 identifies orange panel, over.

GTA: A22, D36 has visual contact, turn to drop heading, over.

Pilot: D36, A22 turning drop heading, over.

GTA: A22, this is D36, steer left/right, over.

Pilot: D36, A22 roger.

GTA: A22, this is D36, on course, over.

Pilot: D36, A22 roger.

When aircraft is 8 to 10 seconds out from release point:

GTA: A22, this is D36, with six jumpers, stand by, over.

Pilot: D36, this is A22, standing by, over.

When aircraft is directly over release point:

GTA: A22, this is D36, with six jumpers, execute, execute, execute. (GTA must say EXECUTE or NO DROP at least three times, or until first load exits.)

At completion of operation, the GTA tells the pilot:

GTA: A22, this is D36, I observe six jumpers away and clear, state intention and report when clear of my control zone, (issue any advisories), over. (GTA must place aircraft into a closed traffic pattern with a reporting point if more than one pass is required.)

22-5. ACCEPTABLE WIND LIMITATIONS

Maximum allowable surface wind for static line parachute personnel airdrops is 13 knots (17 knots for WDZ). The maximum surface wind speed for static line heavy equipment airdrops is 17 knots with ground quick disconnects, 13 knots without ground quick disconnects, and 20 knots for CDS using G1 3/14 parachutes. There is no altitude wind limitation. Winds on the DZ are measured using the AN/PMQ-3A anemometer, or commercial anemometers authorized by USAIS messages DTG 101000Z MAR 94, subject: Use of Anemometers During Airdrop Operations, and DTG 2 12000Z OCT 94, subject: Use of Turbometer During Static Line Airdrop Operations—two (one each for the DZSO and the assistant DZSO). Other anemometers not recommended for use should be employed only after a command-initiated risk assessment is completed. Regardless of the method or device used to measure DZ winds, the airborne commander is responsible for ensuring winds on the DZ do not exceed 13 knots during static line personnel airdrops.

22-6. THE 10-MINUTE WINDOW

On multiple aircraft operations or single aircraft operations using more than 2,100 meters of DZ, the surface wind is measured from two points on the DZ. For single operations using less than 2,100 meters of DZ, the wind is measured from only one location, normally the PI or RP. Beginning 12 minutes before TOT, the DZSO begins a constant monitoring of the surface wind using an anemometer.

a. **Surface Wind Exceeds Limits.** If the surface wind exceeds allowable wind limits, the aircraft is notified of a no-drop, and a new 10-minute window is established. If the wind remains within limits during this new window, the drop takes place as planned. If the winds exceed allowable limits during the new window, no-drop is relayed to the pilot and the entire procedure starts again.

b. **No-Drop Signal.** A no-drop signal may be relayed to the aircraft by radio, red smoke, red flares, scrambled panels, or another planned signal.

22-7. POSTMISSION REQUIREMENTS

Immediately following the operation, several reports must be forwarded to a higher headquarters.

a. **Required Reports.** Most of these reports are self-explanatory and require little time to complete. The MAC Form 168 is used to record strike report information.

- DZSO report.
- Malfunction report.
- MAC Form 168, Airdrop/Airland/Extraction Zone Control Log (Figure 22-6, page 22-11).
- Incident reporting format (Figure 22-7, page 22-12).

b. **MAC Form 168 Completion.** Complete the MAC Form 168 as follows:

- (1) DATE box—date of airdrop.
- (2) LOCATION box—name of DZ.
- (3) CCT AND UNIT box—DZSTL name and unit.
- (4) DZ LZ EZ CONTROL OFFICER AND UNIT box—if used.
- (5) DROP ZONE SAFETY OFFICER AND UNIT box—enter names.
- (6) LINE NO column—mission sequence number of each aircraft.
- (7) TYPE ACFT column—type of aircraft.
- (8) UNIT column—unit of aircraft.
- (9) CALL SIGN column—call sign of pilot.
- (10) TYPE MSN column—type of mission; refer to LEGEND for abbreviations.
- (11) ETA column—estimated time of arrival, estimated TOT, S3 airbrief.
- (12) ETA column—actual arrival time of every pass.

(13) STRIKE RPRT columns—

- YDS column—distance first jumper/container lands from PI in yards; if within 25 yards it is scored a PI.
- CLOCKS column—using direction of flight as 12 o'clock and its back azimuth as 6 o'clock, estimated direction from PI to first jumper/bundle.

(14) SURF WIND column—surface wind; direction in degrees and velocity in knots.

(15) SCORE METHOD column—refer to LEGEND.

(16) MEAN EFFECTIVE WIND columns—time taken; to what altitude.

- TIME column—time taken.
- ALT column—what altitude taken to; should be drop altitude.
- DIR& VEL column—wind direction in degrees and velocity in knots.

NOTE: Every aircraft has a mission sequence number (entered under LINE NO column). Subsequent passes by that same aircraft will all be scored on separate lines, in the order that they occur, immediately below the line for the first pass.

c. **MAC Form 168 Routing.** The DZSTL forwards the MAC Form 168 to his air operations officer, who in turn submits it through the chain of command to the USAF representative.

AIRDROP / AIRLAND / EXTRACTION ZONE CONTROL LOG										DATE 4 MAR 89			
LOCATION		CCT AND UNIT		DZ/LZ/EZ CONTROL OFFICER AND UNIT		DROP ZONE SAFETY OFFICER AND UNIT							
FALCON DZ		SSGT EVANS		SRA GILL				2F550		CAPT STARKBY			
<p>LEGEND</p> <p> ALL-Airland (Heavy) AL-Airland CD-CDS ED-Extraction (Droge) EX-Extraction GM-GMRS HE-Heavy Equipment HO-HALO IL-Inverted "L" LS-Instrument Landing System PE-Personnel RB-Radar Beacon Drop TC-TT B CDS TH-TT B Heavy TP-TT B Personnel WD-AWADS SCORE METHOD E - Estimated P - Paced M - Measured </p>													
LINE NO	TYPE ACFT	UNIT	CALL SIGN	PILOT/NAVIGATOR	TYPE MSN	ETA	ATA	YDS	STRIKE RPT	AL/EX	SCORE METHOD	MEAN EFFECTIVE WIND TIME ALT DIR & VEL	REMARKS (Continue on Reverse)
1	C-130	517	27		HE	1000	1012	250	5		E	0945 1100 150/09	
2					PE		1012	DRY	PASS				
3					PE		1035	50	6				
4					PE		1039	600	5				
5													
6	C-41	437	52		CD	1100	1105	250	6		E	1045 600 150/11	
7							1105	100	8				
8							1110	200	4				
9							1115	200	6				
10													
11													
12													
13													
14													
15													

Figure 22-6. Example of completed MAC Form 168.

A. GENERAL

(1) JA/ATT Sequence Number _____

(2) Date (Of Operation) _____

(3) TOT (Local Time) _____

(4) Type Mission _____

(a) Number of Aircraft _____

(b) Type Aircraft _____

(c) Type Assault Zone _____

(d) Type of Delivery (CARP, VIRS, GMRS) _____

B. PERSONNEL INVOLVED

(1) Flying Unit _____

(2) Unit Supported _____

(3) DZSTL (Name/Rank/Unit) _____

(4) Medics (In Place) _____

(5) POC for Further Information _____

C. ASSAULT ZONE

(1) Name/Type _____

(2) Location _____

(3) Any Deviations From Survey _____

(4) Marked IAW the Survey _____

D. COMMUNICATIONS WITH AIRCRAFT

(1) Type Radios _____

(2) Frequency Used _____

(3) Problems _____

E. WEATHER PASSED TO AIRCRAFT

(1) Time of Observation _____

(2) Time Weather was Passed to Aircraft _____

(3) MEW _____

(4) Surface Wind _____

(5) Remarks _____

F. POST INCIDENT WEATHER OBSERVATION _____

G. NARRATIVE _____

Figure 22-7. Example of suggested format for incident reporting.

22-8. SURVEYS

USAF DZs are surveyed by qualified CCT/DZST. All information concerning the DZ is placed on a MAC Form 339, Drop Zone Survey (Figures 22-8 and 22-9, pages 22-14 and 22-15), or AF Form 3823, Drop Zone Survey (Figures 22-10 and 22-11, pages 22-16 and 22-17). These forms provide the user the essential information needed to operate the DZ. Section 4 of the form states what type of missions may be conducted on the DZ.

a. **Contingency/Wartime Operations.** During contingency/wartime and major exercises, DZSTs may be expected to tactically locate, inspect, and approve a potential DZ for follow-up airdrop of resupply or reinforcements.

b. **Tactical Assessment.** Tactical DZ assessment is accomplished using the following checklist:

- DZ name or intended call sign.
- Topographical map series and sheet number.
- Recommended approach axis magnetic course.
- Point of impact location (eight-digit grid).
- Leading edge centerline coordinates (eight-digit grid).
- DZ size in meters or yards.
- Air traffic restrictions/hazards.
- Name of surveyor and unit assigned.
- Recommended approval/disapproval (cite reason for disapproval).
- Remarks (include a recommendation for airdrop option, CARP, GMRS, VIRS, or blind drop).

NOTE: Airdrop operations on tactically assessed DZs are made only under the following conditions:

1. During training events, the airdrop is located within a military reservation or on US government leased property.
2. The supported service accepts the responsibility for any damage that occurs as a result of airdrop activity.
3. There is adequate time for safe, effective planning.

DROP ZONE SURVEY	1. DZ NAME ARKMAN CIRCULAR		2. LOCATION Ft. Benning, GA	
	3. MAP SERIES / SHEET NUMBER / EDITION / DATE OF MAP Ft. Benning Reservation Map AFPP Map # 39 (1973)			
	4. SURVEY APPROVAL/DISAPPROVAL DATA			
4A. DATE SURVEYED 30 Jan 90	TYPED NAME AND GRADE OF SURVEYOR John P. Werkheiser, SSgt.		PHONE NUMBER (AUTOVON) 486-2535	UNIT 1721 CCS, Pope AFB, NC
4B. DATE REVIEWED 5 Feb 90	TYPED NAME AND GRADE OF REVIEWER Montgomery, Paul J. Capt, USAF		PHONE NUMBER (AUTOVON) 486-4300	SIGNATURE <i>Paul J. Montgomery</i>
4C. DATE APPROVED 5 Feb 90	TYPED NAME AND GRADE OF APPROVING AUTHORITY THOMAS P. QUANCE, Colonel, USAF		PHONE NUMBER (AUTOVON) 486-4414	SIGNATURE <i>Thomas P. Quance</i>
4D. DROP ZONE APPROVAL / DISAPPROVAL	UNIT AND LOCATION 317 TAW/DOXT, POPE AFB, NC 28308			
A. APPROVED	FOR DAY	COMCHS A	FE A	HE B
B. DISAPPROVED	NIGHT	A	A	B
5. COORDINATING ACTIVITIES				
DZ CONTROLLING AGENCY OR UNIT Directorate of Plans and Training, Ft. Benning, GA			PHONE NUMBER (AUTOVON) 835-5245	
RANGE CONTROL SKYWATCH: 277.5(UHF) TAMPA NESTOR: 38.60(VHF/EM)			PHONE NUMBER (AUTOVON) 835-5186	
6. DZ DIMENSIONS (Yds / Mtrs) (For Circular DZ, Enter Radius Only)				
A. LENGTH N/A	B. WIDTH N/A	C. RADIUS 500 yards	D. T/L FROM DZ LEADING EDGE N/A	E. T/F FROM DZ CENTERLINE N/A
F. POINT OF IMPACT (PG DISTANCES FROM DZ LEADING EDGE)		G. CDS PI N/A	H. PE PI N/A	I. HE PI N/A
7. DZ AXIS DATA				
A. MAGNETIC 360	B. GRID (RTM) 360	C. TRUE 359	D. DATE OF VARIATION DATA 1970	
8. GROUND POINT ELEVATION	A. CDS PI 540'	B. PE PI -N/A-	C. HE PI 540'	D. HIGHEST 540'
9. DZ COORDINATES				
A. SPHEROID CLARKE 1866	B. GRID ZONE ZONE 16	C. EASTING 7	D. NORTHING 35	
E. POINT OF ORIGIN 0750 7287				
F. POINT	UTM COORDINATES		LONGITUDE (DMS)	
DZ CENTERPOINT	07347360		32 16' 54.1" N 84° 47' 54.3" W	
CDS PI	07347360		32 16' 54.1" N 84° 47' 54.3" W	
PE PI	07347360		32 16' 54.1" N 84° 47' 54.3" W	
HE PI	N/A		N/A	
10. ZONE MARKER (ZM) POSITION DATA (Enter Additional ZM Points in Remarks)				
A. PRIMARY POINT OF IMPACT	B. DISTANCE PRIOR / AFTER PI (Yards)		C. DISTANCE LEFT / RIGHT OF PI (Yards)	

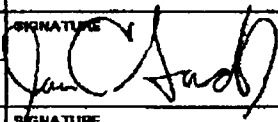
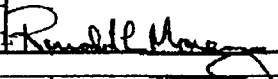
MAC Form 339, FEB 89 PREVIOUS EDITION IS OBSOLETE

Figure 22-8. Example of completed MAC Form 339 (front).

11. DZ DIAGRAM/12. REMARKS <p><u>NOT TO SCALE</u></p>	DZ NAME ARKMAN CIRCULAR DZ, GA		
<ol style="list-style-type: none"> 1. DZ is for single ship operations only. 2. User accepts responsibility for injury to personnel and damage of equipment. 3. DZ is approximately 30% trees from 15' to 20' tall. 4. For pathfinder use, run in heading and PI will be pre-briefed. 5. Aircraft must contact Range Control at least 10 minutes prior to entry into the restricted area (R3002). 6. Ground party must establish radio communications with Range Control 30 minutes prior to TOT and maintain contact for duration of mission. 7. Recommend all turn outs to the west to avoid over flying the town of Cuesseta, GA located 026° at 2000m. 8. Cellular One Telephone tower located 026° at 2600m. Height of tower is 795' MSL. 9. Dirt roads located on the south and east side of DZ. 10. TV tower 2249' MSL located at LAT/LONG 32° 19' 25"N, 84° 46' 46"W; UTM grid coordinates 091784. 			
<table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> 13. PHOTOGRAPHY AVAILABLE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO </td> <td style="width: 50%; vertical-align: top;"> LOW LEVEL ROUTES <input type="checkbox"/> NONE AVAILABLE <input type="checkbox"/> ROUTE NAME/DESIGNATOR </td> </tr> </table>		13. PHOTOGRAPHY AVAILABLE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LOW LEVEL ROUTES <input type="checkbox"/> NONE AVAILABLE <input type="checkbox"/> ROUTE NAME/DESIGNATOR
13. PHOTOGRAPHY AVAILABLE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LOW LEVEL ROUTES <input type="checkbox"/> NONE AVAILABLE <input type="checkbox"/> ROUTE NAME/DESIGNATOR		

MAC Form 339, FEB 88 (Rev 101)

Figure 22-9. Example of completed MAC Form 339 (back).

AIRBORNE UNIT ASSUMES RESPONSIBILITY FOR PERSONNEL INJURY AND EQUIPMENT DAMAGE ON DZ									
DROP ZONE SURVEY	1. DZ NAME LEDOI				2. LOCATION FT. BENNING, GEORGIA				
	3. MAP SERIES/SHEET NUMBER/EDITION/DATE OF MAP AFPP MAP #39 FT. BENNING RESERVATION 1973/TPC G-21D/ATLANTA SECTIONAL								
4. SURVEY APPROVAL/DISAPPROVAL DATA									
4A1. DATE SURVEYED 15 Aug 95	4A2. TYPED NAME AND GRADE OF SURVEYOR EDDIE D. KIDD, SSG				4A3. PHONE NUMBER (DSN) 835-3218		4A4. UNIT HHC 1/507TH PIR		
4B. DROP ZONE APPROVAL/DISAPPROVAL A = APPROVED D = DISAPPROVED	FOR	COM/CRS	PER	HE	MFP	SATB	CRRC	HELLADS	MYCDS
	DAY	A	A	D	A	A	D	A	A
	NIGHT	A	A	D	A	A	D	A	A
4C. DATE APPROVED FOR GROUND OPERATIONS	NAME, GRADE AND SERVICE OF APPROVAL AUTHORITY					PHONE NUMBER (DSN)		SIGNATURE	
	UNIT AND LOCATION								
4D. DATE SAFETY OF FLIGHT REVIEW APPROVED 31 Jan 95	NAME AND GRADE OF REVIEWING OFFICER JAMES E. GOOD, JR., Capt, USAF					PHONE NUMBER (DSN) 731-3988		SIGNATURE 	
	UNIT AND LOCATION 3134 OSS/OSTX, Little Rock AFB AR 72099-5043								
4E. DATE OF MAJCOM APPROVAL 17 Feb 95	NAME AND GRADE OF APPROVING AUTHORITY RONALD L. MOREY, COL, USAF					PHONE NUMBER (DSN) DSN 576-5007		SIGNATURE 	
	UNIT AND LOCATION HQ AMC/DOT, 402 Scott Drive Unit 3A1, Scott AFB IL								
5. COORDINATING ACTIVITIES									
A. DZ CONTROLLING AGENCY OR UNIT 1/507th Para Inf. Reg. S-3, Ft. Benning GA				B. MEMORANDUM OF UNDERSTANDING/LAND USE AGREEMENT YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> ATTACHED <input type="checkbox"/>				C. PHONE NUMBER (DSN) 835-3012	
D. RANGE CONTROL Range Control FM 38.60 UHP 277.5 (Skywatch)								E. PHONE NUMBER (DSN) 835-2152	
6. DZ DIMENSIONS (YDS/MTS) (FOR CIRCULAR DZ, ENTER RADIUS ONLY)									
A. LENGTH 925 yds	B. WIDTH 700 yds	C. RADIUS N/A	D. T/P FROM DZ LEADING EDGE N/A		E. T/P FROM DZ CENTERLINE N/A				
POINT OF IMPACT DISTANCES FROM DZ LEADING EDGE		F. COM PI 350 yds	G. FE PI 350 yds		H. HE PI N/A				
7. DZ AJCS DATA (OPTIONAL FOR CIRCULAR DZ)									
A. MAGNETIC 061 deg		B. GRID (UTM) 058 deg		C. TRUE 059 deg		D. DATE OF VARIATION DATA 1991			
8. GROUND POINT ELEVATION		A. COM PI 480'	B. HE PI N/A		C. FE PI 480'		D. HIGHEST 500'		
9. DZ COORDINATES									
A. SPHEROID CLARKE 1866		B. DATUM 1927 NA		C. GRID ZONE 16		D. EASTING 7		E. NORTHING 35	
F. GPS DERIVED COORDINATES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		G. POINT OF ORIGIN GL 1530 7913 Intersection of roads PI is 432m @ 224 deg							
H. POINT	UTM COORDINATES			WGS84 LATITUDE (D-M-SS)			WGS84 LONGITUDE (D-M-SS)		
DZ CENTERPOINT	GL 1509 7880			N 32d 19' 37.4"			W 84d 42' 54.1"		
COM PI	GL 1500 7874			N 32d 19' 35.7"			W 84d 42' 57.5"		
FE PI	GL 1500 7874			N 32d 19' 35.7"			W 84d 42' 57.5"		
HE PI	N/A			N/A			N/A		
I. DZ CORNERS UTM COORDINATES									
LEFT LEADING EDGE GL 1456 7884					RIGHT LEADING EDGE GL 1490 7830				
LEFT TRAILING EDGE GL 1527 7929					RIGHT TRAILING EDGE GL 1562 7875				
LEFT TRIMING POINT N/A					RIGHT TRIMING POINT N/A				

AF FORM 3823, FEB 94 (EF-V1) (PwFORM PRO)

Figure 22-10. Example of completed AF Form 3823 (front).

DZ NAME LEDO I	
10. DZ DIAGRAM/ REMARKS 1. User accepts responsibility for injury to personnel and damage to equipment and property that may result from an airdrop by AMC/ACC aircraft. 2. Drop zone is approximately 40% trees 35' to 50' tall. 3. TV tower 270 deg, 3.5 sm 2249' MSL. 4. Radio tower 238 deg, 4.8 sm 795' MSL; tower 3 sm west of DZ 1010' MSI. 5. Prior coordination is required for access to R-3002. 6. Ft. Benning MOA located 3 NM past DZ. Contact DSN 835-5186 for info.	
11. PHOTOGRAPH AVAILABLE YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	12. LOW LEVEL ROUTES <input checked="" type="checkbox"/> NONE AVAILABLE <input type="checkbox"/> ROUTE NAME/DESIGNATOR

AF FORM 3823, FEB 84 (REVERSE) (EF-V1) (PerFORM PRO)

Figure 22-11. Example of completed AF Form 3823 (back).