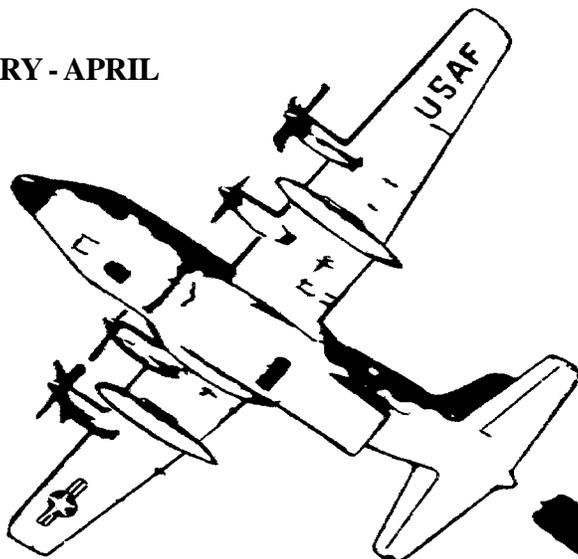
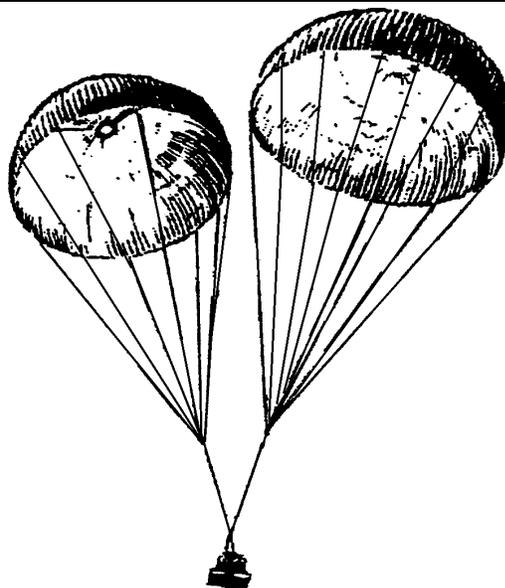


JANUARY - APRIL

VOLUME I 1998



TRIENNIAL
**AIRDROP REVIEW
AND
MALFUNCTION/SAFETY
ANALYSIS**



PREPARED BY
THE US ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA 23801-1502

AIRBORNE CREED

I am an Airborne trooper! A paratrooper!

I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.

I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.

I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.

I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.

I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.

I have pride in the Airborne! I never let it down!

In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.

In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.

My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.

I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.

*I am a trooper of the sky! I am my Nation's best!
In peace and war I never fail. Anywhere, anytime, in anything—
I am AIRBORNE!*

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PREFACE

The airdrop review and malfunction/safety analysis is published by the US Army Quartermaster School in hopes that by “passing the word” the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 January 1998 - 30 April 1998.

POC AND MAILING ADDRESS

The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:

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1010 SHOP ROAD
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CHANGE OF ADDRESS

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REPORTS AND ANALYSES

The Malfunction Review Board met at Fort Benning, Georgia on 28 - 29 May 1998. A breakdown of the areas in which malfunctions occurred from 1 January through 30 April 1998 follows:

<u>CATEGORY</u>	<u>QUANTITY</u>
Containers/CRRC	14
Platforms LVAD	14
Personnel	10

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

PERSONNEL MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 17,900	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 3,100	12. SURFACE WINDS (Knots) 0	13. VISIBILITY (Feet/Miles) Night	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Oxygen		16. JUMPER'S POSITION IN ACFT Left Door 5th Jumper	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 60
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag Lock	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper pulled at 3,500 feet AGL. He saw pilot parachute and thinks he saw D-bag. The MC-4 did not clear the D-bag. Jumper pumped rear risers 2 times and parachute still did not clear D-bag. Jumper cut away and deployed reserve. Reserve functioned normally.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Suspension lines pulled out of the first three grommets. The last grommet had 4 suspension lines remaining that prevented the canopy from coming clear out of the D-bag.

CONTINUED ON NEXT PAGE

ANALYSIS: 1

WHAT WAS THE MALFUNCTION?

1. The main parachute did not separate from the D-bag.
2. Bag lock.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible excess stows.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper packing procedures are followed. The pack tray could have been uneven during the pack up.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 312 Feet Highest	12. SURFACE WINDS (Knots) 2-4 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LBE, Alice Pack, M1950 Kevlar		16. JUMPER'S POSITION IN ACFT Left #11	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 25
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Excessive Twists	
20. TYPE OF RESERVE T-10C	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 Jumper exited aircraft and counted to 4000. He conducted second point of performance and saw that canopy had two small bubbles, one on each side. Jumper noticed his rate of descent was faster than the other jumpers. He states his reserve canopy just laid there upon deployment. Then the reserve opened prior to impact to the ground.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 Inspection of the parachute revealed no damage to the canopy. Slight burn marks were on lines 17 and 19. Witnesses on drop zone indicated the jumper had a poor body position on exit. This will cause excessive twists on the lines. Jumper did not follow correct procedures for a partial malfunction. Jumper landed with no injuries.

CONTINUED ON NEXT PAGE

ANALYSIS: 2

WHAT WAS THE MALFUNCTION?

A suspension line over his canopy and twists.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Poor body position on exit.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pay closer attention to sustained airborne training by jumpmasters for their jumpers.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 742	12. SURFACE WINDS (Knots) 0	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Helmet, Gloves, Goggles		16. JUMPER'S POSITION IN ACFT	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	AR2 high fire	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The jumper exited the aircraft at 12,500 feet. Within 1,000 feet after exiting, the jumper's AR2 activated, deploying his reserve canopy. The jumper was under a good reserve parachute by 11,000 feet. The jumper landed on the drop zone without further incident.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The jumper stated that when the command to arm AR2 was given at 6,000 feet, his AR2 was already in the ON position. He left it on instead of turning it off then back on, recycling it. The jumpmaster is uncertain how the AR2 became armed prior to AR2 setting altitude. This was not a malfunction. The AR2 did what it was designed to do.

CONTINUED ON NEXT PAGE

ANALYSIS: 3

WHAT WAS THE MALFUNCTION?

There was no malfunction. It was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The jumper's AR2 had not been recycled to prevent a premature activation of the jumper's reserve parachute.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

The jumpmaster should provide a more detailed briefing on AR2 procedures during sustained airborne training.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,000 Ft AGL	10. ACFT SPEED (Knots) 120	11. DZ ELEVATION (Feet) 350 Feet highest	12. SURFACE WINDS (Knots) 9 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None	16. JUMPER'S POSITION IN ACFT 5th of 18		
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 50 MFF
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY) Cutaway	
20. TYPE OF RESERVE MC-4		21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	22. RESULTING INJURY Soreness in leg/buttocks		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 After coming under full canopy, soldier cut away by accident. SM made mistake by hitting cutaway pillow with main ripcord while making final approach. Emergency sequence was at approximately 800 feet AGL.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 The cutaway pillow became lodged in his main ripcord. This occurred as jumper was preparing to line up for his landing.

CONTINUED ON NEXT PAGE

ANALYSIS: 4

WHAT WAS THE MALFUNCTION?

There was no malfunction. This was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The jumpmaster's ripcord attached to his wrist became too close to his cutaway pillow.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Jumpers need to pay closer attention to safety and practice canopy control techniques more often.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 300 Feet	12. SURFACE WINDS (Knots) 0-2 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, Helmet		16. JUMPER'S POSITION IN ACFT 2nd pass tailgate exit #8 in stick of 20	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 25
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Canopy release	
20. TYPE OF RESERVE T-10C Res	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The jumper exited the aircraft and the DZSO noticed a delay in the opening of a parachute. The jumper deployed his reserve, conducted a PLF, and landed safely with no injuries. It appeared that the parachute did not inflate completely after deployment. Once the jumper deployed his reserve the main never deployed fully.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The jumper's left canopy release assembly disengaged. There were seven broken suspension lines on the opposite side of the disconnected canopy release.

CONTINUED ON NEXT PAGE

ANALYSIS: 5

WHAT WAS THE MALFUNCTION?

Improper ramp exit.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The jumper flipped through his risers causing his left cable loop of the canopy release assembly to become disengaged.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

The jumpers need to be briefed on better over the ramp exits before the operation.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 157	12. SURFACE WINDS (Knots) 4 to 8	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Alice pack, M-16, Weapons Case		16. JUMPER'S POSITION IN ACFT AJM 2nd Pass 15 Jumper R door	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 85
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	D-bag Contact	
20. TYPE OF RESERVE 24 ft troop chest	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Small cut to middle of upper lip		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 Jumper stated that upon exiting the aircraft he felt contact to his face at approximately his 1000 count. Jumper stated that he had a good exit but did spin towards the aircraft after exiting the door. Jumper stated that he observed the D-bags as he passed by them and that is when he felt the contact to his face.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 Upon exiting aircraft, jumper spun towards D-bags making contact with the D-bags. Cause was determined due to nature and location of injury and exactness of jumpers statement due to his experience as jumper and jumpmaster. (Malfunction NCO note: As jumpers exited the aircraft, they appeared to be above or even with the D-bags as they passed by the D-bags.)

CONTINUED ON NEXT PAGE

ANALYSIS: 6

WHAT WAS THE MALFUNCTION?

There was not a malfunction. This was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

A 15 foot static line was the improper length.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Do not jump a 15 foot static line from a C-17 aircraft.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 157	12. SURFACE WINDS (Knots) 4 - 8	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Alice pack M-16 w/weapons case		16. JUMPER'S POSITION IN ACFT 2nd Pass 9th jumper left door	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 21
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	serious injury	
20. TYPE OF RESERVE 24 foot troop chest	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY 3-inch laceration to right cheek 32 stitches		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper stated that upon exiting the jump door, she felt something slap her in the face. Jumper incurred no other problems during the jump. Jumper stated that the exit was good and that there were no twists in the suspension lines after the parachute deployed. Jumpmaster stated that he had slowed down the stick just before she exited but she seemed to have a good exit. There was blood along the right side of the harness and packtray and a small amount of blood on each riser. The parachute had no other damage found.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

During the deployment phase, jumper incurred contact of her right cheek with her right safety clip of the canopy release assembly. Cause was determined by the nature and location of the injury (medic stated injury was a clean cut typical of metal to flesh cut), location of blood on jumper and equipment, and lack of any blood or damage on the deployment bags.

CONTINUED ON NEXT PAGE

ANALYSIS: 7

WHAT WAS THE MALFUNCTION?

There was no malfunction.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. The jumper's right canopy loop type canopy release cut her cheek.
2. Her harness was excessively loose.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Soldiers need to pay better attention to body position and wear the equipment as it was designed.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 feet AGL	10. ACFT SPEED (Knots) 150 Knots	11. DZ ELEVATION (Feet) 387 feet	12. SURFACE WINDS (Knots) 17 knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER M1950 Alice Pack		16. JUMPER'S POSITION IN ACFT Assistant Jumpmaster Right Door	
17. TYPE PARACHUTE (Specify) T10-C	18. TYPE MALFUNCTION				19. NO. JUMPS 83
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE T10-C	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Parachutist fell from the aircraft approximately two minutes from the drop zone. The reserve activated first, flew free from the jumper. Simultaneously his main deployed. There was extensive damage to his reserve parachute. Damage was also noted on his M1950, parachute harness, and main canopy.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Reserve deployed while parachutist performed his door checks.

CONTINUED ON NEXT PAGE

ANALYSIS: 8

WHAT WAS THE MALFUNCTION?

1. There was no malfunction.
2. This was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Premature activation of the jumpmaster's reserve by him losing his balance and trying to climb back into the aircraft.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure jumpmasters maintain a better door check position.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000 Feet	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 71 Feet	12. SURFACE WINDS (Knots) 7-11 Knots	13. VISIBILITY (Feet/Miles) 10 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, Alice Pack, M1950 with Weapon		16. JUMPER'S POSITION IN ACFT 1st Jumper, Left Door	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 65
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	PLF Injury	
20. TYPE OF RESERVE T-10 reserve	21. RESERVE FUNCTIONED PROPERLY (if "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Broken right ankle and complete dislocation		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The jumper exited the aircraft with no problems. His second and third points of performance were good. During his descent to the ground, he was avoiding other jumpers. He had lower jumpers below him so he could not lower his equipment until he was about 75 to 50 feet off the ground. He landed with his feet apart and did a poor PLF. Within a matter of seconds of him landing, he was yelling for a medic.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The cause of this incident was the jumper was caught up in staying away from fellow jumpers, and he did not want to lower his equipment on lower jumpers when it was time to perform his fourth point of performance. Once he was clear of fellow jumpers, he lowered his Alice pack and tried to lower his M-1950 but he landed. Before landing, his feet and knees were apart and he attempted a PLF, but his foot stuck in the mud. Which caused the breaking and complete dislocation of his right ankle.

CONTINUED ON NEXT PAGE

ANALYSIS: 9

WHAT WAS THE MALFUNCTION?

1. There was no malfunction.
2. This was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The jumper lowered his equipment too low and poor first point of performance.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Altitude awareness and better landing procedures as the jumpmaster should brief during sustained airborne training.

CARGO MALFUNCTION REPORTS AND ANSLYSIS

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 550 AGL	10. ACFT SPEED (Knots) 150	11. DZ ELEVATION (Feet) 1163	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+
III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equip- ment 3060 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 3	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V/8 Foot	27. TYPE PARACHUTE AND NUMBER G12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT #2
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Two platform sequential. Number one platform exited aircraft with no problems noted. Number two platform extraction line deployed and opened 15 foot extraction parachute releasing the platform from locking mechanism. Extraction parachute separated from the type IV link and platform exited slowly out of the aircraft. Primary loadmaster notified the pilot of the problem and inspected aircraft for damage. (No damage noted.)				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The extraction parachute was recovered and inspected. The type IV connector link was found to be installed backwards. The extraction line and adapter web on each side of the type IV link were not taped IAW rigging procedures. The improperly rigged platform was not discovered or corrected by either the inspecting loadmaster or JAI.				

CONTINUED ON NEXT PAGE

ANALYSIS: 10

WHAT WAS THE MALFUNCTION?

Extraction parachute separated from the type IV connector link.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improperly rigged.
2. Not rigged in accordance with FM/TO.
3. The faceplate of the type IV connector link was installed backwards. The extraction line keeper was not taped nor was the 36-inch adapter web according to FM/TO. This allowed the type IV connector link to move and be pulled laterally degrading the strength rating from 40,000 lbs to 3,000 lbs and failing.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper rigging procedures found in FM 10-500-2/TO 13C7-1-5 are followed.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17A	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1203 MSL	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 290	12. SURFACE WINDS (Knots) 180/06	13. VISIBILITY (Feet/Miles) 4 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER TYPE V	27. TYPE PARACHUTE AND NUMBER 2/G12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot Drogue	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Drogue deployed and inflated normally. After "DROGUE OK" call, the drogue suddenly deflated and the malfunction call was initiated. The drogue was jettisoned unevenly approximately 5 to 8 seconds prior to "GREEN LIGHT".

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Material failure. Second event in approximately 2 months.

CONTINUED ON NEXT PAGE

ANALYSIS: 11

WHAT WAS THE MALFUNCTION?

Drogue parachute failed after inflation.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Excessive use/wear and tear due to drogue parachutes being outside of aircraft 10 to 15 seconds longer than extraction. Apex blown. Stress on apex can cause blow out. Normal stress on aircraft.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Technical rigger type inspection in accordance to regulations especially apex area.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250 AGL	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) 1264 MSL	12. SURFACE WINDS (Knots) N/A	13. VISIBILITY (Feet/Miles) AWADS
III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) 15-foot extraction parachute deployed normally. Heavy exited normally and flipped. The G12s deployed and pulled the load so that it descended vertically landing on the latch and adapter. The deadman was broken on the aft side of the load.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Improper rigging of the deadman. The deadman was approximately 13 inches above the load and was tied too tight.				

CONTINUED ON NEXT PAGE

ANALYSIS: 12

WHAT WAS THE MALFUNCTION?

The front slings caught on the front portion of the load breaking deadman. This allowed it to descend and impact vertically instead of normally.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper rigging of deadman. It was 13 inches too high and too tight.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Follow proper procedures in accordance with FM.
2. Center M1 on load.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 927 MSL	10. ACFT SPEED (Knots) 145 Knots	11. DZ ELEVATION (Feet) 265 MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+ Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3040 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V Unilateral Training	27. TYPE PARACHUTE AND NUMBER NA	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot Drogue 15 Foot Main	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The drogue parachute was not recovered from drop zone. Although not recovered, the only suspected cause is that improper rigging procedures were used.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

At drogue deployment parachute exited the aircraft normally. The drogue parachute failed to come out of the bag and failed to deploy. The aircrew called "malfunction" and jettisoned drogue approximately 3 to 5 seconds prior to the release point on the drop zone.

CONTINUED ON NEXT PAGE

ANALYSIS: 13

WHAT WAS THE MALFUNCTION?

The drogue failed to deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Not enough information to determine cause.
2. Suspected improper bag tie. The improper tie was not caught by riggers, aircrew, or JAI.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper packing and inspection procedures are followed.
2. Ensure everyone is properly trained.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1173 AGL	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) 1424 MSL	12. SURFACE WINDS (Knots) 230@4	13. VISIBILITY (Feet/Miles) Clear
III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 2959 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 517
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Deadman became caught on load, then eventually broke. As a result of the vertical position of the platform, numerous suspension risers were routed over the cargo parachute, causing it to remain partially inflated.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) After exiting the aircraft, the load remained in a vertical position after the cargo parachutes deployed. Approximately 3 seconds later, the platform violently righted itself. One of the cargo parachutes remained partially inflated for the drop. Heavy landed properly with a score of 50 yards at 12				

CONTINUED ON NEXT PAGE

ANALYSIS: 14

WHAT WAS THE MALFUNCTION?

The front slings caught on the front portion of the load breaking deadman. This allowed it to descend and impact vertically instead of normally.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper rigging of deadman. It was 13 inches too high and too tight.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Follow proper procedures in accordance with FM.
2. Center M1 on load.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 300 Feet AGL	10. ACFT SPEED (Knots) 220 KIAS	11. DZ ELEVATION (Feet) 529 Feet	12. SURFACE WINDS (Knots) Unknown	13. VISIBILITY (Feet/Miles) 7+ Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Sequential M-998s 9260 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-517/ TO 13C7-1-111	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER (2) G-11B	28. SIZE EXTRACTION/RELEASE PARACHUTE 22-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT CB FS 640

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 While taking the left locks out during the pre-slowdown checklist, the platform shifted aft 20 inches. Right locks were checked just prior to the incident during the preslowdown checklist. Locks were also checks before and after take off. After the incident, the loose platform emergency procedure was performed and completed.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 The cause of the malfunction was one or both right hand locks were not properly engaged in the platform. Lock tests were performed and both were in proper operational condition. The evidence indicates the malfunction was most likely attributed to aircrew error.

CONTINUED ON NEXT PAGE

ANALYSIS: 15

WHAT WAS THE MALFUNCTION?

Aircraft incident. The platform shifted inside the aircraft.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The loadmaster failed to check the lock properly. It was not properly engaged (R) side.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure locks are properly engaged.
2. Ensure more attention is paid to details.
3. Ensure after load inspection is performed properly.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 798	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 300/03	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 2700 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1020

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 The drogue parachute deployed normally. At the release point, the extraction package was pulled from the aircraft, the extraction line elongated but the extraction parachute failed to inflate. After noticing this, the loadmaster locked in the left side locks and proceeded aft to cut the extraction line. As the loadmaster started back, the extraction parachute inflated. Approximately 3 to 4 seconds later, the extraction parachute dipped down out of sight and then the extraction line separated from the load before the loadmaster could cut it. There was damage to the platform rail due to the load shifting under the extraction force.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 The drogue parachute, drogue line, and SELB were found on the drop zone. The extraction line, parachute, and parachute bag were found 1.5 miles south of the DZ. Upon inspection, we found that the stitching on the deployment bag bridle loop strap had failed thus not allowing the drogue parachute to pull the extraction parachute bag off the extraction parachute. We suspect that the force of the extraction parachute being drug behind the aircraft is what allowed the mini knife to cut the bag closing tie thus finally allowing the extraction parachute to inflate. Upon measuring the extraction line and inspecting the aircraft, an area was found on the aft end of the ramp that had tape marks and was sharp enough to nick the extraction line causing it to break.

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ANALYSIS: 16

WHAT WAS THE MALFUNCTION?

After equipment inspection, it was determined that it was material failure. The extraction parachute failed to inflate initially. The extraction line load failed to extract. The extraction parachute delayed opening and the extraction line then failed.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Material failure. Type X nylon webbing.
2. The extraction line was cut on the aft end of the ramp.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure technical type rigger inspection is performed.
2. Check for proper stitch pattern on the equipment.
3. Ensure proper ramp inspections for sharp edges are performed.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 580 AGL	10. ACFT SPEED (Knots) 140 CAL	11. DZ ELEVATION (Feet) 142 Feet	12. SURFACE WINDS (Knots) 050/13 Knots	13. VISIBILITY (Feet/Miles) 20 MILES

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3500 L:BS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER TYPE V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The platform exited the aircraft as expected. When the platform rotated in the direction of the extraction parachute, the aft suspension slings became entangled with the plywood board on top of the supply load after the plywood cut through the deadman. Cargo parachutes deployed and the load impacted the ground in a vertical position with the EFTC coupling face down. The only damage was a pinched EFTC cable.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Deadman was cut during the main cargo parachute deployment allowing the load to rotate into the suspension slings. The malfunction was caused by the plywood board on top of the supply load being larger than the surface it was meant to protect. The fix will be to ensure all plywood is cut to the proper size for the top of the load.

CONTINUED ON NEXT PAGE

ANALYSIS: 17

WHAT WAS THE MALFUNCTION?

1. The load impacted vertically.
2. The aft slings entangled with the plywood, deadman broke.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Parachute tray too large area of load.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Cut plywood in accordance with proper rigging FM.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 Feet	10. ACFT SPEED (Knots) 140 KTS	11. DZ ELEVATION (Feet) 170 Feet	12. SURFACE WINDS (Knots) 270@09	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equipment 3100 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER (2) G12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 630

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The timing device had a malfunction on the mechanism that releases the two keys that protrude out the side. This holds the device in place. Once the keys pull in, the device drops down thus allowing the parachute release connectors to release from the M-1 device. The small pin that holds the keys out broke off. When this happened could not be determined.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Defective timing device (timer mechanism)

CONTINUED ON NEXT PAGE

ANALYSIS: 18

WHAT WAS THE MALFUNCTION?

1. Defective timing device on M-1.
2. Small pin that holds keys broke internally.
3. Need more information.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Keys broke and small pin broke.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform proper inspection procedures.
2. Provide more information.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 884 AGL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 310@7	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3240 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER 2/G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1035

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 Drogue and extraction sequence were normal. The transfer from extraction to deployment phase never occurred and the load impacted suspended under the extraction parachute. The platform was completely destroyed. There was no damage to the aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 After inspection, the following was noted: (1) The actuator arm rotated. (2) The release cable appeared to be functioning properly. (3) There was dirt and rust inside the latch. Suspected cause was excessive build up inside latch,

CONTINUED ON NEXT PAGE

ANALYSIS: 19

WHAT WAS THE MALFUNCTION?

1. EFTC failed to transfer.
2. The main parachute deployment never occurred.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The 3-point link never released from the latch.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure the EFTC system is properly maintained using the TM and May 96 message guidance.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) 1025	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Clear
III. CARGO				
23. TYPE LOAD AND WEIGHT 8-Foot Plat- form 3750 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 8-Foot Platform	27. TYPE PARACHUTE AND NUMBER (2) G12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT STA 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Load landed on the EFTC link with the nose bumper in the air. The load of timbers shifted covering the aft slings. The G12Es were found fully deployed (deflated) with one parachute still connected to the M-1 release. The slings and deadman appeared correct. The drop occurred at night, NVGs were not used.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) After examination of the latch, marks were found indicating the 3-point connector link was over tightened at the cam. It is believed that this caused the load to go from extraction phase to deployment phase at a lower altitude, not letting the load stabilize before impacting the ground.				

CONTINUED ON NEXT PAGE

ANALYSIS: 20

WHAT WAS THE MALFUNCTION?

EFTC failed to transfer.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The 3-point link bolt was overtightened when installed in the latch.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Do not overtighten the bolt. Ensure it moves freely in the latch during inspection.
2. Ensure proper rigging procedures are followed.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1200	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 270	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles
III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3220 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Drogue/Ext	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 2
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At amber light, the right parachute deployment mechanism (PDM) failed to deploy the 15-foot drogue parachute normally or using the right PDM backup switch. Heavy equipment malfunction checklist executed. No damage to aircraft or equipment observed.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Operational post flight ground checks duplicated inflight events. Teams determined that PDM malfunctioned due to a malfunctioning gasket located inside the hydraulic actuator. Aircraft restricted from HE drops using right PDM until corrected.				

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ANALYSIS: 21

WHAT WAS THE MALFUNCTION?

Parachute failed to deploy from the right parachute deployment mechanism.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The right parachute deployment mechanism failed due to a gasket.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Track for statistical data.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 889 MSL	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 270	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited
III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3030 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL NO. PLATFORMS 1	CDS RELEASE GATE NO. CONTAINERS	OTHER (Explain)
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Drogue/ 15-Foot Extraction	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 2 of 2
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Normal airdrop sequence until platform exited aircraft. EFTC 3-point link failed to release causing the platform to impact the DZ destroying the platform and load. DZ observed that the platform exited, flipped upside down, twisted, and the main cargo parachutes never deployed. The EFTC released upon impact, or shortly before. The EFTC was tested at the DZ after photos were taken and the system released normally.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) EFTC 3-point link failed to release. During our investigation, the system was tested five times. It failed to release one time. The system is being sent to Natick for testing. Findings: (1) The load/platform was rigged and inspected. (2) EFTC system was armed and the pin was in the stowage hole. (3) The 3-point link failed to release causing the deployment phase of the airdrop to fail. (4) The 3-point link failed to release once during the investigation. (5) The EFTC actuator brackets were found to be bent. The forward end measured 1 1/2-inches inside to inside, the aft end measured 1 3/4-inches inside to inside. (6) The 1/4 inch of space allowed the actuator to move freely even while the pins were installed. (7) The platform has evidence of being struck by the actuator arm when the arm rotates. (8) During our testing, the actuator arm contacted the platform, continued to rotate, and always came to rest in the locked position. (9) There was no damage to the actuator/arm.				

CONTINUED ON NEXT PAGE

ANALYSIS: 22

WHAT WAS THE MALFUNCTION?

The EFTC system did not transfer from extraction to deployment.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

3-point link failed to release.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform proper inspection of the EFTC according to the appropriate manual and May 96 message.
2. Ensure equipment is not bent and free from defect by performing a technical rigger inspection prior to use.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) 372	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7
III. CARGO				
23. TYPE LOAD AND WEIGHT HE 2780	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER (2) G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot R/S	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT #1
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This malfunction occurred on an 8-foot training load. The load extracted from the aircraft normally, but before the recovery parachutes could fully inflate, the M-1 release activated causing a mid-air release. The load was destroyed.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Investigation of the M-1 release found that the timer had failed internally. Pivoting release arm to the timer assembly had broken loose causing the fingers to retract.				

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ANALYSIS: 23

WHAT WAS THE MALFUNCTION?

Mid air release of the main recovery parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. The timer failed internally retracting fingers allowing the release during movement of the M-1.
2. The parachute connector fingers were not properly seated.
3. Overtorquing while arming the timer.
4. Timer not seated properly.
5. Used beyond life expectancy.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper inspection, testing, and rigging procedures are performed.
2. Pay more attention to detail.
3. Develop a tracking system to determine the number of uses to analysis risk of high number of uses.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141B	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 150	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 2 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training Load 1150 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		<input type="checkbox"/> DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	Single Stick Without CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 Container	27. TYPE PARACHUTE AND NUMBER 1 G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE N/A	29. LENGTH OF REEFING LINE N/A	30. POSITION OF LOAD IN AIRCRAFT F.S. 1185

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Aircraft operations were normal up to and including the retriever winch activation. The release gate cut appeared normal, but the container failed to exit the aircraft. Malfunction procedures were accomplished without incident. Upon inspection of rigging, the guillotine knife was found separated from the retriever winch cable adapter, the little section of cable on the adapter was bent, and the end of the winch cable was kinked and bent. The safety tie on the knife broke, but the release gate was not cut at all. Cost of damaged equipment was \$140,000.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The release gate failed to cut because the metal adapter that connects the knife to the winch cable adapter broke. The adapter used was actually a loop clamp (PN 5430-00-103-2976) and made of thin metal. This metal clamp stretched until one of the mounting holes broke. It is not readily apparent why the metal adapter broke (this is still being investigated). There is no standard or specification, that has been found, for making this part and different wings use different materials.

CONTINUED ON NEXT PAGE

ANALYSIS: 24

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Hardware failure probably caused by a dull knife.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Develop procedures for inspection of the knife.
2. Develop a standard container delivery system kit for all aircraft with logistical procurement and support to include instructions for use and inspection of equipment.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 790	10. ACFT SPEED (Knots) 150	11. DZ ELEVATION (Feet) 289	12. SURFACE WINDS (Knots) 9 Knots	13. VISIBILITY (Feet/Miles) Clear
III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training Load 1100 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1330
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Rail lock 27 left side became engaged sometime after completion of pre-slowdown checklist. Load failed to exit the aircraft. Emergency procedures executed with no damage to aircraft/load observed.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Rail lock could have inadvertently re-engaged due to experiencing moderate turbulence flexing the aircraft inflight.				

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ANALYSIS: 25

WHAT WAS THE MALFUNCTION?

The load failed to exit.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Aircraft equipment malfunction; lock vibrated back in.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Track for statistical data.
2. Consider tying out locks.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1045 MSL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 200	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT A22, CDS 1370 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot RS	28. SIZE EXTRACTION/RELEASE PARACHUTE NA	29. LENGTH OF REEFING LINE NA	30. POSITION OF LOAD IN AIRCRAFT FS 700

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, the western gear retriever ran for approximately 1 1/2 seconds and shut off. The 1/4 inch safety tie was not broken and malfunction procedures were accomplished. No further attempt was made to drop the bundle. There was no damage to the load or aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon inspection, the beaded chains were both at 4 7/8 inch. The cup was seated in the spring and the knife did not slide up the release gate. The cable was also not overly tight after it shut off. On the ground, the system was re-armed and the winch cut the gate after approximately 1 second. Suspect the winch shut off prematurely due to our old friend the limit switch on the western gear retriever.

CONTINUED ON NEXT PAGE

ANALYSIS: 26

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141B	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 375	10. ACFT SPEED (Knots)	11. DZ ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1240 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 3	
26. TYPE PLATFORM/AIR-DROP CONTAINER Skidboard 48" x 48"	27. TYPE PARACHUTE AND NUMBER G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1/1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The CDS exited properly from the aircraft and entered the deployment phase. The parachute separated from the load and free fell to the ground. Three sides of the suspension webbing were burnt and torn at the D-ring attachment position. The fourth side remained intact due to the suspension web spring clip becoming disengaged from the D-ring. The physical load and parachute remained serviceable.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The most plausible cause is that one of the riser clips was not in the locked position and disconnected from its D-ring on opening shock. This caused excessive slippage of the D-rings against the nylon, creating heat friction that weakened the integrity strength causing material failure of the remaining three sides of the container attachment straps. The combined slipping, heat and jolt on the other three sides of the A-22 container caused the remaining sides to break in rapid succession.

CONTINUED ON NEXT PAGE

ANALYSIS: 27

WHAT WAS THE MALFUNCTION?

The parachute separated from the load after opening shock.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Only three of the four suspension webbings were connected causing material failure of the A-22. Material of A-22 showed signs of previous stress.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Better inspection of material.
2. Perform proper rigging, aircrew and JAI procedures.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 450 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1424	12. SURFACE WINDS (Knots) 240@005	13. VISIBILITY (Feet/Miles) >9000m

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS/Water Barrels x 4 1327 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE Pilot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT F.S. 517

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
At green light the Western Gear retriever winch never activated. Type twenty-six release gate failed to cut.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
Aircraft loadmasters stated that the top beaded chain was entangled in the compression spring. After inspection by JAI and STAN/EVAL, the beaded chains were found to be different lengths (4 7/8 inches and 5 inches). However, due to loadmasters de-rigging in-flight, exact cause of malfunction could not be determined. Malfunction could not be duplicated on the ground.

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ANALYSIS: 28

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Beaded chains of the Western Gear retriever were different lengths.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Aircrews should follow proper preflight inspections.
2. Replace Western Gear static line retrievers with suitable substitutes.
3. Develop proper inspection and preflight procedures to include timeframe.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 MSL	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 330	12. SURFACE WINDS (Knots) 10	13. VISIBILITY (Feet/Miles) 10 Miles
III. CARGO				
23. TYPE LOAD AND WEIGHT High Velocity CDS 10120 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 8	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26' Ring Slot	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Oscillation of anchor cable may have broken rubber retainers securing static lines taut to parachute. Static lines became loose and wrapped around anchor cables resulting in premature parachute deployment.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) After green light, it was noticed that three of the four HV CDS bundles on the aircraft right side exited the aircraft with the 26-foot parachutes dragging on the floor. After the drop, it was noted that one of the three static lines did not travel past F.S. 530 and was completely cut approximately 5 inches below the anchor cable clevis. The other two static lines were found approximately 60 inches aft and tangled in a knot.				

CONTINUED ON NEXT PAGE

ANALYSIS: 29

WHAT WAS THE MALFUNCTION?

Parachutes slid off the load onto the aircraft floor.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper rigging of the parachute. The 80 pound parachute restraint tie was probably loose or missing allowing the parachute to fall to the floor.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper rigging/JAI procedures are followed.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 755 MSL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 Feet	12. SURFACE WINDS (Knots) 6-10	13. VISIBILITY (Feet/Miles) Unrestricted
III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 Container 900 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-14 (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE N/A	30. POSITION OF LOAD IN AIRCRAFT FS 660
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The malfunction occurred on the second stick of a two stick airdrop. Both CDSs exited the aircraft normally. The parachutes opened and inflated normally on the first CDS. On the second CDS the parachutes did deploy but did not inflate causing it to be destroyed. The two G-14 parachutes were found to be wrapped together looking like a cigarette roll. After inspecting the parachutes, there was no damage found. The parachutes appeared to be rigged and deployment properly but did nto inflate.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) G-14s wrapped around each other not allowing them to inflate. Specific cause unknown. Possible cause air starvation.				

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ANALYSIS: 30

WHAT WAS THE MALFUNCTION?

Parachute failed to open.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Loss of dynamic pressure.
2. CDS load might have been too light.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Bulid up the weight of the loads.
2. Ensure time compliance of packing dates.
3. Consider anti-static pack floor.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 372	12. SURFACE WINDS (Knots) 7	13. VISIBILITY (Feet/Miles) 7+

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass CDS 5150 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 5	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 617

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Gate failed to cut. This was a 5-bundle mass CDS W/CVR, right stick, using the right static line retriever (Western Gear). Retriever activated until cable slack was removed then stopped, failing to break the 80 pound. Pulley location F.S. 617. No damage to load or aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Investigation revealed the retriever would operate correctly until the cable got to the horizontal position (slack removed) and then stopped. All preflight inspections were accomplished correctly. Further investigation revealed the rewind limit switch was out of adjustment.

CONTINUED ON NEXT PAGE

ANALYSIS: 31

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet	10. ACFT SPEED (Knots) 140 KCAS	11. DZ ELEVATION (Feet) 65	12. SURFACE WINDS (Knots) 6	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Container Training Load 800 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-550-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER Single A-22	27. TYPE PARACHUTE AND NUMBER 26 Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Centerline/617

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 Single CDS load failed to release. Gate failed to cut. Right static line retriever was used and rigged IAW -9 procedures at FS 617. 41-inch strap used. Knife sharp. Actual location of single type 26 release gate was 20-inches forward at FS 597. Retriever was actuated manually for three seconds, however retriever stopped prior to gate release.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 Right hand SLR microswitch engaged, stopping retriever winch early. 1/4-inch cotton webbing was cut, and release gate was frayed. Cable guide was at bottom of spool and compression spring fully seated. 352 MX personnel noted that microswitch adjustment screw appeared to be out of adjustment. Incident appears to be an aircraft system malfunction.

CONTINUED ON NEXT PAGE

ANALYSIS: 32

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 935 MSL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 100	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 10+

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 900 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 Breakaway Static	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 430

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, r/h retriever winch activated, pulled the release gate tight but failed to cut. Loadmaster stated winch ran for just a fraction of a second, failed to cut then malfunction procedures were begun. The aircraft was impounded upon landing. Stan/Eval, safety, and maintenance reviewed the rigging and airdrop events with no problems noted. No damage was incurred.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

With CDS rigged at FS 430 and the guillotine knife rigged where the -9 T.O. says to rig it, the angle at which the winch cable leaves the r/h retriever winch is too large. As the winch activates and pulls tight, this puts side pressure on the winch spring cup resting on the horizontal bar. Too much pressure activates the safety cutoff switch causing a malfunction.

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ANALYSIS: 33

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 700 AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1507 MSL	12. SURFACE WINDS (Knots) 220 at 8	13. VISIBILITY (Feet/Miles) 7+ Miles
III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training Load 1000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Inch High Velocity (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE N/A	30. POSITION OF LOAD IN AIRCRAFT FS 710
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the S/L retriever actuated, cut the release gate, and the load exited the aircraft normally. However, during the clean-up checklist the 2 loadmasters were unable to locate teh guillotine knife. The quick disconnect was still attached to the S/L retriever cable.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Best guess is that the quick disconnect was not fully seated and the knife came free and departed the aircraft. Less popular theories are, the quick disconnect became snagged on the container webbing and released the knife, or the knife struck the hog-trough and somewhere became disconnected. Note: A dropped object report was filled out on this incident due to the still missing knife.				

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ANALYSIS: 34

WHAT WAS THE MALFUNCTION?

1. Aircraft equipment failure.
2. The guillotine knife was not attached to the cable after the drop sequence.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Swagged ball not fully seated.
2. Material failure in the swagged ball area.
3. Quick disconnect caught on load opening the quick disconnect.
4. Quick disconnect spring worn out allowing easy opening.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Develop standard CDS kit to include use of equipment and inspection procedures.
2. Inspect equipment for proper working order.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C 130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 425	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 240	12. SURFACE WINDS (Knots) 050 @ 6-10 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training Load 1000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C-7-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS N/A	NO. CONTAINERS 1	Non-CVR Non-Breakaway S/L
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 1 G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE Pilot Parachute	29. LENGTH OF REEFING LINE N/A	30. POSITION OF LOAD IN AIRCRAFT FS 617

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Static line retriever was engaged at green light. The retriever disengaged after one second. The 80 pound safety tie and the type 26 release gate were not cut. Emergency procedures were initiated with no damage to aircraft or load.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Post mission inspection of the static line retriever by maintenance resulted with retesting the retriever. The test was performed four times with the same results. The static line retriever cut out after one second. Further inspection of the microswitch demonstrated that internal compression spring #22 was out of tolerance. The spring was adjusted. The static line retriever was retested six times with positive results. Suggestion: Local policy, chapter 10. Prior to loading a CDS, a safety check with a piece of type I, 80 pound loop tied to the plane's floor, attached to the static line retriever will be activated to ensure that the static line retriever is in proper working order. The fleets static line retrievers will be tested at once.

CONTINUED ON NEXT PAGE

ANALYSIS: 35

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 700 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 743 Feet	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) 6 nm
III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Training Load 1000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT F.S. 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light, the retriever actuated but shut off prematurely failing to break the 80 pound guillotine knife safety tie and in turn cut the type 26 nylon release gate. Pulley was located at F.S. 530. Retriever is a western gear. No damage to personnel, aircraft or load.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Western gear retriever malfunction. Specifically the limit switch adjustment screw was out of adjustment, causing retriever to shut off as soon as tension was applied to cable during activation.				

CONTINUED ON NEXT PAGE

ANALYSIS: 36

WHAT WAS THE MALFUNCTION?

The gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The western gear rewind limit switch was out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Replace western gear static line retrievers on all C-130 aircraft.
2. Develop proper inspection procedures and timeframes.
3. Develop aircrew procedures to ensure winch is able to operate correctly in addition to the standard preflight. For example: Two turns single 80 lb cotton webbing routed from a floor tiedown ring to the bar of the guillotine knife during the 3 second timer test.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 375	12. SURFACE WINDS (Knots) 9 Knots	13. VISIBILITY (Feet/Miles) Unlimited
III. CARGO				
23. TYPE LOAD AND WEIGHT CDS Stinger 825 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-550/ TO 13C7-22-71	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 5	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 1 G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE 68-Inch Pilot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 2 of 5
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Load exited normally. Suspension lines elongated, however, G-12 did not come out of bag. Load impacted ground and was damaged. Inspection of the G-12 on the DZ, showed the locking stows had come out of the locking stow loops (either in the air or on impact). The locking stow loop on the right side was not pulled out of the locking stow slot. In addition, a portion of the locking stow flap was pulled through the slot, causing the stow loop to be wedged or hung and letting it pull bak out. This was a modified G-12 D-bag. The stitching on this stow was cut on both sides, not IAW TM 10-1670-281-23&P, which states to cut the stitching on one side (3/4-inch to 1 1/1-inch)</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Cause of malfunction was that part of the locking stow flap was pulled through the slot along with the stow loop causing the bag to lock. The stitching being cut on both sides of the stow loop allowed the flap to be pulled through the slot. The flap was either pulled through during pack-up or during deployment (when locking stow was pulled out). To prevent this from happening, insure proper inspection of D-bag (to include modifications), proper pack procedures, and proper in-process inspection (rigger checks).</p>				

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ANALYSIS: 37

WHAT WAS THE MALFUNCTION?

Parachute failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Part of the locking stow flap was pulled through the slot along with the stow loop causing the bag to lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Insure proper inspection of D-bag, proper packing procedures, and rigger checks.

**SUMMARY OF
SUPPLY AND EQUIPMENT DROPS**

1ST TRIANNUAL CY 1998

	PLATFORM LOAD	SINGLE CONTAINER	CDS	TOTAL
Number of Drops	1094	0	2589	3683
Number of Malfunctions	14	0	14	28
Percentage of Malfunctions	0.012	0	0.054	0.077

Malfunction Phases:	IP	EF	IP	EF	IP	EF	IP	EF
Extraction	3	5	0	0	3	8	6	13
Deployment-Recovery	4	2	0	0	2	1	6	3
Release	0	0	0	0	0	0	0	0

IP-Incorrect Procedures

EF-Equipment Failure

**SUMMARY OF
PERSONNEL PARACHUTE JUMPS**

1ST TRIANNUAL CY 1998

		C-17	C-130	C-141	OTHER	TOTAL
Nonmaneuverable	Number of Deployments	721	59,014	11,078	831	71,644
	Number of Malfunctions	1	2	0	0	3
	Percentage of Malfunctions	0.013	0.070	0	0	0.041
Maneuverable	Number of Deployments	291	7,330	1,489	4,557	13,667
	Number of Malfunctions	2	1	0	0	3
	Percentage of Malfunctions	0.069	0.013	0	0	0.021
Free-Fall	Number of Deployments	0	2,409	125	0	2,534
	Number of Malfunctions	0	4	0	0	4
	Percentage of Malfunctions	0	0.017	0	0	0.016
Total	Number of Deployments	1,012	68,753	12,692	5,388	87,845
	Number of Malfunctions	3	7	0	0	10
	Percentage of Malfunctions	0.030	0.010	0	0	0.011

**SUMMARY OF
PERSONNEL PARACHUTE MALFUNCTIONS**

1ST TRIANNUAL CY 1998

	NON- MANEUVERABLE	MANEUVERABLE	FREE-FALL	RESERVE
Number of Deployments	71,644	13,667	2,534	6
Number of Malfunctions	3	4	4	0
Towed Jumper	0	0	0	0
Broken Static Line	0	0	0	0
Entanglement	0	0	0	0
Failed to Inflate	0	0	1	0
Inversion	0	0	0	0
Pilot Chute	0	0	0	0
Semi-inversion	1	0	0	0
Suspension Lines	0	0	0	0
Other	2*	4*	4*	0
Percentage of Malfunctions	0.041	0.030	0.003	0
Fatalities	0	0	0	0

*Injuries

**INJURIES OCCURRING ON PARACHUTE OPERATIONS
AS REPORTED ON DA FORM 285**

1 OCTOBER - 31 DECEMBER 1997

	C-17	C-130	C-141	UNKNOWN	TOTAL
PLF-Related Injuries	0	5	7	12	24
Main Malfunction	0	0	1	0	1
Misrouting of Static Line	0	0	0	0	0
Entanglements	0	0	0	2	2
Tree Landings	0	0	0	0	0
In Aircraft	0	0	0	0	0
Hazards on Drop Zone	0	0	0	0	0
Other	0	1	1	2	4
Insufficient Information	0	0	0	0	0

AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	0
SUPPLY AND EQUIPMENT DROPS	
Rail locks	1
Improperly operating ADS	2
Improperly operating doors or ramps	0
Release mechanism	2
Electrical system	0
CONTAINER DROPS	
Rollers	1
Type XXVI gate	0
Static line retriever	9
TOTAL	15

HOT POOP

- o **The next Malfunction and Review Board will be held at Fort Lee, Virginia on 21 - 22 October 1998.**

- o **All airdrop rigging manuals can be found on the internet. The address is <http://www.lee.army.mil/quartermaster/adfsd>**

- o **The following field manuals have been published:**
 - Change 5, FM 10-517/TO 13C7-1-111, Rigging 1 1/4-ton Trucks**
 - Change 2, FM 10-579/TO 13C7-50-1, Rigging Landing Field Mat**
 - Change 1, FM 10-558/TO 13C7-7-61, Rigging ROWPU**