

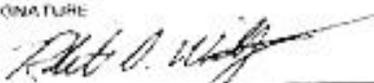
REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol
NCS

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item numbers.

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function) SMC/AXF	2. FROM (Proponent organization and functional address symbol) SMC/TEBI	3. TELEPHONE NO. DSN 246-6272
4. TITLE OF PROPOSED ACTION Weight Test Vehicle (WTV)		
5. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need detail) See Attached		
6. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.) See Attached		

7. PROPONENT APPROVAL (Name and Grade) ROBERT D. WILFONG, Capt. USAF	8a. SIGNATURE 	8b. DATE 16 Aug 00
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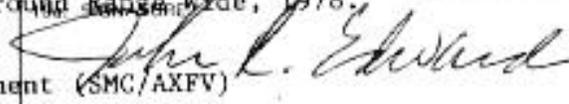
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)

7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)				
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)				
9. WATER RESOURCES (Quality, quantity, source, etc.)				
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity/distance, etc.)				
11. HAZARDOUS MATERIALS/WASTE (Leakage/generation, solid waste, etc.)				
12. BIOLOGICAL RESOURCES (Wildlife/fish/water, flora, fauna, etc.)				
13. CULTURAL RESOURCES (Native American burial sites, archeological, historical, etc.)				
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)				
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)				
16. OTHER (Potential impacts not addressed above.)				

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17.	<input checked="" type="checkbox"/>	PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # <u>A.2.3.11</u> . CR
	<input type="checkbox"/>	PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX, FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS
SMC/AXFV (Environmental Management) reviewed this project. LAW AFI 32-7061 this action qualifies for CATEX A2.3.11 Actions similar to other actions which have been determined to have an insignificant impact in a similar setting as established in an EIS or an EA resulting in a FONSI. Documents: 1) Programmatic Environmental Assessment Air Drop Target System Program, May 1998; 2) U.S. Army Space and Missile Defense Command, Record of Env. Consideration, SRALT Testing Activities at Yuma Proving Grounds Mar. 1998; 3) EIS, Yuma Proving Ground Range Rede, 1978.

19. ENVIRONMENTAL PLANNING FUNCTION APPROVAL (Name and Grade) JOHN R. EDWARDS, GM-14 Chief, Environmental Management (SMC/AXFV)	20. DATE  16 Aug 00
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4.0 PURPOSE AND NEED FOR ACTION:

4.1 Purpose of the proposed action: The purpose of the Weight Test Vehicle (WTV) tests is to evaluate and verify the performance of a cluster of three 94-ft. Polyconical Light Weight Enhanced Ringslot (PLER) parachutes attached to a 21 ton load. The PLER parachutes are being developed by Coleman Aerospace Company (CAC) for use with the Long Range Air Launch Target (LRALT) program. The extraction and descent will be the conditions and environments anticipated for the LRALT demonstration flight.

WTV tests are currently scheduled for 22 Aug 00 and 20 Oct 00. Current plan calls for them to be identical. These identical drops will allow us to gain confidence in the parachutes and increase our reliability predictions for the parachutes. This translates into lower technical risk for the program.

4.2 Need for the proposed action: The primary test objective is to demonstrate the capability and performance of the LRALT parachute system to successfully extract, deploy, and decelerate a 41,800-lb load through three load stages to a steady state descent. The test will demonstrate that the deceleration system will not impart deceleration forces greater than 3g's on the test article during all phases of the deployment. Additionally, these tests will demonstrate that a cluster of 3 PLER parachutes will not rotate beyond the limits of +/- 90 degrees during the first 105 seconds of descent.

5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA)

5.1 Proposed Action: The contractor wanted to accomplish the WTV tests at YPG and the Air Force agreed. Doing drop tests at YPG helps lower program risk. The same tests were accomplished at YPG during the SRALT program. Minor differences between the SRALT and LRALT drops include the parachute material and number of chutes. The procedures for packaging the chutes, extracting the load from the aircraft (must comply with MIL STANDARDS and applicable Air Force regulations), and recovering the tub and chutes after the drop are identical with SRALT.

5.1.1 WTV tests: The WTV tests will simulate LRALT extraction and deployment environments and conditions. The WTV test payload consists of a 24-ft modified Weight Tub configured with steel weights. The tubs to be used are identical with tubes were used on SRALT program. The WTV tests will deploy a cluster of (3) 94-ft. PLER parachutes attached to a 41,800-lb. weight tub and pallet. The tests will be conducted from a C-17 aircraft flying at an altitude up to 24,900-ft. msl and 140+/-5 kias. Two 28-ft. Ringslot parachutes will extract the load. The extraction parachutes will remain attached to the load after extraction. Four seconds after extraction, extraction chutes will be released that deploy two 22-ft. stabilization parachutes and three PLER parachutes. The PLER parachutes are reefed to 3 load stages controlled by two reefing lines and mechanically actuated pyrotechnic line cutters. The cluster of PLER parachutes will remain attached to the load after impact with the ground.

On the morning of the drop, CAC in conjunction with Yuma Proving Ground (YPG) will calculate the High Altitude Release Point (HARP). The HARP coordinates are provided to the YPG Range Control and the aircraft crew. Thirty seconds before the airdrop, the C-17 will tow a single 15-ft. Drouge parachute that will deploy the extraction parachutes on command. The WTV load will be extracted by (2) two 28-ft. Ringslot Extraction parachutes. A pair of time delayed line cutters will release an actuator arm four seconds after the WTV exits the aircraft. After release, the two 28-ft. extraction parachutes deploy the two 22-ft. stabilization parachutes and the three 94-ft. PLER parachutes. Deployment of the PLER parachutes will inflate into a first stage configuration. After a six second delay the reefing line cutters will dis-reef the cluster into a second load stage. Next, the eleven second delay cutters will cut the second stage reefing lines and dis-reef the PLER cluster to full open configuration. Within 2-3 seconds the WTV will achieve a steady state rate of descent. The estimated event timeline from extraction to steady state is 21 seconds with a loss in altitude of 2,325 vertical feet and a forward throw of 2,340-ft. The typical time to impact at the YPG LaPosa DZ from a 24,900-ft msl airdrop is calculated to be 408 seconds.

5.1.2 Yuma Proving Ground: YPG is a primary training range for USAF aircrews to practice these types of airdrops. The process has been in place to support these airdrops which are performing hundreds of times a year at YPG. All standard extraction rigging and airdrop procedures and technical orders will be followed. It makes sense to work with the same organization which were used to conduct previous tests and to work with an organization also familiar with the same test procedures. YPG maintains their own parachute packing facilities and schedules military aircraft for airdrops all year round. All these factors point toward using YPG to accomplish WTV.

5.2 No Action Alternatives:

Under a no action alternative, the proposed tests above would not be implemented. The data required for the development of the LRALT system will not be available. The extraction and descent system will be at risk for not properly tested prior to the live test.