

10 August 1971

ACCIDENT INVESTIGATION - PART I - CONDUCTED AUGUST 6 & 7, 1971  
AT HURRICANE MESA TEST TRACK, HURRICANE, UTAH

Accident Investigation Team: M. E. Sandekian, Explosives Safety Officer, Stanley Aviation Corporation  
E. L. Persons, Supervisor of Quality Engineering, Stanley Aviation Corporation

Advisory Assistance by: James Richoff, Chief of Track Operations, Naval Ordnance Test Station, United States Navy, China Lake, California  
James Pryor, Project Engineer, Naval Ordnance Test Station, United States Navy, China Lake, California

Time of Accident: 8:50 A.M., August 5, 1971

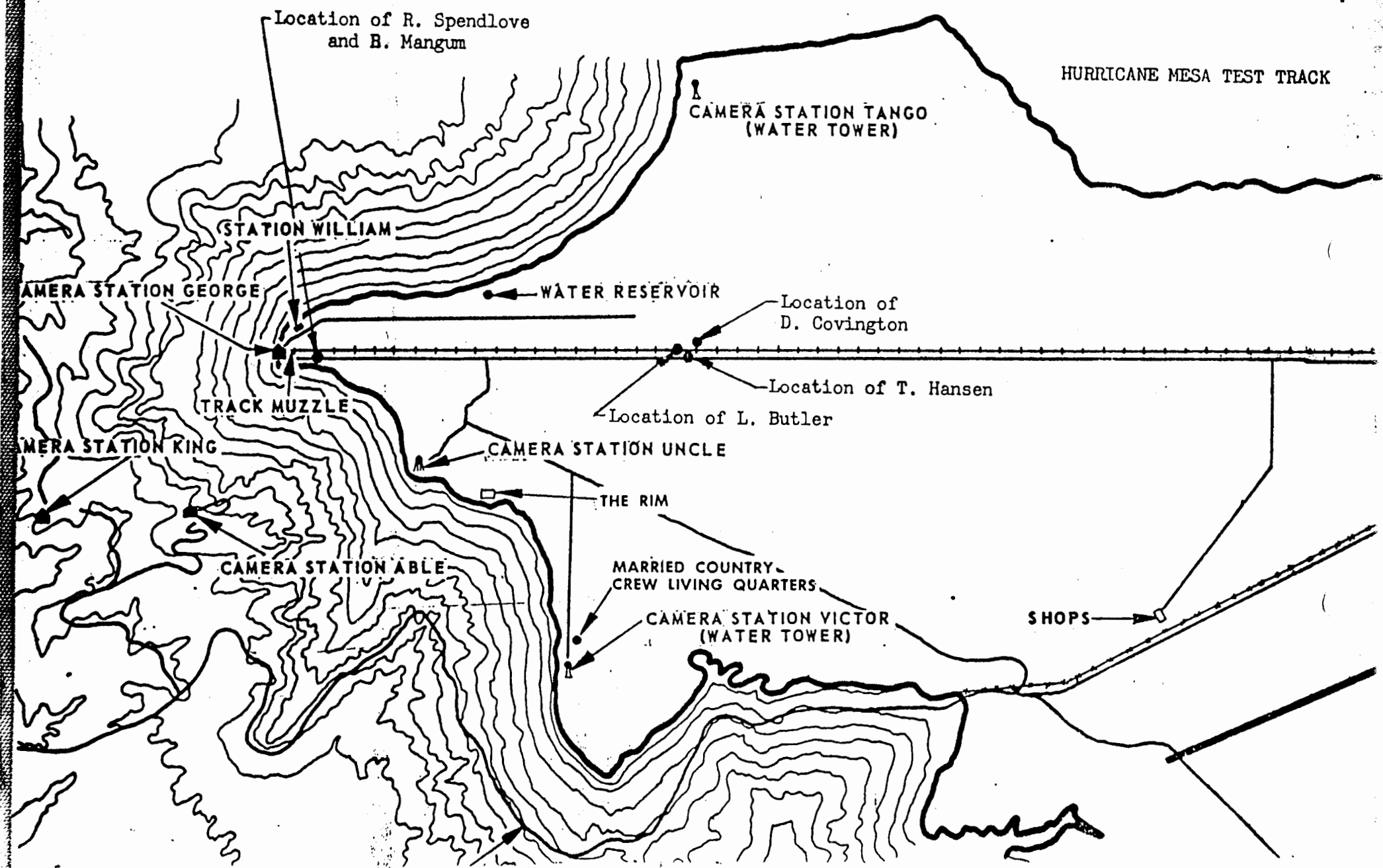
Weather Conditions: Broken clouds - no wind - temperature 85° approximately - rather humid

I. General Description of Hurricane Mesa Test Track.

The Hurricane Mesa Test Track is situated on the top of Hurricane Mesa, located approximately 16 miles northeast of the town of Hurricane, Utah. The test track is used to run tests on aircraft escape systems. These tests are run using sleds which are propelled down a set of railroad tracks, 12,000 ft. long, at various speeds and for various distances depending on the nature of the test being conducted. The method of propulsion is either by rocket motors or jet engines which push the sled up to the desired velocity before the escape system is functioned. Alongside the track at pre-programmed positions, screen boxes are set up to initiate the various events which are to take place. The sleds have pylons on them with knife blades, and, as the sled goes down the track, these knife blades pass through the screen boxes thereby completing the electrical circuit thus initiating the desired sequence of events. After the test specimens leave the sled, the sled is stopped by means of a water brake and an arresting gear.

II. Brief Narrative of Accident.

A high speed development sled test run was scheduled at the Hurricane Mesa Test Track on August 5, 1971, at approximately 11:00 A.M. At 8:50 A.M. that same day, during preparation for the test run, 14 HVAR rockets mounted on the Genie pusher sled ignited prematurely and two of the three sleds started down the track. There were three men working in the immediate vicinity of the sled at the time of the accident. Mr. DuRell Covington, our chief electronics expert who was reported to be just behind the Genie pusher sled, was killed. Mr. Todd Hansen who was standing alongside the track facing away from the sleds when they started moving, was burned on his hands, face, and the right side of his body near the top of his pants. He suffered further abrasions presumably from being blown down a cinder-strewn embankment as the sleds moved down the track. Mr. Larry Butler, who was sitting inside the sled astride the dummy's lap facing the dummy, grabbed onto the seat and rode the sled until it stopped. He then jumped out of the sled. His injuries consisted of bruises and abrasions.



LOCATION OF MEN AT TIME OF ACCIDENT

Figure 1

MEMORANDUM

~~1 September 1975~~

TO: Ryan

CC: Harris, Taylor

SUBJECT: Explosives Burglary

1. Our Hurricane personnel have this date discovered that persons unknown have cut through the fenced enclosure, have broken a hasp from a small ammunition magazine, and are believed to have stolen some plastic explosives stored there by Harry Diamond Laboratories.
2. We do not maintain inventories of Harry Diamond supplies and, hence, do not know the accuracy of the foregoing belief as to the identity of stolen explosives if any.
3. This should be promptly reported to Harry Diamond Laboratories, it has been reported to the local Utah authorities by Mr. Taylor.

R. M. Stanley

In order to permit the performance of these tests at our track at Hurricane Mesa, we would require substantial indemnification and hold-harmless agreements to be furnished to us by the main contractor; said agreements to be concurred in and agreed to by the U.S. Government. These indemnification agreements would have to include such items as complete reimbursement to us for any and all damage to the track and/or the facility occasioned by the subject tests. In addition, any damage to the track and/or facility would no doubt create considerable delays to our own in-house programs scheduled for this facility. Therefore, any indemnification agreement would require that we be reimbursed for our costs incurred in continuing our test programs at other test facilities awaiting the restoration of the HMTT track and/or facility damaged or destroyed by these tests. In addition, we would require the necessary hold-harmless agreements against injury, death, and/or damage to any third party in the area resulting from the tests.

COPY FURNISHED TO Revelal 9/15/71 FOR TRANSMITTAL  
TO KAMMAN ON SPRINT MISSILE TESTING

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DEPARTMENT OF THE ARMY  
HEADQUARTERS UNITED STATES ARMY AVIATION CENTER AND FORT RUCKER  
FORT RUCKER, ALABAMA 36362

RECEIVED  
JUL 28 77

ATZQ-DI-FC

25 JUL 1977

Mr. Robert M. Stanley  
Stanley Aviation Corporation  
2501 Dallas Street  
Denver, Colorado 80220

Dear Mr. Stanley:

The annual survey of your physical security program for the safeguarding of firearms, ammunition and explosives was conducted on 12 May 1977 by Mr. Richard A. Johnson, Industrial Security Specialist, Defense Contract Administration Services Management Area, Salt Lake City, Utah. Mr. K. E. Taylor of your firm assisted Mr. Johnson during the survey.

The survey revealed that your security program at the Hurricane Mesa test site is still in need of improvement and that many of the recommendations made after the previous survey had not been implemented. However, Mr. Johnson's report indicated that some of the recommendations would be implemented shortly by Mr. Taylor and that other potential problem areas were eliminated when Harry Diamond Laboratories removed their explosive material from the site.

As indicated previously, the recommendations contained in the enclosed report are designed to improve your physical security program and hopefully reduce the risk of loss, theft, misappropriation, and unaccountable disappearance of material stored and used at your Hurricane Mesa site.

It should be understood that the cost of implementing the enclosed recommendations does not obligate government funds and the government shall not be liable for any costs arising from implementation of these recommendations unless the costs are specifically authorized by a government contracting officer.

The protective marking "FOR OFFICIAL USE ONLY" used on this report requires that it be treated as you would company proprietary information



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ATZQ-DI-PC

25 July 1977

SUBJECT: Recommendations On Physical Security Program

Thank you for the courtesy and cooperation shown Mr. Johnson during the survey. Please feel free to utilize the services of his or our office in resolving any physical security problems you may encounter. In addition, please give us a report of any loss, theft, wrongful disposition or recovery of arms, ammunition and explosives.

Sincerely,

  
HELEN C. NICHOLSON  
Contracting Officer

1 Incl  
as

cc:  
DCRS-IP  
DCRS-GDC

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## ENCLOSURE

### RECOMMENDATIONS

✓ a. Install steel bars over the ventilation area located on the door to the Igloo. Bars should be installed on the interior of the door for added reinforcement.

✓ b. Replace the present four tumbler proof padlock used to secure the explosive storage facilities with high security type padlocks. Two padlocks should be used on each door using two separate heavy duty hasps. Each padlock should be protected with 1/4 inch steel caps constructed so as to prevent sawing or lever action on the locks or hasps.

✓ c. That the storage facilities be opened and inspected at intervals not greater than three days to determine whether the explosives therein are intact. Mr. Johnson's report indicated the explosive area is checked every other day, but the Igloo/magazines are not entered. Lead wire type seals should be used on each door to facilitate the checking of doors.

✓ d. Recommend that security procedures be prepared for the Hurricane Mesa test site. The procedures should include instructions on checking of the explosive areas as well as the perimeter fence surrounding the explosive storage area. In addition, the procedures should include control and accountability of keys, changing of keys, inventory of explosive items and the reporting of any loss, theft, or attempted unauthorized entry.

✓ e. Complete and maintain an inventory of all explosive items and post warning signs at each magazine/Igloo and at the gate to the explosive area. Mr. Johnson's report indicated that your facility is in the process of accomplishing the above recommendations.

✓ f. It was recommended during the previous survey that the squibs and other related material stored on the second floor of the administration building be moved to the first floor to facilitate removal in the event of fire. We understand that the material is being moved to the explosive area and we concur in this action.

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