

AIRMUNITIONS LETTER

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HEADQUARTERS
OGDEN AIR MATERIEL AREA
UNITED STATES AIR FORCE
Hill Air Force Base, Utah

29 June 1960

OOAMA AIRMUNITIONS LETTER
NO. 136-11-56B

SUBJECT: Advance Explosive Ordnance Disposal Technical Information

TO: SEE DISTRIBUTION

AUTHORITY: This AML is published under the authority of and in compliance with AFR 136-6.

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SUMMARY OF NUCLEAR WEAPONS INCIDENTS (AF FORM 1058) AND RELATED PROBLEMS
CALENDAR YEAR 1959

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1. The purpose of this Airmunitions Letter is to present a periodic summary of incidents wherein nuclear weapons were involved, and to provide a resume of the methods and procedures used by the EOD personnel involved at each incident.

2. This summary includes the incidents reported during the calendar year (CY) 1959 and will refer to them as NWI-59 (Number of Incident).

NWI-59-1

1. Location.

Physical location of Higher Classification.

2. Date.

January 1959

3. Type of Incident.

Damage of ~~_____~~ weapon by fire. An F-100 type aircraft was loaded with a ~~_____~~ weapon and three external fuel tanks. Inadvertent jettison of the three fuel tanks onto the hardstand resulted in tank rupture and fire. Fire was responsible for extensive aircraft and weapon damage.

4. Brief.

Jettison of the three fuel tanks resulted in the left inboard tank rupturing and bursting into flame. The other two tanks fed the fire. The weapon was subjected to constant heat and intermittent flame for approximately seven minutes. Upon extinguishing the fire by foam it was found that extensive damage had been suffered by the weapon. The forward section of the weapon case had melted away and/or fallen off the weapon, exposing the batteries and fuze. Portions of the center section bottom was melted away exposing the detonators. Several of these detonators were cracked and scorched. Insulation on several detonator leads had softened but remained intact. Pull-out wires were in place and Arm-Safe switch was on "Safe." Weapon was monitored with AN/PDR 27C and a reading of 0.2 MR per hour was obtained. An MB-5 Cradle and MF-1 trailer combination was used to remove the weapon from the aircraft and transport it to a remote area for further disassembly and RSP. During battery removal it was found that the lower battery had shorted out as a result of the fire, burning the cables through. The upper battery was warped and the cables had burned through, however, it was still charged. (See Figures 1 through 5.)

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NOTE

Extensive fire damage indicated a possibility of a weak pylon. Note damage to weapon. One "Ni-cad" shorted out the other still retained its charge.

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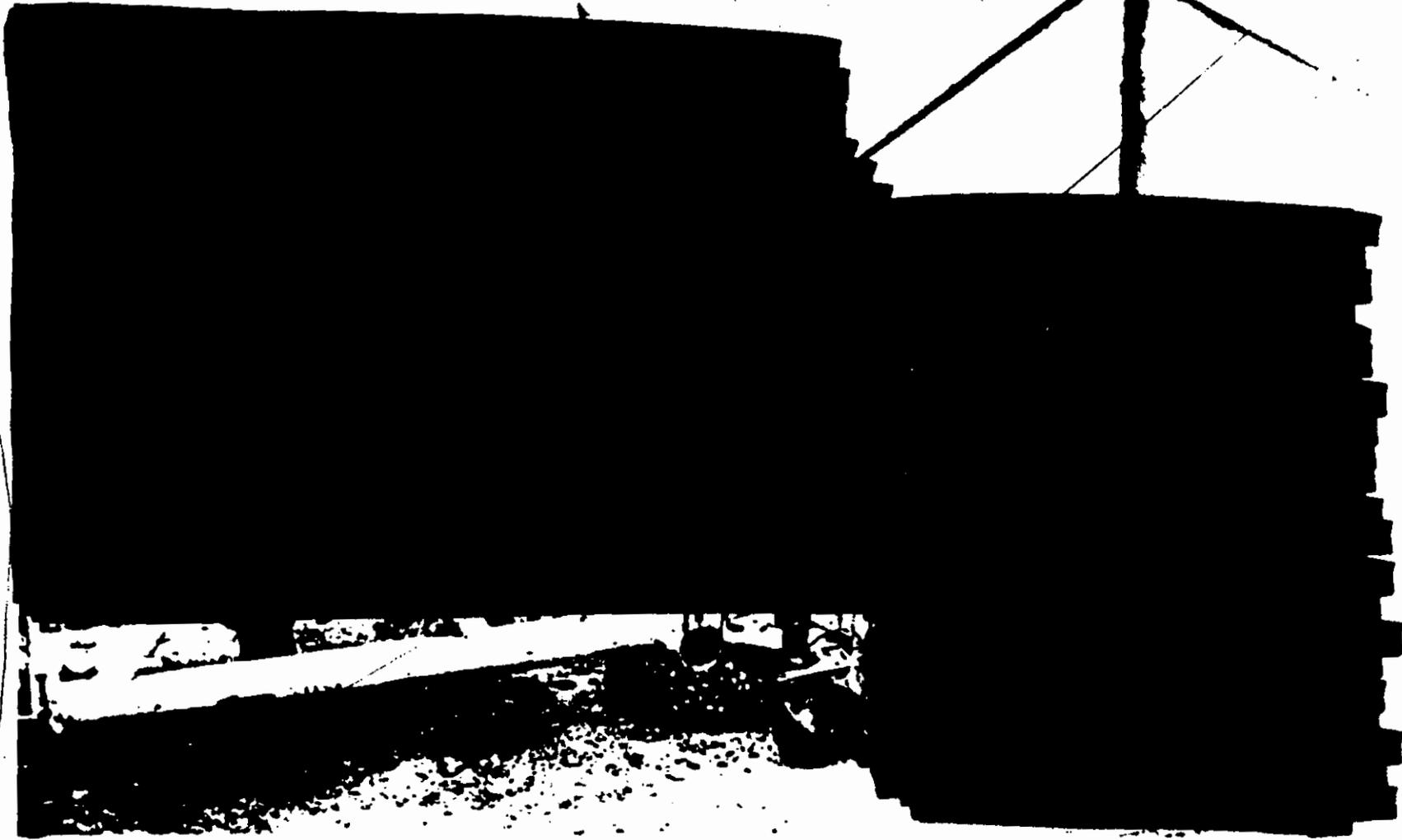
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NOTE: During disassembly the damage to the weapon skin was found to be extensive.

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NOTE: Skin sections fore and aft [redacted] were damaged.

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NOTE: Notice the damaged cables and marks from fire and smoke [REDACTED]

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NOTE: Detonators are removed and at last the IFI comes off. Another successful mission.

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5. Unusual Problems.

None.

6. Contamination.

None.

NWI-59-2

1. Location.

On Base.

2. Date.

July 1959.

3. Type Incident.

Take-off accident involving C-124 type aircraft with
[redacted] Weapons.

4. Brief.

Weapons were being transported by C-124 when a take-off accident
occurred. Fire of intensive magnitude resulted. [redacted]

[redacted] Weapons were removed from wreckage
with aid of M246 wrecker and a 40 foot trailer.

5. Unusual Problems.

Apparently none. Report was incomplete. No photos available.

6. Contamination.

None.

NWI-59-3

1. Location.

Near Hardinsburg, Kentucky.

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2. Date.

October 1959.

3. Type Incident.

Mid-air collision involving KC-135 tanker aircraft and a B-52 aircraft with two (2) [redacted] weapons aboard.

4. Brief.

Notification was received of an aircraft crash involving a B-52 aircraft carrying two [redacted] and a KC-135 tanker. A radiation survey was conducted with negative results. Wreckage was scattered over a large area however the weapons were located in the same general position as loaded in the aircraft (approximately six feet apart and in line). The weapons had been subjected to considerable heat from the fuel fire resulting from the crash. Practically all components aft of the alignment plates had been torn or sheared off either by the mid-air collision or upon impact. The "T" bottle [redacted] from the aft weapon and was covered by soil and debris. The "T" bottle on the forward weapon was still mounted, however, it had been bent down from the normal position and the plumbing had been torn away. Neither bottle was found to be leaking. Spare detonators were uncovered in the debris and soil. Arm-safe switches were found to be on "safe" on both weapons. [redacted]

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[redacted] Detonators had been ripped loose and loose pieces of explosive were evident at every opening. The [redacted] could not be removed due to the case damage. Cutting of the case was necessitated and accomplished. Subsequent entry into the weapons was accomplished only after broken and pulverized explosive was removed and polar cap removal. The pit in both weapons was found to be lying loose on a pile of broken explosive. (See Figures 6 through 16.)

5. Unusual Problems.

A hack-saw was used for cutting the case. This was a very tedious task and a better tool should be devised.

NOTE

EODTC now has a project on this requirement and an "Entry & Access Tool Kit" is under development.

6. Contamination.

None.



NOTE: After Tritium bottles have been removed, the task of clearing away rubble starts, to allow continuation of Rendering Safe Procedures.

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NOTE: Tritium Bottles were isolated prior to enclosing in PLUG-FILM bags.

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[Redacted]

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NOTE: Inspection revealed heavy case damage, making the removal of the [redacted] support section virtually impossible.

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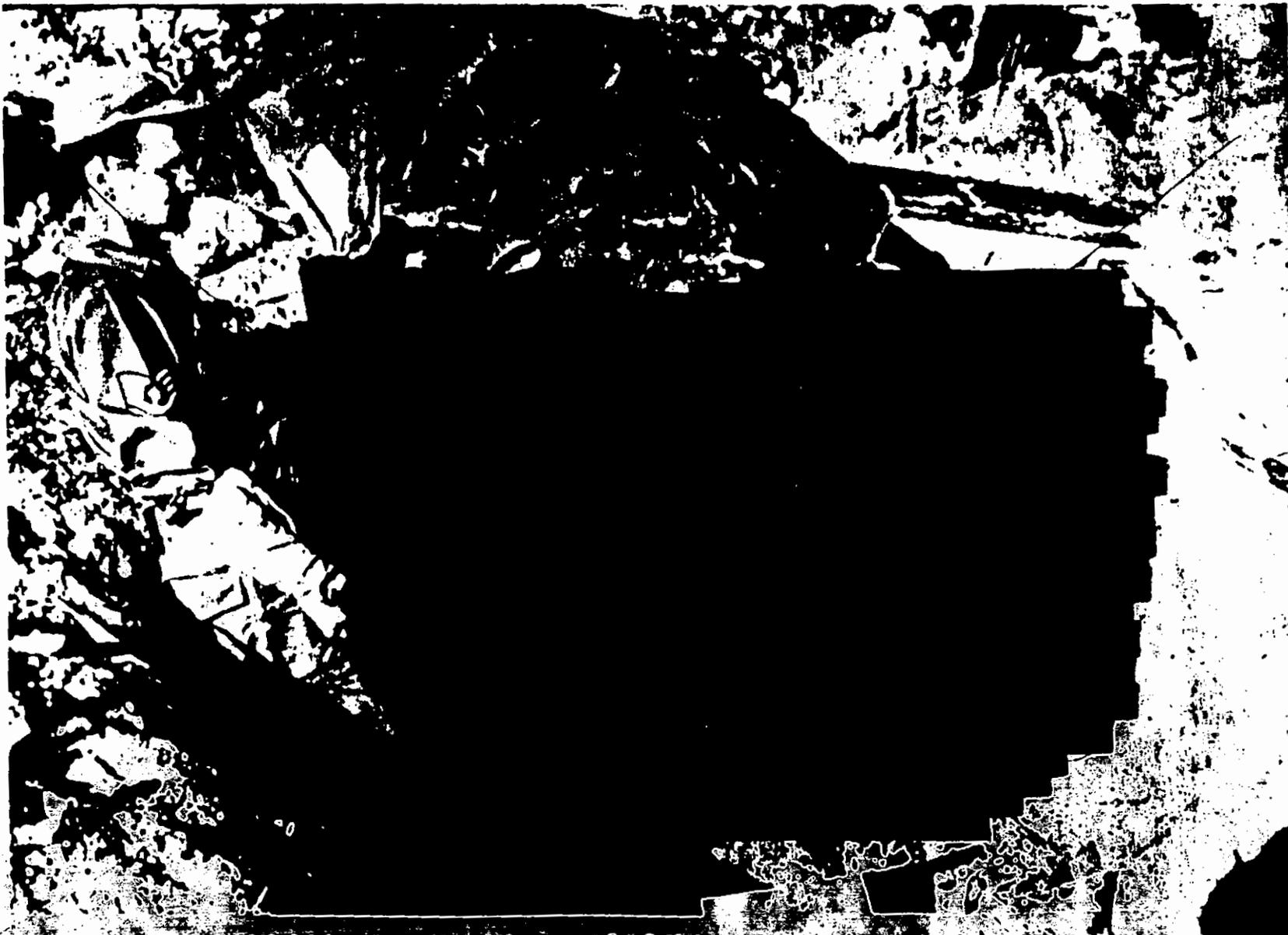
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NOTE: Case was cut with hack-saw to allow the removal of the support section.
Access, for further inspection, was gained to the H.E. sphere as shown here.

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NOTE: Inspection of the H.E. Sphere disclosed major breakup of the explosive. Large chunks were removed as shown.

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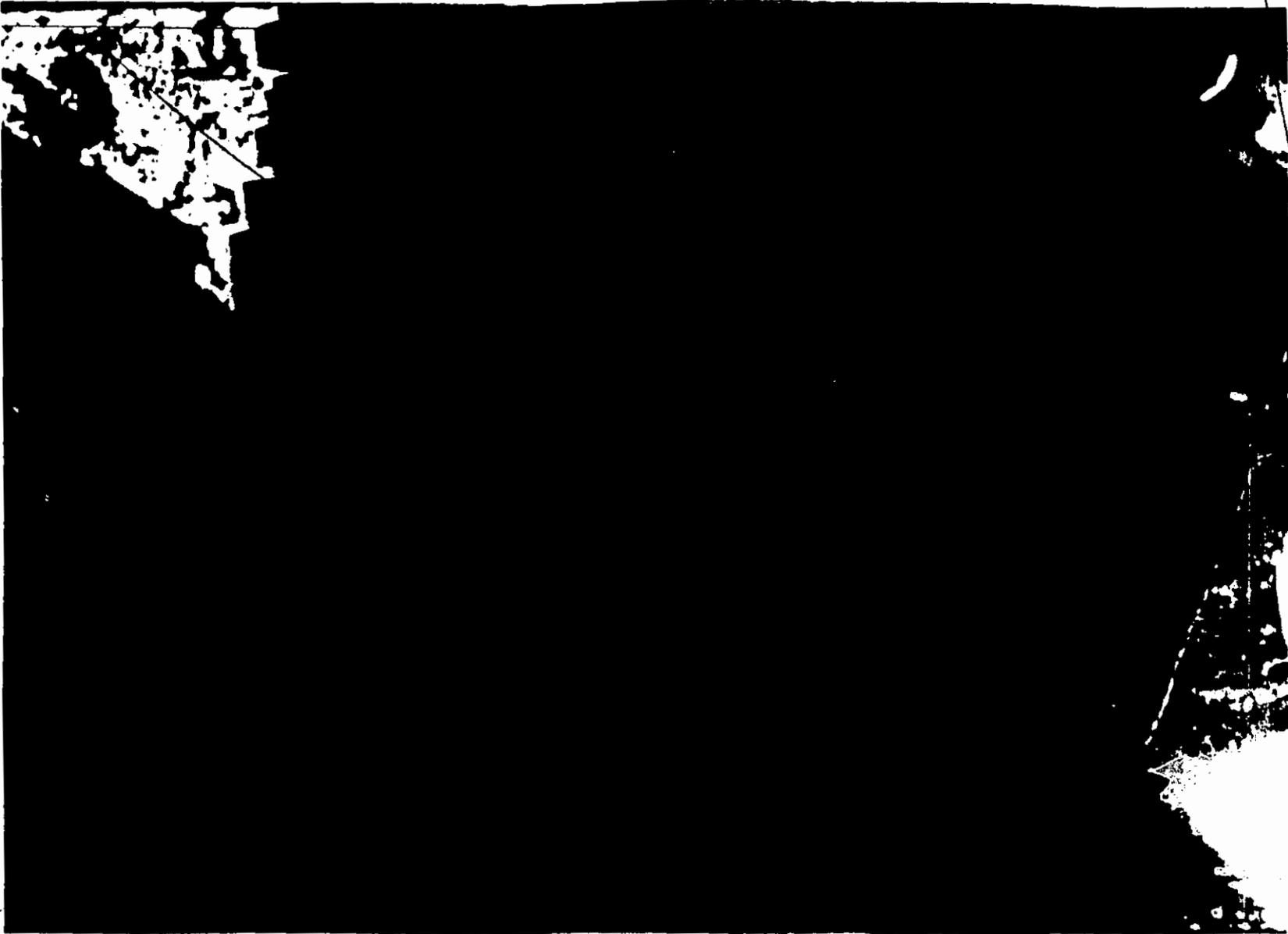
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NOTE: Further removal of explosive near the support section was accomplished with the aid of a paper cup. Explosive was placed in the support section.

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NOTE: After sufficient removal of explosive the support section was removed. The startling realization of what the severe impact accomplished was presented as seen above.

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NOTE: Arrangements were made to remove the pit from the weapon prior to further removal of explosive.

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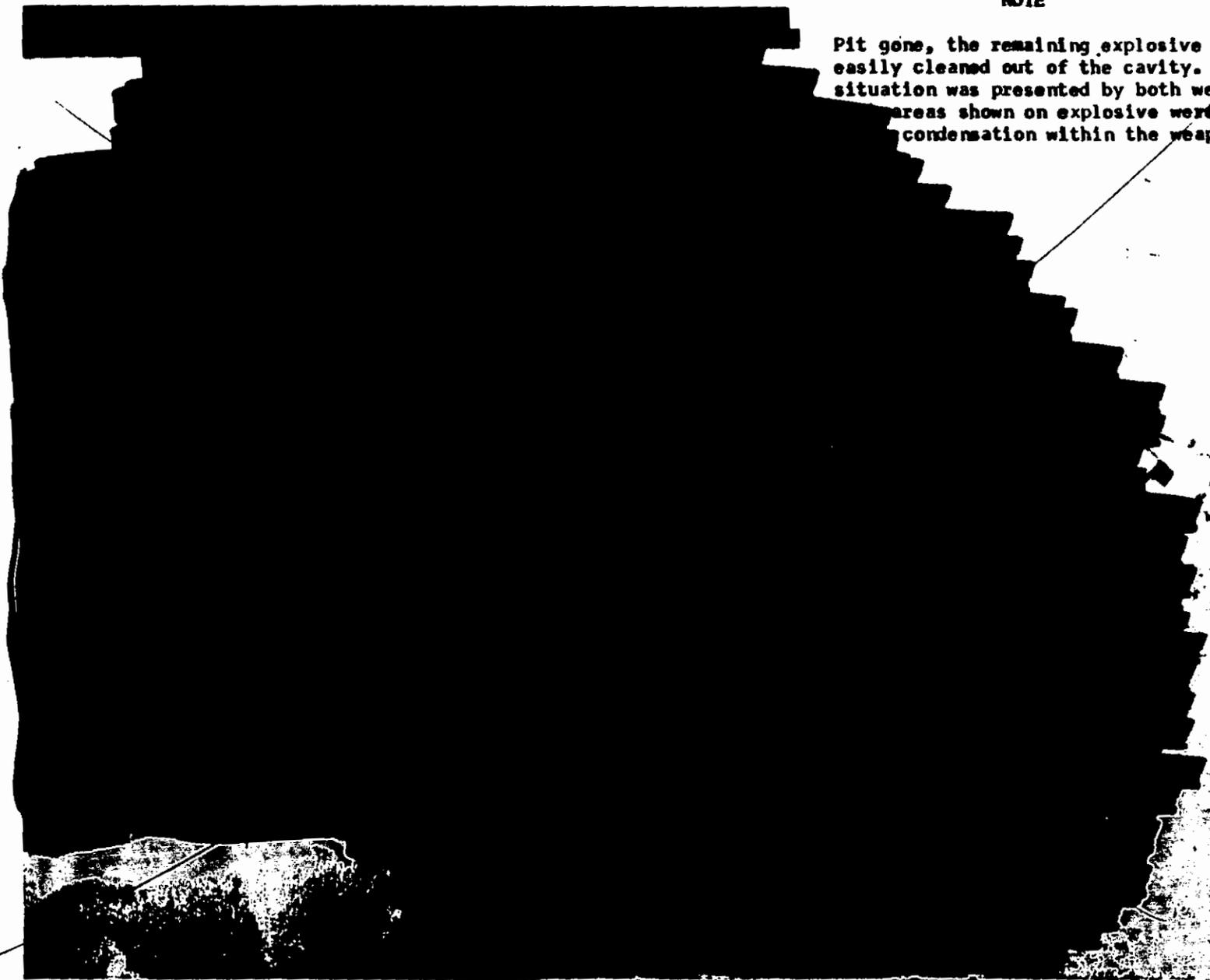
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NOTE

Pit gone, the remaining explosive was easily cleaned out of the cavity. This situation was presented by both weapons. Areas shown on explosive were from condensation within the weapon.



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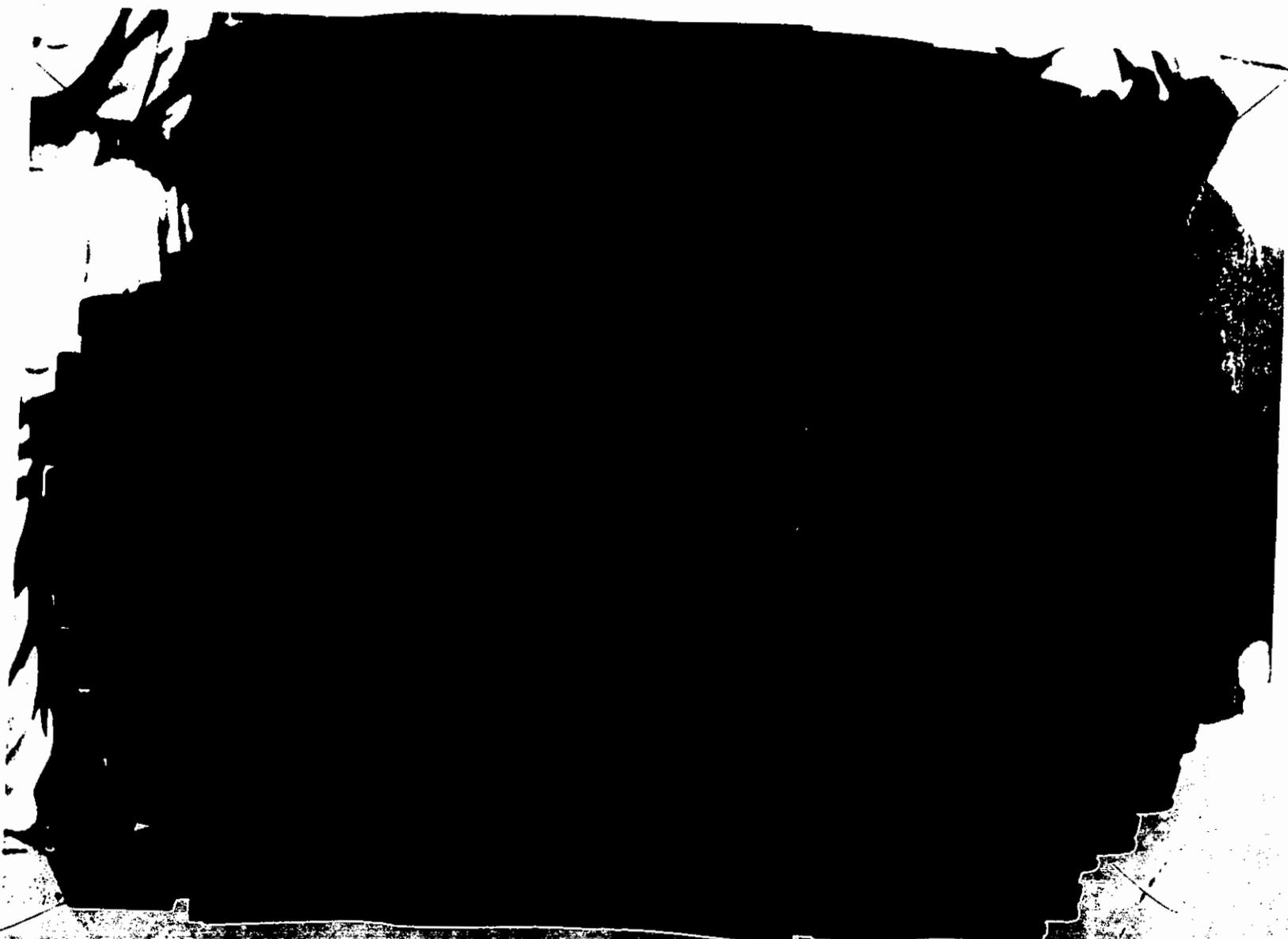
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NOTE: Cavity has been cleaned of hazardous components

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NOTE: This method of handling pit, assured minimum contact with the item and also proved effective for handling such an awkward and heavy item.

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NOTE

Successful accomplishment of this mission can be attributed to the fact that the Explosive Ordnance Disposal personnel called to the scene were well trained, able to apply their training to an actual situation and well disciplined in the requirement for teamwork.

NWI-59-4

1. Location.

Physical location of Higher Classification.

2. Date

September 1959

3. Type Incident.

Nike-Hercules missile damaged while on launch rail, due to high winds.

4. Brief.

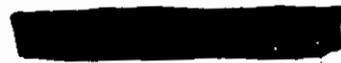
Weapon system became "Car-Hurt" when launching rail broke away from missile during a wind storm. The missile was being elevated for testing when accident occurred. The launch umbilical plug was sheared from weapon and the aft portion of the weapon skin suffered moderate damage. The missile was removed from launch rail, JATO units were removed and the item was placed in the "ready building" for surveillance. Further inspection revealed the female umbilical plug was badly battered with possible electrical shorting in effect. Appropriate weapon system testers were employed and the missile was determined to be "SAFE." At this point the weapon system was released to missile personnel.

5. Unusual Problems.

Pertinent Technical Orders and schematic diagrams for the weapon system were not complete at the missile site. The Missile Battery personnel were not familiar with the entire system, only those specific portions with which an individual worked. Obtaining information from other sources resulted in an unusual delay of seven hours

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before the weapon system could be evaluated for type and extent of damage. (There were no photographs submitted.)

6. Contamination.

None.

FOR THE COMMANDER

for *Manni I Shaveh*
E. W. MILES
Colonel, USAF
Commander
2705th Airmunitions Wing

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