



Expenditure of Depleted Uranium (DU) Rounds at Vieques Inner Training Range, Puerto Rico

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Chronology of Events

- February 19, 1999
 - ◆ 2 USMC Harrier aircraft expend 263 DU rounds on the Vieques Inner Training Range.
- March 5, 1999
 - ◆ Expenditure first discovered during review of ordnance database.
 - ◆ NRC notified by N455.



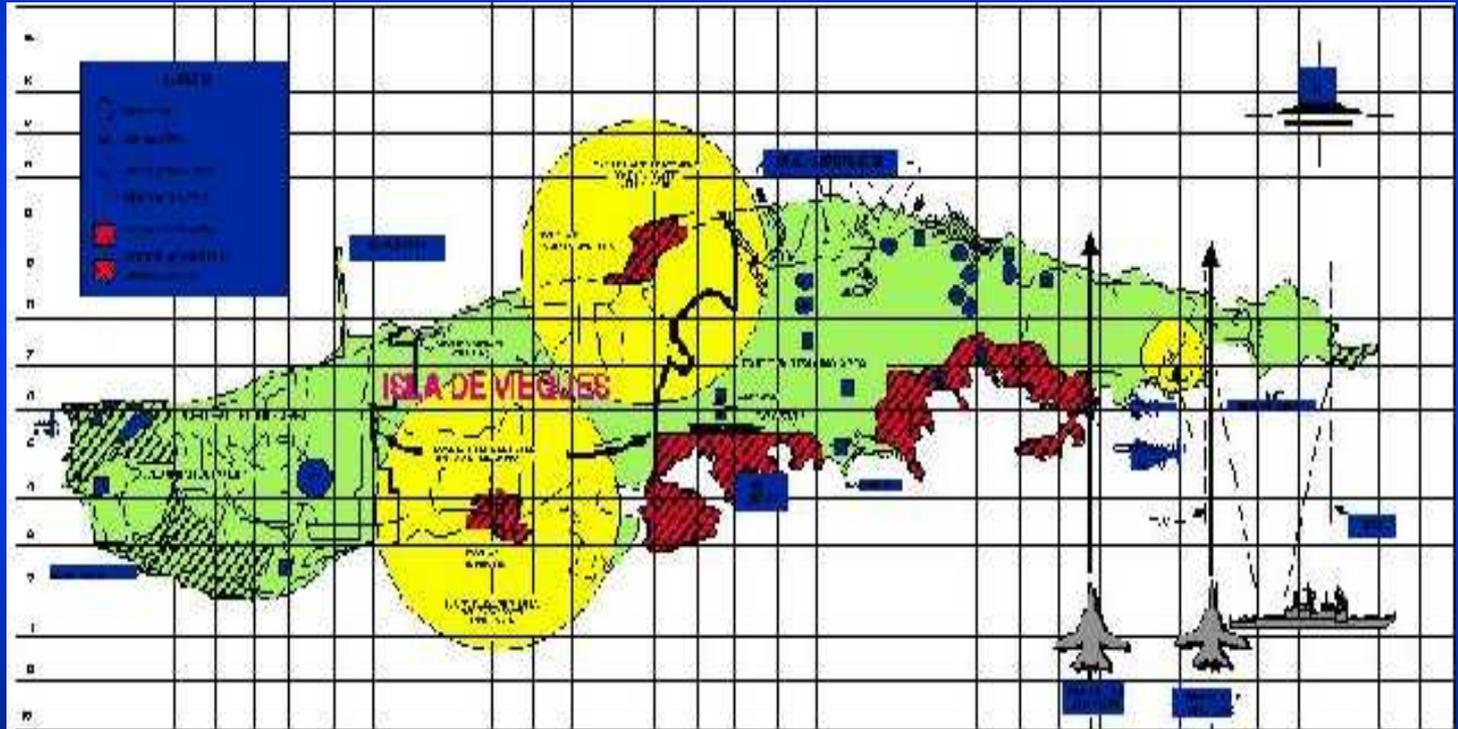
Chronology of Events... *Continued*

- March 10, 1999
 - ◆ Joint investigation initiated.
 - ◆ Recovery of DU munitions commenced.
- April 1, 1999
 - ◆ Formal report forwarded to NRC.
- June 1, 1999
 - ◆ Follow-up report of actions to date to NRC.





Vieques Island, Puerto Rico Inner Training Range



North Convoy Vieques Inner Range





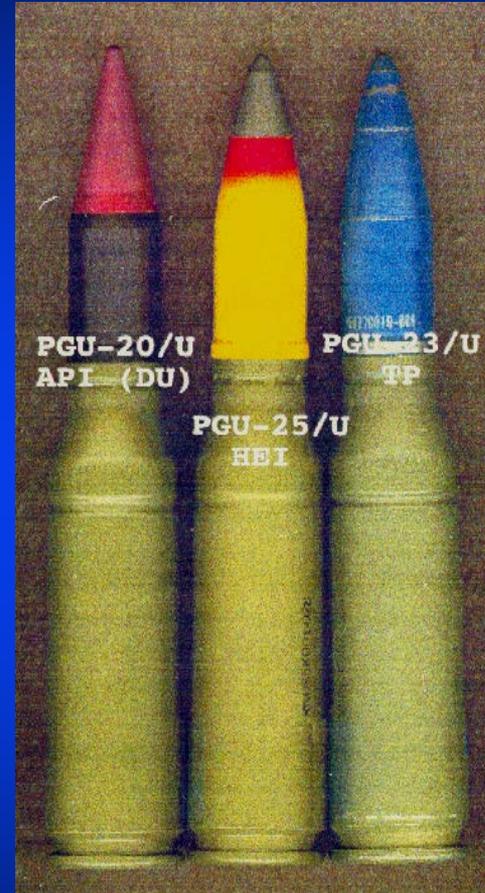
25 mm PGU-20/U

NALC A979

Armor Piercing

Incendiary (API)

148 grams DU



Causes of Incident

- Personnel did not follow standard protocol to check all ammunition use restrictions before its issue and receipt.
- This requirement is specified in:
 - ◆ OP-4 “Ammunition Explosives Afloat”
 - ◆ MARFORLANT Order 4000.10G
 - ◆ SURFLANTINST 4080.1E
 - ◆ Notice of Ammunition Reclassification Manual (NAR)



Corrective Actions

- Marine Corps issued naval message to all ammunition activities emphasizing the conditions of the NRMP. Specifically:
 - ◆ Prohibiting firing the 25mm DU munitions for training, testing, or any other non-combat purpose.
 - ◆ Manufacturing, reworking, demilitarizing DU munitions was not authorized.
 - ◆ Reporting requirements.





Investigation

- Marine Corps and Navy joint investigation:
 - ◆ Interviewed all personnel involved in the issue, receipt, and firing of the DU rounds.
 - ◆ Reviewed shipboard and Navy ammunition supply processes.
 - ◆ Report is going through the chain of command for review.



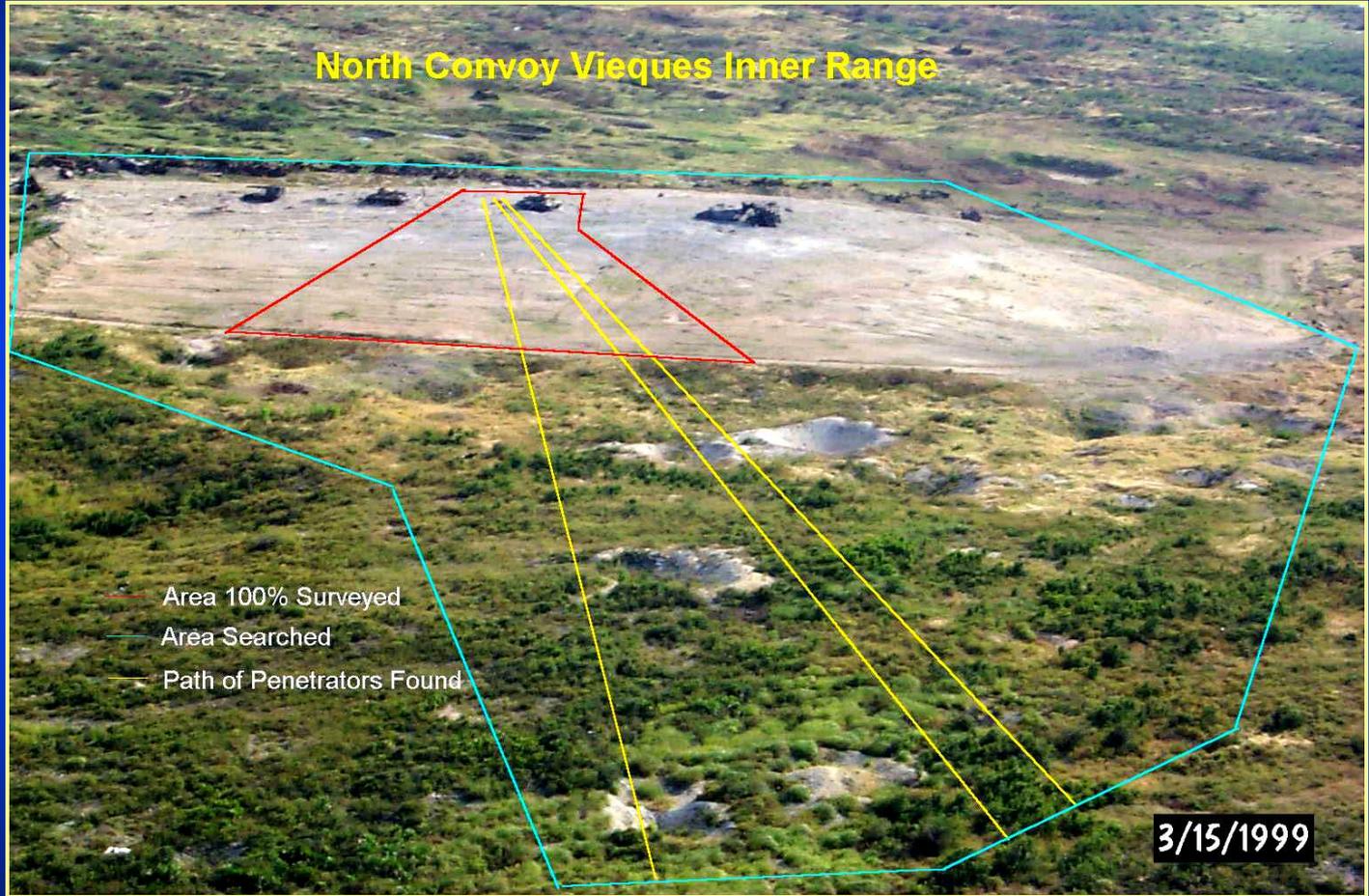


More Corrective Actions

- Navy Instructions and Marine Corps Orders revised to include DU ammunition restrictions.
- Self-Inspection Checklist for DU NRMP compliance forwarded to all storage facilities.
- Marine Corps Ordnance Occupation Courses to include DU training.



Radiation Surveys Conducted





Recovery Operations To Date

- 57 Penetrators recovered.
- Approximately 1 cubic foot soil.
- Pieces of metal.
- Continue recovery operations in August / September 1999 during scheduled range refurbishment.





Questions