



# Virginia Capes (VACAPES) Range Complex

## Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS)

### EFFECTS FROM EXPENDED MATERIALS

#### *Types of Expended Materials Released During VACAPES Range Complex Activities*

In the VACAPES Range Complex EIS/OEIS, the Navy evaluated the potential effects from expended materials, including targets and electronic countermeasures. Electronic countermeasures are disposable devices that are primarily deployed from aircraft to defend against enemy radar, or to jam enemy electronic instrumentation. These are small devices and can include a variety of types of chaff and flares. The materials expended during VACAPES Range Complex activities are not buoyant and will settle on the ocean floor, where they will be covered by sediment or colonized by marine organisms.

Other materials, such as some training targets, are recovered. Due to the large training area, it is unlikely that a marine mammal or sea turtle would come into direct contact with expended material.

The following table provides a summary of the expected annual use of expended materials during VACAPES training activities.

DEVICE	DESCRIPTION	EXPENDED - NO ACTION	EXPENDED - ALT 1 AND ALT 2
Targets	Expendable targets include floating at sea targets and surface balloons (killer tomatoes). Other targets such as BQM-74E aerial drones and some surface towed targets are recovered.	360 targets	397 targets
Chaff	Chaff can be either RR-144 aircraft deployed, or MK-214 or MK-216 ship-deployed.	18,198 chaff canisters	20,372 chaff canisters
Flares	MK-46 MOD1C, MJU-8A/B, MJU-27A/B, MJU-32B, MJU-53B, SM-875/ALE are the types of flares used as infrared countermeasures.	465 flares	825 flares
MK-58 Marine Markers	Marine markers are also called "smoke floats" and are used as targets for bomb training.	300 markers	495 markers

#### *Potential Resources Affected from Expended Materials*

The Navy analyzed the potential effects of expended materials on the physical, biological, and human resources within the VACAPES Study Area. Resources evaluated include:

- Sediment quality (effects from expended material by-products)
- Marine habitat (debris accumulation)
- Water quality (effects from expended material by-products)
- Marine mammals (entanglement, ingestion, and direct strike)
- Sea turtles (entanglement, ingestion, and direct strike)
- Seabirds (entanglement)
- Cultural resources (direct strike)

#### *The Navy is Committed to Minimizing Potential Non-Acoustic Effects on the Marine Environment*

*The U.S. Navy takes its commitment to environmental stewardship seriously as it trains our nation's sailors to defend the United States and Allied Forces. The U.S. Navy has prepared the VACAPES Range Complex EIS/OEIS to assess Fleet training activities in the VACAPES Range Complex. This process gives the Navy an opportunity to review and assess its activities, ensuring that the benefits of recent scientific and technological advances are applied toward minimizing environmental effects.*

### RESULTS OF ANALYSIS

There will be no significant impact to physical, biological, or human resources from expended materials associated with VACAPES Range Complex training activities.

## EFFECTS FROM VESSEL INTERACTIONS

### *Ship Transit and Training Activities*

The Navy evaluated the potential effects from interactions between vessels and commercial, recreational, industrial, and other military activities, particularly related to potential ocean access restrictions or closures.

### *Potential Resources Affected by Ocean Access Restrictions or Closures*

The Navy analyzed the potential effects of ship transit and training activities on human resources occurring within the VACAPES Range Complex Study Area. Resources evaluated include:

- Fishing
- Boating
- Shipping
- Scuba diving
- Marine mammal watching
- Energy production (water, wind, oil, and gas)

## RESULTS OF ANALYSIS

The Navy does not routinely close ocean areas for training activities and proactively notifies ocean users of temporary access restrictions. Additionally, many Navy training activities occur in deep water, beyond the coastal areas where the majority of ocean activities occur. Therefore, there will be no significant impact to human resources from ship transits and VACAPES Range Complex training activities.



### *Vessel Strikes*

During Atlantic Fleet training activities, the potential exists for interactions to occur between vessels and marine life. The most vulnerable animals are slow-moving mammals or those species that spend extended periods of time at the surface. The Navy has evaluated the potential for effects from interactions between vessels and marine life as a part of the environmental analysis.

### *Potential Resources Affected from Vessel Strikes*

The Navy analyzed the potential effects of vessel strikes to biological resources occurring within the VACAPES Range Complex Study Area. Resources evaluated include:

- Marine mammals
- Sea turtles
- Seabirds

## RESULTS OF ANALYSIS

The Navy implements protective measures to avoid interactions between vessels and marine mammals and sea turtles. For example, highly-trained lookouts are posted on each surface ship during VACAPES Range Complex training activities. Additionally, vessels maneuver to avoid sea turtles and to maintain a distance of at least 500 yards from marine mammals. The Navy reduces the speed of their vessels in certain areas based on the critically endangered North Atlantic right whale seasonal migration patterns from feeding to calving grounds. Based on the analysis and the implementation of protective measures, there will be no significant impact to marine mammals and sea turtles from vessel interactions during VACAPES Range Complex activities.

Public involvement is a fundamental part of the VACAPES Range Complex EIS/OEIS development and the Navy wants and appreciates your comments. The Navy has established several venues and informational resource areas for the public to learn more and provide input.

Comments on the Draft VACAPES Range Complex EIS/OEIS will be accepted via mail, fax, or the project Web site. All comments should be submitted no later than August 11, 2008 for consideration in the Final VACAPES Range Complex EIS/OEIS.

**THE NAVY  
WANTS  
YOUR  
INPUT!**

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