

APPENDIX K ACTIVITY IMPACT DETERMINATIONS

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Draft
**Supplemental Environmental Impact Statement/
Overseas Environmental Impact Statement**
Atlantic Fleet Training and Testing
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K ACTIVITY-LEVEL SIGNIFICANCE DETERMINATIONS

K.1 INTRODUCTION

The purpose of this appendix is to document impact significance determinations made under the National Environmental Policy Act (i.e., whether potential impacts are significant or not), for each military readiness activity in the Proposed Action. Conclusions under other applicable regulations, such as effects determinations under the Endangered Species Act, are separate and determined through their respective consultation processes.

K.2 METHODOLOGY

This section discusses the methodology used to make the significance determinations for each military readiness activity. Activity-level impact significance determinations in the public release Draft Atlantic Fleet Training and Testing (AFTT) Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) are limited to only non-modeled activities (i.e., activities that do not have acoustics or explosive stressors). Modeled activities are undergoing consultations with the National Marine Fisheries Service that could influence the resulting impacts to applicable resources (e.g., additional mitigation measures may apply). Consultation on modeled activities will be completed before the Final AFTT Supplemental EIS/OEIS so that a complete list of activity-level impact significance determinations can be included.

K.2.1 CONVERSION OF IMPACT DESCRIPTOR TO SIGNIFICANCE DETERMINATION

The stressor-based impact assessment included in [Chapter 3](#) (Affected Environment and Environmental Consequences) for each resource area considered the context and intensity of stressor impacts in line with guidance from Council on Environmental Quality (CEQ) NEPA-implementing regulations. Four impact descriptors were used to categorize impacts: Negligible, Minor, Moderate, and Major. An impact descriptor was assigned to training and testing activities under Alternative 1 and Alternative 2, assuming implementation of mitigation measures described in [Chapter 5](#) (Mitigation) when making the assignment. The impact descriptors were then converted to a corresponding impact significance determination of “less than significant” or “significant” for all stressors to each resource area. This conversion is shown below for each resource in Table K-1 through Table K-12.

Three resource areas were not analyzed in detail in the Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS), including Cultural Resources, Socioeconomics, and Public Health and Safety. The impact descriptors assigned to these three resource areas were based on the detailed analysis included in the 2018 (AFTT) Final EIS/OEIS.

Table K-1: Air Quality Impact Descriptor Conversion

Stressors		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Air Quality Stressors	Criteria Pollutants	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Hazardous Pollutants	Minor	Minor	Minor	Minor	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Minor	Minor	Minor	Minor	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant
Secondary stressors not applicable to this resource area.

Table K-2: Sediments and Water Quality Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
<i>Stressors</i>		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Sediment and Water Quality Stressors	Explosives and Explosives Byproducts	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Metals	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Chemicals Other than Explosives	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Other Materials	Minor	Minor	Minor	Minor	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Minor	Minor	Minor	Minor	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant

Table K-3: Habitats Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
<i>Stressors</i>		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Explosive Stressor	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Military Expended Materials	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Seafloor Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Pile Driving	Minor	N/A	Minor	N/A	NS	N/A	NS	N/A
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable.

Table K-4: Vegetation Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
<i>Stressors</i>		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Explosive Stressor	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Military Expended Materials	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Seafloor Devices	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Pile Driving	Moderate	N/A	Moderate	N/A	NS	N/A	NS	N/A
	Secondary Stressors	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-5: Invertebrates Impact Descriptor Conversion

		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
Stressors		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Acoustic Stressors	Sonar & Other Transducers	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Air Guns	N/A	Negligible	N/A	Negligible	N/A	NS	N/A	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Weapons Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Explosive Stressor	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
Energy Stressors	In-Water Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Military Expended Materials	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Seafloor Devices	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Pile Driving	Moderate	N/A	Moderate	N/A	NS	N/A	NS	N/A
Entanglement Stressors	Wires & Cables	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Decelerators/Parachutes	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Biodegradable Polymers	N/A	Minor	N/A	Minor	N/A	NS	N/A	NS
Ingestion Stressors	Military Expended Materials – Munitions	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Military Expended Materials – Other than Munitions	Minor	Minor	Minor	Minor	NS	NS	NS	NS
Secondary Stressors	Secondary Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-6: Fishes Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
Stressors		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Acoustic Stressors	Sonar & Other Transducers	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Air Guns	N/A	Minor	N/A	Minor	N/A	NS	N/A	NS
	Pile Driving	Minor	N/A	Negligible	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Weapons Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Explosive Stressor	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
Energy Stressors	In-Water Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Military Expended Materials	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Seafloor Devices	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
Entanglement Stressors	Wires & Cables	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Decelerators/ Parachutes	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Biodegradable Polymers	N/A	Negligible	N/A	Negligible	N/A	NS	N/A	NS
Ingestion Stressors	Military Expended Materials – Munitions	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Military Expended Materials – Other than Munitions	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
Secondary Stressors	Secondary Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-7: Marine Mammals Impact Descriptor Conversion

Stressors		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Acoustic Stressors	Sonar & Other Transducers	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Air Guns	N/A	Negligible to Moderate	N/A	Negligible to Moderate	N/A	NS	N/A	NS
	Pile Driving	Negligible to Minor	N/A	Negligible to Minor	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Weapons Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Explosive Stressors	Explosions in Water	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
Energy Stressors	In-Water Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	High-Energy Lasers	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Military Expended Materials	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Seafloor Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Entanglement Stressors	Wires & Cables	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Decelerators/ Parachutes	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Biodegradable Polymers	N/A	Negligible	N/A	Negligible	N/A	NS	N/A	NS
Ingestion Stressors	Military Expended Materials – Munitions	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Military Expended Materials – Other than Munitions	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Secondary Stressors	Secondary Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-8: Reptiles Impact Descriptor Conversion

		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
Stressors		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Acoustic Stressors	Sonar & Other Transducers	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Air Guns	N/A	Minor	N/A	Minor	N/A	NS	N/A	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Weapons Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Explosive Stressor	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	High-Energy Lasers	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Energy Stressors	In-Water Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Military Expended Materials	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Seafloor Devices	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor	NS	NS	NS	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
Entanglement Stressors	Wires & Cables	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Decelerators/ Parachutes	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Biodegradable Polymers	N/A	Negligible	N/A	Negligible	N/A	NS	N/A	NS
Ingestion Stressors	Military Expended Materials – Munitions	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
	Military Expended Materials – Other than Munitions	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate	NS	NS	NS	NS
Secondary Stressors	Secondary Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-9: Birds and Bats Impact Descriptor Conversion

		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
Stressors		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Acoustic Stressors	Sonar & Other Transducers	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Air Guns	N/A	Negligible	N/A	Negligible	N/A	NS	N/A	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft Noise	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	Weapons Noise	Minor	Minor	Minor	Minor	NS	NS	NS	NS
Explosive Stressor	Explosions in Air	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Explosions in Water	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
Energy Stressors	In-Water Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	In-Air Electromagnetic Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	High-Energy Lasers	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft and Aerial Targets	Moderate	Moderate	Moderate	Moderate	NS	NS	NS	NS
	Military Expended Materials	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Entanglement Stressors	Wires & Cables	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Decelerators/ Parachutes	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Ingestion Stressors	Military Expended Materials – Other than Munitions	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Secondary Stressors	Secondary Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	Negligible to Moderate	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable

Table K-10: Cultural Resources Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
<i>Stressors</i>		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Explosive Stressor	Explosions in Water	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Supersonic Overflights (causing sonic booms)	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Vessel & In-Water Device Strike	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Military Expended Materials	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Seafloor Devices	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable
Secondary stressors not applicable to this resource area.

Table K-11: Socioeconomics Impact Descriptor Conversion

		<i>Impact Descriptor</i>				<i>Significance Determination</i>			
		<i>Alternative 1</i>		<i>Alternative 2</i>		<i>Alternative 1</i>		<i>Alternative 2</i>	
<i>Stressors</i>		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Accessibility Stressors	Access on the Ocean	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Access in the Air	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Airborne Acoustics Stressors	Weapons Firing	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Aircraft	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Pile Driving	Negligible	N/A	Negligible	N/A	NS	N/A	NS	N/A
	Vessel Noise	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Physical Disturbance & Strike Stressors	Aircraft Strike	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Vessel & In-Water Device Strike	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
	Military Expended Materials	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Negligible	Negligible	Negligible	Negligible	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant; N/A = Not Applicable
Secondary stressors not applicable to this resource area.

Table K-12: Public Health and Safety Impact Descriptor Conversion

		Impact Descriptor				Significance Determination			
		Alternative 1		Alternative 2		Alternative 1		Alternative 2	
Stressors		Training	Testing	Training	Testing	Training	Testing	Training	Testing
Energy Stressors	In-Water Energy	Minor	Minor	Minor	Minor	NS	NS	NS	NS
	In-Air Energy	Minor	Negligible	Minor	Negligible	NS	NS	NS	NS
Physical Interaction Stressors	Physical Interactions	Minor	Minor	Minor	Minor	NS	NS	NS	NS
Combined Impacts of all Stressors	Combined Impacts of all Stressors	Minor	Minor	Minor	Minor	NS	NS	NS	NS

Notes: S = Significant; NS = Less than Significant

Secondary stressors not applicable to this resource area.

K.3 ACTIVITY-LEVEL SIGNIFICANCE DETERMINATION

The significance determinations for stressors and their resource-specific impacts made in Section K.2.1 were then mapped to each military readiness activity to make activity-level significance determinations using the [Appendix B](#) (Activity Stressor Matrices) stressor tables that identify the stressors and the resources potentially impacted for each of the 158 military readiness activities.

Section K.3.1 (Training Activity Significance Determinations) and Section K.3.2 (Testing Activity Significance Determinations) below combine these two data elements into a significance determination summary table for each military readiness activity. Each table indicates (1) which stressors are associated with the activity, and (2) whether the stressor has a significant impact on each applicable resource.

The significance conclusions from [Chapter 3](#) (Affected Environment and Environmental Consequences) represent the combined impacts to a resource from all the military readiness activities. If a significance conclusion is found to be less than significant for a resource from all military readiness activities analyzed collectively, then each individual activity associated with that stressor also has less than significant impacts to that resource. By mapping the stressors and their resource-specific significance conclusions back to each activity separately, an overall impact significance determination can be made for each military readiness activity.

A finding of no significant impact under the National Environmental Policy Act is applicable to any military readiness activity within 12 nautical miles of the coast of the United States with stressors that each have less than significant impacts to all applicable resource areas. When activities occur beyond 12 nautical miles, the “less than significant” impact determination is assumed to be more stringent than the threshold for a Finding of No Significant Harm under Executive Order 12114: Environmental Effects Abroad of Major Federal Actions. Therefore, all activities with a less than significant impact determination will also have no significant harm to the global commons within the Study Area under Executive Order 12114.

K.3.1 TRAINING ACTIVITY SIGNIFICANCE DETERMINATIONS

K.3.1.1 Air Warfare

Table K-13: Air Combat Maneuvers – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-14: Air Defense Exercise – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-15: Gunnery Exercise Air-to-Air Medium-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-16: Gunnery Exercise Air-to-Air Small-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-17: Gunnery Exercise Surface-to-Air Large-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-18: Gunnery Exercise Surface-to-Air Medium-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

**Table K-19: Missile Exercise – Man-Portable Air Defense System – Significance
Determination Summary**

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Explosive Stressors												
Explosions in Air									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products		NS										
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-20: Missile Exercise Air-to-Air – Significance Determination Summary

Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors						NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Entanglement Stressors												
Decelerators/Parachutes					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products		NS										
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-21: Missile Exercise Surface-to-Air – Significance Determination Summary

Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Explosive Stressors												
Explosions in Air									NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Entanglement Stressors												
Decelerators/Parachutes					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			

**Table K-21: Missile Exercise Surface-to-Air – Significance Determination Summary
(continued)**

Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products		NS										
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.2 Amphibious Warfare

Table K-22: Amphibious Assault – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-23: Amphibious Raid – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-24: Amphibious Squadron Marine Expeditionary Unit Integration Training – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-25: Amphibious Vehicle Maneuvers – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors					NS	NS	NS	NS	NS			
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-26: Naval Surface Fire Support Exercise – At Sea – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors					NS	NS	NS	NS	NS			
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-27: Non-Combat Evacuation Operation – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.3 Electronic Warfare

Table K-28: Counter Targeting Chaff Exercise – Aircraft – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-29: Counter Targeting Chaff Exercise – Ship – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-30: Counter Targeting Flare Exercise – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-31: Electronic Warfare Operations – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.4 Expeditionary Warfare

Table K-32: Dive and Salvage Operations – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-33: Personnel Insertion/Extraction – Air – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-34: Personnel Insertion/Extraction – Surface and Subsurface – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-35: Port Damage Repair – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-36: Underwater Construction Team Training – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.5 Mine Warfare

Table K-37: Airborne Mine Countermeasures – Towed Mine Neutralization – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Water Electromagnetic Devices					NS	NS	NS	NS	NS			
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		

Table K-37: Airborne Mine Countermeasures – Towed Mine Neutralization – Significance Determination Summary (continued)

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-38: Airborne Mine Laying – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	

Table K-38: Airborne Mine Laying – Significance Determination Summary (continued)

Stressor	Resource Areas										
	Physical		Biological							Human	
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Public Health & Safety
Public Health & Safety Stressors											
In-Water Energy											NS
Physical Interactions											NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-39: Coordinated Unit Level Helicopter Airborne Mine Countermeasures Exercise – Significance Determination Summary

Stressor	Resource Areas										
	Physical		Biological							Human	
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Public Health & Safety
Acoustic Stressors											
Aircraft Noise						NS	NS	NS	NS		
Energy Stressors											
In-Air Electromagnetic Devices									NS		
Physical Disturbance & Strike Stressors											
Aircraft & Aerial Target Strike									NS		
Air Quality Stressors											
Criteria Air Pollutants	NS										
Cultural Resource Stressors											
Physical Disturbance & Strike										NS	
Socioeconomic Resource Stressors											
Accessibility											NS
Airborne Acoustics											NS
Physical Disturbance & Strike											NS
Public Health & Safety Stressors											
In-Air Energy											NS
Physical Interactions											NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-40: Installation and Maintenance of Mine Training Areas – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike												
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Entanglement Stressors												
Wires & Cables					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-41: Underwater Mine Countermeasure Raise, Tow, Beach and Exploitation Operations – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Entanglement Stressors												
Wires & Cables					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.6 Surface Warfare

Table K-42: Gunnery Exercise Air-to-Surface Small-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-43: Gunnery Exercise Surface-to-Surface Boat Small-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Table K-43: Gunnery Exercise Surface-to-Surface Boat Small-Caliber – Significance Determination Summary (continued)

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-44: Gunnery Exercise Surface-to-Surface Ship Small-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-45: Laser Targeting – Aircraft – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-46: Laser Targeting – Ship – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
High-Energy Lasers					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-47: Maritime Security Operations – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-48: Small Boat Attack – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.7 Integrated/Coordinated Training

Table K-49: Amphibious Ready Group Marine Expeditionary Unit Exercise – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.1.8 Other Training

Table K-50: Precision Anchoring – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-51: Search and Rescue – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-52: Unmanned Aerial System Training and Certification – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-53: Waterborne Training – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	

Table K-53: Waterborne Training – Significance Determination Summary (continued)

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2 TESTING ACTIVITY SIGNIFICANCE DETERMINATIONS

K.3.2.1 Acoustic and Oceanographic Science and Technology

Table K-54: Large Displacement Unmanned Undersea Vehicle Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.2 Air Warfare

Table K-55: Air Combat Maneuvers Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-56: Air Platform Vehicle Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-57: Air Platform Weapons Integration Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Entanglement Stressors												
Decelerators/Parachutes					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-58: Air-to-Air Gunnery Test – Medium-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-59: Air-to-Air Weapons System Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

**Table K-59: Air-to-Air Weapons System Test – Significance Determination Summary
(continued)**

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-60: Intelligence, Surveillance, and Reconnaissance Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.3 Amphibious Warfare

Table K-61: Amphibious Vessel Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.4 Electronic Warfare

Table K-62: Chaff Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Table K-62: Chaff Test – Significance Determination Summary (continued)

	Resource Areas											
Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-63: Electronic Systems Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Entanglement Stressors												
Decelerators/Parachutes					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	

Table K-63: Electronic Systems Test – Significance Determination Summary (continued)

	Resource Areas											
Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-64: Flare Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-65: Radar and Other Systems Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Explosive Stressors												
Explosions in Air									NS			
Energy Stressors												
In-Water Electromagnetic Devices					NS	NS	NS	NS	NS			
In-Air Electromagnetic Devices									NS			
High-Energy Lasers					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Entanglement Stressors												
Wires & Cables					NS	NS	NS	NS	NS			
Decelerators/Parachutes					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products		NS										
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.5 Mine Warfare

Table K-66: Airborne Laser Mine Detection System Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-67: Mine Laying Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										

Table K-67: Mine Laying Test – Significance Determination Summary (continued)

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Sediment and Water Quality Stressors												
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.6 Surface Warfare

Table K-68: Gun Testing – Small-Caliber – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Table K-68: Gun Testing – Small-Caliber – Significance Determination Summary (continued)

	Resource Areas											
Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-69: Air-to-Surface High-Energy Laser Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
High-Energy Lasers					NS	NS	NS	NS	NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-70: Laser Targeting Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Military Expended Materials – Other					NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Explosives & Explosive By-Products												
Chemicals Other than Explosives		NS										
Metals		NS										
Other Materials		NS										
Cultural Resource Stressors												
Explosives										NS		

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-71: Maritime Security Operations – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.7 Unmanned Systems

Table K-72: Underwater Search, Deploy, and Recovery – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Water Electromagnetic Devices					NS	NS	NS	NS	NS			
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Entanglement Stressors												
Wires & Cables					NS	NS	NS	NS	NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-73: Unmanned Aerial System Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.8 Vessel Evaluation

Table K-74: Propulsion Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Weapons Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		

Table K-74: Propulsion Testing – Significance Determination Summary (continued)

<i>Stressor</i>	<i>Resource Areas</i>											
	<i>Physical</i>		<i>Biological</i>							<i>Human</i>		
	<i>Air Quality</i>	<i>Sediment & Water Quality</i>	<i>Habitats</i>	<i>Vegetation</i>	<i>Invertebrates</i>	<i>Fishes</i>	<i>Marine Mammals</i>	<i>Reptiles</i>	<i>Birds & Bats</i>	<i>Cultural Resources</i>	<i>Socioeconomics</i>	<i>Public Health & Safety</i>
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-75: Submarine Sea Trials – Propulsion Testing – Significance Determination Summary

<i>Stressor</i>	<i>Resource Areas</i>											
	<i>Physical</i>		<i>Biological</i>							<i>Human</i>		
	<i>Air Quality</i>	<i>Sediment & Water Quality</i>	<i>Habitats</i>	<i>Vegetation</i>	<i>Invertebrates</i>	<i>Fishes</i>	<i>Marine Mammals</i>	<i>Reptiles</i>	<i>Birds & Bats</i>	<i>Cultural Resources</i>	<i>Socioeconomics</i>	<i>Public Health & Safety</i>
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.3.2.9 Other Testing Activities

Table K-76: Air Platform Shipboard Integration Test – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-77: Chemical and Biological Simulant Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Air Quality Stressors												
Criteria Air Pollutants	NS											

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-78: Non-Acoustic Component Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Aircraft Noise						NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
High-Energy Lasers												
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Aircraft & Aerial Target Strike									NS			
Seafloor Devices			NS	NS	NS	NS	NS					
Air Quality Stressors												
Criteria Air Pollutants	NS											
Cultural Resource Stressors												
Physical Disturbance & Strike										NS		
Socioeconomic Resource Stressors												
Accessibility											NS	
Airborne Acoustics											NS	
Physical Disturbance & Strike											NS	
Public Health & Safety Stressors												
In-Water Energy												NS
In-Air Energy												NS
Physical Interactions												NS

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

Table K-79: Payload Deployer Testing – Significance Determination Summary

Stressor	Resource Areas											
	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Acoustic Stressors												
Vessel Noise					NS	NS	NS	NS	NS			
Energy Stressors												
In-Air Electromagnetic Devices									NS			
Physical Disturbance & Strike Stressors												
Vessel & In-Water Device Strike			NS	NS	NS	NS	NS	NS	NS			
Military Expended Material			NS	NS	NS	NS	NS		NS			
Ingestion Stressors												
Military Expended Materials – Munitions					NS	NS	NS	NS				

Table K-79: Payload Deployer Testing – Significance Determination Summary (continued)

	Resource Areas											
Stressor	Physical		Biological							Human		
	Air Quality	Sediment & Water Quality	Habitats	Vegetation	Invertebrates	Fishes	Marine Mammals	Reptiles	Birds & Bats	Cultural Resources	Socioeconomics	Public Health & Safety
Air Quality Stressors												
Criteria Air Pollutants	NS											
Sediment & Water Quality Stressors												
Chemicals Other than Explosives		NS										
Other Materials		NS										

Notes: S = Significant; NS = Less than Significant; Blank = Not Applicable

K.4 ACTIVITY-LEVEL SIGNIFICANCE DETERMINATIONS

Based on methodology described in Section K.2 (Methodology) and using the summary tables in Section K.3.1 (Training Activity Significance Determinations) and Section K.3.2 (Testing Activity Significance Determinations), the military readiness activities with less than significant impacts to the quality of the human environment under the National Environmental Policy Act are listed in Table K-80 and Table K-81.¹ Activity-level significance determinations assume implementation of mitigation measures described in [Chapter 5](#) (Mitigation). Mitigation was developed in coordination with regulators and cooperating agencies, and was designed to be implemented under every action alternative carried forward.

Activity-level impact significance determinations in the public release Draft AFTT Supplemental EIS/OEIS are limited to only non-modeled activities (i.e., activities that do not have acoustics or explosive stressors). Modeled activities are undergoing consultations with the National Marine Fisheries Service that could influence the resulting impacts to applicable resources (e.g., additional mitigation measures may apply). Consultation on modeled activities will be completed before the Final AFTT Supplemental EIS/OEIS so that a complete list of activity-level impact significance determinations can be included.

¹ The National Environmental Policy Act threshold for a Finding of No Significant Impact determination is assumed to be more stringent than the threshold for a Finding of No Significant Harm under Executive Order 12114 (*Environmental Effects Abroad of Major Federal Actions*). Therefore, all activities with a less than significant impact to the human environment under the National Environmental Policy Act will also have no significant harm to the global commons within the Study Area under Executive Order 12114.

Table K-80: Training Activities with Less than Significant Impacts

Warfare Area	Training Activity
Small Coordinated Anti-Submarine Warfare Training	<ul style="list-style-type: none"> Amphibious Ready Group Marine Expeditionary Unit Exercise
Air Warfare	<ul style="list-style-type: none"> Air Combat Maneuvers Air Defense Exercise Gunnery Exercise Air-to-Air Medium-Caliber Gunnery Exercise Air-to-Air Small-Caliber Gunnery Exercise Surface-to-Air Large-Caliber Gunnery Exercise Surface-to-Air Medium-Caliber Missile Exercise – Man-Portable Air Defense System Missile Exercise Air-to-Air Missile Exercise Surface-to-Air
Amphibious Warfare	<ul style="list-style-type: none"> Amphibious Assault Amphibious Raid Amphibious Squadron Marine Expeditionary Unit Integration Training Amphibious Vehicle Maneuvers Naval Surface Fire Support Exercise – At Sea Non-combat Evacuation Operation
Electronic Warfare	<ul style="list-style-type: none"> Counter Targeting Chaff Exercise – Aircraft Counter Targeting Chaff Exercise – Ship Counter Targeting Flare Exercise Electronic Warfare Operations
Expeditionary Warfare	<ul style="list-style-type: none"> Dive and Salvage Operations Personnel Insertion/Extraction – Air Personnel Insertion/Extraction – Surface and Subsurface Port Damage Repair Underwater Construction Team Training
Mine Warfare	<ul style="list-style-type: none"> Airborne Mine Countermeasures – Towed Mine Neutralization Airborne Mine Laying Coordinated Unit Level Helicopter Airborne Mine Installation and Maintenance of Mine Training Areas Underwater Mine Countermeasure Raise, Tow, Beach and Exploitation Operations
Surface Warfare	<ul style="list-style-type: none"> Gunnery Exercise Air-to-Surface Small-Caliber Gunnery Exercise Surface-to-Surface Boat Small-Caliber Gunnery Exercise Surface-to-Surface Ship Small-Caliber Integrated Live Fire Exercise Laser Targeting – Aircraft Laser Targeting – Ship Maritime Security Operations Small Boat Attack
Other Training Activities	<ul style="list-style-type: none"> Precision Anchoring Search and Rescue Unmanned Aerial System Training and Certification Waterborne Training

Table K-81: Testing Activities with Less than Significant Impacts

Warfare Area	Testing Activity
Acoustic and Oceanographic Science and Technology	<ul style="list-style-type: none"> • Large Displacement Unmanned Undersea Vehicle Testing
Air Warfare	<ul style="list-style-type: none"> • Air Combat Maneuvers Test • Air Platform Vehicle Test • Air Platform Weapons Integration Test • Air-to-Air Gunnery Test – Medium-Caliber • Air-to-Air Weapons System Test • Intelligence, Surveillance, and Reconnaissance Test
Amphibious Warfare	<ul style="list-style-type: none"> • Amphibious Vessel Testing
Electronic Warfare	<ul style="list-style-type: none"> • Chaff Test • Electronic Systems Test • Flare Test • Radar and Other Systems Testing
Mine Warfare	<ul style="list-style-type: none"> • Airborne Laser Mine Detection System Test • Mine Laying Test
Surface Warfare	<ul style="list-style-type: none"> • Gun Testing – Small-Caliber • Air-to-Surface High-Energy Laser Test • Laser Targeting Test • Maritime Security Operations
Unmanned Systems	<ul style="list-style-type: none"> • Underwater Search, Deployment, and Recovery • Unmanned Aerial System Testing
Vessel Evaluation	<ul style="list-style-type: none"> • Propulsion Testing • Submarine Sea Trials – Propulsion Testing
Other Testing Activities	<ul style="list-style-type: none"> • Air Platform Shipboard Integration Test • Chemical and Biological Simulant Testing • Non-Acoustic Component Testing • Payload Deployer Testing