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STAFF RECOMMENDATION

ON CONSISTENCY DETERMINATION

Consistency Determination No.	**CD-002-01**
Staff:	MPD-SF
File Date:	1/4/2001
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60th Day:	3/5/2001
Commission Meeting:	2/14/2001

FEDERAL AGENCY: **U.S. Navy**

PROJECT LOCATION: Point Mugu Sea Range, offshore of southern California (Exhibit 1)

PROJECT DESCRIPTION: Various testing and training activities on the Point Mugu Sea Range, including modernization of facilities on San Nicolas Island and at the Naval Air Station (NAS) Pt. Mugu (Exhibits 2-6, 12, & 14-24)

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EXECUTIVE SUMMARY

The Navy has submitted a consistency determination for testing and training activities conducted by the Naval Air Warfare Center Weapons Division on the Point Mugu Sea Range offshore of southern California. The activities include both continuing existing historic levels of testing and training, one new program (theater missile defense (TMD) testing and training), increases in current levels of several existing testing and training exercises, and modernization of various support facilities on San Nicolas Island and at Point Mugu.

The Point Mugu Sea Range is a 36,000 square mile area of ocean and controlled airspace, roughly 200 nautical miles (NM) long (north to south) and extending west into the Pacific Ocean from its nearest point at the mainland coast (3 nautical miles (NM) at Ventura County) out to approximately 180 NM offshore. The Sea Range includes San Nicolas Island and portions of the northern Channel Islands. The Navy has been conducting activities on the Sea Range for over 50 years "... to test and evaluate sea, land, and air weapon systems; to provide realistic training opportunities; and to maintain operational readiness of ... [Navy] forces." The Navy maintains the tests are critical to "... the successful assessment, safe operation, and improvement of the capabilities of current and future weapon systems."

The proposed activities are within the range and scope of historic Navy activities conducted on the Sea Range. The primary coastal recourse concerns are effects on marine mammals found throughout the Sea Range, and sensitive nearshore and land-based sensitive wildlife habitats at San Nicolas Island and Pt. Mugu. To address these concerns, the Navy has coordinated with the National Marine Fisheries Service (NMFS) and the U. S. Fish and Wildlife Service and proposes avoidance, minimization, mitigation and monitoring measures (summarized on pages 11 and 13-14), including: (1) assuring that activities that could harass marine mammals on the Sea Range do not occur when significant concentrations of marine mammals are present; (2) monitoring launch activities on San Nicolas Island; (3) enhancing habitat for the western snowy plover, light-footed clapper rail, and island night lizard; (4) limiting effects on San Nicolas Island to previously disturbed areas; (5) population and density monitoring for a number of sensitive wildlife species; (6) training military personnel on wildlife issues; and (7) if monitoring efforts indicate species are not being protected, implementation of corrective measures to avoid and minimize "take" of listed species. The Navy has also committed to provide all new or revised monitoring plans for Commission staff review, prior to their finalization, as well as provide regular monitoring results to the Commission staff on an

ongoing basis as they become available. With the monitoring and mitigation commitments the Navy has incorporated into the project, including the commitment to enable continuing Commission staff review of finalized monitoring plans and ongoing monitoring results, the project is consistent with the marine resources, environmentally sensitive habitat, and water quality policies (Sections 30230, 30240 and 30231) of the Coastal Act.

Access, recreation, and fishing impacts would be limited to occasional Sea Range clearances of non-military boating activities, primarily in the vicinity of San Nicolas Island. The project would not affect existing public access opportunities on the northern Channel Islands or the mainland. Clearances would generally be limited to eight-hour events, and the Navy will provide advance notice to commercial and recreational fishermen and recreational boaters and divers, to enable them to plan around proposed clearances. The clearances would be isolated and relatively short term, and are necessary to protect public safety and military security needs. The project is consistent with the public access and recreation (Sections 30210-30212), recreational boating and diving (Sections 30213 and 30220), and the commercial and recreational fishing (Sections 30230, 30234 and 30234.5) policies of the Coastal Act.

STAFF SUMMARY AND RECOMMENDATION

I. Project Description. The Navy proposes to continue and expand testing conducted by the Naval Air Warfare Center Weapons Division (NAWCWPNS) on the Point Mugu Sea Range. The Point Mugu Sea Range encompasses approximately 36,000 square miles of ocean area and controlled airspace (Exhibit 1), including San Nicolas Island (Exhibit 5) and portions of the northern Channel Islands. Some activities would also occur at the Naval Air Station (NAS) Point Mugu (Exhibit 12), and using existing instrumentation and communication facilities on Laguna Peak in the western Santa Monica Mountains.

The Navy describes the project purpose as follows:

> *NAWCWPNS Point Mugu has a need to meet the established mission to conduct state-of-the-art weapons systems testing and evaluation by providing a safe, operationally realistic, and thoroughly instrumented Sea Range testing environment and to maintain the level of operational readiness of our military services by providing a realistic training environment. The evolution of international threats and operational technologies has increased the number and type of military operations that require large water ranges for testing and training activities. Consequently, the role of NAWCWPNS Point Mugu as an air warfare test and training center has become even more critical.*

To meet the testing and training need, the purpose of the proposed action is: 1) to accommodate TMD testing and training at NAWCWPNS Point Mugu; 2) to accommodate an increase in current levels of training exercises at NAWCWPNS Point Mugu; and 3) to modernize facilities to enhance the existing testing and training capabilities at NAWCWPNS Point Mugu. Specific components of the proposed action include four distinct types of TMD testing and training, an increase in the current level of littoral (coastal) warfare training and fleet exercise training, and specific modernization of facilities on San Nicolas Island and at NAS Point Mugu to better accommodate future test and training requirements.

In describing existing activities on the Sea Range more specifically, the Navy divides them into five categories of testing and three categories of training activities, as follows:

(A) Five general test categories to evaluate sea, land, and air weapons systems: 1) air-to-air tests, 2) air-to-surface tests, 3) surface-to-air tests, 4) surface-to-surface tests, and 5) subsurface-to-surface tests (Exhibits 20-24); and

(B) Three general categories of training including: 1) Fleet training exercises (FLEETEXs), 2) small-scale amphibious warfare training, and 3) special warfare training.

In addition to these existing activities, the proposal includes new and expanded testing and training on the Sea Range, as well as modernization of support facilities on San Nicolas Island and at Point Mugu. The new and expanded activities include TMD test and training activities and an increase in the current level of both FLEETEXs and special warfare training. Facilities at NAS Point Mugu and San Nicolas Island would be modernized to increase the Sea Range's capability to support existing and future operations (Exhibits 5 & 12). Specific elements of the proposed action are described below and summarized in Tables 1 and 2.

Table 1. Baseline Plus Proposed Sea Range Activities

Category	Aircraft Sorties	Ships and Boats[1]	Missiles Fired/ Ordnance Deployed[2]	Targets Launched[2]
Operations Baseline	3,934	799	351	300
Proposed Action				
Theater Missile Defense	89	111	20	17
Additional FLEETEX	57	18	34	33
Additional Special Warfare	4	32	0	0
Total Proposed Action	**150**	**161**	**54**	**50**
Total	**4,084**	**960**	**405**	**350**

[1] Includes range support boats.
[2] The number of *Missiles Fired/Ordnance Deployed* and *Targets Launched* are not equal because their ratio of use varies by event.

Table 2. Proposed Facilities Modernization for San Nicolas Island and NAS Point Mugu

Modernization	Total Area of Disturbance
San Nicolas Island	
Add vertical missile launcher to existing launch pad	None (build on existing pad)
Construct 50K launcher for target missiles	1,200 SF concrete pad
Add new Range Support Building	12,000 SF construction area
Develop five new multiple-purpose instrumentation sites	15,000 SF construction area (each)
NAS Point Mugu	
Conduct missile launches at previously used launch pads	None (use existing pads)

The Navy elaborates:

1. *Theater Missile Defense Element. The purpose of TMD is to protect U.S. forces and allies against the threat of both short- and long-range missiles. NAWCWPNS Point Mugu proposes that the Sea Range accommodate four distinct types of TMD testing and training activities: 1) boost phase intercept (up to three events per year); 2) upper tier (up to three events per year); 3) lower tier (up to three events per year); and 4) nearshore intercept at San Nicolas Island (up to eight events per year). These events, with the exception of nearshore intercept, would be primarily conducted beyond 3 NM from shore. However, support activities for these events that could affect coastal resources would occur onshore at NAS Point Mugu and at San Nicolas Island.*

2. *Training Element. The Sea Range currently supports two FLEETEXs per year, four small-scale amphibious training exercises per year, and two special warfare training exercises per year. NAWCWPNS Point Mugu proposes to accommodate one additional FLEETEX per year and two additional special warfare exercises per year (small-scale amphibious training would remain at current levels). The additional FLEETEX would primarily be conducted over the open ocean outside the CZ. Support activities that could affect coastal resources would occur onshore at NAS Point Mugu and at San Nicolas Island. Special warfare training exercises would be conducted in the nearshore and onshore environment of San Nicolas Island.*

3. *Facility Modernization Element. Facility modernization activities that could impact coastal resources are proposed for both NAS Point Mugu and San Nicolas Island. At NAS Point Mugu, the previously used Bravo Pad (Pad B) and Charlie Pad (Pad C) near the beach would be used for missile launches. Other than minor pad preparation (e.g., cleaning, maintenance, and security), no construction would be required. Some of the beach launches may include the use of solid propellant boosters. The boosters fall off soon after launch and would typically land in the ocean 0.25 to 0.50 mile offshore. The solid propellant contained within the boosters burns out during the launch operation and would be completely expended prior to the booster entering the ocean. Facility modernizations at San Nicolas Island include construction of facilities and the addition of two new target launch systems (see Table 2). This includes construction of a 50K launcher (capable of launching target missiles weighing up to*

50,000 pounds) and a vertical missile launcher. The 50K launcher would be built on a previously disturbed area near one existing launch complex, and the vertical missile launcher would be built on an existing concrete pad at the island's other launch complex. Other new facilities would include a Range Support Building and five multiple-purpose instrumentation sites.

II. Federal Agency's Consistency Determination. The Navy has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

III. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION: I move that the Commission **concur** with consistency determination CD-002-01 that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).

STAFF RECOMMENDATION:

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

RESOLUTION TO CONCUR WITH CONSISTENCY DETERMINATION:

The Commission hereby **concurs** with the consistency determination by the Navy, on the grounds that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

IV. Findings and Declarations:

The Commission finds and declares as follows:

A. Marine Resources/Environmentally Sensitive Habitat/Water Quality.

1. Coastal Act Policies. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy

populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30240 provides:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

2. Overview. The Navy is proposing a relatively modest increase over historic levels of testing and training, which have varied from year to year but which are defined for comparison purposes using 1995 to represent existing, or baseline conditions. Comparing the proposal to baseline conditions, the additional proposals and operation expansions on the Sea Range would include: (1) a 4% increase in aircraft activity; (2) a 20% increase in ship and boat trips; (3) a 15% increase in missile firings or ordnance deployed; and (4) a 17% increase in targets launched (see Table 1, page 4). The Navy nevertheless notes that while 1995 levels represent a credible current baseline scenario, the levels are reduced when compared to historic levels; the Navy states: "... the tempo of operations on the Sea Range has declined during the past decade." The Navy's consistency determination and accompanying Draft EIS/OEIS describe the effects of both baseline levels and expanded operations on marine resources, including water quality, marine biology, marine mammals, fish and sea turtles, terrestrial biology, and threatened and endangered species. The Navy states: "As discussed in detail in the Draft EIS/OEIS, although proposed accommodation of TMD testing and training activities, accommodation of additional training, and facility modernizations would potentially affect the marine environment, these impacts would be less than significant, and biological productivity of coastal waters would be maintained." The

following discussions summarize the most pertinent of Navy's conclusions with respect marine resources on the Sea Range, including pinnipeds on San Nicolas Island, terrestrial biological resources on San Nicolas Island and at Point Mugu, and water quality.

3. Marine Resources. In its consistency determination and EIS the Navy analyzes a variety of potential impacts on marine mammals and other species, including effects resulting from missile and target debris falling into and destroying/degrading sensitive marine habitats, acoustic effects, and release of hazardous constituents (including fuels, propellants, engine oil and lubricants). The Navy's consistency determination states in general with respect to marine biology:

> *...[A]s described in the water quality discussion above and in the marine biology analysis (Section 4.5) of the Draft EIS/OEIS, resulting concentrations of potential contaminants are well below criteria established for the protection of aquatic life. Consequently, impacts on marine biology would be less than significant. It is estimated that the majority of the debris would be dense (e.g., metal) and non-floating. Non-floating debris would disperse relative to weight, size, shape, and current/wind patterns before settling to the ocean floor. Heavier objects would settle to the floor faster and would not disperse far from an impact area. Larger objects, depending on shape, may not necessarily settle quickly since objects with more drag may disperse with currents. Smaller debris may also be dispersed over a large area due to currents. Using conservative assumptions for current and proposed activities, the volume of debris accumulating on the ocean floor over a 10-year period would equate to an object roughly the size of a shoe box in relation to an entire football field.*
>
> *Nearshore intercept activities could potentially impact marine resources from debris falling on nearshore marine habitats of San Nicolas Island. If smaller debris were to settle onto the nearshore subtidal and intertidal zones, mortality of resident organisms may result. This would be considered a short-term impact and would be less than significant because many of the organisms that inhabit these areas are opportunistic and would quickly recolonize the area. Further, the intercept is designed so that the entire debris pattern falling into the ocean is at least 1 NM offshore (although the targets would fly as close as 0.5 NM offshore). This would eliminate potential impacts on nearshore subtidal and intertidal zones. Concentrations of potential contaminants associated with debris are well below established water quality criteria and would not significantly affect marine habitats. Estimated amounts of all battery constituents released into the CZ [coastal zone] for nearshore intercept activities result in sediment quality concentrations of about 0.29 parts per million (ppm). This amount is less than the National Oceanic and Atmospheric Administration's (NOAA's) conservative criteria for the constituent with the most stringent threshold (cadmium, 1.2 ppm). Marine biology impacts associated with additive debris accumulation as a result of the proposed action would be less than significant.*

The Navy also analyzed potential impacts to fish and sea turtles, concluding that while small numbers of fish could be killed, impacts on fish populations would not be significant, and that since numbers of sea turtles in the study area are low, the probability of a sea turtle being struck by debris or colliding with a Navy vessel is extremely remote.

With respect to marine mammals on the Sea Range, the Navy extensively analyzed noise impacts, debris/marine mammal strikes, and people/marine mammal interactions. The Navy states short-term effects could include: temporary changes in behavior, movement away from the immediate area of noise, and temporary reduction in hearing sensitivity. The Navy elaborates in its consistency determination:

> *Small numbers (approximately 8) of marine mammals per year may experience temporary threshold shift (TTS) with no biological consequences in Sea Range waters. The likelihood of any individual animal experiencing TTS more than once per year approaches zero. Any hearing impairment would be temporary and probably mild, and would not have significant biological consequences for individual marine mammals. Because these short-term effects would occur infrequently, they would not have long-term impacts on individual animals and would have less than significant impacts on marine mammal populations. The probability that any threatened or endangered species of marine mammal would experience TTS in any given year is extremely low (0.08 individuals per year, or one every 12 years).*
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> *Increased debris in the Sea Range would have a negligible effect on the overall probability of a marine mammal being injured or killed by intact missiles and falling debris hitting the water. Approximately 0.006 marine mammals per year would be exposed to potential injury or mortality by falling debris or missile impacts. Impacts would be less than significant.*
>
> *Public access is restricted in the Navy-owned portions of the Sea Range, and marine mammal populations have been able to expand with minimal interference from human activities. The activities proposed by the Navy would not result in significant increases in interactions between marine mammals and Navy activities in the Sea Range. The proposed action would not be expected to significantly impact marine mammal populations occurring in the Sea Range.*

Analyzing effects on marine mammals on land or nearshore areas (San Nicolas Island and Point Mugu), the Navy states:

> *San Nicolas Island. Pinnipeds on San Nicolas Island are exposed to loud noises of short duration during target launches. Pinnipeds on the beaches may show minor alerting responses to the sight or sound of the target, missile or missile/target intercept, but momentary alert or startle reactions are not considered to have adverse effects. No stampedes were noted for the majority of launches from San Nicolas Island during which pinnipeds were observed. However, recent monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate launches of Vandal missile targets. At present, it is not possible to estimate the numbers of seals that might be disturbed by target launches*

or to estimate pup mortality, if any, resulting from stampedes into the water. However, there has been rapid growth in resident pinniped populations despite such launch operations. This implies that there is little if any mortality or serous injury of pups due to stampedes into the water during San Nicolas Island launches. Thus, impacts of launches on pinniped populations on San Nicolas Island are less than significant whether or not there are any adverse effects on individual pinnipeds. However, as described below, in response to the recent observations of pinnipeds during Vandal launches, the Navy is applying for Incidental Harassment Authorization (IHA) from NMFS.

Point Mugu. The harbor seal is a year-round resident at the Mugu Lagoon entrance. Harbor seals at Point Mugu have habituated to current sound levels and would not be exposed to increased sound levels under the proposed action. The distance from the harbor seal haul-out area to the proposed missile launch location is sufficient to ensure that received sound levels would be below those predicted to cause disturbance. Harbor seals at Point Mugu seem to have habituated to the regularly occurring sounds and show little reaction to them. Any behavioral responses to launch noise would be limited to the short term, and impacts on harbor seals at Point Mugu would be less than significant.

In addition to the above-referenced discussion from within the Draft EIS/OEIS' noise analysis, the Navy also included in the EIS a separate *Marine Mammal Technical Report*[1] providing detailed seasonal counts and densities of marine mammal populations on the Sea Range, and detailed review of the various types of impacts[2] (including noise, and with separate discussions of air-to-air, air-to-surface, surface-to-surface, and subsurface-to-surface operations [Exhibits 20-22]). This analysis estimates that under baseline conditions, "... about 0.002 marine mammals per year (i.e., one individual in 500 years) may be injured or killed by missiles and debris hitting the water, ... [that] approximately four marine mammal per year might experience mild TTS [Temporary Threshold Shift] ... [and that] there is only a small probability (0.063 marine mammals per year) that a member of a threatened or endangered species might incur mild TTS." According to this analysis, the probabilities could double, but would still remain extremely small, with the proposed expanded operations: injury from missile or debris strike would increase to 0.0041 mammals/yr., and mammals potentially experiencing mild TTS would increase to 8 per year. Looking at noise impacts to pinnipeds on San Nicolas Island (primarily from launches) and at Point Mugu (from various sources), the analysis also states impacts would be minimal. Furthermore, the Navy will be monitoring marine mammal reactions where appropriate and coordinating with the National Marine Fisheries Service (NMFS). The Navy's consistency determination states:

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[1] *Marine Mammal Technical Report,* December 1998, by William R. Koski, John W. Lawson, Denis H. Thomson, and W. John Richardson.

[2] *Biological Consequences for Marine Mammals,* December 1998, by John W. Lawson, William R. Koski, W. John Richardson, Denis H. Thomson, and Charles I. Malme.

Throughout the development of this analysis, NAWCWPNS Point Mugu has coordinated with the National Marine Fisheries Service (NMFS) concerning compliance with the Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1431 et seq.). Based on a review of the Marine Mammal Technical Report [see Footnote 1, previous page], *NMFS did not recommend that the Navy apply for incidental take authorization, as long as: 1) the Navy developed a marine mammal monitoring program in order to reduce the risk to marine mammals from predictable surface impacts near locations where the animals congregate; 2) the Navy developed a monitoring program on San Nicolas Island to document pinniped responses to acoustic events; and 3) that the results of the monitoring programs on San Nicolas Island show no adverse effects on pinnipeds. Subsequent to completion of the Marine Mammal Technical Report, monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate Vandal launch events. In response to these recent observations, the Navy is applying for an IHA from NMFS. The IHA Application covers launches of Vandal targets and other vehicles of similar size from existing launch sites on San Nicolas Island. The number of launches of this type are expected to be few (a maximum of about 10 Vandal-type launches and five launches of smaller subsonic targets per year) and each launch event is of extremely short duration (strong launch sounds are detectable near the beaches for no more than a few seconds per launch). The number of individual animals expected to be disturbed during the launch activities is small in relation to regional population sizes. Given proposed mitigation measures and monitoring plans (summarized below), effects on those individuals are expected to be limited to harassment and are expected to have negligible impacts on the species and stocks.*

The Navy summarizes its mitigation and monitoring plans as follows:

Mitigation Measures

To avoid additional harassment to the seals on beach haul-out sites, and to avoid any possible sensitizing and/or predisposing seals to greater responsiveness to the sights and sounds of a launch, the Navy will limit activities near the beaches in advance of launches. Where practicable, the Navy will adopt additional mitigation measures when doing so will not compromise operational safety requirements or mission goals.

Monitoring Plans

The Navy plans to document and characterize any observed responses of pinnipeds before, during, and after launch operations. The Navy will establish a land-based monitoring program to assess effects on the three common pinniped species on SNI. The Navy will obtain calibrated recordings of the sounds of the target launches as received at different distances from the target's flightline.

Finally, addressing seabirds on the open ocean portion of the Sea Range, the Navy states:

> *Seabird densities are typically low over the Sea Range (approximately less than 1 bird/acre) and those species that are present are generally on the water or at low altitudes above the water surface and below aircraft, missiles, and targets. Bird-strikes have not historically presented an operational constraint to activities on the Sea Range. Therefore, impacts on seabirds on the Sea Range as the result of aircraft operations and debris strikes would be less than significant. Overall impacts on seabirds resulting from the proposed action in the Sea Range would be less than significant.*

At the same time, the Navy notes that seabirds represent the main terrestrial biological resource in the Sea Range that could be affected by the proposed activity. This issue is addressed in the following section of this report.

4. Terrestrial Biology. The Navy's terrestrial biology analysis focuses on seabirds at San Nicolas Island (Exhibit 7) and Pt. Mugu (Exhibit 13), the island night lizard at San Nicolas Island, and other species of concern identified in consultation with the U.S. Fish and Wildlife Service on these two Navy bases. For the most part, affected areas on San Nicolas Island are limited to previously disturbed areas or areas that do not contain environmentally sensitive habitat. The Navy therefore considers noise and debris impacts to birds and sensitive species on the Island to be insignificant. Analyzing potential effect on birds at Pt. Mugu, the Navy states:

> *Studies by NAS Point Mugu environmental personnel have determined that noise from aircraft takeoffs and landings does not significantly affect wildlife. Bird strike data indicate that anywhere from 10 to 60 birds have been struck within a given year. Based on a recent Bird Aircraft Strike Hazard (BASH) study at Whidbey Island, the actual number of bird strikes is probably five times the number of reported strikes; therefore, anywhere from 50 to 300 bird strikes probably could occur over a given year. The majority of reported bird strikes occurred with propeller-driven planes. Swallows, killdeers, and shorebirds comprised the majority of reported bird strikes. The number of reported bird strikes is less than one percent of the total number of birds that inhabit, or travel through, Point Mugu; therefore, impacts from bird strikes would be less than significant.*
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> *Physical impacts on seabirds from target launches at NAS Point Mugu would be less than significant. The probability of a JATO [jet assisted take off] bottle striking an individual bird is insignificant when considered as an individual or annual event. The fact that birds are mobile, may fly away from an incoming bottle, and may not be present during a launch further reduces the likelihood of a JATO bottle striking a bird species. The cumulative impacts of individual JATO bottles landing in Mugu Lagoon would be significant to coastal biological resources if large habitat areas that support sensitive species are eliminated through accumulation of JATO bottles. However, NAWCWPNS Point Mugu has recently implemented a program to recover JATO bottles. Potential impacts to terrestrial biological resources have thus been reduced to less than significant levels through implementation of this JATO bottle recovery program.*

The Navy is coordinating with the U.S. Fish and Wildlife Service (USFWS) concerning the above impacts on federally listed threatened and endangered species. The Navy states: "Mitigation measures currently being identified in coordination with the U.S. Fish and Wildlife Service (USFWS) would reduce potential significant impacts on these species to below a level of significance." These measures are being implemented in conjunction with two programmatic Biological Assessments (BAs), one addressing overall Navy activities at Pt. Mugu, and the other overall activities on San Nicolas Island. The BAs address all significant impacts to sensitive species and their critical habitat. The mitigation and monitoring efforts from these analyzes are summarized below:

> *Point Mugu. Missile launches and aircraft overflights have been identified as potentially affecting sensitive resources at Point Mugu. JATO bottles have been identified as potentially "taking" western snowy plovers and light-footed clapper rails through physical impacts and recovery options. Aircraft overflights may affect western snowy plovers, California least terns, California brown pelicans, light-footed clapper rails, and American peregrine falcons by causing species to move off their nests, disrupting their behavior, and striking the birds. As noted previously, the use of two previously used launch pads near the beach could affect sensitive species that use beach habitats.*
>
> *The Navy has recently implemented a JATO bottle removal program for the salt marsh in front of Building 55. This program, which includes seasonal restrictions on recovery activities, is expected to benefit sensitive avian species at Mugu Lagoon. Additional mitigation and conservation measures identified in coordination with the USFWS, many of which are ongoing, include:*

- *Western snowy plover and light-footed clapper rail habitats will be enhanced.*
- *Population monitoring of salt marsh bird's-beak, western snowy plover, California least tern, and light-footed clapper rail shall be standardized and used consistently.*
- *Areas where physical parameters are appropriate and no other use is anticipated shall be restored as salt marsh, sandy beach, or other habitat for listed species.*
- *If monitoring of the light-footed clapper rail population suggests that the species is being displaced from currently occupied habitat, the Navy shall create an equivalent area of salt marsh habitat in proximity to occupied habitat.*
- *Because variations from standard procedures were the cause of some adverse effects to listed species, aircraft overflights will be modified and monitored by air operations personnel.*
- *All base personnel and contractors shall be educated on the identification and importance of conserving listed species, and their personal responsibilities in this regard.*
- *All mitigation measures shall be monitored to determine their effectiveness in avoiding and minimizing take of listed species. If mitigation measures are not effective, corrective measures shall be implemented.*

San Nicolas Island. Target and missile launches from the two existing launch locations (Alpha Launch Complex and Building 807 Launch Complex) and the two proposed launchers (vertical launcher and 50K launcher) may affect California brown pelicans and western snowy plovers that use the west end of the island for roosting, foraging, and nesting. Missile launches and associated vehicle and personnel activity at the Building 807 Launch Complex may potentially result in disturbances to nesting western snowy plovers. As noted previously, environmental restrictions placed on special warfare training sites would preclude potential impacts on sensitive species. The sites and access roads for the proposed facility modernizations at San Nicolas Island would be sited to avoid sensitive species.

The Navy has closed the south side of the island to all activities. This closure area protects three species of marine mammals, western snowy plovers, Brandt's cormorants, western gulls, and California brown pelicans. This measure also provides undisturbed habitat for a variety of other wildlife species. Additional mitigation and conservation measures proposed to the USFWS, many of which are ongoing, include:

- *To prevent disturbance of the federally listed western snowy plover, nesting areas are closed during the breeding season. Signs and barricades alert personnel of closure areas.*
- *The distribution and status of listed species are regularly and consistently monitored. Listed species habitat in or near operational areas is surveyed frequently to assess potential for effects to listed species by Navy activities.*
- *All permanent and visiting island personnel attend a mandatory "environmental briefing." Federal legislation and Navy regulations regarding protected species are emphasized, along with the importance of honoring environmental closure areas.*
- *The habitat for island night lizard is being expanded using revegetation.*
- *The substrate immediately adjacent to the Building 807 launch area may be altered during the nonbreeding season to make the area unappealing for nest site selection by snowy plovers (this area is not designated critical habitat for the species).*
- *All construction equipment, vehicles, and supplies will be thoroughly cleaned and inspected prior to shipment to San Nicolas Island to reduce the potential for introduction of non-native species.*
- *Staging areas for temporary storage of equipment and materials will be sited in areas with low island night lizard densities whenever feasible.*
- *Habitat for relocated night lizards will be created by planting appropriate cover in barren areas adjacent to currently utilized habitat.*
- *The sites and access roads for proposed facility construction projects will be placed to avoid habitat which may harbor island night lizards.*

5. Water Quality. Addressing water quality, the Navy reviewed the project under the Clean Water Act, the California Ocean Plan, and Coastal Act policies, including looking at National Ambient Water Quality Criteria (NAWQC) established under the Clean Water Act for the protection of aquatic life. Potential water quality degradation could occur through the use of

missile propellants, fuels, engine oil, hydraulic fluid, and batteries. NAWQC establishes the most specific, and therefore most applicable, standards for heavy metals and PAHs of concern. Focusing on water quality in the coastal zone, the Navy's consistency determination states:

> *As described in the water quality analysis (Section 4.4) of the Draft EIS/OEIS, the proposed action would not cause a significant adverse impact on water quality in the CZ [coastal zone]. Under the proposed action, the TMD Element would result in increased amounts of debris falling into the ocean from missile and target activities. For this analysis, fuels, propellants, engine oil and lubricants are the hazardous constituents of interest. Concentrations of these chemical constituents of concern resulting from increased testing and training activities were estimated. The calculations indicate that concentrations would remain below National Ambient Water Quality Criteria (NAWQC) established for the protection of aquatic life and would represent a less than significant impact on marine water quality within the CZ. For example, estimated amounts of all battery constituents released into the CZ for nearshore intercept result in concentrations of about 7.1 micrograms per liter (µg/L). This amount is less than NAWQC for the constituent with the most stringent acute threshold (cadmium, 43 µg/L). Similar calculations were made for the Training Element; impacts on water quality in the CZ were estimated to be less than significant.*
>
> *Facility modernizations at NAS Point Mugu and San Nicolas Island would not significantly impact water quality in the CZ. Under the proposed action, missile launches would occur at existing NAS Point Mugu beach launch pads, with solid propellant boosters falling into the ocean approximately 0.25 to 0.50 mile offshore. Since all of the propellant is expended during launch, impacts on nearshore water quality would result solely from booster casings entering the water. Given that the casings are not soluble and that a maximum of six per year would enter the water, impacts would be less than significant. On San Nicolas Island, missiles and targets would be launched at or near existing onshore launch pads. Impacts on nearshore water quality would be less than significant.*

6. Commission Conclusion. The proposed activities are within the range and scope of historic Navy activities conducted on the Sea Range. The primary coastal recourse concerns are effects on marine mammals found throughout the Sea Range, and sensitive nearshore and land-based sensitive wildlife habitats at San Nicolas Island and Pt. Mugu. To address these concerns, the Navy is coordinating with the National Marine Fisheries Service (NMFS) and the U. S. Fish and Wildlife Service. Through this coordination and the EIS process, and as summarized above, the Navy has committed to avoidance, minimization, mitigation and monitoring measures to assure the protection of important wildlife species, including: (1) assuring that activities on the Sea Range that could harass marine mammals do not occur when significant concentrations of marine mammals are present; (2) monitoring launch activities on San Nicolas Island; (3) enhancing habitat for the western snowy plover, light-footed clapper rail, and island night lizard; (4) limiting effects on San Nicolas Island to previously disturbed areas; (5) population and density monitoring for a number of sensitive

wildlife species; (6) training military personnel on wildlife issues; and (7) implementation of remedial measures, in the event monitoring efforts indicate listed species are not being protected. While a number of these measures are continuations of existing Navy mitigation and monitoring practices, for the purposes of this comprehensive Sea Range program they are being implemented within the context of two programmatic Biological Assessments, (one addressing overall Navy activities at Pt. Mugu, and the other overall activities on San Nicolas Island). In addition, at the request of the Commission staff the Navy has committed to submit all monitoring plans to the Commission staff, for its review prior to their finalization, and to provide regular monitoring results to the Commission staff on an ongoing basis as they become available. Moreover, the Commission staff has contacted NMFS and the U. S. Fish and Wildlife Service, which have not raised any major concerns over the Navy's proposal as long as the monitoring and other commitments remain in place. The Commission concludes that, with the monitoring and mitigation commitments the Navy has incorporated into the project, including the commitment to enable continuing Commission staff review of finalized monitoring plans and ongoing monitoring results, the project is consistent with the marine resources, environmentally sensitive habitat, and water quality policies (Sections 30230, 30240 and 30231) of the Coastal Act.

B. Public Access and Recreation. Sections 30210-30212 of the Coastal Act provide for the maximization of public access and recreational opportunities, with certain exceptions for, among other things, military security needs and public safety. For example, Section 30212 (a) provides:

> *a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
>
> *(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, ...*

Section 30213 provides:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided.*

Section 30220 provides:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

The Navy acknowledges that, as has historically been the case, its ongoing testing and training activities necessitate clearance of nonmilitary boats and personnel (including both commercial and non-commercial activities) for safety purposes. Clearances are typically up to eight hour events, and they most commonly occur within a radius of 10-20 miles around San Nicolas Island. To minimize disruptions, the Navy currently conducts several public notification

procedures prior to test and training events, including publishing Notice to Mariners (NOTMARs) for, among other things, sportboats bringing recreational fishermen, divers, or tourists to the waters surrounding San Nicolas Island and other parts of the Sea Range. The Navy states:

> *NOTMARs would continue to be provided in advance which would allow mariners to select alternate destinations without substantially affecting their activities. Impacts on sport fishing, recreational activities, and tourism would be less than significant.*

The Navy also states access on San Nicolas Island and at Point Mugu would not be affected, because these areas are already off-limits to the public due to military security and public safety needs. Publicly accessible areas on the Channel Islands would not be affected by the proposal. Concerning public recreation in the general project area, and attempting to quantify the number of potential clearances, the Navy states:

> *Public activities in nearshore waters that are not readily provided in inland waters of Ventura County include recreational boating, sport fishing, scuba diving, and commercial fishing. The proposed action would not interfere with any water-oriented recreation activities or facilities at Point Mugu State Park, Point Mugu State Beach, the Santa Monica Mountains National Recreational Area, Ormond Beach, or at Navy-owned San Nicolas Island. All proposed development would occur on land presently owned and operated by the Navy with restricted public access. Therefore, no impacts would occur to recreational uses.*
>
> *The proposed action would have a less than significant impact on recreational uses of area waters, beaches, the Channel Islands, or associated recreational facilities within the Sea Range. Water-oriented recreational activities would be subject to short-term, temporary closures only in specific areas. The proposed action could add 17 events, each of which would require clearance of various Range Areas for safety purposes. Sea Range operations can sometimes be "scrubbed" or canceled on the scheduled day for various operational reasons. In such cases, range clearance procedures have typically already been initiated. Therefore, it can be assumed that the TMD Element would involve clearance of various Range Areas up to 34 times per year. Collectively over a one-year period, a total of about 114 vessels might be present in the clearance areas prior to NOTMAR issuance. However, only a small percentage of these vessels would be within the CZ* [coastal zone]. *Further, with advanced coordination of NOTMARs, it is likely that half of these vessels would already be clear of the area. The two-percent increase in aircraft activity could easily be accommodated within established procedures and would not impact current airspace use. Ground traffic systems ashore would not be affected. Therefore, traffic impacts would be less than significant. For the most part, potential effects on recreational uses (recreational fishing boats and sport diving boats) in the CZ would be minimal.*

The Training Element would consist of one additional FLEETEX, which typically lasts 2 to 3 days, and two additional special warfare training exercises, which typically have durations of 8 hours each. However, major activities associated with the proposed additional FLEETEX would be conducted in the portions of the Sea Range well outside the CZ and, therefore, would not affect CZ resources. Some associated target launches from NAS Point Mugu and San Nicolas Island would require safety clearance procedures within the CZ; however, disruption to recreational uses within the CZ would be considered minimal and short-term. If appropriate, publication of NOTMARs would be used to inform the public of these activities, so disruption to recreational uses within the project area would be minimal and short-term. Therefore, impacts of the Training Element on recreational uses would be less than significant. Special warfare training exercises generally occur in nearshore waters at San Nicolas Island and they do not require safety clearance procedures.

The Commission finds that proposed Sea Range clearances are necessary both for military security and public safety needs, and that project will not affect existing public access opportunities on the Channel Islands or the mainland. The Commission concludes that the project is consistent with the public access and recreation policies (Sections 30210-30212) and recreational boating and diving policies (Sections 30213 and 30220) of the Coastal Act.

C. Commercial and Recreational Fishing. Section 30230 of the Coastal Act, quoted on page 6 above, provides for the protection of economically (as well as biologically) significant marine species. Section 30234 provides:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. ...

Section 30234.5 provides:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

The Navy states:

Potential effects on economic, commercial, and recreational uses of fishing activities have been analyzed. As described in the socioeconomics analysis (Section 4.12) of the Draft EIS/OEIS, the most notable effect on commercial fishing and recreational uses is associated with nearshore intercept activities. Short-term adverse effects on individual commercial fishermen may result from the implementation of the proposed action but the economic importance of the regional commercial fishing industry would not be significantly impacted.

The Navy elaborates:

> *As described in the socioeconomics analysis (Section 4.12) of the Draft EIS/OEIS* [see Exhibits 26-27], *minimal effects on public access would be experienced by commercial fishing boats, recreational fishing boats, and sport diving boats in areas around San Nicolas Island in the CZ. Commercial fishing activities beyond 3 NM from shore would not be adversely affected. However, safety clearances associated with nearshore intercept activities would preclude commercial fishing activities around San Nicolas Island during certain days of the year. Although the nearshore intercepts would occur at one end of the island* [Exhibit 19], *it is necessary to clear areas surrounding the entire island* [Areas Alpha, Bravo and Charlie (Exhibit 27)] *in order to ensure public safety. Peak fishing periods typically occur October through March around San Nicolas Island. About 35 boats are present at San Nicolas Island during the winter fishing season. This number fluctuates, however, and can reach 50 boats during peak periods, such as the opening of lobster season each fall. During peak periods and good weather, a single boat at San Nicolas Island can earn $3,000 or more per day. If a nearshore intercept test were to be conducted during one of these peak days while a maximum number of boats were in the area (50), clearing the entire area surrounding the island for safety purposes could result in a revenue reduction of $150,000. This reduction would temporarily have an adverse socioeconomic effect on individual fishermen affected. Using the assumption that all lost revenue would be permanent and would only affect boats landing at Ventura (this assumption maximizes the potential for impact), the lost revenue would represent 2.6 percent of the total value of 1995 Ventura commercial fish landings. Of the eight proposed nearshore intercept events per year, only one or two (requiring up to four closures) would be likely to occur during peak fishing season, and the nearshore intercept activities would require cessation of fishing activities for only eight hours for each closure day. Therefore, it would be likely that lost revenue would be temporary and could be recaptured at another time (i.e., a "lost" day would not preclude fisherman from maximizing revenues over the course of the fishing season). Furthermore, NAWCWPNS personnel have implemented successful communication procedures with commercial fishermen at San Nicolas Island to minimize effects on commercial fishing activities. This coordination allows fishermen to select an alternate location for fishing when safety clearance procedures are implemented around San Nicolas Island. Therefore, while there could be short-term, adverse impacts on individual commercial fishermen, impacts would be less than significant on the overall economy of Ventura County and to the regional commercial fishing industry.*
>
> *Other activities associated with the proposed action would involve missile and target launches from San Nicolas Island (about six times per year). Some recreational and commercial fishing vessels could potentially be present in areas north and northwest of San Nicolas Island prior to target launches from the island. These vessels would be cleared prior to launch but would have the option of relocating the day of the event to different, unaffected waters off the island. Therefore, impacts of increased testing and training on public access would be less than significant.*

Exhibits 26 and 27 provide additional information on commercial fishing impacts, including average fish catch landing data under baseline conditions on the Sea Range, and depicting areas off San Nicolas Island that are subject to potential closures. The Commission agrees with the Navy that impacts would be minimal, noting that the Navy has historically conducted numerous military testing and training activities throughout the Sea Range without apparent significant conflicts with commercial and recreational fishing. The proposed activities are similar to the types and amounts of past Navy activities on the Sea Range, and, as the Navy points out, for any particular operating area the tests would be relatively short term in nature. As discussed in the previous section of this report, limited military preclusion of non-military activity is warranted to protect public safety (as well as military security). Given the Navy's commitment for advance notice to fishermen to enable them to plan around proposed clearances, the activities would not appreciably affect the economics of commercial and recreation fishing. The Commission concludes that the project is consistent with the commercial and recreational fishing policies (Sections 30230, 30234 and 30234.5) of the Coastal Act.

V. Substantive File Documents:

1. *Draft Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS),* Naval Air Warfare Center, Weapons Division, July 2000.

2. *Marine Mammal Technical Report*, December 1998, by William R. Koski, John W. Lawson, Denis H. Thomson, and W. John Richardson.

3. *Biological Consequences for Marine Mammals,* December 1998, by John W. Lawson, William R. Koski, W. John Richardson, Denis H. Thomson, and Charles I. Malme.

4. *Low-frequency Sound and Marine Mammals: Current Knowledge and Research Needs, Committee on Low-frequency Sound and Marine Mammals,* Ocean Studies Board, Commission on Geosciences, Environment, and Resources, National Research Council, March 21, 1994.

5. Consistency Determinations No. CD-113-00, CD-95-97 and CD-153-97 (Navy, Low-Frequency Active (LFA) Sonar).

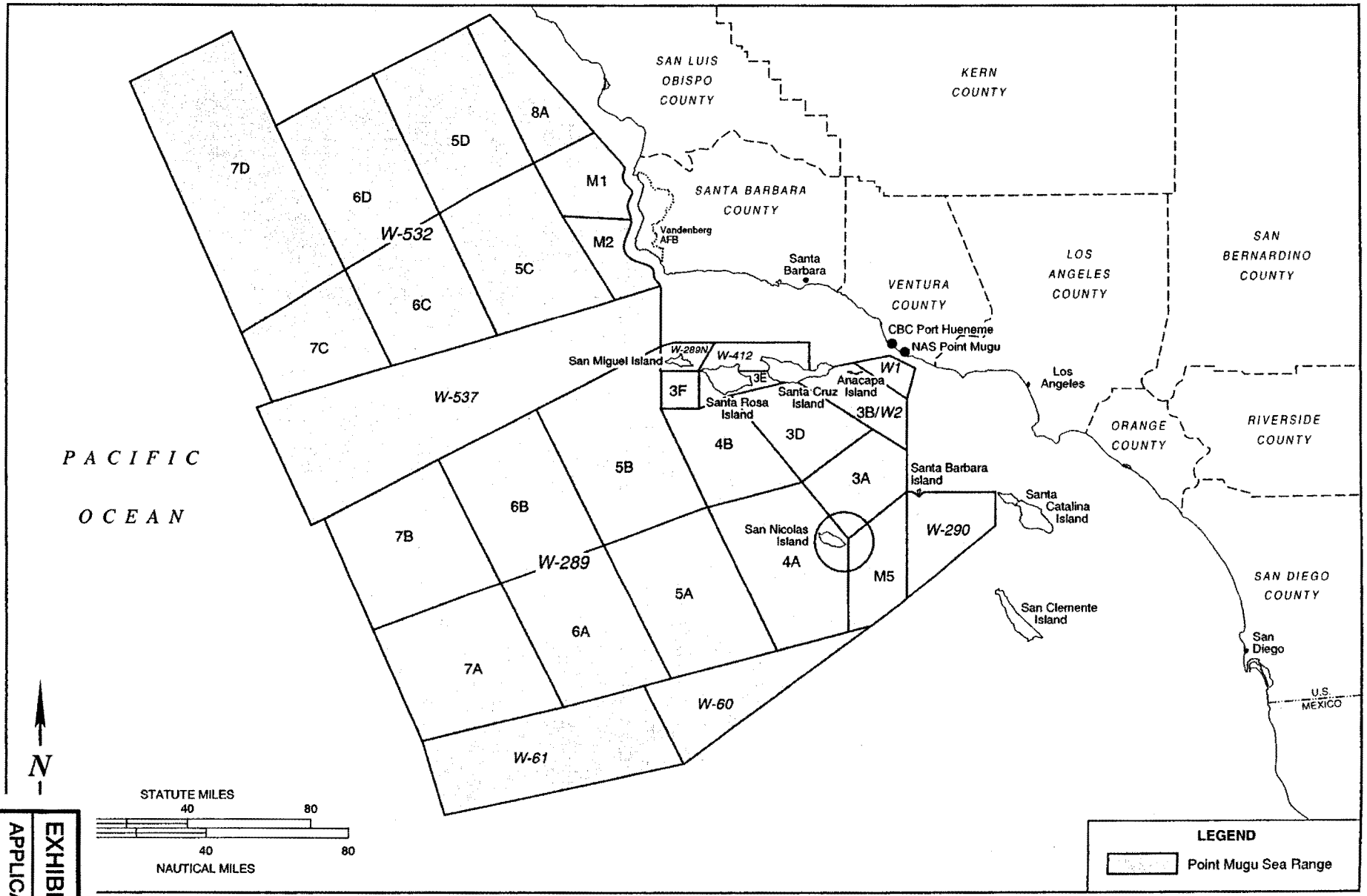


Figure ES-1
Point Mugu Sea Range

ES-2

EXHIBIT NO. 1
APPLICATION NO. CD-2-01
Pt. Mugu Sea Range

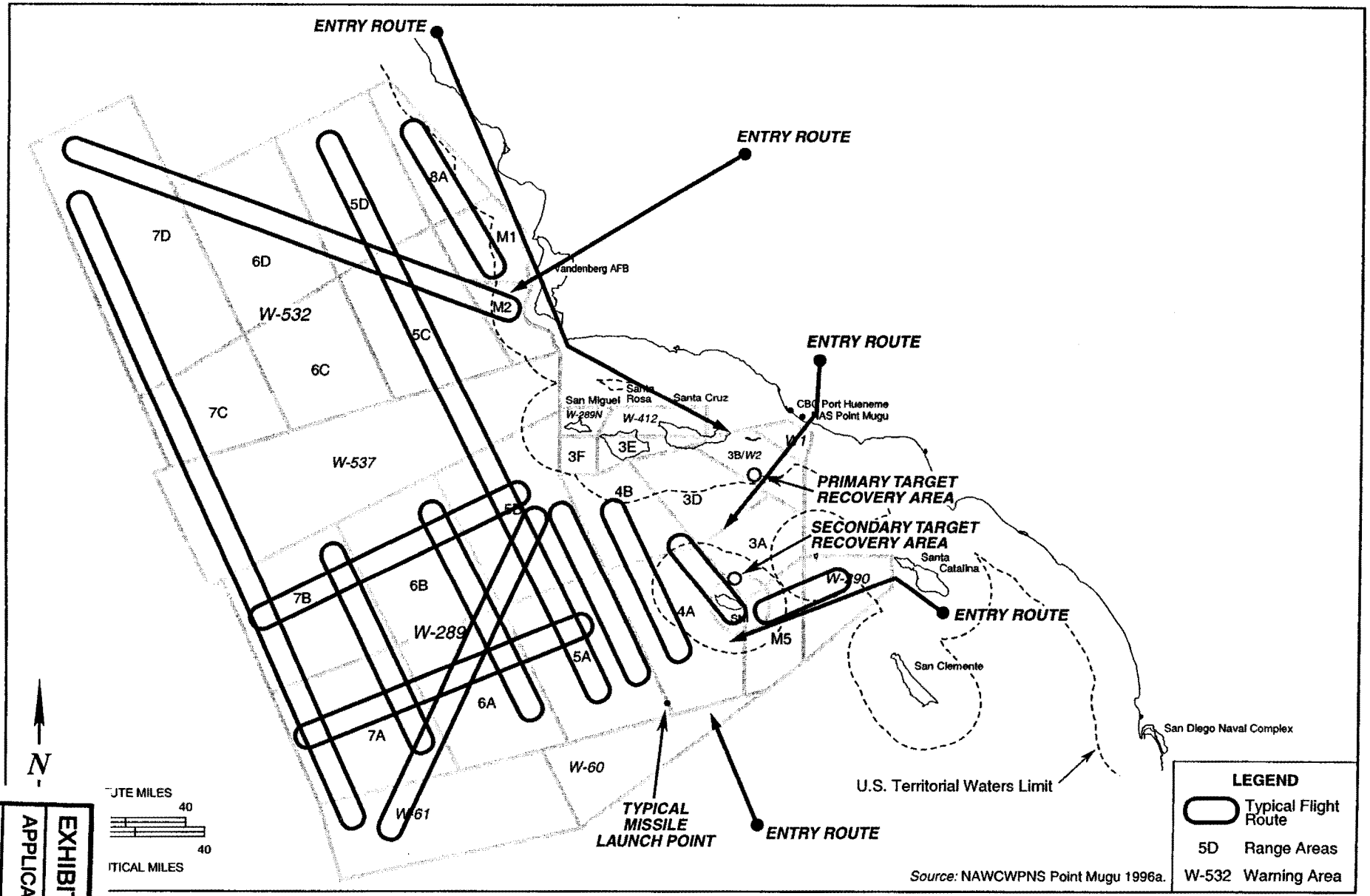


Figure 3.0-5
Typical Flight Routes

EXHIBIT NO. 2
APPLICATION NO. CD-2-01

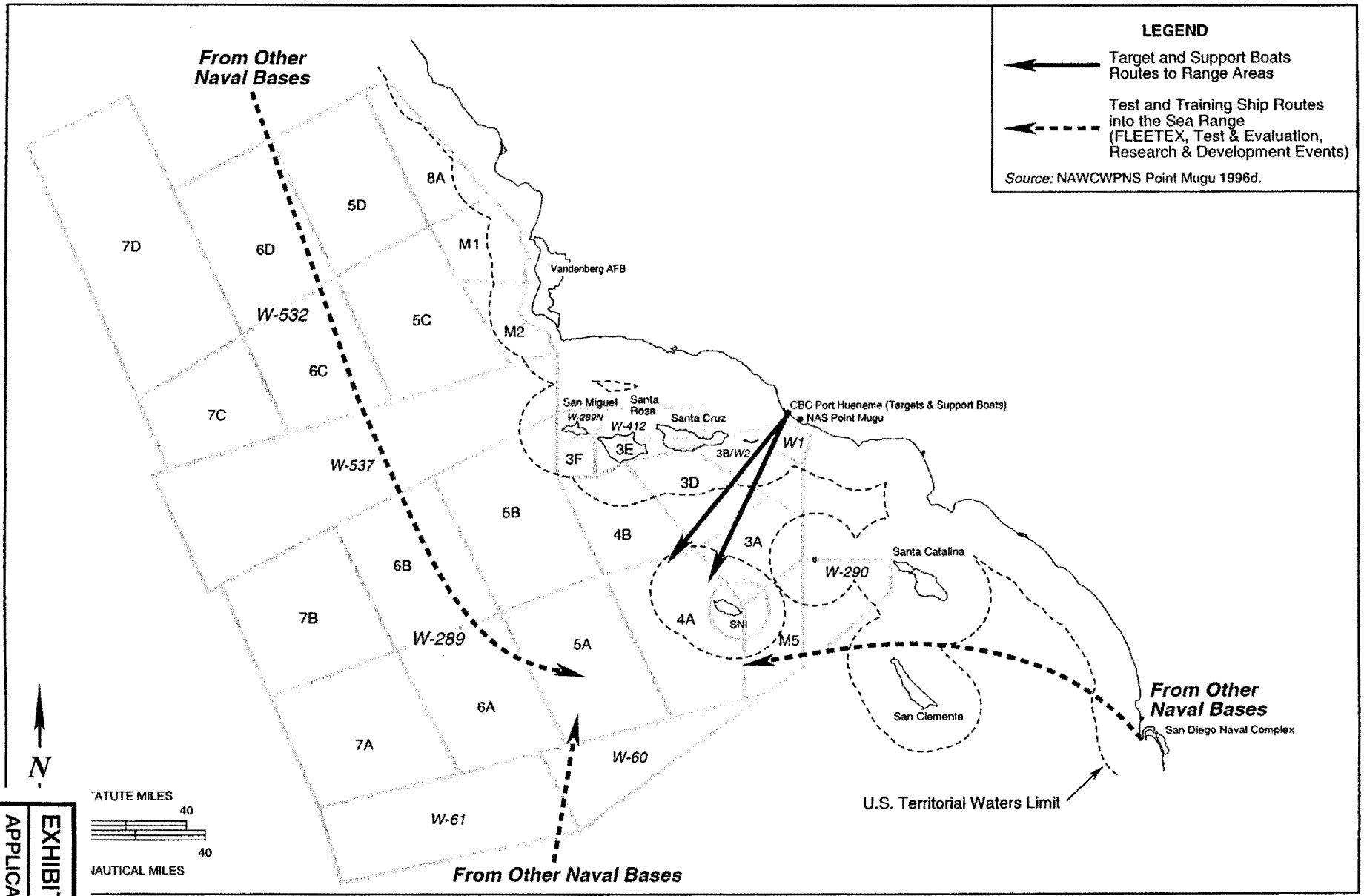


Figure 3.0-7
Typical Routes — Surface Ships, Support Boats, and Surface Targets

EXHIBIT NO. 3
APPLICATION NO. CD-2-01

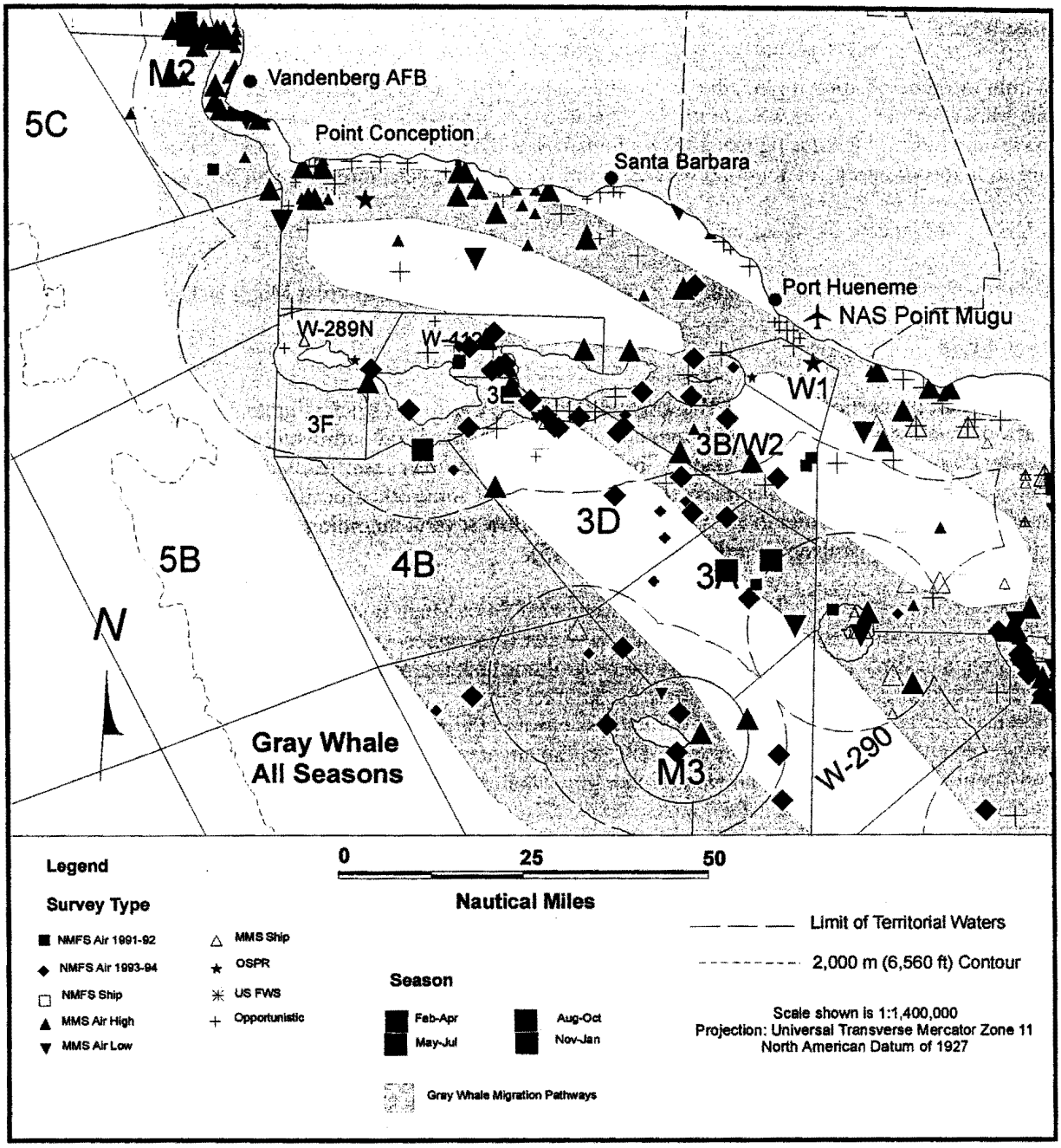


Figure 3.7-15

Sightings of gray whales in and near the Channel Islands during the 1975-96 surveys summarized. Survey effort was not uniform throughout the area or at different times of the year; thus sightings cannot be assumed to represent relative abundance either geographically or seasonally. Small and large symbols denote sightings of single animals vs. 2 or more animals, respectively. Generalized migration routes, from Bonnell and Dailey (1993), are superimposed on the actual sightings.

EXHIBIT NO. 4
APPLICATION NO.
CD-2-01

San Nicolas Island Modernization Locations of Proposed New Facilities

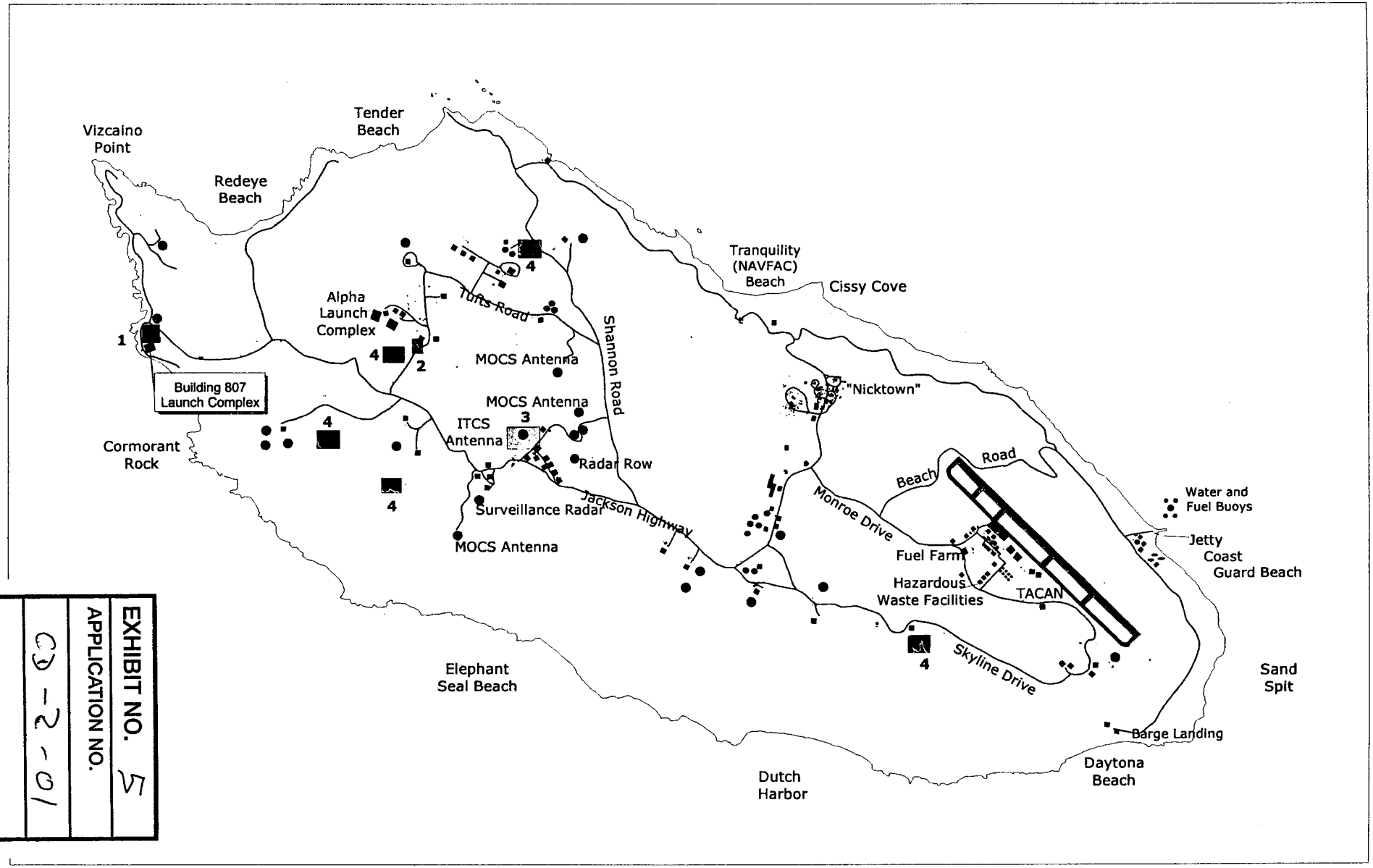


EXHIBIT NO. 5
APPLICATION NO. CD-2-01

Legend

- 1) Proposed Vertical Launch System
- 2) Proposed 50K Launcher Site
- 3) Proposed Range Support Building
- 4) Proposed Multi-Purpose Instrumentation Sites
- 100' Contour Lines
- Existing Airfield
- Existing Structures
- Existing Instrumentation

2000 0 2000 Meters

1 0 1 Statute Miles

Projection: Universal Transverse Mercator, Zone 11
North American Datum of 1927
Scale shown is 1:62,500
Source: NAWCWPNS.

Note: Additional Information is presented in Table

Figure 2-3b

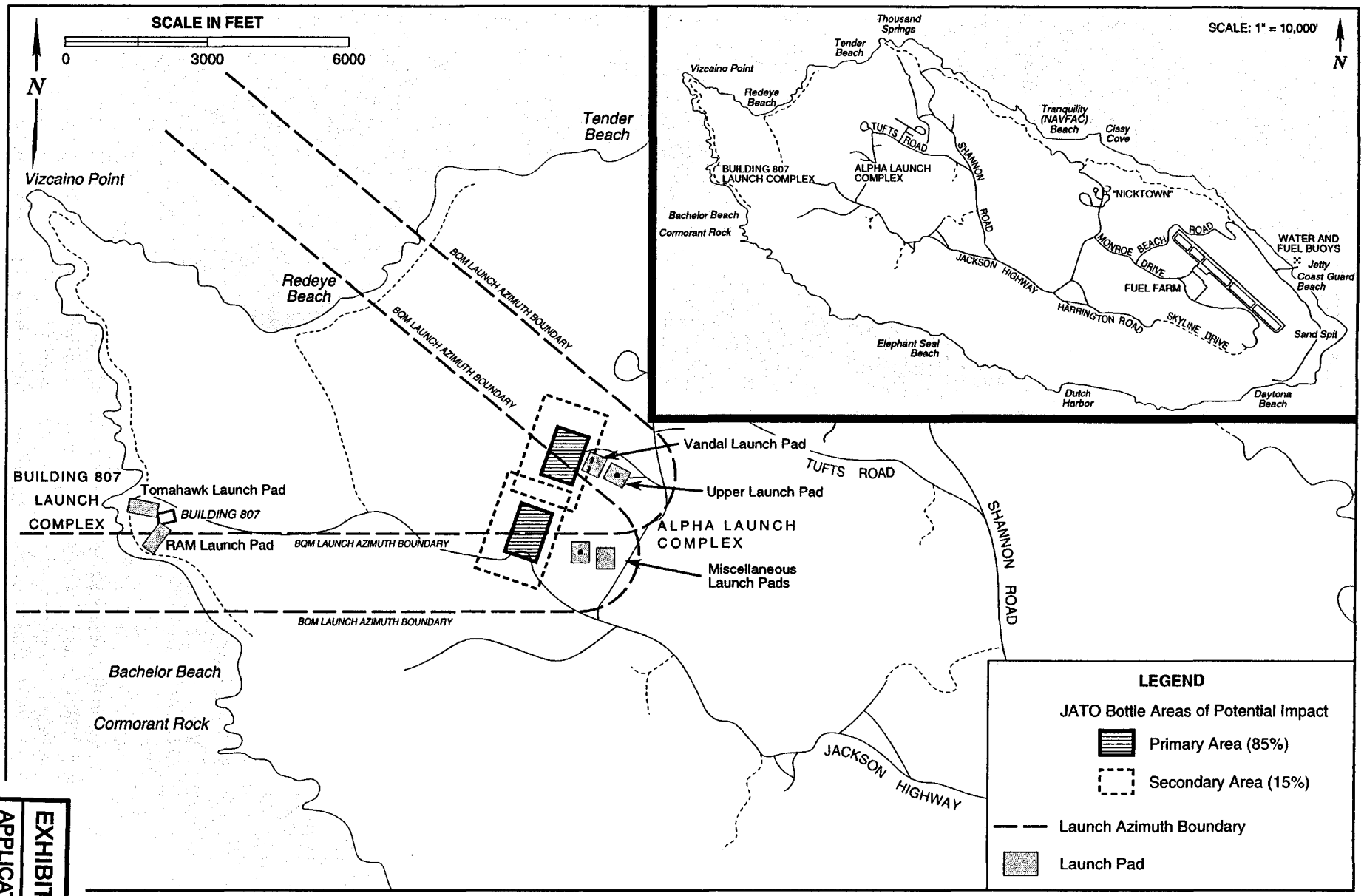


Figure 3.0-9
BQM Target Launch Site at San Nicolas Island

EXHIBIT NO. 6
APPLICATION NO. CD-2-01

Special Interest Avian Species of San Nicolas Island

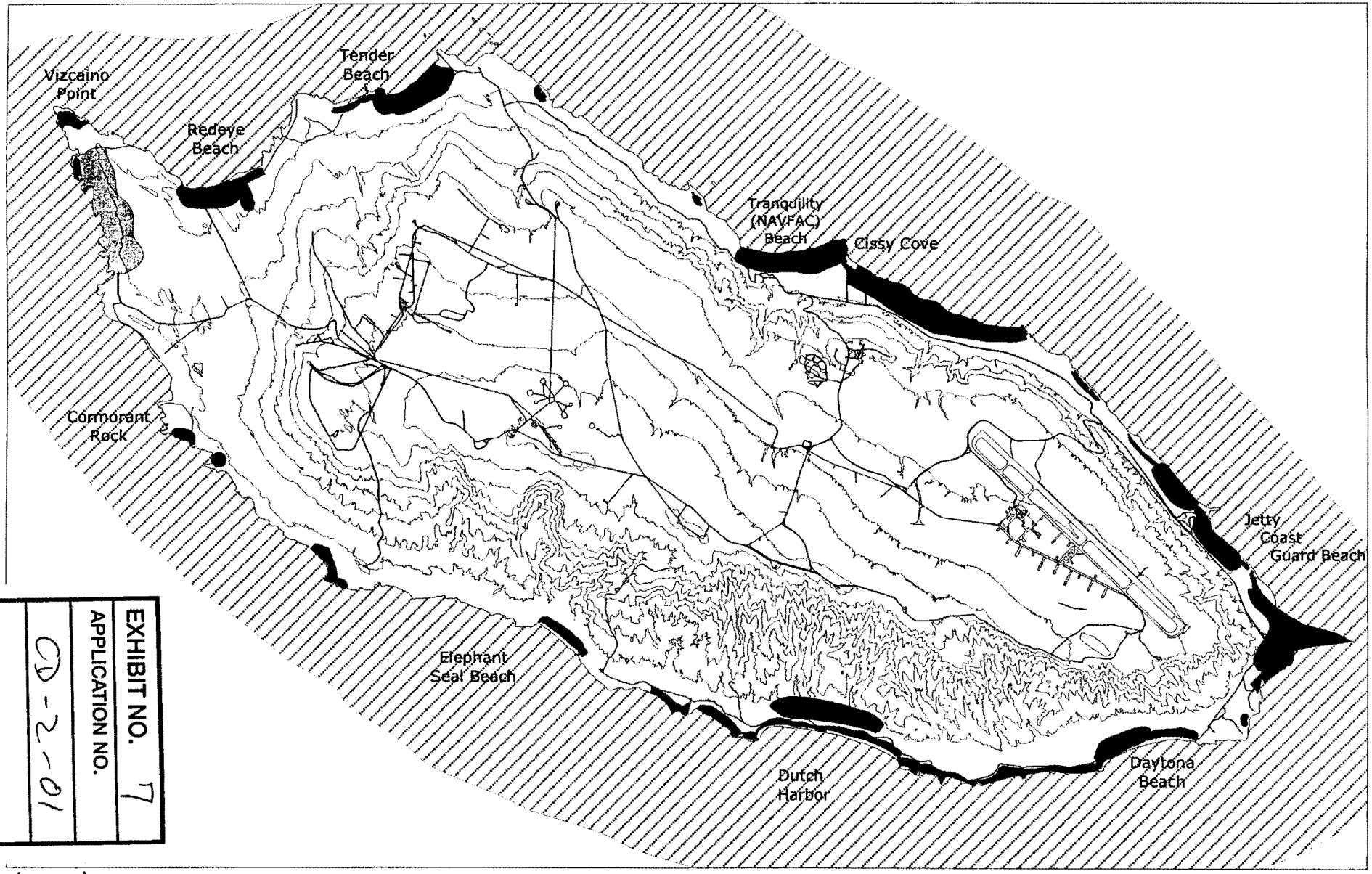


EXHIBIT NO. 7
APPLICATION NO. 9-2-01

Legend

- Brown Pelican Day Feeding Area
- Brown Pelican Day Roosting Area
- Designated Snowy Plover Critical Habitat
- Brandt's Cormorant Nesting Area
- Western Gull Nesting Area
- 100' Contour Lines

N
W E
S

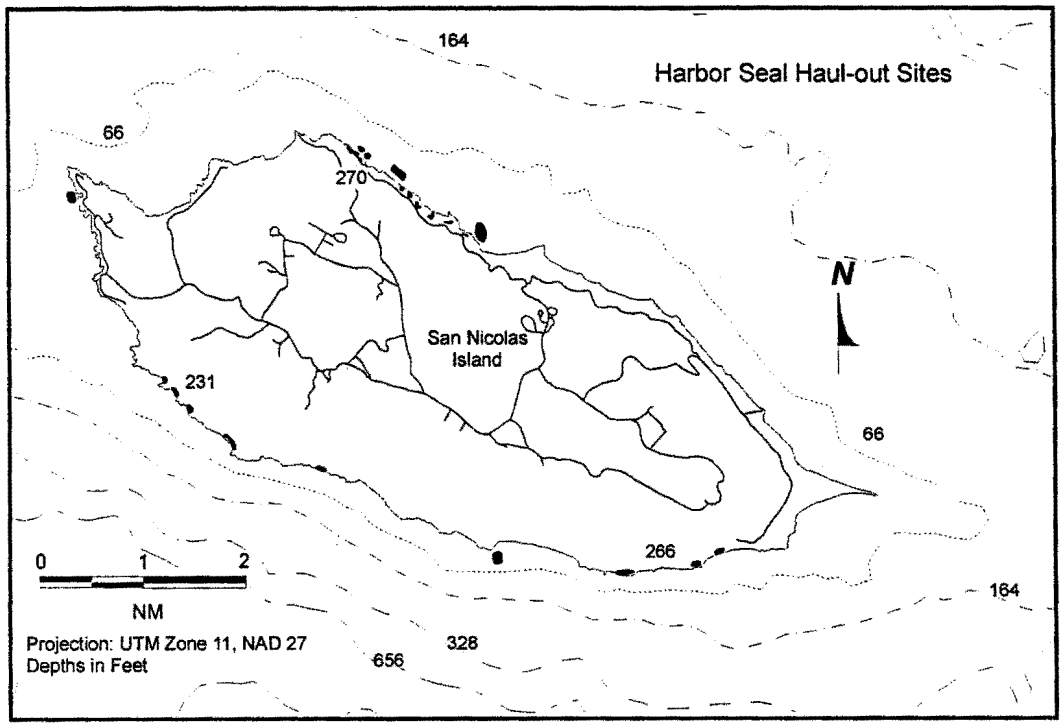
3000 0 3000 Meters

2 0 2 Miles

Projection: Universal Transverse Mercator, Zone 11
North American Datum of 1927, Scale 1:60,000

Source: Brown Pelican & Snowy Plover data provided by S. Schwartz (Snowy Plover updated based on 12-7-99 Federal Register Notice) (NAWS Point Mugu 1997). All other species data provided on 8 1/2x11 hand-drawn maps by Environmental Division personnel, SNI.

Figure 3.8-7



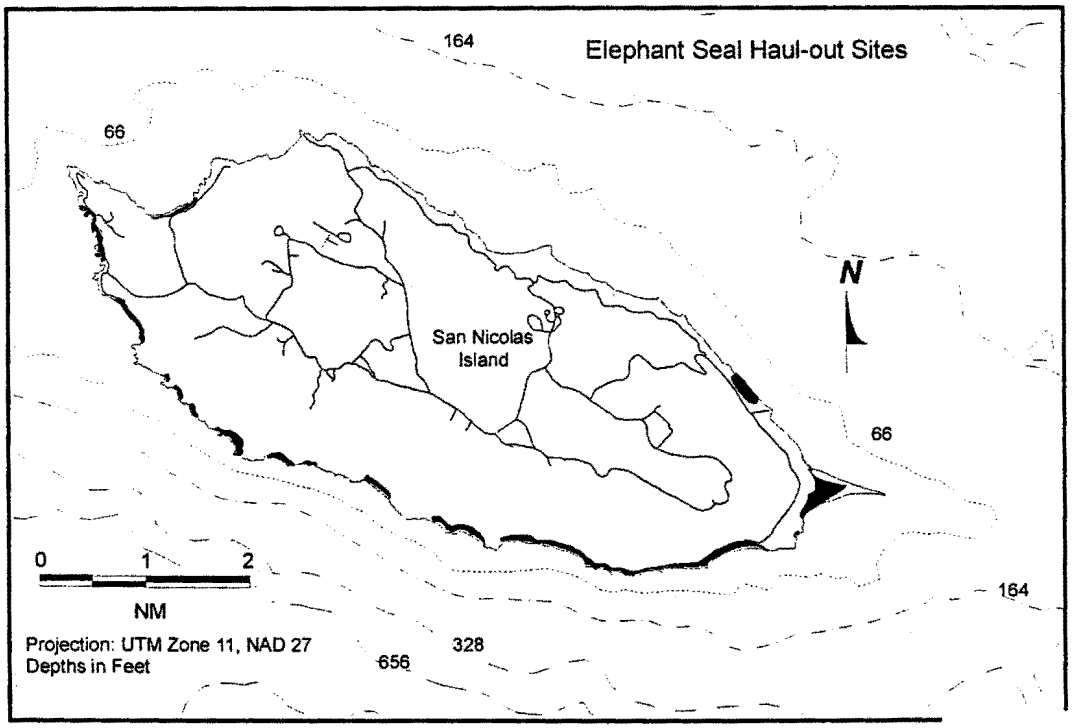


Figure 3.7-21
Map of San Nicolas Island showing areas used by northern elephant se

EXHIBIT NO. 9
APPLICATION NO.
CD-2-01

California Sea Lion

California sea lions do not have a special status. The San Nicolas Island population has increased at 21.4 percent per year since 1983. The 1995 size was 78,000 to 88,000 animals of all ages and sexes, which was about 47 percent of the U.S. population. About half of the San Nicolas Island population may be hauled out on land at one time during the peak of the breeding season (refer to Section 3.7.4.3 of the "Marine Mammal Technical Report" [NAWCWPNS Point Mugu 1998e]). Sea lions have recently occupied new areas on San Nicolas Island and they now occur along most of the southern shore (Figure 3.7-22). There is no evidence that numbers have reached the carrying capacity of the available habitat.

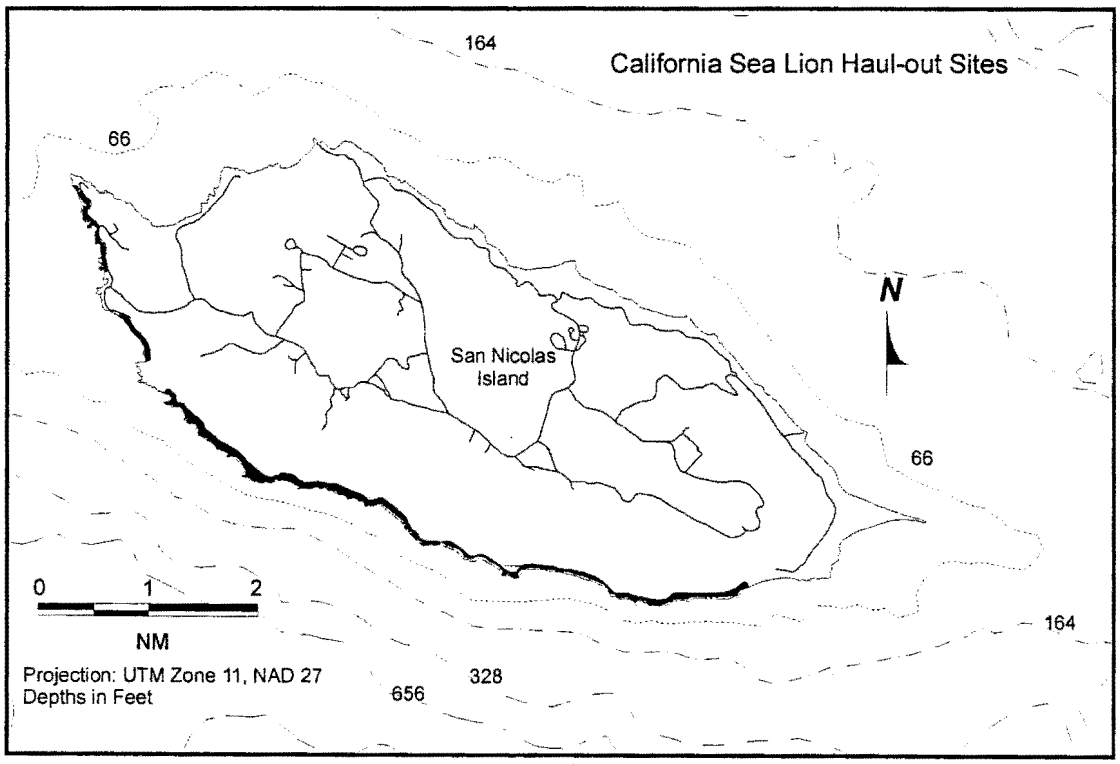


Figure 3.7-22
Map of San Nicolas Island showing areas used by California sea lions.

Guadalupe Fur Seal

Eighteen sightings of Guadalupe fur seals were made on San Nicolas Island between 1949 and 1986. Most sightings were either juveniles of undetermined sex or adult males. One male defended a territory among breeding California sea lions each year from 1981 to 1986. Observations suggest that Guadalupe fur seals are capable of obtaining space for breeding among California sea lions, and that they may successfully recolonize the Channel Islands once the species is abundant enough to establish a breeding population (Stewart et al. 1987).

EXHIBIT NO. 9
APPLICATION NO.
CD-2-01

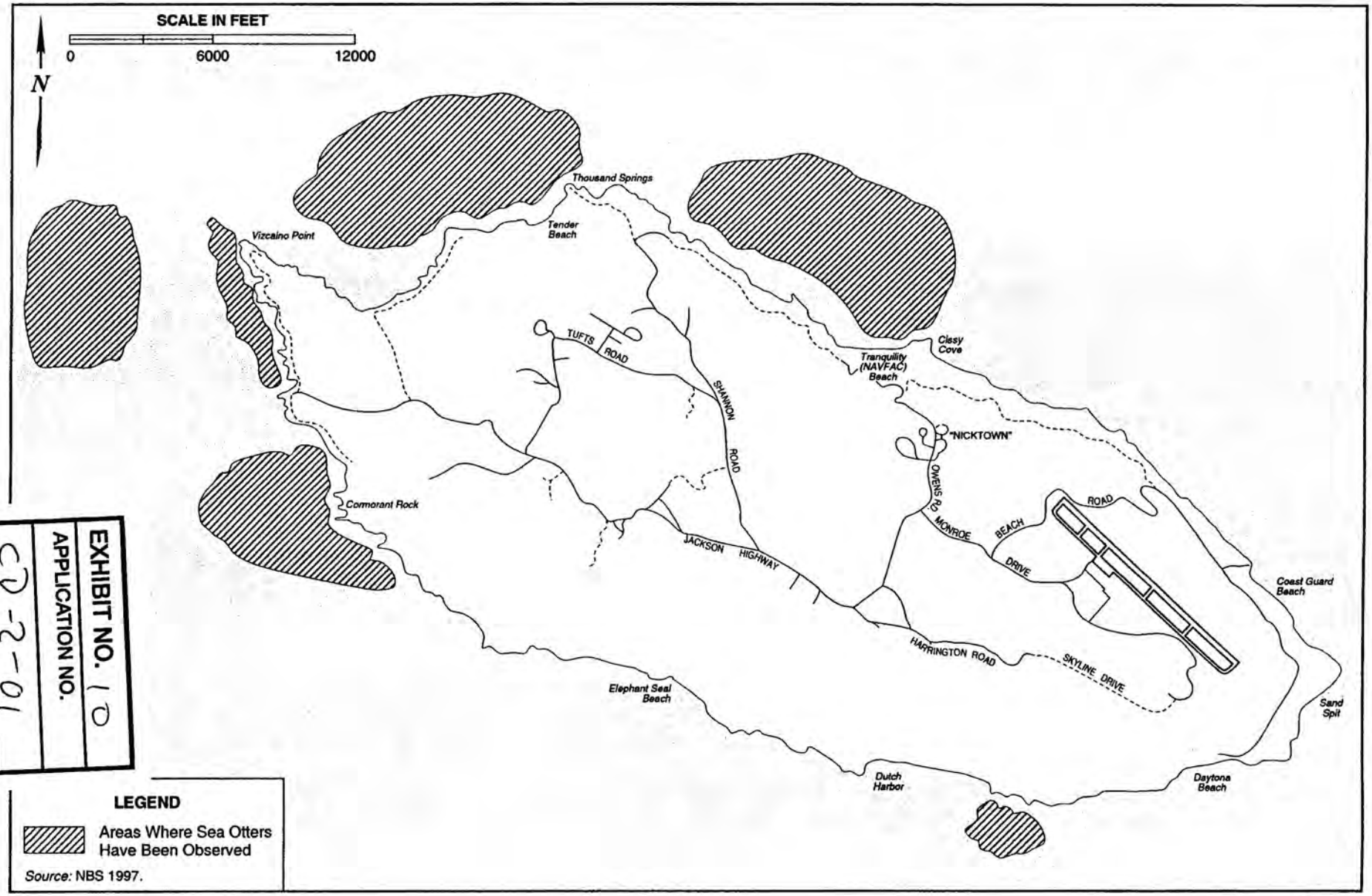


EXHIBIT NO. 10
APPLICATION NO.
CD-2-01

Figure 3.7-23
Sea Otter Distribution at San Nicolas Island

NAS Point Mugu

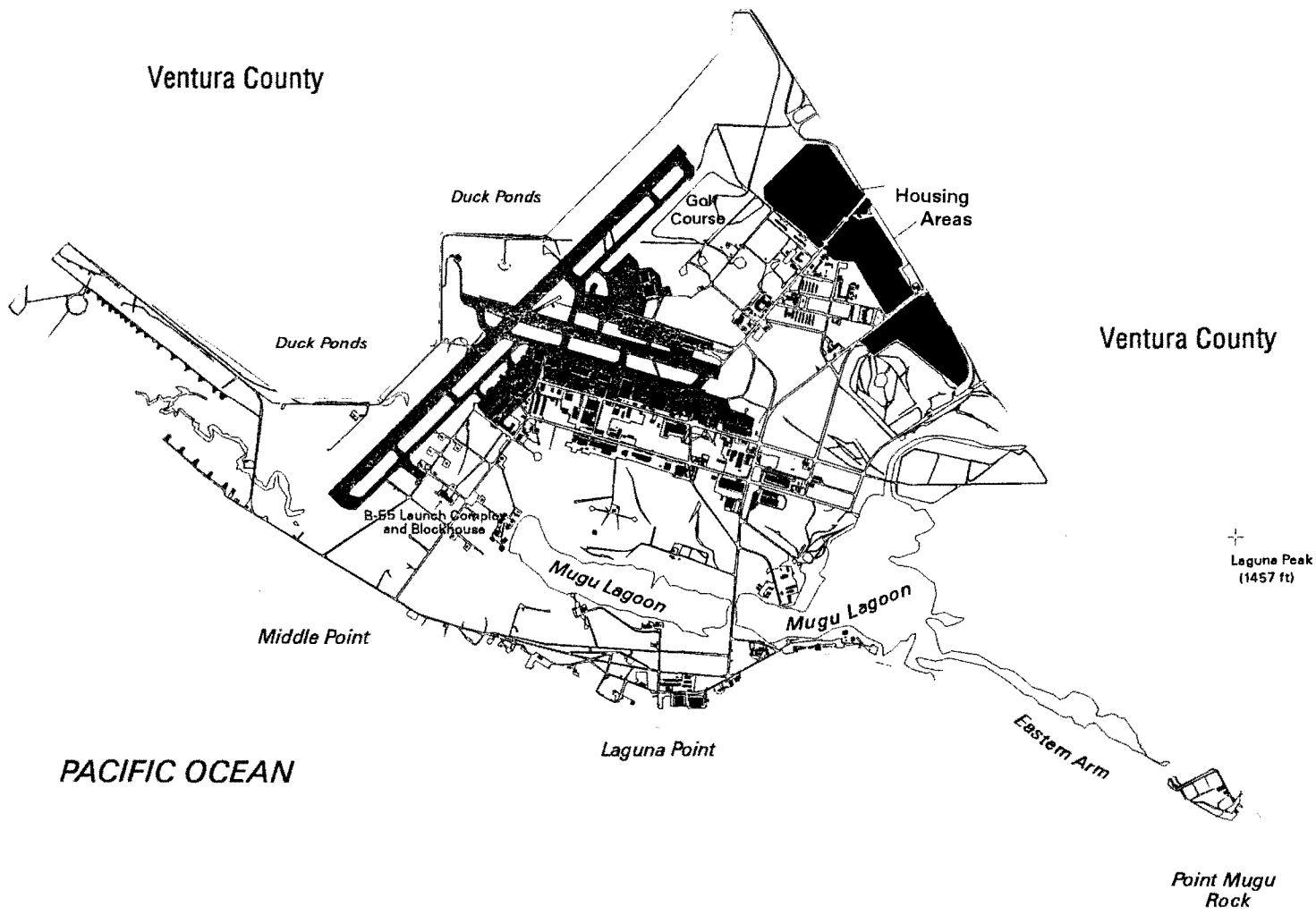


EXHIBIT NO. 11
APPLICATION NO. CD-2-01

Legend

- NAS Point Mugu
- Surface Water
- Roads
- Airfield
- Structures

N
W E
S

1 0 1
statute miles

Projection: Universal Transverse Mercator, Zone 11
North American Datum of 1927
Scale shown is 1:45,000
Source: NAWCWPNS.

nasptmugu.aml

Figure 3.0-1

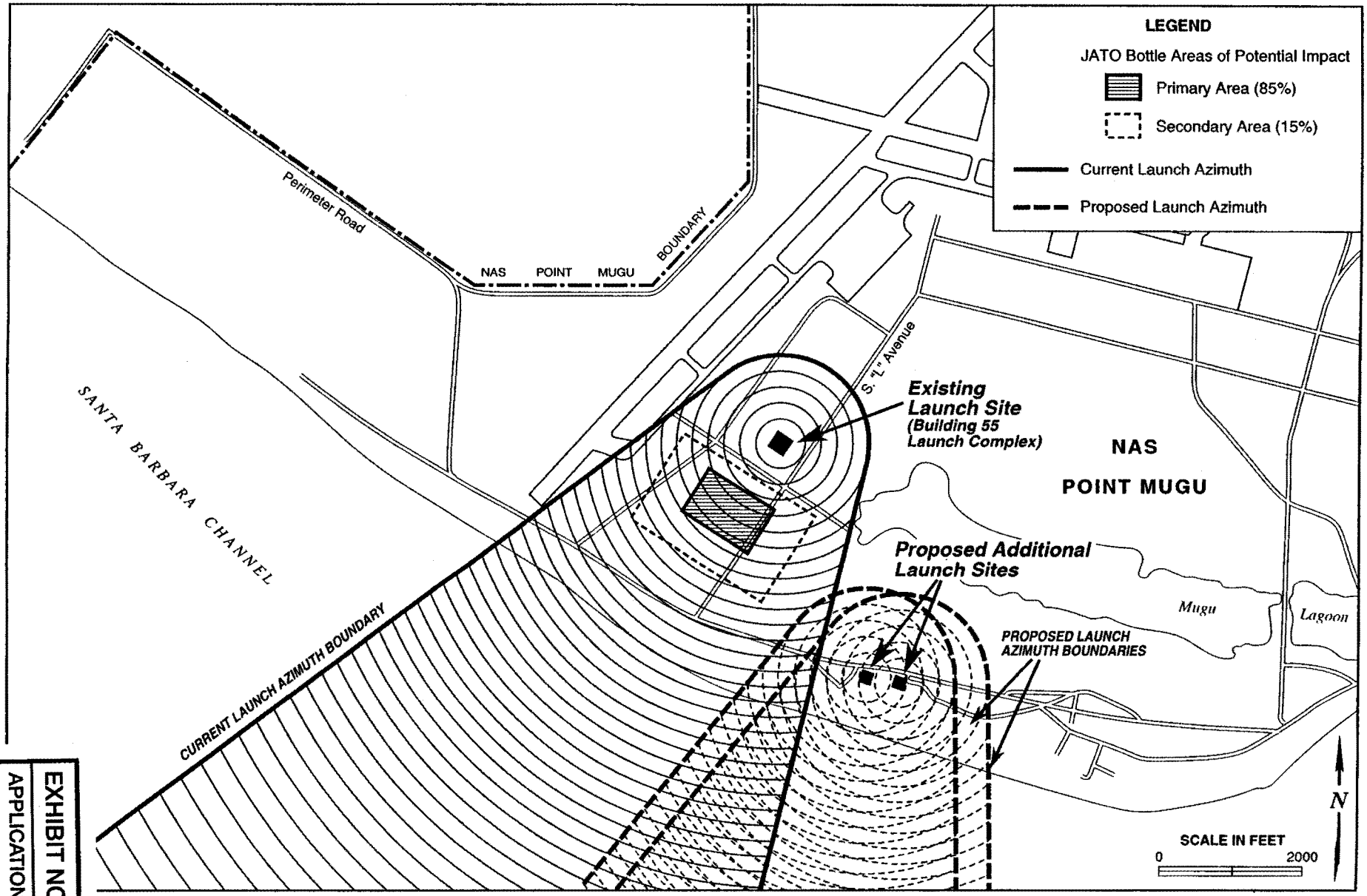
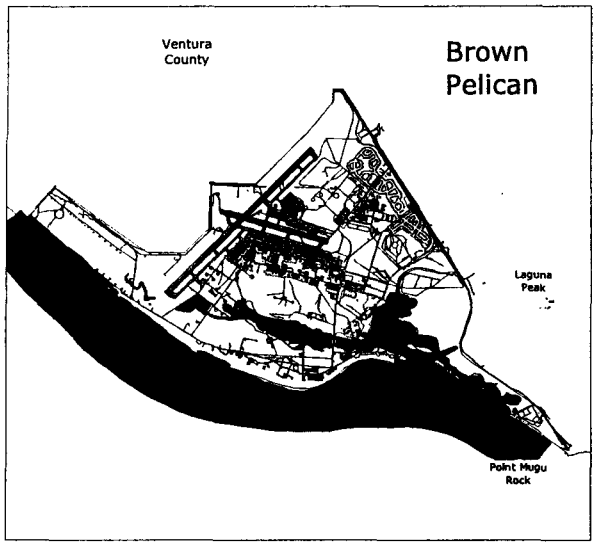
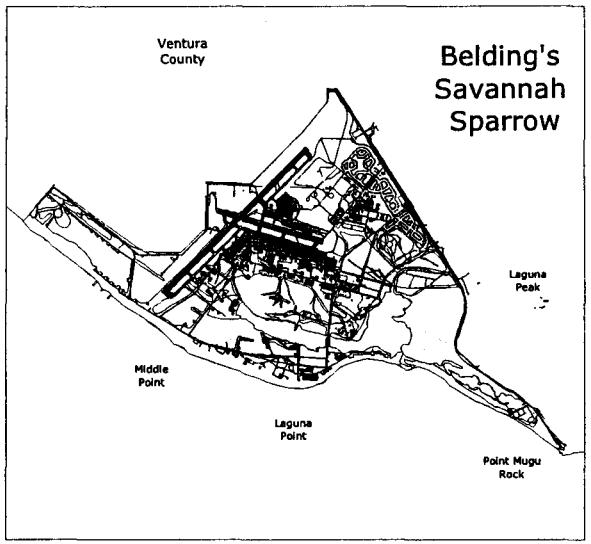


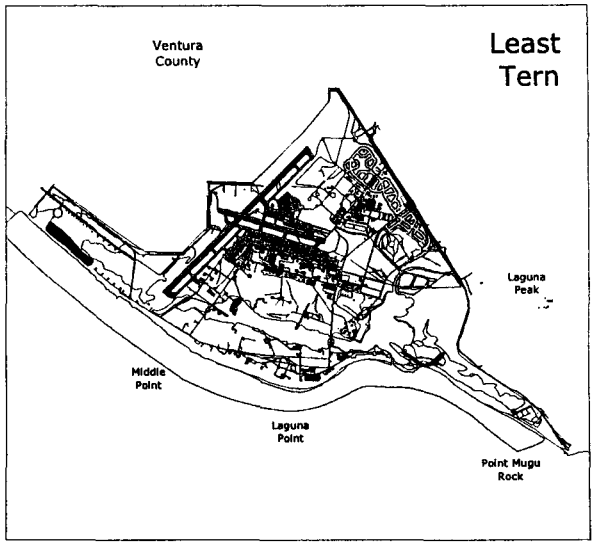
Figure 2-3a
Enhanced Capabilities: Proposed Launch Sites at NAS Point Mugu

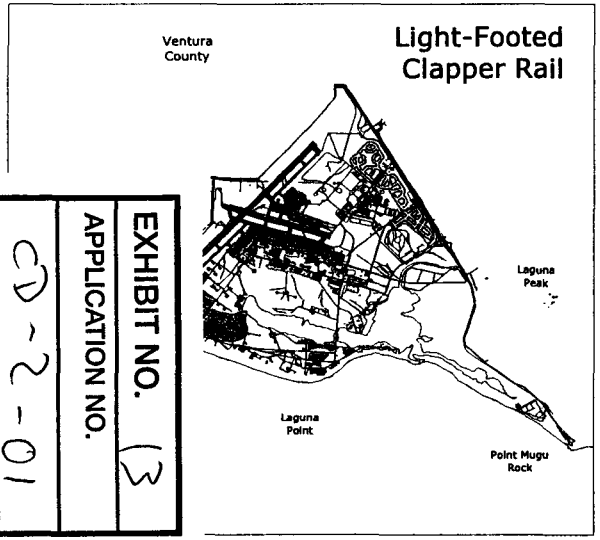
EXHIBIT NO. 12
APPLICATION NO. CD-2-01

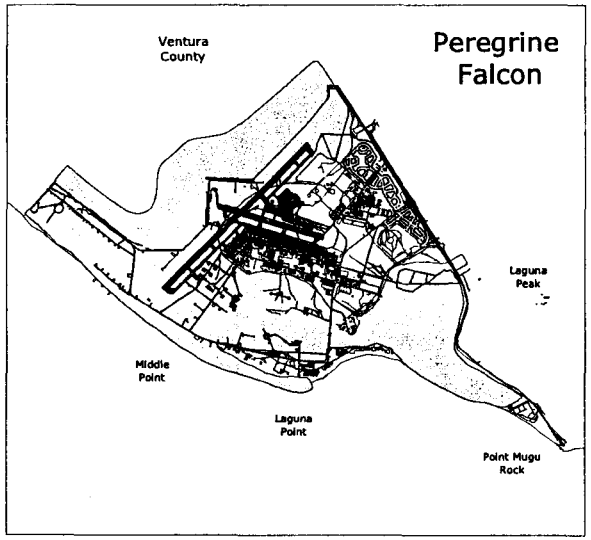
Sensitive Avian Species at NAS Point Mugu











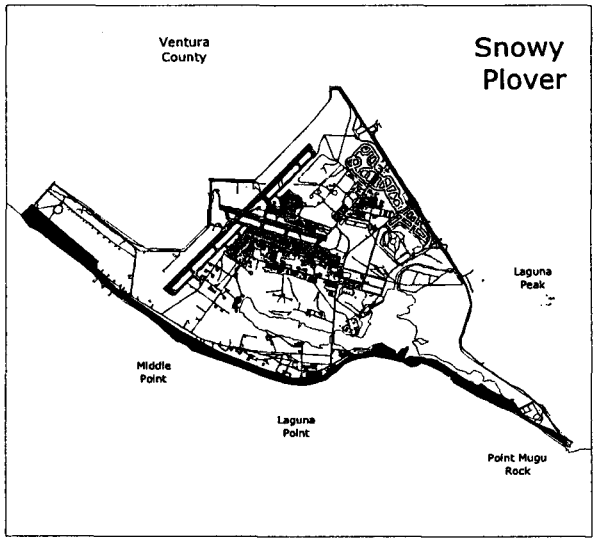


EXHIBIT NO. 13
APPLICATION NO.
CD-2-01

Legend

- Brown Pelican Feeding Areas
- Brown Pelican Roosting Areas
- Belding's Savannah Sparrow Areas
- Least Tern Breeding Areas
- Least Tern Foraging Areas
- Light-Footed Clapper Rail Habitat
- Peregrine Falcon Feeding Areas
- Designated Snowy Plover Critical Habitat

N
W E
S

3000 0 3000 Meters

2 0 2 Statute Miles

Projection: Universal Transverse Mercator, Zone 11
North American Datum of 1927
Source: Geographical Information System-
NAWS Point Mugu 1997.

Figure
3.8-3

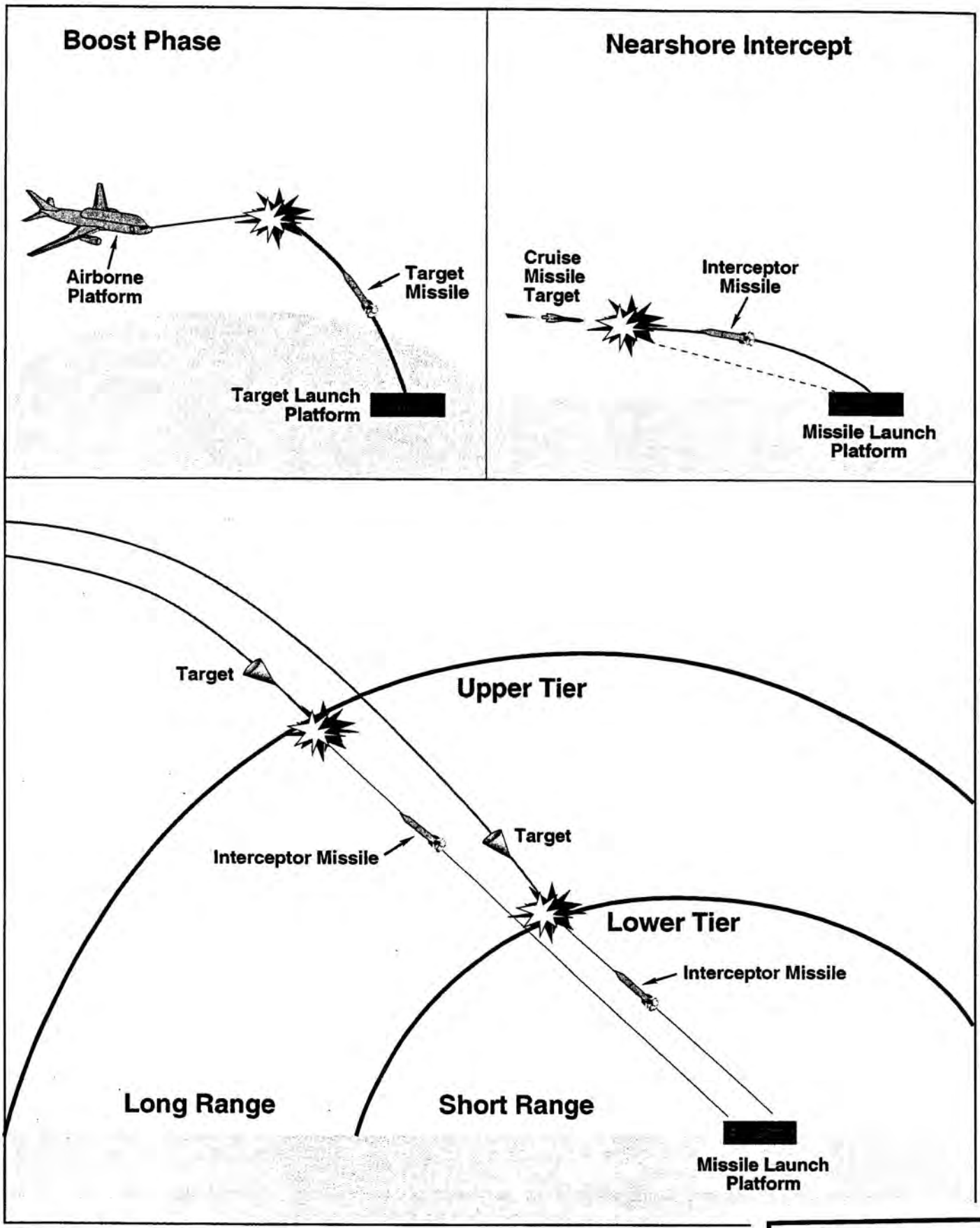
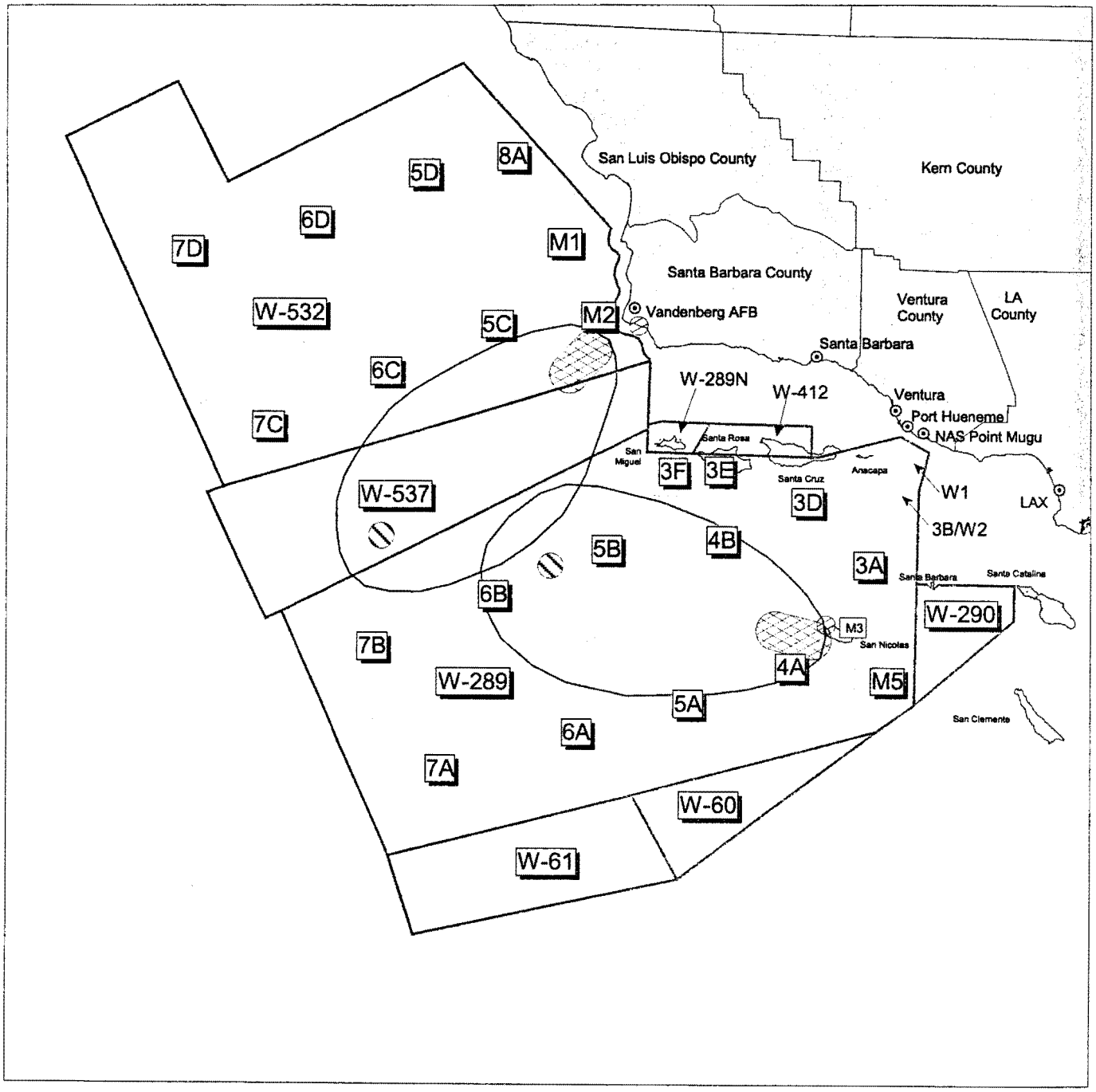


Figure 2-1
Proposed Representative Testing Scenarios

EXHIBIT NO. 14
APPLICATION NO.
CD-2-01

TMD Element
A) Representative Boost Phase Intercept Scenarios



Legend

- Interceptor Launch Area
- Point Mugu Sea Range
- Target Launch Area
- Debris Intercept Area
- Hazard Area

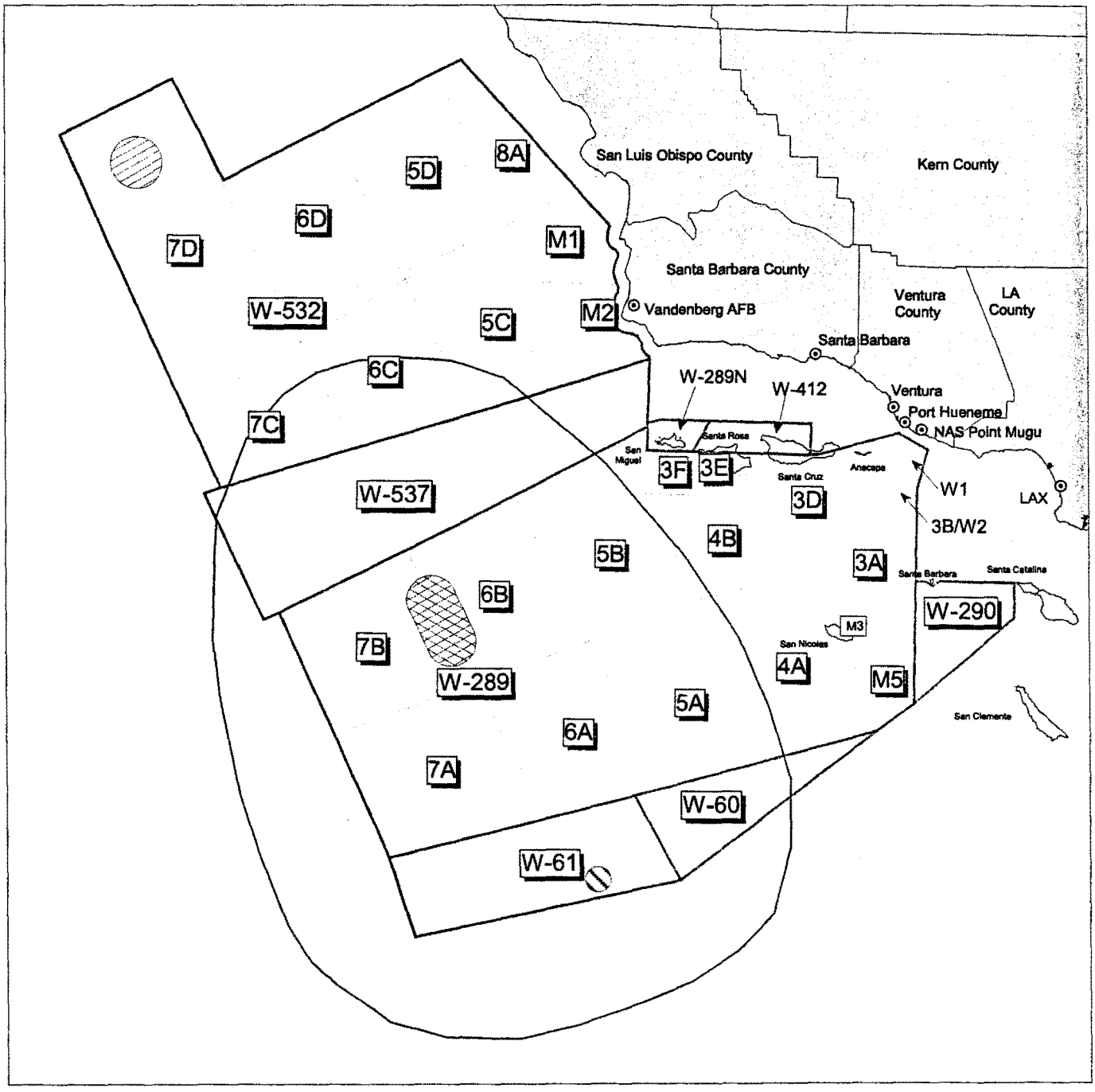
N W E S

40 0 40 Nautical Miles

Projection: Universal Transverse Mercator
North American Datum 1927

EXHIBIT NO. 15
APPLICATION NO.
CD-2-01

TMD Element
B) Representative Upper Tier Scenario



Legend

- Interceptor Launch Area
- Point Mugu Sea Range
- Target Launch Area
- Debris Intercept Area
- Hazard Area

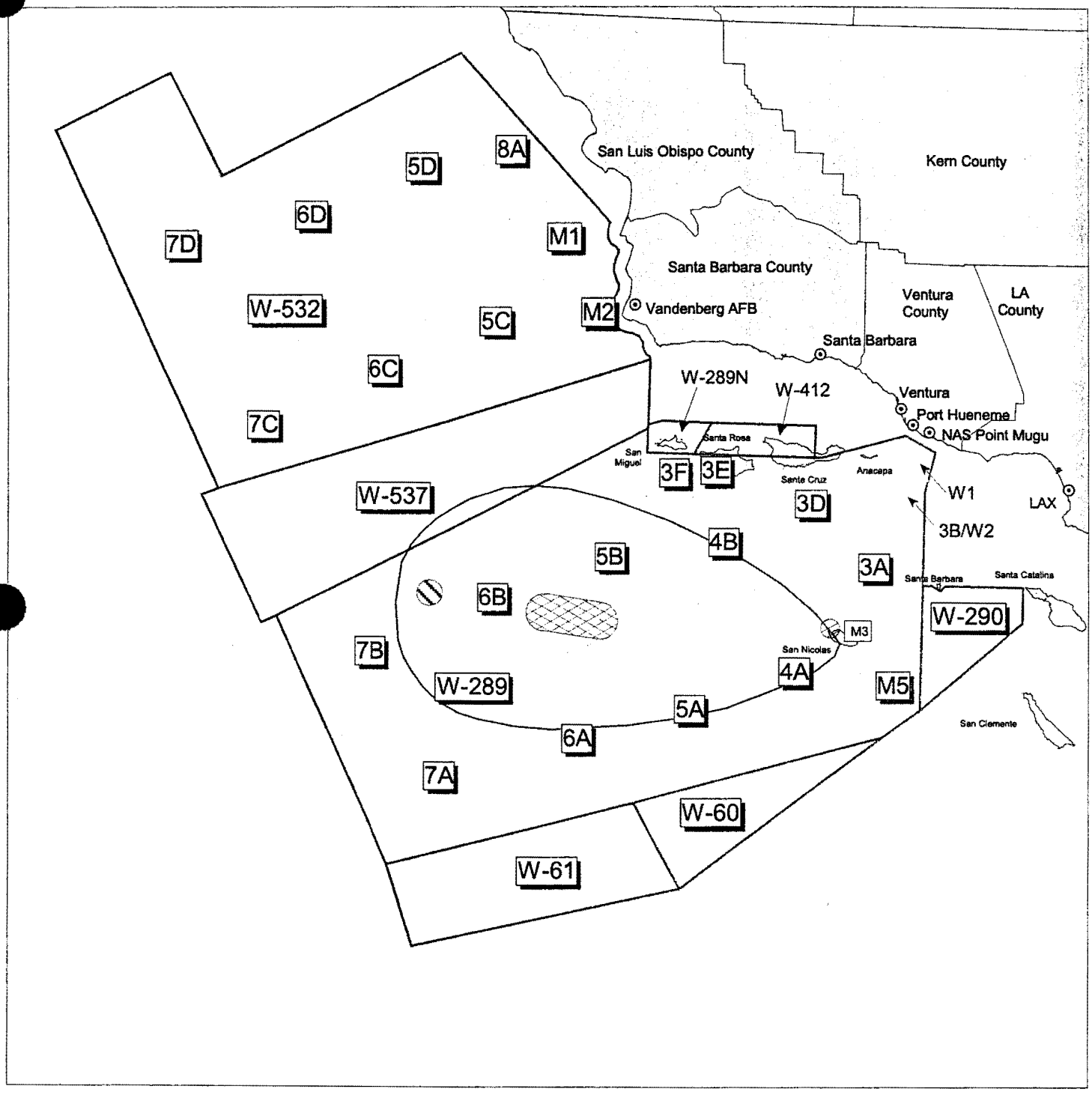
N W E S

40 0 40 Nautical Miles

Projection: Universal Transverse Mercator

EXHIBIT NO. 16
APPLICATION NO.
CD-2-01

TMD Element
C) Representative Lower Tier Scenario



Legend

- Interceptor Launch Area
- Point Mugu Sea Range
- Target Launch Area
- Debris Intercept Area
- Hazard Area

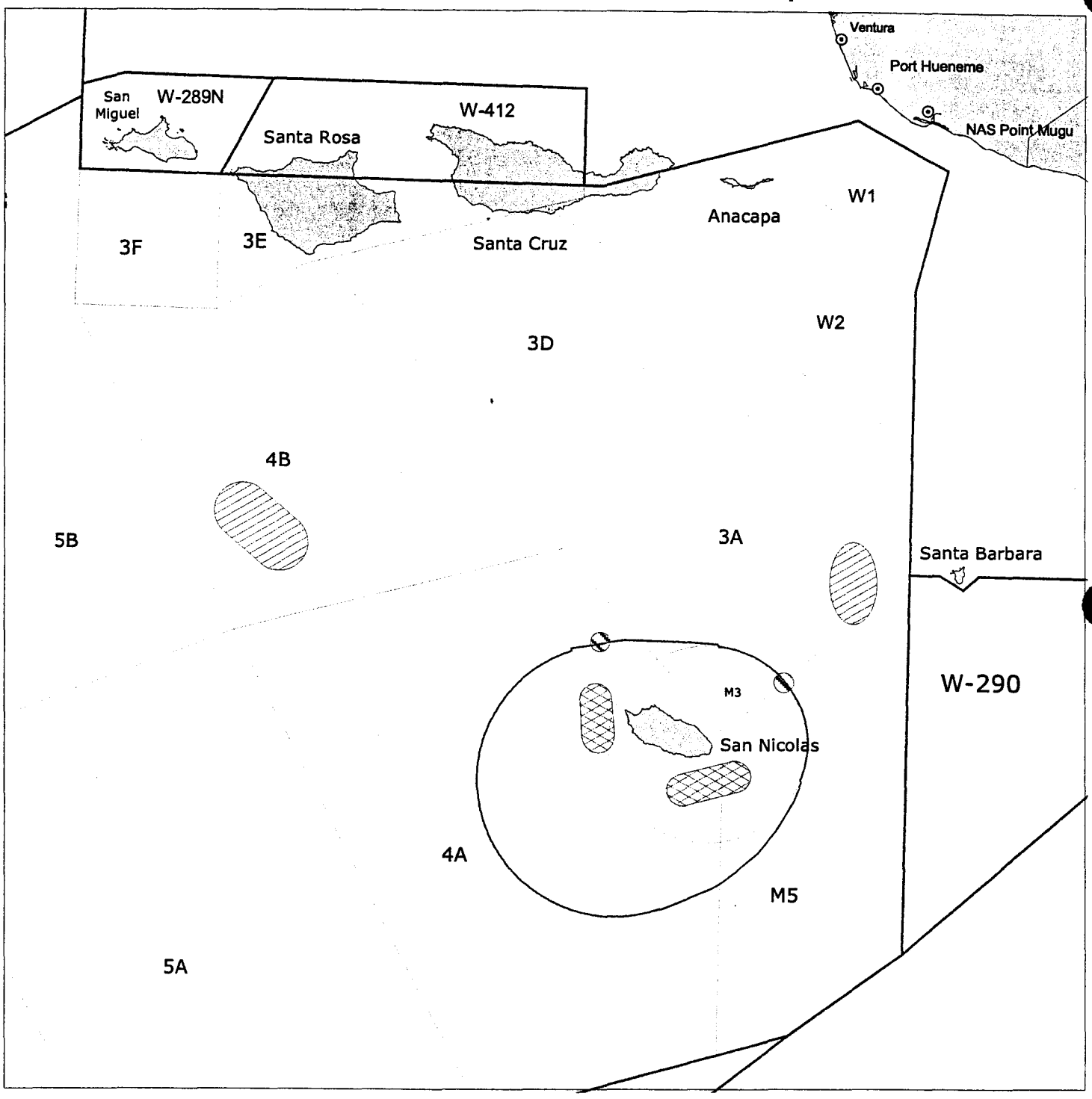
N
W E
S

40 0 40 Nautical Miles

Projection: Universal Transverse Mercator
N

EXHIBIT NO. 17
APPLICATION NO.
CD-2-01

TMD Element
D) Representative Nearshore Intercept Scenarios



Legend

- Interceptor Launch Area
- Point Mugu Sea Range
- Target Launch Area
- Debris Intercept Area
- Hazard Area

Note : Debris pattern will always be at least 1 NM offshore.

N W E S

10 0 10 Nautical Miles

Projec

EXHIBIT NO. 18

APPLICATION NO.

CD-2-01

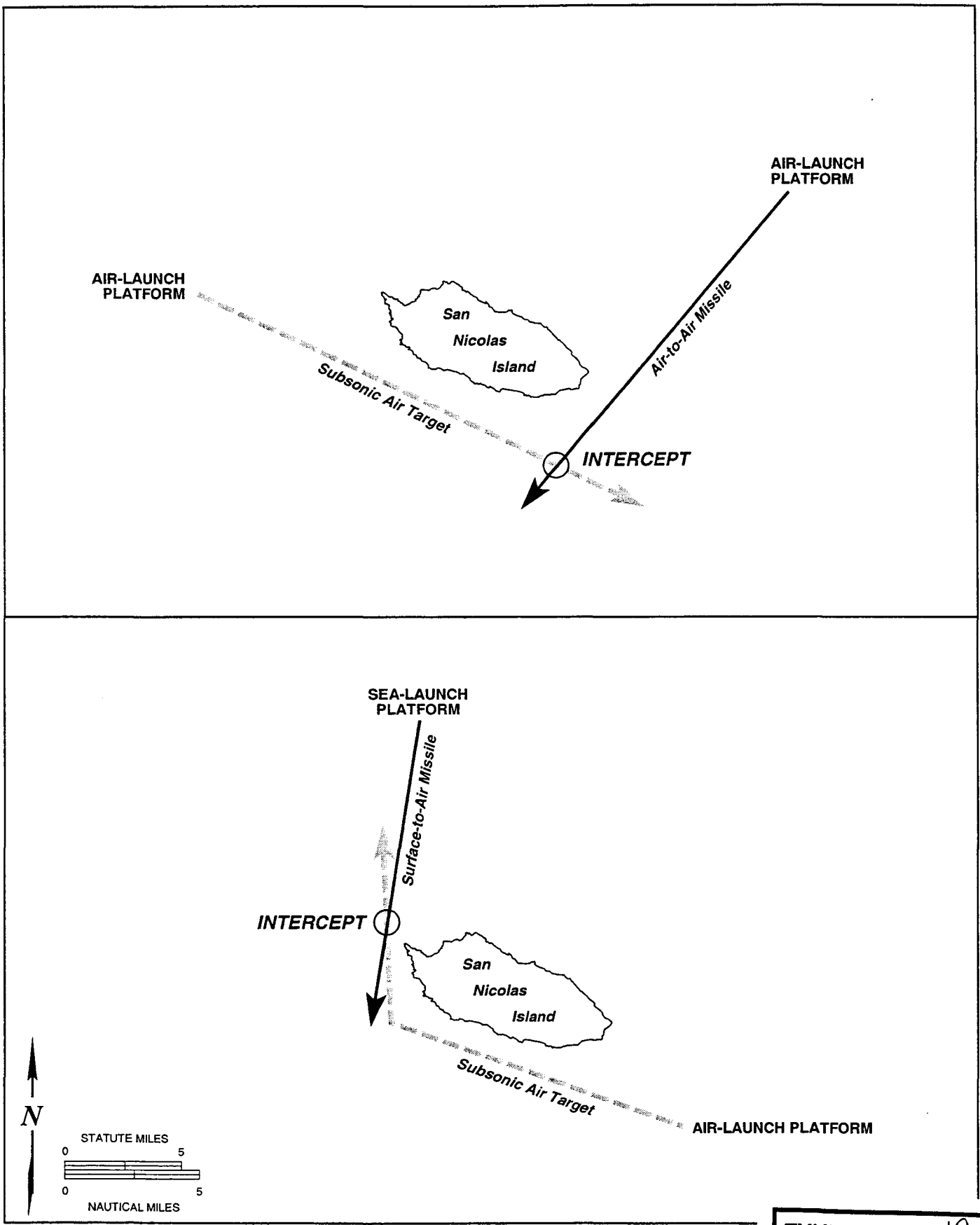


Figure 2-2e
Proposed Representative Nearshore Intercept Geometry at San Nicolas Island

EXHIBIT NO. 19
APPLICATION NO.
CD-2-01

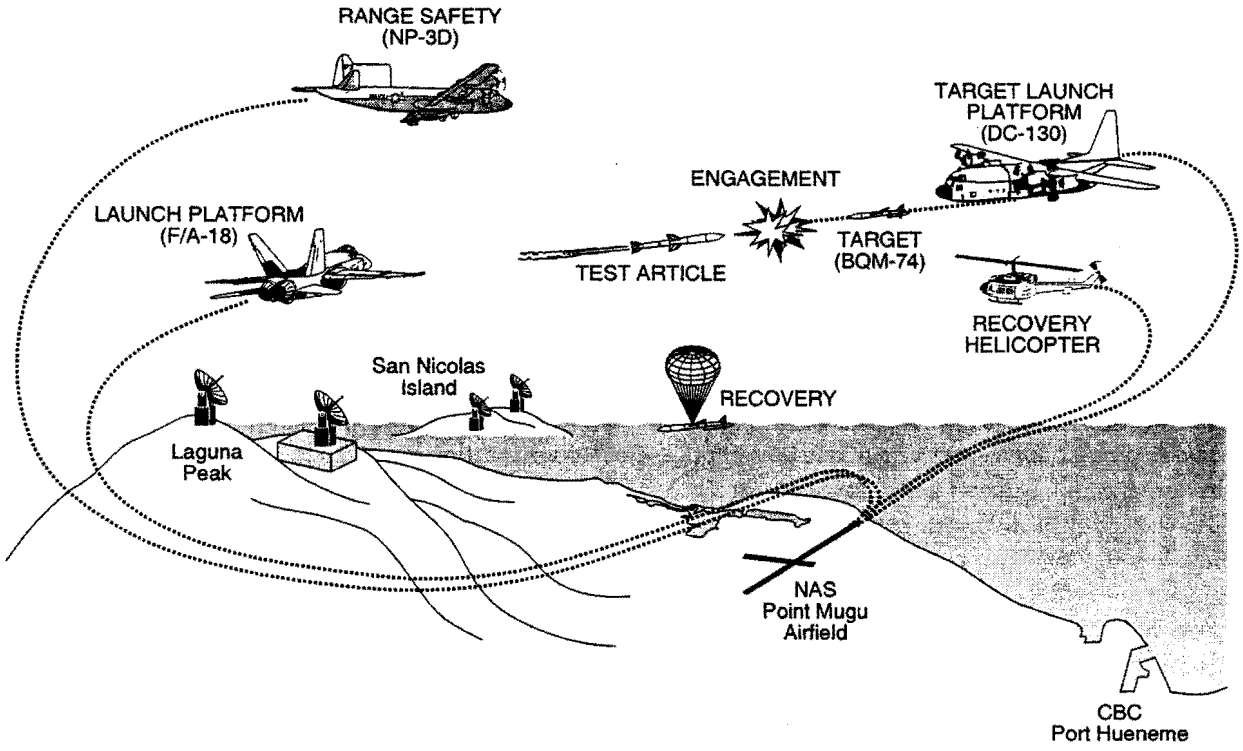


Figure 3.0-12
Representative Air-to-Air Scenario

aircraft and surface traffic. Prior to any hazardous activity, the projected impact areas are surveyed by Range Safety aircraft. Each missile has a safety hazard pattern, which is the surface area that could be endangered by the missile if it does not follow its prescribed flight path. Safety hazard patterns for selected Navy missiles are shown in Appendix B. The debris pattern for a given test is a smaller subset of the safety hazard pattern and is located within these boundaries. If non-participating ships or aircraft are in the impact area, these individuals are warned of the impending hazard and asked to leave. If the area cannot be cleared, the tests or training events are delayed until the area is clear or the event is moved to a clear area. Prior to any live firing of missiles or ordnance, range safety officials ensure that the range areas are clear of non-participating aircraft or ships (see "Safety" in Section 3.0.2.1-F).

Recovery

Many of the airborne targets used in the air-to-air scenarios are recoverable. As described in Section 3.0.2.1, helicopters and boats are used for recovery operations. Typically, the primary recovery area 10 miles (16 km) south of Anacapa Island (see Figure 3.0-5) would be used to recover airborne targets used in the air-to-air scenarios.

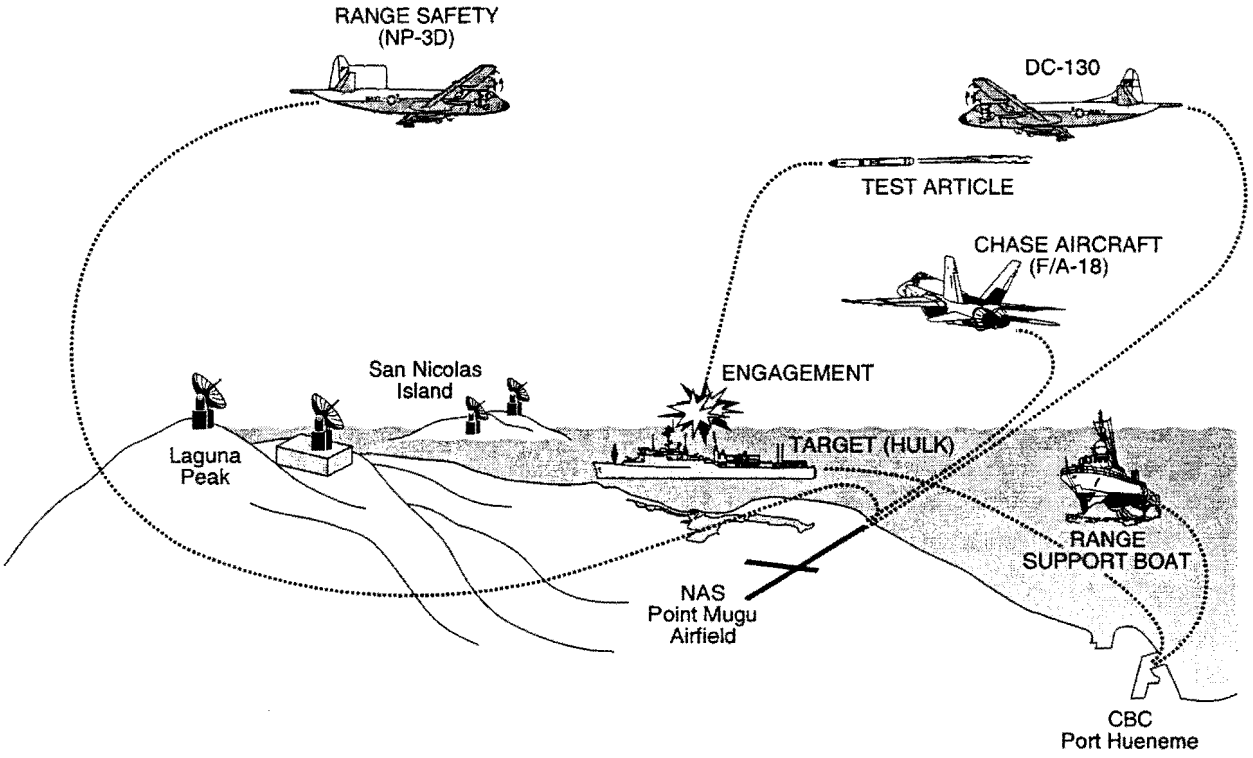


Figure 3.0-13
Representative Air-to-Surface Scenario

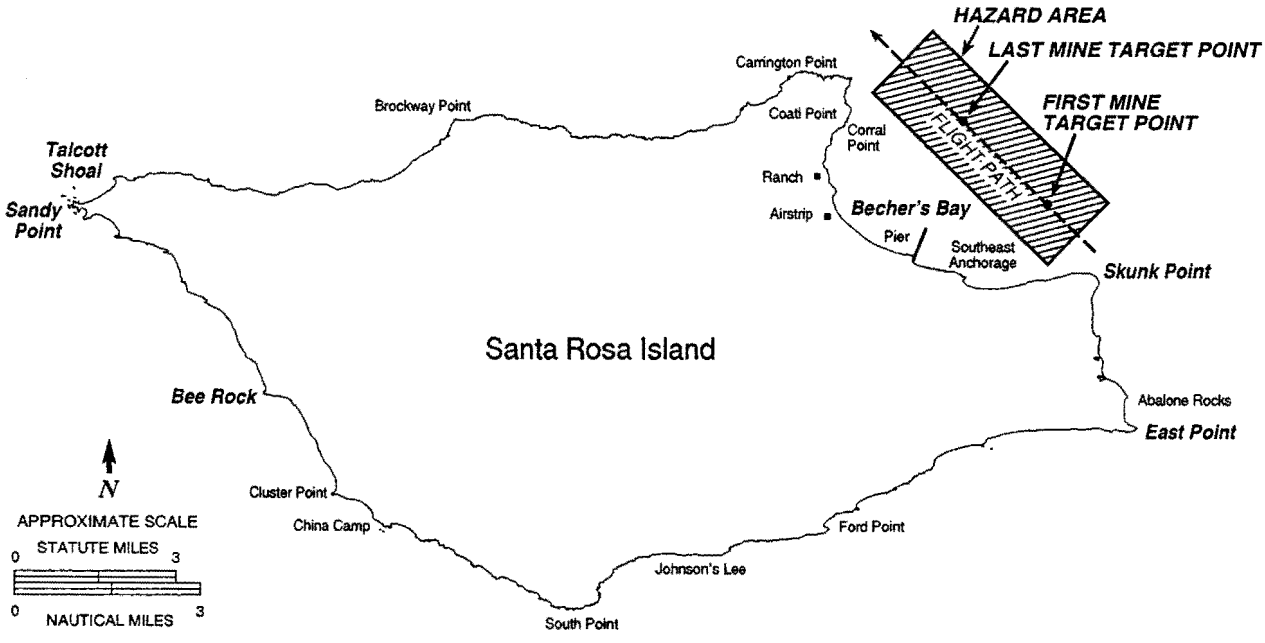


Figure 3.0-14
Inert Mine Shape Drop Zone Near Santa Rosa Island

EXHIBIT NO. 21
APPLICATION NO.
CD-2-01

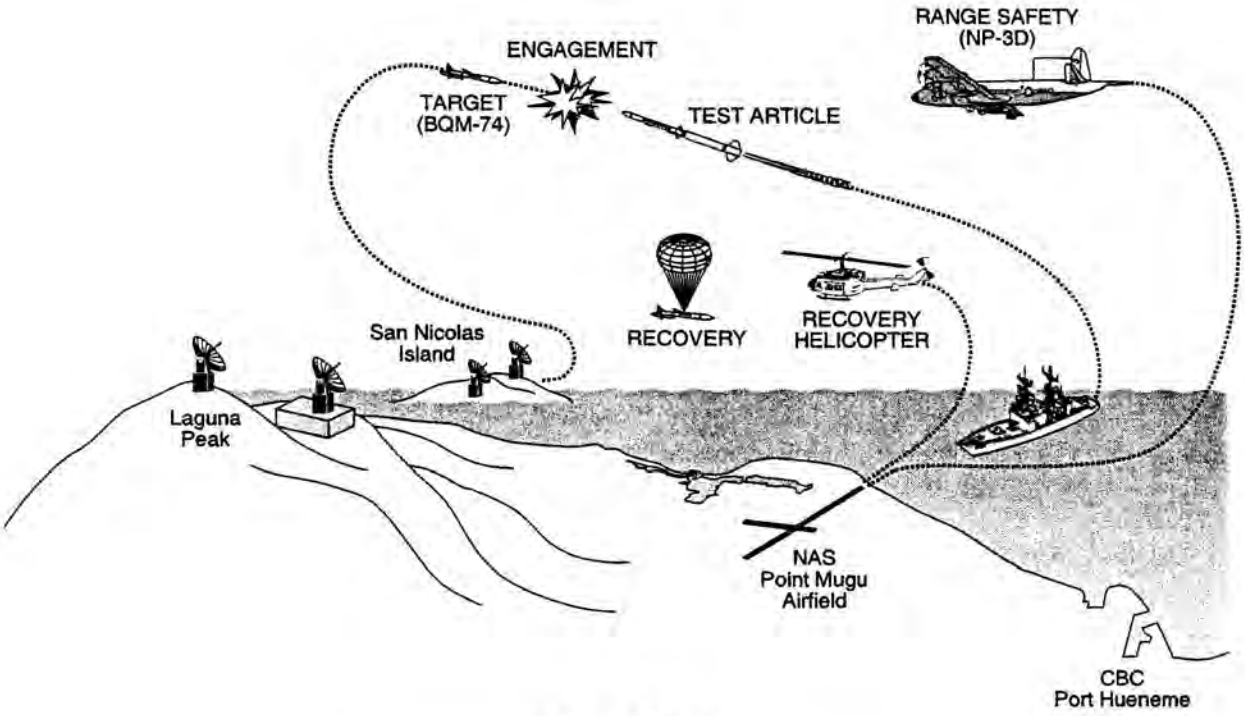


Figure 3.0-15
Representative Surface-to-Air Scenario

Phalanx Close-In Weapon System

Another example of a surface-to-air scenario involves testing a ship's close-in defense systems against high-speed anti-ship missiles. Close-in ship defense systems are considered the last line of defense designed to protect ships from missile attacks. Close-in ship defense systems include a search and track radar, gun, magazine, weapon control unit, and associated electronics, all integrated into a single unit. The gun is hydraulically powered and fires a projectile with a tungsten penetrator. Each firing burst consists of about 200 rounds. The typical missile intercept range is between 2 miles (3 km) and 4 miles (6 km) from the ship. Missile intercept altitudes typically range from about 20 feet (6 m) to 50 feet (15 m) above the water.

The Navy has equipped most ships with close-in defense systems including frigates, destroyers, cruisers, amphibious ships, and aircraft carriers. Testing close-in ship defense systems on the Sea Range involves Navy ships firing the gun against an airborne target. In addition, calibration tests are conducted which do not require the use of targets.

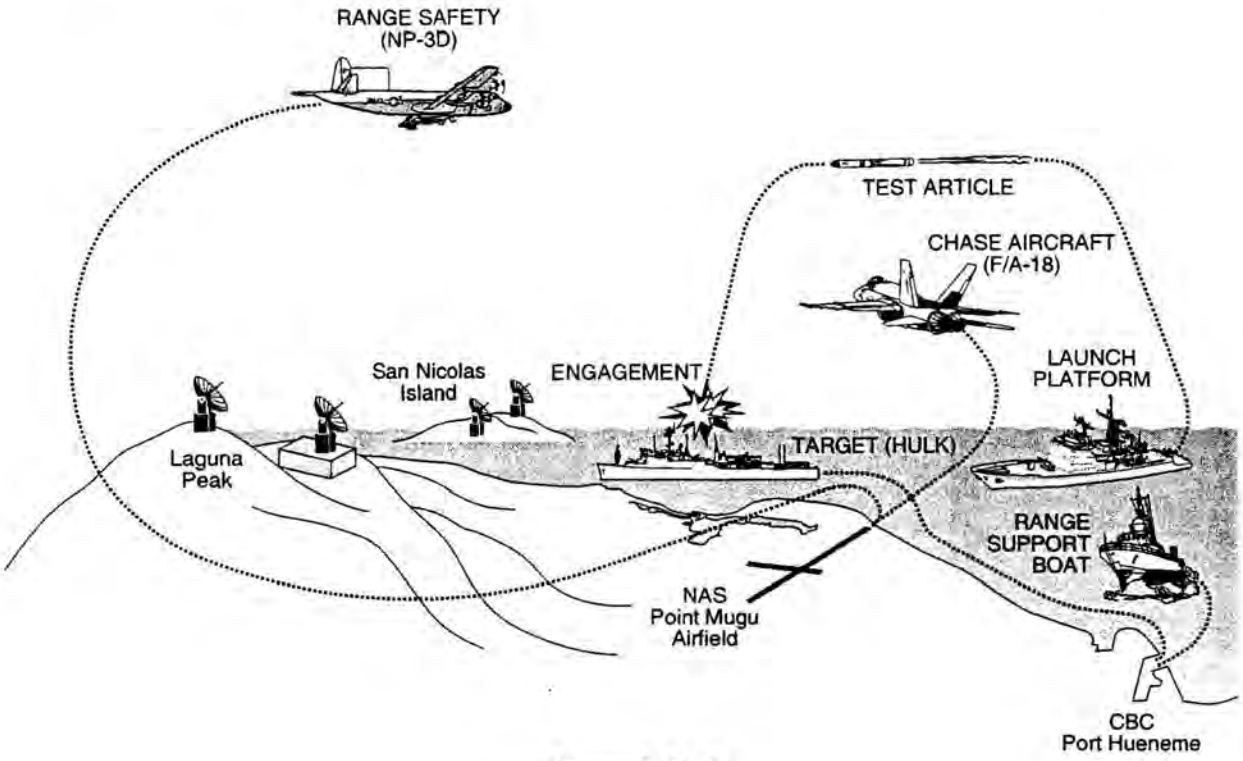


Figure 3.0-16
Representative Surface-to-Surface Scenario

E - Subsurface-to-Surface Tests

Tomahawk Missile – Subsurface-to-Surface

General

The subsurface-to-surface scenario involves testing weapons that support the strike/surface warfare mission. This includes testing a submarine's weapon system to attack a surface or land target. Missiles are fired from a submarine in the Sea Range at a surface target (hulk) on the Sea Range similar to those discussed in the air-to-surface scenario. The air support required from the range to clear the target operational area and provide chase aircraft is identical to the air-to-surface scenario. (See Table 3.0-4 for a summary of the frequency and components of subsurface-to-surface testing, as well as other test scenarios.)

Examples

Figure 3.0-17 displays a representative subsurface-to-surface test scenario for a submarine launching a subsurface-to-surface missile against a surface target. Additional range support involves the chase aircraft, range support boat, and tug required to tow the target into place. Recovery of the surface targets is similar to that performed for air-to-surface tests.

EXHIBIT NO. 23
APPLICATION NO.
CD-2-01

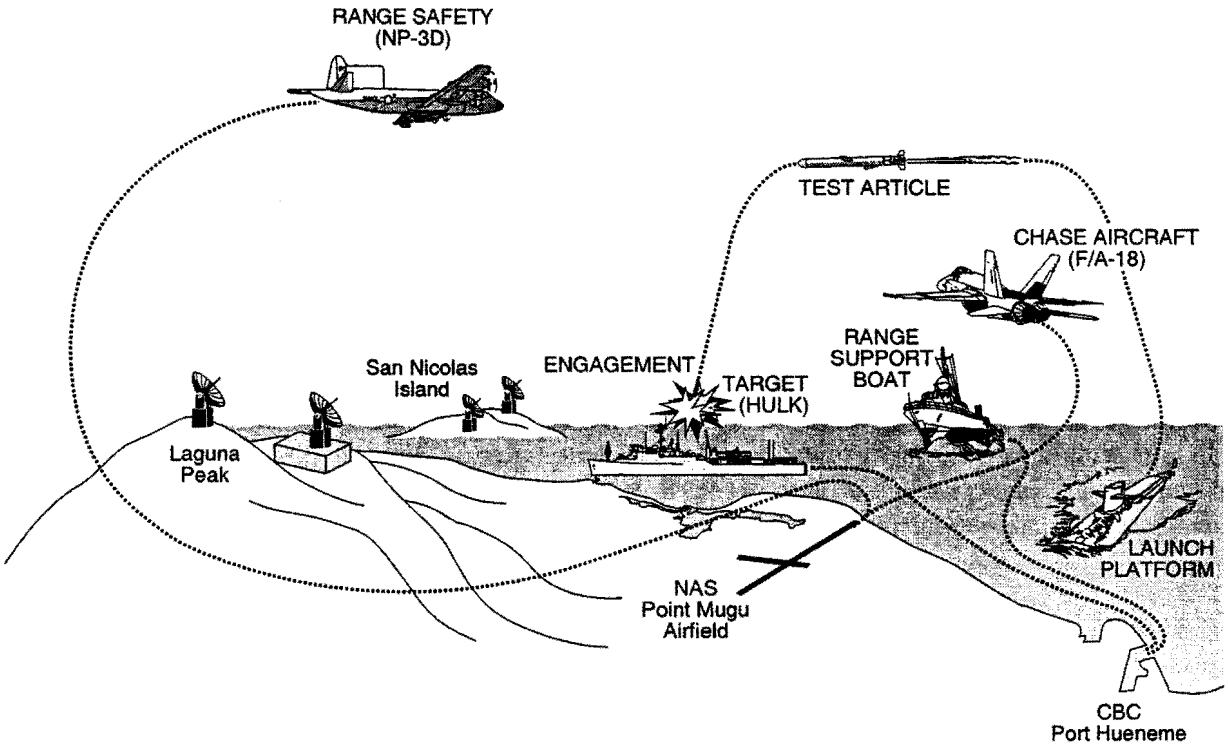


Figure 3.0-17
Representative Subsurface-to-Surface Scenario

Safety

Sea Range safety procedures for this scenario are identical to those described in the air-to-air scenario. In addition, extensive safety precautions are taken when subsurface-to-surface missiles are fired against land targets, including a safety chase aircraft and an FTS.

Recovery

Sea Range target recovery procedures are identical to those described in the air-to-surface scenario.

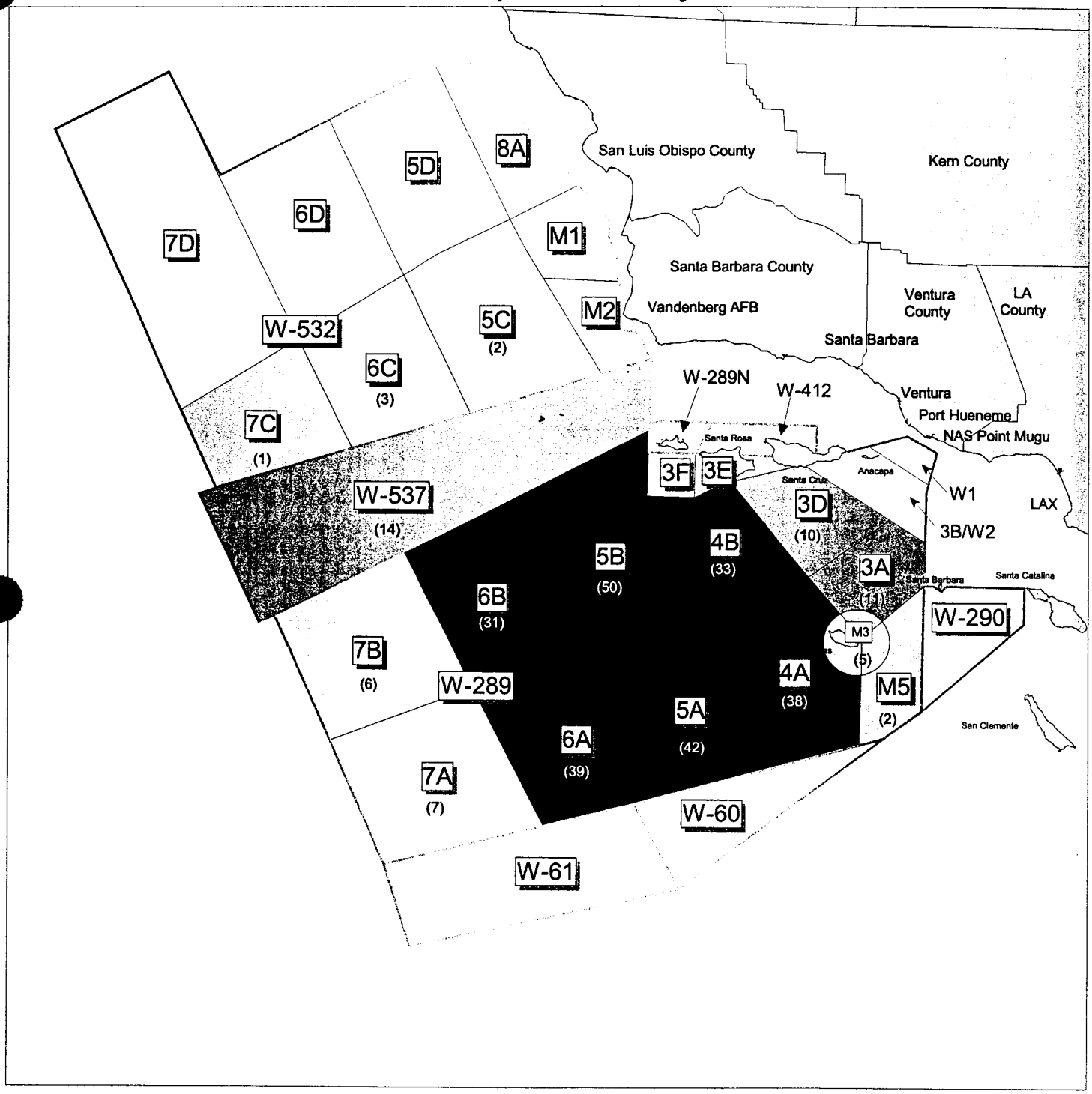
F - Ancillary Operations Systems

Ancillary Operations Systems are those systems which support routine Sea Range operations. These include systems such as radars, communications, lasers, chaff, and flares that are used in conjunction with the five typical test scenarios described in the previous section.

Radar Systems

Surveillance Radars. NAWCWPNS uses a variety of surveillance radars and display and track aircraft and surface vessels on or near the Sea Range. Surveillance radars complete picture of all of the activity within line-of-sight on the range, including both

Baseline Sea Range
Missile Impact Density



Legend

Missile Impact Density

- No Impacts
- Low (1-9 impacts)
- Medium (10-30 impacts)
- High (31-50 impacts)

N W E S

50 0 50 Nautical

Projection: UTM, Zone 11, North American Datum 1927

EXHIBIT NO. 25
APPLICATION NO.
CD-2-01

4.12.3.1 Theater Missile Defense Element – Nearshore Intercept

A - Commercial Shipping

Proposed nearshore intercept testing and training would not significantly affect commercial shipping traffic (refer to Section 4.11, Traffic), so this form of economic activity would not be disrupted. Impacts on commercial shipping would be less than significant.

B - Commercial Fishing

[Exhibit 27]

Proposed nearshore intercept activities would involve eight events per year at San Nicolas Island. To account for potential "scrubbed" or canceled operations, the entire area around the island (i.e., surface restricted areas Alpha, Bravo, and Charlie; refer to Figure 3.14-5) would be cleared of non-participating vessels up to 16 times per year. This would represent a potentially adverse socioeconomic impact on individual commercial fishermen if the closures were to occur during peak fishing periods. While peak fishing periods do not occur daily, they typically occur October through March around San Nicolas Island. About 35 boats are present at San Nicolas Island during the winter fishing season. This number fluctuates, however, and can reach 50 boats during peak periods, such as the opening of lobster season each fall (Ventura County Commercial Fisherman's Association 1998). During peak periods and good weather, a single boat at San Nicolas Island can earn $3,000 or more per day. If a nearshore intercept event were to be conducted during one of these peak days while a maximum number of boats were in the area (50), clearing the entire area surrounding the island for safety purposes could result in a revenue reduction of $150,000. This reduction would temporarily have an adverse socioeconomic effect on individual fishermen affected. Using the assumption that all lost revenue would be permanent and would only affect boats landing at Ventura (this assumption maximizes the potential for impact), the lost revenue would represent 2.6 percent of the total value of 1995 Ventura commercial fish landings; a more likely scenario—distributing the estimated maximum loss across the region—would comprise lost revenues of only 0.3 percent (refer to Table 3.12-1). Further, of the eight proposed nearshore intercept events per year, only one or two (requiring up to four closures) would be likely to occur during peak fishing season, requiring cessation of fishing activities for only 8 hours for each closure day. It would be likely that lost revenue would be temporary and could be recaptured at another time (i.e., a "lost" day would not preclude fisherman from maximizing revenues over the course of the fishing season). In addition, NAWCWPNS personnel have implemented successful communication procedures with commercial fishermen at San Nicolas Island to minimize effects on commercial activities (Ventura County Commercial Fisherman's Association 1997). Therefore, while there could be temporary, adverse impacts on individual commercial fishermen, impacts would be less than significant on the overall economy of Ventura County and to the regional commercial fishing industry.

C - Recreational Activities and Tourism

Clearance procedures for nearshore intercept events would not adversely affect economic activities such as boating, diving, and whale watching (refer to Section 4.10, Land Use). These activities do not regularly occur at San Nicolas Island, but they can increase notably at certain times of the year (such as the opening of lobster season each fall). For sportboats that do bring recreational fishermen and divers to the island, NOTMARs would be provided in advance, which would allow the boats to select an alternate destination without substantially affecting their activities. Impacts on recreational activities would be less than significant.

Table 3.10-1. Average Annual Commercial Catch Totals near the Channel Islands (with Range Area)

Catch Type	Average Landings for 1994 and 1995 (pounds)				
	San Nicolas Island M3	Santa Cruz Island (South) 3E	Santa Cruz Island (North) W-412	Santa Cruz Island (East) Anacapa	San Miguel Island W-289N
Fish	312,173	980,276	224,762	115,485	87,429
Invertebrates*	2,106,536	22,868,926	9,090,641	926,994	2,714,029
TOTAL	**2,418,709**	**23,849,202**	**9,315,403**	**1,042,479**	**2,801,458**

*Average annual catch 1994/1995 only – 80 percent of catch reported by origin.
Source: CDFG 1996a.

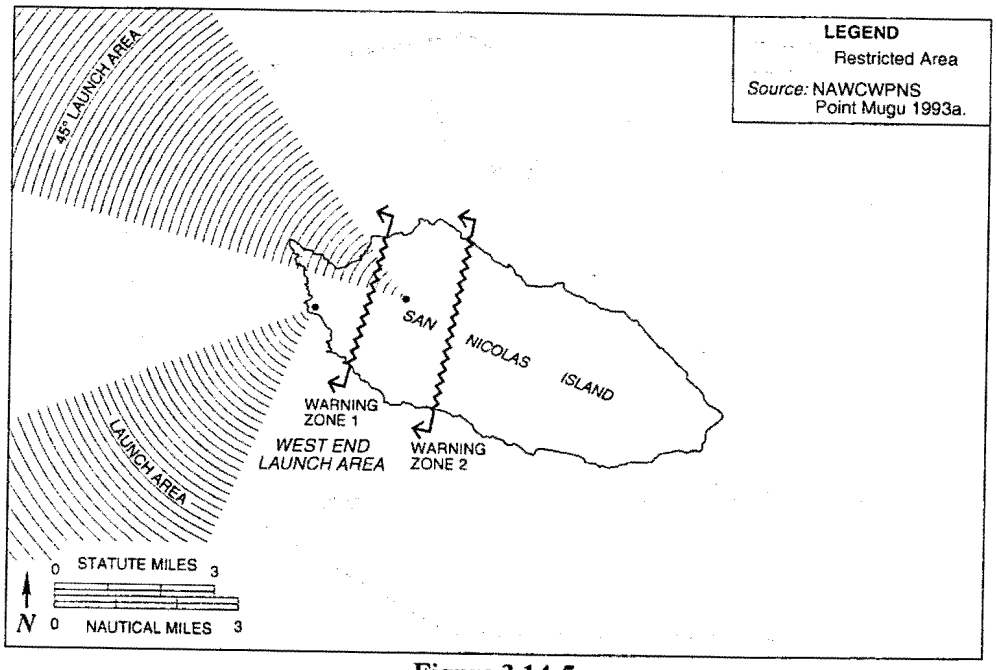


Figure 3.14-5
Warning Zones for Missile and Target Launches at San Nicolas Island

EXHIBIT NO. 27
APPLICATION NO.
CD-2-01

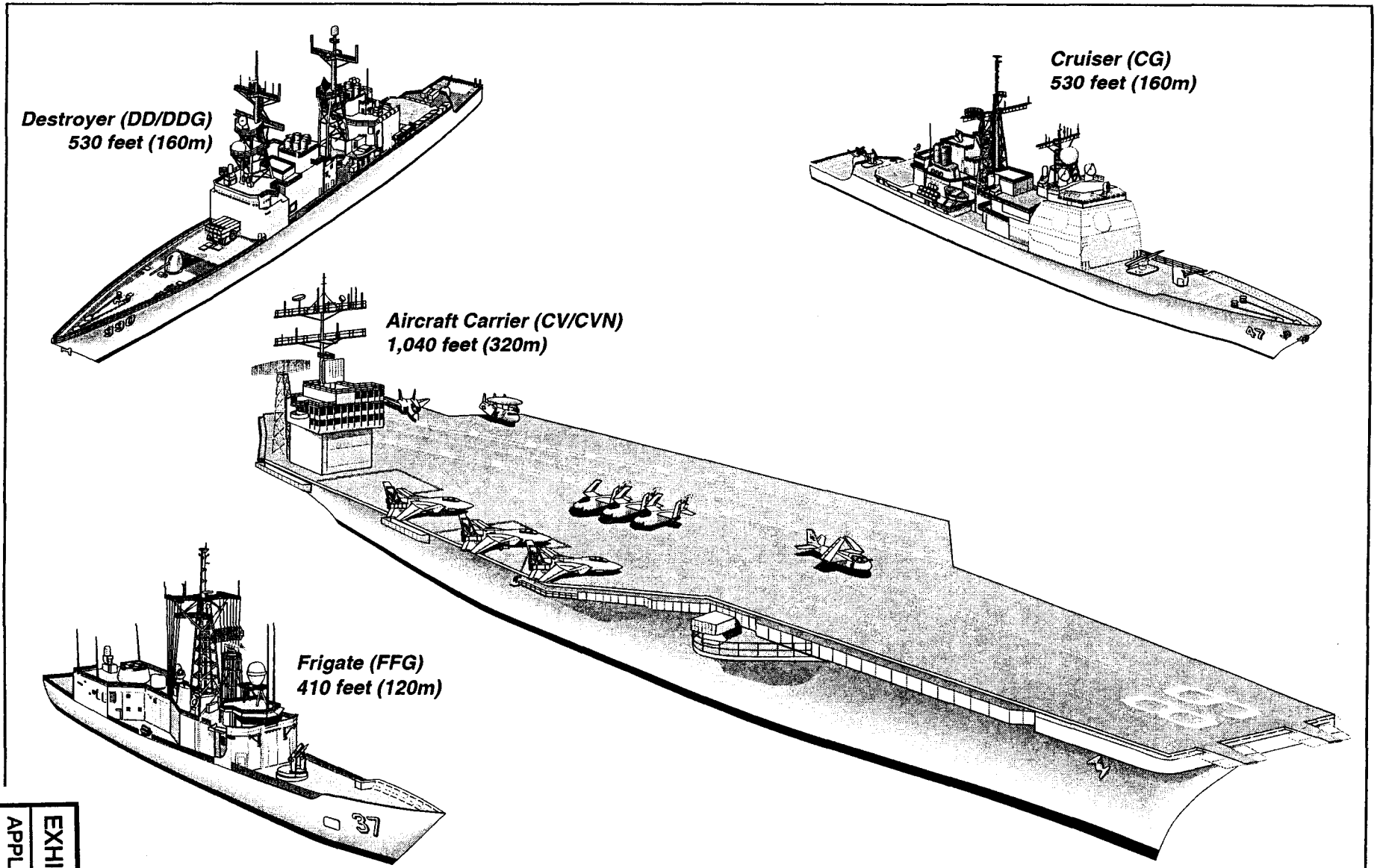
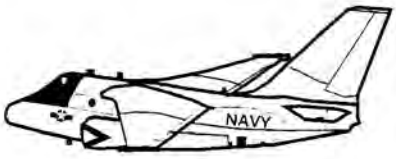


Figure 3.0-6
Typical Navy Ships Operating on the Point Mugu Sea Range

EXHIBIT NO. 28
APPLICATION NO. CD-2-11

DC-130 Hercules



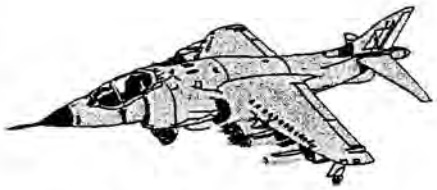
S-3 Viking

NAWCWPNS
Range NP-3D

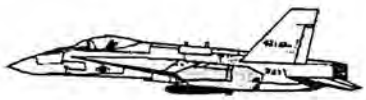
QF-4 Phanton

F-14 Tomcat

Fleet P-3 Orion



AV-8B Harrier



F/A-18 Hornet

E-2C Hawkeye

F-15 Eagle

F-16 Falcon

5335

Convair 580
on San Nicolas Island

Figure 3.0-4
Typical Aircraft Types Operating at the Point Mugu Sea Range

EXHIBIT NO. 29
APPLICATION NO.
CD-2-01

Sources: NAWCWPNS Point Mugu 1996m; BMDO 1994.

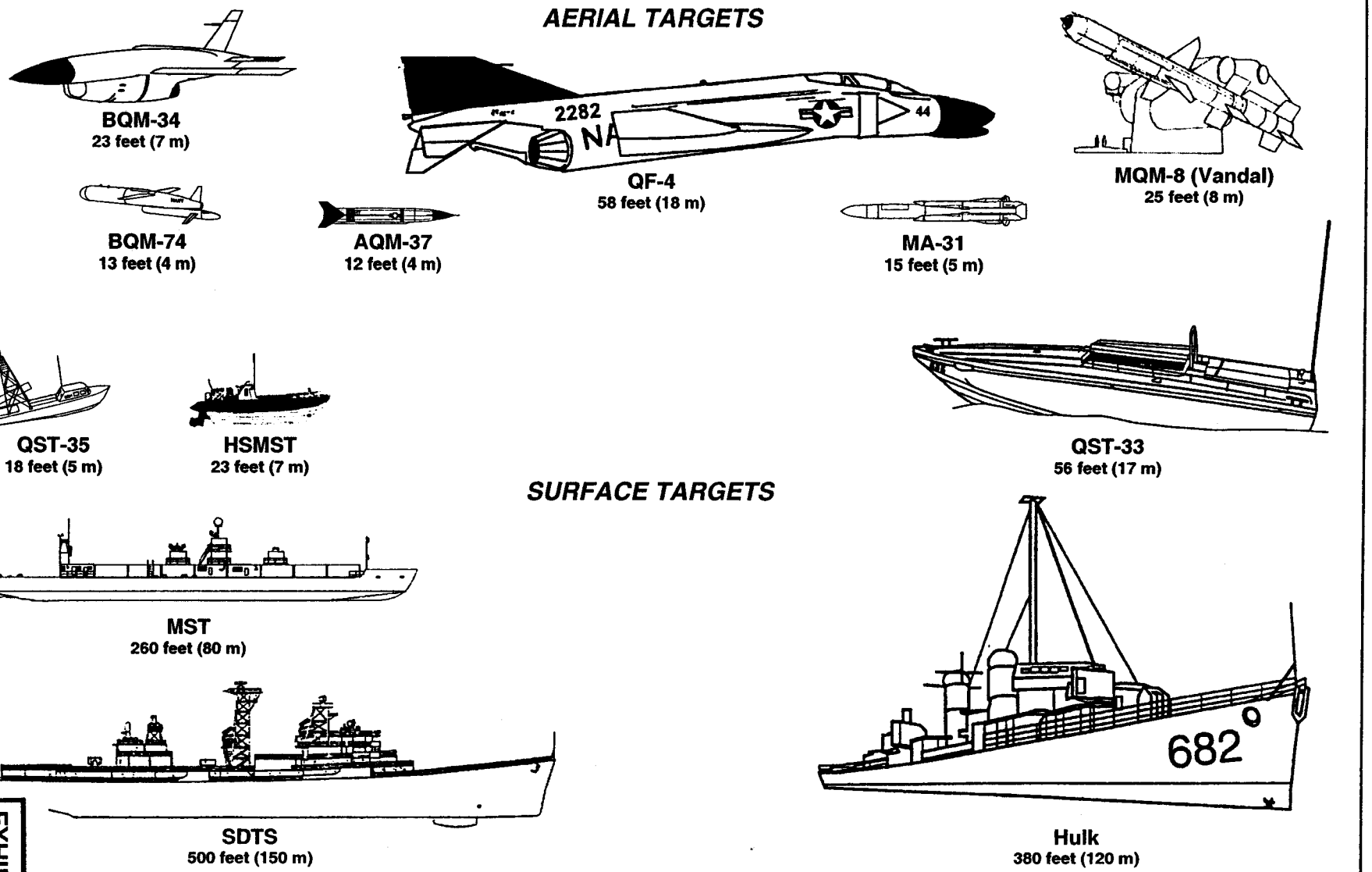


Figure 3.0-8
Targets Used at Point Mugu Sea Range

EXHIBIT NO. 30
APPLICATION NO. CD-2-01

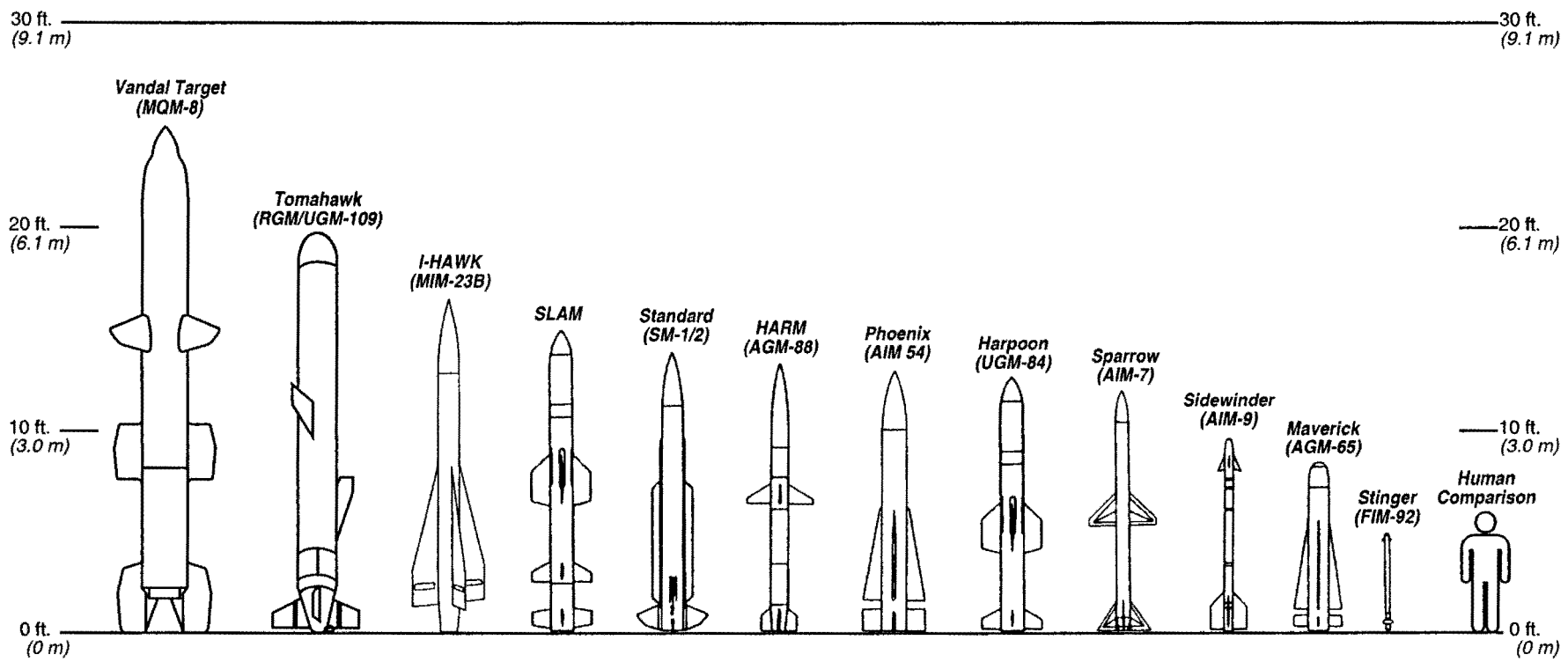


Figure 3.0-10
Typical Missiles Used at Point Mugu Sea Range

EXHIBIT NO. 31
APPLICATION NO. CD-2-01

U.S. NAVY SUBMITTAL

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE
CHINA LAKE, CA 93555-6100
575 I AVENUE SUITE 1
POINT MUGU, CA 93042-5049

W 10a

RECORD PACKET COPY

5090
Ser 529600E/7188
21 Dec 2000

Mr. Mark Delaplaine
Federal Consistency Coordinator
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Dear Mr. Delaplaine:

The U.S. Navy, Naval Air Warfare Center Weapons Division, located at Point Mugu, California, is pleased to submit the attached Consistency Determination (CD) for activities proposed at the Point Mugu Sea Range. These proposed activities include accommodating Theater Missile Defense testing and training, accommodating increased Fleet training exercises, and modernizing facilities. A Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS) addressing these activities was prepared and released in July 2000. The public and agency comment period closed on October 11, 2000. Enclosed please find our response to your agency's DEIS comments and questions.

Based on a careful and thorough review of the applicable sections of the California Coastal Act, the CD concludes that the proposed activities are consistent to the maximum extent practicable. We look forward to continuing to work closely with you during the consistency process. Please contact Mr. Alex Stone, (805) 989-0647, StoneAM@navair.navy.mil, with any questions and for coordination of the CD Commission hearing.

Sincerely,

Paul D. Knight

PAUL D. KNIGHT
Deputy for Programs
By direction of the Commander

Enclosures: 1. Consistency Determination
2. Response to California Coastal Commission DEIS comments

CONSISTENCY DETERMINATION
Table of Contents

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LIST OF FIGURES

LIST OF TABLES

ACRONYMS

AGL	above ground level
BA	Biological Assessment
BASH	Bird Aircraft Strike Hazard
C.C.F.	California Code of Regulations
C.F.R.	Code of Federal Regulations
CZ	coastal zone
CZMA	Coastal Zone Management Act
DoD	Department of Defense
EIS	Environmental Impact Statement
FLEETEX	Fleet training exercise
IHA	Incidental Harassment Authorization
µg/L	micrograms per liter
MHT	mean high tide
MMPA	Marine Mammal Protection Act
NAS	Naval Air Station
NAWCWPNS	Naval Air Warfare Center Weapons Division
NAWQC	National Ambient Water Quality Criteria
NAWS	Naval Air Weapons Station
NHPA	National Historic Preservation Act
NM	nautical miles
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOTAM	notice to airmen
NOTMAR	notice to mariners
NPS	National Park Service
NRHP	National Register of Historic Places
OEIS	Overseas Environmental Impact Statement
ppm	parts per million
SR-1	State Route 1
TMD	theater missile defense
TTS	temporary threshold shift
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

CONSISTENCY DETERMINATION
DETERMINATION OF CONSISTENCY
with the
California Coastal Act of 1976
Naval Air Warfare Center Weapons Division
Point Mugu Sea Range Draft EIS/OEIS
Point Mugu, California

October 2000

SECTION 1
INTRODUCTION

1.1 PROJECT LOCATION

A Draft Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) has been prepared by the Department of the Navy for proposed activities in the Naval Air Warfare Center Weapons Division (NAWCWPNS) Point Mugu Sea Range. The EIS/OEIS addresses NAWCWPNS Point Mugu's proposal to accommodate theater missile defense (TMD) testing and training, accommodate an increase in current levels of training exercises, and modernize facilities to support existing and future operations. The Point Mugu Sea Range encompasses approximately 36,000 square miles (Figure 1); the ocean area and controlled airspace making up the Sea Range parallel the California coastline for approximately 200 nautical miles (NM) between Malibu and Santa Barbara. It extends west into the Pacific from its nearest point at the coast (3 NM at Ventura County) out approximately 180 NM offshore. The Point Mugu Sea Range encompasses San Nicolas Island and portions of the northern Channel Islands, four of which are either owned by the Department of the Navy (Navy) or provide instrumentation sites used to support Sea Range operations. These islands are Navy-owned San Nicolas Island and San Miguel Island; Santa Cruz Island, the majority of which is owned by the Nature Conservancy (the National Park Service [NPS] owns 14,733 acres of the eastern portion), with approximately 10 acres leased to the Navy for use as an instrumentation site; and Santa Rosa Island, which is owned by the NPS and includes a Navy tracking antenna.

Portions of the Sea Range include state waters (out to 3 NM) and are within what is called the coastal zone (CZ). The CZ can vary from as little as a few blocks landward of mean high tide (MHT) to 5 miles inland of MHT. All offshore islands, whether within 3 NM of shore or not, are considered within the CZ. Federal property is considered to be outside of the CZ, and federal activities on federal land are excluded from California Coastal Commission permit authority. However, in accordance with the Coastal Zone Management Act (CZMA) (16 Code of Federal Regulations [C.F.R.] § 1451 et seq.), federal agency activities taking place outside the CZ but which may affect land, water uses, or natural resources of the CZ shall consider the effect of such actions on CZ resources.

Naval Air Station (NAS)[1] Point Mugu comprises 4,490 acres in southern Ventura County. The base is bounded by State Route 1 (SR-1) on the northeast, the Pacific Ocean along the south and west, and agricultural land to the north and northwest. Instrumentation and communication facilities are also

[1] On 11 October 2000, Naval Base Ventura County (NBVC) was established. NBVC includes what was formerly referred to as "NAS Point Mugu," as well as the Naval Construction Battalion Center, Port Hueneme. The term "NAS Point Mugu" was retained for consistency with the DEIS and to avoid potential confusion.

located on Laguna Peak, a 1,457-foot summit located just east of the base in the western Santa Monica Mountains.

Figure 1
Regional Location

1.2 PURPOSE AND NEED

NAWCWPNS Point Mugu has a need to meet the established mission to conduct state-of-the-art weapons systems testing and evaluation by providing a safe, operationally realistic, and thoroughly instrumented Sea Range testing environment and to maintain the level of operational readiness of our military services by providing a realistic training environment. The evolution of international threats and operational technologies has increased the number and type of military operations that require large water ranges for testing and training activities. Consequently, the role of NAWCWPNS Point Mugu as an air warfare test and training center has become even more critical.

To meet the testing and training need, the purpose of the proposed action is: 1) to accommodate TMD testing and training at NAWCWPNS Point Mugu; 2) to accommodate an increase in current levels of

training exercises at NAWCWPNS Point Mugu; and 3) to modernize facilities to enhance the existing testing and training capabilities at NAWCWPNS Point Mugu. Specific components of the proposed action include four distinct types of TMD testing and training, an increase in the current level of littoral (coastal) warfare training and fleet exercise training, and specific modernization of facilities on San Nicolas Island and at NAS Point Mugu to better accommodate future test and training requirements. Although uncertainties exist in the international arena and downsizing of the Department of Defense (DoD) continues, the specific testing, training, and facility modernization proposals are based on NAWCWPNS Point Mugu's current knowledge of priorities for future testing and training, and the needs and desires of NAWCWPNS Point Mugu to conduct more testing and training on the Sea Range.

1.3 PROPOSED ACTION

The NAWCWPNS Point Mugu Sea Range currently supports five general categories of tests to evaluate sea, land, and air weapons systems: 1) air-to-air tests, 2) air-to-surface tests, 3) surface-to-air tests, 4) surface-to-surface tests, and 5) subsurface-to-surface tests. The Sea Range also supports three general categories of training including: 1) Fleet training exercises (FLEETEXs), 2) small-scale amphibious warfare training, and 3) special warfare training. In addition to the current test and training operations conducted on the Sea Range, NAWCWPNS Point Mugu proposes to accommodate TMD test and training activities and an increase in the current level of both FLEETEXs and special warfare training. Facilities at NAS Point Mugu and San Nicolas Island would be modernized to increase the Sea Range's capability to support existing and future operations. Specific elements of the proposed action are described below and summarized in Tables 1 and 2.

Table 1. Baseline Plus Proposed Sea Range Activities

Category	Aircraft Sorties	Ships and Boats[1]	Missiles Fired/ Ordnance Deployed[2]	Targets Launched[2]
Operations Baseline	3,934	799	351	300
Proposed Action				
Theater Missile Defense	89	111	20	17
Additional FLEETEX	57	18	34	33
Additional Special Warfare	4	32	0	0
Total Proposed Action	**150**	**161**	**54**	**50**
Total	**4,084**	**960**	**405**	**350**

1 Includes range support boats.

2 The number of *Missiles Fired/Ordnance Deployed* and *Targets Launched* are not equal because their ratio of use varies by event.

Table 2. Proposed Facilities Modernization for San Nicolas Island and NAS Point Mugu

Modernization	Total Area of Disturbance
San Nicolas Island	
Add vertical missile launcher to existing launch pad	None (build on existing pad)
Construct 50K launcher for target missiles	1,200 SF concrete pad
Add new Range Support Building	12,000 SF construction area
Develop five new multiple-purpose instrumentation sites	15,000 SF construction area (each)
NAS Point Mugu	
Conduct missile launches at previously used launch pads	None (use existing pads)

1. *Theater Missile Defense Element.* The purpose of TMD is to protect U.S. forces and allies against the threat of both short- and long-range missiles. NAWCWPNS Point Mugu proposes that the Sea Range accommodate four distinct types of TMD testing and training activities: 1) boost phase intercept (up to three events per year); 2) upper tier (up to three events per year); 3) lower tier (up to three events per year); and 4) nearshore intercept at San Nicolas Island (up to eight events per year). These events, with the exception of nearshore intercept, would be primarily conducted beyond 3 NM from shore. However, support activities for these events that could affect coastal resources would occur onshore at NAS Point Mugu and at San Nicolas Island.

2. *Training Element.* The Sea Range currently supports two FLEETEXs per year, four small-scale amphibious training exercises per year, and two special warfare training exercises per year. NAWCWPNS Point Mugu proposes to accommodate one additional FLEETEX per year and two additional special warfare exercises per year (small-scale amphibious training would remain at current levels). The additional FLEETEX would primarily be conducted over the open ocean outside the CZ. Support activities that could affect coastal resources would occur onshore at NAS Point Mugu and at San Nicolas Island. Special warfare training exercises would be conducted in the nearshore and onshore environment of San Nicolas Island.

3. *Facility Modernization Element.* Facility modernization activities that could impact coastal resources are proposed for both NAS Point Mugu and San Nicolas Island. At NAS Point Mugu, the previously used Bravo Pad (Pad B) and Charlie Pad (Pad C) near the beach would be used for missile launches. Other than minor pad preparation (e.g., cleaning, maintenance, and security), no construction would be required. Some of the beach launches may include the use of solid propellant boosters. The boosters fall off soon after launch and would typically land in the ocean 0.25 to 0.50 mile offshore. The solid propellant contained within the boosters burns out during the launch operation and would be completely expended prior to the booster entering the ocean. Facility modernizations at San Nicolas Island include construction of facilities and the addition of two new target launch systems (see Table 2). This includes construction of a 50K launcher (capable of launching target missiles weighing up to 50,000 pounds) and a vertical missile launcher. The 50K launcher would be built on a previously disturbed area near one existing launch complex, and the vertical missile launcher would be built on an existing concrete pad at the island's other launch complex. Other new facilities would include a Range Support Building and five multiple-purpose instrumentation sites.

1.4 No Action Alternative (Current Sea Range Operations)

Under the No Action Alternative, current test and training operations would continue and the Sea Range would not accommodate TMD test and training activities. The ongoing five categories of tests (described earlier in Section 1.3) would continue to be conducted on the Sea Range. In addition, the three types of training activities would continue at current levels, and proposed facility modernizations would not be implemented.

SECTION 2
DETERMINATION OF CONSISTENCY

Because proposed actions on the Sea Range may impact areas located within the CZ or CZ resources, a Consistency Determination is required for proposed testing, training, and facility modernization. Proposed actions occurring on Navy-owned property are evaluated for consistency with the coastal resources planning and management policies of the California Coastal Management Program to the maximum extent practicable. The following Determination of Consistency is prepared in compliance with the CZMA of 1972, Section 307, which states that federal actions must be consistent with approved state coastal management programs to the maximum extent practicable. Sections of the California Coastal Act of 1976 (14 California Code of Regulations [C.C.R.] § 13001 et seq.) applicable to this project, as determined by the Navy, include: Article 2 - Public Access (Sections 30210-30212); Article 3 - Recreation (Section 30220); Article 4 - Marine Environment (Sections 30230-30232 and 30234.5); Article 5 - Land Resources (Sections 30240, 30241, and 30244); and Article 6 - Development (Sections 30250, 30251, and 30253). Sections and Articles of the California Coastal Act not addressed below are not relevant to the proposed action. In the following Determination of Consistency, the applicable California Coastal Act policy is stated first. The Navy then comments on how its proposed action relates to the policy.

It is the opinion of the Navy, based on a review of the applicable sections of the Act and on the findings of the Draft EIS/OEIS, that the proposed action is consistent with the California Coastal Act of 1976 to the maximum extent practicable. This Determination of Consistency has been prepared with the following applicable sections of the California Coastal Act of 1976:

2.1 ARTICLE 2 - PUBLIC ACCESS

2.1.1 State Policies (Section 30210)

> **Section 30210.** *Maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

2.1.2 U.S. Navy Comments

2.1.2.1 Proposed Action

Under the proposed action, the need to evaluate new technologies and threat scenarios would involve accommodating TMD testing and training 17 times per year throughout the Sea Range. As a result, various Sea Range areas would require clearance of nonparticipating personnel (e.g., the general public) for safety purposes. Any ships or boats (commercial and non-commercial) would need to be moved outside safety hazard patterns (i.e., safety buffer zones around the test and training areas) prior to conducting the event. The size of a safety hazard pattern can vary depending on various operational parameters, and it is typically kept clear for a period of up to eight hours. Such activities would occasionally include clearing non-participating vessels within a radius of 10-20 NM around San Nicolas Island. To streamline clearance efforts, the Navy publishes notices to airmen (NOTAMs) and mariners (NOTMARs) and also maintains close coordination with controlling agencies for both air and surface traffic over and on the Sea Range. The proposed action would not cause significant impacts on, or require clearance of, public beach access routes, the Channel Islands, or associated recreation areas

within the Sea Range. Public access would be only temporarily limited during testing and training (and only within the immediate area) to ensure public safety.

As described in the socioeconomics analysis (Section 4.12) of the Draft EIS/OEIS, minimal effects on public access would be experienced by commercial fishing boats, recreational fishing boats, and sport diving boats in areas around San Nicolas Island in the CZ. Commercial fishing activities beyond 3 NM from shore would not be adversely affected. However, safety clearances associated with nearshore intercept activities would preclude commercial fishing activities around San Nicolas Island during certain days of the year. Although the nearshore intercepts would occur at one end of the island, it is necessary to clear areas surrounding the entire island in order to ensure public safety. Peak fishing periods typically occur October through March around San Nicolas Island. About 35 boats are present at San Nicolas Island during the winter fishing season. This number fluctuates, however, and can reach 50 boats during peak periods, such as the opening of lobster season each fall. During peak periods and good weather, a single boat at San Nicolas Island can earn $3,000 or more per day. If a nearshore intercept test were to be conducted during one of these peak days while a maximum number of boats were in the area (50), clearing the entire area surrounding the island for safety purposes could result in a revenue reduction of $150,000. This reduction would temporarily have an adverse socioeconomic effect on individual fishermen affected. Using the assumption that all lost revenue would be permanent and would only affect boats landing at Ventura (this assumption maximizes the potential for impact), the lost revenue would represent 2.6 percent of the total value of 1995 Ventura commercial fish landings. Of the eight proposed nearshore intercept events per year, only one or two (requiring up to four closures) would be likely to occur during peak fishing season, and the nearshore intercept activities would require cessation of fishing activities for only eight hours for each closure day. Therefore, it would be likely that lost revenue would be temporary and could be recaptured at another time (i.e., a "lost" day would not preclude fisherman from maximizing revenues over the course of the fishing season). Furthermore, NAWCWPNS personnel have implemented successful communication procedures with commercial fishermen at San Nicolas Island to minimize effects on commercial fishing activities. This coordination allows fishermen to select an alternate location for fishing when safety clearance procedures are implemented around San Nicolas Island. Therefore, while there could be short-term, adverse impacts on individual commercial fishermen, impacts would be less than significant on the overall economy of Ventura County and to the regional commercial fishing industry.

Other activities associated with the proposed action would involve missile and target launches from San Nicolas Island (about six times per year). Some recreational and commercial fishing vessels could potentially be present in areas north and northwest of San Nicolas Island prior to target launches from the island. These vessels would be cleared prior to launch but would have the option of relocating the day of the event to different, unaffected waters off the island. Therefore, impacts of increased testing and training on public access would be less than significant.

The Navy currently conducts several public notification procedures prior to test and training events. In addition, the following measure is proposed to minimize short-term effects to public access on the Sea Range during testing and training activities:

- For sportboats that do bring recreational fishermen, divers, or tourists to the waters surrounding San Nicolas Island and other parts of the Sea Range, NOTMARs would continue to be provided in advance which would allow mariners to select alternate destinations without substantially affecting their activities. Impacts on sport fishing, recreational activities, and tourism would be less than significant.

2.1.2.2 No Action Alternative (Current Sea Range Operations)

Public activities in nearshore waters typically include recreational boating, sport fishing, scuba diving, and commercial fishing; recreational activity tends to be heavier on weekends, while the level of commercial activity is dependent primarily on open fishing seasons. The Navy implements strict safety procedures prior to each test or training activity. Consequently, current operations can result in some limitations (typically lasting less than eight hours) of public access to shorelines or nearshore waters at Point Mugu and San Nicolas Island. These limitations primarily correspond to activities involving onshore target or missile launches. However, such launches are relatively infrequent; during the baseline year, approximately 56 missiles and targets were launched from NAS Point Mugu, and approximately 19 targets were launched from San Nicolas Island. This equates roughly to once each week at Point Mugu and once every three weeks at San Nicolas Island. Consequently, current operations under the No Action Alternative do not significantly affect access issues. In addition, NOTMARs are provided in advance that allow mariners to select alternate destinations without substantially affecting their activities.

2.1.3 State Policies (Section 30211)

> **Section 30211**. *Development shall not interfere with the public's right of access to the sea where acquired through use of legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

2.1.4 U.S. Navy Comments

2.1.4.1 Proposed Action

The proposed action would not interfere with the public's right of access to the sea in the CZ. The proposed development at San Nicolas Island is occurring on Navy-owned property where public access is strictly controlled for security reasons and to safeguard against potential hazards associated with military operations.

2.1.4.2 No Action Alternative (Current Sea Range Operations)

San Nicolas Island is Navy-owned property where public access is strictly controlled for security reasons and to safeguard against potential hazards associated with military operations. Current operations at NAS Point Mugu do not interfere with the public's right of access to the sea in the CZ. SR-1 provides access to Point Mugu State Beach immediately east of NAS Point Mugu and to roadways leading to Ormond Beach immediately west of NAS Point Mugu. Current operations do not affect access to the sea.

2.1.5 State Policies (Section 30212)

> **Section 30212**. *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected.*

2.1.6 U.S. Navy Comments

2.1.6.1 Proposed Action

San Nicolas Island is Navy-owned property where public access is strictly controlled for security reasons and to safeguard against potential hazards associated with military operations. At NAS Point Mugu, the proposed action would not interfere with or affect the public's right of access to the coast from the nearest public roadway (SR-1). SR-1 provides access to Point Mugu State Beach immediately east of NAS Point Mugu and to roadways leading to Ormond Beach immediately west of NAS Point Mugu.

2.1.6.2 No Action Alternative (Current Sea Range Operations)

San Nicolas Island is Navy-owned property where public access is strictly controlled for security reasons and to safeguard against potential hazards associated with military operations. At NAS Point Mugu, current operations do not interfere with or affect the public's right of access to the coast from the nearest public roadway (SR-1). SR-1 provides access to Point Mugu State Beach immediately east of NAS Point Mugu and to roadways leading to Ormond Beach immediately west of NAS Point Mugu.

2.2 ARTICLE 3 - RECREATION

2.2.1 State Policies (Section 30220)

> **Section 30220.** *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

2.2.2 U.S. Navy Comments

2.2.2.1 Proposed Action

Public activities in nearshore waters that are not readily provided in inland waters of Ventura County include recreational boating, sport fishing, scuba diving, and commercial fishing. The proposed action would not interfere with any water-oriented recreation activities or facilities at Point Mugu State Park, Point Mugu State Beach, the Santa Monica Mountains National Recreational Area, Ormond Beach, or at Navy-owned San Nicolas Island. All proposed development would occur on land presently owned and operated by the Navy with restricted public access. Therefore, no impacts would occur to recreational uses.

The proposed action would have a less than significant impact on recreational uses of area waters, beaches, the Channel Islands, or associated recreational facilities within the Sea Range. Water-oriented recreational activities would be subject to short-term, temporary closures only in specific areas. The proposed action could add 17 events, each of which would require clearance of various Range Areas for safety purposes. Sea Range operations can sometimes be "scrubbed" or canceled on the scheduled day for various operational reasons. In such cases, range clearance procedures have typically already been initiated. Therefore, it can be assumed that the TMD Element would involve clearance of various Range Areas up to 34 times per year. Collectively over a one-year period, a total of about 114 vessels might be present in the clearance areas prior to NOTMAR issuance. However, only a small percentage of these vessels would be within the CZ. Further, with advanced coordination of NOTMARs, it is likely that half of these vessels would already be clear of the area. The two-percent increase in aircraft activity could easily be accommodated within established procedures and would not impact current airspace use.

Ground traffic systems ashore would not be affected. Therefore, traffic impacts would be less than significant. For the most part, potential effects on recreational uses (recreational fishing boats and sport diving boats) in the CZ would be minimal.

The Training Element would consist of one additional FLEETEX, which typically lasts 2 to 3 days, and two additional special warfare training exercises, which typically have durations of 8 hours each. However, major activities associated with the proposed additional FLEETEX would be conducted in the portions of the Sea Range well outside the CZ and, therefore, would not affect CZ resources. Some associated target launches from NAS Point Mugu and San Nicolas Island would require safety clearance procedures within the CZ; however, disruption to recreational uses within the CZ would be considered minimal and short-term. If appropriate, publication of NOTMARs would be used to inform the public of these activities, so disruption to recreational uses within the project area would be minimal and short-term. Therefore, impacts of the Training Element on recreational uses would be less than significant. Special warfare training exercises generally occur in nearshore waters at San Nicolas Island and they do not require safety clearance procedures.

2.2.2.2 No Action Alternative (Current Sea Range Operations)

Current activities do not significantly affect water-oriented recreation activities or facilities at Point Mugu State Park, Point Mugu State Beach, the Santa Monica Mountains National Recreational Area, Ormond Beach, or at Navy-owned San Nicolas Island. The Navy implements strict safety procedures prior to each test or training activity, resulting in the need to clear certain areas. However, clearance procedures associated with target and missile launch activities are only implemented, on average, roughly once each week at Point Mugu and once every three weeks at San Nicolas Island. In addition, NOTMARs are provided in advance which allow recreational boaters to select alternate destinations without substantially affecting their activities.

2.3 ARTICLE 4 - MARINE ENVIRONMENT

2.3.1 State Policies (Sections 30230 and 30231)

Section 30230. *Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231. *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alternation of natural streams.*

2.3.2 U.S. Navy Comments

2.3.2.1 Proposed Action

Under the proposed action, marine resources would be adequately maintained. As discussed in detail in the Draft EIS/OEIS, although proposed accommodation of TMD testing and training activities, accommodation of additional training, and facility modernizations would potentially affect the marine environment, these impacts would be less than significant, and biological productivity of coastal waters would be maintained. Activities associated with the proposed action that could potentially affect marine resources would occur primarily outside the CZ; however, proposed activities are evaluated for their potential impact on coastal resources. Potential effects to individual marine-related resources (i.e., water quality, marine biology, fish and sea turtles, marine mammals, terrestrial biology, and threatened and endangered species) are discussed below.

A - Water Quality

As described in the water quality analysis (Section 4.4) of the Draft EIS/OEIS, the proposed action would not cause a significant adverse impact on water quality in the CZ. Under the proposed action, the TMD Element would result in increased amounts of debris falling into the ocean from missile and target activities. For this analysis, fuels, propellants, engine oil and lubricants are the hazardous constituents of interest. Concentrations of these chemical constituents of concern resulting from increased testing and training activities were estimated. The calculations indicate that concentrations would remain below National Ambient Water Quality Criteria (NAWQC) established for the protection of aquatic life and would represent a less than significant impact on marine water quality within the CZ. For example, estimated amounts of all battery constituents released into the CZ for nearshore intercept result in concentrations of about 7.1 micrograms per liter (µg/L). This amount is less than NAWQC for the constituent with the most stringent acute threshold (cadmium, 43 µg/L). Similar calculations were made for the Training Element; impacts on water quality in the CZ were estimated to be less than significant.

Facility modernizations at NAS Point Mugu and San Nicolas Island would not significantly impact water quality in the CZ. Under the proposed action, missile launches would occur at existing NAS Point Mugu beach launch pads, with solid propellant boosters falling into the ocean approximately 0.25 to 0.50 mile offshore. Since all of the propellant is expended during launch, impacts on nearshore water quality would result solely from booster casings entering the water. Given that the casings are not soluble and that a maximum of six per year would enter the water, impacts would be less than significant. On San Nicolas Island, missiles and targets would be launched at or near existing onshore launch pads. Impacts on nearshore water quality would be less than significant.

B - Marine Biology

Potential impacts on marine biology associated with the proposed action would result from missile and target debris falling into and destroying/degrading sensitive CZ marine habitats, and from the release of hazardous constituents (including fuels, propellants, engine oil and lubricants) in the nearshore environment. However, as described in the water quality discussion above and in the marine biology analysis (Section 4.5) of the Draft EIS/OEIS, resulting concentrations of potential contaminants are well below criteria established for the protection of aquatic life. Consequently, impacts on marine biology would be less than significant. It is estimated that the majority of the debris would be dense (e.g., metal) and non-floating. Non-floating debris would disperse relative to weight, size, shape, and current/wind patterns before settling to the ocean floor. Heavier objects would settle to the floor faster and would not

disperse far from an impact area. Larger objects, depending on shape, may not necessarily settle quickly since objects with more drag may disperse with currents. Smaller debris may also be dispersed over a large area due to currents. Using conservative assumptions for current and proposed activities, the volume of debris accumulating on the ocean floor over a 10-year period would equate to an object roughly the size of a shoe box in relation to an entire football field.

Nearshore intercept activities could potentially impact marine resources from debris falling on nearshore marine habitats of San Nicolas Island. If smaller debris were to settle onto the nearshore subtidal and intertidal zones, mortality of resident organisms may result. This would be considered a short-term impact and would be less than significant because many of the organisms that inhabit these areas are opportunistic and would quickly recolonize the area. Further, the intercept is designed so that the entire debris pattern falling into the ocean is at least 1 NM offshore (although the targets would fly as close as 0.5 NM offshore). This would eliminate potential impacts on nearshore subtidal and intertidal zones. Concentrations of potential contaminants associated with debris are well below established water quality criteria and would not significantly affect marine habitats. Estimated amounts of all battery constituents released into the CZ for nearshore intercept activities result in sediment quality concentrations of about 0.29 parts per million (ppm). This amount is less than the National Oceanic and Atmospheric Administration's (NOAA's) conservative criteria for the constituent with the most stringent threshold (cadmium, 1.2 ppm). Marine biology impacts associated with additive debris accumulation as a result of the proposed action would be less than significant.

C - Fish and Sea Turtles

Fish

As described in the fish and sea turtles analysis (Section 4.6) of the Draft EIS/OEIS, adverse effects to fish could result from missile and target debris and termination of missile flights within the Sea Range during increased testing and training activities. Fish could be killed during a near-surface missile detonation, impact, or by release of unspent fuel. Nearshore intercept events would distribute more hazardous constituents into the water than any of the other proposed TMD activities. The nearshore intercept event would produce a small debris pattern footprint since the intercept would occur at altitudes less than 1,000 feet. Since dispersion time would be limited, the density of debris in the pattern would be high, and it is likely that missile and target debris would settle on the ocean bottom in San Nicolas Island's nearshore environment. Fish in the immediate environment could be exposed to various concentrations of hazardous constituents in the water due to falling debris. Although dilution and dispersion would further reduce the concentration of hazardous constituents, some fish in the immediate vicinity could be killed due to exposure to toxins, particularly unspent fuel. In addition to chemical effects, missile and target debris could cause injury or mortality to fish as it falls through the water column. However, while small numbers of fish could be killed, impacts on fish populations would not be significant. Impacts on fisheries would be less than significant.

Adverse effects to fish could result from increased testing and training within the Sea Range. However, these impacts would be considered less than significant because, although some fish mortality may result, there would be no significant impacts on populations. Some fish could temporarily change their behavior in response to noise produced during ship operations. Such temporary behavioral changes would contribute to negligible impacts on fish and no impacts on fish populations. Impacts on fisheries would be less than significant.

Sea Turtles

Activities on the Sea Range and in nearshore waters of San Nicolas Island would have less than significant impacts on turtle populations. Since all species of sea turtles are listed as threatened or endangered, mortality of one animal could be considered a significant impact. However, activities at NAS Point Mugu and San Nicolas Island would be unlikely to have any impact on sea turtles because sea turtles do not use beaches in the study areas. Since numbers of sea turtles in the study area are low, the probability of a sea turtle being struck by debris or colliding with a Navy vessel is extremely remote. Impacts on sea turtle populations would be less than significant.

Sea turtles do react to low frequency sounds. Sonic booms could temporarily change turtle behavior, but this would be short-term and result in less than significant impacts on individuals or populations.

D - Marine Mammals

Point Mugu Sea Range. Most of the activities proposed for the Sea Range would have only short-term effects on marine mammals. These short-term effects may include the following: temporary changes in behavior, movement away from the immediate area of noise, and temporary reduction in hearing sensitivity. Small numbers (approximately 8) of marine mammals per year may experience temporary threshold shift (TTS) with no biological consequences in Sea Range waters. The likelihood of any individual animal experiencing TTS more than once per year approaches zero. Any hearing impairment would be temporary and probably mild, and would not have significant biological consequences for individual marine mammals. Because these short-term effects would occur infrequently, they would not have long-term impacts on individual animals and would have less than significant impacts on marine mammal populations. The probability that any threatened or endangered species of marine mammal would experience TTS in any given year is extremely low (0.08 individuals per year, or one every 12 years).

Increased debris in the Sea Range would have a negligible effect on the overall probability of a marine mammal being injured or killed by intact missiles and falling debris hitting thewater. Approximately 0.0006 marine mammals per year would be exposed to potential injury or mortality by falling debris or missile impacts. Impacts would be less than significant.

Public access is restricted in the Navy-owned portions of the Sea Range, and marine mammal populations have been able to expand with minimal interference from human activities. The activities proposed by the Navy would not result in significant increases in interactions between marine mammals and Navy activities in the Sea Range. The proposed action would not be expected to significantly impact marine mammal populations occurring in the Sea Range.

San Nicolas Island. Pinnipeds on San Nicolas Island are exposed to loud noises of short duration during target launches. Pinnipeds on the beaches may show minor alerting responses to the sight or sound of the target, missile or missile/target intercept, but momentary alert or startle reactions are not considered to have adverse effects. No stampedes were noted for the majority of launches from San Nicolas Island during which pinnipeds were observed. However, recent monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate launches of Vandal missile targets. At present, it is not possible to estimate the numbers of seals that might be disturbed by target launches or to estimate pup mortality, if any, resulting from stampedes into the water. However, there has been rapid growth in resident pinniped populations despite such launch operations. This implies that there is little if any mortality or serous injury of pups due to stampedes into the water during San Nicolas Island launches. Thus, impacts of launches on pinniped populations on San Nicolas Island are less than significant whether or not there are any adverse

effects on individual pinnipeds. However, as described below, in response to the recent observations of pinnipeds during Vandal launches, the Navy is applying for Incidental Harassment Authorization (IHA) from NMFS.

Point Mugu. The harbor seal is a year-round resident at the Mugu Lagoon entrance. Harbor seals at Point Mugu have habituated to current sound levels and would not be exposed to increased sound levels under the proposed action. The distance from the harbor seal haul-out area to the proposed missile launch location is sufficient to ensure that received sound levels would be below those predicted to cause disturbance. Harbor seals at Point Mugu seem to have habituated to the regularly occurring sounds and show little reaction to them. Any behavioral responses to launch noise would be limited to the short term, and impacts on harbor seals at Point Mugu would be less than significant.

Marine Mammal Protection Act Compliance. As described in the marine mammal analysis (Section 4.7) of the Draft EIS/OEIS, impacts on marine mammals would be less than significant. Throughout the development of this analysis, NAWCWPNS Point Mugu has coordinated with the National Marine Fisheries Service (NMFS) concerning compliance with the Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1431 et seq.). Based on a review of the *Marine Mammal Technical Report*, NMFS did not recommend that the Navy apply for incidental take authorization, as long as: 1) the Navy developed a marine mammal monitoring program in order to reduce the risk to marine mammals from predictable surface impacts near locations where the animals congregate; 2) the Navy developed a monitoring program on San Nicolas Island to document pinniped responses to acoustic events; and 3) that the results of the monitoring programs on San Nicolas Island show no adverse effects on pinnipeds. Subsequent to completion of the *Marine Mammal Technical Report*, monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate Vandal launch events. In response to these recent observations, the Navy is applying for an IHA from NMFS. The IHA Application covers launches of Vandal targets and other vehicles of similar size from existing launch sites on San Nicolas Island. The number of launches of this type are expected to be few (a maximum of about 10 Vandal-type launches and five launches of smaller subsonic targets per year) and each launch event is of extremely short duration (strong launch sounds are detectable near the beaches for no more than a few seconds per launch). The number of individual animals expected to be disturbed during the launch activities is small in relation to regional population sizes. Given proposed mitigation measures and monitoring plans (summarized below), effects on those individuals are expected to be limited to harassment and are expected to have negligible impacts on the species and stocks.

Mitigation Measures

To avoid additional harassment to the seals on beach haul-out sites, and to avoid any possible sensitizing and/or predisposing seals to greater responsiveness to the sights and sounds of a launch, the Navy will limit activities near the beaches in advance of launches. Where practicable, the Navy will adopt additional mitigation measures when doing so will not compromise operational safety requirements or mission goals.

Monitoring Plans

The Navy plans to document and characterize any observed responses of pinnipeds before, during, and after launch operations. The Navy will establish a land-based monitoring program to assess effects on the three common pinniped species on SNI. The Navy will obtain calibrated recordings of the sounds of the target launches as received at different distances from the target's flightline.

E - Terrestrial Biology

Point Mugu Sea Range

Seabirds are considered to be coastal resources in accordance with the CZMA (see earlier discussion in Section 1.1). Seabirds are the main terrestrial biological resource in the Sea Range that could be impacted by the proposed activity. Seabird densities are typically low over the Sea Range (approximately less than 1 bird/acre) and those species that are present are generally on the water or at low altitudes above the water surface and below aircraft, missiles, and targets. Bird-strikes have not historically presented an operational constraint to activities on the Sea Range. Therefore, impacts on seabirds on the Sea Range as the result of aircraft operations and debris strikes would be less than significant. Overall impacts on seabirds resulting from the proposed action in the Sea Range would be less than significant.

San Nicolas Island

Changes in existing noise levels from the proposed action would have less than significant impacts on seabirds at San Nicolas Island because of the short duration of a launch. Noise could potentially impact seabirds, but impacts would be short-term and less than significant. Debris from nearshore intercept activities would fall within the nearshore CZ waters, but it is unlikely that a significant number of birds would be struck and this impact is considered less than significant.

Special warfare training activity at the nearshore and beach areas of San Nicolas Island would not be expected to affect any sensitive habitats or species since current environmental restrictions placed on training sites would preclude this potential impact. Therefore, impacts on terrestrial biological resources would be less than significant.

Facility modernizations at San Nicolas Island would be located in previously disturbed areas or sited to avoid sensitive biological resources. None of these facilities would impact sensitive plant species or vegetation communities, and impacts would be less than significant.

Point Mugu

As described in the terrestrial biology analysis (Section 4.8) of the Draft EIS/OEIS, changes in existing noise levels from additional launch activities associated with the proposed action at NAS Point Mugu would have less than significant impacts on seabirds because birds are mobile, and suitable habitat is available adjacent to the proposed activity. The proposed action is of short duration and would require only temporary avoidance of the area. For the same reason, the presence of ships and aircraft near the CZ also would have less than significant impacts on seabirds.

Aircraft that originate from NAS Point Mugu could impact wildlife through noise or air strikes. Studies by NAS Point Mugu environmental personnel have determined that noise from aircraft takeoffs and landings does not significantly affect wildlife. Bird strike data indicate that anywhere from 10 to 60 birds have been struck within a given year. Based on a recent Bird Aircraft Strike Hazard (BASH) study at Whidbey Island, the actual number of bird strikes is probably five times the number of reported strikes; therefore, anywhere from 50 to 300 bird strikes probably could occur over a given year. The majority of reported bird strikes occurred with propeller-driven planes. Swallows, killdeers, and shorebirds comprised the majority of reported bird strikes. The number of reported bird strikes is less than one

percent of the total number of birds that inhabit, or travel through, Point Mugu; therefore, impacts from bird strikes would be less than significant.

Physical impacts on seabirds from target launches at NAS Point Mugu would be less than significant. The probability of a JATO bottle striking an individual bird is insignificant when considered as an individual or annual event. The fact that birds are mobile, may fly away from an incoming bottle, and may not be present during a launch further reduces the likelihood of a JATO bottle striking a bird species. The cumulative impacts of individual JATO bottles landing in Mugu Lagoon would be significant to coastal biological resources if large habitat areas that support sensitive species are eliminated through accumulation of JATO bottles. However, NAWCWPNS Point Mugu has recently implemented a program to recover JATO bottles. Potential impacts to terrestrial biological resources have thus been reduced to less than significant levels through implementation of this JATO bottle recovery program.

Facility modernizations at NAS Point Mugu would not require construction and would not affect biological resources. However, missile launches from two previously used launch pads near the beach would occur at a lower altitude over the beach than current launches from Building 55. This could affect sensitive species that use beach habitat. Federally listed threatened and endangered species, including western snowy plover and California brown pelican, are known to occur in this area. Mitigation measures currently being identified in coordination with the U.S. Fish and Wildlife Service (USFWS) would reduce potential significant impacts on these species to below a level of significance (see "Threatened and Endangered Species" below).

Some of the missile launches could include the use of solid propellant boosters (similar to JATO bottles). The boosters would land in the ocean approximately 0.25 to 0.50 mile offshore. This distance is sufficient to preclude potential impacts on California brown pelican and western snowy plover foraging and roosting areas. Although the density of seabirds increases closer to shore, the densities would still be so small as to preclude the likelihood of a booster striking a seabird. Also, seabirds would be able to detect a falling object the size of a booster and effectively avoid it. Therefore, physical impacts of missile launches on seabirds transiting nearshore areas at NAS Point Mugu would be less than significant.

Threatened and Endangered Species

Two programmatic Biological Assessments (BAs), one addressing all base activities and the other addressing all activities on San Nicolas Island, are currently being developed and coordinated through the USFWS. The BAs address all significant impacts to sensitive species and their critical habitat, including recently designated western snowy plover habitat at Point Mugu and San Nicolas Island. The activities determined to be having or expected to have an effect on listed species are summarized below, followed by a summary of proposed mitigation measures.

Point Mugu. Missile launches and aircraft overflights have been identified as potentially affecting sensitive resources at Point Mugu. JATO bottles have been identified as potentially "taking" western snowy plovers and light-footed clapper rails through physical impacts and recovery options. Aircraft overflights may affect western snowy plovers, California least terns, California brown pelicans, light-footed clapper rails, and American peregrine falcons by causing species to move off their nests, disrupting their behavior, and striking the birds. As noted previously, the use of two previously used launch pads near the beach could affect sensitive species that use beach habitats.

The Navy has recently implemented a JATO bottle removal program for the salt marsh in front of Building 55. This program, which includes seasonal restrictions on recovery activities, is expected to

benefit sensitive avian species at Mugu Lagoon. Additional mitigation and conservation measures identified in coordination with the USFWS, many of which are ongoing, include:

- Western snowy plover and light-footed clapper rail habitats will be enhanced.
- Population monitoring of salt marsh bird's-beak, western snowy plover, California least tern, and light-footed clapper rail shall be standardized and used consistently.
- Areas where physical parameters are appropriate and no other use is anticipated shall be restored as salt marsh, sandy beach, or other habitat for listed species.
- If monitoring of the light-footed clapper rail population suggests that the species is being displaced from currently occupied habitat, the Navy shall create an equivalent area of salt marsh habitat in proximity to occupied habitat.
- Because variations from standard procedures were the cause of some adverse effects to listed species, aircraft overflights will be modified and monitored by air operations personnel.
- All base personnel and contractors shall be educated on the identification and importance of conserving listed species, and their personal responsibilities in this regard.
- All mitigation measures shall be monitored to determine their effectiveness in avoiding and minimizing take of listed species. If mitigation measures are not effective, corrective measures shall be implemented.

San Nicolas Island. Target and missile launches from the two existing launch locations (Alpha Launch Complex and Building 807 Launch Complex) and the two proposed launchers (vertical launcher and 50K launcher) may affect California brown pelicans and western snowy plovers that use the west end of the island for roosting, foraging, and nesting. Missile launches and associated vehicle and personnel activity at the Building 807 Launch Complex may potentially result in disturbances to nesting western snowy plovers. As noted previously, environmental restrictions placed on special warfare training sites would preclude potential impacts on sensitive species. The sites and access roads for the proposed facility modernizations at San Nicolas Island would be sited to avoid sensitive species.

The Navy has closed the south side of the island to all activities. This closure area protects three species of marine mammals, western snowy plovers, Brandt's cormorants, western gulls, and California brown pelicans. This measure also provides undisturbed habitat for a variety of other wildlife species. Additional mitigation and conservation measures proposed to the USFWS, many of which are ongoing, include:

- To prevent disturbance of the federally listed western snowy plover, nesting areas are closed during the breeding season. Signs and barricades alert personnel of closure areas.
- The distribution and status of listed species are regularly and consistently monitored. Listed species habitat in or near operational areas is surveyed frequently to assess potential for effects to listed species by Navy activities.
- All permanent and visiting island personnel attend a mandatory "environmental briefing." Federal legislation and Navy regulations regarding protected species are emphasized, along with the importance of honoring environmental closure areas.
- The habitat for island night lizard is being expanded using revegetation.
- The substrate immediately adjacent to the Building 807 launch area may be altered during the nonbreeding season to make the area unappealing for nest site selection by snowy plovers (this area is not designated critical habitat for the species).
- All construction equipment, vehicles, and supplies will be thoroughly cleaned and inspected prior

to shipment to San Nicolas Island to reduce the potential for introduction of non-native species.

- Staging areas for temporary storage of equipment and materials will be sited in areas with low island night lizard densities whenever feasible.
- Habitat for relocated night lizards will be created by planting appropriate cover in barren areas adjacent to currently utilized habitat.
- The sites and access roads for proposed facility construction projects will be placed to avoid habitat which may harbor island night lizards.

2.3.2.2 No Action Alternative (Current Sea Range Operations)

Current operations do not cause a significant adverse impact on water quality and marine biology (including fish and sea turtles) in the CZ. The majority of the debris patterns are located over the open ocean outside the CZ. Further, water quality calculations indicate that concentrations remain below NAWQC established for the protection of aquatic life and represent a less than significant impact on marine water quality within the CZ. Similarly, sediment quality calculations indicate that concentrations remain below conservative NOAA criteria.

Based on the analysis performed for the Draft EIS/OEIS, impacts of current operations on marine mammals are less than significant. Throughout the development of this analysis, NAWCWPNS Point Mugu has coordinated with NMFS concerning compliance with the MMPA. Based on a review of the *Marine Mammal Technical Report*, NMFS did not recommend that the Navy apply for incidental take authorization, as long as: 1) the Navy developed a marine mammal monitoring program in order to reduce the risk to marine mammals from predictable surface impacts near locations where the animals congregate; 2) the Navy developed a monitoring program on San Nicolas Island to document pinniped responses to acoustic events; and 3) that the results of the monitoring programs on San Nicolas Island show no adverse effects on pinnipeds. Subsequent to completion of the *Marine Mammal Technical Report*, monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate Vandal launch events. In response to these recent observations, the Navy is applying for an IHA from NMFS (see Section 2.3.2.1.D).

Seabirds are considered to be coastal resources in accordance with the CZMA (see earlier discussion in Section 1.1). Existing noise levels at NAS Point Mugu have less than significant impacts on seabirds because birds are mobile, and suitable habitat is available adjacent to the activity location. Furthermore, current operations are typically of short duration and require only temporary avoidance of the area. For the same reason, the presence of ships and aircraft near the CZ also has less than significant impacts on seabirds. Missile launches and aircraft overflights have been identified as potentially affecting sensitive resources (e.g., western snowy plover) at Point Mugu and San Nicolas Island. JATO bottles at NAS Point Mugu have been identified as potentially "taking" western snowy plovers and light-footed clapper rails through physical impacts and recovery options. As described earlier, two programmatic BAs addressing all base and San Nicolas Island activities are currently being developed and coordinated through the USFWS. The BAs address all significant impacts to sensitive species and their critical habitat (see Section 2.3.2.1.E).

2.3.3 State Policy (Section 30232)

> **Section 30232**. *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such*

materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

2.3.4 U.S. Navy Comments

2.3.4.1 Proposed Action

As described in the hazardous materials and wastes analysis (Section 4.13) of the Draft EIS/OEIS, protection against the spillage of crude oil, gas, petroleum products, or hazardous substances would be provided. NAWCWPNS Point Mugu has established containment and cleanup facilities and procedures for potential accidental spills, complying with applicable federal regulations regarding hazardous substances. Additional spill clean-up services are available in the area and the Navy contracts these services as necessary. Therefore, protection against the spillage of crude oil, gas, petroleum products, and hazardous substances would be provided under the proposed action, and the quality of coastal waters would be maintained.

2.3.4.2 No Action Alternative (Current Sea Range Operations)

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances is provided. NAWCWPNS Point Mugu has established containment and cleanup facilities and procedures for potential accidental spills, complying with applicable federal regulations regarding hazardous substances. Additional spill clean-up services are available in the area and the Navy contracts these services as necessary. Since protection against the spillage of crude oil, gas, petroleum products, and hazardous substances are currently provided, the quality of coastal waters would be maintained.

2.3.5 State Policy (Section 30234.5)

Section 30234.5. *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

2.3.6 U.S. Navy Comments

2.3.6.1 Proposed Action

Potential effects on economic, commercial, and recreational uses of fishing activities have been analyzed. As described in the socioeconomics analysis (Section 4.12) of the Draft EIS/OEIS, the most notable effect on commercial fishing and recreational uses is associated with nearshore intercept activities. Short-term adverse effects on individual commercial fishermen may result from the implementation of the proposed action but the economic importance of the regional commercial fishing industry would not be significantly impacted. See response to Section 30210 for a description of how potential impacts to commercial and recreational users of the marine environment would be minimized.

2.3.6.2 No Action Alternative (Current Sea Range Operations)

Short-term adverse effects on individual commercial fishermen can result from current safety clearance procedures associated with current operations. However, the economic importance of the regional commercial fishing industry is not significantly impacted. See response to Section 30210 for a description of how potential impacts to commercial and recreational users of the marine environment would be minimized.

2.4 ARTICLE 5 - LAND RESOURCES

2.4.1 State Policy (Section 30240)

Section 30240. *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas, and (b) development in areas adjacent to environmental sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

2.4.2 U.S. Navy Comments

2.4.2.1 Proposed Action

The proposed action would have less than significant impacts on environmentally sensitive habitat areas. Sensitive habitats are analyzed in the Draft EIS/OEIS; see the discussion under Section 30230 for a discussion on the potential effects to sensitive habitats.

No impacts would occur to parks and recreation areas adjacent to NAS Point Mugu. Facilities on San Nicolas Island would be located in previously developed areas or sited to avoid sensitive resources.

2.4.2.2 No Action Alternative (Current Sea Range Operations)

Current operations have less than significant impacts on environmentally sensitive habitat areas. Sensitive habitats are analyzed in the Draft EIS/OEIS; see the discussion under Section 30230 for a discussion on the potential effects to sensitive habitats.

2.4.3 State Policy (Section 30241)

Section 30241. *The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses.*

2.4.4 U.S. Navy Comments

2.4.4.1 Proposed Action

The proposed action would not impact agricultural lands. In general, areas to the east, northeast, and north of NAS Point Mugu are zoned for agricultural use. Current activities and proposed future operations are compatible with the surrounding agricultural use. Facility construction is not proposed for NAS Point Mugu. No changes in land use would result, and all improvements would occur on lands presently owned and operated by the Navy; therefore, no impacts would occur to agricultural land.

2.4.4.2 No Action Alternative (Current Sea Range Operations)

Current operations are compatible with the surrounding agricultural use.

2.4.5 State Policy (Section 30244)

Section 30244. *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

2.4.6 U.S. Navy Comments

2.4.6.1 Proposed Action

A - Point Mugu Sea Range

Under the proposed action, archaeological and paleontological resources would not be adversely impacted by increased testing, training, and facility modernizations. Potential adverse effects from increased testing and training to archaeological and paleontological resources are unlikely to result from debris falling into the Sea Range since the debris pattern would be spread over a large area located offshore. Given the location of debris patterns more than 1 NM from shore and the low potential for resources in offshore areas, the minimal effect of debris on the scientific potential of these resources, and the likelihood that submerged resources would be covered with at least some sediment because of settling processes and shifting sand movement over the years, impacts from increased testing and training on archaeological and paleontological resources in the CZ would be less than significant. Therefore, no adverse impacts on archaeological and paleontological resources would occur.

B - San Nicolas Island

Adverse effects to cultural resources could result from the construction of facilities at San Nicolas Island. However, many cultural resource studies have been conducted at San Nicolas Island over the past 100 years. Data from these studies are typically used during the facility siting process to minimize effects on cultural resources. Furthermore, the areas chosen for construction would be evaluated for the presence of buried archaeological sites, and appropriate actions would be taken to minimize and eliminate any impacts. This potential impact would also be mitigated to a less than significant level because any contract, lease, or permit for construction at San Nicolas Island would include a requirement to suspend work in the event of a discovery of archaeological materials. If subsequent avoidance is not possible, then consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA) (§ 106, 16 U.S.C. 470 et seq.) would be initiated to mitigate adverse effects to the resource. Construction of facilities would be designed to avoid known archaeological sites and minimize adverse affects to these resources. Beach areas used for special warfare training are chosen to avoid or minimize damage to cultural resources. No adverse effects to archaeological and paleontological resources on San Nicolas Island would result from proposed activities.

C - Point Mugu

There would be no modifications to structures at NAS Point Mugu under the Facility Modernization Element. The proposal includes the reuse of two launch pads along Beach Road for missile launches and continued use of Building 55 as a target launching facility. Missiles currently launched by truck in front of Building 55 would be launched from the Bravo pad or Charlie Pad and total approximately 6 missile launches per year. Other than minor pad preparation, no construction is required. The Bravo pad is part of the Bravo Launch Complex (formerly known as the Baker Launch Complex), which includes three buildings considered to meet the criteria for eligibility to the National Register of Historic Places (NRHP)

for significance associated with the Cold War. Reuse of the launch pad would not adversely affect the facility since it does not require modifications and proposed use is similar to the historical use of the facility and does not detract from its historical significance. Minor utility upgrades, if required, would not alter the criteria that make the facility significant and therefore would not adversely affect the complex. No impacts to the complex would result from this action. It has been determined that the Charlie pad does not meet criteria for eligibility to the National Register.

Some of the missile launches could include the use of solid propellant boosters. The boosters would be ejected and fall into the ocean approximately 0.25 to 0.50 mile offshore. In the remote case that a booster settled on the surface of an underwater archaeological resource, damage to the resource would not be likely since submerged resources would be covered with at least some sediment due to settling processes and shifting sand movement. In addition, if an expended booster fell on a resource, the effect on the scientific potential of the resource would be minimal and result in impacts that would be less than significant.

Building 55, considered to be an "exceptionally significant" Cold War-era resource and listed on the National Register, would continue to be used as a target launch facility and would be maintained as appropriate. No impact to the building would result from this action.

2.4.6.2 No Action Alternative (Current Sea Range Operations)

Current operations do not adversely affect archaeological and paleontological resources. Potential adverse effects are unlikely to result from debris falling into the Sea Range since the debris patterns are typically spread over large areas located offshore. Given the location of debris patterns more than 1 NM from shore, the low potential for resources in these areas, the minimal effect of debris on the scientific potential of these resources, and the likelihood that submerged resources would be covered with at least some sediment because of settling processes and shifting sand movement over the years, impacts from current operations on archaeological and paleontological resources in the CZ are less than significant.

Inert mine shapes dropped into the nearshore areas at Becher's Bay could significantly impact cultural resources. Shipwreck remains have been discovered near the pier at Becher's Bay, and at least two ships have been lost in the area. Although the National Park Service surveyed the area between the pier and Carrington Point using side-scan sonar and a magnetometer in 1985 with negative results, shipwreck remains are periodically uncovered during winter storms. Dropping or recovering inert mine shapes could destroy fragile remains if the drop zone overlaps with the locations of submerged or shallowly buried shipwrecks. The inert mine drop zone is located off the coast of Becher's Bay between Skunk Point and Carrington Point. The surface hazard area is 2 NM wide and 5 NM long and is located between 0.5 NM and 2 NM from the shore. The target points occur in the center of the hazard area, which is located between 1.5 NM and 3 NM from the shore. A predictive model of shipwreck locations in the Sea Range indicates that shipwrecks are most likely to be found within 0.5 NM of land. The shipwreck found at Becher's Bay was on the beach. If the impact area is confined to the hazard area, significant impacts on cultural resources are unlikely. If inert mine shapes fall outside of the hazard area and closer to land or if cleanup activities disturb the beach and nearshore area, then adverse effects to significant resources could occur. These effects are reduced to less than significant levels through implementation of the following mitigation measures:

- Conduct a thorough survey of the entire impact area, in addition to a buffer zone, for the presence of shipwrecks.

- If resources are found to be present, then conduct Section 106 consultation.
- If inert mine shapes or cleanup activities expose or damage cultural resources, then data recovery measures are initiated in accordance with Section 106 of the NHPA to record and preserve scientific information in keeping with a research design and using accepted professional standards (Secretary of the Interior's *Standards and Guidelines*).

2.5 ARTICLE 6 - DEVELOPMENT

2.5.1 State Policy (Section 30250)

Section 30250. *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

2.5.2 U.S. Navy Comments

2.5.2.1 Proposed Action

The proposed action would occur in areas currently used by the Navy for military testing, training, and associated operations. No changes in land use would result upon approval of the proposed action, and all improvements would occur on lands presently owned and operated by the Navy. In addition, facilities would be located in previously disturbed areas or sited to avoid sensitive resources. Adequate services are available for proposed facility modernizations.

2.5.2.2 No Action Alternative (Current Sea Range Operations)

Current operations occur in areas presently and historically used by the Navy for military testing, training, and associated operations. No changes in land use patterns result from current operations.

2.5.3 State Policy (Section 30251)

Section 30251. *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

2.5.4 U.S. Navy Comments

2.5.4.1 Proposed Action

The proposed action would not cause a significant adverse impact on visual qualities of area waters, beaches, the Channel Islands, or associated resources within the Sea Range or Point Mugu. Navy testing and training activities are currently conducted in these areas and the proposed action would not introduce new activities. Disruption to land use within the project area would be considered minimal and short-term; therefore, impacts of the TMD and Training elements on visual resources would be less than significant.

Facility modernization would consist of facility improvements at San Nicolas Island, which support existing land use activities. Facilities would be located in previously disturbed areas or sited to avoid sensitive resources and would be visually compatible with the character of surrounding areas. The proposed vertical launch system structure would change the height and profile of the Building 807 Launch Complex. Although this would be visible from the ocean, the proposed vertical launch system would not change the aesthetics of the Building 807 Launch Complex. No substantial changes in land use would result. Therefore, significant impacts would not occur to visual resources.

2.5.4.2 No Action Alternative (Current Sea Range Operations)

Current operations do not cause a significant adverse impact on visual qualities of area waters, beaches, the Channel Islands, or associated resources within the Sea Range or Point Mugu. Navy testing and training activities are currently conducted in these areas. Disruption to land use within the project area is minimal and short-term; therefore, impacts of current operations on visual resources are less than significant.

2.5.5 State Policy (Section 30253)

> **Section 30253**. *New development shall: (1) minimize risks to life and property in areas of high geologic, flood, and fire hazard; (2) assure stability and structural integrity, and neither create not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs; (3) be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development; (4) minimize energy consumption and vehicle miles traveled; and (5) where appropriate, protect special communities and neighborhoods which, because of their unique characteristic, are popular visitor destination points for recreational uses.*

2.5.6 U.S. Navy Comments

2.5.6.1 Proposed Action

The proposed action would not involve development in areas of high geologic, flood, or fire hazards. Proposed development would assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. The proposed use of two previously used launch pads at NAS Point Mugu would occur on developed land located far enough from the shoreline as to not alter natural shoreline processes.

As described in the air quality analysis (Section 4.2) of the Draft EIS/OEIS, emissions would be below *de minimis* levels or not subject to the General Conformity Rule; therefore, the General Conformity Rule is not applicable to the proposed action.

As discussed in Section 30220, the proposed action would temporarily impact popular visitor destination points for recreational uses. See Section 30220 for a detailed discussion of availability of public access to recreational areas.

2.5.6.2 No Action Alternative (Current Sea Range Operations)

The No Action Alternative does not involve new development.

SECTION 3
MITIGATION MEASURES

Federal consistency with the California Coastal Management Plan has been analyzed for the proposed action at the NAWCWPNS Point Mugu Sea Range. The primary focus was on impacts within the CZ, as opposed to Sea Range-wide impacts, although some proposed activities in the Sea Range would ultimately affect coastal resources. It is the opinion of the Navy that the proposed action is consistent with the California Coastal Act of 1976 to the maximum extent practicable. No significant impacts were identified with regard to applicable sections of the Act. However, listed below are measures proposed to minimize identified impacts in the Draft EIS/OEIS, organized by the relevant articles discussed in Section 2.

3.1 PUBLIC ACCESS AND RECREATION

- For sportboats that do bring recreational fishermen, divers, or tourists to San Nicolas Island, Notices to Mariners (NOTMARs) would be provided in advance which would allow mariners to select alternate destinations without substantially affecting their activities. Impacts on sport fishing, recreational activities, and tourism would be less than significant.

3.2 MARINE ENVIRONMENT

3.2.1 Point Mugu

Mitigation and conservation measures identified in coordination with the USFWS, many of which are ongoing, include:

- A JATO bottle removal program has recently been implemented at Mugu Lagoon with timing restrictions to ensure no impacts to sensitive species.
- Western snowy plover and light-footed clapper rail habitats will be enhanced.
- Population monitoring of salt marsh bird's-beak, western snowy plover, California least tern, and light-footed clapper rail shall be standardized and used consistently.
- Areas where physical parameters are appropriate and no other use is anticipated shall be restored as salt marsh, sandy beach, or other habitat for listed species.
- If monitoring of the light-footed clapper rail population suggests that the species is being displaced from currently occupied habitat, the Navy shall create an equivalent area of salt marsh habitat in proximity to occupied habitat.

- Because variations from standard procedures were the cause of some adverse effects to listed species, aircraft overflights will be modified and monitored by air operations personnel.
- All base personnel and contractors shall be educated on the identification and importance of conserving listed species, and their personal responsibilities in this regard.
- All mitigation measures shall be monitored to determine their effectiveness in avoiding and minimizing take of listed species. If mitigation measures are not effective, corrective measures shall be implemented.

3.2.2 San Nicolas Island

Marine Mammal Protection Act Compliance:

- Ground-based monitoring of pinniped behavior has recently been implemented at San Nicolas Island during activities that might cause stampedes. Observational data will be used to better define the resource and impacts, and to modify future operations, if necessary, to ensure no adverse effects. The recent monitoring efforts at San Nicolas Island revealed that pinnipeds stampeded during two separate Vandal launch events. In response to these recent observations, the Navy is applying for an IHA from NMFS. In addition to limiting activities near the beaches in advance of the launches, the Navy will adopt additional mitigation measures when doing so will not compromise operational safety requirements or mission goals.

Mitigation and conservation measures proposed to the USFWS, many of which are ongoing, include:

- The south side of San Nicolas Island has been closed to all activities.
- To prevent disturbance of the federally listed western snowy plover, nesting areas are closed during the breeding season. Signs and barricades alert personnel of closure areas.
- The distribution and status of listed species are regularly and consistently monitored. Listed species habitat in or near operational areas is surveyed frequently to assess potential for effects to listed species by Navy activities.
- All permanent and visiting island personnel attend a mandatory "environmental briefing." Federal legislation and Navy regulations regarding protected species are emphasized, along with the importance of honoring environmental closure areas.
- The habitat for island night lizard is being expanded using revegetation.
- The substrate immediately adjacent to the Building 807 launch area may be altered during the nonbreeding season to make the area unappealing for nest site selection by snowy plovers (this area is not designated critical habitat for the species).
- All construction equipment, vehicles, and supplies will be thoroughly cleaned and inspected prior to shipment to San Nicolas Island to reduce the potential for introduction of non-native species.
- Staging areas for temporary storage of equipment and materials will be sited in areas with low island night lizard densities whenever feasible.
- Habitat for relocated night lizards will be created by planting appropriate cover in barren areas adjacent to currently utilized habitat.
- The sites and access roads for proposed facility construction projects will be placed to avoid habitat which may harbor island night lizards.

3.3 LAND RESOURCES

- If inert mine drops or cleanup activities occur nearshore of the hazard area in Becher's Bay and expose cultural resources, initiate data recovery measures in accordance with Section 106.

3.4 DEVELOPMENT

- Include a requirement in any contract, lease, or permit for construction to suspend work in the event of a discovery of archaeological materials. If subsequent avoidance is not possible, initiate consultation in accordance with Section 106 of the NHPA.