
Appendix I
Outdoor Recreation Management Plan

Final DRAFT

Appendix I: Outdoor Recreation Management Plan

This Appendix I provides an Outdoor Recreation Management Plan (ORMP) which complements the natural resource management efforts at Patrick Air Force Base (PAFB) and Cape Canaveral Air Force Station (CCAFS) and includes a list of cooperating agencies and their responsibilities, resource protection challenges, military mission of the 45th Space Wing (45 SW), and planning guidelines. For more on the military mission of the 45 SW and facility overviews of CCAFS and PAFB, refer to Chapter 3 of the INRMP.

I.1 Introduction

Air Force Instruction (AFI) 34-110 implements Air Force Policy Directive (AFPD) 34-1, Morale, Welfare, Recreation, and Services Programs, which provides guidance for initiating and operating outdoor recreation programs at US Air Force (USAF) installations. AFI 32-7064, Integrated Natural Resources Management requires that installations prepare an Outdoor Recreation Management Plan (ORMP) as a component of the installation's Integrated Natural Resources Management Plan (INRMP). Thus, outdoor recreation programs should complement natural resource management efforts. The INRMP describes the overall natural resources management program for the 45 SW. In particular, Chapter 7 describes the natural resources management on 45 SW facilities. This ORMP refers to recreational programs and activities at Cape Canaveral Air Force Station (CCAFS) and Patrick Air Force Base (PAFB). Since both installations are located relatively close to one another, the cooperating agencies, resource protection challenges, and planning guidelines are largely the same at CCAFS and PAFB. However, due to access limitations, the recreational program at CCAFS is much more limited than at PAFB.

The primary purpose of the ORMP is to maximize and encourage outdoor recreation benefits and use within the constraints of the installation's mission and the capacity of its resources. Where feasible, multiple use concepts will be applied. Within the ORMP, areas that are appropriate for outdoor recreation activities are identified and classified according to recreation potential and ecosystem sustainability.

The overall outdoor recreation program should provide for specific types of recreational activities on CCAFS and PAFB, while considering the potential impacts to Threatened and Endangered (T&E) species. Amenities include picnic facilities; a family camping area; fishing, boating, golfing, jogging, and biking activities; enjoyment of scenic natural and historic areas; and outdoor adventure activities such as wakeboarding, surfing, kayaking, as well as other off-site activities such as horseback riding, and diving. In order to provide these opportunities, the program must provide and maintain recreational facilities, educate customers on resource appreciation and safety concerns, and organize and schedule activities and classes. Overall, outdoor recreation resource management should improve on existing assets and programs, as well as seek out additional recreational opportunities and develop new programs. For Goals and Objectives associated with Outdoor Recreation, see Chapter 8 of the INRMP.

The outdoor recreation program involves coordination with a number agencies, both internal To 45 SW and external to DoD. Table I-1 identifies the internal and external agencies that are involved with the 45 SW and its recreational components.

Table I-1. Offices and Agencies Involved with the ORMP, CCAFS and PAFB

Agency Name	Agency Type	Responsibilities of Agencies
45 th Space Wing Civil Engineer Squadron, Environmental Conservation Element (45 CES/CEIE-C)	Internal Office	Develops the INRMP, of which the ORMP is part, to avoid any adverse habitat impacts to threatened and endangered (T&E) species (Appendix C of the INRMP).
45th Force Support Squadron (45 FSS)	Internal Office	Administers many of the activities of the Outdoor Recreation Program at PAFB.
Florida Department of Environmental Protection (FDEP), Division of Recreation and Parks	External Agency	Develops and maintains the statewide comprehensive, multipurpose outdoor recreation plan (SCORP). The SCORP provides the framework for planning and implementing the state's recreation system. Information such as carrying capacity estimates which are contained within the SCORP is useful to the installation for recreation planning.
Florida Fish and Wildlife Conservation Commission (FWC)	External Agency	Has responsibility for game and fish management in the state. They provide outreach on various fisheries issues, as well as direct the licensing program. They also have programs for the protection of non-game and endangered species.
U.S. Fish and Wildlife Service (USFWS)	External Agency	Has responsibility for protection of Federally listed threatened and endangered species. They provide response under Section 7 Endangered Species Act consultation process for any outdoor recreation actions that may impact listed species.
The Florida Department of State, Division of Historical Resources	External Agency	Florida's primary historic preservation agency. This agency is involved in reviewing historic site surveys and environmental activities, as well as historic preservation planning.

Several threatened, endangered, or protected plants and animal species occur or have the potential to occur on CCAFS and PAFB. There are a number of federally listed species present on CCAFS and PAFB that need to be factored into the outdoor recreation program. For more on these species, see Section 7.2 and Appendix C of the INRMP. Of particular relevance to the outdoor recreation program are the following:

- **Sea Turtles-** Sea turtle nesting occurs on the beaches of CCAFS and PAFB. Adults and hatchlings can become disoriented by light pollution, so at both installations there are specific requirements for exterior lighting fixtures and usage periods. Additionally, military outdoor recreation programs that occur on the beach, in the Atlantic Ocean and Banana River have specific avoidance and impact minimization guidelines for protection of sea turtle nests, nesting females, and hatchlings through recreational equipment rental agreements, pre-coordination with 45 CES/CEIE for beach events, etc.
- **West Indian Manatee-** The US Fish and Wildlife Service (USFWS) has designated the Indian and Banana Rivers as critical manatee habitat. At PAFB, manatees can be observed in the marina area, in canals near the airfield, and within the Banana River near the shoreline. Proposed alterations or maintenance of these recreation areas (marina, piers, and designated fishing areas) must consider potential effects to

manatees. Recreational boat rental agreements and pre-rental safety courses cover manatee awareness, safe speed zones, and protection requirements required by law.

- **Protected birds-** There are many bird species that have specific habitat requirements on CCAFS and PAFB. The habitat requirements and protected status of bird species must be considered when recreational use is anticipated (e.g. protect nesting areas on the ocean and riverside beaches). Additionally, tree and upland ground nest protection is also assisted by 45 CES/CEIE at the PAFB FamCamp, Golf Course or Marina when necessary.

I.2 CCAFS Outdoor Recreation Opportunities

Jogging paths are available within CCAFS; the route and restrictions are posted at the Cape Fitness Center (Bldg 49915). Other recreational amenities offered within CCAFS (to personnel with long-term access badges) include tennis, volleyball, racquetball, and basketball, barbecue (Bourne Pavilion), horseshoes and a softball field. No hunting is allowed anywhere at CCAFS. Due to security reasons, only personnel with valid long-term badges may fish in designated areas of CCAFS beaches, and canoe/kayak on the Banana River side of CCAFS.

Personnel with long-term access badges to CCAFS and KSC employees, with up to two guests, may fish in designated areas (Class II recreational areas) on CCAFS. There are four areas on the CCAFS beach that are open for access to fishing during daylight hours when launch operations permit. Personnel with long-term badges may walk/jog and may escort up to six guests on CCAFS beaches (described below), but must enter and exit beaches via dune crossovers only. Badged personnel must remain with their guests at all times. Parking is allowed only on a stable road. The following are the locations allowing access for fishing:

- Camera Road A - 1/4 miles south of Hangar C, off Pier Road. Dune crossover provided for beach access.
- Camera Road B - located north of SLC-46 perimeter fence and east of Complex 1, 2, 3 and 4 off of Pier Road. Dune crossover provided for beach access.
- SLC-34 beach - located southeast of the SLC-34 blockhouse off Phillips Parkway. Dune crossover provide for beach access.
- Navy Port Area – fishing is controlled by the Commanding Officer, Naval Ordnance Test Unit

A fishing pass is not required for authorized fishing areas. Personnel that bring guests must stop at PIDS 1 or 3, or any perimeter gate during non-duty hours to register their guests to receive a one day pass for each guest. This pass allows access to and from the fishing/access areas only and is not valid anywhere else.

In order to manage recreational use within areas of CCAFS that are also utilized by protected species, personnel using the beach for fishing are required to adhere to certain rules which include:

- avoiding native dune vegetation by using the provided crossovers; and
- protecting endangered species by not disturbing sea turtles, turtle nests (nesting season is May through October), nest markers, predator screens, light shields, driftwood paths, and sea turtle/marine mammal skeletal remains.

Because of federally protected status of the sea turtle, violators of the above rules are subject to prosecution. Additionally, personnel are required to remove their trash from the area and not insert objects (i.e. umbrellas) into the sand above the high tide line during sea turtle nesting season. (See Appendix C, Attachment C-1 of the INRMP for additional rules and restrictions). Canoeing and kayaking are allowed at the canoe ramp behind Hangar AF. No motorized boats (gasoline or electric) are allowed. Manatees also utilize this area, and signage is posted

advising of the manatee's presence, protected status, and penalties associated with harassing, harming, injuring, or killing manatees.

I.3 PAFB Outdoor Recreation Opportunities

I.3.1 Overview of Existing Outdoor Recreation Program

PAFB's natural resources and aesthetic surroundings provide a unique setting that demands a special approach to the installation's outdoor recreation management program and which provides an outstanding Outdoor Recreation Program. Most of the outdoor recreation program activities at PAFB are managed by the Outdoor Recreation Program Manager under the leadership of the 45 MSG/FSS. The golf course and marina are separately managed and have their own facility staff. Some elements that complement and/or are essential to outdoor recreation programs, such as natural and cultural resource protection are managed by personnel from the 45 CES/CEIE-C.

I.3.2 Outdoor Program Elements with Oversight by 45 CES/CEIE-C

The 45 CES/CEIE-E oversees the following components that interact with outdoor recreation:

- Natural resource management including habitat restoration, exotic invasive plant removal, and dune re-vegetation.
- Wildlife and natural resource protection, monitoring, and interpretation.
- Historic and cultural resource sites protection and interpretation.
- Environmental review of construction projects related to installation of recreational features and attendant features, such as trails, boardwalks, docks, and external lighting fixtures.
- Information regarding Installation Restoration Program (IRP) sites and potential contaminant problems.
- Information regarding Integrated Pest Management protocols and environmental effects of control methods for installation pests (See Appendix L of this INRMP for the Integrated Pest Management Plan).
- Recycling and reuse programs as well as sponsoring beach clean-up events.

I.4 Installation Recreational Areas and Resources

The FL SCORP provides use guidelines for activities the state classifies as "resource-based" and "user-oriented." Resource-based outdoor recreation is dependent upon some element or a combination of elements in the natural or cultural environments that cannot be easily duplicated by man. Examples include hunting, fishing, camping, boating, surfing and nature study. User-oriented activities are those that can be provided almost anywhere for the convenience of the user, such as volleyball, soccer, swimming, and golf. In the context of this ORMP, "user-oriented activities" correlates closely to "Class I – Developed Recreation Areas," and "resource-based recreation" roughly corresponds to "Class II – Dispersed Recreation Areas." According to AFI

32-7064, land designated for outdoor recreation shall be zoned into the following classes of use, based on multiple use potential and ecosystem sustainability:

Class I areas (developed recreation areas) contain facilities designed to accommodate intensive recreational activities such as sports fields, campgrounds, picnic areas, paved walking/jogging/cycling trails, winter sports areas, marinas, developed swimming beaches, and other water sports areas.

Class II areas (dispersed recreation areas) are areas that are suitable to support dispersed recreational activities such as hunting, fishing, primitive camping, bird watching, boating, hiking, and sightseeing.

Class III areas (special interest areas) are recreation areas that contain valuable archeological, botanical, ecological, geological, historic, zoological, scenic, or other features that warrant special protection and access control. There are no Class III recreational areas within PAFB.

I.4.1 Class I – Developed Recreation Areas

The FamCamp provides utilities and services needed to allow for recreational vehicle (RV) and tent camping. There is an onsite manager to oversee the residents and facilities. Residents are also specifically offered tours, classes, and outdoor recreational opportunities; attendees are provided transportation to these activities.

The FamCamp area is located within the Banana River floodplain. The sandy shoreline of the river provides a scenic backdrop to the area. Residents can fish from the shoreline or relax and enjoy views of river and its endemic aquatic life. Invasive vegetation removal and native shade tree plantings conducted by 45 CES/CEIE have improved the aesthetics and habitat quality around FamCamp. Just offshore there are protected seagrass beds. Motorized boat usage is minimized in the shallow shoreline waters. The Banana River is an Outstanding Florida Water, and to protect the resource the residents are restricted from engaging in activities which could adversely affect the river. Most notably, one such restriction is that vehicle maintenance is prohibited onsite, although vehicle washing with biodegradable products is allowed away from surface waters where wash water would have the potential to drain to the river. Additionally, Famcamp and Marina patrons are not authorized to damage surrounding shoreline vegetation for canoe/kayak and fishing access or to increase views of the water. Habitat degradation is monitored by 45 CES/CEIE and any observations are reported to 45 FSS for patron violation notification and restoration action.

Along with the residents, the pet population is managed at FamCamp. Residents are allowed to keep their pets on site; however, there is a two pet maximum per campsite, all pets must be registered, and all pets must have current rabies inoculation. There are designated pet walk and fenced play areas, and all pet owners must dispose of pet droppings in the dumpster.

The FamCamp expanded in 2011 and added 32 full-hookup (sewer, water, electric) RV sites. Another expansion project is anticipated for 2015 which will increase the 80 sites to 127. The area of expansion was a former military shooting range which has been demolished and remediated. A new sewer and line will also be added to accommodate the expansion to include

upgraded fire protection and servicing for the new sites and upgraded laundry facility. The entire FamCamp area will be permitted for stormwater management with dry swales included in the design. This will be an improvement for this area and will significantly reduce flooding problems and surface water runoff. The FamCamp area will need to be monitored for carrying capacity and habitat degradation as the number of guests utilizing the area will be increasing by over 60%.

The PAFB Manatee Cove Golf cCourse is an 18-hole course that covers approximately 260 acres, and offers year-round golf programs. In order to maintain the playability and enhance the aesthetics of the greens and fairways, herbicides and pesticides are applied to control unwanted plants and pests. These applications are limited to the playing areas, and the roughs adjacent to the course's water features are only mechanically maintained. Invasive vegetation removal conducted by 45 CES/CEIE and canal dredging through 45 CE has also improved the aesthetics and aquatic habitat quality. Several aquatic amphibian, reptile, bird, and fish species utilize the golf course canals. Occasionally, there have been fish kills in the golf course ponds due to low oxygen levels. The 45 CES/CEIE has reduced these incidents significantly by adding aeration systems to the ponds. The course is developed on old closed landfills, and excavation activities occurring at the site must be coordinated with the personnel of the AFCEC Installation Restoration Program.

Adjacent to the golf course is the Manatee Cove Marina and Yacht Club which includes over 230 wet slips, an upland boat wash rack and boat maintenance area, dry boat storage, a bathroom/shower facility, and a club and outdoor Tiki bar area. Manatee can frequently be observed in the marina area; therefore, boaters must be cognizant of the presence of these animals and exercise caution and slow down when boating in and around the area. Additionally, manatee awareness signs are posted at the boat ramp and docking areas at the Marina. Refer to Attachment I-1 of this Appendix I for the 'Florida Department of Environmental Protection Clean Marina Program, Clean Boatyard Requirements' that lists the guidelines required of the marina and boat storage area.

There is an Outdoor Recreation rental boat dock, elevated pavilion, and fishing pier within the Banana River adjacent to the Outdoor Recreation facility west of the north centrally located Administrative area at PAFB. The Outdoor Recreational Staff require boat users to attend a boater safety course which covers manatee protection measures. The rental boat dock generally houses between five and ten boats. In addition to the fishing pier connected to the boat dock, there are also four other elevated fishing piers located within the Banana River. Three are adjacent to the privatized North Housing, although the piers are Government property. The remaining pier is located at Chevron Park to the north of FamCamp along the central section of PAFB. There are six (6) **beach parking areas** and dune crossover areas on PAFB property along State Road A1A outside of the installation's gate. The northern beach area, called North Beach or Picnic Tables Beach, also has an upland picnic pavilion, bathroom, outdoor showers, and volleyball court, as well as a beach viewing wood deck at the top of the dune. The next beach parking area south of North Beach is associated with the Beach House, formerly the Blockhouse and Officers Club area. The Beach House will be discussed separately following this paragraph. The 2nd Light or Main Gate Beach parking area is the next location south of the Beach House; it only has a north and south dune crossover and outdoor shower on

either side of the parking lot. Following south of Main Gate beach is Hangars Beach parking which is similar to the Main Gate beach parking lot configuration. The Tides Club north and south parking lots can also be used for beach access. Finally, the last southernmost beach parking area called Pineda Beach also has a small picnic pavilion, bathroom and outdoor showers. All of these areas are accessible to the public and a few are very popular surfing spots. The recreating public can be a significant nuisance to wildlife, particularly shorebirds. Some shorebirds are selecting gravel rooftops on the east side of PAFB over the sandy beach for nesting sites; rooftops are also generally more protected from predators as well. Design and timing of lighting at beach areas must follow light management requirements which minimizes light pollution and scatter; providing protection to sea turtles.

The Beach House facility was renovated (2011-2013), and has become a more popular socializing location for 45 SW personnel. The area includes an outside food service, an indoor/outdoor bar, interior and exterior gathering space, two (2) elevated deck/pavilions, restrooms, outdoor showers, and beach equipment rental storage. All of the Beach House area is behind a seawall formerly for the Officers Club which was demolished in 2011 after a fire. Beach equipment such as chairs, umbrellas, surfboards, bikes, etc., can be rented during the warmer season months from the Beach House. Beach ready Segways were introduced by 45 FSS in 2013 as available for rental, but liability and maintenance issues have limited rental. Generally the Segways are used for small group beach tours guided by an experience member of the Outdoor Recreation staff that trains patrons on usage and keeps the tour below mean high water for sea turtle and shorebird nest protection. Equipment rental rules were established under Section 7 consultation with the USFWS for protection of sea turtles (refer to Attachment I-3)

There are two **running/bike trails** that originate at the Fitness Center; each respectively offers a 4 mi and 5K distance route. This trail is most typically utilized by active duty personnel for fitness purposes, although it is available to anyone with access to the installation. For shorter distance running, there is also the WARFIT paved track in a scenic location near the river. There are also two tennis courts to the east of the WARFIT paved track. Soccer and softball fields are additionally available for use in the separate South Housing area south of PAFB proper, now known as Pelican Coast.

I.4.2 Class II – Dispersed Recreation Areas

The Banana River and the Atlantic Ocean are the boundaries for PAFB, west and east boundaries, respectively. Ocean shoreline areas that are not as used by the public (e.g. that are a substantial distance from beach crossovers) provide opportunities for fishing and observation of wildlife and waterfowl. Fishing is allowed in accordance with state regulations and policy.

There are a few ponds and canals on the golf course property and adjacent to the FamCamp, however, fishing access is not allowed in these ponds and canals due to concerns about the potential effects of contaminated sediments and wildlife inhabiting those waterbodies. Occasionally, a manatee can be observed in the Survival Canal adjacent to FamCamp; this canal has a direct connection to the Banana River.

Regulations related to fishing activities are provided in Attachment I-2 of this Appendix I.

In addition to fishing activity, boating recreation is authorized within the waterways that border the installation. As mentioned earlier, a boat dock and pavilion are located on the Banana River near the Outdoor Recreation Office, and there is a boat launch ramp at the marina. Care must be observed so that neither seagrass beds nor manatees are harmed by boating operations. The Outdoor Recreation staff provides information about safe boat operation and about regulatory “slow zones” for manatee.

I.5 Projects Relevant to Outdoor Recreation

There have been and are some projects led by either the Outdoor Recreation Program or 45 CES/CEIE-C that benefit outdoor recreation, as well as contribute to general environmental protection. These include, but are not limited to:

- **Golf Course Greens Renovation:** In 2007, the golf course green complexes were renovated and replanted with seashore paspalum (*Paspalum supreme*). Site prep involved *sterilization* of the soils with a broad-spectrum pesticide prior to replanting the greens. Seashore paspalum is expected to require fewer chemicals to maintain a healthy turf than previous Bermuda grass that was planted on the course. Another advantage to the seaside paspalum is its ability to withstand the salty beachside environment.
- **Golf Course Irrigation Renovation:** Starting in 2008, the golf course irrigation system was renovated.
- **Golf Course Canal Widening:** Widening of some of the canals and reconfiguration of the culverts and wiers on the PAFB gold course were recently completed (2013) as part of a regional stormwater permit.
- **Golf Course Water Use Reduction:** The golf course is now using reclaimed water for irrigation; the two most eastern ponds on the golf course function as the irrigation holding ponds. The golf course is also working on reducing the use of tap water wells.
- **Banana River Shoreline Stabilization:** Damaged docks and pavilions along the shore of the Banana River were rebuilt after the hurricanes in 2005. Part of this project also stabilized the shoreline using methods that avoided direct impacts to the river and associated fringe wetlands, modeled after previous stabilization efforts at FamCamp utilizing coquina rip-rap above the mean high water line and an upland trench buried gabion metal basket full of large rocks/boulders. Wetland plants below the mean high water were avoided, and mangroves growing along the river shoreline were avoided. The northern Banana River and southern Banana River property boundary south of FamCamp and adjacent to the airfield was repaired sometime between 2007 and 2009.
- **PAFB Marina Dock Replacement:** Three of the docks were repaired and slip size was increased to allow for larger boats which reduced slip number (2012-2013). Design completion for the repair/replacement of the remaining docks is anticipated for 2016 with construction by 2017.
- **PAFB Marina Dredging:** 45 SW is currently conducting maintenance dredging of the marina channel; a permit has been recently received (2014) to conduct long-term maintenance dredging for a ten year period.
- **Removing invasive species near the FamCamp** to potentially provide additional area for recreational use.

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- Re-vegetating the Banana River shoreline to promote stabilization and enhance habitat.
- Widen golf cart paths (in next 5 years)

Future re-utilization of a closed landfill south of FamCamp for daytime, light recreational use: Once habitat restoration is complete, the AFCEC IRP and FDEP approve of the restored landfill cap, and Quality of Life funds provide for a handicap accessible hardened trail, waterless bathroom, picnic area, benches and exercise stations, the approximately 20 acre acre will be open for recreational use. Invasive vegetation removal has been occurring since 2007 when the monoculture of Brazilian pepper was removed. Native planting islands and landfill cap stabilization have followed invasive vegetation removal and continual re-growth treatment.

I.6 Special Issues

I.6.1 Environmental Protection

Activities affecting waterways should be managed so that recreational fishing and wildlife uses are protected. The coastal environment is fragile and must be afforded added protection because of potential conflicts between resource protection and conservation and users of the outdoor recreation program. During the conduct of outdoor recreation, plants and animals should be protected from avoidable and unnecessary impacts. Protection of native plants and animals ultimately enhances the passive recreational value of the installation.

There are no available on-base areas suitable for the public use of all-terrain vehicles (ATV). Occasionally ATVs are used, however, by 45 CES/CEIE-C staff and its contractors to do surveys or to carry supplies or by security forces patrolling the beach areas. For additional information regarding ATV use within the 45 SW, see Chapter 7 on the INRMP.

The use of any herbicide, pesticide, fertilizer, or other chemical, or the proposed eradication of any pest species at any outdoor recreation area must be coordinated with the Base Pest Manager and performed in accordance with relevant federal, state, and USAF regulations and the 45 SW Integrated Pest Management Plan.

Users of outdoor recreation areas will be informed of the proper procedures to follow in the event of a spill (hazardous material, gasoline or other fuel, or oil). FamCamp users are advised that changing motor oil at the campsite is not allowed, since spills could harm the fragile environment of the Banana River.

I.6.2 Multiple Use Coordination

Outdoor recreation at PAFB has two functions. The primary function is to provide enhanced quality of life opportunities for base personnel, thus enhancing their morale. Good personnel morale is essential to achieving the military mission, and morale is dependent in part on a high quality of life. A secondary function of the outdoor recreation program is to teach and encourage outdoor skills, provide wildlife and natural resource appreciation and utilization opportunities, and provide opportunities to appreciate and understand historic resources.

An area can be used for more than one purpose and the management of an area can achieve multiple goals. Multiple use management of outdoor areas requires coordination among the various elements of the Environmental Flight, the Outdoor Recreation Program, Wing Safety, 45 CES/CEIE-C, and other 45 SW units.

One of the best examples at PAFB of a multiple use area that achieves multiple goals is the beach along the eastern base boundary. This area provides nesting habitat for threatened loggerhead turtles; a walking or jogging area for individual fitness, aesthetic, or nature study purposes; an outdoor recreation and pavilion area for group gatherings; and a community involvement arena for base and residents through beach clean-ups. It also meets USAF and other regulatory requirements for coastal and floodplain protection.

Attachment I-1

Clean Marina Program at PAFB

I.7 Clean Marina Program PAFB MARINA

The Florida Department of Environmental Protection (FDEP) has developed guidance that describes the requirements to qualify as a Clean Boatyard under the FDEP Clean Marina program. For additional information see FDEP website: <http://www.dep.state.fl.us/cleanmarina/>. FDEP defines a boatyard as follows:

A boatyard is a facility that provides a repair or refinishing site for hull, mechanical or electrical work on vessels. This work may entail the use of resins, paints, lubricants, solvents or other hazardous materials and may require an air permit, industrial waste permit or storm water permit for areas other than vehicular parking.

I.8 Boat Cleaning

I.8.1 Out of the Water

- 45 CES/CEIE-C must add the marina to the PAFB National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Permit that is currently being updated
- Boats must be rinsed in a designated area and until the rinse rack is constructed, only clean water rinses can be allowed
 - **Action:** Services Squadron (SVS) maintains a sign to notify users that only clean water rinses in the designated rinsing area is allowed
- Boat drain plug must not be removed when pulling boats out of the water
 - **Action:** SVS maintains a sign at the boat ramp to notify users not to remove drain plugs when boats are being pulled out of the water
- Pull boats out and away from the water and the boat ramp so bilge water does not drain back into the water
- Check bilge for petroleum and if found remove the petroleum before removing the plug
 - **Action:** SVS has absorbent towels available for purchase in Marina store and provides receptacle for disposal of used absorbent towels
- Pressure washing is not allowed – pressure washing requires an Industrial Wastewater Permit which is not in the best interest of the Air Force due to added regulatory requirements and inspections

I.8.2 In the Water

- Wash the boat hull above the waterline by hand. Only phosphate-free, biodegradable detergents will be allowed.
- Clean the boat hull on a regular basis with sponges or soft towels only
- In-the-water hull scraping and any abrasive processes that occur underwater that may remove anti-fouling paint from the boat hull are not allowed.
 - **Action:** SVS maintains signs providing in-the-water cleaning information

I.9 Hull Maintenance

I.9.1 Land Based Hull Scraping and Sanding

Provide a clearly marked designated work area for hull scraping and sanding. Work should be done inside a building if possible. For outdoor hull maintenance areas, the work must be performed over tarps or drop cloths preferably on an impervious surface away from storm drains. Tarps must be cleaned by manual sweeping or vacuuming routinely during the day, before a rain event, and at the end of the day.

- **Action:** 45 CES/CEIE-C and SVS have identified area in Defense Reutilization and Marketing Office (DRMO) yard to be used for hull maintenance
- **Action:** SVS provides signs designating work area and rules for management of the area
- **Action:** SVS provides shop vacuum for use by personnel doing hull maintenance
- **Action:** SVS provides container for disposal of waste from scraping/sanding/vacuum
- **Action:** 45 CES/CEIE-C provides mechanism for sampling and analysis of waste
- **Action:** 45 CES/CEIE-C provides disposal of waste if characterized as hazardous waste (after analysis results are received)
- **Action:** SVS has users sign a form that user understands proper use and management of the hull maintenance area
- **Action:** SVS discusses OSHA requirements concerning worker lead exposure with Bioenvironmental

I.9.2 Painting

- Painting activities at the marina may need to be added to existing PAFB Title V air permit. Painting should not occur until the determination has been made and the permit has been updated if necessary.
 - **Action:** SVS provides Material Safety Data Sheets (MSDS) to CES/CEIE-C
 - **Action:** 45 CES/CEIE-C uses MSDS to determine if a permit is necessary
- Painting over the water will not be allowed
 - **Action:** SVS maintains a sign to notify users that painting over water is not allowed
- Painting on the land should be done indoors whenever possible.
- Painting on the land outdoors must occur over an impermeable surface and in a manner that prevents over-spray from falling on open ground or surface water.
- Use of rollers or brushes rather than spray painting should be encouraged to limit hazardous waste generation and potential for wind blown paint over-spray. If spray painting is done, waste solvents from cleaning spray equipment must be placed into a labeled container with a lid to prevent evaporation into the atmosphere.
- Waste solvents that cannot be used again in the painting process must be managed as a hazardous waste.
 - **Action:** SVS provides hazardous waste container for liquid solvent hazardous waste
 - **Action:** SVS manages hazardous waste in a < 90-day accumulation site

- **Action:** 45 CES/CEIE-C provides hazardous waste training to SVS personnel managing hazardous waste
- **Action:** 45 CES/CEIE-C provides off-site disposal for hazardous waste
- Excess paint must be identified to Marina hazardous waste personnel for proper management (re-use or disposal as hazardous waste). Empty paint cans must be completely dry before placing in dumpsters.
- Marina must provide recyclable rags for use during hull or mechanical maintenance (including receptacle for dirty rags).
 - **Action:** SVS contacts 45 CES/CEIE-C to begin rag recycling service

I.10 Engineering Repair and Maintenance

I.10.1 Engine Service and Repair

- Perform major engine repairs indoors or under cover whenever possible.
- Provide designated on-land work areas for engine repairs and maintenance and prohibit work outside of those designated areas.
- During engine servicing and repair operations, used oil, used oil filters, anti-freeze and stale gasoline must be collected in separate disposal containers for recycling and/or management as a hazardous or controlled waste.
 - **Action:** SVS provides waste container for used oil, used oil filters, anti-freeze and stale gasoline
 - **Action:** SVS takes used oil and used oil filters to PAFB recycle center for recycling
 - **Action:** 45 CES/CEIE-C provides disposal of anti-freeze and stale gasoline
- Used engine fluids must be transferred to properly labeled containers as they are generated; do not leave full drip pans or other open containers around the work area.
- Wash engine parts over catch pans or containment/recycling systems to prevent discharge to ground and surface waters.
- Collect wash water for proper disposal.
- Patrons that have used batteries should either exchange them at the store where the new battery is purchase, or take them to Brevard County landfill as household hazardous waste.
- Used batteries taken from SVS equipment should be stored with all caps intact, out of the weather in non-leaking secondary containers and taken to DRMO on CCAFS for recycling.
- Direct marina patrons as to the proper disposal of all liquid waste through the use of signs, mailings and other means.
 - **Action:** SVS provides signs designating work area and rules for management of the area
- Recommend that all contractors/mechanics sign an environmental agreement which outlines how all materials are to be handled when on the marina property. Do not allow contractors/mechanics on the property who do not sign an agreement or have violated the terms of the agreement in the past.

- **Action:** SVS has contractors/mechanics sign a form that outlines how all materials are to be handled when on the marina property. Monitor compliance and do not allow contractors/mechanics on the property who have violated the terms of the agreement in the past.

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Attachment I-2

Fishing Rules

Final DRAFT

Fishing and Beach Access Information for CCAFS

- A. Three locations on the CCAFS beach are approved for fishing and walking. Beach access is allowed only during daylight hours (½ hour after sunrise - ½ hour before sunset), one quarter mile either side of the authorized access points, and individuals must remain within sight of the access point. Please access using dune crossover or access path. Personnel must be in possession of an operational cell phone. All beach accesses are closed one day prior to all rocket launches and are subject to closure for other reasons without notice. Call **(321) 853-0911** for all emergencies. Personnel are required to adhere to the rules listed below. Violation of any of the stated rules and requirements may result in suspension of all fishing and beach access privileges for the violator or as directed by Det 1 MSG/CC.

Authorized Beach Access and Fishing Locations

- a) Camera Road A: Located 1/2 mile south of Cape Canaveral Lighthouse (Directions: Travel north on Phillips Parkway from the South Gate (Gate 1) to Central Control Rd. Turn right (east) onto Central Control Rd. Follow Central Control Rd east until it turns to the south and turns into Lighthouse Rd, then follow Lighthouse Rd south. Turn left (east) on Camera Road A to the beach).
- b) Camera Road B: Located 1/10 mile north of Cape Canaveral Lighthouse (Directions: Same as for Camera Road A - 3/4 mile further north).
- c) Complex 47: Located approximately 7 miles north of the South Gate just off Phillips Parkway. The beach access is located east of the camera pad (**not yet open-currently waiting approval for this site**).

Beach Access and Fishing Rules

- a) Adhere to all state and federal fishing regulations, including those pertaining to size, season, bag limits, licensing, and fishing equipment. CCAFS-specific beach rule limits the number of fishing poles to two per fisherman.
- b) Do not disturb sea turtles, turtle nests (nesting season is May through October), nest markers (numbered wooden stakes), predator screens, light shields, traps, driftwood raceways, or any skeletal remains. These animals are state and federally protected and violators are subject to prosecution.
- c) Do not pick up or remove plants, animals, or historical artifacts. Stay off of dune and beach vegetation. A small number of shells may be removed for personal use only. No collection for commercial use will be allowed. Any violators will be prosecuted.
- d) Umbrellas or canopies are permitted below high tide only.
- e) Metal detectors are not permitted to be used.
- f) Stay out of posted bird nesting areas.
- g) Littering is prohibited; all trash must be removed. Glass bottles/containers are not allowed.
- h) Do not clean or dispose of fish on CCAFS (this attracts predators to the beach).
- i) Fishermen and walkers may fish and walk on the beach at their own risk but assume responsibility for the actions and safety of any guests. Alligators, snakes, sharks, feral hogs and other wild animals inhabit CCAFS so be cautious.
- j) Swimming and wading are not allowed.
- k) Firearms, explosives, and alcoholic beverages are strictly prohibited.
- l) If you observe any violations of these rules, please report to the Det 1 MSG office at 853-3900.

B. Authorized Port Fishing Locations

- a) Navy Port Area: Fishing is authorized at the Trident and Poseidon Wharfs only. Fishing hours are from ½ hour after sunrise to 2200 hrs. Fishing is controlled by the Commanding Officer, Naval Ordnance Test Unit and may be closed at anytime without notice. Call (321) 853-1169 for the fishing hotline.

C. Authorized Banana River Access

- a) South side of Hangar AF. This is for canoe/boat ramp access only. No fishing is permitted from shore.

PAFB Fishing Rules

1. Personnel must adhere to all state fishing regulations including those pertaining to fish size, season, limits, licensing, and fishing equipment.
2. Refer to: www.myfwc.com/fishingareas.html for State Fishing Regulations
3. Protect endangered species. Don't disturb turtles, turtle nests (nesting season is May through October), nest markers, numbered wooden stakes, predator screens, light shield, driftwood raceways, or sea turtle skeletal remains. Don't feed or harass any of the wildlife, including birds.
4. Protect the delicate ecological environment. Don't pick up or remove plants, animals, or historical artifacts.
5. Fishing allowed 24 hrs daily.
6. Remove your own trash.

Attachment I-3
USFWS Guidance for Beach Equipment Rental

Final DRAFT

**Requirements for Beach Equipment Staging at PAFB, FL
United States Fish and Wildlife Service (USFWS) Log #41910-2011-I-0270
(applicable 1 May to 31 Oct annually and if early or late nests
are marked within the area of the Beach house beach)**

In accordance with Section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), the USFWS concurred that, if the following measures described below are implemented, the requested Air Force activity of beach equipment staging is not likely to adversely affect nesting and hatching loggerhead (*Caretta caretta*), green (*Chelonia mydas*), leatherback (*Dermodochelys coriacea*), hawksbill (*Eretmodochelys imbricata*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles.

1. No recreation equipment shall remain on the beach or dune overnight. All recreation equipment shall be removed from the beach no later than sundown each day during sea turtle nesting and hatching season;
2. Recreation equipment shall not be brought out onto the beach until after the daily early morning sea turtle surveys are completed (no equipment earlier than 0900);
3. Umbrellas will only be set up below the average high tide line (waterward) to prevent impacts to potential sea turtle nests/eggs as almost no nests are laid in this swash zone. The measured distance to this mean high tide line is approximately 107 feet from the seawall that parallels the Beach house and large parking lot. This line must be marked/maintained with a flag/stake/cone to prevent erroneous use of other high tide lines that are created due to lunar phases or storm activity;
4. Only umbrellas that are clamped to beach chairs (lounger legs-no straight legs) may be used above the high tide line during sea turtle nesting/hatching season. Signs or flags (for advertisement, etc.) must either be weighted such that they sit on the sand and don't penetrate it or must be installed close to the seawall (without damaging/trampling dune vegetation);
5. All recreation equipment shall be brought on to the beach by hand (manually) without the assistance of heavy equipment or motorized vehicles;
6. Trash receptacles shall be maintained within the Beach house area and near beach access points to minimize the potential for attracting predators of sea turtles (raccoons, etc.). Trash receptacles must be either predator-proof or all trash must be removed every day most especially before dusk as predators are more active in the evening;
7. All lighting used for the Beach house must be in compliance with established light management guidelines found in Biological Opinion 41910-2009-F-0087 and 45 SWI 32-7001;
8. Nest surveys/markings will only be conducted by persons on a valid FWC permit pursuant to FAC 68E-1;
9. All nests found below the high tide line must be marked;
10. A report describing the actions taken to implement these measures shall be submitted to USFWS by 31 December (by 45 CES/CEA).