

Coastline

GAVIOTA COAST CONSERVANCY NEWSLETTER

SPRING 2024

FOCUS: VANDENBERG SPACE FORCE BASE



Western snowy plover

Callie Bowdish

Rocket Launch Frequency to Increase Dramatically

BY ANA CITRIN, LEGAL AND POLICY DIRECTOR

If you live in Santa Barbara County, odds are you have noticed that more rocket launches seem to be happening at VSFB. Until two years ago, the average was 6.2 annual launches. According to Colonel Brian Titus in recent remarks to the California Coastal Commission, 19 launches occurred in 2022 (including both rocket and Intercontinental Ballistic Missile (ICBM) launches), and that number increased to 37 launches in 2023.

Unless assumptions regarding the carrying capacity of the base change, the planned ramp up is likely to culminate in 125 yearly launches (110 rockets and 25 missiles) – nearly 2.5 per week and the maximum authorized by federal wildlife agencies.

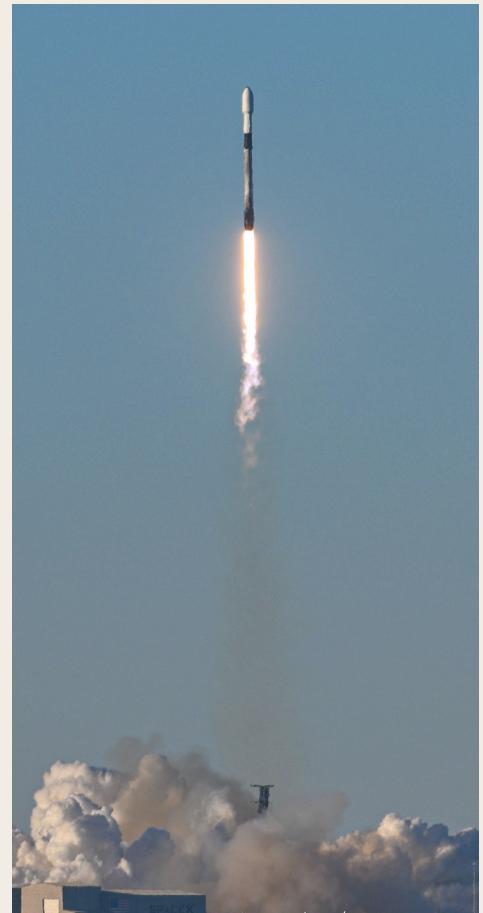
The increased launch frequency raises many environmental concerns, from Greenhouse Gas (GHG) emissions, to closures of Jalama Beach County Park and Campground, to ocean debris and pollution. How often sensitive wildlife species can tolerate the extremely loud launch events, along with sonic booms from the reentry of the first stage of some rockets, is an unknown that wildlife biologists are monitoring.

Whether adequate safeguards

are in place to limit the impacts of this increased launch cadence depends on how government agencies with jurisdiction over VSFB development and operations proceed. Only the National Marine Fisheries Service has been willing to require that launches immediately cease if serious injury or mortality of marine mammals is attributed to launch activity. Halting or changing launch activity is not presently required if injury or mortality of other protected species under the jurisdiction of the US Fish and Wildlife Service is documented.

Because VSFB's launch facilities are located within the California Coastal Zone, the California Coastal Commission (CCC) also has an oversight role. The nature and extent of that role is now squarely at issue, as the CCC contemplates whether to exercise its federal consistency or permitting jurisdiction over the recent SpaceX proposal for 36 annual launches from VSFB's Space Launch Complex 4.

Organizations like GCC, and concerned members of the public, play a critical role in ensuring that the Coastal Commission and other regulatory agencies are aware of - and act to - protect the public's interest in protecting the environment from the adverse consequences of launch activity.



USSF, a Good Steward of Resources at Vandenberg

Vandenberg Space Force Base (VSFB), generally situated west of Lompoc and south of Guadalupe, spans nearly 100,000 acres of the Gaviota Coast including 42-miles of coastline. Five perennial streams pass through VSFB, including the Santa Ynez River. VSFB's location at the transitional geographic zone between central and southern coastal California gives rise to the large number of unique and varied biological habitats present on the base.

Bishop pine forest, tanbark oak forest, oak woodland, riparian woodland, wetlands, central coast maritime chaparral, grasslands, coastal scrub, coastal strand, coastal salt marsh, freshwater marsh, saltwater and freshwater habitats, coastal bluffs, dunes, and rocky headlands all exist at VSFB. These habitats are home to numerous protected plant species including five that are federally endangered (Gaviota tarplant, Vandenberg monkeyflower, Lompoc yerba santa, Beach layia and Gambel's water cress).

An incredible diversity of wildlife is found at VSFB, including a whopping sixty four special status wildlife species. Among them are the federally endangered California least tern, El Segundo blue butterfly, California tiger salamander, the federally threatened Western snowy plover, California red-legged frog, and Vernal fairy shrimp, five protected marine mammal species, and three bat species that are State species of special concern.



Vandenberg monkeyflower

USFWS

The United States Space Force (USSF) has largely been a good steward of these resources, however several recent proposals have come forward that may threaten to compromise sensitive habitats and the species that rely on them. GCC's involvement in the Vandenberg Dunes Project and proposals to dramatically increase rocket launch activity, discussed further herein, has made a real difference in protecting VSFB's extraordinary biological resources.



1st Lt. Ashley Wiser

Environmental Win on the Gaviota Coast: Major Development Halted

We are pleased to share with you the latest development in our ongoing efforts to preserve the natural beauty of the Gaviota Coast—the termination of the Vandenberg Dunes project.

This overly-ambitious proposal envisioned not just one, but five golf courses, along with lodges and additional amenities on Vandenberg Space Force Base. Recognizing the environmental impact of such a large development that would have destroyed sensitive habitats and endangered species, squandered limited water resources and facing push back by the California Coastal Commission and the public, the project was ultimately sunk.

At GCC, we closely monitored this proposal for years. With your support, we submitted detailed comment letters outlining the potential harm to wildlife corridors and endangered species, met with stakeholders, and raised public awareness about the project's potential consequences. Our persistent advocacy efforts, combined with your letters, undoubtedly contributed to the developer's decision to withdraw the project.

This victory underscores the power of community engagement and environmental advocacy. It serves as a testament to the collective efforts of individuals, organizations, and stakeholders who are dedicated to preserving the Gaviota Coast for present and future generations.

Let us remain vigilant to protecting our cherished coastal ecosystems.

GCC remains dedicated to safeguarding the Gaviota Coast on Vandenberg Space Force Base.

Together, we can continue to make a difference in safeguarding the Gaviota Coast.



An Exclusive Interview with Vandenberg Space Force Base Commander, Colonel Mark Shoemaker

BY DOUG KERN, EXECUTIVE DIRECTOR



On Friday April 26, I had the opportunity to visit with Colonel Mark Shoemaker, Vandenberg Space Force Base Commander. Also at the meeting: Jennifer Green-Lanchoney, Chief, Space Launch Delta 30 Public Affairs, Patrick Harrower, Chief of Media Operations and Base Biologist, Samantha Kaisersatt. The 50-minute interview has been edited for clarity and brevity.

KERN - Colonel Shoemaker, what inspired you to pursue a career in the military?

SHOEMAKER - I was in high school, and my dad's like, hey, did you ever think about getting a scholarship? I got a scholarship, went to Iowa State, studied electrical engineering, had plans of doing, four to six years. And then now here I am, 27 years later, still in and continuing to serve from the place of a calling. It's not a business decision at this point in my life and career.

KERN - So, Iowa State, Brock Purdy?

SHOEMAKER - Brock Purdy was a Cyclone. I think the Super Bowl was probably the first time I actually rooted for the 49ers!

KERN - What aspects of this role that you find yourself in are the most rewarding or challenging?

SHOEMAKER - Well, the most rewarding are the command responsibilities and authorities and leading people. There are about 2,500 military and civilian people

that work for me. And I get the opportunity to go out and engage with them and meet with them and talk with them, and unleash their creativity and their skills to go solve problems. That's the most rewarding thing. The most challenging things are how to continue to lead this organization, to the future of what this spaceport needs to be for the nation. Vandenberg was relatively sleepy for a couple of decades, compared to what's happening now. We need to do things in a way that the community understands what's going on and that we're doing it in a safe way and environmentally responsible way.

KERN - Vandenberg was pretty sleepy just five years ago.

SHOEMAKER - Yes, from mid 2019, toward the end of 2020 there were no space launches from Vandenberg. There were some missile test launches, but no satellites to space for nearly a year and a half. So really, in the span of just about three years, we've gone from that to what we're doing now, which is significantly busier, and projected to get even busier. I was here as a younger officer, as a captain from 2003 to 2006. In that three year span, there were three space launches in three years. And we thought we were busy then. This is a new level of busy.

Now, we are dependent on space, and the nation is dependent upon space, for GPS, environmental sensing for agriculture, business needs, for communications, the ability to be out in a rural area where you might not have cell coverage, but still be able to talk to people and call 911, and get a signal and the ambulance can come out. There is a whole set of things that space is enabling. We're really just at the knee in the curve of going from what was mostly DOD and civilian types of uses. And now commercial capabilities in space are really expanding dramatically. It's a national priority and it's also a defense priority. We look to benefit from those commercial capabilities for defense purposes as well. Those capabilities really are providing value from a federal perspective, a national perspective. So we're trying to unleash that capacity in a responsible manner,



KERN - What do you see for the future of this expansion? Is this just the start of the expansion?

SHOEMAKER - It is the start. I don't want to put a number on the end, because we're gonna get there in a measured way this year. Maybe we hit maybe 50 launches this year. If all the approvals and all the technology is ready to go, we're not gonna do a hundred launches next year, but perhaps it is two years or three years. Maybe there are a hundred launches from Vandenberg. Again, in a phased manner so, we're not just gonna flip a switch and then all of a sudden get there. What does it look like ten years from now? I don't know but what I've asked my team to look at is let's just start working on a path that allows us to get there, should the nation need us to be able to make that happen. And, we'll do it in a way that is safe. Because public safety is really my number one charter, from a Department of Defense perspective. And we've also got to do it in a way that allows us to comply with environmental law.

KERN - I'm wondering when GCC or the public has comments and questions, are there other ways besides writing a comment letter and then speaking in front of the Coastal Commission?

SHOEMAKER - It is really not a conducive way to exchange information we have found, and so we realize that we need to share more and be more transparent. We weren't trying to be opaque, but when I put

SEEKING CUSTOMIZED, TAILORED SOLUTIONS TO TOUGH PROBLEMS

myself in your shoes, I can see how that would be the case. We'll give everybody a little bit longer term vision of what we're trying to accomplish here, so that it's not like all of a sudden, oh, here's another thing, when is this gonna end?

The conversation turned to Base Biologist, Samantha Kaisersatt.

KAISERSATT - We go to the Coastal Commission hearings there for proposed future actions, not for actions that we're already taking. That's the opportunity for the public to comment or for the Coastal Commission to comment. GCC's lawyer's letters during the public comment period have been great. She obviously understands the NEPA process, which we really appreciate. So we are looking at doing more public scoping early in the process to get the public's concerns from the beginning, so that those can be addressed throughout the environmental assessment process and be heard early. Especially given what Colonel Shoemaker is talking about regarding the spaceport of the future. All of that will have early public scoping to afford the local community a chance to voice their concerns, and the analysis that they would like to see.

KERN - Can you talk a bit about sensitivity to species with the launch frequency increase?

KAISERSATT - We've been monitoring different species on base for decades, marine mammals and plovers. We're starting to monitor bats, red legged frogs and lots of different things. Our launch cadence has typically been very low. So what we've monitored in the past is actual reaction to the launch itself. And what we found is that most animals will startle, and some will even flush. The snowy plover, sitting on a nest, can flush off the nest temporarily, they all come back pretty quickly thereafter. With the increase in launch cadence, what we're now studying is if there's any population level impacts to those species due to the increase in launch cadence. If you have recurring launch noise effects within areas that snowy plovers are nesting, are they migrating out of those areas to other areas that aren't experiencing launch noise? Those are some of the things we're doing now to try to assess the effects of increased launch cadence.

KERN - Your thoughts around the Vandenberg Dunes project? I understand it's been terminated.

SHOEMAKER - It was terminated at the Secretary of the Air Force, pentagon level

within Energy, Installations and Environment. So they put the stop on that. It's been almost a year and a half now. There was some additional discussion over the following six months, not long before I came into the job. But no, no change to the official position.

We're marching forward with alternative approaches and concepts to using that land in a way that is really no impact to coastal resources. It's great land for our Security Forces personnel to go out and do off road, on foot navigation training. We have some camping on the installation and that area could be used. Thinking about public access and education, could I move our museum and artifacts that are on the base right now, miles inside the fence line, difficult to access. Could we move all or some of that outside into that area, which would then give us a much better outreach to K-12 for STEM-related activities and engagements. And the public could get a better idea of what is happening at Vandenberg. The history of Vandenberg and activities that are ongoing at Vandenberg. So those are the kinds of things that we're looking at doing right now.

KERN - What opportunities might exist for collaboration moving forward with organizations like GCC and others?

SHOEMAKER - I think the first thing is that I would want to understand ... what do you really value? What are your main interests so we can assess what opportunities look like to your constituents. Perhaps there are some very simple things that are within the authority I have as the installation commander here on this installation, where we go, oh, that's something you might want and be meaningful.

KERN - Public access, maintaining a rural character, maintaining the environmental

integrity, these are our values. The California Coastal Trail is something that is a big item for many of our supporters. Limited, managed access and education. I know you have massive security needs but perhaps there can be days where the public can see some of these special resources

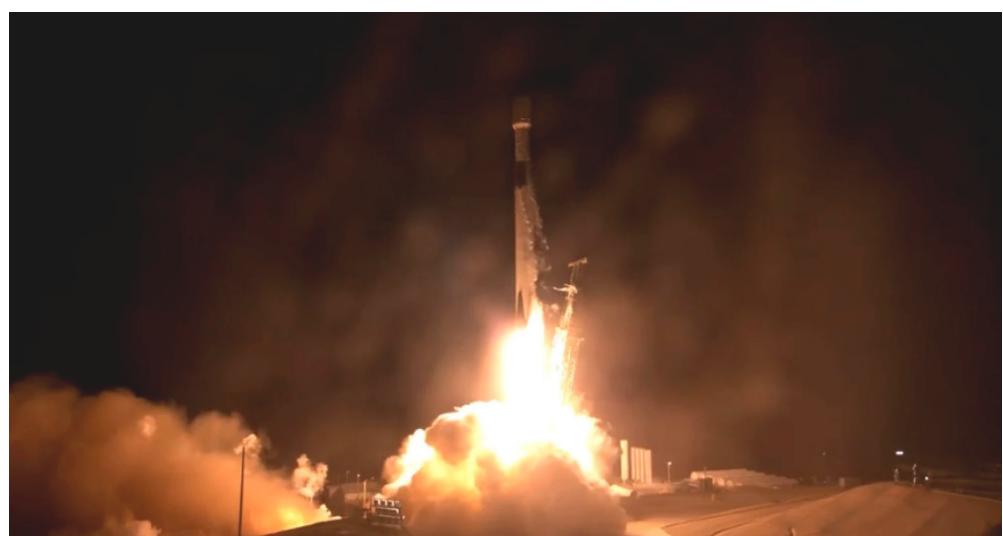
KAISERSATT - We have been doing some directed public access, and perhaps you might want to partner with us on that. Recently, we've been doing an education and outreach program in the Lompoc Unified School District, K-12 grades, where we do an in class Snowy Plover education program, and then we take all the students out to Surf Beach and, provide their transportation. You would be surprised at how many kids in Lompoc have never been to the beach at all ... ever. It's amazing. They have a great time. And they run around and have a great day on the beach. It may not be possible for people to be walking up and down the base at, you know, at their leisure. But I think there are some very focused opportunities that we can develop to get people onto the base in certain areas.

We recently had a field trip with the Lompoc Valley Historical Society to go see the Point Conception lighthouse. So I think there are things like that that we can do, depending on the community's interests and what they would like to see on base.

KERN - Thank you Colonel, for this conversation about the future of the Space Force Base. Thank you Patrick and Jennifer for arranging this meeting. Samantha, very nice to talk with you and learn more about protecting the resources here and the possibilities for public access.

SHOEMAKER - Thanks for reaching out.

KERN - Thank you, sir.



Bridging the Gap: Studying Wildlife Crossings at Vandenberg SFB

BY DOUG KERN

GCC in collaboration with Legacy Works and Coastal Ranches Conservancy (CRC), is proud to partner with the Bren School of Environmental Science & Management at UC Santa Barbara on a crucial project – exploring wildlife crossings near Vandenberg Space Force Base (Vandenberg SFB). This initiative delves into a critical issue: habitat fragmentation caused by roads and development.

A Hotspot of Biodiversity Under Threat

California's Southern Central Coast boasts a remarkable diversity of life. However, this "biodiversity hotspot" faces a growing challenge – habitat fragmentation. Roads act as barriers, severing crucial corridors used by wildlife for movement and survival. This fragmentation leads to a rise in wildlife-vehicle collisions (WVCs), impacting both animal populations and public safety.

Bren School Steps Up

A Bren School student team is tackling this challenge head-on. Their project, **"Exploring High-Impact Regional Habitat Connectivity Projects,"** aims to identify critical areas around Vandenberg SFB where targeted interventions like wildlife crossings (overpasses or underpasses) are most needed.

How They'll Do It

The team will leverage a wealth of data sources, including:

- UC Davis Road Ecology Center's WVC data
- The Nature Conservancy's camera trap images and GIS layers
- GPS collar data tracking mountain lion movement

By analyzing this data, they'll identify areas with high WVC rates and frequent animal movement. They'll then explore various crossing infrastructure options, considering factors like effectiveness, cost, and feasibility.

Beyond the Data: Equity Matters

The project prioritizes equity. The team understands the potential social, recreational, and economic benefits for nearby communities, particularly Lompoc and the Santa Ynez Band of Chumash Indians. They'll actively engage residents through outreach programs, ensuring local concerns are incorporated into the planning process.

will provide draft language for a Sentinel Landscapes Partnership (SLP) application, a program that supports collaborative conservation efforts on military lands.

Building on Success

This project builds upon GCC's and CRC's recent success with Caltrans, securing an \$8 million grant to construct a wildlife crossing at Gaviota Pass. The Bren School's study will provide valuable data to inform



Wikicommons

Benefits for All

This project isn't just about protecting wildlife. It's about safeguarding a vital ecosystem and promoting regional prosperity. Improved connectivity can:

- Reduce WVCs, enhancing public safety on roads
- Foster healthier wildlife populations
- Support a thriving ecotourism industry

The Road Ahead

The Bren School team's findings will be compiled in a comprehensive report. This report will recommend specific crossing locations, infrastructure needs, and potential funding sources. Additionally, it

future collaborative efforts aimed at creating a network of wildlife crossings across the region.

A Brighter Future for Wildlife Corridors

GCC applauds the Bren School's initiative and our partners Legacy Works and Coastal Ranches Conservancy. This project represents a significant step towards restoring habitat connectivity and ensuring the long-term health of Vandenberg SFB's remarkable ecosystems. By working together, we can create a future where wildlife and humans thrive in harmony.

Stay Tuned!

In future newsletters, we'll provide updates on the project's progress and delve deeper into the fascinating world of wildlife crossings.



1st Lt. Ashley Wiser

Coastal Commission Contemplates Increased Oversight Over Private Companies Rocket Launches

BY ANA CITRIN

On Wednesday April 10, the California Coastal Commission (CCC or Commission) considered whether to “concur” in a “Consistency Determination” authorizing private company Space Exploration Technologies Corporation (SpaceX)’s proposal to increase their rocket launches at VSF from 6 to 36 annually, along with 12 landings of the first stage booster. The

Commission voted unanimously to postpone the matter, requesting an evaluation of various issues including whether a Coastal Development Permit should be required.

The CCC’s Executive Director previously concurred in a “Negative Determination” authorizing the SpaceX proposal in May 2023. However, SpaceX exceeded the beach closure limits set in that Negative Determination, prompting the Commission to reopen the Executive Director’s concurrence at their December 2023 meeting.

Concurrence in a Negative Determination or Consistency Determination is part of the Commission’s “federal consistency jurisdiction”, which uniquely applies to projects proposed and carried out by federal agencies that impact resources in California’s Coastal Zone. This stands in contrast to the “permitting jurisdiction” typically exercised over development proposed by a state or local government, or by a private entity.

The SpaceX proposal involves launch activity carried out by a private entity to serve its objectives, and would only occasionally launch military payloads for the Space Force. The Space Force however has vigorously argued that the SpaceX proposal constitutes “federal agency



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Coming in the Fall 2024 Issue of Coastline

- GCC Progress on Acquisitions
- Making New Space for Endangered Species
- Updates on Public Access to the Gaviota Coast
- New Trail Possibilities

activity,” that qualifies for federal consistency review because the federal government no longer carries out space launch activities and instead relies on private companies such as SpaceX to send government payloads to space. The Commission openly questioned that interpretation, and pondered whether bifurcation of the private and public launch approvals is warranted.

GCC has been deeply involved in this issue, advocating for increased oversight, enforceability, and avoidance of impacts to sensitive species. With your help, we can continue that advocacy, and help ensure the best possible outcome through the CCC process.