NELLIS AND CREECH AIR FORCE BASES,
THE NEVADA TEST AND
TRAINING RANGE

& SOUTHERN NEVADA:

Community











to continue to sustain the installations' national security mission, while ensuring that communities close to us can continue

to thrive and prosper. \P

- Barry Cornish, Colonel, USAF Commander, 99th Air Base Wina

NELLIS AND CREECH AIR FORCE BASES, THE NEVADA TEST AND TRAINING RANGE & SOUTHERN NEVADA: PARTNERS IN ONE COMMUNITY

The military plays a significant role in the areater Southern Nevada area and has enjoyed decades of continuous support from local communities. With historic roots dating back to the Las Vegas Army Air Field established in 1941, Nellis Air Force Base (AFB), Creech AFB and the Nevada Test and Training Range (NTTR) continue to serve as a oneof-a-kind interconnected base and range complex. Together these pivotal components have helped spur the growth and success of American air power for over 70 years.

Partners in One Community was developed as part of a 2013 encroachment planning analysis at Nellis AFB, Creech AFB and the NTTR, considering areas of shared interest between the bases, range and the community. This document highlights actions the Air Force and citizens can take together to enhance sustainability of local communities while preserving national security missions in Southern Nevada.

COMMUNITY

Nellis AFB, Creech AFB, the NTTR and communities throughout Southern Nevada are connected neighbors with mutual interests. Especially strong, collaborative relationships exist today with Nellis' closest neighbors, the City of North Las Vegas and the nearby Clark County community of Sunset Manor as well as the City of Las Vegas. Additionally, Creech AFB has an equally strong relationship with the community of Indian Springs.

Nellis AFB and Creech AFB interact with regional communities in a variety of ways. For example, one well-received program is the Civilian Military Council of Southern Nevada, a nonprofit, non-Federal entity which brings together leaders from the Las Vegas community and Nellis AFB to discuss current events, build relations and recognize outstanding Airmen.

MISSION

Nellis AFB, Creech AFB and the NTTR have interconnected missions critical to preserving our national security. Nellis AFB is home to the U.S. Air Force (USAF) Warfare Center and USAF Weapons School, facilitating the largest and most advanced air-to-air and air-to-surface combat training exercises in the world. Nellis AFB provides resources to facilitate complex, integrated aerial combat exercise training for every type of aircraft and weapon system in the Air Force

inventory. The 99th Air Base Wing enables the success of these operations by providing robust and innovative base support for Nellis AFB, Creech AFB, and the NTTR.

Creech AFB has become a cornerstone in the Department of Defense's utilization of remote piloted aircraft (RPA) for varied missions, including combat operations and humanitarian

The NTTR is the largest contiguous and most advanced air and ground test and training range complex available for peacetime military operations in the free world. This range complex provides Airmen and our Joint partners and international allies with a realistic, simulated battlespace environment to hone and polish their combat skills

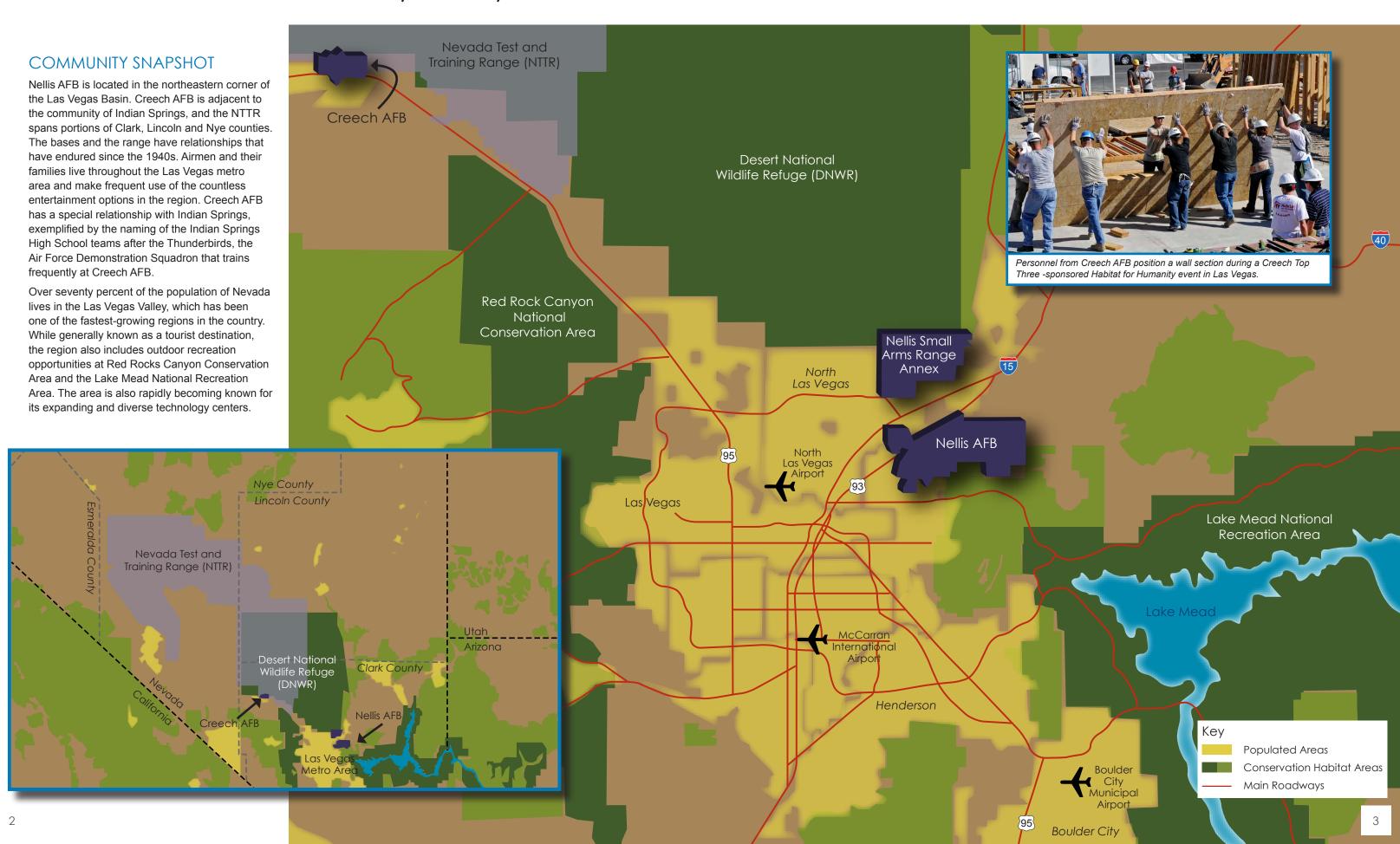
ECONOMY

Nellis AFB, Creech AFB and the NTTR are significant economic contributors to the communities of the Las Vegas Basin. In 2012, the Installations employed 11,672 Active-duty, Reserve and civilian personnel. The payroll of the combined bases added over \$922 million to the local economy while retiree benefits added another \$673.8 million. The bases spent \$3.2 billion in annual base-related expenditures, which included service contracts as well as construction projects. In addition to jobs created directly by the bases, approximately 5,600 more jobs were indirectly created, contributing \$229 million to the local economy. Lastly, in 2012, Aviation Nation, one of the most popular air shows in the nation, brought 111,000 visitors and contributed over \$19 million to the local economy during the weekend-long event. According to the Department of Commerce's Bureau of Economic Analysis, the overall gross domestic product of the Las Vegas Metro area increased by 60 percent from 2001 to 2010, while the military's contribution to the local economy during the same time period increased by over 150 percent.

ENVIRONMENT

The U.S. Armed Forces have been called upon to oversee or manage public lands and natural resources since 1823, and the Air Force is committed to continuing this tradition. Nellis AFB. Creech AFB. and the NTTR are dedicated to demonstrating environmental stewardship while executing critical national defense and security missions. Southern Nevada is home to many natural resources and ecosystems, including the Las Vegas Wash and Tule Springs. Water is a vital and scarce resource for the region and the sustainment of the Air Force mission. The Air Force supports regional natural resource conservation efforts, including water, and the establishment of new and innovative partnerships to achieve common goals.

NELLIS & CREECH AFBs, NTTR, AND THE SOUTHERN NEVADA COMMUNITY



THE NELLIS AFB, CREECH AFB, & NTTR MISSIONS

NELLIS AFB, CREECH AFB, AND THE NTTR



Nellis AFB is a major focal point for advanced combat aviation testing and training. Its mission is accomplished through an array of aircraft, including fighters, bombers, refuelers, and aircraft used for transport, close-air-support, command-andcontrol and combat search and rescue. The base is home to many units including the 99th Air Base Wing, the U.S. Air Force Warfare Center (USAFWC), the 57th Wing, the U.S. Air Force Weapons School, and the USAF Air Demonstration Squadron Thunderbirds.



Creech AFB is an integral part of the U.S. remotely piloted aircraft (RPA) program. Its units play a direct role in defending our nation by piloting RPAs participating in missions across the globe.



The NTTR is considered the "crown jewel of the Air Force" and comprises the largest training range within the continental United States. The range provides a realistic training environment that cannot be replicated elsewhere. Almost three million contiguous acres of land support over a thousand training targets, a robust communications infrastructure and multiple auxiliary air fields.



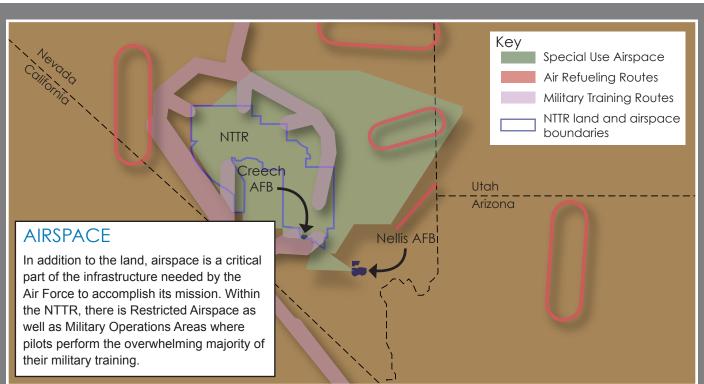
The USAFWC certifies that deployed forces are well-trained and well-equipped to conduct integrated combat operations. The Center, founded Sept. 1, 1966, oversees advanced training, operational testing, and tactics development in air, space and

Right, from top to bottom: Capt Nicholas Holmes, Thunderbird 4 slot pilot, takes off in

A U.S. Air Force MQ-9 Reaper remotely piloted aircraft (RPA) prepares to land at Creech AFB after flying a training mission.

The NTTR is responsible for the largest contiguous air and ground space available for military operations in the free world.







RED FLAG



Red Flag is a large-scale advanced aerial combat training exercise hosted by Nellis AFB and held within the NTTR. Red Flag exercises often use live ammunition and include participation from the Air Force, other branches of the U.S. military, and global allies. Following the Vietnam War, Red Flag was created to help pilots survive air-to-air combat missions. In order to provide pilots with adequate experience, they undertake ten missions during the Red Flag exercise, which are noted by veterans to accurately replicate actual combat. In addition to facing a myriad of challenges from ground-based weapons simulators, "Aggressor Squadrons," comprised of expert pilots, serve as opponents in order to make the exercise as realistic as possible. This training mimics real- world scenarios and helps our service members and allies effectively defend our nation and return home safely.

GREEN FLAG-WEST



Green Flag-West is a realistic large-scale air and land combat training exercise involving the aviation forces of the United States military and is primarily conducted with the U.S. Army at Fort Irwin, California. Green Flag-West focuses on close-air-support of ground units with different branches of the military training together. Green Flag exercises provide critical training for approximately 75,000 joint and coalition personnel per year, averaging over 3,000 sorties, 6,000 flight hours, and the expenditure of approximately 700,000 pounds of live and training ordnance.

Nevada Test and Training Range

SMALL ARMS RANGE

Desert

Wildlife

Refuge

National

The Small Arms Range spans approximately 12,160 acres and is located four miles north of the main base, and immediately north of the Nevada National **Guard Floyd Edsel Training** Center. The complex contains five ranges used by the Nellis AFB Security Forces for accomplishing numerous combat arms training requirements.

REMOTE PILOTED AIRCRAFT



Creech AFB is home to the 432nd Wing/432nd Air Expeditionary Wing's 432nd and the 732nd Operations Groups, which employ RPAs 24 hours a day, seven days a week and 365 days a year in support of U.S. military and coalition forces worldwide. The 432nd Maintenance Group ensures that Airmen, MQ-1B and MQ-9 remotely piloted aircraft, ground control stations, Predator Primary Satellite Links, and a global integrated communications networks are fully mission capable to support aircrew training, combat operations, operational test and evaluation, and natural disaster support.

Creech AFB



Las Vegas Metro Ărea

SHARED INTEREST, SHARED ACTION

Nellis AFB, Creech AFB and the NTTR strive to be good neighbors by building and maintaining relationships with community stakeholders and collaborating on important issues. Strong relationships benefit everyone in Southern Nevada. Through partnerships and collaborative efforts, Nellis AFB, Creech AFB, the NTTR and the surrounding communities can continue to

- · identify mutual benefits,
- · leverage resources,
- · resolve common issues, and
- strengthen communication.

This section highlights several areas of shared interest between the Installation and the community. We welcome your comments and questions—please refer to the contact information listed on the back of this publication.

Nellis AFB is home to the one of the largest solar arrays in all of North America. The solar array, a public-private partnership between the Air Force and private enterprise, supplies Nellis AFB with more than 30 million kilowatt-hours of clean electricity annually. More than 72,000 solar panels were constructed on 140 acres of previously disturbed land and supply the base with more than 25 percent of the total power used by the base population of roughly 12,000 people. The plant is estimated to save the Air Force \$1 million annually and reduces carbon dioxide emissions by 24,000 tons per year—the equivalent of removing 185,000 cars from the roadways. The project was lauded by former Nevada Governor Jim Gibbons as having "the potential to reduce United States dependence on foreign and nonrenewable energy sources." This creative approach, which utilizes public private partnerships, is an example of collaborative problem solving to address unique challenges resulting in more sustainable, secure, and affordable energy supplies.



Right (top and bottom): Nellis AFB's solar panel array is one of the largest in North America.

Renewable energy projects and transmission lines can present safety risks and navigational challenges for aircraft. Early communication and screening can identify mission impacts and support compatible renewable energy development. The Department of Defense has an established Energy Siting Clearinghouse to facilitate the appropriate responses across military services:

Two online tools are available for preliminary assessments:

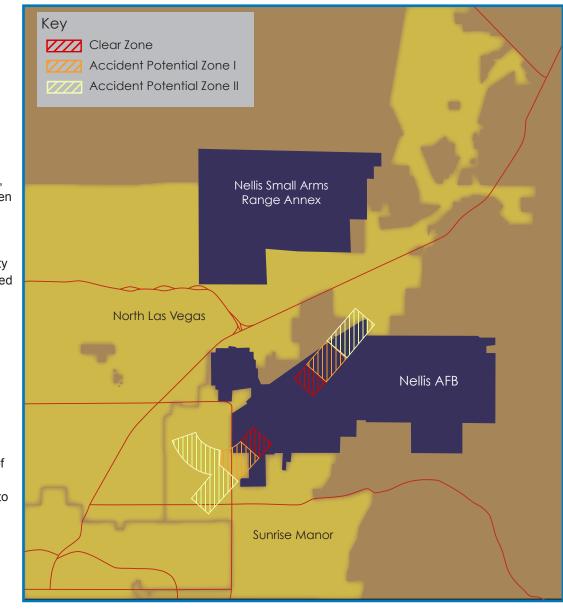
 FAA Obstruction Evaluation/Airport Airspace Analysis Tool: https://oeaaa.faa.gov Renewable Energy And Defense (READ)
 Tool (Natural Resources Defense Council):
 http://www.nrdc.org/energy/readgdb.asp

COMPATIBLE LAND USE PLANNING

Urban growth and development poses a range of challenges for the sustainment of military missions and the safety of Southern Nevada. To reduce these risks, Nellis AFB, Creech AFB, and the NTTR have worked closely with the nearby communities to promote compatible land use guidelines and be involved in the planning process.

The counties neighboring Nellis AFB, Creech AFB and the NTTR have taken steps to promote land uses near the bases and range that can sustain the test and training missions. Clark, Lincoln and Nye counties and the City of North Las Vegas have all addressed the need to incorporate compatible land use planning and growth objectives that protect two equally important areas: the Air Force military missions and public safety. Communities have developed a roadmap to how military training and prosperous communities can successfully coexist through comprehensive planning, public management plans and enactment of zoning guidelines. While the policies are clear, there is an enduring need to meet these mutual goals.

Communities throughout northern Clark County neighbor Nellis AFB, Creech AFB and the NTTR. Clark County recognizes the contribution the bases make to national security and to nearby communities. Clark County has worked closely with



Nellis AFB to outline land use planning strategies and update policy to reduce incompatible development adjacent to the base in order to sustain the mission. Clark County's Airport Environs plan outlines policies to cooperate with the Air Force, by evaluating land use proposals, eliminating development incompatibilities, and promoting mutually beneficial land uses near Nellis AFB. The City of North Las Vegas also updated their zoning code in 2011 to establish a unique planning area known as an overlay district. The district allows for compatible land uses near the base that have little impact to military operations, including industrial land uses, while establishing zoning of residential areas away from areas potentially impacted by Nellis AFB. This approach included coordination with Nellis AFB early in the planning process so that land owners could make informed decisions while projects were still in the conceptual stages of development.

Even though there are many existing land use controls to promote compatible development near Nellis AFB, non-conforming land uses near the base undermine the effectiveness of these efforts. Existing non-conforming land uses include a mix of residential and commercial development near or adjacent to the base. These kinds of developments create safety hazards, liability concerns, and may pose risks to the communities neighboring Nellis AFB.

In the future, the base will continue to work with the cities and counties to explore options that address pre-existing non-conforming land uses, siting of new land uses, density, noise, and safety requirements within the safety zones. Pursuing these strategies will help to support the long-term sustainment of Nellis AFB, Creech AFB, the NTTR missions, and the Southern Nevada region.



DESERT NATIONAL WILDLIFE REFUGE

The Air Force contributes to habitat conservation efforts in Southern Nevada. The southern ranges of the NTTR include the Desert National Wildlife Refuge (DNWR). As the largest National Wildlife Refuge within the continental United States, the DNWR encompasses 1.6 million acres of the Mojave Desert. The refuge was established in 1936 for the conservation and development of wildlife resources, including the desert bighorn sheep. The DNWR is managed by the U.S. Fish and Wildlife Service (USFWS) as a National Refuge. Natural resource managers from both the USAF and USFWS collaborate and coordinate studies and surveys that benefit both the USFWS and the USAF. The DNWR is also part of a National Wildlife Refuge Complex that includes three other National Wildlife Refuges in the region. The NTTR is also home to bald and golden eagles, desert tortoises, bighorn sheep and multiple other species, including flora and fauna habitat that benefit from the adjacent Wildlife Refuge. The DNWR is an example of how national security and environmental stewardship have complementary goals.

Left, top to bottom: Bighorn Sheep, Desert Tortoise, Bald Eagle
Below: A view of the Desert National Wildlife Refuge
(All photos on this page are courtesy of the U.S. Fish and Wildlife Service)





Across the country, bases and local communities are faced with the realization that their continued success depends on their ability to collaborate and seize opportunities to operate more efficiently. One approach Nellis AFB and local partners are exploring is the facilitation of partnerships among public entities and between private organizations. Public-to-public, public-to-private partnerships (P4 partnerships) enable multiple stakeholders to work together to achieve common goals. Developing creative ways to leverage the capabilities and resources of military bases, local communities, commercial entities, and non-profit organizations is mutually beneficial for all. The Community Partnership process results in many secondary benefits such as the protection of mission capabilities, reductions in operating costs and service expenses, and improvements in quality of service delivery.

Clark County, the City of North Las Vegas, the City of Las Vegas and Nellis AFB continually strive together to build upon the success of existing partnerships such as the North Nellis Coalition. The North Nellis Coalition consists of members from the 99th Security Forces Squadron, the Las Vegas Metropolitan Police Department and dozens of businesses surrounding Nellis AFB. Making areas around the base safer for Airmen and citizens alike is good for everyone in the community. Shared interest resulting in shared action is the core purpose of the ongoing Community Partnerships Process. The development of unique collaborative solutions to address and overcome challenges together will continue to strengthen ties between the Air Force and local communities.

Below, left: Capt Arthur Zeitler, 99th Security
Forces Squadron force protection officer, and Officer James Paroon, Las Vegas Metro Police Department policeman, stand in front of a stage during a North Nellis Coalition community event in North Las Vegas.

Below, right: Col Steve Langford, Nevada Test and Training Range Commander, Col Stephan Waller, 57th Wing Vice Commander, Col Barry Cornish, 99th Air Base Wing Commander, Col James Cluff, 432nd Wing Commander sign the community action plan at Nellis AFB.





NEXT STEPS

Nellis AFB, Creech AFB and the NTTR are committed to continued collaboration with local and regional neighbors to partner together and develop innovative solutions to address local and regional challenges. Together we can build consensus and develop solutions to the present challenges, while planning for tomorrow.

Broad based regional stakeholder coordination is essential to address complex issues such as the preservation of the desert tortoise and the development of compatible land uses. Building and strengthening collaboration between Nellis AFB, the Bureau of Land Management, the USFWS, Clark County, the City of North Las Vegas and other stakeholders, helps in the development and implementation of solutions to address complex challenges and provide lasting benefits to our community.

Please contact the Nellis AFB Public Affairs Office listed on the back of this publication with questions or inquiries.



AIR FORCE ENCROACHMENT MANAGEMENT PROGRAM

Partners in One Community highlights several areas of mutual cooperation, collaboration, and coordination between Nellis AFB, Creech AFB, the NTTR and the community. It was developed as part of a 2013 encroachment planning analysis conducted at Nellis AFB, Creech AFB, and the NTTR that considered 13 different topics, ranging from airspace to security. The focus of the analysis process is managing encroachment, described as both the impact of a stakeholder's actions on current and future military activities and the impact of the military's actions on stakeholders. Encroachment impacts from natural factors and climate effects are also considered in the analysis.

Bases around the country are completing encroachment planning analyses as part of the Air Force Encroachment Management Program. The Air Force is committed to ongoing engagement with its many community stakeholders in order to preserve mission capability, conserve environmental resources, and maintain quality of life for community residents and military personnel.

For more information, please contact:

Nellis Public Affairs (702) 652-2750 http://www.nellis.af.mil/main/contactus.asp

All photos are courtesy of the U.S. Air Force unless otherwise noted.

Created December 2013