

LUKE AIR FORCE BASE

As the premier training base in the Air Force, Luke Air Force Base (Base) has ideal climatic conditions and access to the airspace and training areas that provide for highly realistic combat training. The 2.8-million-acre Barry M. Goldwater Range and the adjacent Sells MOA are 50 miles south of the Base, both are crucial to Luke's training operations.

Six elements are critical to accomplishing the mission at Luke AFB. Each of the six elements is essential to providing the best margin of safety for both military personnel and civilians while training the world's best fighter pilots. They are:

1. the ability to land and take off in either direction at Luke AFB without undue risk to the community,
2. the ability to access the Barry M Goldwater Range with live/training munitions without undue risk to the community,
3. the ability to fly instrument approaches at Luke Auxiliary Field 1 without undue risk to the community,
4. the ability to perform patterns and landing at the Gila Bend Auxiliary Airfield without undue risk to the community,
5. the ability to access and utilize the Gladden/Bagdad MOAs without undue risk to the community, and
6. the ability to access Military Training Routes (MTRs) throughout Arizona without undue risk to the community.

Each of the six critical elements is comfortably satisfied today. The ability of Luke to accomplish its mission today and well into the future has been secured by the strong partnership that exists among the Air Force, the State of Arizona, Maricopa County and the 12 incorporated local governments that surround the Base (Avondale, Buckeye, El Mirage, Glendale, Goodyear, Litchfield Park, Peoria, Phoenix, Surprise, Tolleson, Wickenburg and Youngtown).

Since 1978, the partnership between a growing State and the Air Force has matured. Successive Governors and Arizona Legislatures have taken steps to preserve the mission viability of Luke

and other military airports in Arizona by enacting legislation that has incrementally eliminated the threat of incompatible land uses around such facilities. The brief legislative history that follows is recognized as a model throughout the country, and reflects Arizona's willingness to restrict private property rights in exchange for the continued viability of the military training mission.

In 1978, the first legislation was enacted, permissively allowing local planning jurisdictions the ability to adopt and enforce planning and zoning regulations that would assure that development projects would be compatible with military airport operations. While the 1978 legislation is considered weak and ineffective by today's standards in Arizona, the legislation was monumental for its time, establishing a statutory recognition of the necessity for compatible development.

In 1986, the 1978 legislation was modified to **require** the adoption of a land use plan, as opposed to the permissive language previously enacted. The Legislature directed local governments to use the Air Installation Compatible Use Zone (AICUZ) report for the development of land use plans consistent with preserving mission viability of military airports. In addition, the legislation required political subdivisions to notify all property owners impacted by the land use plans relating to any changes resulting from the adoption of such zoning regulations.

During the 1980s, Maricopa County commissioned two land use studies and issued a joint land use study addressing residential development and the requirement for sound attenuation. The 1988 Joint Land Use Study had as its basis the 1985 AICUZ, and provided a critical backdrop for future legislative and local planning and zoning decisions that are reflected in today's protection of the Luke mission.

In 1995, legislation defining "in the vicinity of military airports," established a box around military airports for public disclosure requirements beyond noise contours, and noise contours are identified as the key reference point for which future restrictions would be enacted. In the case of Luke, the "box" requires compatibility determination by the military facility for any new

zoning within an area of 40 square miles. Noise contours are statutorily established independently for each impacted military airport.

In 2001, the Arizona Statutes were further amended to specifically define compatible land uses with a military airport and to codify permissible development options within the noise contours and accident potential zones of military airports. The legislation was the first of its kind in the country.

In 2004, those same compatibility standards were extended statutorily to military airport auxiliary fields, and notification standards were placed in Statute for potential buyers of land underlying military training routes. Further, recognizing the impact of compatibility standards on private properties, a military preservation fund was established (\$4.8M annually for 20 years), for the purpose of preserving land in the vicinity of military airports. Additional legislation prohibiting natural gas storage facilities within 9 miles of an active duty military air force base whose primary mission is pilot training was enacted, removing the threat of the proposed Copper Eagle gas storage facility adjacent to Luke AFB housing.

At the same time, the local governments were taking extraordinary steps to improve compatibility through their own actions. For example, the City of Goodyear purchased Duncan Farms for \$3.2M in order to remove an incompatible land use from the southern departure corridor, and also removed 145 homes from a previously "grandfathered" development within the Luke noise contours. The City of Phoenix has purchased land and adopted a resolution to keep 920 acres bordering the north side of Luke as an agricultural preserve. In addition to the compatibility standards statutorily enacted for lands within the noise contours, all local governments surrounding Luke have voluntarily employed a graduated density concept, which is an area approximately three miles beyond noise contour lines in which residential development is further restricted.

Finally, the Arizona Congressional Delegation, led by Congressman Bob Stump and Senator John McCain, secured \$27.5M to preserve access to the Goldwater Range and acquire the Munitions Storage Area (MSA). The MSA purchase improves security by enclosing the munitions storage area within a Luke secure area. The balance of the \$27.5M is being used to

purchase permanent restrictive easements in the north and south departure corridors that will eliminate the possibility of incompatible development in those critical areas, augmenting similar restrictions found in State law.

In short, Arizona, through legislative protections, has removed 32,788 acres from the threat of incompatible development in the area surrounding Luke AFB and both of its auxiliary airfields (18,630 acres outside the main Luke fence, and approximately 7,079 acres each at Luke Aux 1 and Gila Bend Aux). By purposefully enacting the 1988 Joint Land Use Study noise contours in Arizona State Statutes, an area greater than 150% of what is required under the most recent 2003 AICUZ is under protection and arguably more restrictive than under AICUZ standards. (Arizona Revised Statutes are more restrictive in 25 of 56 land use categories and Air Force policy is more restrictive in 6 of 56 categories that are common with the AFH 32-7984 land use table.)

Maricopa County is currently the fastest growing county in the nation. Western Maricopa County, which includes Luke and its auxiliary airfields, has experienced an 84% increase in population since 1995. In spite of this rapid growth – an unprecedented 32,788 acres have been removed from incompatible development and noise complaints have decreased. The above clearly demonstrates the effectiveness of Arizona's measures to protect Luke over the long term.

Every F-16 combat mission flown in Afghanistan and Iraq was flown by a pilot trained at Luke Air Force Base or in airspace and ranges located within the State of Arizona. With F-16s representing more than 50 percent of the U.S. Air Force fixed-wing fighter aircraft through 2020, how and where the U.S. trains its F-16 pilots is key to their success in attack, close air support, and the defense of the nation in the next decade and beyond. All 14 municipal, county, and state governments with zoning authority in Luke's area of operations have been unified in their understanding of the importance of the mission at Luke, and in the need to control incompatible development. Luke AFB is arguably the most statutorily protected military facility in the nation. Since the spring of 2003, there has not been a single incompatible development approved within Luke's entire area of operations.

Luke AFB remains today, and is well prepared to continue into the future, to be the gateway to one of the national's premier tactical gunnery training ranges, the Barry M. Goldwater Range. The close proximity to the Goldwater Range, a national training "jewel", makes Luke the unquestioned premier facility to continue to produce the world's greatest fighter pilots and maintainers.

BARRY M. GOLDWATER RANGE

The Barry M. Goldwater Range (BMGR) includes 2.8 million acres of restricted airspace, 1.7 million acres of restricted land, and is subdivided into nine (9) smaller mission-specific sub-ranges. The more than 1.7 million acres of the Goldwater Range contain some of the Nation's most unique and well-preserved Sonoran desert. The 1999 Goldwater Range renewal (P.L. 106-65) required both the Air Force and the Marine Corps to prepare an Integrated Natural Resources Management Plan (INRMP) jointly with the Department of the Interior. The INRMP incorporates a series of U. S. Fish and Wildlife Biological Opinions.

The Air Force and Marine Corps have invested significant time, effort and funds in resolving environmental issues, resulting in excellent stewardship for the approximately 500 species of flora and fauna, with no significant degradation to the Range mission and protection of the endangered species. Recognition of Luke's environmental stewardship on the Range includes awards at the national level for both natural and cultural resources management to include the Gen. Thomas D. White Award and the BLM Director's 4Cs Award.

The BMGR is the lynchpin of the network of military installations with flying missions located in Arizona. More than 65,000 sorties are flown each year on the Goldwater Range by aircraft from all services. Within a 50 mile radius of the BMGR is Luke AFB, as well as MCAS Yuma, Davis-Monthan AFB, Arizona Air National Guard wings located at Phoenix Sky Harbor International Airport and Tucson International Airport, the Western Army National Guard Aviation Training Site (WAATS) at Silverbell Army Heliport, the Gila Bend Auxiliary Field and the Yuma Proving Ground. This constellation of bases, centered on the BMGR, creates an infrastructure which satisfies the aviation training needs of all services, joint force exercises and some testing, all without the need for aerial refueling support. Further enhancing this infrastructure is an extensive system of MTRs and access points to the BMGR, which allow each and every base and type of aircraft to optimize their airborne training time.

The Range, with its extensive land and airspace, has the following features.

- The range allows unrestricted supersonic flight

- The range includes numerous low-level flight corridors for tactical employment of fighter and helicopter aircraft
- The range has specific areas identified for live fire missions
- The range is large enough to safely accommodate many independent but simultaneous operations, permitting cost- and time-effective flight training.
- The range and many of its individual sub-ranges are large enough to support training at or near the full capability of existing and planned aircraft and weapons systems.
- When multiple sub-ranges are used in blocks or the range is used as a whole, it has the capacity to accommodate realistic training exercises involving complex battle scenarios with large forces of both friendly and adversary aircraft.
- It is large enough to absorb the changes in tactics, targets, and increased aircraft performance that will occur in the future.

On occasion, concerns regarding two negative impacts on training on the Goldwater Range are raised; however, the reality is that both have minimal operational impacts. The first is the presence of the Sonoran Pronghorn Antelope and the second is undocumented aliens transiting the area.

It is important to note that with regard to both the Sonoran Pronghorn Antelope and transiting undocumented aliens, suspension of a training activity does not necessarily equate to a closure. For example, while the presence of the Sonoran Pronghorn Antelope may prohibit live weapon delivery on one of the three tactical employment ranges on the eastern side of the Goldwater Range, the associated airspace above is not closed and missions are allowed to proceed with altitude restrictions that permit low altitude helicopter and ground operations. The same type of "adjustment" is available and utilized when UDA's migrate onto range land.

Included in Luke's environmental stewardship, is protection of the Sonoran Pronghorn Antelope. As a result of Biological Opinions, the Air Force and Marine Corps have invested heavily in Antelope-related studies, programs and preventative measures, the result of which is more efficient cooperative planning of mission operations on the Range.

The presence of the Sonoran Pronghorn Antelope has minimal impact on the Range mission. On an annual basis, live drops constitute less than 2% of the 45,000 missions flown on the Air Force's Goldwater Range-East. Of these live drop missions, the Air Force averages approximately a 6% mission alteration rate due to pronghorn protection measures. In other words, only 54 of 45,000 sorties have been either canceled or forced to fly an alternate mission. The greater impact is the millions of dollars the Air Force and Marine Corps have spent on antelope-related activity over the years. However, this fiscal obligation by the DoD has resulted in assuring that the protection of the Sonoran pronghorn antelope has a negligible impact to the training requirements of the users of the BMGR.

While the Air Force has successfully proven that smarter planning results in compatibility between the training mission and the Sonoran pronghorn antelope population, the impact of undocumented aliens (UDAs) transiting the area has not been as easy to quantify.

Since 9/11/2001, there has been a marked increase in the numbers of UDAs detained and/or crossing the Goldwater Range.

Increased UDA activity has necessitated an increased response by Customs and Border Protection, and resulted in a rapid increase in their requirement to access the BMGR and the adjacent Sells Military Operating Area (MOA). As their requirement to access the BMGR and Sells MOA increases, so does the impact to the military training mission in these areas.

Since the monitoring began, out of the 45,000 annual missions on the USAF side of the Goldwater Range, there have been range suspensions of 37 in 2003, 55 in 2004, and 23 in the 1st quarter of 2005 because of transiting UDAs and associated law enforcement response. ("Range" in this context refers to small, individual sub-ranges contained within the BMGR. There are seven (7) on the USAF side and two (2) on the USMC portion.) Through closer coordination and improved communications between the Range managers and the Customs and Border Patrol, the average suspension time has been reduced from approximately 4.0 hours in 2003 to 2.4 hours over the past year and a half.

Tracking of the number of sorties affected has been accomplished since October 2004. Again, from the data collected in nine months, the only conclusion that can be drawn so far is that the overall impact to the training operation is minimal.

On the USMC portion of the BMGR, the UDA situation is far more acute. Since July 1, 2004, the Marines have suspended or limited missions on their two (2) sub ranges on 670 occasions. Again, a suspension does not necessarily equate to a cancellation. Due to Customs and Border Patrol activities in neighboring Border States, a "Yuma funnel" has been created, illustrated by a dramatic increase in UDA traffic:

2002 – 23 apprehended

2003 – unknown

2004 – 1,593 apprehended

January 1st through April 30th, 2004 – 2,042 apprehended

Although the situation is a growing concern, particularly for the USMC, users of the BMGR are still able to accomplish their respective missions. As previously stated, but needing to be reinforced, the operational impact of both the Undocumented Aliens as well as the Sonoran pronghorn antelope is negligible. As an example, it is widely accepted that Arizona is blessed with the best year round flying weather in the nation, and still Luke cancels an average of 450 sorties a year for weather-related issues. Compare this to the average sortie cancellation numbers for UDAs at 13 per year, and an average of 36 sortie cancellations per year for Sonoran pronghorn antelope (total sorties flown out of Luke AFB are in excess of 37,000 per year).

The Goldwater Range offers the capacity to keep pace with the evolution of aircraft technology and changing tactics of aerial warfare, and will continue to be a critical asset for ensuring national defense air power readiness. Through the strong partnership for more than three decades among the Air Force, State and local governments and private landowners, the mission at Luke Air Force Base and its auxiliary fields to produce the world's best fighter pilots and maintainers is secure today and in the future. The combined missions of Luke and the Goldwater Range guarantee the Air Force a continued source of fighter pilots and maintainers who are prepared to defend our national interests.