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The Joint Pacific Alaska Range Complex: Winning the Future Fight

Then: *I believe that in the future, whoever holds Alaska will hold the world. I think it is the most important strategic place in the world.*

Brigadier General (Retired) Billy Mitchell
1935

Now: *It is critical to sustain Army capabilities in Alaska. If anything ever happens in the world that demands operations in this type of environment, this is where we will come for the expertise.*

General Raymond T. Odierno
Chief of Staff, Army

Remarks at Joint Base Elmendorf–Richardson, Alaska, 23 January 2012

Introduction

Today's security environment is as uncertain and complex as ever, and it is the duty of the joint force to remain trained and fully ready to meet any challenge. The nation expects nothing less. As an integral part of tomorrow's joint force, the Army must provide globally flexible, responsive, regionally engaged forces to meet combatant commanders' objectives across the full spectrum of conflict—from humanitarian assistance and disaster relief missions to stability operations to major combined-arms campaigns. The joint force of 2020 must maintain the integration it has achieved during more than a decade at war as well as its ability to adapt and dominate in hybrid settings.

Army Chief of Staff General Raymond Odierno recently warned that sequestration's severe cuts to operation and maintenance funding are already resulting in significant training shortfalls—meaning that Soldiers are not receiving the best that America can give them. It is more critical than ever in this environment that joint forces have the support and the modern infrastructure required to preserve overmatch against any adversary.

The Joint Pacific Alaska Range Complex (JPARC) is the Department of Defense's (DoD's) largest training venue in Alaska, integrating all domains—land, air, sea, space and cyber—to provide unparalleled opportunities. It is a collaborative, multiservice effort to bring disparate capabilities into a coordinated and comprehensive joint environment. It allows employment over greater range than most venues and realistically replicates the long distances endemic to joint operations in the Pacific region. It also provides an uncluttered electromagnetic background for training, testing and developing advanced electronic warfare capabilities.



Background

Alaska sits at the center of gravity for the entire Asia–Pacific region, enabling the U.S. military to project strategic landpower across the theater. The Army stations a significant amount of combat power there to be ready to respond to contingencies around the world. In fact, by flying “great circle” routes from Alaska, U.S. forces can arrive anywhere in the Northern Hemisphere in a matter of hours. In addition, Alaska's size and topography make it extremely valuable as a military training environment unlike any other. It encompasses vast and diverse air, land and maritime opportunities that permit realistic training for almost any contingency.

Therefore, the presence of forward-stationed forces in Alaska coupled with the world-class training available through the JPARC creates a formidable strategic capability. In recognition of the value of joint collaboration to make best use of the JPARC, U.S. Pacific Command appointed Alaskan Command (ALCOM) to serve as its executive agent. In 2006, ALCOM commissioned the JPARC Vision Project,



whose goal was to achieve a comprehensive and transparent management process and record of decision. This helped ensure that the future JPARC would be organized as a truly joint endeavor rather than a loose, ad hoc conglomeration of individual service projects.

The net result of this effort was the JPARC Master Plan—a strategic vision to build a premier multi-domain, live–virtual–constructive joint range. ALCOM created the Alaska Joint Range Strategic Working Group (JRSWG) to seek synergies among the services that employ the facilities and implement the master plan. The JRSWG incorporates executive leadership from all military commands, organizations, centers and directorates in Alaska and serves as a consensus-based guide for the ongoing development of the JPARC enterprise.

JPARC Today

The JPARC provides significant training capacity and numerous characteristics that make it ideal for realistic preparation for current and emerging threats. Perhaps its most unique attribute is its geographic dispersal across Alaska—with training opportunities for the joint force in widely varying terrain and weather conditions. For example, Alaska’s mountains, cold weather and long periods of daylight allow simulation of realistic scenarios in austere environments.

Additionally, the overlapping and complementary domains support the entire range of military training requirements: individual, unit, service, joint, multinational and interagency. The JPARC offers opportunities for everything from individual small-arms training to full-scale, complex, realistic joint and multinational operations.

Land

The JPARC comprises a total of 2,490 square miles of land with 1.5 million acres of maneuver land (see table). It provides the room necessary to simulate complex large-scale engagements as well as the diverse and hybrid environments that have come to define the next-generation security challenge. JPARC facilities permit many special-

ized training prospects, including both coastal and inland environments. Because it offers scalable and versatile capabilities, it allows numerous options for multinational exercises and the building of partner capacity with friends and allies—and it also provides abundant space and advanced support for American-only operations and testing.

Specifically, the JPARC enables a wide range of activities including air assault, airborne and live-fire operations; mounted or dismounted maneuver; response to nuclear, biological or chemical attack; and complex and hybrid urban operations—precisely the range of activities that the joint force of 2020 must be ready to perform if called. Numerous weapons ranges—including the Battle Area Complex and the Combined Arms Collective Training Facility—provide automated and instrumented training support. Terrain is available to support specialized training in areas such as mountaineering, glacier, arctic, high-altitude, littoral, river and urban operations. As international attention to the Arctic region continues to increase, the JPARC’s capability to support Arctic training will only grow in significance.

Air

The JPARC also offers one of the best military aviation training environments in the world, totaling more than 65,000 square miles of airspace. There are 24 military operations areas (MOAs) and extensive dedicated special-use airspace and ranges. Military and civilian infrastructure is also robust; for example, the runway at Eielson Air Force Base is 14,507 feet long—making it the second-longest in North America and enabling even the heaviest cargo aircraft. In addition, the two runways at Joint Base Elmendorf–Richardson are 10,000 feet and 7,505 feet long. Eleventh Air Force can complement any training plan with its organic E-3 airborne warning and control system (AWACS), F-16, F-22 and C-17 aircraft as well as reserve component C-130 and tanker support.

Several special-use restricted areas adjoin the MOAs and therefore enable live and inert air-to-ground weapons training. Many MOAs support all-altitude and supersonic flight training as well as numerous types of surface-to-air threat emitters (both manned and unmanned), all of which enhance the realism of JPARC air training. There is opportunity for testing and training in the rapidly evolving mission sets of space operations; intelligence, surveillance and reconnaissance (ISR); electronic warfare; unmanned aerial systems; Global Positioning System jamming and many others. As advanced weapons and air platform capabilities proliferate, the JPARC offers the only American ranges with sufficient geographical range to support emerging tactics.

Sea

The Gulf of Alaska’s Temporary Maritime Activities Area (TMAA) is the designated training area for naval forces in Alaska and provides a world-class venue. It

Training Area

Maneuver Space Available

Donnelly Training Area	<ul style="list-style-type: none">• 13 light maneuver training areas in 567,734 acres• 7 heavy maneuver training areas within 87,457 acres• Weapons ranges
Joint Base Elmendorf–Richardson	<ul style="list-style-type: none">• 9 light maneuver training areas in 18,552 acres• 27 heavy maneuver training areas encompassing 34,121 acres• 16 numbered maneuver training areas• Weapons ranges
Fort Wainwright and the Tanana Flats Training Area	<ul style="list-style-type: none">• 592,699 acres available for training• Maneuver areas and drop zones comprising approximately 86 percent of the installation’s total area• Weapons ranges
Yukon Training Area	<ul style="list-style-type: none">• 8 light maneuver training areas in 257,281 acres• Weapons range

Source: Joint Pacific Alaska Range Complex

is composed of more than 42,000 square nautical miles of surface and subsurface ocean area and overlying airspace. This venue supports a host of maritime capabilities including full-spectrum sonar operations, live weapons employment, torpedo operations (including a portable undersea training range), live air and surface gunnery, search and rescue, missile defense and as many as two sinking exercises per year.

The TMAA provides a realistic environment—including long distances and both developed and austere sites—that supports operational and logistical challenges associated with future scenarios. It plays a vital role in executing the joint force’s readiness mandate for the rebalance to the Pacific as well as ongoing commitments around the world. It also provides tomorrow’s joint force the ability to train with and develop tactics for the newest platforms, such as the EA-18G Growler and P-8 Poseidon aircraft, guided missile submarines and surface ships and unmanned aerial systems.

Virtual

The JPARC is also capable of supporting virtual and constructive integration to live field training exercise events. For example, Eielson Air Force Base hosts a joint training and experimentation network node that enables various joint service tactical simulators, command and control systems and enhanced synthetic participation in a range of venues. Other technologies—such as the Army’s Initial Homestation Instrumentation Training System, Blue Force Tracker and the Air Force’s Distribution Mission Opera-

tions simulation network—allow geographically distributed forces to participate in JPARC exercises from home station.

Such capability is particularly significant for high-demand/low-density assets such as ISR capabilities, Patriot missile batteries and ballistic missile defense-capable Aegis ships. The JPARC’s live–virtual–constructive networking capacity not only enhances realism for live exercise participants but also increases value for those training audiences who cannot deploy to Alaska due to high operational tempo or limited assets.

Joint National Training Capability

In addition to home-station training for Alaska-based units, the JPARC hosts three or four regular large-scale exercises per year. Since 2009, it has been an accredited and certified joint national training capability—able to ensure that range space and infrastructure are interoperable and supportable and meet standards to provide a realistic joint operating environment. Chief among these joint exercises is Northern Edge—a U.S. Pacific Command event that prepares the joint force to respond to crises in the Asia–Pacific region.

This exercise, which can employ as many as 10,000 participants across the services (including the U.S. Coast Guard and reserve components), involves all of JPARC’s ranges and training venues and typically uses the full logistic support capability of all DoD installations in Alaska. Its purpose is to rehearse joint interoperability in a complex, heavily contested operating environment that simulates the anti-access/area-denial challenge common in the Pacific



region. Army special operations forces, land-based Air Force aircraft, Navy assets—including a carrier strike group—and Marines are all incorporated into the exercise frequently to practice high-end joint operations such as personnel recovery, close air support and joint terminal attack controller training. The cross-domain nature of the exercise coupled with robust live–virtual–constructive networking capability integrates the force seamlessly to help achieve the objectives of the combatant commander.

What Is Needed

Despite the extensive capabilities currently available in the JPARC, enhancements and future investments are needed to ensure continued support for evolving training requirements. Three key initiatives are particularly essential: service-specific improvements, the ongoing JPARC modernization and enhancement environmental impact study and continued investment in robust joint exercises. Each of these improves joint capability and ensures readiness to meet anti-access/area-denial challenges in the Asia–Pacific theater and elsewhere.

For the Army, year-round training access to certain areas of the JPARC is a challenge. In particular, portions of the Tanana Flats Training Area and the Donnelly Training Area are not accessible in all seasons. Improved ground access to these areas is crucial—especially as the Army seeks ways to preserve its capability to meet combatant commanders’ requirements. If a sudden contingency emerged that required additional ground forces, increased access to versatile training grounds such as these would be imperative. Likewise, specific instrumentation and infrastructure advances to enhance the quality of training, improve feedback and aid event debriefing would dramatically increase the utility of the JPARC’s maneuver areas.

To continue to support the best joint opportunities with the Air Force, several improvements are required. Air-to-ground infrastructure, instrumentation and the system that simulates surface-to-air threats have not kept pace with the most modern threats posed by potential adversaries’ integrated air defenses. The JPARC air ranges currently lag slightly behind the instrumentation and infrastructure capabilities found at the smaller Nellis Test and Training Range in Nevada. Improvements are also necessary to expand the employment range for advanced munitions and to support advanced aircraft such as the F-22 and F-35.

The Gulf of Alaska TMAA has been recently updated and currently meets all of the Navy’s core training requirements. Increased utilization would



enhance the JPARC’s total value. Additionally, improved radio and instrumentation coverage across the TMAA would increase its attractiveness for future Navy exercises, and greater availability of maritime hulks would enable more and better sinking exercises.

The success of the ongoing JPARC Modernization and Enhancements Environmental Impact Study is critical to the future of joint military training capability in Alaska. The proposals being studied are based on meeting specific training shortfalls and represent the highest priority investments as validated by JPARC users. The study is expected to be completed in 2013.

Major exercises such as Northern Edge, Red Flag, Alaska Shield, Vigilant Shield and Ardent Sentry/Arctic Edge demonstrate the strategic requirement for joint training in the vast geographic areas currently utilized by the JPARC. But these exercises (like most other military training and readiness programs today) are severely threatened by fiscal uncertainty.

Conclusion

The JPARC is a unique construct among DoD ranges, enabling large-scale joint training not available elsewhere, and (like any training capability) it requires regular maintenance, modernization and resources. Its location makes it ideal for joint, inter-agency, intergovernmental and multinational training events—but it is also highly valuable for advanced testing and fielding of next-generation weapon systems available only to America’s joint force. It allows for realistic deployment and employment of joint forces to meet tactical and operational requirements; it also allows the exercise of existing war plans for the defense of the Asia–Pacific theater of operations. Timely, predictable and balanced funding is essential to maintain the modern, relevant joint training venues necessary to confront 21st century security challenges and meet combatant commanders’ requirements now and in the future.