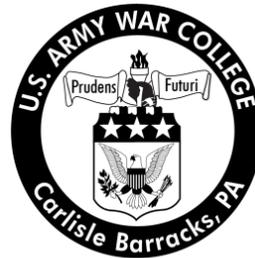


Strategy Research Project

Strategic Importance of the Joint Pacific Alaska Range Complex

by

Colonel Thomas Bell
United States Army



United States Army War College
Class of 2012

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

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|--|------------------------------------|--|--|---|--|
| 1. REPORT DATE (DD-MM-YYYY) 22-03-2012 | | 2. REPORT TYPE Strategy Research Project | | 3. DATES COVERED (From - To) | |
| 4. TITLE AND SUBTITLE Strategic Importance of the Joint Pacific Alaska Range Complex | | | | 5a. CONTRACT NUMBER | |
| | | | | 5b. GRANT NUMBER | |
| | | | | 5c. PROGRAM ELEMENT NUMBER | |
| 6. AUTHOR(S) Colonel Thomas Bell | | | | 5d. PROJECT NUMBER | |
| | | | | 5e. TASK NUMBER | |
| | | | | 5f. WORK UNIT NUMBER | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Colonel Tim Brown Department of Military Strategy, Planning, & Operations | | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College 122 Forbes Avenue Carlisle, PA 17013 | | | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| | | | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | |
| 12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Unlimited | | | | | |
| 13. SUPPLEMENTARY NOTES | | | | | |
| 14. ABSTRACT The Joint Pacific Alaska Range Complex (JPARC) is built on a firm foundation of extensive training, decades of testing, and range infrastructure currently in existence. The JPARC consists of all land, air, and sea training areas used by the United States Department of Defense (DOD) and the military services in Alaska. The Army, Air Force, Navy, Marine Corps, Coast Guard, and Alaska National Guard utilize the JPARC to conduct training and testing and to support joint mission exercise programs. The JPARC was originally established to support Cold War-era weapons and training concepts associated with both World Wars I and II. Alaskan Command is currently involved in the National Environmental Policy Act process to propose modernizations and enhancement initiatives through the congressionally funded JPARC Environmental Impact Statement, in an effort to bring this strategically important resource closer to its full potential. Future Joint Forces and coalition partnerships will enjoy increased capacity and attain higher readiness and training levels by executing Joint Mission Essential Tasks in any of the JPARC multiple training environments. The JPARC gives DOD maximum flexibility for future training investments. | | | | | |
| 15. SUBJECT TERMS Department of Defense (DOD), National Environmental Policy Act, Environmental Impact Statement, Joint Mission Essential Task | | | | | |
| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT UNLIMITED | 18. NUMBER OF PAGES 26 | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT UNCLASSIFIED | b. ABSTRACT UNCLASSIFIED | c. THIS PAGE UNCLASSIFIED | | | 19b. TELEPHONE NUMBER (include area code) |

USAWC STRATEGY RESEARCH PROJECT

STRATEGIC IMPORTANCE OF THE JOINT PACIFIC ALASKA RANGE COMPLEX

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ABSTRACT

AUTHOR: Colonel Thomas Bell

TITLE: Strategic Importance of the Joint Pacific Alaska Range Complex

FORMAT: Strategy Research Project

DATE: 22 March 2012 WORD COUNT: 5,358 PAGES: 26

KEY TERMS: Department of Defense (DOD), National Environmental Policy Act, Environmental Impact Statement, Joint Mission Essential Task

CLASSIFICATION: Unclassified

The Joint Pacific Alaska Range Complex (JPARC) is built on a firm foundation of extensive training, decades of testing, and range infrastructure currently in existence. The JPARC consists of all land, air, and sea training areas used by the United States Department of Defense (DOD) and the military services in Alaska. The Army, Air Force, Navy, Marine Corps, Coast Guard, and Alaska National Guard utilize the JPARC to conduct training and testing and to support joint mission exercise programs. The JPARC was originally established to support Cold War-era weapons and training concepts associated with both World Wars I and II. Alaskan Command is currently involved in the National Environmental Policy Act process to propose modernizations and enhancement initiatives through the congressionally funded JPARC Environmental Impact Statement, in an effort to bring this strategically important resource closer to its full potential. Future Joint Forces and coalition partnerships will enjoy increased capacity and attain higher readiness and training levels by executing Joint Mission Essential Tasks in any of the JPARC multiple training environments. The JPARC gives DOD maximum flexibility for future training investments.

STRATEGIC IMPORTANCE OF THE JOINT PACIFIC ALASKA RANGE COMPLEX

In his 1935 Congressional address, Air Force legend and pioneer Billy Mitchell called Alaska “the most important strategic place in the world...whoever holds Alaska, holds the world,”¹ while explaining the strategic advantages of a geographical position almost equidistant from Europe and Asia by air. Alaska has a remote appearance when analyzed from a standard north-to-south global reference. However, when viewed using an overhead map of the North Pole, the strategic logic of United States (U.S.) military forces stationed in Alaska becomes readily apparent. Military units throughout the state are firmly anchored in the North Pacific and strategically positioned for worldwide deployment. Ingress and egress air routes provide for rapid deployment and redeployment options from Alaska throughout the Pacific Theater. Transportation times to other parts of the world, such as Europe and Southwest Asia, are better than, or compare favorably with, other U.S. force locations.

The strategic importance of the world’s arctic areas of operation is becoming increasingly significant in regard to potential friction among the world’s powers. Russian Prime Minister Vladimir Putin said at the International Arctic Forum in Arkhangelsk, Russia in September 2011, “It is our intention to turn the Northern Sea Route into a key transport route of global importance.”²

Former U.S. President George W. Bush stated, “The United States is an Arctic nation, with varied and compelling interests in that region.”³ Alaska provides the most efficient access for the U.S. to the approximately 20 per cent of the world’s surface that makes up the earth’s arctic areas. This is important to U.S. national interest levels since many of these areas are reasonably accessible only from Alaska. Global warming

and the effects of polar ice cap and sea ice melting potentially open sea lines of communications never experienced before and combine to exacerbate the evolving importance of the arctic areas surrounding the Joint Pacific Alaska Range Complex (JPARC). *National Security Presidential Policy Directive (NSPPD) 66 and Homeland Security Presidential Directive (HSPD) 25* state:

The United States has broad and fundamental national security interests in the Arctic region and is prepared to operate either independently or in conjunction with other states to safeguard these interests. These interests include such matters as missile defense and early warning; deployment of sea and air systems for strategic sealift, strategic deterrence, maritime presence, and maritime security operations; and ensuring freedom of navigation and over-flight.⁴

Robert Hormats refers to the British government's 700-page report on the effects of climate change and global warming, in his book *The Price of Liberty*:

The next threat to American security could very well be global warming, and the United States must incorporate that prospect into current policy. The scientific evidence is now overwhelming: climate change presents very serious risks, and it demands an urgent global response.⁵

The Department of Defense (DOD) continues to face exceptional challenges to meet increasingly urgent national security needs. Educated opponents in demanding environments require our military to continually evolve and improve. The effects of a decade at war executing the Global War on Terrorism have significantly demonstrated the importance for the U.S. to improve rapid response and global reach capabilities, while maintaining a defensive presence to protect against global engagement threats. The overall strategic significance of the JPARC is to establish a true long-term capability for future American forces and coalition partners to train and exercise in the foreseeable future. The future direction for the JPARC must incorporate the best possible use of

resources and technology, in a fashion that recognizes and improves the vast 150-year cooperative history between the Armed Services and U.S. citizens, especially Alaskans.

One of the major benefits of the JPARC existing inside the state of Alaska, as a training venue of strategic importance, is its vast size. With an area of approximately 586,000 square miles, Alaska is approximately one-fifth the size of the entire contiguous U.S. or over two times the size of Texas. Furthermore, Alaska's coastline, based upon its dimensions and island areas, is five times longer than the entire coastline of the contiguous U.S. This vast expanse of acreage, combined with Alaska's relatively low population density of about 670,000 residents, makes it an ideal area for joint military training. The JPARC is like no other range or training resource, with over 62,000 square miles of airspace alone, which makes it over five times larger in area than the famous Nellis Range in Nevada.

The JPARC has over 67,000 square miles of potential training space for air, surface, and subsurface maritime operations in the Gulf of Alaska. This creates an invaluable resource for joint training of land, air, and sea components. Several portions of the range provide opportunities for wide varieties in weapons training, and ranges include instrumentation to provide time, space, and position information of practice air battles for very precise after action review and debriefing purposes. The continued effects of population increases are becoming more prevalent in the contiguous U.S. The uniqueness and high value of the JPARC become more apparent, as the demand for air, land, and sea training ranges gets more competitive due to population increases. The *Alaska Army Lands Withdrawal Renewal* final environmental impact statement describes Alaska and JPARC resources:

Alaska stands out as one of the very few places left where all conditions to conduct large-scale joint operations can be satisfied. The U.S. Alaskan Command (ALCOM) mission of command, control, and coordinate joint and combined operations as a subordinate unified command in Alaska... requires the opportunities offered by the combined and synergistic effect of Alaska's Military Operations Areas (MOAs), Restricted Areas (RAs), and withdrawn lands. As the Department of Defense's premier large-scale joint and combined training opportunity, the NORTHERN EDGE exercise program provides participating units with virtually all features desired for full scale Joint Task Force training exercises and rehearsals. The ability to concurrently employ air and ground conventional weapons in combination with large scale maneuver makes Alaska a prime choice for joint training operations.⁶

Alaska's strategic location and economic importance were recognized long before it became the 49th state in 1959. U.S. military strategists quickly realized Alaska's location in the Northern Hemisphere added a great deal of flexibility to Cold War-era security and national military strategies. This type of versatility does not diminish over time regardless of technological improvements to weaponry or the tactical situation. The state's sheer size and austere location are enough to significantly challenge the tactics and fortitude of the most formidable potential adversary. These characteristics also make the JPARC an unparalleled training resource.

Alaskan Command (ALCOM) is preparing for the increasing demand for joint training spaces by preparing a JPARC Modernization and Enhancement Environmental Impact Statement (EIS). This EIS anticipates military training requirements within the state for the next 20 to 30 years. The effort was initiated after Lieutenant General Dana Atkins, former commander of Alaskan Command, stated, "The JPARC ranges cannot meet the vast preponderance of training requirements for forces based in Alaska and the numerous Joint and service exercises conducted in Alaska, based upon current configuration."⁷

The DOD record of accurately analyzing and predicting the future battlefield has not been extremely accurate. However, we can predict every service will get smaller, based upon fiscal constraints DOD will be facing in the upcoming years. This will, in turn, require the service Chiefs of Staff to conduct military business in a more frugal, financially responsible, and tactically proficient manner than required over the last decade. The bulk of our efforts over the last ten years has gravitated toward protection of the force, specifically survivability, due mostly to our ongoing efforts in both Iraq and Afghanistan. It is predictable to believe our military efforts over the next decade will face complex fiscal challenges as DOD begins a drawdown similar to those experienced after every major war.

In a lecture on U.S. National Security Strategy at the U.S. Army War College in the fall of 2011, the distinguished speaker discussed many of the factors affecting the domestic challenges our country is currently experiencing. He referred to the country's slow economic growth and large percentages of persistent unemployment as major contributing factors to this national economic problem. One of the potential means our military can contribute is to effectively leverage future coalition partnerships by using existing DOD training resources. A recent article in the Association of the United States Army's Institute of Land Warfare series, *National Security Watch*, stated, "This moment of transition demands an American strategy of continued engagement with emphasis on building allied partner capacity to reinforce deterrence and increase U.S. influence."⁸ Military experts tend to agree the partnerships we build today assist in our future endeavors. Stravridis and Howard describe the challenges of future partnership as:

Our partners face an array of hazards, ranging from international terrorism, extremism, shifting demographics, and economic turbulence to

concerns over access to energy. The United States cannot obtain its strategic objectives without a unified approach, and the military is seeking more innovative solutions using proven concepts.⁹

The JPARC is a logical consideration for exercising strategic partnerships in the future, due to its existing infrastructure, remote location, and potential for increased capacity. This aligns with the latest DOD guidance titled *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, which highlights “the United States will rebalance toward the Asia Pacific Region out of necessity.”¹⁰ Since most of the required training resources already exist within Alaska, this concept is more economically feasible than establishing training space in another country or location in the Pacific Rim. Creating similar infrastructure and capacity in an overseas location adds to the economic benefit of foreign nations instead of our own.

One of the concerns of employing a joint training strategy of this magnitude is the amount of increased risk to current and future anticipated national security levels. The JPARC solution helps alleviate many of these national security concerns due to Alaska’s austere operating environment, as well as the time and vast distance factors involved, posing minimal threats to national assets in the contiguous 48 American states. A joint and coalition training strategy employing the JPARC as a primary location would impose a fraction of the cost of similar programs run in the contiguous U.S. or elsewhere.

The main reason the JPARC is so dramatically important in a joint training strategy of this proportion is Alaska’s rich history, size, and diverse training environments, within various climatic and geographic areas. The majority of military training occurs in three geographic locations. The Interior Region, near Fairbanks, is a vast plateau with large temperature fluctuations and is highly useful for military training.

Installations in this region typically experience weather related closures comparable with most airports located throughout America. The Southcentral Region, where Anchorage is located, contains three ice-free ports and experiences milder temperatures due to the close proximity to the Gulf of Alaska. The Southeast Region, where the state capitol Juneau is located, has a rainy climate similar to the Pacific Northwest and possesses a rugged coastline.

Simply put, Alaska represents a vital U.S. strategic interest in the arctic. In that status, the state incurs significant American equities with responsibility levels similar to some countries. In the future, as global warming trends continue and maritime shipping lanes open, Alaska and the JPARC may become even more strategically vital to America. The Bering Strait between the U.S. and Russia is the only shipping lane in the arctic environment that connects current U.S. shipping lanes to this new sea line of communication, which contains unlimited and unexplored potential. The language contained in *NSPPD-66 and HSPD-25* is clear in regard to future arctic interests:

The Arctic region is primarily a maritime domain; as such, existing policies and authorities relating to maritime areas continue to apply, including those relating to law enforcement. Human activity in the Arctic region is increasing and is projected to increase further in coming years. This requires the United States to assert a more active and influential national presence to protect its Arctic interests and to project sea power throughout the region.¹¹

Strategic military deployments to the JPARC are conducted by land, sea, and air. Over land this can be accomplished along remote expanses of the Alaska Highway system or via the Alaska Railroad, which connects the towns and ports in Valdez, Seward, Whittier, and Anchorage to Fairbanks and Eielson Air Force Base. However, the most efficient means to move heavy equipment to and from the JPARC is by

maritime assets into one of Southcentral Alaska's four deepwater ports, which possess rail interconnectivity.

Strategically essential to the JPARC and all of Alaska's armed forces is the Port of Anchorage. It provides deployment and staging areas, critical fuel, and throughput for both consumer and business materials. The port has a long and successful history of supporting military deployments from its docks. The port successfully supported over 20 military deployments, including multiple brigade-size deployments to Iraq and Afghanistan from 2005 to 2010. Approximately 20,000 items of military-related equipment passed through the port's facilities during this critical time period.

The Port of Anchorage was designated a Department of Defense Nationally Strategic Seaport in 2006. The port is one of only 19 ports throughout the U.S. with this "strategic" distinction. The significance surrounds a secure roadway and fuel pipeline to Joint Base Elmendorf Richardson (JBER), the closest and largest military facility in Alaska.¹² JBER is the most critical facility in the JPARC largely due to recent expansion of port, rail, and secure road networks that facilitate this huge logistical capability. Anchorage's streamlined cargo handling functionality reduces damage and costs while increasing security and timeliness, as well as significantly improving overall operating efficiency. This capability allows the military to deploy directly from JBER to the port without having to tie up public roadways in the most heavily trafficked city in Alaska, thus significantly increasing safety and operating efficiencies. The Anchorage port facilities are connected by rail to four of Alaska's major military installations 12 months out of the year. These rail line connections can support deployments from both JBER

and Fort Wainwright by transporting all military cargo directly onto the port's secure property.

Fuel supplies are an important logistical factor in the port's relationship to the military. One hundred percent of the jet fuel used on JBER enters the Port of Anchorage and is transported to the base by pipeline. Two-thirds of the fuel utilized for military purposes travels through port facilities prior to reaching a military logistics point. This is an extremely important logistical aspect of the JPARC, since without this critical capability the joint training currently conducted would be impossible. In a December 2010 letter to U.S. Senator Lisa Murkowski, Lieutenant General Dana Atkins, then Commander, Alaskan Command, wrote:

The Port of Anchorage is not only the strategic hub for military deployments and operations, it is also the point of throughput for the commodities we stock in our base exchanges, commissaries and troop stores in support of 55,000 military and family members in Alaska.¹³

Alaska's DOD infrastructure and training areas include 33 military installations throughout the state critical to the support of JPARC activities. These include 3 Army posts, 3 Coast Guard stations, 3 national missile defense sites, 7 Air Force installations, and 17 radar sites.

The JPARC supports training in each of the warfighting domains, identified in this paper including the space domain. The training conducted in space and relating to capabilities associated with GPS jamming and satellite communications will not be discussed in detail in this paper due to their operational sensitivities.

Land Domain

The Joint Force Land Component Commander is the United States Army Alaska (USARAK) Commander. This two star headquarters is located on JBER with a Deputy

Commander located at Fort Wainwright, in Fairbanks. USARAK's mission is to train and equip forces to deploy rapidly in support of combat operations and other operations worldwide, conduct operations in cold regions and mountainous terrain, and provide support for Army forces based in Alaska.

USARAK's strategic location, unsurpassed training capabilities, long-term economic impact, and partnership with Alaskan communities make it a significant national asset and world-class power projection platform for military operations anywhere in the world.

USARAK has two immediate higher headquarters: U.S. Army Pacific Command (USARPAC), headquartered in Hawaii, and ALCOM, located on JBER. USARPAC is the U.S. Army service component to USPACOM, and ALCOM is a sub-unified command, also subordinate to USPACOM.

The USARAK Commander has two extremely unique responsibilities. As the USARAK Commander, he responds directly to the USARPAC Commander on service component issues. As the Deputy ALCOM Commander, he responds directly to the ALCOM Commander on Alaska-specific matters and joint responsibilities.

USARAK training resources include 1.6 million acres of training land capable of supporting all conventional weapons in the Army and Air Force inventory. These resources include the Fort Richardson Training Area, composed of over 53,000 acres of all-season maneuver land and impact area. Fort Wainwright possesses more than 924,000 acres of training area and 94,000 acres of impact area. The Donnelly Training Area consists of more than 631,000 acres of maneuver land, of which over 151,000 acres is impact area. This facility supports brigade-level training year round and

division-level winter operations training. Each of these facilities have a whole host of staging areas, range complexes, drop zones, and automated ranges to support individual and collective training through the brigade level.

The United States Marine Corps is not heavily represented in Alaska on a year-round basis. On JBER, the USMC's Delta Company Anti-Terrorism Battalion, 4th Marine Division remains the only permanent contingent of Marines. However, the USMC is invited and participates in the NORTHERN EDGE (NE) Exercise every two years with a robust contingent of Marine Corps air and ground assets. NE 2011 had over 6,000 joint exercise participants with 31 units, 13 ships, and 120 aircraft including all of the uniformed services as well as the Coast Guard.¹⁴

Air Domain

ALCOM is a three-star Joint Headquarters with a unique four-tiered responsibility. The ALCOM Commander is responsible to USPACOM and conducts all integrated military activities inside the state of Alaska and maximizes readiness of assigned forces. The Joint Task Force Alaska mission area falls under United States Northern Command with the mission to detect, deter, prevent, and defeat terrorist activities within the state as well as to conduct Defense Support to Civil Authorities as required. The North American Aerospace Defense Command (NORAD) is represented by Alaska NORAD Region with the mission to provide continuous warning and assessment of aerospace attack and maintain aerospace control including air sovereignty and air defense. For the responsibilities associated with the air domain, the Joint Force Air Component Commander is the 11th Air Force Commander, with the mission to organize, train, and equip air forces in Alaska and provide forces to unified commanders.

A key component in the accomplishment of the 11th Air Force mission in Alaska is situational awareness and the establishment and maintenance of the Common Operational Picture (COP). During exercises in the JPARC, a recent *Signal Magazine* article referred to the establishment of the COP as:

Modern computer software, airborne combat simulation systems and a plethora of advanced Russian surface-to-air radar and missile hardware are melding air forces and ground-based air defense systems into a seamless air combat exercise that simulates ground and air combat. Friends are able to know immediately how their simulated fight against various foes is progressing, and after-action reviews can examine the tactics and weapon performance information in a multilevel security environment... and now contributes to a common picture that provides a multifaceted view of simulated air warfare over tens of thousands of square miles.¹⁵

This capability allows units and countries participating in a JPARC exercise to potentially fly against the same type of anti-aircraft capability they could face in future conflicts. Participating units are able to align desired threat systems in support of their training objectives and their specific type of aircraft. A large percentage of the ground-based anti-air technology threat is advanced Russian equipment purchased openly from the former Soviet Union.

Red Flag - Alaska is the catalyst behind many air and cyber domain training initiatives; this Pacific Air Forces exercise held in the JPARC several times throughout the year was described by *Signal Magazine*:

U.S. Air Force personnel and their aircraft are joined by their counterparts from Pacific allies as well as by U.S. Army ground forces in an exercise that encompasses 67,000 square miles of airspace and 1.6 million acres of training land. All told, about 100 aircraft and up to 2,000 personnel take part in the endeavor over JPARC at Eielson Air Force Base near Fairbanks. During Red Flag exercises, featured aircraft and support personnel from the United States and coalition partners participate in air operations over several days and real-time data from all ground and air assets is consolidated to generate a single picture of simulated combat.¹⁶

A key element assisting in Red Flag's overall success in this mission area is the fact that Alaska possesses its own F-16 aggressor force. This squadron, located at Eielson Air Force Base, provides a distinct advantage over previous exercise capabilities, as Robert Ackerman describes:

Prior to the establishment of this resident red force (enemy), pilots participating in the exercise were required to divide their time between red and blue force (friendly) activities. This lessened the amount of effective training they would receive as blue force pilots, and it complicated safety programs. Now, participating blue force pilots have twice as much time training the way they would fight in coalition operations.¹⁷

Cyberspace Domain

The *2010 Joint Operating Environment* suggests, "The pace of technological change is accelerating exponentially. If the pace of technological advancement continues, greater change will occur over the next twenty years than occurred in the whole of the Twentieth Century."¹⁸ The author's involvement in the JPARC EIS shows that modernization and enhancement proposals in the JPARC EIS offer potential solutions to these rapidly developing technological improvements.¹⁹

The JPARC's use of a live, virtual, and constructive model particularly during the NORTHERN EDGE exercise allows the future Joint Force to enhance training and integration by including participants from around the world. The virtual and constructive portions of the exercise allow for a larger employment of forces across 11 time zones.

Several programs allow various weapon systems operating in the JPARC to exchange critical information across the full spectrum of operations and along multiple security levels and are a cornerstone in the situational awareness success story. One of these programs is computer enabling software known as SimShield. The author's observation of this critical software is it consolidates data into a single commercial

system built around a military-developed training architecture and functions as the cross-domain solution sanitizing classified information for use in unclassified data networks.²⁰ Testing and Training Enabling Architecture (TENA) establishes a data standard that assists systems working together to produce interoperability between systems. This critical software facilitates coalition units' visualization of this unclassified information in near real time as a COP that can be seen by every unit participating in the exercise. The Chief of Instrumentation for the JPARC has stated, "We could not conduct the training we do today with all of these systems, without TENA."²¹

Utilizing the multiple systems ensures "classified air combat data from a U.S. Air Force fighter aircraft, unclassified data from a partner country's anti-aircraft team, and unclassified data from a U.S. Army ground forces unit can be consolidated."²² This technique places joint training programs like Red Flag and NORTHERN EDGE at the forefront of air combat simulations since all the assets generate data to influence the exercises in near real time. The information generated by the various airborne platforms and ground operations create an up-to-date situational awareness picture of the overall operation. Joint Red Flag operating procedures ensure aircraft destroyed during the exercise are timely removed from the exercise to minimize training distractions and enhance safety.

These COP consolidation procedures allow various air combat maneuvering instrumentation systems to operate simultaneously integrating aircraft and weapon data through encrypted information linkages to ground data systems in near real time. Many units and aircraft use newer pods that attach to weapon system launch rails and provide continuous data information feeds to the COP for situational awareness.

Two phases of a Red Flag Exercise incorporate both air-to-air and ground-to-air combat. The exercise also includes air-to-ground scenarios, with friendly pilots rated on their ability to strike various ground targets as well as against ground-based anti-air threats.²³ Many of the target arrays within the JPARC utilize threat capabilities that feature a numerous variety of targets. Infrastructure in the form of buildings, bridges, and other high pay off targets provide opportunities to exercise precision targeting techniques.

The greatest ground threat friendly pilots will most likely face in future air combat will be based upon equipment and systems from the former Soviet Union. The JPARC has a menu of up-to-date former Soviet and Russian radar and anti-aircraft systems, many of which are designed to be linked during actual combat. In an exercise in the JPARC, these systems provide data to the simulation center. The Russian equipment ranges from the upgraded SA-6 to the newest targeting and detection radars.

There are a myriad of security challenges encountered while orchestrating joint and coalition partnered exercises. The JPARC Chief of Instrumentation stated in an October 2011 interview:

Transitioning from a U.S.-only mission to a multinational operation entails meeting a host of security requirements. The information assurance program helps to solve this problem but proves demanding since it slows the real-time process and training originally envisioned.²⁴

As a result of the information assurance endeavor, the former challenges were resolved. To further assist in this area, Red Flag created a test location so every piece of equipment incorporated in the JPARC is thoroughly tested before it is incorporated into the range infrastructure.

The acquired Russian assets are incorporated at the price of logistical costs. As the October 2011, *Pacific Air Over Alaska* article suggests, “some of the Soviet-designed radars conflict with U.S. commercial bandwidth. Cellular telephones in particular can be affected during certain conditions when the Russian radars are operating.”²⁵ Range managers employ mitigating techniques to prevent and minimize any negative effect to local cellular communications. To legally utilize the acquired radars in the conflicted spectrum, the Federal Communications Commission had to issue permits to allow the range to operate the threat emulating capabilities.

As Ackerman states, “Warfighters demand and expect ranges to be equipped with the latest relevant threats to train against and desire reliable and accurate data recording and feedback systems.”²⁶ Multiday exercises are normally comprised of air and land forces from several countries, generating air combat information and reviewed by participants in near real time. The JPARC is equipped with the latest former Soviet and Russian air defense systems, known as threat emulators. These systems are networked to allow the fire control radar to transmit information to aircraft radar and generate the overall airspace picture similar to the manner they were originally designed to operate. Former Soviet and Russian hardware in the JPARC Surface to-Air Weapons arsenal as described in the October 2011 issue of *Signal Magazine* “include 2S6, SA-6, SA-8, SA-10, SA-IIb, SA-13, and SA-15b. The Early Warning Radar Systems include the Clam Shell Flat Face, Long Track Spoon Rest, and Thin Skin Tin Shield.”²⁷

Updates to the range’s physical attributes are also under consideration. According to the ongoing ALCOM JPARC EIS, future construction plans include the

potential for building a “Joint Air-Ground Integration Complex to train aviation units and crews on the skills necessary to detect, identify, and engage stationary and moving targets in a tactical array.”²⁸ This will incorporate intelligence-driven operations as part of air combat activities with ground forces.

Maritime Domain

Freedom of the seas is a top national priority. The Northwest Passage is a strait used for international navigation, and the Northern Sea Route includes straits used for international navigation; the regime of transit passage applies to passage through those straits. Preserving the rights and duties relating to navigation and overflight in the Arctic region supports our ability to exercise these rights throughout the world, including through strategic straits.²⁹

Maritime forces in Alaska are mostly Coast Guard and fall under the jurisdiction of the DOD during contingency or wartime operations. Coast Guard District 17, headquartered in Juneau, is responsible for maritime security, mobility, safety, protection of natural resources, and national security. The Coast Guard readily trains in the JPARC and plays a significant role in joint exercises throughout Alaska.

The Navy trains in the Alaska Training Areas to prepare Navy personnel and other military forces for global conflicts, homeland defense and homeland security activities. The Alaska Training Areas are strategically important for meeting the Navy’s mission. Together, these areas have a unique combination of attributes that make them an ideal training venue for the Navy, including location, area of training space, and oceanographic conditions. The Alaska Training Areas include the Temporary Maritime Activities Area (TMAA) in the Gulf of Alaska and Alaska’s inland training areas. These areas are used by the U.S. Navy to conduct military activities across the full spectrum of

operations, from individual and unit-level training to larger joint (multi-service) training events. The air, land, and sea components in and around the Gulf of Alaska provide the space and resources needed to realistically train Sailors to achieve and maintain fleet readiness. The TMAA is located within flight range of several Air Force and Army bases and their associated air and land training areas. The proximity of personnel, resources, and equipment within a few hundred miles of the Gulf of Alaska allows for rare joint training opportunities for Navy forces, as stated in the Navy's Gulf of Alaska EIS: "These activities provide realistic experience and include operating aircraft, ships, and submarines; conducting training against ships and aircraft; practicing aerial surveillance; and detecting and locating submarines."³⁰

Recommendations and Conclusions

The JPARC training resources represent many opportunities to our partners throughout the Pacific. Short air and sea routes and efficient equipment make training in Alaska a more viable option now than experienced twenty years ago. The yet undetermined effects of climate change and global warming on future lines of communication indicate Alaska will continue to hold a vital strategic importance and will always be a decisive factor in U.S. policy and strategy. This is particularly true with the interest levels many of the northern areas are receiving from other countries.

Our nation prepares American servicemen and women for the requirements of the future battle. Premier training resources like the JPARC ensure future generations possess the resources to continue this legacy. Retired General Gordon Sullivan's introduction to the *Army Budget* is in alignment with keeping this legacy alive:

In the past ten years, Americans, individually and through their elected officials, have kept their promise to provide the very best material and equipment, the best training, the best support to Soldiers and their families

and the best care for wounded warriors. America needs to continue to honor its obligation to provide adequate numbers of Soldiers and the best for those Soldiers.³¹

The criticality of the JPARC to U.S. current and future long range capabilities is high, given the latest DOD guidance shifting focus toward the Pacific. The future JPARC must continue to incorporate the best possible use of resources, technology, and relate the vast 150-year cooperative history between the Armed Services and U.S. citizens. Alaska's strategic location and world energy situations increase the significance of the JPARC's strategic contributions to the U.S. and future partners. Civilian special interest group pressure to return under-utilized DOD ranges and training areas will be a future concern. The strategic importance of the JPARC will continue to increase as civil expansion and population encroachment in the contiguous U.S. create training resource challenges for future DOD forces.

Alaska was once a land bridge to Siberia, an amphibious route to Japan and Asia, a refueling link to Southeast Asia, and an outpost against airborne attacks in World War II. Today, as a strategic location for national level missile programs, Alaska and the strategically important JPARC have a vital and unique role to play in the age of global warming. U.S. forces and coalition partners training in the JPARC are more prepared to win the future fight wherever it may be.

Endnotes

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