



DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON DC 20330

2 JAN 2009

HQ USAF/CC
1670 Air Force Pentagon
Washington, DC 20330-1670

The Honorable Byron Dorgan
United States Senate
Washington, DC 20510

Dear Senator Dorgan

Sir,
Thank you for your interest in Grand Forks AFB and its flying mission. The 319th Air Refueling Wing's "Warriors of the North" have a proud legacy of supporting our nation and are better served by your involvement.

When we last met, the North Dakota Congressional Delegation expressed concern about a "bathtub" or potential gap of the flying mission at Grand Forks AFB. As you are aware, the Base Realignment and Closure Commission required the Air Force to remove its KC-135s from Grand Forks AFB no later than 31 December 2010. It further mandated a follow-on UAS mission at Grand Forks. To comply, the Air Force plans to assign RQ-4 Global Hawks starting in FY10 and growing to eight aircraft by 2015. This plan provides an ongoing flying mission at Grand Forks.

The drawdown of the KC-135 mission at Grand Forks AFB will result in a decrease in personnel supporting that mission. However, with the RQ-4 mission this impact to Grand Forks AFB will be minimal, with a net loss of less than 200 Airmen. This does not account for any addition of personnel associated with potential future missions, including the KC-X.

Since last January's Air Force Weapons Systems Roadmap press release when Grand Forks AFB was identified among many potential KC-X beddown locations, much has happened. With the KC-X decision delayed until the next administration, the impact on the program's timing is still being determined. As the KC-X program re-enters the acquisition timeline, the Air Force will continue to evaluate KC-X basing options and will provide further details as they become clear.

The Air Force values the capability brought to the fight by Grand Forks AFB, and its flying mission will continue. The Grand Forks AFB Viability and Capacity Preservation Report as required by HR 2638 are attached. This report focuses on the investment required to maintain Grand Forks' flying mission viability while embracing its future as a hub of UAS activity. As we comply with BRAC law and bring on new capabilities with new weapons systems, rest assured Grand Forks AFB will remain key to the Air Force mission.

Sincerely


NORTON A. SCHWARTZ
General, USAF
Chief of Staff

Attachment:
CRR Grand Forks Infrastructure Report



United States Air Force

Report to Congressional
Appropriations Committees

Grand Forks Air Force Base,
North Dakota Infrastructure

December 2008

FY09 Defense Appropriations Act, Joint Explanatory Statement, page 105

Introduction

This report is being provided to the Congressional Appropriations Committees as directed in HR 2638 Consolidated Security, Disaster Relief, and Continuing Resolution 2009, page 105.

GRAND FORKS AIR FORCE BASE, NORTH DAKOTA, INFRASTRUCTURE

The January 2008 United States Air Force Weapons Systems Roadmap anticipates a future KC-X tanker mission at Grand Forks Air Force Base after the departure of the base's current fleet of KC-135R tankers. Thus, the Air Force is directed to prepare a report which recommends the best way to keep the base and its associated infrastructure viable until the potential arrival of KC-X tanker aircraft so it does not have to rebuild or recreate facilities that now exist. This report shall be provided to the House and Senate Committees on Appropriations within 90 days of Enactment of this Act.

Executive Summary

Despite the termination of the competition for a U.S. Air Force airborne tanker replacement, the challenges since the 2005 BRAC announcement continue. However, as a result of events at the national, state, and local levels, new opportunities have emerged that may leverage the unused capacity resident at Grand Forks Air Force Base (GFAFB).

Annual fixed costs to maintain the viability of GFAFB with assigned workforce, infrastructure and associate mission support requirements are approximately \$45.2 million per year. The four areas that drive the annual costs include: airfield maintenance for the Unmanned Aerial System (UAS) mission; civilian pay, base support, and utilities.

A programmatic drawdown of the Grand Forks Air Force Base tanker mission will complete in December 2010 when the final KC-135 aircraft departs. Keeping GFAFB viable for future mission sets is dependent on two strategies: embracing the current and future UAS mission and preserving infrastructure within Air Force fiscal constraints.

GFAFB has a robust infrastructure with excess capacity for new missions and a team of Air Force experts is developing an action plan that details a number of pro-active options to defray base operating costs during the "bathtub" period. These actions include demolition of unusable space, placement of under-utilized space in caretaker status, and promote short-term leases to provide a potential revenue stream to offset base operating costs.

Report

Mission Environment.

In May 2005, the Department of Defense (DoD) recommended to the Base Realignment and Closure (BRAC) Commission that GFAFB be realigned. While this decision effectively prevents the base from being closed, it does result in a loss in personnel and the installation's current tanker mission. To offset some of these losses, the Air Force is planning on expanding the BRAC directed bed down of UAS aircraft at GFAFB, to include the Predator A (MQ-1) to be operated by the Air National Guard (the 119th Air Wing in Fargo, ND) and the Global Hawk (RQ-4) operated by Air Combat Command (ACC). A depiction of the proposed UAS bed down plan is included at Tab 1.

GFAFB is shaping up to be a unique wing, with partners from DoD, Department of Homeland Security Customs and Border Protection (DHS/CBP) Air and Marine Division (AMO) and the National Guard slated to conduct UAS Operations side-by-side in the very near future. GFAFB finds itself facing a series of significant challenges as it transitions from a super tanker wing to a UAS wing.

Challenges

Tanker mission “bathtub” and fixed cost. During the tanker “bathtub” period – the timeframe between the departure of the aged KC-135R fleet and the potential beddown of a new Air Force tanker -- mission support and base support Airmen will continue to operate the base. Additionally, the facilities and infrastructure will remain with considerable spare capacity. People and infrastructure drive the “fixed cost” portion of operating an installation representing the cost of keeping the gates open. Much like the fixed cost associated with a manufacturing plant, the base's fixed cost varies only slightly with flying mission changes. The fixed cost is more dependent upon base capacity (land, number of facilities, ramp/hangar space, number of support functions, etc). Mission operations tempo (aircraft maintenance cost, jet fuel cost, operator personnel costs, etc.) drives the variable costs of the base. Variable cost has little impact on the fixed cost as long as the operations tempo requirements do not exceed the capacity of the base driving additional infrastructure and support personnel to expand.

To keep GFAFB viable, we need to preserve the support machine and infrastructure, which includes funding the associated annual fixed-cost bill. No mission set on the immediate horizon will bring instant growth. Therefore, the “bathtub” period is a significant challenge for cost and efficiency. Temporary solutions to offset fixed operating cost will require non-standard solutions and innovation.

Summary of annual funding requirements. \$45.2 million per year is required in fixed costs to maintain the viability of GFAFB with assigned workforce, infrastructure and associate mission support requirements. Costs are outlined in the projected operating cost point paper in Tab 4. Costs are driven by the following areas:

Grand Forks AFB Viability and Capacity Preservation

- **Airfield maintenance.** \$2.3 million per year in maintenance costs is required to preserve airfield pavement and lighting alone for the UAS and other potential new missions
- **Civilian pay.** \$20.4 million is required for Fiscal Year 2012 civilian payroll funding (doesn't include pay raises, performance awards, retirements, and, lump sum leave)
- **Base support.** \$15.3 million is required for Fiscal Year 2012 base support funding
- **Utilities.** \$7.2 million is required for Fiscal Year 2012 utility funding

Infrastructure available for new missions. GFAPB will have excess capacity for new missions. In the last decade, this base has benefited from \$438 million in infrastructure project investment. GFAPB has a new runway, quality housing, one of the Air Force's finest fitness complexes (at 135,000 sq ft), and a host of buildings less than four years new. Additionally, the base is preparing to break ground on a \$13 million state-of-the-art control tower and RAPCON facility and anticipate construction of a \$13 million fire station in the very near future. Finally, GFAPB is launching a 2+ year upgrade of the communication systems (fiber backbone, key equipment nodes, and pipelines off-base) which is estimated to be scoped at several million dollars. There is 225,000 square feet of administrative, warehouse and hangar space available (Tab 3) in addition to 1,200 acres of real estate for potential development (Tab 2). GFAPB will have 224 adequate surplus dorm rooms and 273 surplus new military family housing units.

Action Plan for viability. The Air Force can grow the UAS mission assigned to GFAPB and concurrently preserve capacity for any future potential tanker mission. GFAPB may have sufficient space to assign additional mission sets without jeopardizing the base as a potential bed down site for a new tanker mission.

Objective 1: Preserve Capacity for potential future tanker mission and other emerging mission sets.

Demolition. There is space on GFAPB that is beyond its useful life and unsuitable for any re-use, which will be prioritized for demolition. However, none of that demolition will hamper the Air Force's ability to develop the UAS mission, house a potential tanker mission, or host an emerging mission set. In fact, demolishing facilities past their useful life-cycle prepares land for future redevelopment.

Care-taker maintenance. While the preference is to find temporary or long-term use for buildings, some space will likely remain vacant. The Air Force will maintain those buildings with a care-taker maintenance plan. The plan will divert infrastructure craftsman labor to a periodic inspection and maintenance cycle for vacant facilities. The Air Force will maintain the facility shells and the mechanical equipment in order to preserve integrity of the building and maintain moisture control inside. The temperatures will be controlled to maintain humidity but set at seasonal extremes to save energy costs. All repairs beyond what is necessary to keep the buildings ready for re-use will be shelved for the foreseeable future.

Housing/dorm capacity. During the bathtub period, the Air Force projects that it will have 224 surplus dorm rooms and 273 surplus adequate military family housing units. GFAFB is aggressively working to privatize the military family housing units and divest the infrastructure from Air Force real property records by late 2009 to early 2010. Unoccupied dorms will be kept in care-taker status. The Air Force will continue to explore opportunities to use unoccupied dormitories until tanker mission beddown plans are solidified.

Objective 2: Explore opportunities to increase defense value and efficiency for the taxpayer investment.

Direct reimbursement lease provisions: Lease authority to temporarily lease unused facility space is covered by provisions of 10 USC 2667, which contains provisions to displace the tenant for an emergent high-priority Air Force mission (i.e., KC-X or some other large-scale platform). This lease authority provides the flexibility to structure the lease to accept payment in-kind or money.

The sum square footage available for leases across the wing (after fully accounting for the current bed down of Department of Homeland Security (DHS), North Dakota Air National Guard, and active duty UAS platforms) could provide a revenue stream to help offset base operating costs.

Leases in response to unsolicited proposals. Any unsolicited proposals to lease facilities and land at GFAFB may provide the opportunity for funding to maintain GFAFB viability for short and long term leasing. Long term lease commitments are more appropriate for land available for development or for facilities earmarked for long-term exclusive use.

Objective 3: Acquire new missions to defray base operating costs.

On-Going Airspace Initiative. Air Mobility Command and Air Combat Command are working to obtain funding and be inserted into the Air Force Laser Lab schedule to investigate and certify Camp Grafton South, restricted area (R-5401) for non-eye safe laser UAS air operations. The Environmental Impact Statement is on-going with the current completion date being slipped from October 2009 to January 2010.

Emerging UAS technologies and programs. The demand for UAS technologies continues to rapidly proliferate. GFAFB is uniquely positioned to support these emerging UAS needs and initiatives by providing synergistic opportunities that could net significant economies of scale for all stakeholders by combining them.

Department of Homeland Security (DHS) UAS missions. The DHS mission, as currently described, is slated to grow to approximately 103 personnel operating up to six Predator B's. There is potential for further DHS expansion as a training hub.

University of North Dakota UAS programs. The University of North Dakota has been working to establish a UAS Center of Excellence in the greater Grand Forks region to conduct research projects for the FAA, DOD, and private companies. The Center will use the core competencies of the university to strengthen the defense of the U.S. and further the civil development and implementation of unmanned aircraft.

In addition, the University of North Dakota is currently partnering with the Joint UAS Center of Excellence at Creech AFB, NV, conducting analysis into UAS payloads and evaluating the use of ground based radar for traffic de-confliction purposes. Recently, the University of North Dakota has teamed with Crew Training International (CTI) as a part of a \$50 million contract to conduct all ground training for the Air Force Reaper (MQ-9). As a result of its broad based UAS partnerships and long-standing reputation for civilian pilot training, University of North Dakota now finds itself uniquely positioned to offer initial pilot and UAS training.

Air National Guard. Consistent with the BRAC law, the North Dakota Air National Guard will begin flying UAS at GFAFB no later than the first quarter of the 2011 fiscal year. The North Dakota Guard units are slated to be co-located in the same facility as DHS. Potential exists to establish a UAS Center of Excellence for the National Guard in the region.

Air Force Research Labs (AFRL). GFAFB has been approved for base level security testing of "riding lawnmower sized" helicopter UAS systems that both enhance force protection efforts and enhance our security forces ability to respond quicker at greater stand-off distances. AFRL has an approved test plan and an air vehicle that will arrive at the base in the near future for commencement of integration and human factors testing.

The United States Air Force Academy (USAFA). USAFA personnel are interested in partnering with UND on a recently awarded \$3.76 million USAF Battle Lab funded contract to research the potential of using gang phased array radar to measure the issues associated with UAS sense and avoid challenges.

Private entities. Private corporations involved in the development of UAS technologies have approached GFAFB requesting the opportunity to enter into some form of lease arrangement. Among those companies, Laserlith Corporation is a rapidly growing technology company that is currently developing a family of nanotechnology-based products that deliver reliable and high performance UAS-related communications equipment to the war fighter.

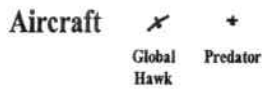
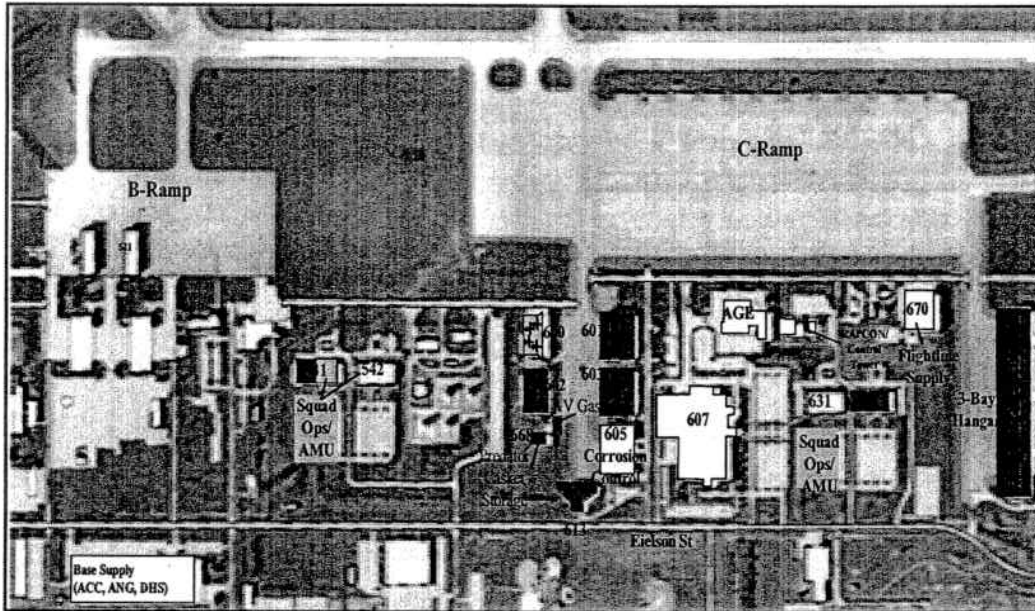
The integration of UAS-centric private businesses into available base facilities provides a tremendous opportunity to not only offset base operating costs addressed earlier during this period of transition, but also keeps the focus on integrating only synergistic entities. This is an opportunity to open unused space to commercial interests that are involved in the development, training, or manufacturing of UAS-centric endeavors.

Grand Forks AFB Viability and Capacity Preservation

Bottom line: The USAF is projected to require \$45.2 million annually starting in Fiscal Year 2012 to maintain the viability of GFAFB with assigned workforce, infrastructure and associate mission support requirements. A responsible action plan is being developed to mitigate the tanker “bathtub”. GFAFB and the Air Force are moving forward to beddown UAS aircraft with the North Dakota Air National Guard operating the Predator A (MQ-1) and Air Combat Command (ACC) operating the Global Hawk (RQ-4). Air Mobility Command and the 319 Air Reserve Wing have developed strong partnerships with federal, state, and local government agencies, the Grand Forks community, and the private sector to utilize leasing opportunities to open up the base to potential UAS related industry and academic initiatives.



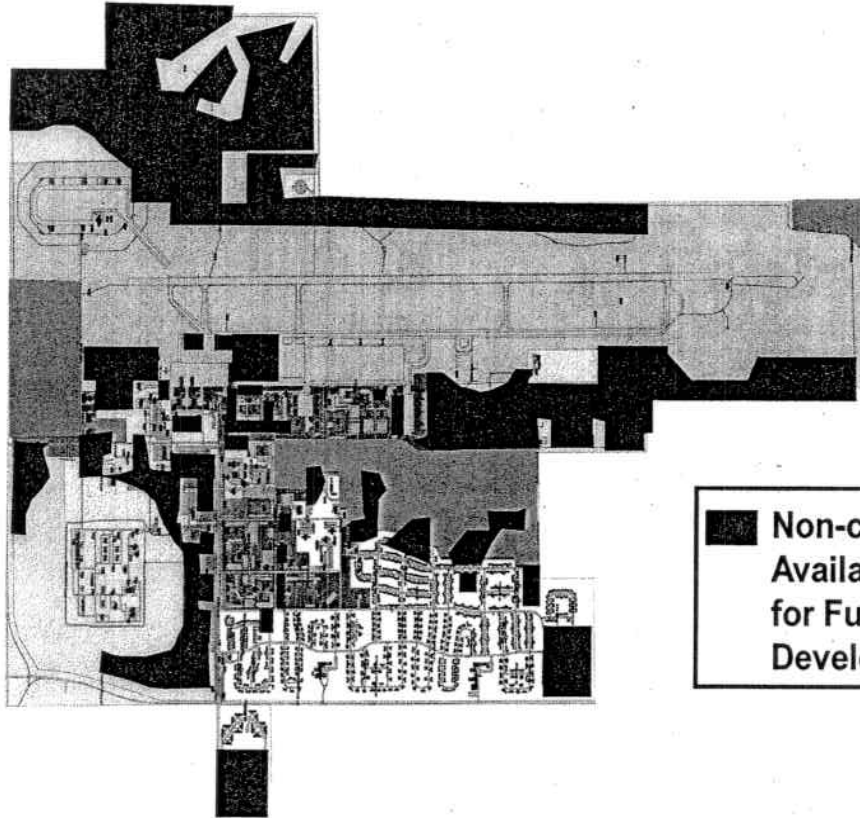
Future with UAV's Only



Tab 2

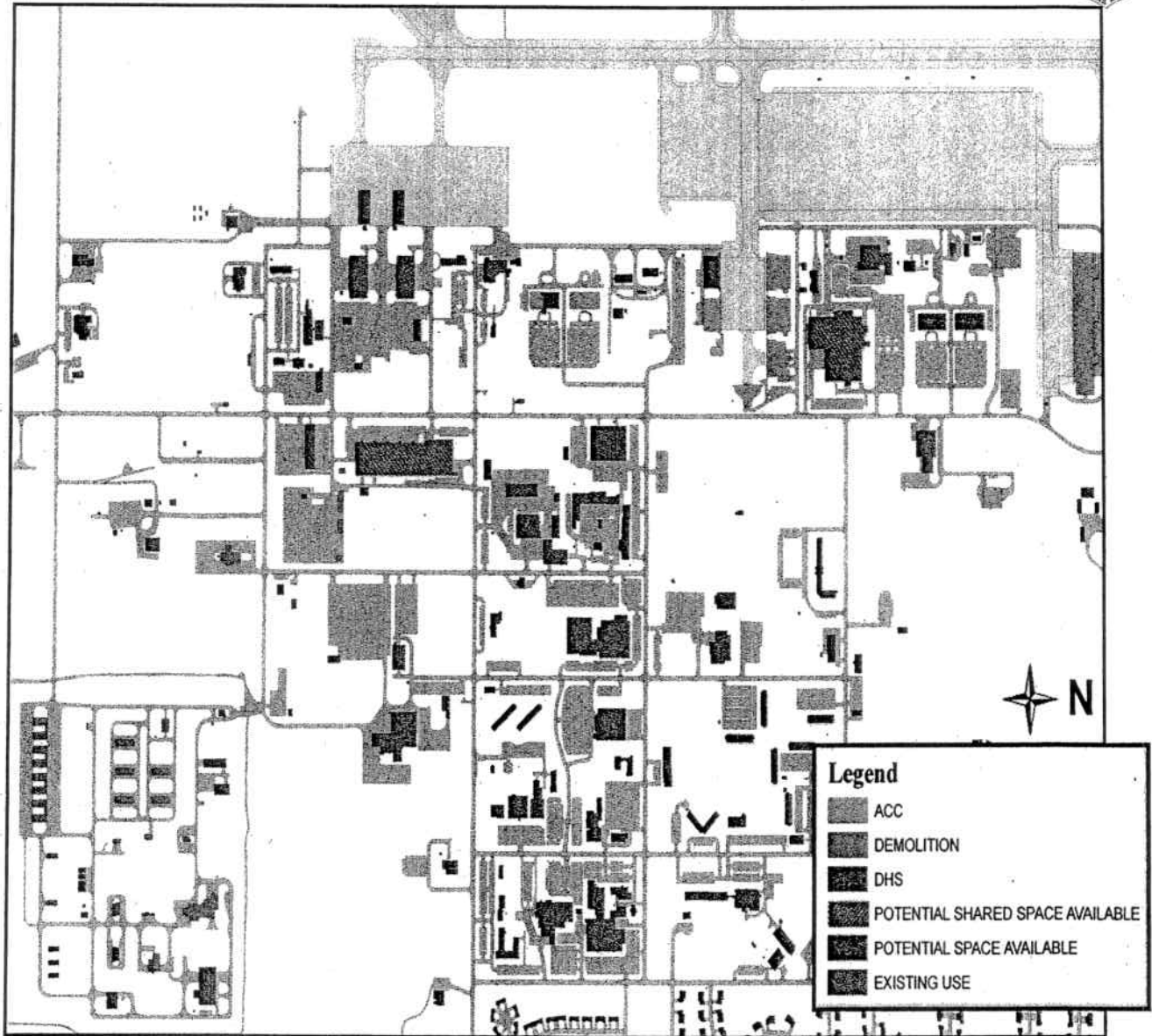


Grand Forks AFB Non-constrained Available Space



Tab 3

Grand Forks AFB Future Space Potential



Tab 4
GFAFB Aggregated Base Operating Support Summary

	FY08 Requirements (\$K)	FY12 Requirements (\$K)	
Airfield Maintenance	\$2,100	\$2,272	Cost to maintain airfield during "bathtub" period
Civilian Pay	\$20,600	\$20,443	Reduction due to loss of 39 civilian positions plus an additional 8 positions retained for KC-X missions--are expected to be lost in FY11 if the timeline slips further to the right
Utilities	\$7,140	\$7,228	Reduced number of base personnel will reduce utility requirements; and completion of energy savings projects and measures will reduce consumption
Base Support	\$14,100	\$15,256	Reduced number of active duty personnel will allow re-negotiation of service contracts
		<hr/> \$45,199	Total required to maintain GFAFB during the "bathtub" period

Note: Inflation is accounted for in these projections

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