

# State of North Dakota

July 15, 2005

The Honorable Anthony J. Principi  
Chairman, Base Realignment and Closure Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Mr. Chairman:

We write to bring to your attention the attached paper, an analysis of why the Commission ought to affirm the Air Force and Department of Defense recommendation to retain Grand Forks Air Force Base. We believe that Grand Forks AFB should remain an active Air Force base in order to accommodate emerging missions such as hosting a family of UAVs. We also believe that the Commission should recommend retaining a core group of tankers at Grand Forks Air Force Base in order to better serve the operational needs of the Air Force.

It is our hope that this paper will help you and your fellow commissioners in your deliberations, particularly as you convene for your hearing to consider adding bases as candidates for closure. We believe that the attached paper makes clear the reasons that the Commission should drop Grand Forks from its closure consideration list at this time.

Please feel free to contact us with any questions related to this paper. We appreciate the time that you have taken to meet with us in recent weeks, and look forward to continued discussions on this issue.

Sincerely,



KENT CONRAD  
United States Senate



BYRON L. DORGAN  
United States Senate



EARL POMEROY  
United States House



JOHN HOEVEN  
Governor

Enclosure

cc: Commissioners Bilbray, Coyle, Gehman, Hansen, Hill, Newton, Skinner, and Turner

## **Military Judgment Justifies Retaining Grand Forks Air Force Base**

### **EXECUTIVE SUMMARY**

The Air Force and Department of Defense Base Realignment and Closure analysis recommended retaining Grand Forks Air Force Base in the active inventory for several strategic and operational reasons - many unique to Grand Forks AFB. Military judgment – determined by top officers based on current and future needs that may be inadequately captured in a quantitative analysis – is the essence of the Air Force and DOD rationale for retaining Grand Forks AFB. Geography and clear unimpeded airspace are simply not amenable to simple economic analysis or a COBRA run. The Air Force’s requirement for UAVs and its need to establish a second UAV center has increased substantially and continues to increase, even since the publication of the last force structure plan. Prudent planning justifies retaining Grand Forks AFB.

While the Air Force and DOD analysis was correct in its overriding conclusion that military judgment dictated that Grand Forks AFB be retained, it erred in calculating the Mission Compatibility Index (MCI) for the base, which generated the conclusion that “Grand Forks ranked lowest in military value of all active duty KC-135 bases.” In some areas, the weighting and formulas used in compiling the MCI do not accurately reflect true military value. This paper seeks to correct some of these shortcomings, showing that Grand Forks is in fact one of the most valuable Air Force bases, especially for the tanker and UAV missions. This re-evaluation only underscores the importance of retaining Grand Forks and expanding its missions.

### **WHY RETAIN GRAND FORKS?**

For the following seven policy reasons, the Commission should support the Air Force and DOD recommendation to retain Grand Forks AFB in the active inventory of Air Force bases. The Commission should also consider retaining a core group of tankers at Grand Forks Air Force Base in order to better serve the operational needs of the Air Force.

*1. Grand Forks AFB is strategically located in the north central United States.* The Secretary gave proper consideration to BRAC Criterion #1 (current and future mission capabilities) by maintaining a strategic presence through active duty air bases located throughout the length and breadth of the continental United States. After criticism from the Infrastructure Executive Council and the Secretary of Defense’s “Red Team,” the Air Force recognized that it was essential to maintain a presence in the north central United States. That decision was based on military judgment.

Maintaining a strategic presence in the Northern tier is important to protect a crucial recruiting base for the Air Force by maintaining a strong connection between the military and the population in the region, to secure access to the least congested airspace in the country, for northern border homeland defense needs, and to protect against future contingencies by maintaining access to polar flight routes needed in a potential future confrontation with North Korea, China, a Middle Eastern nation, or a resurgent Russia.

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 2.

Maintaining a strategic presence in the north central United States does not mean keeping just one base where once there were many. Nor is it simply about protecting local populations from a hypothetical attack, though homeland defense is an important part of the strategic presence reasoning. Charts 1 and 2 depict the demise of nearly every Northern tier Air Force base since 1958.

**2. Grand Forks AFB is an outstanding operational environment for the UAV mission.** The Air Force has told the Commission that “Vast amounts of airspace over limited populations make Grand Forks AFB well suited for [the UAV] mission.” Grand Forks AFB has the highest score in the region on the Mission Compatibility Index (MCI) for the UAV mission. This high UAV MCI score was based on Grand Forks’ possession of key attributes necessary to be a superior host to the UAV mission, including infrastructure, conditions at the installation, and operating areas and airspace. (Several of the critiques of the tanker MCI analysis addressed below also apply to the UAV analysis, suggesting that Grand Forks ought to be rated even higher for the UAV mission.)

The Air Force has told the Commission that it wants to station UAVs in Grand Forks because “establishing a cold weather UAV center is necessary to advance training and system development to ensure these vehicles can be operated worldwide, all weather, and under a wider set of operational circumstances.” Military value selection criterion #2 was amended specifically to require preservation of installations throughout a diversity of climates.

Making Grand Forks AFB a major UAV base offers excellent potential for developing the tactics, techniques and procedures needed to operate UAVs in cold weather climates, which is essential for future operations. The Air Force identified this as a critical factor in their decision to commit to Grand Forks as the second CONUS Global Hawk base. The Secretary gave proper consideration to Criteria #1 and #2 (availability and condition of land, facilities, and airspace) by considering the emerging requirement for a UAV base in the north central United States to ensure the training and readiness of our UAV fleet.

While diversity of climate was considered in arriving at the military judgment that Grand Forks should be retained as a UAV base, the Secretary did deviate somewhat from Criterion #2 by not giving any credit in the MCI scoring to bases for being located in regions with diverse climate. Criterion #2 specifically calls for “land, facilities, and associated airspace... throughout a diversity of climate and terrain areas....” Yet these characteristics did not receive credit in the MCI scores. Grand Forks AFB should have received credit for a climate that is significantly more diverse than most of the bases evaluated during BRAC, with summer temperatures as high as 100 degrees and winter temperatures as low as minus 40, and therefore should have received an even higher MCI score for UAVs.

Establishing Grand Forks as the second major Global Hawk base in the United States is also advisable because of the significant operational limitations imposed by having only one Global Hawk base. Even if the Air Force only acquires the 50 Global Hawks now included in the FY 06-

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 3.

11 Future Years Defense Plan, it would be important to establish an additional base. If they end up procuring a significantly larger number – as senior Air Force leaders have indicated they intend to do – then a second base will be essential to provide sufficient aircraft parking capacity.

One operational reason to establish a second base is to reduce the vulnerability of a vital national asset. Global Hawk is a low density, high demand reconnaissance asset currently housed at only one installation, Beale AFB. The only real operational substitute for Global Hawk is the U-2, also based at Beale. Global Hawk is a critical force multiplier and our adversaries are clearly aware of this. Maintaining all of these assets at a single installation is unwise because it risks losing the use of those vital assets due to an attack or natural disaster.

There are also operational advantages to establishing a Global Hawk base that can more readily deploy aircraft to Europe and the Middle East. Global Hawk is designed to self-deploy, but flying from Beale to the Middle East requires traveling through very heavily trafficked airspace. Grand Forks offers much shorter flying times and fewer conflicts with civilian air traffic. All current UAV bases are in the southwest and it would be nearly impossible for the Air Force to operate a significant number of UAVs out of an east coast base due to the heavy commercial demands on airspace. Chart 3 depicts national airspace utilization, demonstrating the advantages of Grand Forks. Due to great circle flying routes, GFAFB based UAVs can reach east coast and Atlantic Ocean destinations quickly while still avoiding air traffic. Grand Forks is superior to all other Northern tier bases in this respect.

**3. *Grand Forks AFB has unique assets supporting and complementing the UAV Mission.*** The Secretary of Defense correctly applied military judgment and criterion #1 in deciding to retain Grand Forks AFB for emerging missions because no other Northern tier base offers the possibility for a blended wing with a nearby Air Guard unit. Unmanned Aerial Vehicle operations are ideally suited to Air National Guard units and the Air Force's Future Total Force plan anticipates relying heavily on the Guard for the UAV mission.

Grand Forks AFB is in close proximity to Fargo's Happy Hooligans and is the closest Air Force base to both Duluth, Minnesota (282 miles) and Sioux Falls, South Dakota (334 miles). The North Dakota Air National Guard has committed to supporting UAV operations at Grand Forks AFB and has also indicated that it would support the formation of other Active Air Force/Guard associate relationships at Grand Forks, including flying tankers.

Grand Forks AFB's proximity to the Northern border and the presence of the Border Patrol's sector headquarters in Grand Forks offers the potential for synergies between the base and the Department of Homeland Security. The Air Force plan for an associate wing relationship between the North Dakota Air National Guard and the active duty at Grand Forks operating the Predator UAV means that Air Guard assets can collaborate with the Department of Homeland Security without running afoul of *Posse Comitatus* restrictions. Furthermore, the intelligence bill passed last year and signed

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 4.

by the President calls for UAV overflights and a network of sensors to strengthen Northern border security. That law contemplates a central United States Northern border Air Force Base.

In addition, the University of North Dakota Odegard School of Aerospace Sciences is recognized as one of the top programs in its field and is less than 15 miles from GFAFB. With UND Aerospace tasked by the FAA as one of five aviation universities pursuing UAV research and the Air Force currently planning to shift UAV flight duties to commercially rated pilots, the potential for collaboration will likely grow in the future.

***4. The BRAC analysis underestimated the advantages of Grand Forks AFB as a tanker base.***

The Secretary of Defense deviated from Criterion #1 with regard to tankers by using an inadequate metric – Formula 1245 – to assess the operational value of bases' proximity to airspace supporting the tanker mission. One of the Air Force's top principles for the BRAC round was to retain "tanker basing that optimizes proximity to mission." However, the method for determining proximity to mission was seriously flawed. In Formula 1245, proximity to mission was measured using the distance of the base to domestic tanker refueling tracks listed on the FLIP AP1B and similar charts (see Chart 4). These tracks are used primarily for peacetime training, and do not even make up a large share of total peacetime training requirements. Measuring military value through distance to domestic refueling tracks does not reflect the value of a base for deployments, by far the largest part of current tanker operations.

Formula 1245 comprised over 39 percent of a tanker base's total military value score, by far the largest component of the MCI ratings. Grand Forks AFB lost nearly 20 points from its MCI rating for the tanker mission for Formula 1245. It would have kept most of those points, and been ranked much higher for the tanker mission, if that formula used different metrics that accurately reflected the kind of airspace in which tankers train and operate.

The commander of GFAFB told commissioners during their site visit on June 22, 2005 that this approach does not reflect the way the tanker fleet trains and operates. This is the case for two reasons. First, as the commander noted, about 80 percent of Air Mobility Command's effort is now being expended overseas in support of the wars in Iraq and Afghanistan. The Air Force reports that over 66 percent of AMC tanker missions in FY 2004 were in support of those overseas combat operations, a total that does not include the significant number of missions performed by AMC assets temporarily "chopped" to CENTCOM. With such a large war effort, training is being done "on the job."

Second, only a small component of the 20 percent of AMC effort that is being carried out domestically actually entails travel to refueling tracks contained on the FLIP AP1B. Travel to refueling tracks is only required for one small part of tanker training – for instance, only about 15 percent of all KC-135 pilot training events. Much of that 15 percent is in fact now conducted overseas during deployments. The majority of CONUS training for tanker pilots is done in the local traffic pattern, where local air traffic control congestion and open airspace are the primary

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 5.

constraints. Grand Forks AFB has an abundance of open airspace and minimal air traffic congestion. Formula 1245 does not accurately reflect the majority of training, much less operational deployments, and therefore inaccurately reduced GFAFB's MCI score for proximity to airspace supporting the tanker mission.

For the MCI tanker operations analysis, distance to associated training airspace should be complemented by distance to mobility bases. Since about 80 percent of AMC operations are overseas, distance to major overseas deployment locations should be 80 percent of the score. Such a metric would more accurately assess the value of Grand Forks, because it can efficiently support deployments both to the east and west. Grand Forks and McConnell are the only tanker bases that can efficiently support deployments both to the east and to the west (in almost every case, Grand Forks offers faster trip times than McConnell). Grand Forks is also closer to key destinations in the Middle East than any other active duty tanker base. Charts 5, 6, and 7 (attached) show the advantages of Grand Forks for expeditionary operations.

When the Formula 1245 "Proximity to Airspace Supporting Mission" component of the MCI is replaced with an alternative formula based 80 percent on distance to five key deployment destinations and 20 percent on Formula 1245, Grand Forks AFB moves from 40<sup>th</sup> of 174 bases in the Tanker Mission Compatibility Index to 19<sup>th</sup>. Furthermore, Grand Forks AFB moves from 6<sup>th</sup> to 3<sup>rd</sup> of the seven active duty tanker bases (Fairchild, Grand Forks, MacDill, McConnell, McGuire, Robins, and Travis). This revised MCI clearly justifies retaining a core group of tankers at Grand Forks, and would also argue for a post-BRAC decision in favor of designating Grand Forks as a KC-X base.\*

The shortcomings in the Air Force's current MCI analysis are demonstrated by the proven operational efficiency of Grand Forks for the tanker mission. Grand Forks AFB has consistently maintained the highest levels of operational efficiency of any tanker base. In fiscal year 2004 it conducted more missions and flew more hours in support of Operations Iraqi Freedom and Enduring Freedom than any tanker base – more than twice as many as Fairchild (See Chart 8). On a per assigned aircraft basis, Grand Forks produced nearly 50 percent more flying hours in support of those operations than the average AMC tanker base. This high operational efficiency has been sustained over many years, suggesting that it reflects real military value factors that are not included

---

\* This calculation was based on 2005 Base Realignment and Closure data, specifically Question 1273 (Aerial Port Proximity), the distance in nautical miles from each Air Force installation to five aerial ports (RAF Mildenhall, UK; Naval Station Rota, Spain; Lajes Field, Azores; Elmendorf AFB, Alaska; and Hickam AFB, Hawaii). These five distances were summed. Installations were then measured on a scale with the lowest value at two standard deviations below the mean of the data (13,923 nm) and the greatest value at two standard deviations above the mean (19,759 nm). The distance in nautical miles was then pro-rated on a 10-100 scale to produce a score in a manner consistent with other elements in the DOD analysis. These scores were then reincorporated into the overall MCI analysis to determine the effects of the new refueling data on the overall Tanker MCI. The rank ordering of all active duty tanker installations under this revised MCI is Fairchild (#7), Robins (#13), Grand Forks (#19), McConnell (#25), McGuire (#31), MacDill (#38), Travis (#42).

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 6.

in the Air Force MCI analysis. The revised analysis presented here better reflects the operational realities faced by our expeditionary Air Force.

High operational efficiency underlies one other reason to retain tankers at Grand Forks. In FY 2004, the average active duty KC-135 flew 664 hours (including both overseas and domestic operations), while the Guard and Reserve tankers only flew 321 hours. Unless the transferred aircraft are able to achieve significantly higher utilization rates than the units to which they are transferred have historically attained, transferring Grand Forks-based tanker aircraft runs the risk of diminishing the total amount of tanker sorties that the Air Force can generate. On average, Grand Forks' tankers flew 675 hours in FY 2004, while tankers at the bases receiving Grand Forks' aircraft flew only 377 hours (this average includes Forbes, which receives fallout aircraft resulting from the move from Grand Forks to McConnell). This suggests that transferring 36 Grand Forks aircraft could actually reduce the total ability of the Air Force to generate tanker missions. This is precisely the wrong outcome at a time when the tanker fleet is already heavily strained. Augmenting the tanker crew ratios at Grand Forks might be a better option.

Finally, the Air Force MCI scoring ignores the role of tankers in nuclear missions. Grand Forks is the base best positioned to support B-52s from Minot AFB flying on Unified Command Plan (UCP) missions, and it is also well positioned to support B-2s from Whiteman AFB. Tankers' missions in support of the UCP are nowhere taken into account in the MCI analysis. Sound strategic judgment dictates retaining at least a core group of tankers at Grand Forks sufficient to support UCP missions.

***5. Grand Forks AFB has large amounts of available acreage providing excellent expansion possibilities.*** The Secretary deviated from Criterion #2 by penalizing GFAFB for not having as much existing ramp space as other bases while giving it very little credit for having a great deal of unconstrained buildable acreage for new ramps. This error runs directly counter to the basic principle that BRAC ought to preserve that which cannot be easily duplicated. The current Air Force MCI analysis is improperly balanced because, instead of reflecting enduring and immutable characteristics of bases, it overweights factors that can be fairly readily changed or bought, like total ramp space, while underweighting potential "showstopper" issues like air quality and available acreage for expansion.

Three different MCI factors which together total 24 percent of the tanker mission MCI all depend largely on counting the size of the same ramp area (Formula 8, ramp area and serviceability; Formula 1235, pavements quality; and Formula 1241, mobility space). As a result, GFAFB lost more than 10 points in the MCI score because it has 334,000 square yards of ramps, instead of the 851,000 needed for a perfect score.

While bases deserve credit for the ramp space they already have, they should also get credit for the ability to add new ramps and other needed facilities. It would cost less to expand Grand Forks' ramps so the base could accommodate more tankers and other missions than it would to move Grand Forks tankers elsewhere. For example, it would cost about \$25 million to add 120,000

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 7.

square yards of ramps at Grand Forks, enough to accommodate 16 KC-135s. It is not overly expensive to pour concrete, so long as you have the space to build on.

In the MCI scores (Formula 1205, buildable acres) available, unconstrained acreage accounts for only 3.16 percent of the total tanker mission score. Therefore, Grand Forks got very little credit for having the second most total available buildable acreage for airfield operations and maintenance of all the flying bases in the Air Force, behind only Eglin AFB. Grand Forks AFB has over 2,000 acres available, almost 10 million square yards of available land. It also ranks near the top of all Air Force bases (8<sup>th</sup>) for *unconstrained* buildable acreage for airfield operations with more than 400 acres – ten times more than Ellsworth AFB.

Not only are “showstopper” issues that block base expansion underweighted, they are assessed using metrics that do not adequately distinguish between the good and the great. For example, only the very largest bases received maximum points for ramp space on the tanker MCI, because the threshold for full credit is set at 851,000 square yards. On the other hand, 16% of bases received full credit for having available, unconstrained acreage for expanded air operations infrastructure.

Available acreage will be particularly important for the UAV beddown, because these aircraft require specialized facilities and new hangars. Since it is not expensive to pour concrete, so long as there is available land to build on, GFAFB provides excellent opportunities for construction and expansion to accommodate both a core group of tankers and a family of UAVs, as well as other emerging missions.

**6. Grand Forks AFB has no encroachment and air quality issues.** The Secretary also deviated from Criterion #2 by giving insufficient weight to the impact of encroachment on training, operations and basing. Grand Forks has no encroachment issues that could restrict operations and has plenty of uncrowded airspace for training and routine flight operations. Encroachment is not a problem in North Dakota now, and it won't be a problem twenty years from now. Chart 9 shows the unencroached perimeter of Grand Forks AFB.

Formula 1207 (level of mission encroachment) accounts for only 2.08% of a tanker base's score, despite the fact that the Department of Defense has repeatedly testified that encroachment and urban sprawl are major threats to readiness. Service officials have told the Government Accountability Office (GAO) that population growth around military installations is responsible for much of their past and present encroachment problems, and that higher-than-average population growth around their installations makes further encroachment losses likely.

Formula 1207 also fails to accurately measure future encroachment threats because it does not account for population growth. Bases in areas with rapid population growth are more likely to see increased encroachment problems in future years. It is unwise to match a 20 year Force Structure Plan with a short term analysis of encroachment.

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 8.

Moreover, Formula 1207 is too narrowly defined. It does not adequately account for either the problems caused by urban sprawl or by the growth in commercial and general aviation which encroaches airspaces and airbases. The Formula only identifies areas immediately around an airfield that are encroached by the noise of operations. It fails to address the myriad of other encroachment issues that are involved with the takeoff, departure, recovery, traffic patterns, and landing of modern jet aircraft, let alone UAVs. For example, many bases have ground references to force turns to avoid noise sensitive areas miles from the base on either departure or on arrival. Additionally, neither 1207 nor any other Formula accounts for restrictions that some bases have imposed on the hours of take offs and landings because of local community noise concerns.

Grand Forks Air Force Base received a perfect score for Formula 1207, but that had a minimal impact on the overall MCI score. Perhaps most troubling of all, Grand Forks apparently got no credit at all for being in the least congested area for air traffic in the U.S. While air traffic control delays were scored in the MCI analysis, that metric focused on takeoff and landing, not open operational airspace. Moreover, the standard for receiving full credit on Formula 1207 was set so low that only four active duty Air Force installations with runways (Cannon AFB, Eglin AFB, Elmendorf AFB, and McGuire AFB) received anything other than a perfect score. Grand Forks had one of the best ratings on ATC delays, but the metric did not differentiate between simply adequate and very good. The failure to give greater weight to these issues runs directly counter to the BRAC principle of preserving assets that are difficult – if not impossible – to re-create elsewhere. This contrasts sharply with the treatment of ramp space, as discussed above, where full credit was hard to achieve even though any shortfall could be remedied at moderate cost.

The Secretary also deviated from Criterion #3 by putting insufficient value on the impact of emissions and air quality attainment requirements on basing needs. Grand Forks AFB has no air quality issues that could restrict operations. Formula 213 (attainment status/emission budget growth allowance) accounted for only 1.35% of the tanker mission MCI score. However, non-attainment was one of the most common “showstoppers” identified by the Air Force Base Closure Executive Group during its review of BRAC scenarios, according to the minutes of its July 15, 2004 meeting. Chart 10 shows that many regions of the country face much more serious air quality issues than North Dakota.

In addition, the Air Force has testified to Congress that “*considerations related to air emissions may supersede readiness as a key driver in basing and operating decisions*” because the Air Force must comply with the provisions of the Clean Air Act. Aircraft emissions generate the largest percentage of criteria pollutant emissions at most Air Force installations. If an Air Force BRAC action that changes the numbers and types of aircraft at an installation does not conform to the state implementation plan for Clean Air Compliance, the Air Force must either obtain air quality credits or reduce other emissions at the base. Otherwise the proposed BRAC action cannot take place.

About eighty-five Air Force installations are located in areas that do not achieve minimum air quality standards, meaning the Air Force may not be able to deploy additional systems at those

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 9.

bases because of emissions restrictions. But GFAFB received a perfect MCI score for air emissions attainment. Its overall MCI scores would have been significantly higher if Formula 213 were given appropriate weight to reflect its importance as a potential “showstopper” in future beddown decisions.

***7. The Secretary of Defense and Secretary of the Air Force properly exercised military judgment by retaining Grand Forks to ensure sufficient basing capacity for UAVs and other aircraft the Air Force will acquire in the next twenty years.*** The Secretary did not include a separate listing for UAVs in the BRAC Force Structure Plan given to Congress and the Commission. Nevertheless, the Secretary’s recommendation to retain Grand Forks is designed to leave the Air Force with sufficient capacity to beddown the future UAV force, given the growth in UAV requirements and the fact that UAVs have unique basing needs.

The Secretary’s recommendation will give the Air Force the capacity to beddown 246 UAVs (90 Global Hawks and 156 Predators) at Beale, Nellis/Indian Springs and Holloman Air Force Bases, according to the Installation Capacity Analysis in Part I of Volume V of the Air Force Analysis and Recommendations. The Air Force will acquire a total of 50 Global Hawks and 203 Predators by FY 11, according to the FY 06-11 Future Years Defense Program. The Air Force also plans to begin deploying one or more variants of the F-15/F-16-sized Joint-Unmanned Combat Aerial System in FY 2015, according to an Air Force Base Closure Executive Group briefing dated September 30, 2004.

Currently, the Air Force is accelerating the procurement of UAVs to meet the needs of warfighting commanders. In July 2005, the Air Force reprogrammed funds to procure 15 additional Predator UAVs in FY 2005. The Air Force has also told Congress it has an unfunded FY 06 requirement for 29 MQ-1 Predator As and 4 MQ-9 Predator Bs as well as associated military construction funds, some of which is targeted for GFAFB. These aircraft are in addition to the UAVs already included in the FY 06-11 FYDP. (Air Force FY 06 Unfunded Priority List.) Senior Air Force leaders have indicated that they want to procure about 100 Global Hawk UAVs, rather than the 50 in current plans.

It is a prudent exercise of military judgment to retain excess capacity for a new emerging weapon system. It is also important to note that most Air Force bases are not suitable for UAVs because, according to Air Force guidelines, “basing should not require routine access to heavily congested airspace.” (BCEG Briefing, Sept 30, 2004.)

Since the release of the Secretary’s BRAC recommendations, the Air Force has notified the Commission that it wants to make GFAFB home to a “family of UAVs” with associated intelligence, surveillance, and reconnaissance support functions. Predators are scheduled to arrive in FY 2007, while Global Hawk will arrive as the tankers begin to depart in FY 2009. The Air Force intends to make Grand Forks the second major Global Hawk base in the continental US. No other Global Hawk bases are planned.

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 10.

While military judgment determined that a sufficient basis for retaining Grand Forks AFB was the need to maintain sufficient infrastructure to support future growth in emerging missions (primarily in UAVs), there is also a distinct possibility that the Air Force will have more tanker force structure than is currently planned. In fiscal years 2004 and 2005, the Air Force was blocked by Congress from executing its plan to retire KC-135E tankers. It appears that a similar restriction will block the proposed retirement of 61 KC-135Es in fiscal year 2006. If retirements continue to be blocked, the Air Force will be left with significantly more tankers than its force structure plan projects. It would not be appropriate for the BRAC analysis to beddown those tankers, but it is appropriate for the Commission to exercise strategic judgment and maintain sufficient tanker-appropriate installations to hedge against the possibility that planned retirements will be blocked.

Similarly, the total future requirement for tanker aircraft is currently being considered by the Mobility Capabilities Study and the Quadrennial Defense Review. There is a strong chance that those reviews will conclude that tanker requirements have grown due to the withdrawal of US forces from Europe and the concomitant increase in mobility assets needed to for future deployments to Europe. Current uncertainty about the status of the KC-X tanker recapitalization program further widens the range of possible future tanker force structure outcomes. In the face of all this uncertainty, military judgment dictates retaining bases suitable for absorbing increased force structure in the future, like Grand Forks.

**CONCLUSION AND RECOMMENDATIONS**

Grand Forks Air Force Base is an outstanding asset for the Department of Defense. It is strategically located in the center of the North American continent, accessible to any theater, at a maximum distance from sea-launched threats including cruise missiles, and close to polar routes to Europe, the Middle East, and Asia.

Grand Forks has unique advantages that provide maximum flexibility to expand facilities and accept new missions. While other bases will experience massive increases in encroachment over the next twenty to thirty years, GFAFB is a rare base with absolutely no problems with air or ground encroachment. It has ample space available for new construction and nearly unlimited potential for expansion outside the current fence line. Grand Forks AFB also offers outstanding opportunities for UAV operations due to North Dakota's unencroached airspace, a tremendous asset that will be further enhanced by the North Dakota Joint Training Area initiative.

At a time when other bases have fallen short on air pollution standards, or will fail under new regulations, GFAFB has excellent environmental attainment and will continue to comply with pollution restrictions well into the future.

Given how long it will likely be until the next BRAC, and the likelihood that many bases will face increasing stringent pollution limits in future years, the nation cannot afford to lose one of the few

**Military Judgment Justifies Retaining Grand Forks Air Force Base**

Page 11.

bases that has ample capacity to absorb new or expanded missions while still meeting environmental standards.

As the Commissioners noted during their visit to Grand Forks, the base is also in great physical shape. Its infrastructure has been comprehensively renewed in the last decade with \$327 million in investment. Right now, the runway is being completely rebuilt with funding from Air Force O&M accounts. In the last ten years, the base has received four new Squadron Operations Centers – state of the art facilities capable of supporting tanker operations or nearly any other mission area. Grand Forks has received more family housing investment since 2003 than any other Air Force base, and thus offers outstanding quality of life to the Airmen assigned there.

All of these advantages have paid off in operational excellence. Grand Forks tankers have consistently had the highest utilization rates of any tanker unit in the Air Force. During Operation Enduring Freedom in Afghanistan, tankers from Grand Forks were the first on the ground, first in the air, first to fly over enemy territory, and first to provide aerial refuelings. In recognition of its exemplary performance, at a time when the tanker fleet was doing more than it ever had, the wing won the Solano Trophy in 2003 as the best unit in Air Mobility Command. A Grand Forks squadron was recognized this year as the best tanker unit in AMC.

The outstanding performance of GFAFB personnel is significantly aided by top-notch community support. The relationship between the city and the base, always strong, was permanently solidified when the Air Force Base came to the rescue of thousands of civilians during the catastrophic flood and fire of 1997. The city of Grand Forks offers high quality of life at very low cost, as well as an excellent education system in which military and civilian students are treated in an equally outstanding way. The city of Grand Forks recently won the 2005 Abilene Trophy for the best community support in Air Mobility Command, making it only the second city ever to twice be honored with this trophy.

Because of all these advantages, the Commission should affirm the Air Force and Department of Defense recommendation to retain Grand Forks AFB in the active inventory of Air Force bases in order to accommodate emerging missions like hosting a family of UAVs. The Commission should also consider retaining a core group of tankers at Grand Forks Air Force Base, possibly with crew augmentation from the Air National Guard, in order to better serve the operational needs of the Air Force.

Chart 1

# Major Active Duty U.S. Air Force Bases (Northern Region, Flying Mission), 1958



Source: AIR FORCE Magazine

Chart 2

# Major Active Duty U.S. Air Force Bases (Northern Region, Flying Mission), 2005

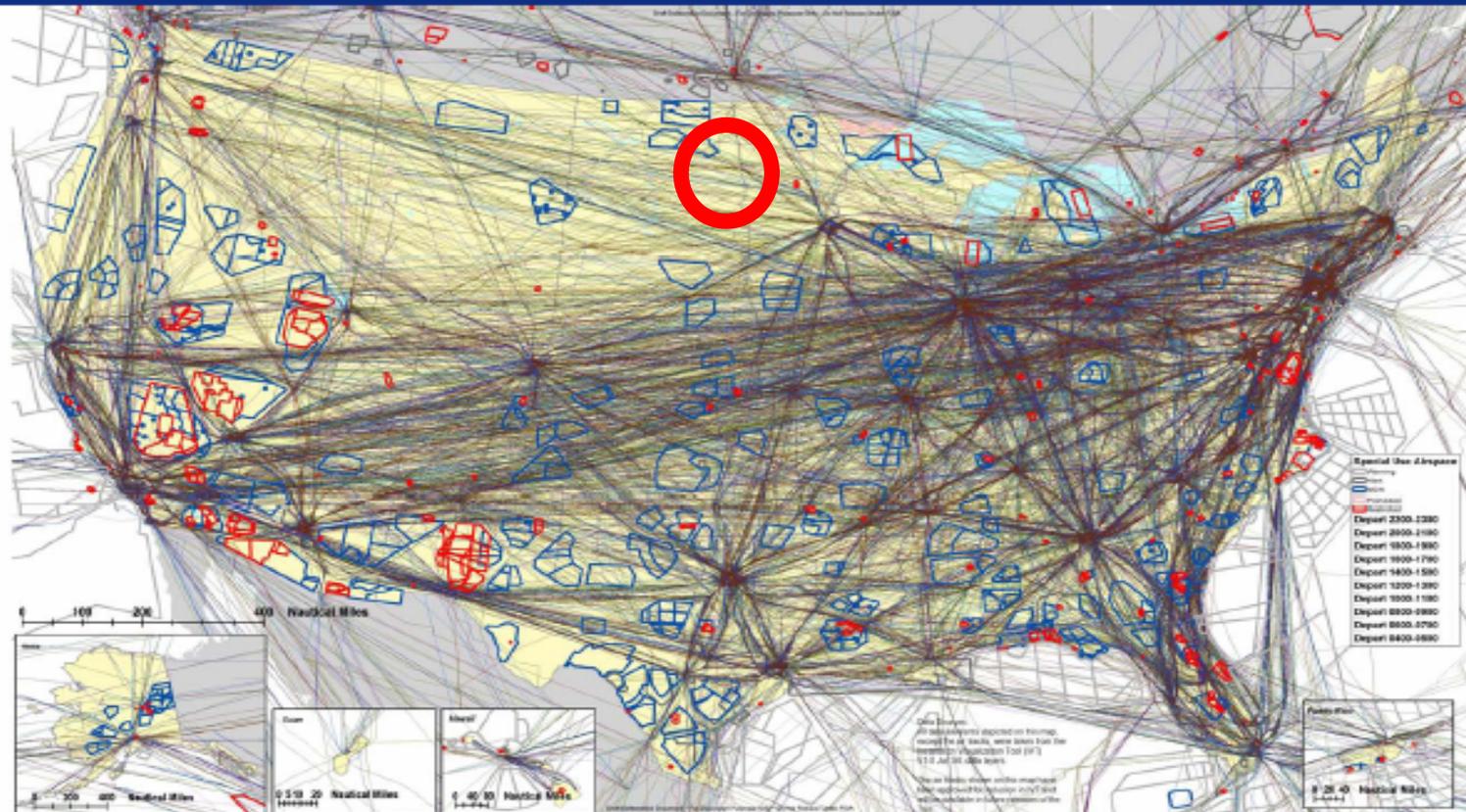


# North Dakota: Uncongested Airspace



DRAFT DELIBERATIVE DOCUMENT – FOR DISCUSSION PURPOSES ONLY  
NOT RELEASABLE UNDER FOIA

## Airspace Considerations



# Refueling Measure Does Not Reflect Reality of Mission

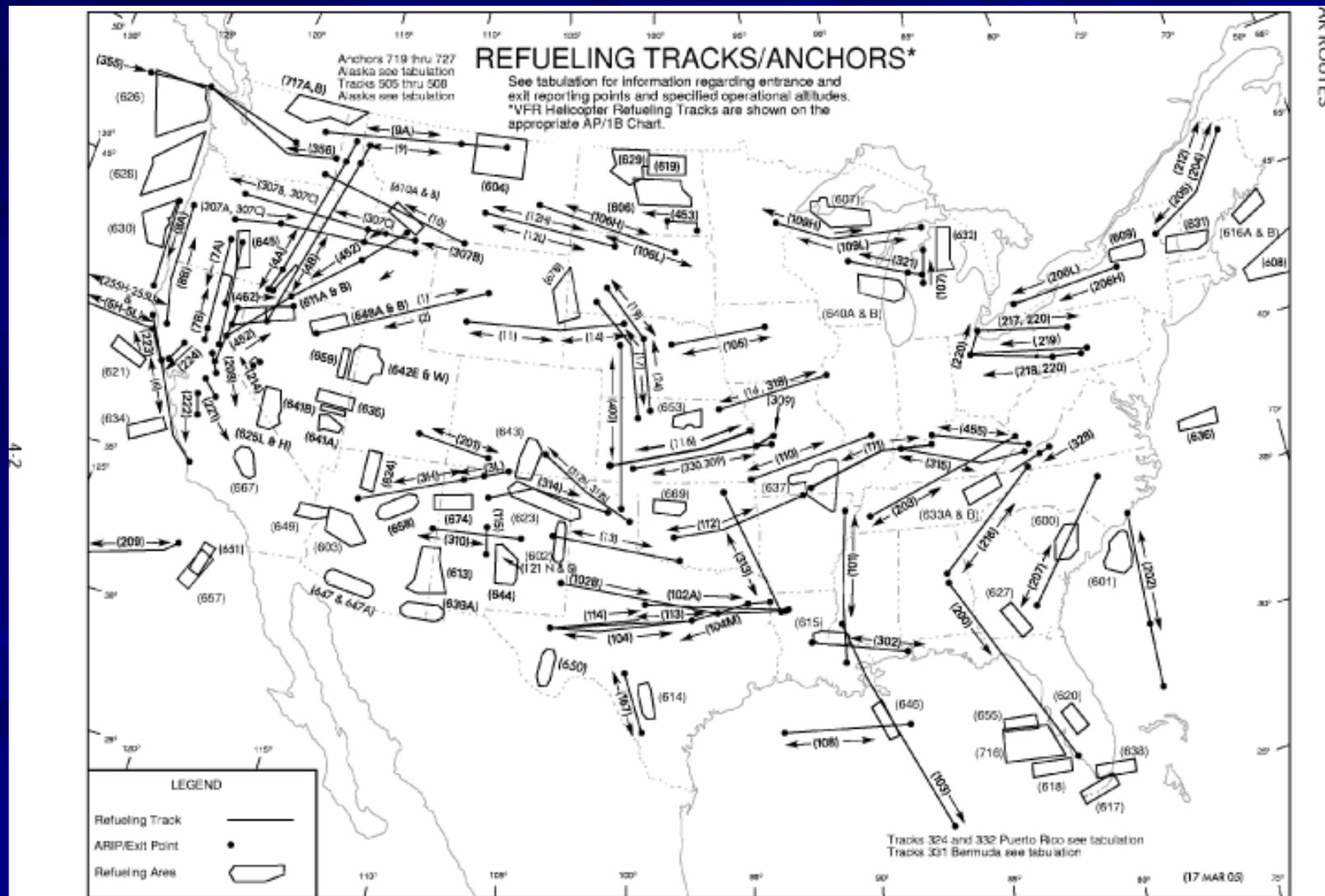


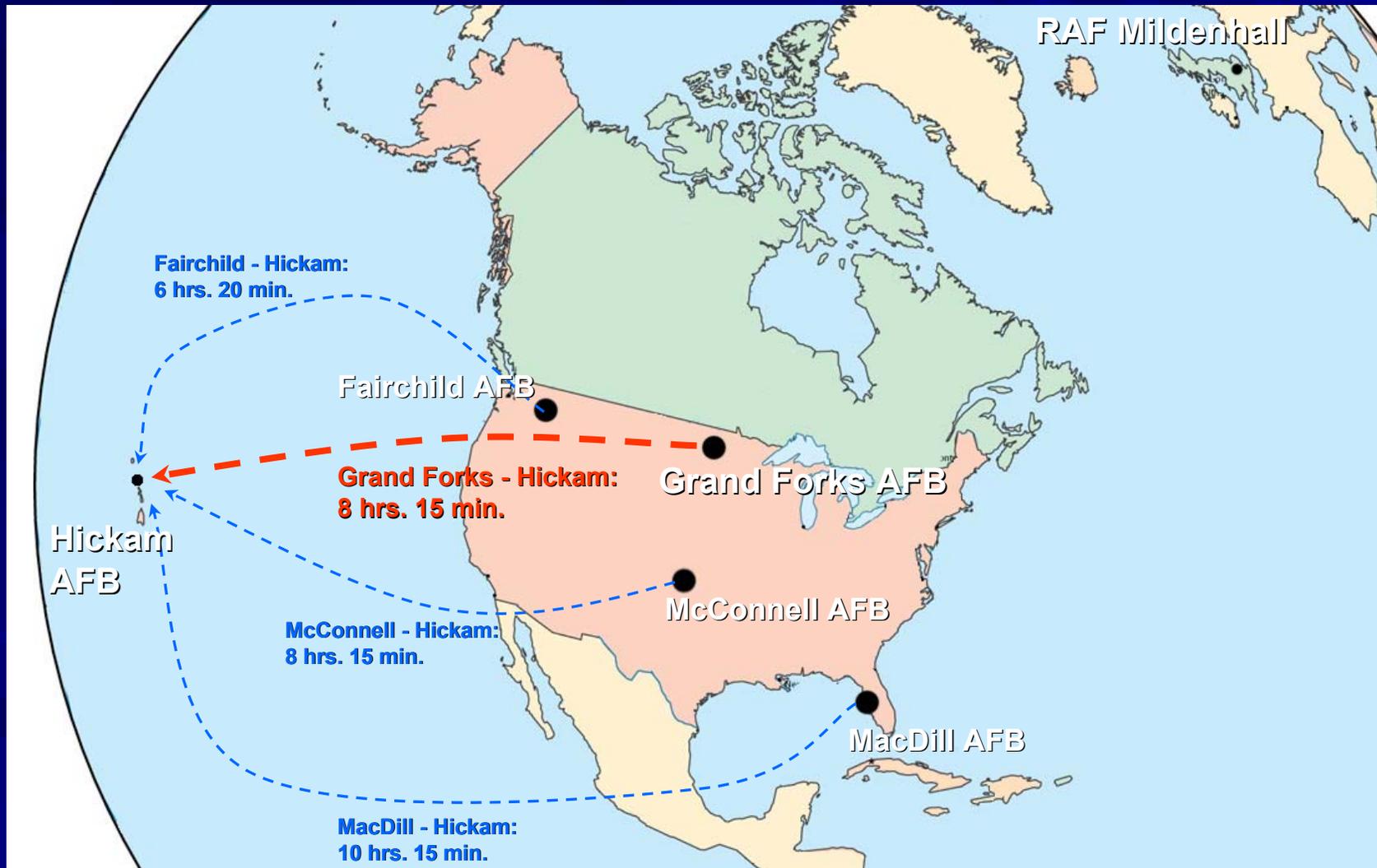
Chart 5

DCN 5262

# Grand Forks Location Ideal for Expeditionary Operations



# Grand Forks AFB is Best for Overseas Deployments



# Grand Forks Clearly Best for Deployments

## To RAF Mildenhall:

- |                           |                       |
|---------------------------|-----------------------|
| 1. <b>Grand Forks AFB</b> | <b>8 hrs. 45 min.</b> |
| 2. MacDill AFB            | 9 hrs. 41 min.        |
| 3. McConnell AFB          | 9 hrs. 51 min.        |
| 4. Fairchild AFB          | 10 hrs. 15 min.       |

## To Hickam AFB:

- |                           |                       |
|---------------------------|-----------------------|
| 1. Fairchild AFB          | 6 hrs. 20 min.        |
| 2. <b>Grand Forks AFB</b> | <b>8 hrs. 15 min.</b> |
| McConnell AFB             | 8 hrs. 15 min.        |
| 4. MacDill AFB            | 10 hrs. 15 min.       |

## To Iraq:

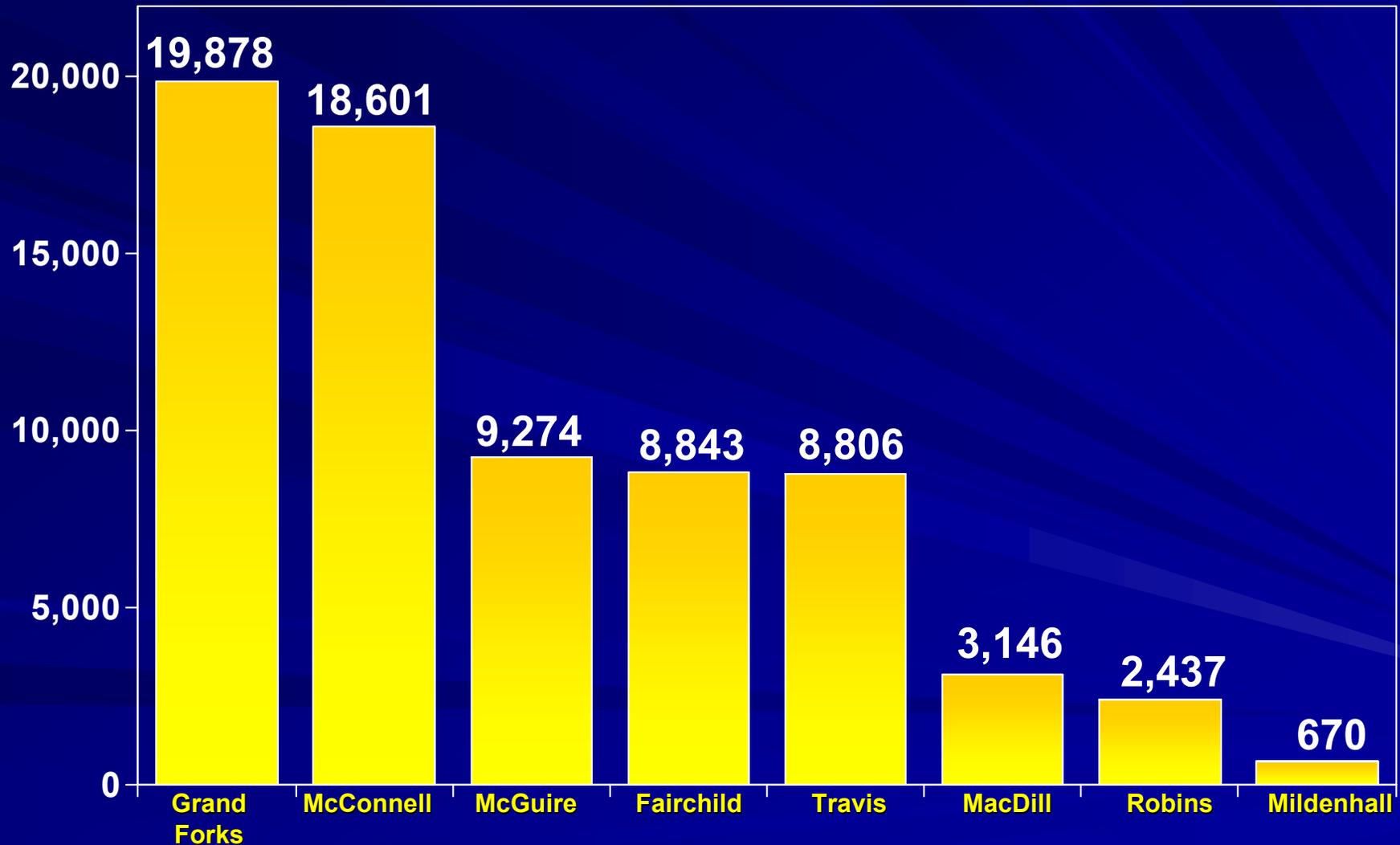
- |                                     |                  |
|-------------------------------------|------------------|
| 1. <b>Grand Forks AFB – Baghdad</b> | <b>6,300 mi.</b> |
| 2. Fairchild AFB – Baghdad          | 6,700 mi.        |
| 3. McConnell AFB – Baghdad          | 6,950 mi.        |
| 4. MacDill AFB – Baghdad            | 6,960 mi.        |

Chart 8

DCN 5262

# Grand Forks Outperforms Other AMC Bases in the War Effort

(Total flying hours in support of OIF or OEF in FY 2004)



Source: U.S. Air Force, Air Mobility Command

# Grand Forks: No Encroachment



Grand Forks Air Force Base

# North Dakota: No Air Quality Issues

