

108th Air Refueling Wing Future Missions Military Value

Executive Summary

- The 108th ARW is programmed to retire its KC135E model aircraft without a follow-on flying mission as announced in the AF Future Total Force Plan as part of BRAC. The 108th will lose *two* flying squadrons. This will result in a loss of 954 personnel from the 108th ARW. Despite the movement of 533 Marine Corps and Navy Reserve personnel to McGuire AFB, there will be a net loss to McGuire of 421 personnel due to the elimination of the flying mission at the 108th.
- The United States Air Force Tanker Study is slated for completion in the Fall of 2005. Any movement of assets prior to the completion of the study would be premature and counterintuitive.
- Decisions appear to be arbitrary and capricious in that no scoring process was used; the 2005 Base Realignment and Closure recommendations for KC-135R distribution does not mirror the National Guard Bureau (NGB) conversion list in use for over 10 years. Both the Scott (Illinois) and Sioux City (Iowa) wings, lower on the NGB prioritized plan, are now proposed to receive R models while the 108th Air Refueling Wing faces retirement of its airplanes without replacement. Neither of these units participates in tanker alert.
- Decisions regarding the appropriate number of Primary Aircraft Authorizations (PAA) are inconsistent. Four units remain at 8 PAA, one will have 10 PAA, eight will increase from 8 to 12 PAA, and the other two “super tanker” ANG wings at Rickenbacker and Pittsburgh remain unchanged at 18 and 16 PAA respectively.
- Northeast Tanker Task Force (NETTF) Impact:
 - 108th provides 15% of the fuel offloads for the NETTF.
 - With the elimination of assets at the 108th and the 107th (Niagara), the remaining NETTF units would have to increase sorties by 78% and offload quantities as much as 53% to meet current demands.
 - The northern NETTF units average 3-9 times as many days per year of freezing precipitation more than the 108th. This plan puts 50% of the NETTF aircraft on two municipal airports in the northern edge of the NETTF area of operations.

- The 108th is within 30 minutes of Boston, New York City, and Washington, D.C., as well as all east coast major population, industrial and political centers. The wing frequently supports POTUS Combat Air Patrol (CAP) missions.
- The 108th is co-located with the active duty 305th Air Mobility Wing (AMW) on the McGuire/Fort Dix/Lakehurst megabase yielding tremendous operational and training synergies.
- DOD has invested \$70 million to create the premier tanker base with the most modern fueling system of all ANG tanker units. It is the only unit with bulk fuel deliveries to the fuel farm via secure pipeline. Fuel is delivered to the other airports via thousands of 5,000-gallon tractor-trailer tanks to their fuel farm bulk storage facilities. Fuel tank trucks can be significantly impacted by weather, truck availability, trafficability, and can be overwhelmed during surge operations. The other ANG tanker units do not have the hangar and apron space to accommodate more airframes without significant MILCON expenditures.
- The 108th is manned at 93.7% for 16 PAA. Other units currently at 8 PAA and proposed for 50% increases are at even lower strength rates and would likely find it difficult to increase manning. TAG of New Hampshire already identified this as a significant issue.
- The 108th maintains a modern aircrew alert facility that most other tanker units do not.
- Specific and unique issues at other bases:
 - Pittsburgh – weather; strength; fuel delivery by truck; and training difficulties due to co-location with an international airport. The unit is actually unable to perform local pattern work, and does all scheduling around airport operations. Least efficient for alert.
 - Bangor – weather, strength, MILCON required, fuel delivery, proposed cessation of 24-hour air traffic control.
 - Pease – weather, strength, MILCON required, fuel delivery.
 - Rickenbacker – fuel delivery, no participation in alert missions.
 - Selfridge – conversion, which requires infrastructure, training, fuel delivery. Would not participate in alert missions.

Introduction

The 108th Air Refueling Wing (ARW), New Jersey Air National Guard (ANG) stationed at McGuire Air Force Base is programmed to retire its KC-135E airframes without replacement, as announced in the 2005 Base Realignment and Closure Report (BRAC).

Since this recommendation for the 108th is technically not a closure, there was no BRAC scoring utilizing the published BRAC criteria. However the recommendation has the full effect of a closure and affects two flying squadrons, not one.

The purpose of this paper is to discuss the military value of the 108th ARW and the impacts of unit disbandment on the Northeast Tanker Task Force, and to review the capabilities of other tanker bases in the area.

The US Air Force initiated a "Tanker Study" to determine the characteristics of the air refueling capabilities required to support the future Air Force. The Tanker Study is scheduled for completion in the Fall of 2005, after finalization of the 2005 BRAC process. Implementation of BRAC's tanker restructuring prior to completion of the "study" would negate the outcome of the study and indicate that, in this matter, certain BRAC recommendations do not reflect capabilities based decision-making.

The Air Force Base Closure Executive Group (AF/BCEG) stated in Candidate Recommendation #USAF-0118 / S434 that their justification for closure of the 108th ARW was "to enable Future Total Force transformation". Their assigned Military Value of inactivating the 108th ARW was that it "retires aging force structure" and "enables scenario DON-0084". In DON-0084 the Navy recommended closure of NAS Willow Grove and created a need for airport space to house Navy and Marine aircraft. Despite the movement of 533 Navy and Marine Corps Reserve personnel to McGuire AFB, McGuire will experience a net loss of 421 personnel with the elimination of the 108th ARW.

There was no consideration of the comparative military value of the various current or proposed refueling wings to identify those units with the greatest or least military value. The decision to disband the 108th ARW appears to be arbitrary in that no objective scoring process was used to compare unit experience, strength, strategic location, existing infrastructure, or jointness opportunities and efficiencies. Further, the recommendations for KC-135R aircraft distribution within the 2005 BRAC Report do not mirror the National Guard Bureau (NGB) unit conversion and aircraft distribution list in use for over 10 years. Both the Scott and Sioux City wings were given lower priority on the NGB prioritized plan yet are proposed in the 2005 BRAC Report for conversion to KC-135R's.

There are 31 air refueling wings and 3 air refueling groups in all components of the US Air Force: 4 wings and 1 group in the active AF, 8 wings in the in the Air Force Reserve Command (AFRC), and 19 wings and 2 groups in the ANG. The USAF doctrine for aerial refueling organizational structure remains muddled. The 2004 White Paper titled

“Air Force Organizational Principles” indicates that the USAF considered 16 Primary Aircraft Authorized (PAA) as the doctrinally correct size for KC-135 equipped tanker units as recently as July 2004.

In the 2005 BRAC Report the USAF recommends modifying the structure of nearly all of its reserve component wings to levels other than what it stated as the optimally correct figure. Wings at Andrews, Sioux Gateway, Lincoln, and Salt Lake will remain at 8 PAA. The wing at Phoenix will increase from 8 to 10 PAA. Wings at Bangor, Selfridge, Pease, McGhee-Tyson, Forbes, Mitchell, March, and Scott will increase from 8 to 12 PAA.

“Super wings”, including the three ANG wings based at Rickenbacker, Pittsburgh, and McGuire, were created to maximize the operational efficiencies gained through greater aircraft densities. There are four active duty Super Tanker Wings and three in the ANG. The ANG Super Tanker Wings at Rickenbacker and Pittsburgh are proposed to remain at 18 and 16 respectively while the “super” wing at McGuire will lose all 16 aircraft. There is no apparent logic to this shuffling of PAA and certainly no military doctrinal support for such widely dissimilar wing structures.

Finally, it should be noted that the primary purpose of the Defense Base Closure and Realignment Act of 1990 as amended in 2004 (Part A of Title XXIX of Public Law 101-510; 10 U.S.C. 2687 note) is for “the closure or realignment of military installations...” (emphasis added). The emphasis in the statute is on infrastructure and cost savings realized, which must be certified by the Secretary of Defense and Comptroller General. The Air National Guard (ANG) has historically consumed less than 10% of the total Air Force budget. The cost savings achieved through airframe changes appears negligible compared to potential savings if additional airframes had been reallocated from the active duty Air Force to the Air National Guard instead of leaving highly experienced ANG units without airframes.

Northeast Tanker Task Force

The Northeast Tanker Task Force is formed by contributions from five Air National Guard tanker wings and one Air Force Reserve wing, based at McGuire AFB (NJ), Pease ANGB (NH), Bangor International Airport (IAP) (ME), Niagara Falls Air Reserve Stations (NY), and Pittsburgh IAP (PA).

The 108th Air Refueling Wing is the center of gravity of the Northeast Tanker Task Force (NETTF). It currently provides 15% of the NETTF fuel offloaded. If the 108th ARW and the 107th ARW (Niagara) no longer contribute to these mission taskings, the remaining NETTF units would have to increase their sorties by as much as 78% and their offload quantities as much as 53% to meet current demands.

The 108th is perfectly sited to support airbridge operations to refuel fighter, cargo and transport missions across the Atlantic to Europe, North Africa, the Middle East and Southwest Asia as well as strategic missions under the revised OPLAN 8044. The 108th is

20% closer to NETTF and Operation Noble Eagle (ONE) Combat Air Patrols (CAP) tracks than the 171st ARW at Pittsburgh and 10% closer than all other NETTF units. This proximity resulted in 25% savings from budgeted flight time for the 108th ARW. While extreme northern aerial refueling units have efficiency advantages in mission accomplishment for the northern track, and similarly extreme southern units enjoy efficiencies supporting the southern track, the 108th is best suited for northeast ONE CAP refueling missions and also best suited for overall refueling support of all three missions. If equipped with KC-135R's, the 108th would be able to increase its fuel off-loads to more than 120,000 pounds per sortie while significantly reducing its flight times and mission costs.

The 108th ARW is strategically located within 30 minutes flying time to Boston, New York City, and Washington DC and is close to all east coast major population, industrial and political centers. Considering its centralized location, the 108th is heavily tasked for Northeast ONE missions along the Atlantic seaboard and is frequently called to support POTUS CAP over the mid-Atlantic region. The 108th has become TACC's "go to team" to cover short-notice ONE CAP due to their ability to respond quickly when other tanker units cannot.

The 108th ARW has attained an exceptional mission reliability rate in the past 12 months of 96% in the historically less capable E model of the KC-135. The wing enjoys the best NETTF mission efficiency rate per sortie (3.2 hours / sortie) for KC-135E aircraft, resulting in 25% greater than planned fuel offloads. This record of excellence has resulted in the 108th being tasked 30% more per alert line than the Air Force Reserve KC-10's for NETTF missions.

The Mid-Atlantic location of the 108th ARW relieves it from most of the region's severe winter weather, permitting the NJANG to complete missions when other tankers cannot. Nearly all of the other tanker units in the NETTF average two to nine times as many days per year of freezing precipitation than McGuire AFB. The other NETTF units therefore have to either spend far greater amounts per year to de-ice their aircraft or cancel missions at a much greater rate due to freezing precipitation. Concentration of 50% of the NETTF aircraft in the northern edge of NETTF area would magnify the impacts of regional severe weather. In contrast, maintaining the current dispersion would minimize weather cancellation rates due to such severe winter weather.

The 108th ARW is co-located with the active duty 305th AMW on the McGuire / Dix / Lakehurst mega-base, yielding tremendous operational and training synergies. Stationing on the mega-base promotes unique opportunities for joint training and mission execution. The current proposal concentrates 50% of the NETTF aircraft on two municipal airports in the northern edge of the NETTF area of operations. The 108th ARW's mid-Atlantic location, in close proximity to superior training airspace and ranges, permits excellent support to concentrations of initial or upgrade aviator training in KC-10s, C-17s and C-5s with simultaneous training value to the 108th aircrews.

Infrastructure

The 2005 BRAC report did not include the cost of abandoning the \$70 million tanker wing infrastructure on McGuire AFB.

The air refueling wing specific facilities developed for the 108th at McGuire AFB to house an oversized tanker wing were designed to support as many as 20 tanker aircraft with the most modern fueling system of all ANG tanker units. The 108th is the only ANG unit to receive its bulk fuel deliveries to the airport “fuel farm” via secure underground pipeline. Fuel is delivered to other bases by 5000-gallon tank tractor-trailers; each NETTF sortie requires approximately four tractor-trailer deliveries. Each of those tractor-trailer tanks driven over the road represents both an environmental risk as well as an anti-terrorist/force protection risk to every community it passes through en route to the base fuel farm as well as to the airbase itself. Bulk fuel delivery via secure underground pipeline is the model in efficiency, safety, and security and most easily accommodates surge operations.

The other ANG tanker units do not have the hangar and apron space to accommodate more airframes than they already possess without considerable MILCON expenditures. All other ANG refueling infrastructure is a generation behind that at McGuire AFB. Fuel is delivered to the other airports via trucks to the “fuel farm” bulk storage facility. Fuel tank trucks receive fuel from the “fuel farm” can be significantly impacted by weather, truck availability and traffic (on civilian highways and onto the airport). Furthermore, this method of fuel delivery can be quickly overwhelmed during surge operations.

Strength and Recruiting

The 108th is currently manned at approximately 93.7% for a 16 PAA unit structure. Other units are proposed for 50% increases in manning, some of which are at even lower strength rates and unlikely meet higher requirements. Conversion of the 108th ARW from its existing 16 PAA structure to an 8 or 12 PAA organization structure would result in immediate 100% manning with experienced qualified maintainers and aircrews. Other units would have to find members to fill positions and then train those new members. While currently a **RED** state when compared to a 16 PAA manning document, the 108th ARW would be a **GREEN** state when compared to a 12 or 8 PAA document.

The Air National Guard uses color codes to easily identify assigned strength levels. GREEN reflects assigned strength greater than or equal to 96.7% of authorized strength. YELLOW reflects assigned strength greater than or equal to 94.7% but less than 96.7%. RED represents assigned strength less than 94.7% of authorized strength.

Most units in the NETTF will face increased manning requirements under the plan presented in the 2005 BRAC Report. The 101st ARW, Maine ANG, at Bangor International Airport is programmed to increase its primary aircraft authorization (PAA) from 8 to 12; they are also currently as **RED** state with assigned strength of only 91.1%

for the smaller 8 PAA authorized strength. The 157th ARW, New Hampshire ANG is likewise proposed to increase from 8 to 12 PAA; they, too, are currently graded as **RED** with only 93.8% assigned strength. These NETTF wings are ill-prepared to assume greater strength requirements and corresponding greater taskings under the proposed restructuring of the overall northeast CONUS tanker force. In Pennsylvania, the 171st ARW at Pittsburgh IAP, is proposed to maintain 16 PAA; it is currently graded as **YELLOW** at 95.3% manning.

Other Air National Guard and Air Force Reserve ARW's outside the NETTF face similar challenges with achieving current assigned strength requirements. The tanker wing in Phoenix, Arizona is programmed to increase to 12 PAA and is only graded as **YELLOW** at 96.3% assigned manning for 8 PAA. In Hawaii, their tanker wing is proposed to increase from 8 to 12 PAA; they are currently graded as **RED** with only 94.2% manning for the smaller structure. Other wings face similar challenges with manning 8 PAA units and would face even greater challenges meeting increased recruiting requirements for 12 PAA units.

The 108th ARW is poised to downsize to a 12 or 8 PAA unit and would be in excellent shape to continue recruiting to that mission. With new recruiting tactics and emphasis in place, the 108th will continue to recruit the finest personnel available for any future mission.

108th Air Refueling Wing, McGuire Air Force Base, NJ

The 108th Air Refueling Wing's New Jersey location makes it strategically ideal to support operations along the eastern seaboard and across the Atlantic Ocean. Boston, New York City, Philadelphia, Baltimore, Washington DC, Pittsburgh, and Norfolk are all within 30 minutes flying time from the 108th ARW's home station at McGuire AFB.

The 108th ARW is the only tanker wing in the northeast US located on a military installation, reducing overhead compared to stand alone units at civilian airports or Air National Guard airbases. McGuire AFB is the first mega-base, adjoining Fort Dix and Lakehurst NAES; there is no danger of encroachment issues in the foreseeable future. The mega-base is home to an AMC wing and is the leading reserve component force projection platform for overseas deployments since 2001. The 108th ARW is excellently sited to support aircraft based at locations that concentrate heavily on initial or upgrade training for aviators: the KC-10's and C-17s at McGuire AFB, the C-5s at Westover and Dover, and C-17s from Charleston.

The 108th ARW is ideally located for Tactical Employment Training, one of Air Mobility Command's highest priorities. Proximity to the coastline provides access to Warning Areas 105 and 107 in less than 25 minutes. Entire sorties, including air refueling and tactical employment maneuvers, can be flown under Visual Flight Rules (VFR) with minimal assistance of Air Traffic Control. The 108th Tactical Arrival and Departure letter of agreement with McGuire AFB ATC was the first such document approved by the Air

National Guard for KC-135 aircraft; this program was declared an Outstanding Program by AMC's Aircrew Standardization and Evaluation (ASE) team.

The co-location of the 108th ARW with the Air Mobility Warfare Center permits frequent interaction. The 108th serves as Air National Guard liaison to the Center for KC-135 issues. This relationship permits the 108th to participate in Mobility Air Forces Tactics Review Boards and Tactics Analysis Conferences. The 108th ARW seeks greater involvement with the AMWC through integration of the wing with the USAF Mobility Weapons School. Greater details of this opportunity are attached as a Background Paper.

The 108th ARW has over 20 years of experience providing air refueling support for America's strategic nuclear deterrence under OPLAN 8044. On September 11, 2001 the wing stood up three aircraft supporting the United States Strategic Command (USSTRATCOM) at the direction of the President. The wing passed AMC Inspector General Operational Readiness Inspections in 1996 and 2002. The wing's aircrews achieved perfect Emergency Action Procedures scores in 1996, 2002, and 2003. During USSTRATCOM Exercise Global Lightning '05 the 108th attained the highest participation and execution rate of any Air National Guard unit. The wing and its members are acknowledged mentors to all other NETTF units in their preparation for inspections, deployments, and exercises.

With the exception of Andrews-based KC-135s, the 108th ARW is the closest location for supporting Homeland Defense missions for the nation's capitol. Such missions range from operational flying to manning a 24/7 alert force capable of launching within 30 minutes to provide aerial refueling support for combat air patrol (CAP) aircraft. The 108th maintains a modern aircrew "Alert" facility; most other tanker locations have no such facilities. The 108th currently supports homeland defense missions for the other major cities on the eastern seaboard. The centralized location of the wing combined with the improved capabilities of the KC-135R would cement the 108th as the premiere Homeland Defense refueling asset on the East coast.

Individual Tanker Bases

171st Air Refueling Wing, PA ANG, Pittsburgh International Airport

DESCRIPTION: The 171st Air Refueling Wing is assigned 16 KC-135R's; there is no change proposed to that authorization based on the BRAC Report. This wing is located on a major airline hub airport. The FAA reports no flight restrictions on the wing but it is reasonable to assume that the unit voluntarily schedules training missions to avoid the peak airline hours. Training for this wing is difficult; due to their location on a busy international airport the unit is unable to perform local pattern work.

STRENGTH: Assigned strength for this wing of the Pennsylvania ANG is 95.3% of authorized strength (YELLOW). With no change in PAA programmed so there is no anticipated relief to their recruiting shortfall.

INFRASTRUCTURE: There is no additional construction required to accommodate the BRAC proposed aircraft.

FUEL: Fuel is delivered to the airport fuel farm via a multitude of 5000-gallon tractor-trailer tanks.

WEATHER: Pittsburgh IAP experiences some of the worst winter weather of the NETTF bases. Reduced ceilings and visibility result in delayed takeoffs and arrivals for the large number of civilian aircraft that fly at Pittsburgh daily. The frequent freezing precipitation with its resultant de-icing delays and costs makes operations during winter months inefficient.

FLIGHT ISSUES: Pittsburgh is located farther from the air refueling tracks of the NETTF than any other participating wing. Their flight time to and from the North and South tracks reduces their offload quantities and consequently their overall efficiency in contributing to the NETTF and Homeland Defense missions.

TACTICS: The 171st ARW has historically claimed their location prohibits the conduct of tactical takeoffs, departures, approaches and landings due to the high volume of civilian aircraft. They are now almost halfway complete in their tactics training program but can only complete tactical arrival and departure procedures in the flight simulator or when at USAF controlled airports.

ALERT: The 171st ARW provides three NETTF alert lines and provides approximately 13% of the sorties and 15% of the NETTF fuel offloaded (slightly less than that provided by the one NETTF line from the 108th ARW). This wing unit is the farthest of all NETTF bases from the northern and southern air refueling tracks as well as the ONE CAP tracks, making it the least efficient in terms of sorties per flight hour and fuel available for offload per sortie.

101st Air Refueling Wing, ME ANG, Bangor International Airport

DESCRIPTION: The 101st Air Refueling Wing is assigned 8 KC-135E's; it is programmed to retire the 8 E's and receive 12 R's as proposed in the 2005 BRAC Report. This wing is located on a civilian operated international airport.

STRENGTH: Assigned strength for the Maine Air National Guard is 91.1% of authorized strength (RED). They appear ill-suited to achieve the additional strength required to support a 50 % increase in PAA. Their Adjutant General has acknowledged this problem.

INFRASTRUCTURE: The increase in PAA, from 8 to 12, would require construction of an additional hangar for Phase maintenance (\$9.3 million) as well as additions to the apron to park four additional aircraft (\$1.1 million each), for an approximate total of

nearly \$13.7 million. There is already over \$13 million programmed for airfield pavement and parking aprons simply to continue current 8 PAA operations.

FUEL: Fuel is delivered to the airport by thousands of 5000-gallon tractor-trailer tanks each year.

WEATHER: Bangor experiences some of the most extreme winter weather of the NETTF bases. The greatest weather impact here is the high average number of days of freezing precipitation each year, requiring frequent de-icing of aircraft and high operating costs. Further, Bangor suffers the greatest annual number of days with temperatures below 10 degrees F and the greatest annual number of days when missions must be canceled due to fog.

FLIGHT ISSUES: The FAA plans to reduce air traffic control tower operations to cease at 11:00 PM daily. Lack of an operating airfield tower would require the wing to conduct operations and training with waivers accepting increased risk. It is unclear how a tanker unit with Alert aircraft taskings can operate from an airport without an operational tower.

TACTICS: The wing is well along in developing their tactics program. They have a letter of agreement with their home airport permitting tactical takeoffs, departures, approaches, and landings.

ALERT: The wing has three NETTF alert lines and provides approximately 15% of the sorties and 15% of the fuel offloaded for the NETTF mission. Its location as the northernmost of the NETTF bases makes it most efficient for northern aerial refueling track missions, but far less efficient supporting southern refueling track or ONE CAP missions.

157th Air Refueling Wing, NH ANG, Pease Air National Guard Base

DESCRIPTION: The 157th Air Refueling Wing currently has 9 KC-135Rs authorized; the 2005 BRAC Report proposes increasing their PAA to 12. This unit is located on a "stand-alone" Air National Guard base.

STRENGTH: The 157th has a current assigned strength of 93.8% (RED) for a 9 PAA wing structure. They appear ill-suited to achieve a 33% increase in assigned strength.

INFRASTRUCTURE: There is already \$17 million programmed for airfield pavement and parking aprons simply to continue 9 PAA operations.

FUEL: Fuel is delivered to the airport bulk fuel storage site by thousands of 5000-gallon tractor-trailer tanks.

WEATHER: Severe winter weather at Pease is primarily the average number of days with temperatures below 10 degrees F. Such cold weather, below 10° F, results in outdoor

tasks taking much longer to accomplish. In addition, Pease ranks near the top for NETTF bases for snow accumulation, requiring snow removal to permit continued operations.

FLIGHT ISSUES: Not available.

TACTICS: This wing has a well-developed tactics training program. They have a letter of agreement with their local airport as well as with Brunswick Naval Air Station to perform tactical arrivals and departures. They have a KC-135R simulator on their home station, permitting maximum use to accomplish required maneuvers.

ALERT: The 157th ARW stands two alert lines for NETTF as well as support to the ONE CAP mission. They contribute 17% of the sorties delivering 19% of the fuel offloaded. Their northern location makes them more efficient than most in supporting the northern aerial refueling track but less efficient for southern track and ONE CAP missions.

121st Air Refueling Wing, OH ANG, Rickenbacker Int'l Airport

DESCRIPTION: The 121st ARW is an 18 PAA wing equipped with KC-135R's stationed on a civilian international airport. There was no change to the existing wing structure proposed in the 2005 BRAC Report.

STRENGTH: With assigned strength at more than 100% (**GREEN**), the 121st is capable of maintaining its current force structure.

INFRASTRUCTURE: There is no proposed increase in PAA so there is no additional construction projected to accommodate more aircraft. Current construction projects, to continue 16 PAA operations, are estimated at \$9 million.

FUEL: Fuel is delivered to the airport bulk fuel storage site by thousands of 5000-gallon tractor-trailer tanks. It receives approximately 8 trucks per day six days per week to meet demand. Nearly 2500 individual tractor-trailers hauling 5000-gallon tankers filled with jet fuel pass through its surrounding communities each year.

WEATHER: Not available.

FLIGHT ISSUES: Location on a civilian airport requires coordination with civilian air traffic control and fewer opportunities to conduct tactical departures and approaches.

TACTICS: Not available.

ALERT: This wing does not participate in the NETTF "ALERT" taskings due to its distance from the operational area. It similarly does not contribute to the eastern seaboard ONE CAP missions.

127th Air Refueling Wing, MI ANG, Selfridge ANG Base

DESCRIPTION: The 127th Air Refueling Wing is based on a stand-alone Air National Guard base. The 127th is programmed to turn in C-130's and receive 12 KC-135R's. It is reasonable to assume they will occupy the buildings vacated by the co-located AFRC ARW disbanded under the 2005 BRAC Report.

STRENGTH: The 127th is currently manned at or above 100% for a C-130 equipped wing. With the transfer of Selfridge-based AFRC aircraft to the Selfridge-based ANG wing there should be an abundance of potential unit members but a lack of qualified incumbents. Considerable transition training will be required for ANG aircrew members and maintenance workers to convert their skills to KC-135R and aerial refueling specialties.

INFRASTRUCTURE: Programmed construction required to continue operations at the current level requires \$13 million. The addition of 4 tanker aircraft to the base and departure of the C-130's should leave adequate parking space for the resulting fleet.

FUEL: Fuel is delivered to the airport bulk fuel storage site by thousands of 5000-gallon tractor-trailer tanks. There is no in-ground hydrant system to parking pads for individual tanker fueling; fuel is transferred from the bulk storage facility to the aircraft via tank trucks. This method is the least desirable, more subject to weather and vehicle interference, and is quickly overwhelmed during surge operations. It would cost nearly \$16 million to install the current technology underground system to deliver fuel to the tanker parking apron.

WEATHER: The weather at Selfridge is only slightly worse in all categories than that experienced at McGuire AFB and not significant enough to require comment.

FLIGHT ISSUES: The runway length at Selfridge, 9000 feet, limits the maximum takeoff weight of tanker aircraft. This weight limitation restricts the fueling offloading capacities of the wings aircraft.

TACTICS: Not available. This unit is currently flying C-130s and would have to develop a Tactics program upon commencing KC-135R flight training.

ALERT: This wing would not participate in the NETTF "ALERT" taskings due to its distance from the operational area. It similarly would not contribute to the eastern seaboard ONE CAP missions

Conclusions

A super tanker wing stationed on an Air Force commanded mega-base is programmed to cease flying operations. The wing is scheduled to turn-in all 16 KC-135Es without replacement. The eminently qualified and experienced aircrews, and support personnel of the 108th Air Refueling Wing are programmed for disbandment with the retirement of their aircraft. The \$70 million premiere tanker base in the Air National Guard is programmed for less than optimal use. The underground jetfuel hydrants to each tanker parking apron would sit unused or underemployed as parking spaces for helicopters. The 108th has existing apron and hangar capacity to accept four additional aircraft, up to a total of twenty-three.

Other units, unable to fill current positions at lesser authorizations and unable to accommodate more aircraft on their aprons and in their hangars will increase their aircraft population. These upgraded wings will build new hangars for maintenance and aprons for parking. They will fly farther to reach refueling tracks, when the weather permits. They will continue to transport bulk fuel to their airports via insecure environmentally risky tractor-trailer tankers.

In contrast to BRAC's pronounced goals of efficiency, "joint-ness", and military value, tanker assets are being realigned to move aircraft from the right place, the centrally located east coast mega-base, onto stand-alone bases and international airports that do not have the necessary strength, infrastructure, wartime capabilities, or the strategic location of the 108th ARW.

Surely the military value of the 108th ARW, one of only three Air National Guard super tanker wing and a key contributor to eastern US aerial refueling support for air bridge operations and Homeland Defense CAP support missions, is greater than the proposed alternate use of the real estate the 108th occupies now.

The 108th is the right organization with the right people in the right place. Tankers at McGuire are more versatile to support modern real-world aerial refueling taskings.

Recommendation

The most efficient resolution to the proposed restructuring of the tanker force is to replace the 108th ARW's 16 retired KC-135E's with 8 to 12 KC-135R's.

Attachments:

1. BRAC Gains/Losses
2. Air National Guard End Strength
3. Pre-BRAC Tanker Locations
4. Post-BRAC Tanker Locations
5. Northeast US Tanker Locations
6. ANG Tanker Alert Status
7. NETTF Project Workload Increases
8. NETTF Weather Data
9. Background Paper: Integration of the 108th ARW and USAF Mobility Weapons School

1. BRAC Gains/Losses

Category	Memory Value	Por to BRAC	End State FY	916 ARW (AFR)	507 ARW (AFR)	452 AMW (AFR)	190 ARW (ANG)	185 ARW (ANG)	161 ARW (ANG)	157 ARW (ANG)	154 W (ANG)	134 ARW (ANG)	126 ARW (ANG)	127 W (ANG)	126 ARW (ANG)	101 ARW (ANG)	22 ARW (AD)	6 AMW	
AD MacDill -- 6 AMW	36	12	16																
AD McConnell -- 22 ARW	19	30	48																
ANG Bangor -- 101 ARW	123	8E	12																
ANG Scott -- 128 ARW	28	8E	12																
ANG Selfridge -- 127 Wing	87	0	12																
ANG General Mitchell Field -- 128 ARW	86	9R	12																
ANG McChes-Tyson -- 134 ARW	74	8E	12																
ANG Hickam -- 184 W	87	8R	12																
ANG Pease -- 157 ARW (ANG)	106	8R	12																
ANG Phoenix -- 161 ARW	37	8R	10																
ANG Souix Gateway IA -- 185 ARW	87	8E	8																
ANG Forbes -- 180 ARW	36	8E	12																
AFR March -- 452 AMW	19	8R	12																
AD Tinker AFB -- 507 ARW	4	8R	12																
AFR Seymour Johnson -- 916 ARW (PAA)	25	8R	16																
ANG Birmingham (Resigned) -- 117 ARW	63	8R	0																
ANG Merzon (Resigned) -- 163 ARW	19	9R	0																
ANG Robins (Resigned) -- 19 ARG	18	12R	0																
ANG Key Field MS (Resigned) -- 185 ARW	92	9R	0																
ANG Niagara (Closed) -- 107 ARW	#	8R	0																
ANG Fairchild (Resigned) -- 141 ARW	#	8R	0																
ANG McConnell (Resigned) -- 184 ARW	15	9R	0																
ANG McGuire -- 108 ARW	#	16E	0																
AFR Beale (Resigned) -- 940 ARW	#	8R	0																
AFR Portland (Resigned) -- 939 ARW	71	8R	0																
AFR Selfridge -- 927 ARW	#	8R	0																
AD Grand Forks (Resigned) -- 319 ARW	#	3B	0																
AD Fairchild 92 ARW	17	48R	48																

Data from: AMC Command Data Book Apr 2003 and BRAC report. Detailed info available in comments section of electronic version. As of 14 May 05

Ready - Reliable - Relevant

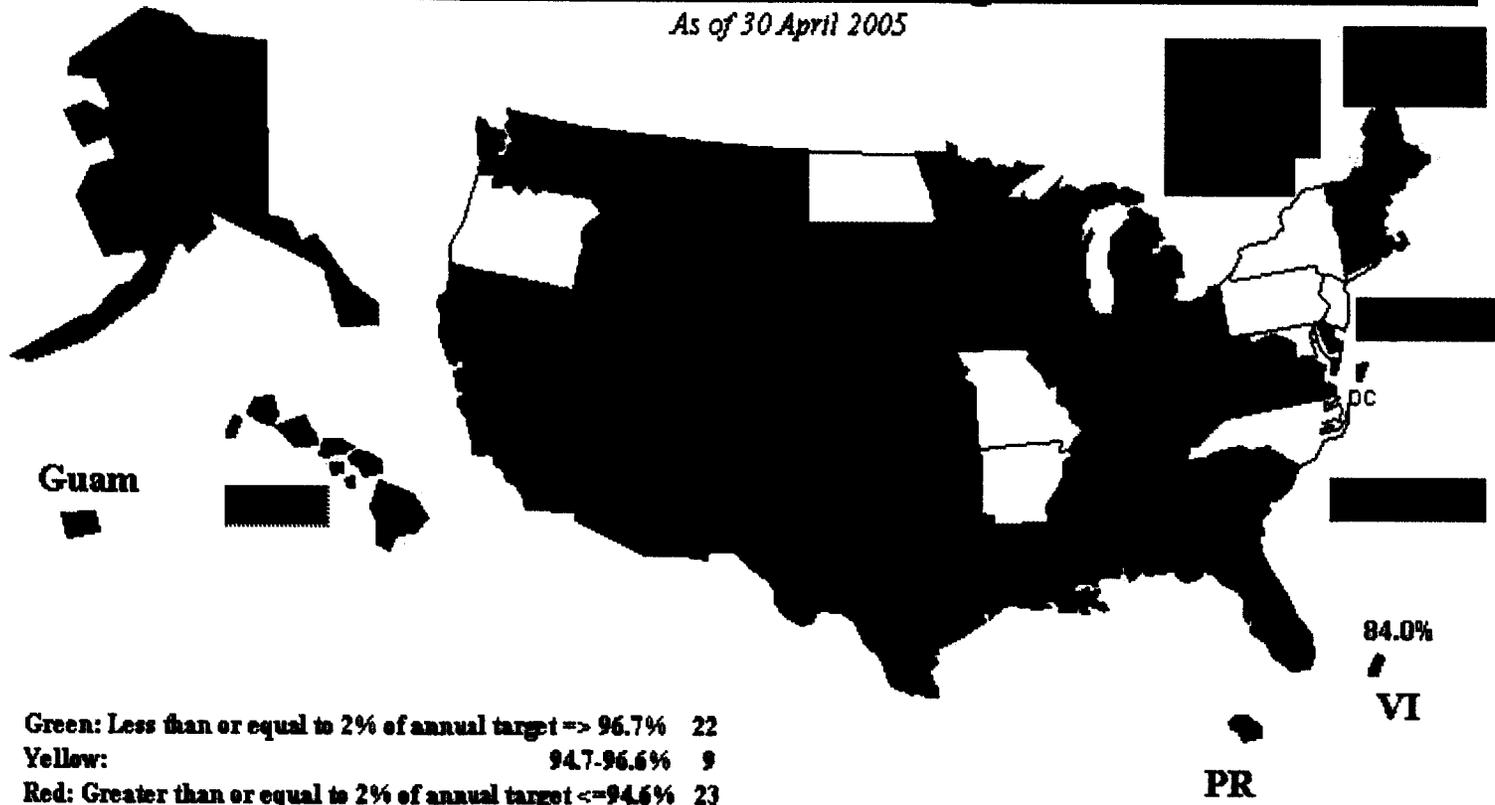


U.S. AIR FORCE



ANG End Strength

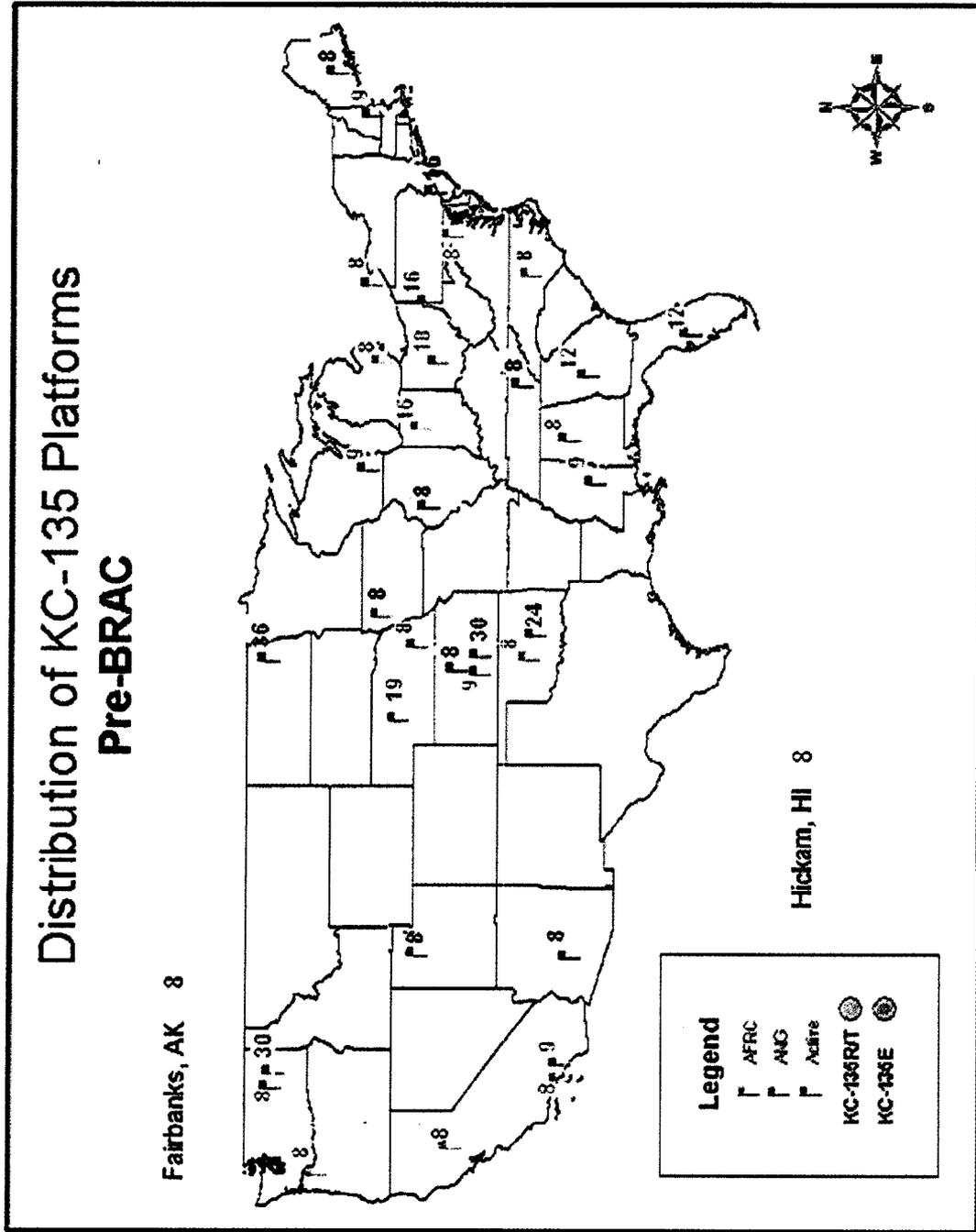
As of 30 April 2005



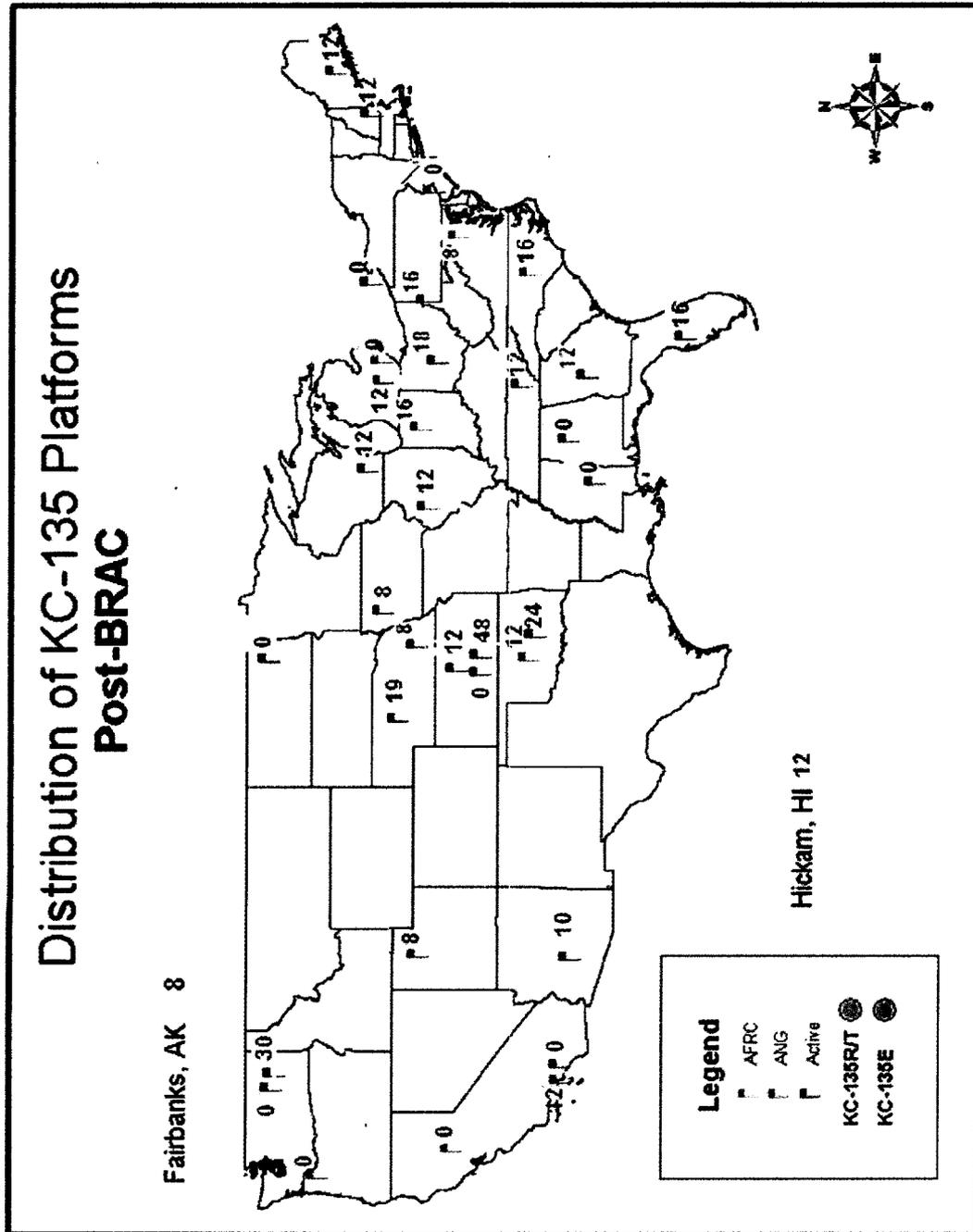
Created by NGB/KFS

Now... and in the Future

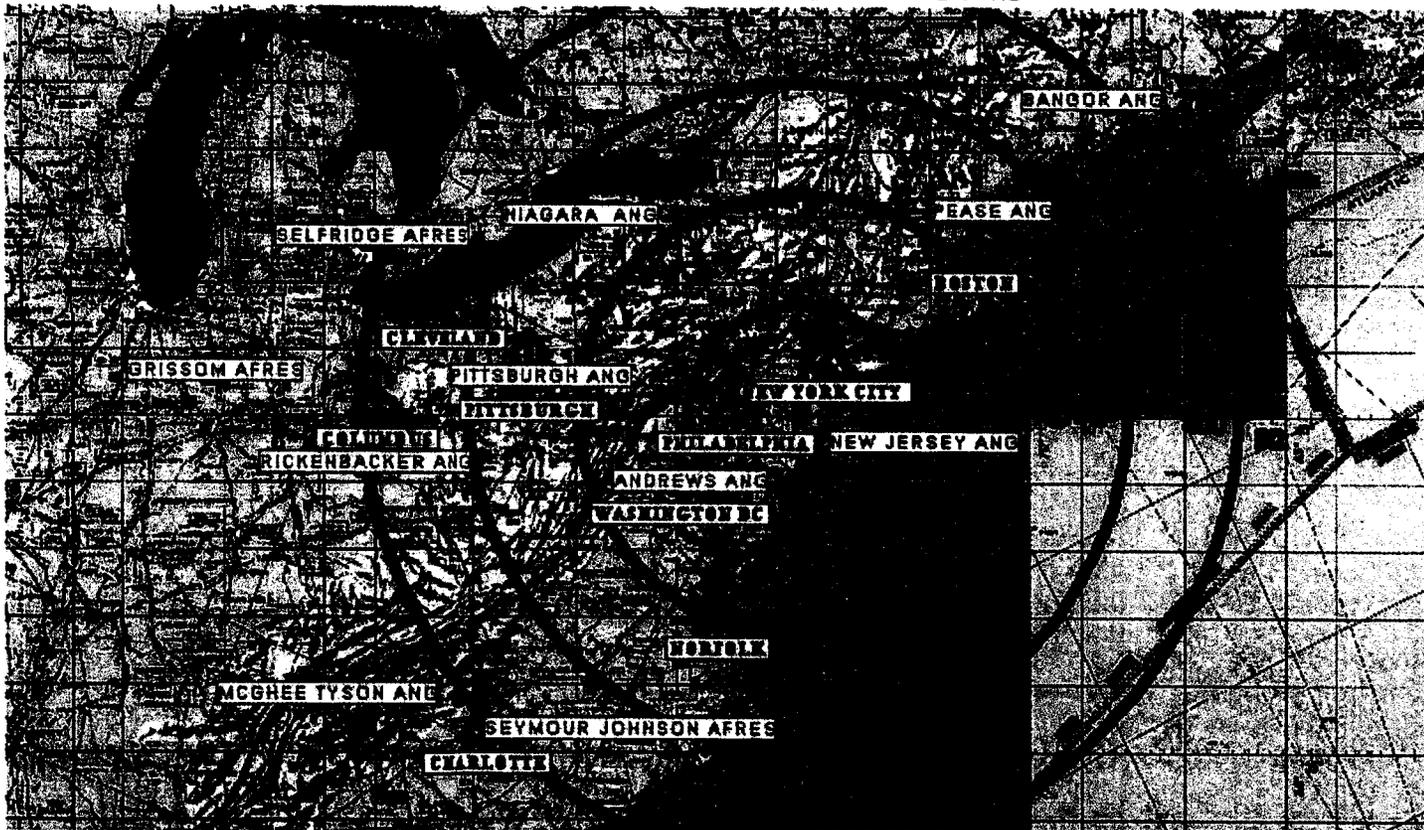
3. Pre-BRAC Tanker Locations



4. Post-BRAC Tanker Locations



NORTHEAST TANKER DEPICTION AND MAJOR CITY LOCATIONS



5. Northeast US Tanker Locations

7. NETTF Project Workload Increases

Unit#(TTF lines)	Taskings	Sortes	Fuel Offload	% of current offload	% of proposed offload*	% change in offload*
108 th ARW (1)			3,800,000	15%	0	n/a
Pittsburgh (3)			3,726,000	15%	22%	49%
Bangor (3)			3,800,000	15%	22%	47%
Niagara (2)			4,650,000	18%	0	n/a
Pease (2)			4,860,000	19%	28%	46%
AFRC KC-10 (4)			4,470,000	18%	27%	53%
Total			25,306,000			

Projected increase in workload

Unit#(TTF lines)	Taskings	Sortes	% of current taskings	% of current sorties	proposed sorties*	% of proposed sorties**	% increase in sorties*
108 th ARW (1)	135	68	19%	18%	0	0%	n/a
Pittsburgh (3)	94	51	13%	13%	91	24%	78%
Bangor (3)	101	56	14%	15%	91	24%	62%
Niagara (2)	159	77	23%	20%	0	0%	n/a
Pease (2)	121	68	17%	18%	110	29%	62%
AFRC KC-10 (4)	92	59	13%	16%	95	25%	61%
Total	702	379					

Unit#(TTF lines)	Sortes	fuel offload	current Avg offload /sortie	proposed sorties*	proposed fuel offload*	resultant increased offload*	NETTF mission* add'l fuel truck deliveries for
108 th ARW (1)	68	3,800,000	55,882	0	0	-3,800,000	
Pittsburgh (3)	51	3,726,000	73,058	91	5,567,320	1,841,320	57
Bangor (3)	56	3,800,000	67,857	91	5,567,320	1,767,320	54
Niagara (2)	77	4,650,000	60,390	0	0	-4,650,000	
Pease (2)	68	4,860,000	71,471	110	7,085,680	2,225,680	68
AFRC KC-10 (4)	59	4,470,000	75,783	95	6,832,620	2,362,620	73
Total							

* assumption that TTF fuel delivery demand remains constant

8. NETTF Weather Data

Average Annual Snowfall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2. Pease	18	16	12	3.0	0	0	0	0	0	0	3.0	15	67
5. McGuire	6	6	4	.5	0	0	0	0	0	0	.5	3	22
7. Seymour	1.5	1.3	.9	0	0	0	0	0	0	0	0	.8	4.5
3. Pittsburgh	12.5	10.1	7.7	1.7	.2	0	0	0	0	.2	3.2	8.1	43
4 Rickenbacker	6.7	5.1	3.5	.5	0	0	0	0	0	.2	1.9	4.6	22.5
1. Bangor	19.7	19.2	14.1	4.2	.3	0	0	0	0	.6	4.5	15.9	78
6. Andrews	6.7	5.9	3.1	.1	0	0	0	0	0	.1	1.1	2.9	20.1

Average # of Days Airmort Below VFR

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2. Pease	5	4	6	6	6	6	5	4	5	5	5	5	5
3. McGuire	5	4	5	4	5	4	4	5	5	4	4	5	4
3. Seymour	5	4	4	3	2	3	3	4	4	4	4	5	4
3. Pittsburgh	8	6	6	4	4	4	4	4	4	4	5	8	5
7 Rickenbacker	6	5	4	2	2	2	3	4	3	3	4	5	3
1. Bangor	6	5	7	6	5	5	6	6	6	6	5	7	6
3. Andrews	5	4	5	4	4	3	3	3	4	4	4	5	4

Average # of Days Airmort Below 200' ½

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1. Pease	1	1	1	1	1	1	1	1	1	1	1	1	12
6. McGuire	.5	.5	.5	0	0	0	.5	.5	.5	.5	.5	.5	4.5
5. Seymour	.5	.5	.5	0	0	0	.5	.5	.5	.5	.5	1	5
4. Pittsburgh	1	.5	.5	0	.5	.5	.5	.5	.5	.5	.5	1	6.5
7 Rickenbacker	.5	.5	0	0	0	0	0	.5	.5	.5	0	.5	3
2. Bangor	1	1	1	1	.5	1	1	1	1	1	1	1	11.5
3. Andrews	1	1	1	.5	.5	.5	0	0	.5	1	1	1	8

Other Weather Data

	Days/Yr Freezing Precip	Days/Yr Frozen Precip	Days/Yr Temp <32F	Days/Yr Temp <10F	Days/Yr Msn CNX Fog
Pease	12	78	135	20	15
McGuire	4	43	101	5	5
Seymour	n/a	n/a	n/a	n/a	N/a
Pittsburgh	n/a	84	124	6	12
Rickenbacker	n/a	n/a	n/a	n/a	N/a
Bangor	36	35	156	19	21
Andrews	6	35	83	17	9

9. Background Paper: Integration of the 108th ARW and USAF Mobility Weapons School (Maj Francine Main/108OGV/4-6314/fm/2 Jun 05)

The New Jersey Air National Guard, McGuire AFB, offers a unique partnership opportunity to the Center of Excellence for Air Mobility operated by the Air Mobility Warfare Center located on neighboring Fort Dix. Currently, the USAF Mobility Weapons School is headquartered at Fort Dix; however, the flying organizations are situated at Little Rock AFB, Arkansas (C-130), Fairchild AFB, Washington (KC-135), and McGuire AFB, New Jersey (C-17). With conversion of the 108th Air Refueling Wing to a composite wing consisting of KC-135R and C-130J aircraft in partnership with the Mobility Weapons School, all three Weapons Squadrons can be united on one airfield with existing adjacent airspace amenities.

- *Home Stationing at Fort Dix/McGuire AFB offers a full complement of support services with ample expansion capability.*
 - Base can support a high volume of air traffic without encroachment issues
 - Conveniently located near Special Use Airspace (W107/105), Drop Zone (Coyle DZ) and assault runway facilities (Lakehurst Naval Air Engineering Station)
 - Successful joint ventures with McGuire AFB (57th Weapons Squadron) and Lakehurst Naval Air Engineering Station (Expeditionary Operations School) in operation

- *Affiliation with 108th Air Refueling Wing provides highly skilled work force with proven reliability*
 - Ten-Year Mission Capability Rating 73.9% with Mission Effectiveness Rate of 98.2%
 - Highly skilled maintenance force – 53% 7-level or higher
 - Aircrew Qualification: 27 Instructor Pilots (43%), 50 Aircraft Commanders (79%), 13 Instructor Boom Operators (35%)
 - Average Crewmember experience: 2782 hours
 - Highly Accomplished Unit
 - USAF Outstanding Unit Award and Lt Gen Malcolm B. Armstrong Trophy for the best Air National Guard unit in 21st Air Force
 - Tactics Shop cited as “best seen to date” by ASEV team
 - First ever ANG tanker unit deployed under an Air Combat Command Air Expeditionary Wing

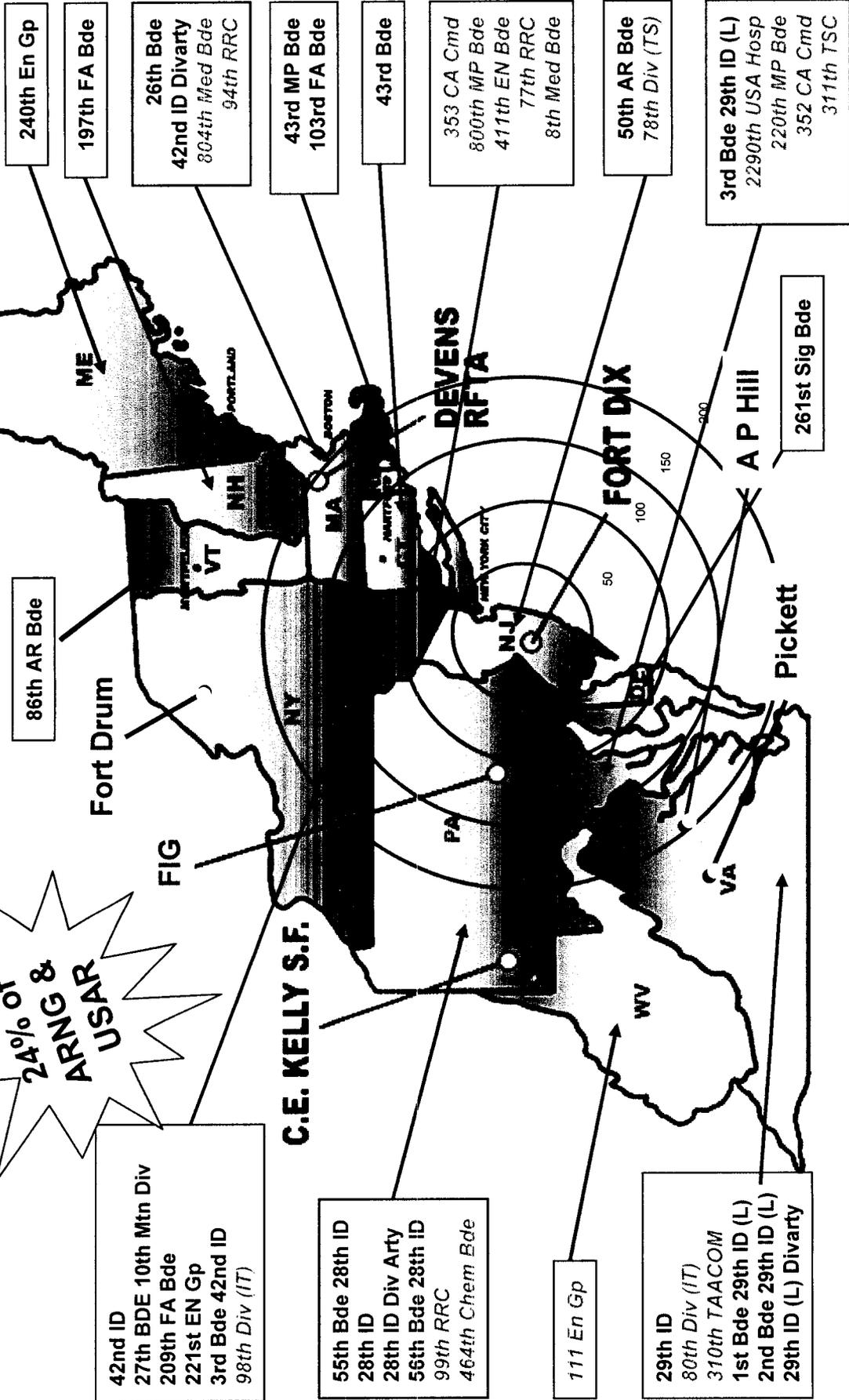
- *Unification of Mobility Weapons Schools consolidates existing resources and reduces relocation costs*
 - Headquarters of the Mobility Weapons School and Ronald R. Fogelman Library located at Fort Dix Campus
 - Single building can house two relocating (or all three squadrons) with shared classrooms, administrative staffs and facilities for approximately \$12 million
 - Increase in Student travel costs is only 13%; however, travel access to major airports is greatly improved

- Infrastructure for a seamless transition currently in place
 - Ramp facilities designed for a 20 PMAI KC-135 operation
 - New, modern Squadron Operations building
- *Composite Wing of KC-135R and C-130J aircraft provides vital aerial refueling and tactical airlift support to the State of New Jersey and the Northeast region*
 - Missions are well suited to the Air National Guard
 - The ANG provides 42% of the Tanker force and 40% of the Tactical Airlift force
 - Strategic location of McGuire AFB vital for expeditionary airlift and aerial refueling
 - 108th ARW currently maintains two active Bravo Alert lines for the Tanker Task Force
 - Combat proven: Mission effectiveness rate of 99.5 percent in Operation ENDURING FREEDOM while flying 693 combat/combat support missions
 - Quick response capability to the New York and Washington metropolitan areas makes the 108th ARW essential to homeland defense
 - Unit averaged 3 alert sorties and 2 Combat Air Patrol (CAP) refuelings per day for a year under Operation NOBLE EAGLE
 - Aircrews flew over 2300 hours on 540 sorties offloading over 11 millions pounds of fuel to fighter and AWACs aircraft
 - Over 690 days of alert performed with over 140 mission launches to support CAP refuelings
 - Total NOBLE EAGLE and ENDURING FREEDOM numbers outpace any single ANG unit
 - Wing flew 20% of ANG tanker missions and 4% of all ANG flying hours and sorties for the 2001-2002 timeframe

Regional Army Reserve &

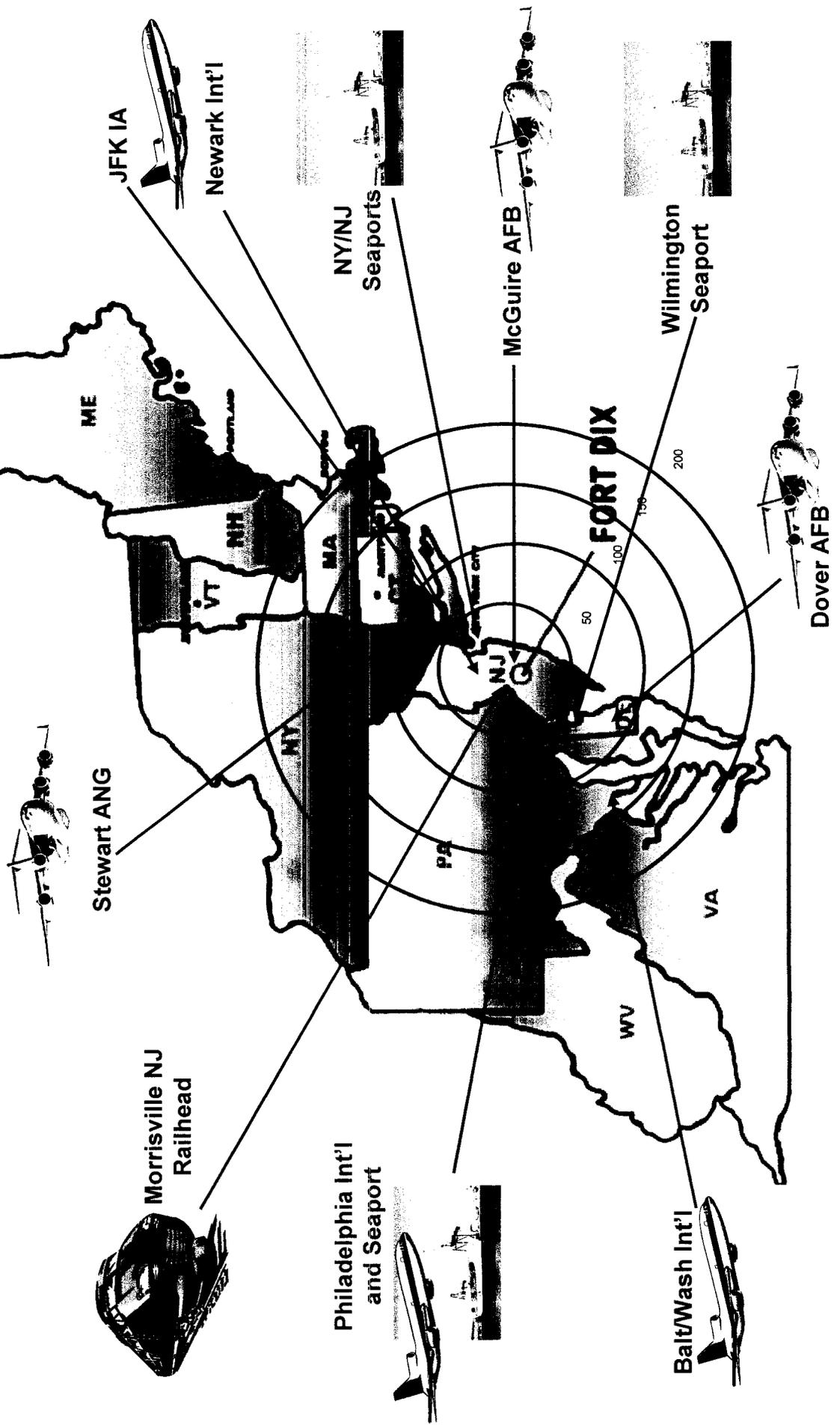
National Guard Units

24% of
ARNG &
USAR



TOTAL ARNG authorized strength 85,117 / 372 units
 TOTAL USAR authorized strength 46,259 / 438 units

Regional Transportation / Ports



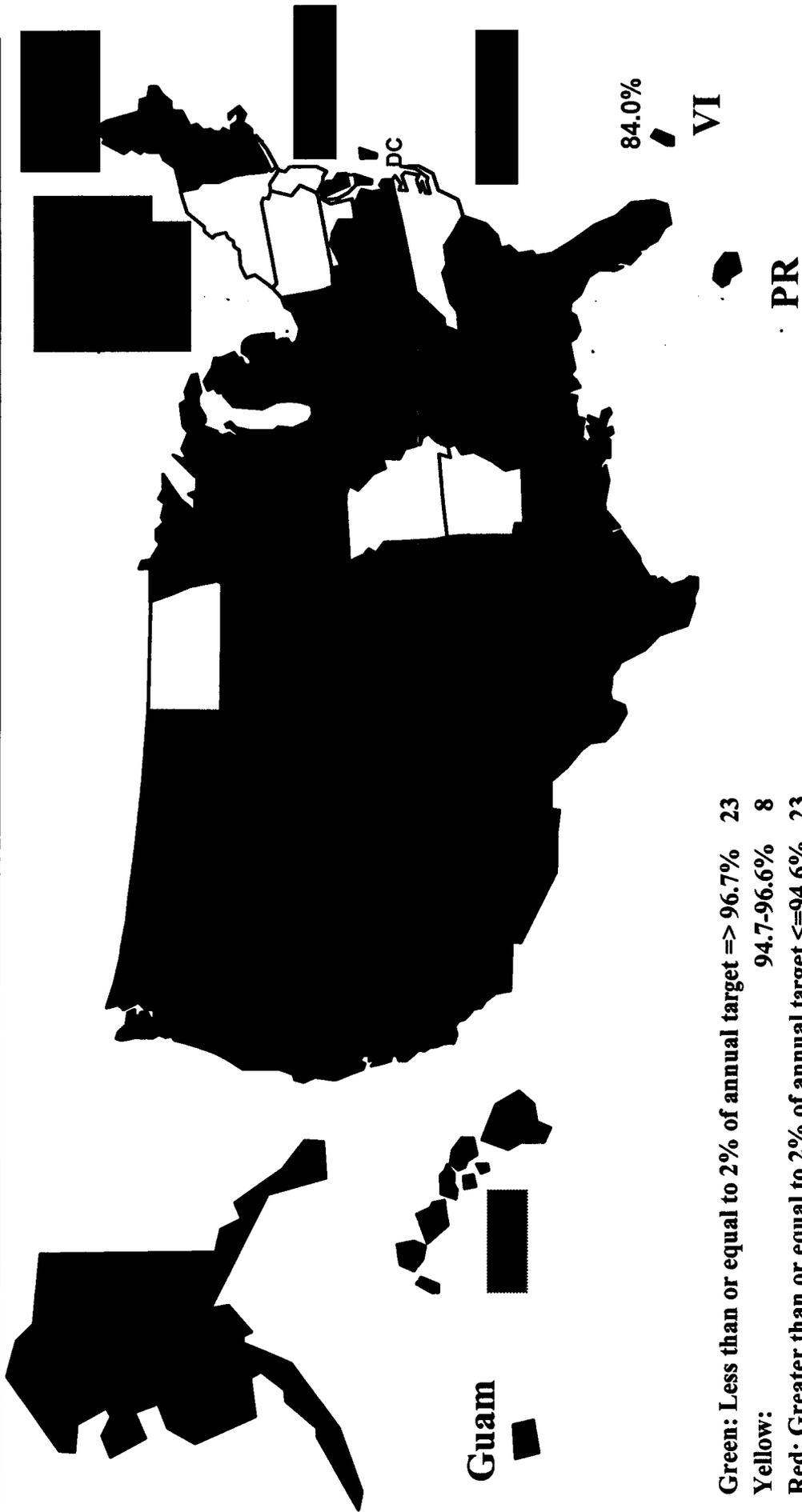


Ready - Reliable - Relevant
ANG End Strength

As of 31 May 2005



U.S. AIR FORCE



Created by NGB/CFS

Now... and in the Future

Military Tanker Base Projects – Air National Guard
McGuire AFB

1988	Tanker Engine Repair Shop	\$.2M
	Alter Building	\$.18
1990	Alter Training Facility	\$1.05
1991	<i>Decision Made to Convert to Tanker Base</i>	
	Parking (KC-135 Aircraft) Apron	\$.91
1992	KC-135 Fuel Syst Maintenance Dock	\$.66
	KC-135 Tanker Hangar/Design	\$1.2
	Jet Fuel Storage & Dist System	\$.87
1994	Jet Fuel Operating Ramp	\$11.4
	KC-135 Tanker Hangar/Construct	\$13.3
1996	Consolidated Operations Facility	\$.97
	Consolidated KC-135 Pkg Apron	\$.98
	Corrosion Control	\$.71
	Jt Medical Training Facility/Design	\$1.16
1997	KC-135 Parking Apron, Phase II	\$23.9
2002	Jt Medical Training Facility/Construct	\$4.4
2003	Jt Medical Training Facility/Design	\$.21
1991- 2005	Sustain/Repair/Maintenance Projects	\$14.7
	Total:	<u>\$76.8M</u>
	In 2005 dollars:	\$90.9M

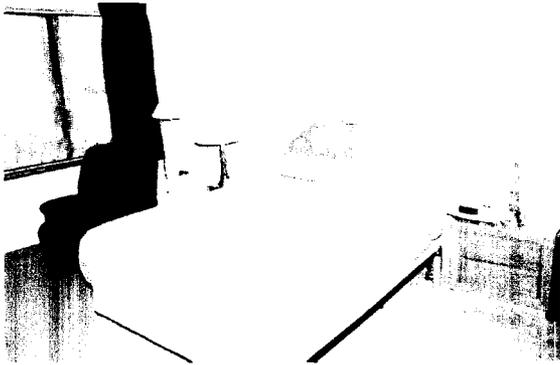
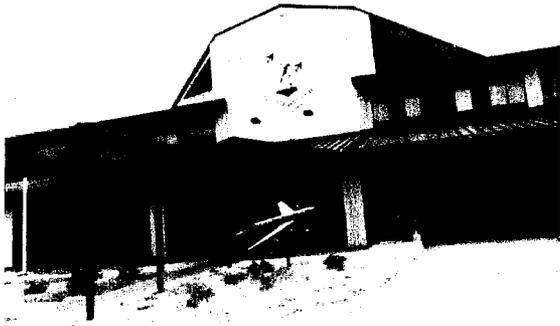
1

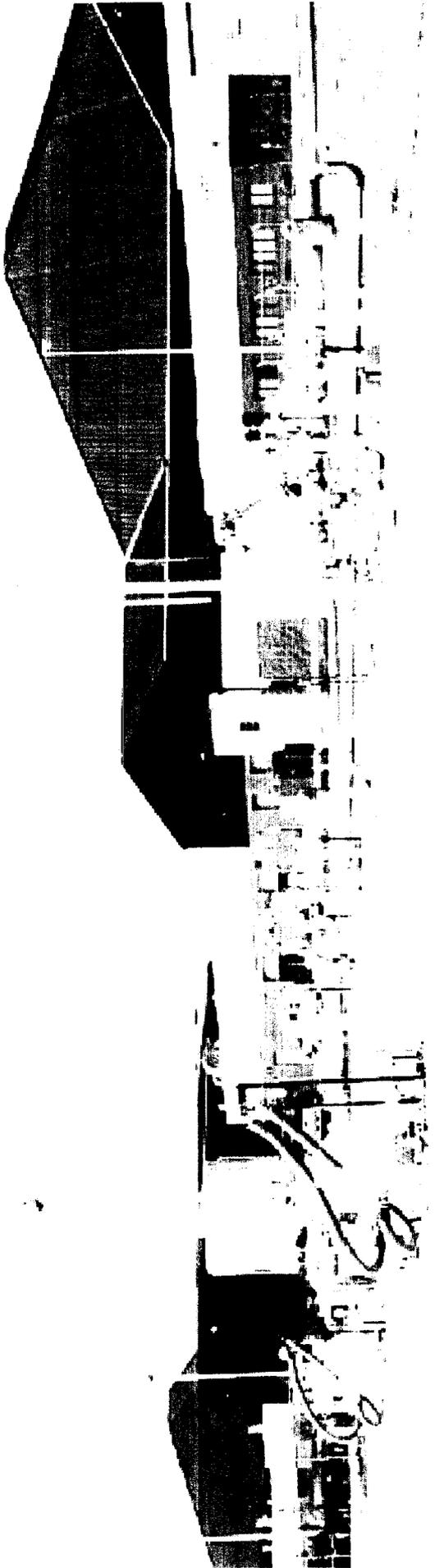


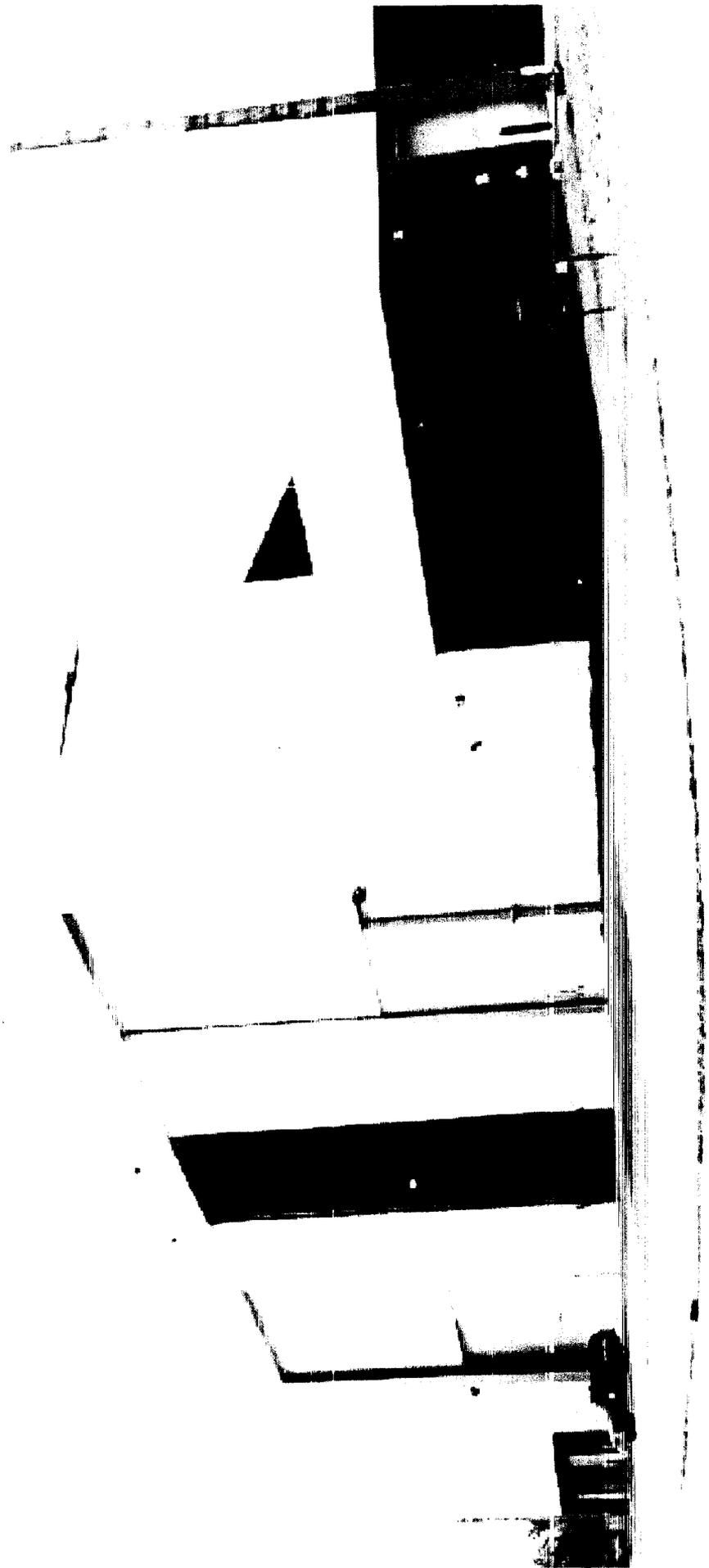
1000

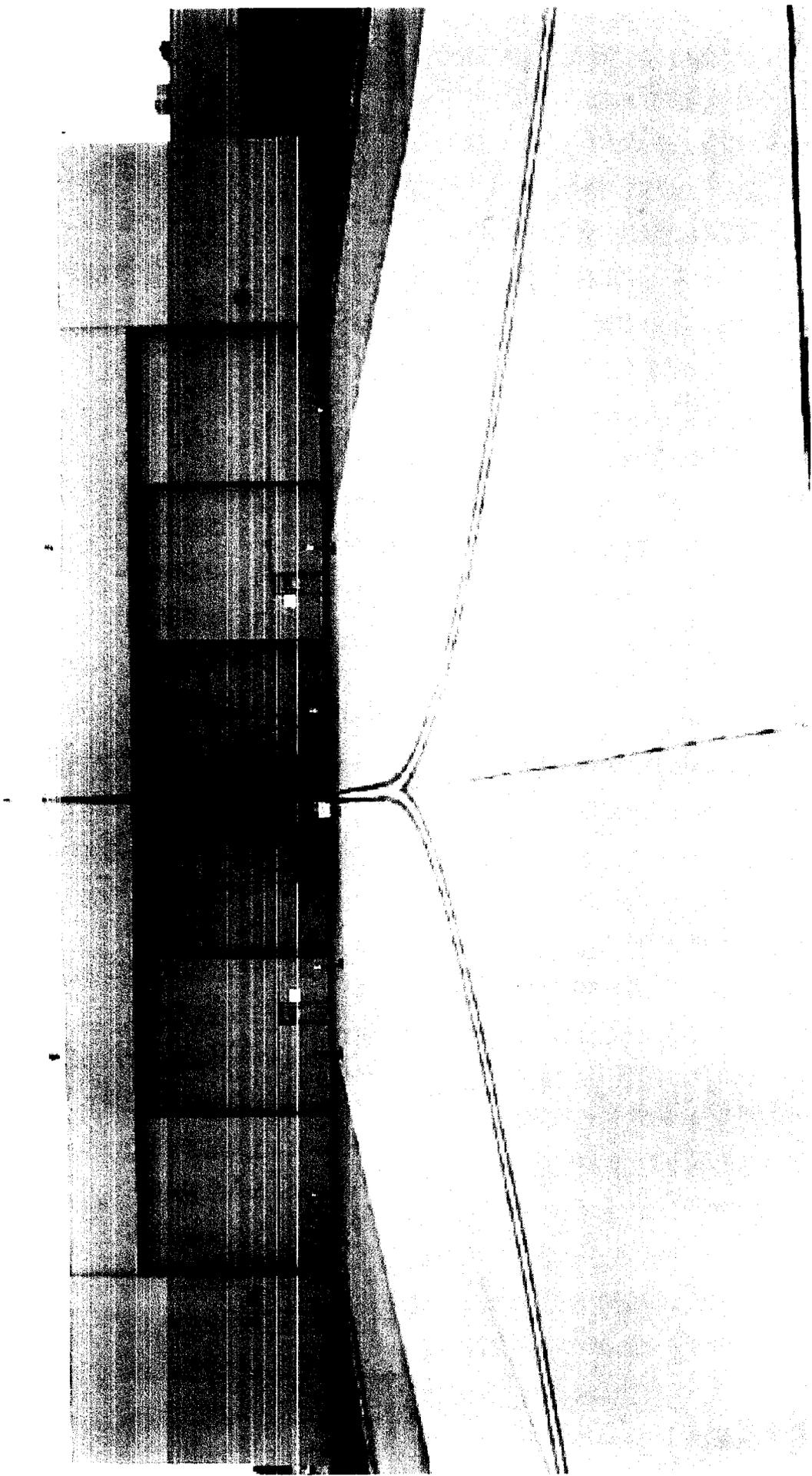
1000



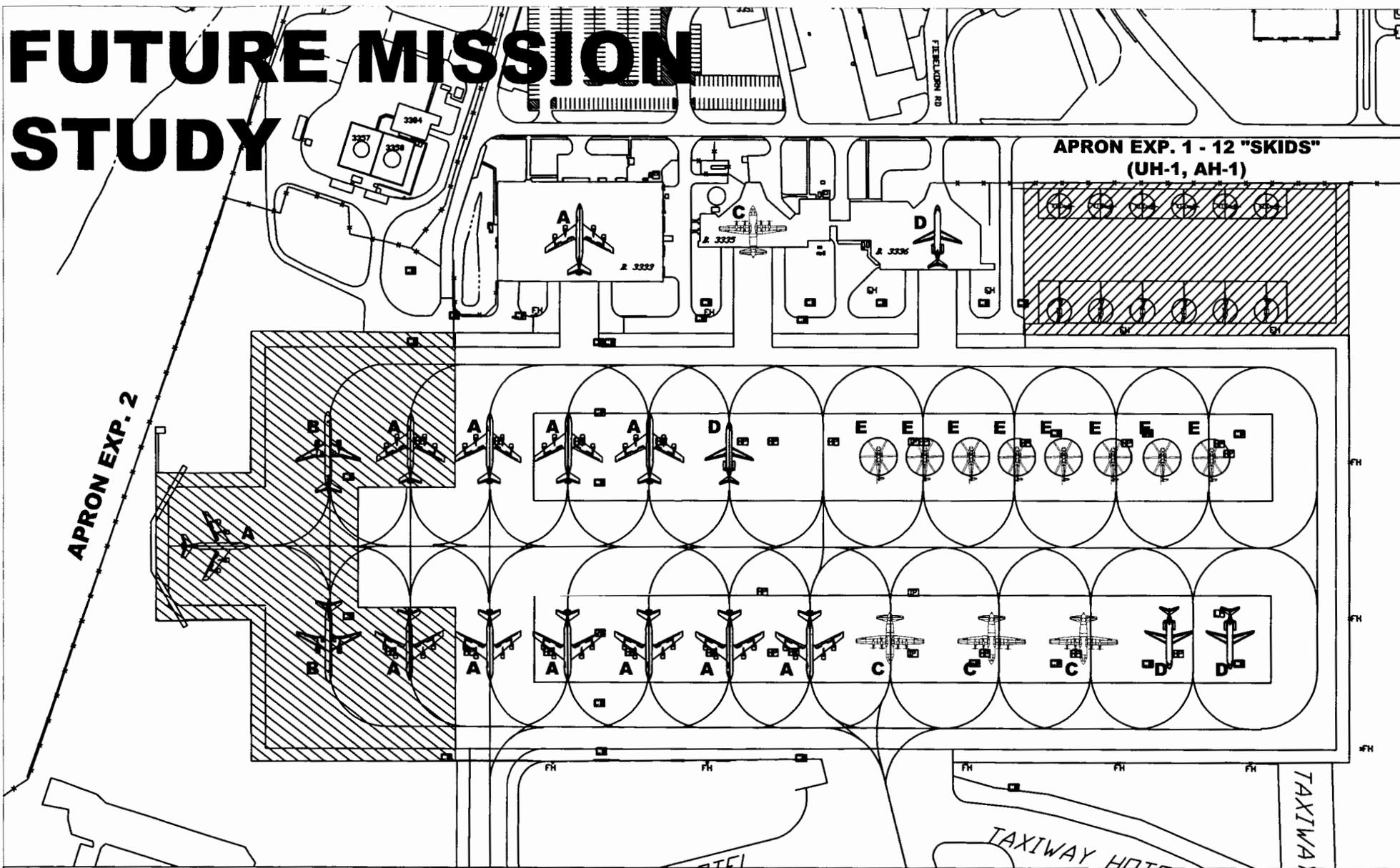








FUTURE MISSION STUDY



FUTURE MISSION - SCHEME 3 - LEGEND:

APRON REQUIREMENTS:

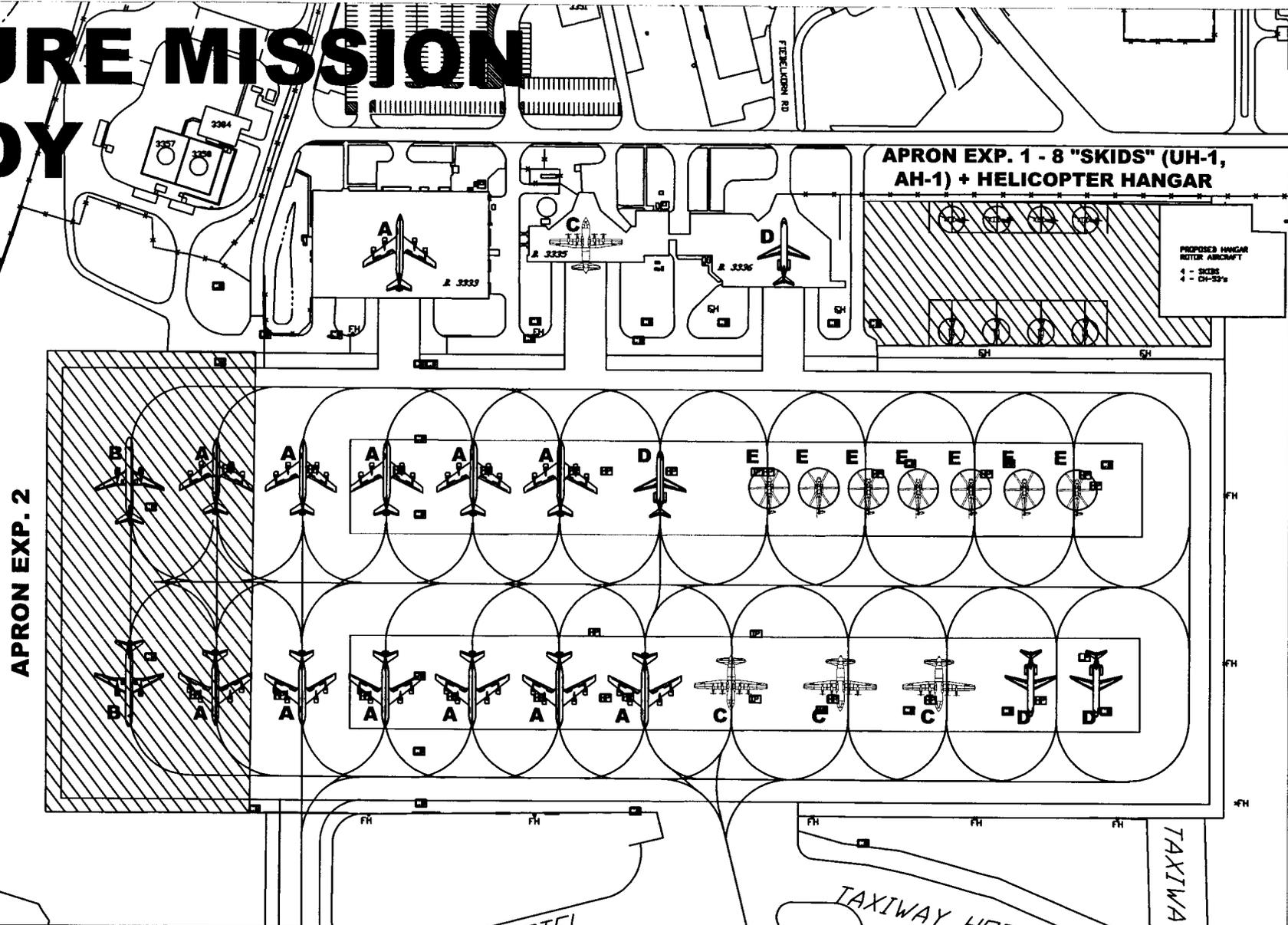
APRON EXPANSION 1 - 182,500 SF
 APRON EXPANSION 2 - 335,000 SF
 TOTAL APRON EXPANSION - 517,500 SF

AIRCRAFT IDENTIFIER:

A - KC-135 R E - CH 53 E
 B - C 32 B
 C - C 130
 D - C-9

NOTE: SKIDS ARE IDENTIFIED ON SITE PLAN

FUTURE MISSION STUDY



FUTURE MISSION - SCHEME 4 - LEGEND:

APRON REQUIREMENTS:

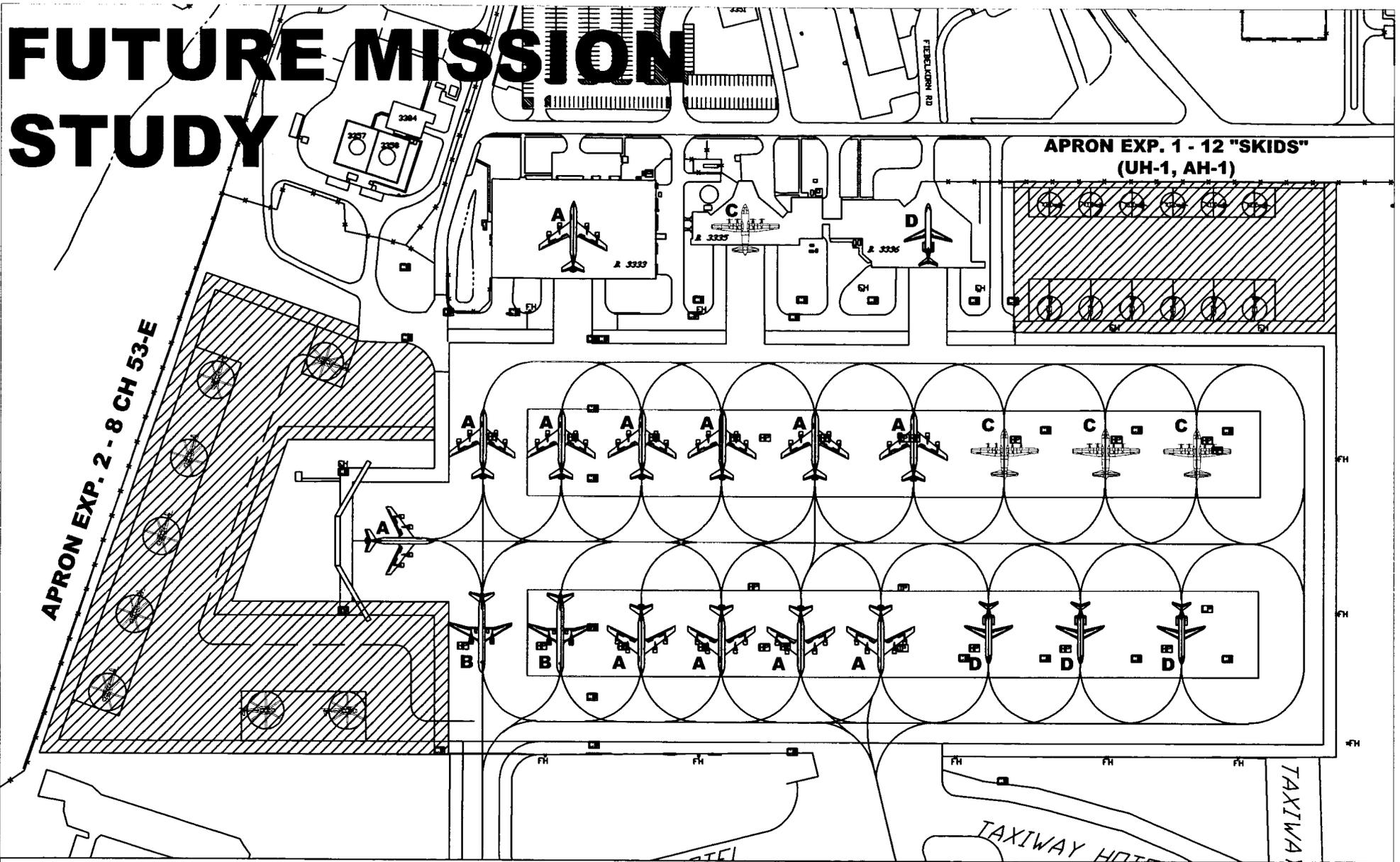
APRON EXPANSION 1 - 182,500 SF
 APRON EXPANSION 2 - 306,700 SF
 TOTAL APRON EXPANSION - 489,200 SF

AIRCRAFT IDENTIFIER:

A - KC-135 R E - CH 53 E
 B - C 32 B
 C - C 130
 D - C-9

NOTE: SKIDS ARE IDENTIFIED ON SITE PLAN

FUTURE MISSION STUDY



FUTURE MISSION - SCHEME 2 - LEGEND:

APRON REQUIREMENTS:

APRON EXPANSION 1 - 182,500 SF
 APRON EXPANSION 2 - 430,200 SF
 TOTAL APRON EXPANSION - 612,700 SF

AIRCRAFT IDENTIFIER:

A - KC-135 R
 B - C 32 B
 C - C 130
 D - C-9

NOTE: HELICOPTERS ARE IDENTIFIED ON SITE PLAN