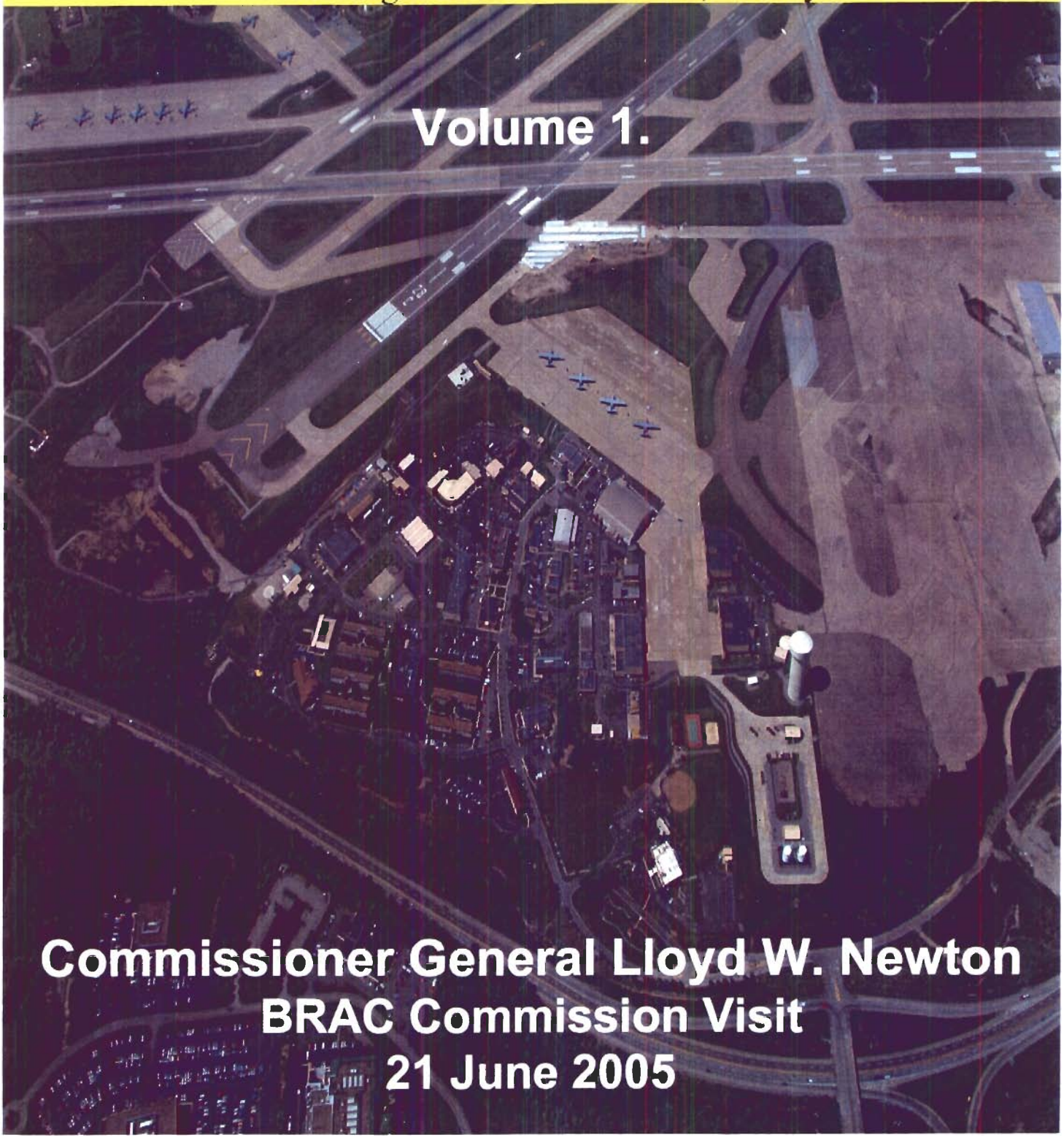
DCN 4270

103-06A –AF32 – Base Input
Air Force – Pittsburgh International Airport Air Reserve Station-PA
BRAC COMMISSION – FY 2005
COFF:_____ DISPOSITION: Permanent

911th Airlift Wing

Pittsburgh Air Reserve Station, Pennsylvania



Volume 1.

Commissioner General Lloyd W. Newton
BRAC Commission Visit
21 June 2005

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DEPARTMENT OF THE AIR FORCE
Air Force Reserve Command
911th Airlift Wing

21 June 2005

Dear Commissioner Lloyd W. Newton,

On behalf of the men and women of the 911th Airlift Wing, WELCOME to the Pittsburgh Air Reserve Station. I trust your stay will be productive and that you will find time to enjoy some of the many sights and activities that the local area has to offer. If there is anything that my staff or I can do to make your visit more enjoyable, please let us know by calling Ann Morrocco, (412) 474-8506 or Capt Geno D'Amico, (412) 474-8507.

CARL E. VOGT, Colonel, USAFR
Commander

BIOGRAPHY

UNITED STATES AIR FORCE

COLONEL CARL E. VOGT

Colonel Carl E. Vogt is Commander of the 911th Airlift Wing, Pittsburgh International Airport Air Reserve Station, Coraopolis, PA. As installation commander, he is the senior officer responsible for the wing organization, which includes authorized manning of 1,275 Air Force Reserve members and approximately 320 civilian employees (including more than 180 dual-status air reserve technicians)

Colonel Vogt was born in Michigan and graduated with a Bachelor of Arts degree from Michigan State University and a Master's in Business Administration from Southern Illinois University. He was commissioned through Officers Training School at Lackland AFB, TX. Upon graduation from Navigator School, Colonel Vogt was assigned to Travis AFB, CA, where he compiled over 3,300 hours worldwide in the C-141A and became an initial cadre instructor on the C-141B.

Colonel Vogt transitioned into the Air Reserve Technician program with the HC-130H Search and Rescue unit at March AFB, CA. He then became the first fixed wing airman assigned to the newly formed composite rescue unit at Portland Air National Guard Base, OR. His next assignment was to Willow Grove ARS, PA. as the Operation Training Officer and later as the Group's Director of Operations. Upon his selection to Colonel, he was reassigned to the 94th AW, Dobbins ARB, GA. as the Operations Group Commander. In 1995, he was reassigned to 22nd Air Force as the Chief of Operations Support with oversight of 15 reserve flying wings. In September 1998, he returned to active duty as the Reserve Advisor to the Commander of Air Force Special Operations Command (AFSOC) at Hurlburt Field, FL. As the Reserve Advisor, his primary duties were to advise the Commander and headquarters staff on Reserve and Guard matters related to preparing Air Reserve component units gained by AFSOC during mobilization or employed in contingency operations. Colonel Vogt has accumulated over 8,500 military flight hours in the C-141A/B, KC-135E, C-17, C-5A, HC-130H, C-130E/H and MC-130P.

Colonel Vogt was appointed Commander of the 911th Airlift Wing on July 14, 2002.

EDUCATION:

1971 Bachelor of Arts Degree in Marketing, Michigan State University
1976 Master's in Business Administration, Southern Illinois University
198 Air Command and Staff College
4
1989 National Security Management

ASSIGNMENTS:

1. October 1971-August 1972, T-29B student Navigator, Mather Air Force Base, CA.
2. August 1972-November 1972, Aircrew Training at Homestead Air Force Base, FL.; Altus Air Force Base, OK; and Fairchild Air Force Base, WA.
3. November 1972-August 1977, C-141 A/B Instructor Navigator, 7th Military Airlift Squadron, Travis Air Force Base, CA.
4. August 1977-December 1977, C-141 A/B Instructor Navigator, 301st Military Airlift Squadron (A), Travis Air Force Base, CA.
5. December 1977-October 1985, HC-130H Flight Examiner Navigator, 303rd Aerospace Rescue and Recovery Squadron, March Air Force Base, CA.
6. October 1985-November 1985, Chief Navigator Examiner, 304th Aerospace Rescue and Recovery Squadron, Portland Air National Guard Base, OR.
7. November 1985-January 1991, Director of Operations, 913th Airlift Group, Willow Grove Air Reserve Base, PA.
8. January 1991-August 1995, Operation Group Commander, 94th Airlift Wing, Dobbins Air Reserve Base GA.
9. June 1995-August 1998, Chief Operations Support, 22nd Air Force, Dobbins Air Reserve Base, GA.
10. September 1998-July 2002, Reserve Advisor to Air Force Special Operations Command, Hurlburt Field, FL.
11. July 2002-present, Commander, 911th Airlift Wing, Pittsburgh International Airport Air Reserve Station, Coraopolis, PA.

FLIGHT INFORMATION:

Rating:	Master Navigator
Flight Hours:	8500
Aircraft	C-141A/B, KC-135E, C-17, C-5A, H/M/C-130E/P

MAJOR AWARDS AND DECORATIONS:

Bronze Star Medal
Meritorious Service Medal with 2 OLCs
Air Force Commendation Medal with 1 OLC
Air Force Outstanding Unit Award with 1 OLC
AF Organizational Excellence Award with 1 OLC
Combat Readiness Medal with 2 OLCs

EFFECTIVE DATES OF PROMOT

Second	Oct.7, 1971
First Lieutenant	April 7, 1973

Captain	Oct. 7, 1976
Major	May 11, 1983
Lieutenant	Sept. 30, 1987
Colonel	Sept. 1, 1991

Commissioner Newton, Dr. Flinn, Congressional, State, Community leaders, and members of the 911th Airlift Wing, Good Morning.

Pittsburgh holds a close and dear relationship to the events that precipitated the nation's Global War on Terrorism. While United Flt 93 reversed course and began over flying "the Burgh," community leaders, gathered in Region 13's Command Center, to prepare for the worse. Simultaneously, ordinary, unarmed US citizens initiated America's first response with the command, "Let's roll." Their courage and sacrifice prevented a much greater catastrophe. This photo of the 911th Wing's lead aircraft of a 3-ship fly-by commemorates the anniversary of Flt 93's crash in Somerset, PA and the heroism of passengers onboard. The 911th Airlift Wing is proud to continue in America's offense and defense –an attribute of military value that is simply un-measurable.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Welcome to the 911th Airlift Wing

BRIEFING BULLET:

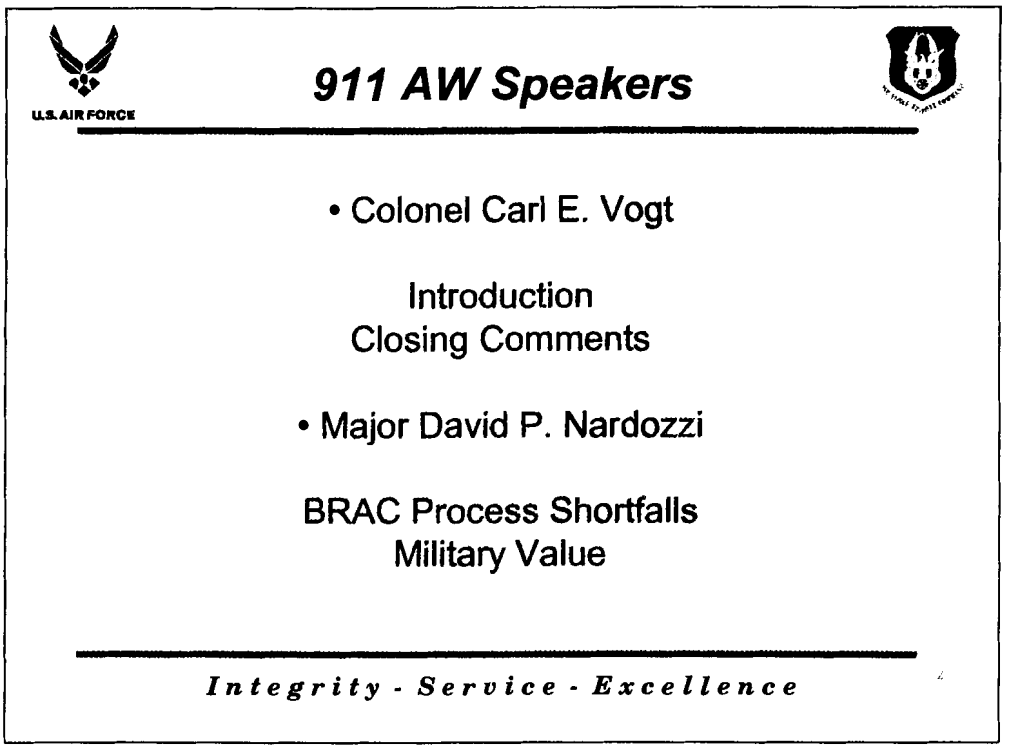
- Commissioner Lloyd "Fig" Newton
- BRAC Briefing
- 21 June 2005

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



There are, however, other factors of military value that can be measured. Some of these have been correctly reported to you, several crucial factors are inaccurately reported or undervalued, and others are not measured at all.

The purpose of this briefing is to offer for your consideration measures of military value we believe have gone under reported.

I will open and close the briefing, and Major David Nardozzi will discuss the recommendations and inaccuracies in detail .

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing Speakers

BRIEFING BULLET:

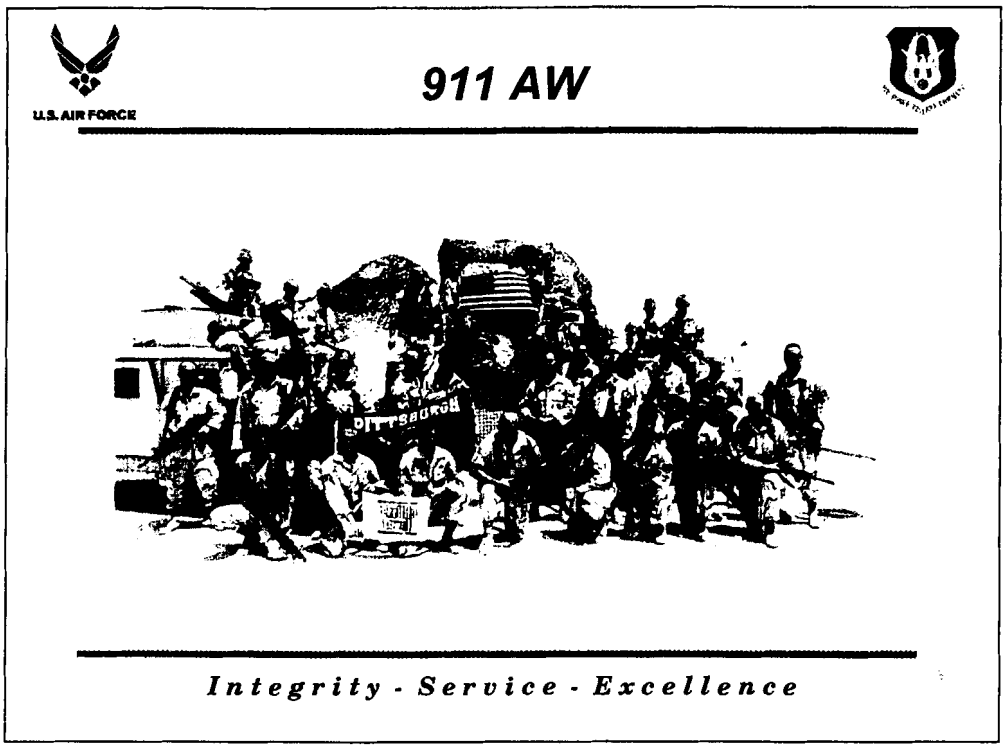
- Colonel Carl E. Vogt
  - Introduction
  - Closing Comments
- Major David P. Nardozzi
  - BRAC Process Shortfalls
  - Military Value

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



I specifically selected today's Uniform of Day to be the desert flight flight/DCU to highlight those who have or are currently serving the nation in extended tour deployments to the AOR. Individually we are proud of our service, and I, as the commander, am immensely proud of this Wing's commitment to the nation. Over 54% of my military personnel have served in these uniforms since 9-1-1, not just the airmen of the unit, but leadership, as well, most notably, Col Dennis Ployer, my Vice, who served with distinction as Commander of Baghdad AB, Iraq. Many other commanders have voluntarily deployed including Col Chuck Boivin, commander of the Mission Support Group who deployed twice, Lt Col Ken Honaker, Mx Group Commander, along with many of the Unit's Deputies, numerous Squadron Commanders and 1st Sgts.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing

BRIEFING BULLET:

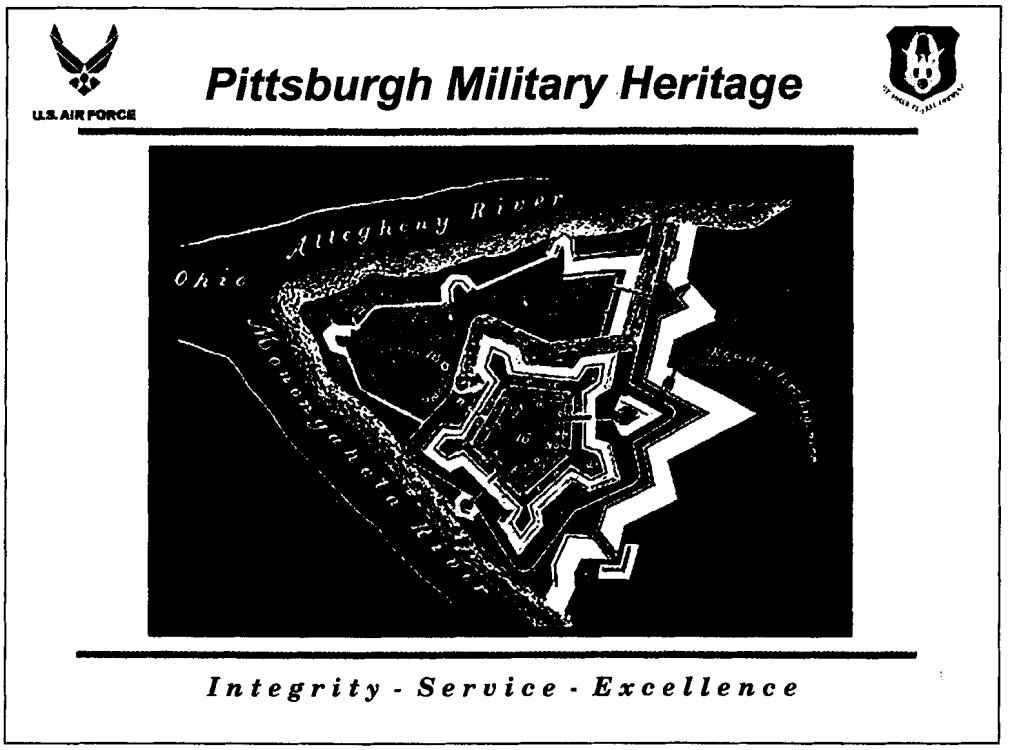
- Introduction

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



Pittsburgh's rich military history begins before the formation of our nation. In 1754, then Colonial Major George Washington directed musket fire in the thick woods nearby what would later become the City of Pittsburgh. This exchange initiated an earlier Global War. In the colonies, it was called the French and Indian War, but in Europe, the High Seas, India and elsewhere it was known as the 7 Years War –a war of truly global magnitude. A century later it was south of Pittsburgh that General Lee suffered his first major defeat of the Civil War, a defeat supported by the north's largest armory in nation located in Pittsburgh. Another century later it was the 99th Infantry Division from "the Burgh" that steadfastly defended the Elsenborn Ridge –the north shoulder in the Battle of the Bulge- against repeated and violent assaults as Germany exhausted its military might. And today, it is this very same fidelity, this combat heritage, that courses through the veins of reserve Pittsburgh soldiers and airmen in yet another Global War. Combat heritage runs deep and long in Pittsburgh, home of the second largest population of veterans in the nation. Though much of this briefing focuses on flawed measures of capacity, property and metrics, the undervalue of people, Pittsburgh's demographics, heritage, and grass roots support, that truly misses the mark in projecting future military value.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Pittsburgh Military Heritage

BRIEFING BULLET:

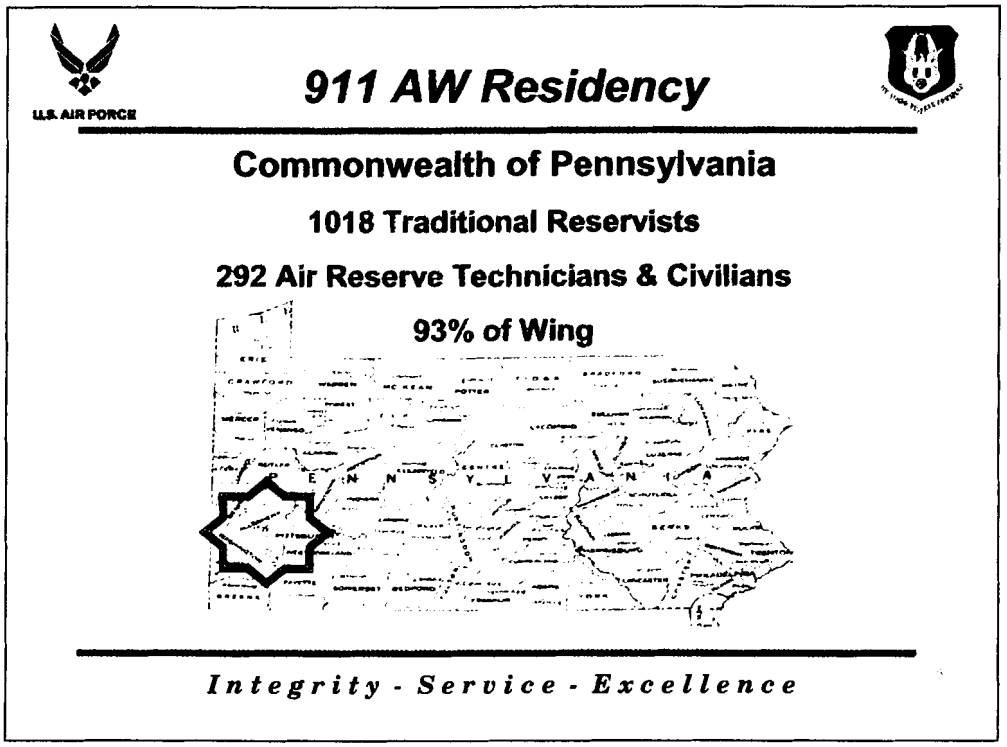
- Drawing of Pittsburgh

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



Of the over 1400 reservists, ARTs and civilians who make up the 911th Wing, 93% reside in Pennsylvania – predominantly in the southwestern counties. The are integral leaders of the communities:

-Deacons in our houses of worship

-Members of School Boards

-Scoutmasters & Troop leaders

-Board members of numerous charities

-Soccer and Little League coaches

-And they are elected officials not unlike State Senator John Pippy who mobilized for OIF with the Army.

-Reserve Component personnel are inherent organic resources ingrained into the communities they comprise.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing Residency

BRIEFING BULLET:

- Commonwealth of Pennsylvania
  - 1018 Traditional Reservists
  - 292 Air Reserve Technicians and Civilians
  - 93% of Wing Personnel

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): Captain Steven Miner

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a

The 911th possesses a standard C-130 mission statement. But the real emphasis has been and is ... on DEPLOY. The 911th Wing is an integral, reliant and relevant part of the Air Force's global mission. Although we are composed predominantly of reservists – part-timers whose primary income source is within the local community, we are not weekend warriors. None are here solely for educational benefits. Members of this Wing live and work in the greater Pittsburgh area and possess a patriotic love of country that calls them to serve, day after day, throughout the entire year. And particularly since the first Gulf War, they have deployed, time and time again, fulfilling Air Expeditionary Force requirements around the globe.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Mission

BRIEFING BULLET:

- Train Air Force Reservists
- Provide Airdrop and Airland Resupply
- and Deploy

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a

U.S. AIR FORCE

Post 9/11 Deployments

Noble Eagle - Palmetto Ghost - OIF / OEF - Joint Forge - Coronet Oak

Iraq	Afghanistan
Saudi Arabia	Kuwait
Puerto Rico	Egypt
Pakistan	Italy
Spain	Kosovo
Kyrgyzstan	Qatar
Columbia	England
Bahrain	U.A.E.
Germany	Turkey
Djibouti	Oman

Integrity - Service - Excellence

As testament of our commitment since Sept 11, 2001... this slide tells the story by itself.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Post 9/11 Deployments

BRIEFING BULLET:

- Post 9/11 Deployments

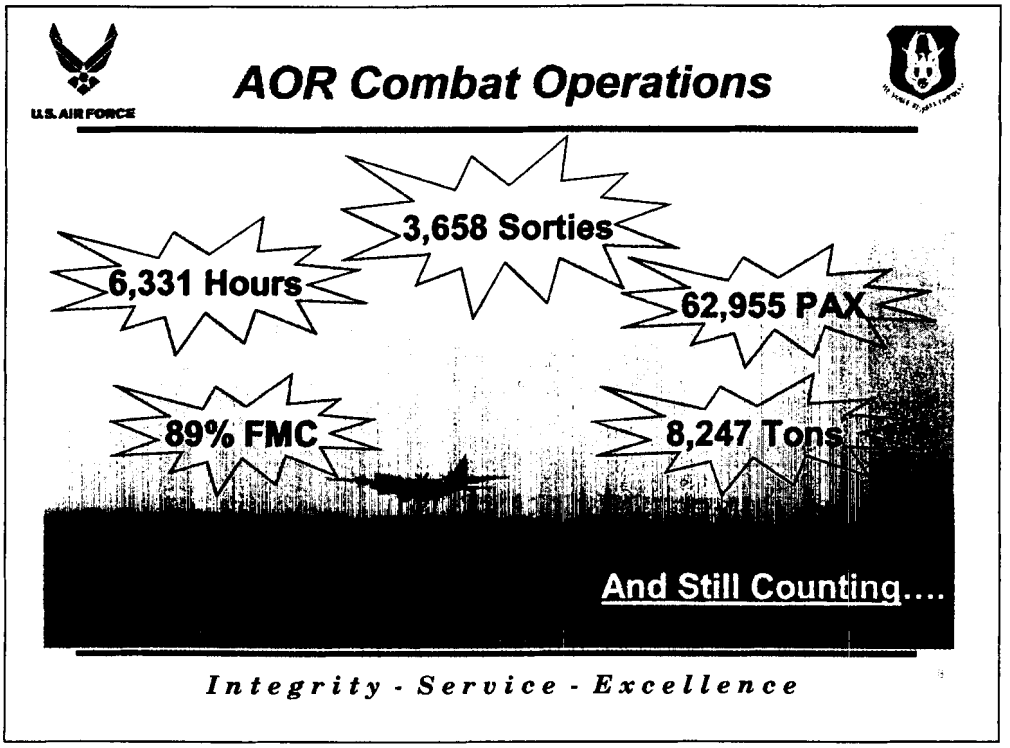
BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS:

- Examples of Post 9/11 Operations and countries deployed to:
  - Noble Eagle
  - Palmetto Ghost
  - OIF/OEF
  - Joint Forge
  - Coronet Oak
  - Iraq
  - Saudi Arabia
  - Puerto Rico
  - Pakistan
  - Bahrain
  - Afghanistan
  - Egypt
  - Kosovo
  - Qatar
  - Turkey
  - Oman

SUPPORTING DOCUMENTATION: n/a



And since the aviation package was mobilized in Dec of 2003, here is a short list of the flyers' and maintainers' accomplishments.

In the meantime, those who were at home station have successfully completed an

- AMC Inspector General exercise (IGX),

- a Maintenance Standardization & Evaluation Program visit,

- a Staff Assistance Visit,

- an AMC Aircrew Stan/Eval Visit and,

- an AMC Readiness Assistance Team assessment which completed our Expeditionary Operational Readiness Inspection cycle.

- We also hosted an Air Show to an audience of some 200,000.

- And, of course, we responded to the Department's multiple BRAC Data Calls involving several thousand questions.

These accomplishments, this character of people of the 911th were not factors in the Department's BRAC analysis.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AOR Operations

BRIEFING BULLET:

- Area of Responsibility Operations

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): Major David P. Nardozzi, SMSgt Gregory Gogets, MSgt David Riley

SUPPORTING ANALYSIS:

- 3,658 Sorties
- 6,331 Hours
- 62,955 PAX
- 89% FMC
- 8,247 Tons

SUPPORTING DOCUMENTATION: 2 Pages

911TH AW BRAC Commissioner's Briefing
DATA CARD

SUPPORTING ANALYSIS:

911th Operations Group
Hours, sorties, pax, and tons flown by 911th AW crews
Dec 03 - Nov 04

Month	Hours	Sorties	Pax	Tons
Stats for Site 1 & 3				
Dec	228	200	4,816	176
Jan	470	368	9,381	384
Feb	312	242	2,410	350
Mar	248	165	2,426	310
Apr	298	224	1,753	444
May	341	190	1,818	313
Jun	164	110	1,474	142
Jul	168	117	3,461	156
Aug	323	197	4,303	1,313
Sep	255	171	7,224	306
Oct	287	198	7,036	364
Nov	204	154	2,655	300
Dec	120	84	1,702	157
Jan	137	64	564	237
Feb	500	241	2,636	706
Mar	585	253	2,763	630
Apr	539	238	2,492	667
May	280	119	1,480	297
Sub-total	5,459	3,335	60,394	7,252
1.5 Year totals Sites 1/3	5,459	3,335	60,394	7,252
Joint Forge				
Jan	67	21	117	51
Nov - Dec Forge	288	105	818	314
Aug Forge - Est	257	97	826	330
Coronet Oak - Est	260	100	800	300
Deployment Total	6,331	3,658	62,955	8,247

911TH AW BRAC Commissioner's Briefing
DATA CARD

Deployed FMC Rates

MONTH	A/C 410	A/C 411	A/C 412	A/C 413	A/C 414	A/C 415	A/C 418	A/C 419
Dec-03	96.98		88.19	97.28	99.26		81.13	
Jan-04	98.08		71.75	62.2	83.48		95.12	
Feb-04	58.05		98.66	86.09	94.12		97.51	
Mar-04			93.27	95.15	97.5	92.66		
Apr-04			74.49	100	85.63	95.57		
May-04	100	97.86	83.66	73.05		93.91		
Jun-04	91.22	97.92					81.5	97.14
Jul-04	94.89	96.65					72.82	99.83
Aug-04	79.95	81.21	86.36				93.15	92.38
Sep-04			38.78				95.97	96.33
Oct-04	92.47		94.65					
Nov-04	79.78		76.69					
Dec-04	94.96			89.61				
Jan-05	76.29			95.11				93.71
Feb-05				94.18			95.55	93.62
Mar-05				94.27			97.14	93.21
Apr-05							62.65	65.22
May-05								
AVER	87.51545	93.41	80.65	88.694	91.998	94.04667	87.254	91.43

TOTAL AVERAGE FOR ALL DEPLOYED A/C	
89.37477	

This slide highlights just a very few of the many unit and individual awards.

For the individual awards it was:

Major Judith P. Patton – Administrative Excellence Award

TSgt Rudy M. McCallister – Outstanding Life Support NCO

Major Charles E. Sargent – Life Support Officer of the Year

Captain Richard D. Frye – Services Company Grade Officer of the Year

These are all accomplished by people, not things

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Award Highlights

BRIEFING BULLET:

- Unit and Individual Awards

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): Captain Steven C. Miner

SUPPORTING ANALYSIS:

- Major Judith P. Patton – 2004 Donald B. Wagner Administrative Excellence Award
- TSgt Rudy M. McCallister – 2003 22nd Air Force Outstandinng Life Support Non-Commissioned Officer
- Major Charles E. Sargent – 2003 and 2004 22nd Air Force Life Support Officer of the Year
- Captain Richard D. Frye – 2003 Air Force Reserve Command Services Company Grade Officer of the Year

SUPPORTING DOCUMENTATION: 1 Page

Bosley Adrian Maj 911 OSF/IN

From: Miner Steven Capt 911 MSF/CC
Sent: Saturday, June 18, 2005 3:20 PM
To: Bosley Adrian Maj 911 OSF/IN

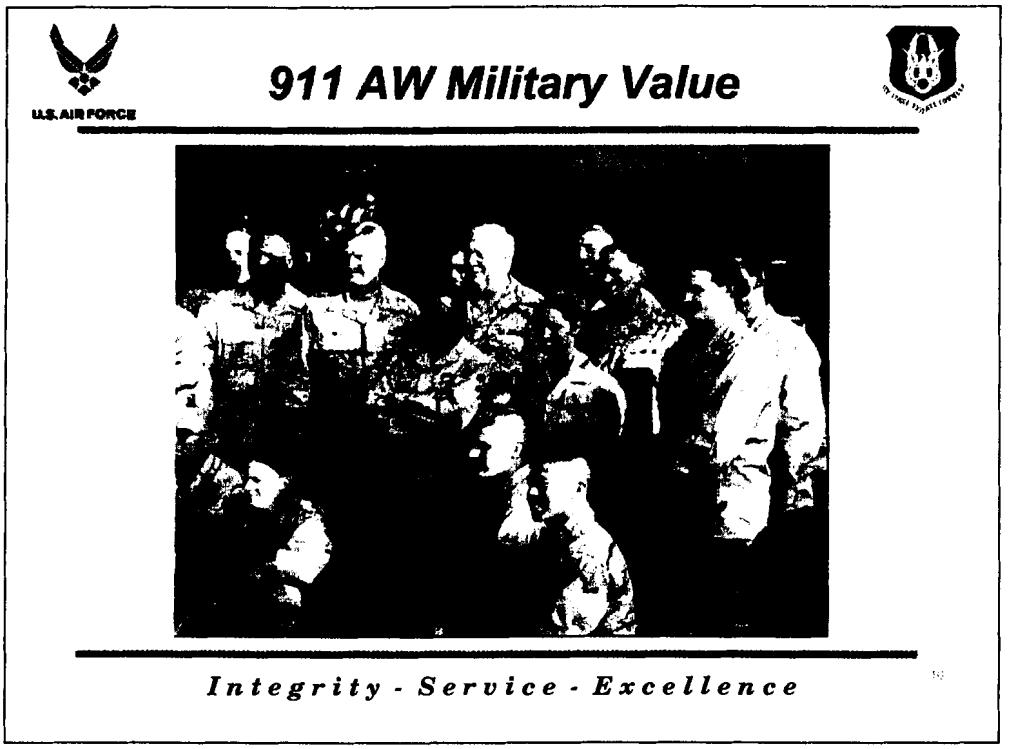
Major Judith P. Patton – 2004 Donald B. Wagner Administrative Excellence Award

TSgt Rudy M. McCallister – 2003 22nd AF Outstanding Life Support Non-Commissioned Officer

Major Charles E. Sargent – 2003 & 2004 22nd AF Life Support Officer of the Year

Captain Richard D. Frye – 2003 AFRC Services Company Grade Officer of the Year

//SIGNED//
Steven C. Miner, Capt
Commander, 911 MSF



This photo, taken in the desert, further emphasizes our aircraft, the heritage displayed in its nose art, the uniqueness of our designation, and the desire of our own people... and that of others to be associated with the 911th.

This concludes my introduction to our briefing.

Let me turn the next portion over to Major David Nardozzi.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing Military Value

BRIEFING BULLET:

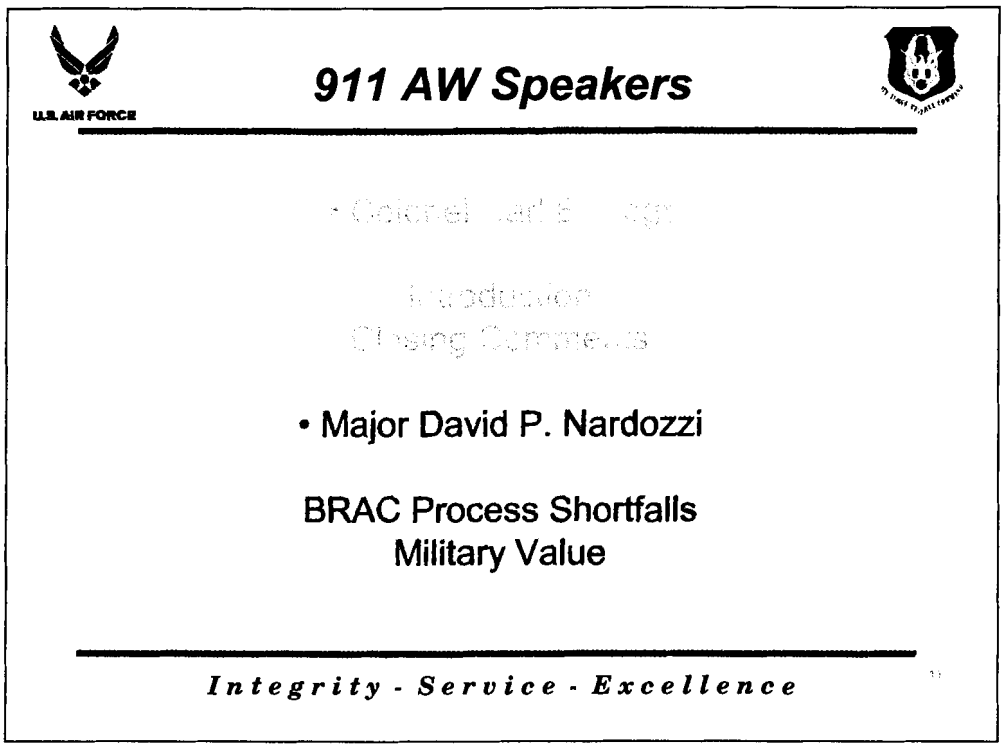
- Military Value

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



Good Morning Commissioner Newton, Dr. Flinn and Distinguished Guests.

My portion of the briefing will be presented in two sections, BRAC Process Shortfalls and our Military Value here at the 911th.

The BRAC Process Shortfalls will address the errors in those areas that were measured in the analysis, and the Military Value will address the areas not measured at all.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing Speakers

BRIEFING BULLET:

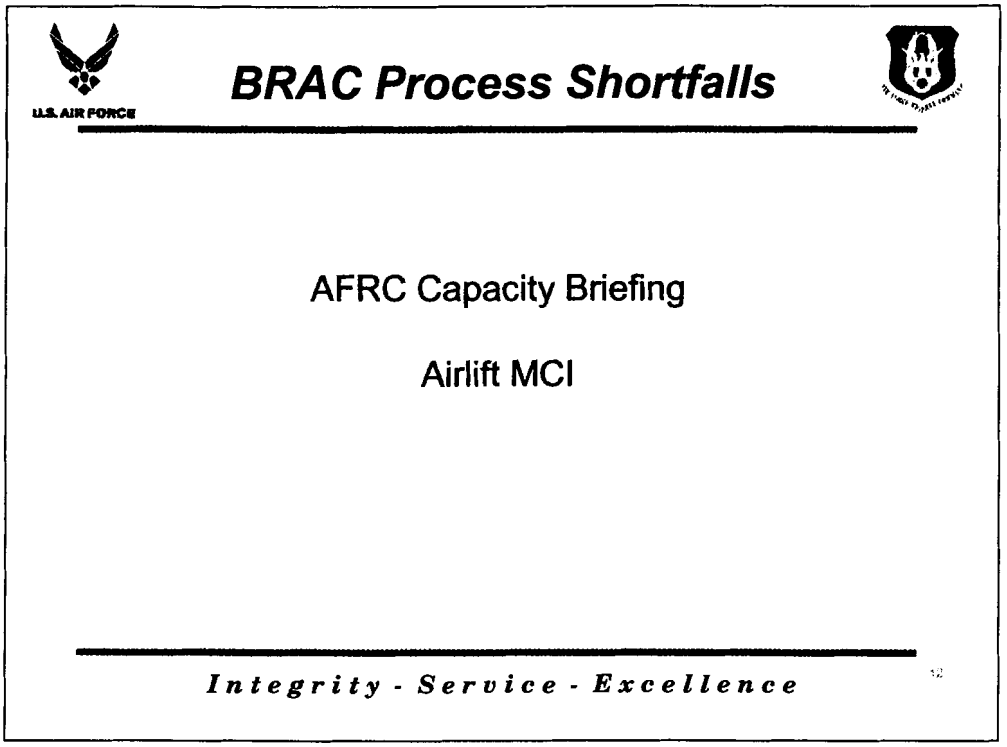
- Colonel Carl E. Vogt
  - Introduction
  - Closing Comments
- Major David P. Nardozzi
  - BRAC Process Shortfalls
  - Military Value

BRIEFER: Colonel Carl E. Vogt

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



The Process part of my brief is also broken up into two sections, the AFRC Capacity Briefing and a look at the Airlift Mission Capability Index (MCI).

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: BRAC Process Shortfalls

BRIEFING BULLET:

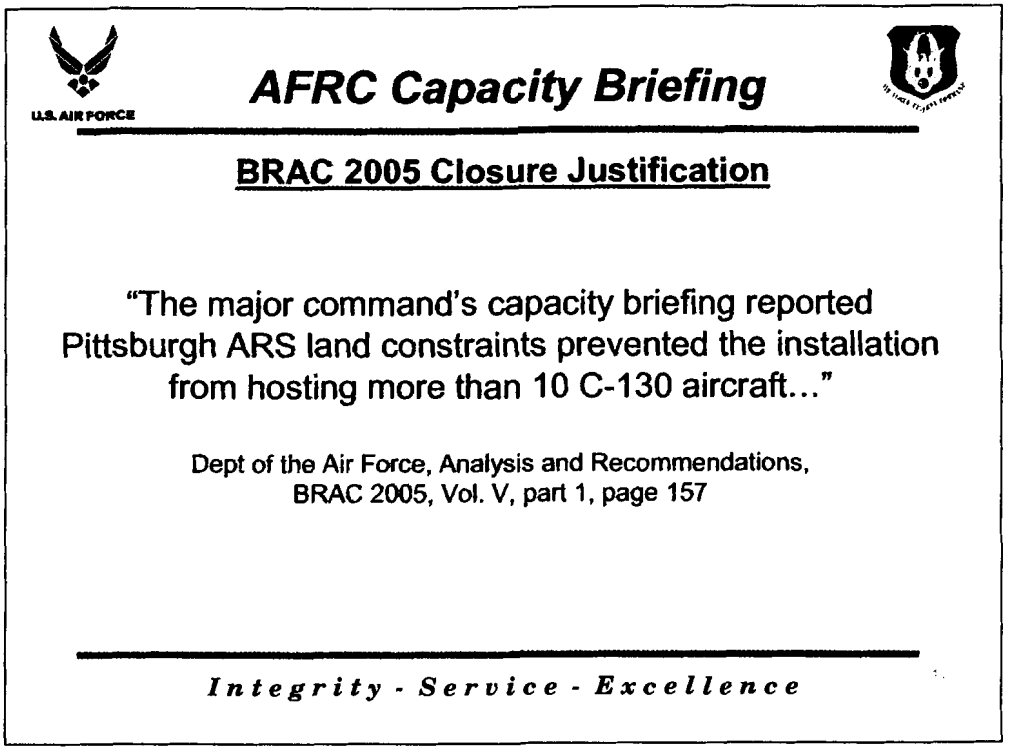
- AFRC Capacity Briefing
- Airlift MCI

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



"The major command's capacity briefing reported Pittsburgh ARS land constraints prevented the installation from hosting more than 10 C-130 aircraft..."

That is the closure justification for our base as stated in the Dept of the AF BRAC 2005 Recommendations. The capacity brief also states that land is a "Showstopper" for our Wing.

That means that even if we scored 100% on all MCIs, we would still be on the list.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- BRAC 2005 Closure Justification

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS:

- Attached copy of Department of the Air Force, Analysis and Recommendations BRAC 2005, Vol V, part 1, pg 157

SUPPORTING DOCUMENTATION: 1 Page

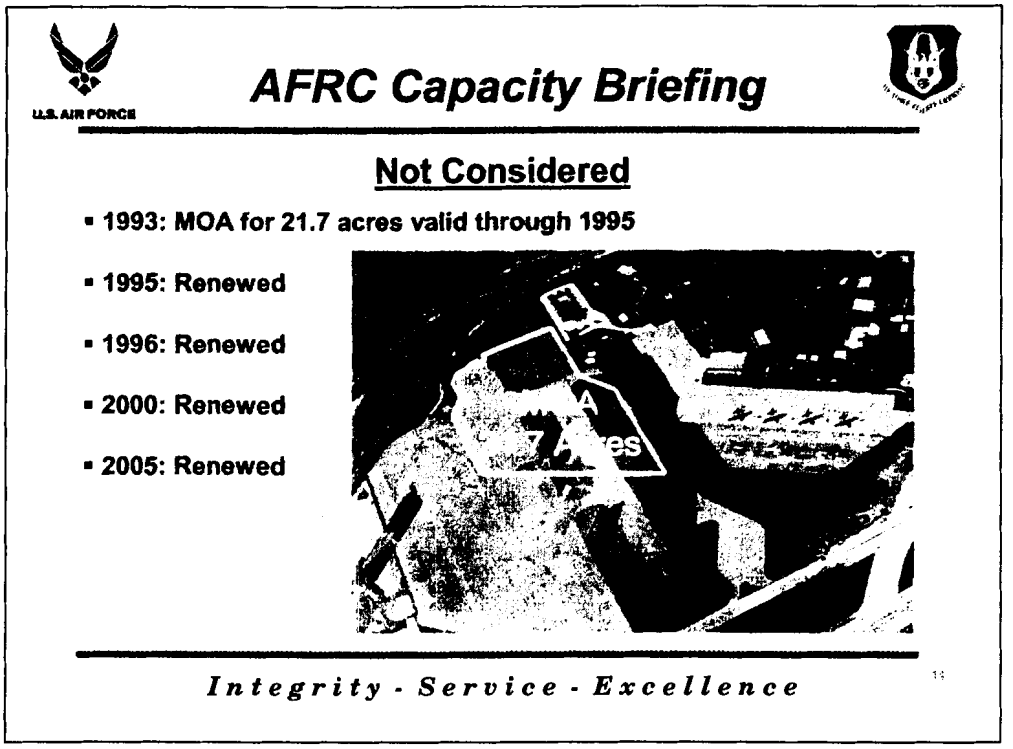
Pope Air Force Base, NC Pittsburgh International Airport Air Reserve Station, and Yeager Air Guard Station, WV, Little Rock Air Force Base, AR

Recommendation: Realign Pope Air Force Base (Air Force Base), North Carolina. Distribute the 43d Airlift Wing's C-130E aircraft (25 aircraft) to the 314th Airlift Wing, Little Rock Air Force Base, Arkansas; realign the 23d Fighter Group's A-10 aircraft (36 aircraft) to Moody Air Force Base, Georgia; transfer real property accountability to the Army; disestablish the 43rd Medical Group and establish a medical squadron. At Little Rock Air Force Base, Arkansas, realign eight C-130E aircraft to backup inventory; retire 27 C-130Es; realign one C-130J aircraft to the 143d Airlift Wing (ANG), Quonset State Airport Air Guard Station, Rhode Island; two C-130Js to the 146th Airlift Wing (ANG), Channel Islands Air Guard Station, California; and transfer four C-130Js from the 314th Airlift Wing (AD) to the 189th Airlift Wing (ANG), Little Rock Air Force Base.

Realign Yeager Airport Air Guard Station (AGS), West Virginia, by realigning eight C-130H aircraft to Pope/Fort Bragg to form a 16 aircraft active duty/Reserve associate unit, and by relocating flying-related expeditionary combat support (ECS) to Eastern West Virginia Regional Airport/Shepherd Field AGS (aerial port and fire fighters). Close Pittsburgh International Airport (IAP) Air Reserve Station (ARS), Pennsylvania and relocate 911th Airlift Wing's (AFRC) eight C-130H aircraft to Pope/Fort Bragg to form a 16 aircraft active/reserve associate unit. Relocate AFRC operations and maintenance manpower to Pope/Ft. Bragg. Relocate flight related ECS (aeromedical squadron) to Youngstown-Warren Regional APT ARS. Relocate all remaining Pittsburgh ECS and headquarters manpower to Offutt Air Force Base, Nebraska. Air National Guard units at Pittsburgh are unaffected.

Justification: Downsizing Pope Air Force Base takes advantage of mission-specific consolidation opportunities to reduce operational costs, maintenance costs and the manpower footprint. The smaller manpower footprint facilitates transfer of the installation to the Army. Active duty C-130s and A-10s will move to Little Rock (17-airlift) and Moody (11-SOF/CSAR), respectively, to consolidate force structure at those two bases and enable Army recommendations at Pope. At Little Rock, older aircraft are retired or converted to back-up inventory and J-model C-130s are aligned under the Air National Guard. Little Rock grows to become the single major active duty C-130 unit, streamlining maintenance and operation of this aging weapon system. At Pope, the synergistic, multi-service relationship will continue between Army airborne and Air Force airlift forces with the creation of an active duty/Reserve associate unit. The C-130 unit remains as an Army tenant on an expanded Ft. Bragg. With the disestablishment of the 43rd Medical Group, the AF will maintain the required manpower to provide primary care, flight and occupational medicine to support the Air Force active duty military members. The Army will maintain the required manpower necessary to provide primary care, flight and occupational medicine to support the Army active duty military members. The Army will provide ancillary and specialty medical services for all assigned Army and Air Force military members (lab, x-ray, pharmacy, etc).

The major command's capacity briefing reported Pittsburgh ARS land constraints prevented the installation from hosting more than 10 C-130 aircraft and Yeager AGS cannot support more than eight C-130s. Careful analysis of mission capability indicates that it is more appropriate to



Land *is* the issue. We have access to land that was not considered, however.

In 1993, AFRC and Allegheny County entered and signed a Memorandum of Agreement for 21.7 acres that was formerly part of the old Airport Terminal. The agreement was valid through 1995.

In 1995, it was renewed. In 1996, it was renewed again. In 2000, it was renewed a third time.

This year, it was renewed again, and is valid through 2009. The County has offered to make the expiration indefinite, but AFRC can only approve it in five year increments.

What is important here is that we have used that pavement for 12 years, and AFRC and the County have signed it five times over.

It is worth mentioning that Data Call questions for the BRAC allowed such Ramps to be counted for MCI analysis purposes. I will address this later in my brief.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- Not Considered
  - 1993: MOA for 21.7 acres valid through 1995
  - 1995: Renewed
  - 1996: Renewed
  - 2000: Renewed
  - 2005: Renewed

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Mr. Robert Moeslein

SUPPORTING ANALYSIS:

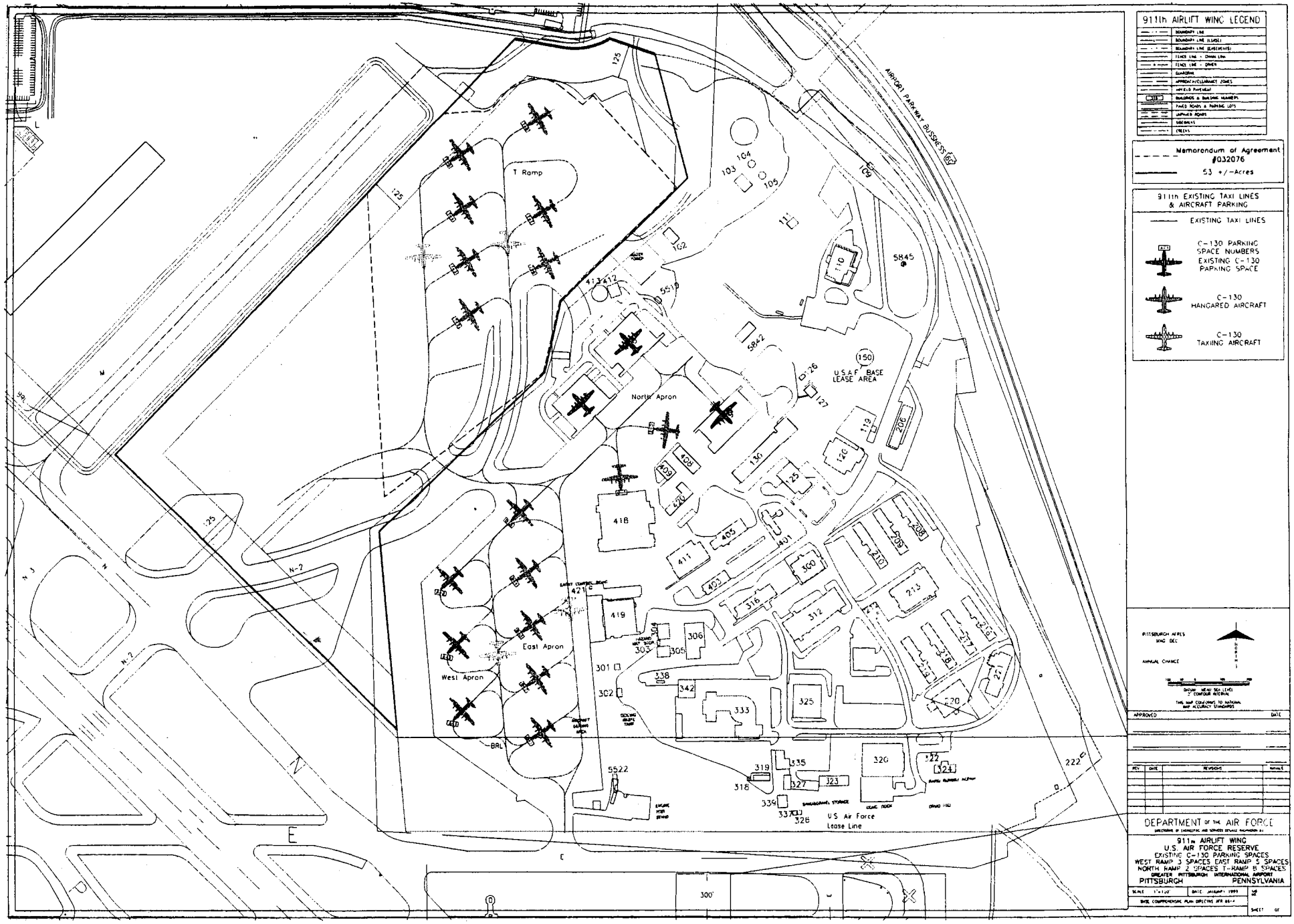
- Point Paper
  - Pittsburgh IAP ARS Land Offer and MOA Property History
- Memorandum of Agreement
  - Agreement No. 032076
- Supplement Agreement No. 2
- Supplement Agreement No. 3
- Supplement Agreement No. 4

SUPPORTING DOCUMENTATION: 16 Pages

Memorandum of Agreement

Agreement No. 032076

- Temporary Aircraft Parking Apron
- ± 21.7 acres of concrete/asphalt apron pavement
- Executed 3 February 1993 (2 yr. term, 3/93-3/95)
  - Supplement 1 (2 yr. term, 3/95-12/96)
  - Supplement 2 (4 yr. term, 1/96-12/99)
  - Supplement 3 (5 yr. term, 1/00-12/04)
  - Supplement 4 (5 yr. term, 1/05-12/09)
- Signed by Executive Director, Allegheny County Airport Authority and The Civil Engineer, Air Force Reserve Command
- Grants temporary use of the old Allegheny County commuter apron to AFRC for the purpose of parking five or more C-130 military aircraft *during apron repairs and construction of a deicing pad, water storage tank and jet fuel storage complex.*
- Grants use of County access road to subject property


911th AIRLIFT WING LEGEND
Memorandum of Agreement #032076
53 +/- Acres
911th EXISTING TAXI LINES & AIRCRAFT PARKING
EXISTING TAXI LINES
C-130 PARKING SPACE NUMBERS EXISTING C-130 PARKING SPACE
C-130 HANGARED AIRCRAFT
C-130 TAXIING AIRCRAFT
T Ramp
North Apron
East Apron
West Apron
U.S.A.F. BASE LEASE AREA
U.S. Air Force Lease Line
AIRPORT PARKWAY (BUSINESS 60)
DEPARTMENT OF THE AIR FORCE
911th AIRLIFT WING
U.S. AIR FORCE RESERVE
EXISTING C-130 PARKING SPACES
WEST RAMP 3 SPACES EAST RAMP 5 SPACES
NORTH RAMP 2 SPACES T-RAMP 11 SPACES
GREATER PITTSBURGH INTERNATIONAL AIRPORT
PITTSBURGH PENNSYLVANIA

POINT PAPER

PITTSBURGH IAP ARS LAND OFFER AND MOA PROPERTY HISTORY

Purpose:

Provide a summary of the history of Airport property that has been offered to the 911 AW as far as back as 1994, as well as the Memorandum of Agreement (MOA) property that has been used by the Wing since 1993

Discussion:

- Land Offer

-- When Allegheny County moved into the new terminal, discussions began on what to do with the old terminal property adjacent to the 911 AW

-- Over time, the exact acreage and boundaries of the land changed, but generally stayed the same

-- Below is a timeline of the land offer:

--- Early 1990's (no documentation): First discussion of 911 AW expansion during construction of new Pittsburgh Airport Terminal

--- Nov 1994: Allegheny County makes first official offer of additional ramp space for the base

--- May 1996: BG Bradley, then Deputy to the Chief of Air Force Reserve, declines the offer of new land

"My Headquarters plans and programs staff did an analysis of present and future operational requirements and found no requirement for additional land at Pittsburgh ARS."

--- Feb 1998: BG Bradley re-addresses and declines offer when asked again by County

"...AF Reserve has not changed its position...Pittsburgh ARS has no new mission requirements that would require the acquisition of any new land..."

--- Sep 1998: AFRC responds to Congressman Murtha inquiry about the land:

"...existing property (at Pittsburgh ARS) is adequate to support existing mission...no additional missions are planned in the foreseeable future..."

--- BRAC 2005: Department of the Air Force Analysis and Recommendations, Volume V, Part 1, page 157 states:

"The major command's capacity briefing reported Pittsburgh ARS land constraints prevented the installation from hosting more than 10 C-130 aircraft..."

--- Jun 2005: Allegheny County Airport Authority again officially offers 53 acres of property for 911 AW expansion

- MOA

-- Separate from the land offers, a MOA granting the use of 21.7 acres for 911 AW C-130 aircraft during ramp repairs of 911 AW main ramp was created

-- The MOA and Supplements were all signed by AFRC

-- It appears (our inquiries to AFRC, AF & DoD have not been answered) that the MOA property was not counted in the major command capacity briefing, which reported our C-130 parking capacity as 10 (instead of 20) in Vol V, page 157

-- The MOA property is co-located with the 53 acre land offer addressed above

-- Below is a timeline of the MOA:

-- Feb 1993: Original MOA, with an expiration date of 31 Dec, 1995

-- Jul 1995: Supplement Agreement No. 1, extending the agreement to 31 Dec, 1996

-- Nov 1996: Supplement Agreement No. 2, extending the agreement to 31 Dec, 1999

-- Aug 2001: Supplement Agreement No. 3, extending the agreement to 31 Dec, 2004

-- Mar 2005: Supplement Agreement No. 4, extending the agreement to 31 Dec, 2009

MEMORANDUM OF AGREEMENT BETWEEN
ALLEGHENY COUNTY AND THE UNITED STATES AIR FORCE RESERVE

PURPOSE: The purpose of this agreement is to specify terms for the Air Force Reserve (AFRES) to use a portion (21.7 acres more or less) of the old commuter parking apron east of the recently installed security fence around the former terminal building at Pittsburgh International Airport (IAP). Allegheny County owns the property located north and east of taxiway "O". (See exhibit A attached). The apron will be used for parking five or more C-130 aircraft temporarily during three phases of ramp repairs, and the construction of a deicing pad on the Pittsburgh IAP Air Reserve Station (ARS).

Agreement:

1. Allegheny County Shall:

a. Allow AFRES, its officers, agents and employees use of the apron (County property) at no cost for the limited purpose of parking Military aircraft.

b. Not be responsible for damages to property or injuries to persons which may arise from, or be incident to, the use and occupation of the apron premises or arising out of activities of AFRES, its officers, agents, employees, representatives or contractors; or for any contamination caused by AFRES; or for damages to the property or injuries to the person of the Counties officers, agents, servants or employees or others who may be on the used premises at their invitation or the invitation of any one of them, except for claims arising out of the negligence or willful misconduct of the County, its officers, agents, employees, or invitees.

2. Air Force Reserve Unit:

a. Prepare an Environmentel Assessment, and Environmental Base Line Survey prior to the use of the property, to show what significant impact, if any, use of the land will have on the property, surrounding area and/or environment at large.

b. Comply with all applicable Pittsburgh IAP regulations,etc. while using County property.

c. Be responsible for sweeping and removing all snow while using County property.

d. Be responsible for security of used County property thru daily inspections by AFRES security police.

e. Maintain and implement a spill response plan that would include provisions for containing and cleaning up a spill. Supply and maintain adequate spill protection kits on site and assume total managerial and financial responsibility for the organization, cleanup and disposal of spilled fuel and/or contaminated material in case of an accidental spill or emergency on County property.

f. Conduct a joint condition survey of the proposed use County property with representatives of the County prior to implementation of this Agreement. All damage caused by AFRES during the term of this Agreement will be repaired and/or replaced by AFRES at no cost to the County.

g. Restore the property to the same condition as that existing at the time of entering upon the same under this Agreement, or leave any improvements made to the County at no cost.

3. Limitations: The County will allow utility connections and useage to AFRES, however, no other services will be provided.

4. Term: This Agreement shall be in effect for one year, renewable for an additional year, and shall in no event extend beyond 31 Dec 95, or upon completion of ramp repairs and construction of the deicing pad on the Air Station. The Agreement may only be modified by mutual agreement of both parties in writing and signed by each of the parties hereto. This Agreement may be cancelled by either party upon 90 days written notification, and is effective upon signing of both parties.

This Agreement made and entered into this 3rd day of February, 1993.

COUNTY OF ALLEGHENY

HERBERT HIGGENBOTHAM, III
DIRECTOR

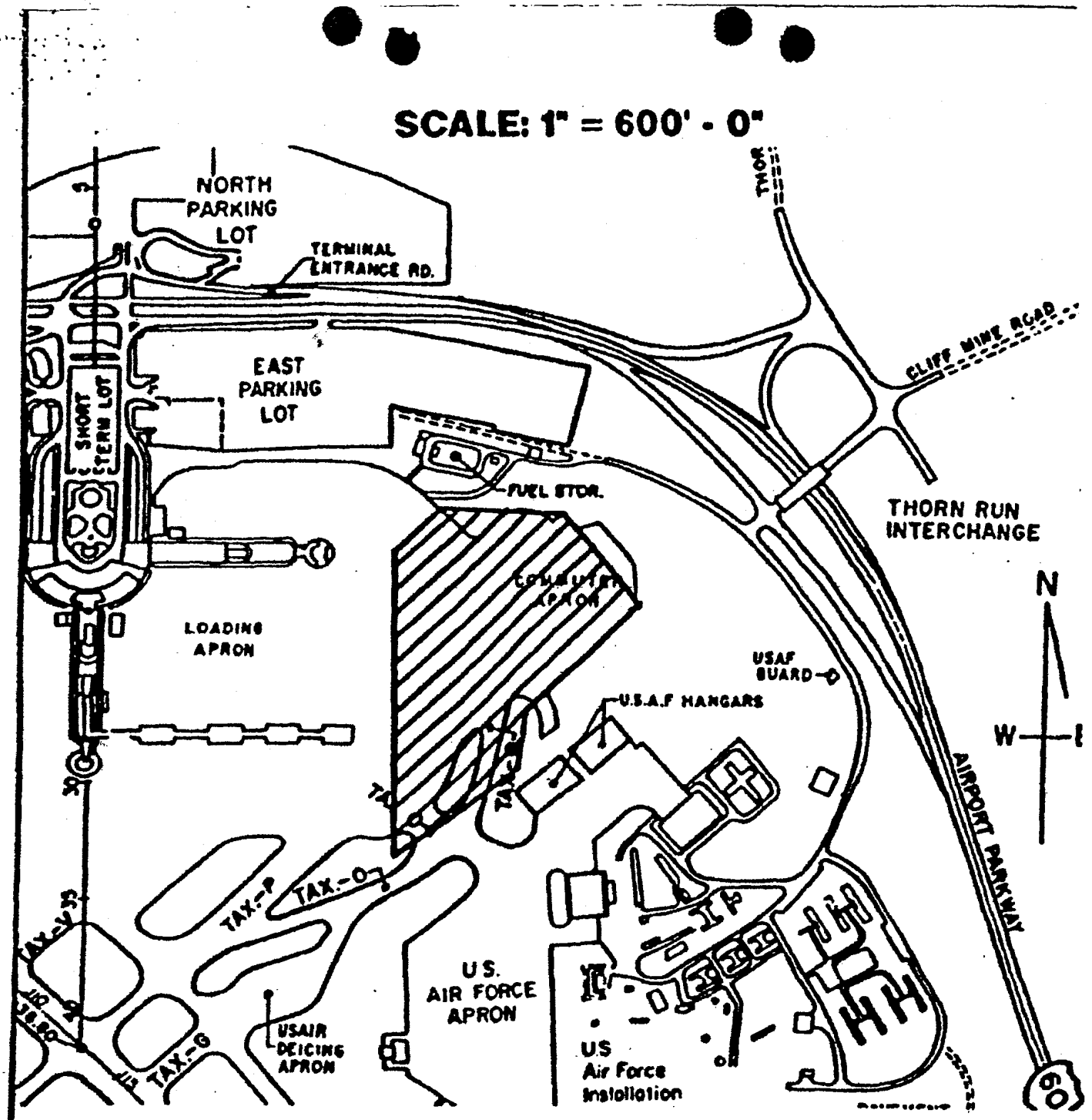
HEADQUARTERS UNITED STATES
AIR FORCE RESERVE

BOBBY G. CLARY
Asst Director/Civil Engineering

APPROVED AS TO FORM:

SOLICITOR

ASSISTANT COUNTY SOLICITOR



PROPOSED SITE

TEMPORARY AIRCRAFT PARKING APRON

13 JANUARY 1993

EXHIBIT A

ALLEGHENY COUNTY
ALLEGHENY COUNTY INSTITUTION DISTRICT
CONTRACT LOG
CONTACT PERSON: CELESTE MCGRAW
412 355-4750

AGENDA #: 156-94-B

Date Authorized: 2/03/94

Moved: DUNN Second: FLAHERTY Vote: U

Date received from Law Department: 2/03/94
Date received by Commissioners: 2/03/93
Date forwarded to Controller: 3/29/94
Date received from Controller:
Date returned to Department: 3-31

TO: Director
Department: AVIATION

When Billing please refer:

From: Guy A. Tumolo
Director of Administration/
Chief Clerk

Agreement #: 0 32070

Contract #: 0

Vendor Name: U.S. AIR FORCE

Description:

U.S. AIR FORCE, MEMORANDUM OF AGREEMENT, FOR TEMPORARY USE OF THE OLD COMMUTER APRON FOR THE PURPOSE OF PARKING MILITARY AIRCRAFT DURING APRON REPAIRS AND CONSTRUCTION OF A DEICING PAD, FOR THE PERIOD OF ONE YEAR FROM DATE OF EXECUTION AND RENEWABLE FOR AN ADDITIONAL YEAR, NOT TO EXTEND BEYOND DECEMBER 31, 1995, AND FURTHER GRANT AUTHORIZATION FOR THE DIRECTOR OF AVIATION TO EXECUTE MEMORANDUM OF AGREEMENT.

****

Properly executed copies of the above-referenced agreement are returned herewith. You are requested to distribute those returned you.

GAT/cam

cc: Controller
Law Department
Vendor: U.S. AIR FORCE

SUPPLEMENT AGREEMENT NO. 1
TO
MEMORANDUM OF AGREEMENT
AGREEMENT NO. 032076
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND
THE UNITED STATES OF AMERICA

WHEREAS, on February 3, 1993, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as Allegheny County, and the United States of America, hereinafter referred to as AFRES, entered into a Memorandum of Agreement whereby Allegheny County granted temporary use of the old commuter apron to AFRES for the purpose of parking military aircraft during apron repairs and construction of a deicing pad, for the period of one year from date of execution and renewable for an additional year, not to extend beyond December 31, 1995; and

WHEREAS, AFRES desires to extend the Memorandum of Agreement until December 31, 1996; and

WHEREAS, AFRES desires to use the County access road to the apron area.

NOW THEREFORE, effective upon the execution hereof, Agreement No. 032076 is amended as follows:

1. Paragraph No. 4 is changed in part to read "...This Agreement shall in no event extend beyond December 31, 1996 ..."

2. Allegheny County hereby agrees for AFRES to use the County access road to the apron area during the construction of the Water Storage Tank and the new POL (Fuel Farm) facility. Use of the access road will be coordinated with the Engineering Section/ Construction Manager on an as-needed basis.

THAT ALL OTHER TERMS AND CONDITIONS of the Memorandum of Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, this Supplement Agreement 1 is duly executed on 27th day of JULY 1995, by the parties hereto, intending themselves to be legally bound hereby.

COUNTY OF ALLEGHENY

Herbert C. Higginbotham

HERBERT C. HIGGINBOTHAM, II, P.E.
Director, Dept of Aviation

HEADQUARTERS UNITED STATES AIR FORCE RESERVE

B G Clary

BOBBY G. CLARY
The Asst Civil Engineer

Attn 2 (5th 6)

SUPPLEMENT AGREEMENT NO. 3
TO
MEMORANDUM OF AGREEMENT
AGREEMENT NO. 032076
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND THE UNITED STATES OF AMERICA

WHEREAS, on February 3, 1993, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as Allegheny County, and the United States of America, hereinafter referred to as AFRC (Air Force Reserve Command), entered into a Memorandum of Agreement whereby Allegheny County granted temporary use of the old commuter apron to AFRC for the purpose of parking military aircraft during apron repairs and construction of a deicing pad, for the period of one year from date of execution and renewable for an additional year, not to extend beyond December 31, 1995; and by subsequent Supplemental Agreements 1 and 2, extended the Agreement term to December 31, 1999; and

WHEREAS, AFRC desires to extend the Memorandum of Agreement for a five (5) year period from 1 January 2000 thru 31 December 2004.

NOW THEREFORE, effective upon the execution hereof, Agreement No. 032076 is amended as follows:

1. Paragraph No. 4 is changed in part to read "... This Agreement shall remain in effect for a five (5) year period from 1 January 2000 through 31 December 2004."

2. Allegheny County hereby agrees for AFRC to continue the use of the County access road during the use of the parking ramp. Use of the access road will be coordinated with the Engineering Section/Construction Manager on an as-needed basis.

3. The Allegheny County Airport Authority reserves the right to adjust the amount of area access is granted under this agreement with 90 days written notice.

THAT ALL OTHER TERMS AND CONDITIONS of the Memorandum of Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, this Supplement Agreement 3 is duly executed on the 20th day of AUGUST 2001, by the parties hereto, intending themselves to be legally bound hereby.

ALLEGHENY COUNTY AIRPORT AUTHORITY

KENT G. GEORGE, AAE
Executive Director
Allegheny County Airport Authority

HEADQUARTERS UNITED STATES
AIR FORCE RESERVE COMMAND

JON D. VERLINDE, COLONEL
The Civil Engineer

SUPPLEMENT AGREEMENT NO. 2
TO
MEMORANDUM OF AGREEMENT
AGREEMENT NO. 032076
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND THE UNITED STATES OF AMERICA

WHEREAS, on February 3, 1993, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as Allegheny County, and the United States of America, hereinafter referred to as AFRES, entered into a Memorandum of Agreement whereby Allegheny County granted temporary use of the old commuter apron to AFRES for the purpose of parking military aircraft during apron repairs and construction of a deicing pad, for the period of one year from date of execution and renewable for an additional year, not to extend beyond December 31, 1995; and by a subsequent supplemental agreement extended the Agreement term to December 31, 1996; and

WHEREAS, AFRES desires to extend the Memorandum of Agreement until December 31, 1999; and

WHEREAS, AFRES desires the continued use of the County access road to the apron area; and

WHEREAS, the COUNTY of ALLEGHENY desires that limitations be added to the Agreement as described below.

NOW THEREFORE, effective upon the execution hereof, Agreement No. 032076 is amended as follows:

1. Paragraph No. 4 is changed in part to read "... This Agreement shall in no event extend beyond December 31, 1999; or in the event Project JLSS 94-9004, Jet Fuel Storage Complex and Project JLSS 97-0009, Repair Apron Concrete Slabs are completed earlier than the dates described; or in the event a new agreement is reached regarding a larger tract of land, this present Agreement will terminate...."

2. Allegheny County hereby agrees for AFRES to continue using the County access road to the apron area during the abovementioned construction projects. Use of the access road will be coordinated with the Engineering Section/Construction Manager on an as-needed basis.

THAT ALL OTHER TERMS AND CONDITIONS of the Memorandum of Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, this Supplement Agreement 2 is duly executed on the 25TH day of NOVEMBER 1996, by the parties hereto, intending themselves to be legally bound hereby.

COUNTY OF ALLEGHENY

GARY L. BISHOP
Director, Department of Aviation

HEADQUARTERS UNITED STATES AIR FORCE RESERVE

DONALD J. MEISTER
The Civil Engineer

ATTA 2 (3 of 6)

DEPARTMENT OF THE AIR FORCE
Air Force Reserve Command

cc: Kurt Sepp
Fire Department
Rich
Tom Somerville
File - Original.

31 March 2005

MEMORANDUM FOR PITTSBURGH INTERNATIONAL AIRPORT
ATTENTION: BRADLEY D. PENROD
DEPUTY DIRECTOR AIRFIELD OPERATIONS
1000 AIRPORT BLVD, SUITE 4000
P.O. BOX 12370
PITTSBURGH PA 15231-0370

FROM: 911TH AIRLIFT WING/MSG/CE
PITTSBURGH IAP ARS
1100 HERMAN AVENUE
CORAOPOLIS PA 15108-4403

SUBJECT: Supplement Agreement No. 4 to Memorandum of Agreement No. 032076

1. Attached please find executed copy of the subject Memorandum of Agreement for your file.

2. Any questions can be directed to the undersigned at (412)474-8571.

Robert F. Moeslein

ROBERT F. MOESLEIN
Base Civil Engineer

Attachment:
MOA No. 032076

SUPPLEMENT AGREEMENT NO. 4
TO
MEMORANDUM OF AGREEMENT
AGREEMENT NO. 032076
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND THE UNITED STATES OF AMERICA

WHEREAS, on February 3, 1993, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as Allegheny County, and the United States of America, hereinafter referred to as AFRC (Air Force Reserve Command), entered into a Memorandum of Agreement whereby Allegheny County granted temporary use of the old commuter apron to AFRC for the purpose of parking military aircraft during apron repairs and construction of a deicing pad, for the period of one year from date of execution and renewable for an additional year, not to extend beyond December 31, 1995; and by subsequent Supplemental Agreements 1, 2, and 3 extended the Agreement term to December 31, 2004; and

WHEREAS, AFRC desires to extend the Memorandum of Agreement for an additional five (5) year period from 1 January 2005 thru 31 December 2009.

NOW THEREFORE, effective upon the execution hereof, Agreement No. 032076 is amended as follows:

1. Paragraph No. 4 is changed in part to read "... This Agreement shall remain in effect for a five (5) year period from 1 January 2005 through 31 December 2009."

2. Allegheny County hereby agrees for AFRC to continue the use of the County access road during the use of the parking ramp. Use of the access road will be coordinated with the Engineering Section/Construction Manager on an as-needed basis.

3. Paragraph 3 from Supplement Agreement No. 3, dated 20 August 2001 which states: "The Allegheny County Airport Authority reserves the right to adjust the amount of area access is granted under this agreement with 90 days written notice." Is changed to read: "This Agreement may be cancelled by either party upon 90 days written notification."

THAT ALL OTHER TERMS AND CONDITIONS of the Memorandum of Agreement shall remain in full force and effect.

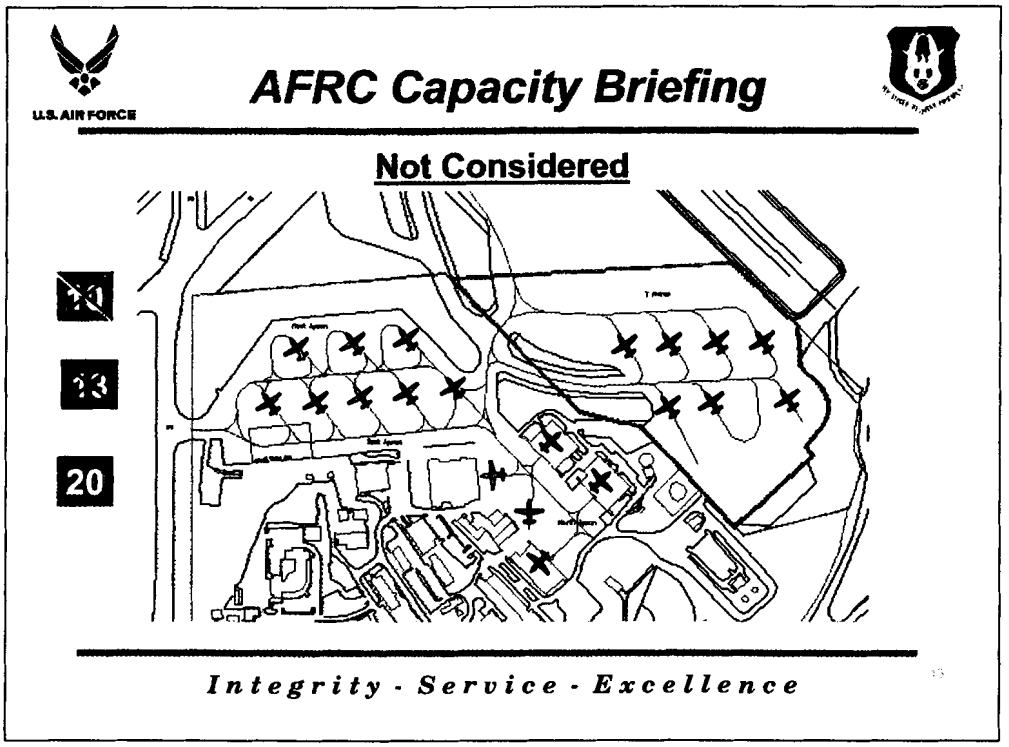
IN WITNESS WHEREOF, this Supplement Agreement 4 is duly executed on the 24th day of March 2005, by the parties hereto, intending themselves to be legally bound hereby.

ALLEGHENY COUNTY AIRPORT AUTHORITY

KENT G. GEORGE, A.A.E.
Executive Director
Allegheny County Airport Authority

HEADQUARTERS UNITED STATES
AIR FORCE RESERVE COMMAND

STEVEN W. ZANDER, COLONEL
The Civil Engineer



Let's take a look at our parking capabilities.

The Capacity Brief stated that we had 10 parking locations. There are eight spots on the Main Ramp, and two "down in the hole" as we call it.

What the briefing did not consider, however, was parking three aircraft in our hangars, bringing the total number of parking spots for C-130's up to 13.

That alone, without even talking about the MOA Ramp, makes land no longer a "Showstopper" because 12 aircraft is acceptable in the vision of bigger AF Reserve Wings.

But we're not done. Also not considered are the additional seven parking spots on the MOA Ramp. A ramp that we have been using for 12 years. A ramp that AFRC has signed an MOA for five times in 12 years.

20 spots on a base that AFRC reported had 10. It far exceeds the metric of 16 spots that defines the goal of future C-130 locations.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- Not Considered
  - 10 Aircraft
  - 13 Aircraft
  - 20 Aircraft

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi

SUPPORTING ANALYSIS:

- Air Force Reserve Command Capacity Analysis Briefing to the Base Closure Executive Group – 28 April 2004
- Air Force Reserve Command Phase II Capacity Analysis – 25 August 2004
- 911th Airlift Wing Map
- Air Force Handbook 32-1084 dated 1 September 1996
  - Facility Requirements

SUPPORTING DOCUMENTATION: 12 Pages

AIR FORCE RESERVE COMMAND CAPACITY ANALYSIS BRIEFING to the BASE CLOSURE EXECUTIVE GROUP

28 Apr 2004

AFRC Considerations

- Build 1st Squadron to Optimum AEF Configuration
  - –12 PAA for Airlift and Tanker
  - –24 PAA for Fighters
- Second Increment adds one AEF Configured Squadron
  - –Except C-130 missions
- Recruiting Demographics
  - –Can become a Reserve Limiting Factor or Showstopper
- No Land Expansion
  - –At Tenant Locations Remained Within Assigned Areas
  - –At Host Locations Remained Within Permanent, Long-Term Boundaries
  - –Lease Situation at Pittsburgh and Portland

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

AFRC Considerations

- Only Operations, Maintenance, and Direct Mission Support Facilities Included in Cost Estimates
- Does not Include Environmental Impact Analysis Process (EIAP) or Conformity (Clean Air Act) Cost Estimates
- Total Available Aircraft Parking Spaces Includes Covered Maintenance Spaces (per AFH 32-1084 & AFRCH 32-1001)
- Based on Announced C-141 Mission Conversions
  - –C-17 at March ARB, CA
  - –C-5 at Wright-Patterson AFB, OH
  - –KC-135 at Andrews AFB, MD

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

AFRC Host Locations

* March ARB, CA
* Westover ARB, MA
* Grissom ARB, IN

General Mitchell ARS, WI
Minneapolis ARS, MN
Niagara Falls ARS, NY
Pittsburgh ARS, PA
Youngstown ARS, OH
Willow Grove ARS, PA

* Dobbins ARB, GA
* Homestead ARB, FL

- AFRC owns and operates the runway

Niagara Falls ARS, NY
Estimated Costs Add Increment

Add Increment of 4 PAA	
Major Construction	
C-130 Parking Apron	4.5
New Squad Ops	3.5
Maintenance Hangar	8.7
Add/Alter Facilities	2.5
Add/Alter Refueler Parking	1.3
Design MILCON	2.0
Subtotal	**22.5**
Minor Construction	
O&M Costs	0.9
Subtotal	**0.9**
TOTAL	**23.4**

Pittsburgh ARS, PA Overview

Assigned Weapon System Type	C-130H2
Total PAA	8
# Flying Squadrons	1
Total Available Aircraft Parking Spaces	10
Unused Aircraft Parking Spaces	2

Template used	C-130
Standard PAA per squadron	12

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

Pittsburgh ARS, PA Overview
Tenant Flying Units

Tenant Flying Unit	Type AC	# PAA	# Parking Spaces Used
	NO TENANT AIRCRAFT		

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

Pittsburgh ARS, PA
Estimated Costs

Template used	**Airlift**
Robust Existing Squadron to 12 PAA	
Showstopper	Land
MILCON	
Other procurement	
Subtotal	N/A
Total Cost for 12 PAA	**N/A**

Pittsburgh ARS, PA Overview
Tenant Flying Units

Tenant Flying Unit	Type AC	# PAA	# Parking Spaces Used
	NO TENANT AIRCRAFT		

Pittsburgh ARS, PA
Estimated Costs

Template used	**Airlift**
Robust Existing Squadron to 12 PAA	
Showstopper	Land
MILCON	
Other procurement	
Subtotal	**N/A**
Total Cost for 12 PAA	**N/A**

Air Force Reserve Command

Phase II Capacity Analysis

Maj Gen Charles Stenner

25 Aug 04

HQ AFRC Considerations

- Command Specific Issues
  - AFRC Supports AEF Squadron Configuration
    - 12 PAA Heavy Airlift
    - 16 PAA C-130 and Tanker
    - 24 PAA Fighter
    - AEF support can be obtained through rainbow
  - AFRC supports relocation of GSU's to Military Installations
    - 92APS, Wyoming, PA
    - 911CES, Morgantown, WV
    - 84APS, Greenville, SC
    - 307RHS, East Kelly Annex, TX
  - FY06 POM and CAF 2025 Impact

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

Pittsburgh ARS, PA
Tenant Flying Units

	As of	30 Sep 2005		30 Sep 2011	
Tenant Flying Unit	Type AC (MDS)	# Aircraft	# Parking Spaces Used	# Aircraft	# Parking Spaces Used
		NO TENANT AIRCRAFT			

AFRC, 25 Aug 04 — *Integrity - Service - Excellence* — 87

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

Pittsburgh ARS, PA
Estimated Capacity after 2011

Weapon System Type (MDS)	C-130
Maximum Capacity	10

AFRC, 25 Aug 04 — *Integrity - Service - Excellence* — 88

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

Pittsburgh ARS, PA
Estimated Costs

Template used	Airlift
Robust Existing Squadron to 16 PAA	
Showstopper	Land
MILCON	N/A
Other procurement	N/A
Subtotal	N/A
Total Cost for 16 PAA	N/A

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

Pittsburgh ARS, PA
Natural Infrastructure

Natural Infrastructure	Exists (Y), Added (A), Precluding Factor (N)	Steps required to add capacity or reasons for precluding factor	Cost ($M)
Capacity Requirements to robust existing unit to 16 PAA			
Air			
AICUZ			
Surface Land Access	N	Inadequate space within current boundary	
Water Access			
Water Discharge			
Planning			
		Total Natural Infrastructure Capacity Cost	
Capacity Requirements to add second 16 PAA unit: (32 PAA)			
Air			
AICUZ			
Surface Land Access	N	Inadequate space within current boundary	
Water Access			
Water Discharge			
Planning			
		Total Natural Infrastructure Capacity Cost	

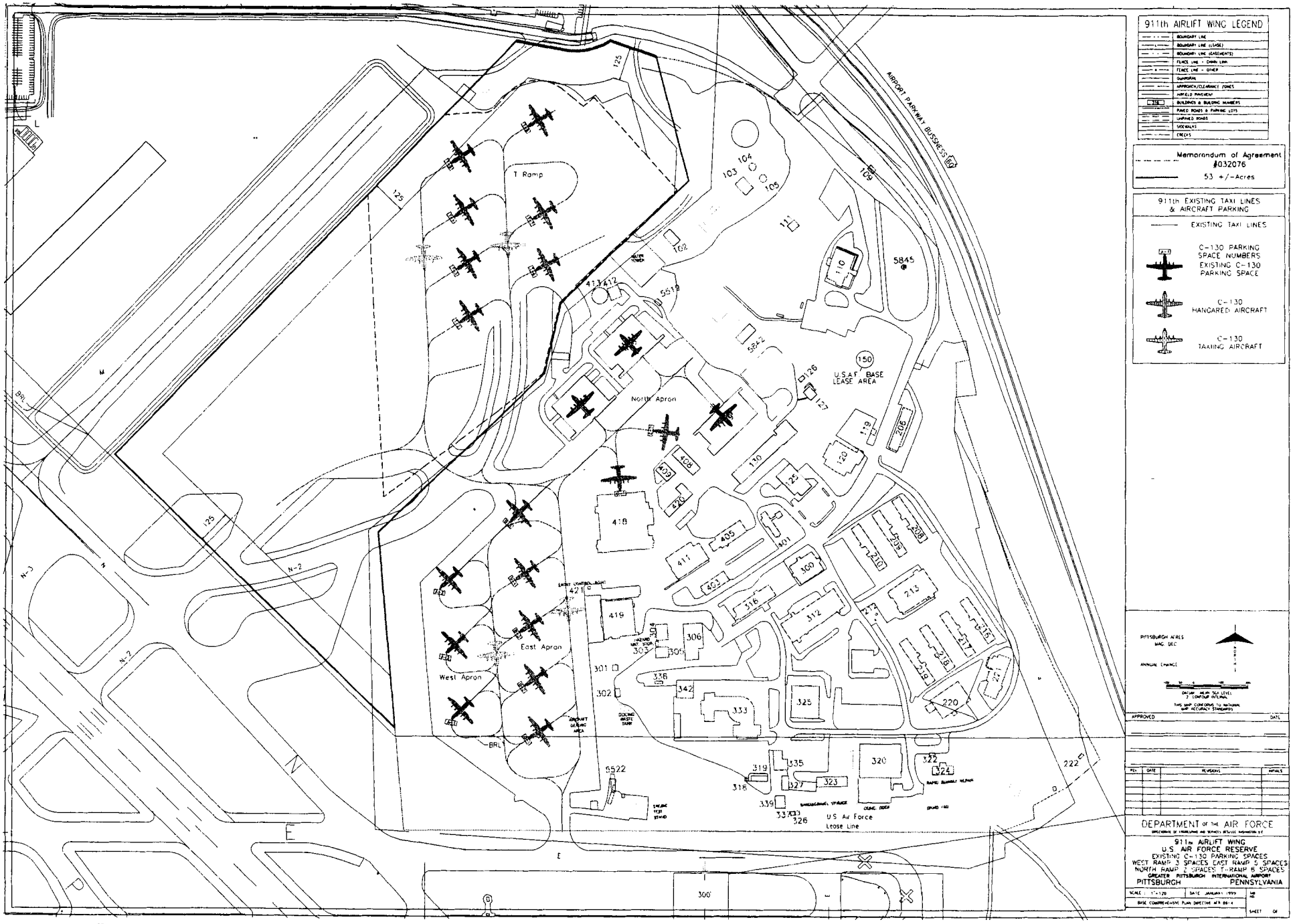
HQ AFRC Considerations
Pittsburgh ARS, PA

- Command Specific issues
  - Candidate for associate build with ANG (ANG co-located across runway – aircraft type TBD)
  - Large metropolitan area (Pittsburgh) with major airline hub (US Airways) good for recruiting

Youngstown ARS, OH
Overview

As of	30 Sep 2005		30 Sep 2011	
Assigned Weapon System Type(s) (MDS)		C-130H2		C-130X
Total Aircraft		12		12
# Flying Squadrons		2		1
Total Available Aircraft Parking spaces		19		19
Unused Aircraft Parking Spaces		7		7

Template used	C-130
Standard PAA per squadron	16


T Ramp
North Apron
East Apron
West Apron
U.S.A.F. BASE LEASE AREA
U.S Air Force Lease Line
AIRPORT PARKWAY BUSINESS
911th AIRLIFT WING LEGEND
BOUNDARY LINE
BOUNDARY LINE (LEASE)
BOUNDARY LINE (EASEMENTS)
FENCE LINE - CHAIN LINK
FENCE LINE - OTHER
RUNWAYS
APPROACH/CLEARANCE ZONES
APRON PAVEMENT
BUILDINGS & BUILDING NUMBERS
PAVED ROADS & PARKING LOTS
UNPAVED ROADS
SIDEWALKS
TREES
Memorandum of Agreement #032076
53 +/- Acres
911th EXISTING TAXI LINES & AIRCRAFT PARKING
EXISTING TAXI LINES
C-130 PARKING SPACE NUMBERS EXISTING C-130 PARKING SPACE
C-130 HANGARED AIRCRAFT
C-130 TAXIING AIRCRAFT
PITTSBURGH INTL ARPT MAG DEC
ANNUAL CHANGE
APPROVED
DATE
NO.
DATE
REVISIONS
INITIALS
DEPARTMENT OF THE AIR FORCE
911th AIRLIFT WING
U.S. AIR FORCE RESERVE
EXISTING C-130 PARKING SPACES
WEST RAMP 3 SPACES EAST RAMP 5 SPACES
NORTH RAMP 2 SPACES T-RAMP 8 SPACES
GREATER PITTSBURGH INTERNATIONAL AIRPORT
PITTSBURGH PENNSYLVANIA
SCALE : 1" = 120'
DATE JANUARY 1999
BASE COMPREHENSIVE PLAN DIRECTIVE AFR 86-4
SHEET

BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE HANDBOOK 32-1084
1 SEPTEMBER 1996

Civil Engineering

FACILITY REQUIREMENTS

NOTICE: This publication is available digitally. Contact your Publishing Distribution Office (PDO) for the monthly CD-ROM or access to the bulletin board system. The target date for discontinuing paper publications is December, 1996.

This handbook implements AFPD 32-10, *Installations and Facilities*, Department of Defense (DoD) Instruction 4165.3, *Department of Defense Facility Classes and Construction Categories*, October 24, 1978 with Change 1, and portions of MIL HDBK 1190, *Facility Planning and Design Guide, Part II, Technical Guidance.* It provides facility space allowance guidance by category code. These criteria are used in assigning occupancy of existing facilities and in programming new facilities. This handbook applies to all Air Force commanders and managers who plan, program, review, certify, and approve Air Force facilities. This handbook does not authorize the use of appropriated funds, nonappropriated funds, or private funds for the construction or conversion of facilities. Refer to the appropriate instruction for funding guidance.

SUMMARY OF REVISIONS

This revision aligns this handbook with AFPD 32-10. It updates the technical criterial of AFM 86-2 (which has been superseded). Criteria has been revised according to input by respective offices of primary responsibility (OPRs). Its companion document, AFI 32-1024, *Standard Facility Requirements*, lists OPRs and provides an overview of the facility requirements system.

OPR: HQ AFCEE/DGA (Mr Robert Fitzsimmons)

Certified by: HQ USAF/CEC (Col Karsten H. Rothenberg)

Pages: 256/Distribution: F

2.17. Category Code 113-321, Apron.

2.17.1. **Size and Configuration of Aprons.** There are no standard apron sizes. Aprons are individually designed to support specific aircraft and missions at specific installations. The detailed dimensions are determined by the size, type, and number of aircraft requiring parking and maneuvering space; the type of activity the apron serves; the physical characteristics of the project site; and the objectives of the installation master plan. The dimensions in Table 2.4 through Table 2.7 on aircraft size, taxi lane widths, and wingtip separations are the basis for design.

2.17.1.1. Table 2.4 provides variable wingtip separations for C-5 and C-17 aircraft. Use the maximum wingtip separations for these aircraft when planning and programming new Air Mobility Command (AMC) aprons. EXCEPTION: When you are planning to rehabilitate an existing apron, provide the maximum wingtip separation the existing apron size will allow. Do not exceed the maximum clearance provided within Table 2.4.

2.17.1.2. At non-AMC bases, the maximum separation which can reasonably be provided for these aircraft is desirable. As a minimum, these separations must always meet current aircraft Technical Order (TO) requirements.

2.17.2. **Apron Allowances.** A proper apron allowance is the amount required to afford maximum operational efficiency with a minimum amount of paving. The paragraphs below describe the basis for calculating apron allowances for various types of operations. Paragraph 2.19 describes a method for estimating apron requirements. High threat areas may require additional pavement to meet aircraft dispersal requirements.

2.17.3. **Assigned Aircraft.** Assigned aircraft will at a minimum consist of Primary Assigned Aircraft (PAA) inventory established from funded flying program for the base. Many bases will have other aircraft inventory that will require a parking apron. This inventory will vary by base and depot repair cycles. These aircraft may be annotated as backup inventory, ready reserve, or attrition reserve. The monthly average of these non-primary assigned aircraft remaining on station must be accounted for in determining apron requirements.

2.17.4. **Aprons for Operational Aircraft.** Operational aircraft are parked on mass aprons, strip aprons, or where authorized, on dispersed stubs. To determine how many operational aircraft require apron space, proceed as follows: Begin with 100 percent of the assigned aircraft as established by official documents (see exceptions in 2.17.3.3 for Air Mobility Command (AMC) aircraft); subtract the number of aircraft located on separate aprons, such as alert aircraft; subtract the number of aircraft located in maintenance hangars or docks under normal maintenance schedules; finally, subtract aircraft that are parked elsewhere on existing paving of a suitable nature and location. Other factors affecting the size and configuration of aprons for operational aircraft follow:

2.17.4.1. **Aircraft Parking Arrangements.** On a typical mass apron, aircraft are parked in rows and spaced according to the dimensions given in Table 2.4 through Table 2.7. This spacing permits aircraft to move in and out of parking places under their own power. Parking arrangements should be studied carefully to achieve the parking layout that requires the least amount of pavement per parked aircraft. The following example is typical of the possibilities for economy: On an apron for eight aircraft, changing the parking arrangement from four rows of two aircraft to two rows of four aircraft reduced pavement requirements by 20 percent.

2.17.4.2. **Parking, Fighter Type Aircraft:**

2.17.4.2.1. As indicated by Table 2.6 and Figure 2.1, some aircraft are often parked at a 45° angle. This is an efficient way to achieve adequate clearance to dissipate the temperature and velocity of jet blast to levels that will not endanger aircraft or personnel; that is, about 38° C (100° F), and 56 kph (30.4 knots).

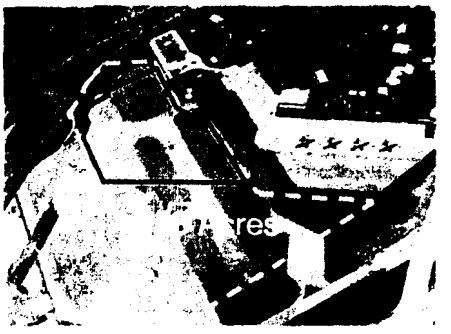
2.17.4.2.2. To achieve adequate dissipation of heat and blast, some aircraft such as the F-111 and FB-111 require a wider lane than shown in Figure 2.1. To achieve a safe lane width; obtain the minimum safe distance to the rear of a jet engine operating at 80 percent power, unaugmented, from the appropriate aircraft technical order. If this distance exceeds 38.1 m (125 ft), minimize pavement requirements by parking aircraft so that two rows of aircraft blast into a common lane, with alternate lanes of minimum taxiway width.

2.17.4.3. Parking for Air Mobility Command Aircraft (AMC) Tanker aircraft (KC-10 and KC-135) require apron parking spots for 100 percent of the Primary Assigned Aircraft (PAA). Strategic Airlift (C-5, C-17, and C-141) require apron

U.S. AIR FORCE

AFRC Capacity Briefing

- 1994: Allegheny County's First Offer to Add Land
- 1995: BRAC Report to President
  "The AF indicated...inappropriate to act on the offer pending the outcome of the base closure process."
- May 1996: AFRC
  "...no requirement..."
- Feb 1998: AFRC
  "...has not changed its position..."
- Sept 1998: AFRC
  "...property is adequate..."



Integrity - Service - Excellence

Another part of the land issue is the County Airport Authority offer of 53 acres to the AF. The previously stated MOA Ramp is a part of that 53 acres.

In Nov 1994, Allegheny County made the first offer to add land to our lease.

In the 1995 BRAC Report to the President, the Commission Findings stated "The AF indicated...inappropriate to act on the offer pending the outcome of the base closure process."

The report also stated that the AF failed to recognize the "expansion opportunities" of the base.

In May 1996, AFRC rejected the offer, stating "...(there is) no requirement for additional land at Pittsburgh ARS..."

In Feb 1998, AFRC again responded "... the AF Reserve has not changed its position...Pittsburgh ARS has no new mission requirements that would require acquisition of any new land..."

In a Sep 1998 response to a Congressional Inquiry by Congressman Murtha, AFRC said "...existing property is adequate to support existing mission...no additional missions are planned in the foreseeable future..."

Since then, the land has been reserved by the Airport Authority for future expansion of our base.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- 1994: Allegheny County's First Offer to Add Land
- 1995: BRAC Report to President
  - "The Air Force indicated...inappropriate to act on the offer pending the outcome of the base closure process."
- May 1996: AFRC
  - "...no requirement..."
- February 1998: AFRC
  - "...has not changed its position..."
- September 1998: AFRC
  - "...property is inadequate..."

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi, Mr. Robert Moeslein, Mr. Kent George

SUPPORTING ANALYSIS:

- Point Paper
  - Pittsburgh IAP ARS Land Offer and MOA Property History
- Additional Ramp Space Available Analysis
- Supplemental Agreements, Allegheny County and U.S. Government
- County of Allegheny, Department of Aviation letter dated April 5, 1994
- United States Senator Rick Santorum letter dated December 12, 1994
- 1995 BRAC Report to the President
- 911th Airlift Wing Commander Memorandum to HQ AFRES/CE dated 5 October 1995
- Brig Gen John A. Bradley letter to County of Allegheny dated 2 May 1996
- 911th Airlift Wing Base Civil Engineer letter to the Federal Aviation Administration, Airport District Office dated 29 December 1997
- Brig Gen John A. Bradley letter to the Federal Aviation Administration dated 26 February 1998
- Congressional Inquiry from Representative John P. Murtha dated 9 September 1998

SUPPORTING DOCUMENTATION: 55 Pages

POINT PAPER

PITTSBURGH IAP ARS LAND OFFER AND MOA PROPERTY HISTORY

Purpose:

Provide a summary of the history of Airport property that has been offered to the 911 AW as far as back as 1994, as well as the Memorandum of Agreement (MOA) property that has been used by the Wing since 1993

Discussion:

- Land Offer

-- When Allegheny County moved into the new terminal, discussions began on what to do with the old terminal property adjacent to the 911 AW

-- Over time, the exact acreage and boundaries of the land changed, but generally stayed the same

-- Below is a timeline of the land offer:

--- Early 1990's (no documentation): First discussion of 911 AW expansion during construction of new Pittsburgh Airport Terminal

--- Nov 1994: Allegheny County makes first official offer of additional ramp space for the base

--- May 1996: BG Bradley, then Deputy to the Chief of Air Force Reserve, declines the offer of new land

"My Headquarters plans and programs staff did an analysis of present and future operational requirements and found no requirement for additional land at Pittsburgh ARS."

--- Feb 1998: BG Bradley re-addresses and declines offer when asked again by County

"...AF Reserve has not changed its position...Pittsburgh ARS has no new mission requirements that would require the acquisition of any new land..."

--- Sep 1998: AFRC responds to Congressman Murtha inquiry about the land:

"...existing property (at Pittsburgh ARS) is adequate to support existing mission...no additional missions are planned in the foreseeable future..."

--- BRAC 2005: Department of the Air Force Analysis and Recommendations, Volume V, Part 1, page 157 states:

"The major command's capacity briefing reported Pittsburgh ARS land constraints prevented the installation from hosting more than 10 C-130 aircraft..."

--- Jun 2005: Allegheny County Airport Authority again officially offers 53 acres of property for 911 AW expansion

- MOA

-- Separate from the land offers, a MOA granting the use of 21.7 acres for 911 AW C-130 aircraft during ramp repairs of 911 AW main ramp was created

-- The MOA and Supplements were all signed by AFRC

-- It appears (our inquiries to AFRC, AF & DoD have not been answered) that the MOA property was not counted in the major command capacity briefing, which reported our C-130 parking capacity as 10 (instead of 20) in Vol V, page 157

-- The MOA property is co-located with the 53 acre land offer addressed above

-- Below is a timeline of the MOA:

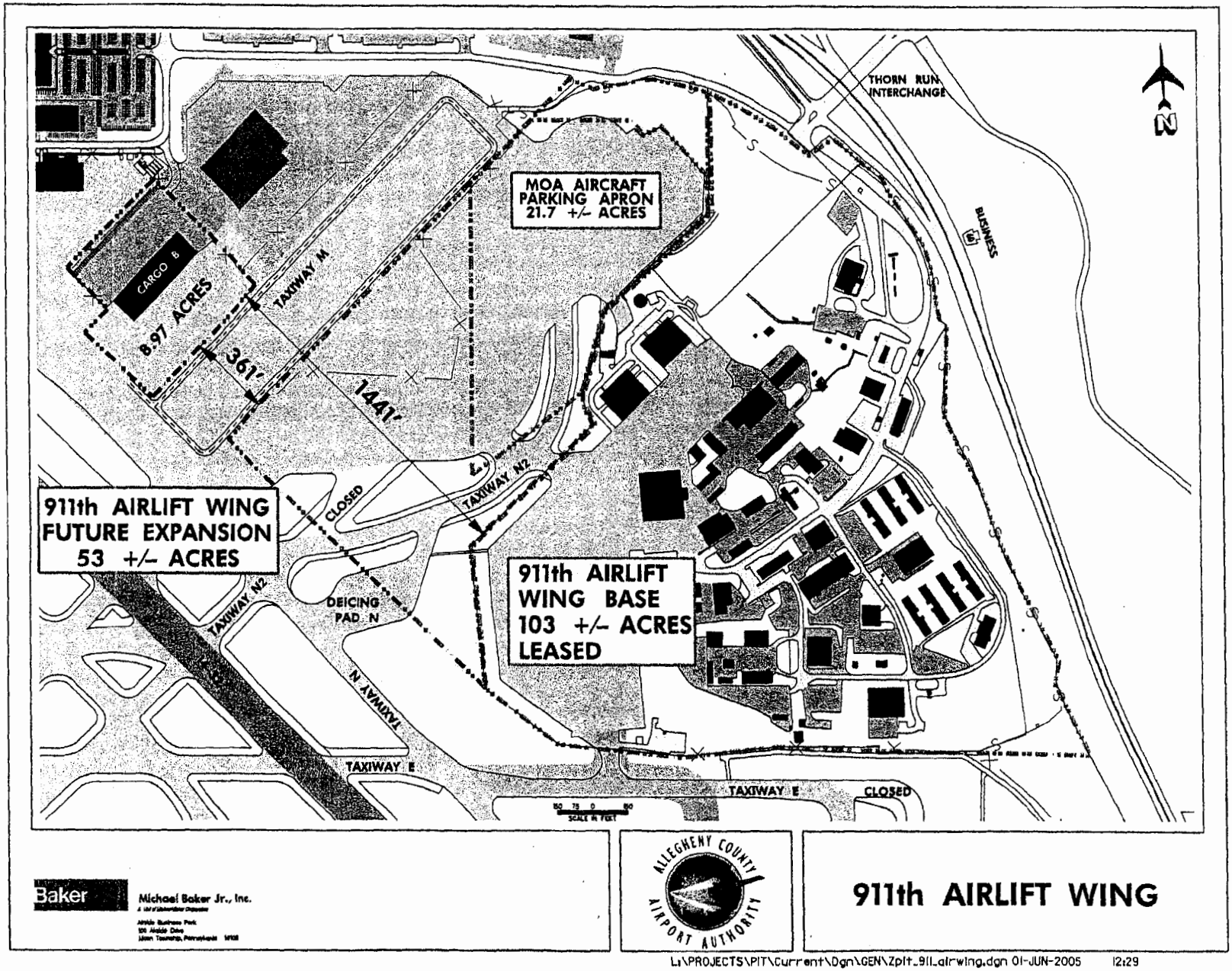
-- Feb 1993: Original MOA, with an expiration date of 31 Dec, 1995

-- Jul 1995: Supplement Agreement No. 1, extending the agreement to 31 Dec, 1996

-- Nov 1996: Supplement Agreement No. 2, extending the agreement to 31 Dec, 1999

-- Aug 2001: Supplement Agreement No. 3, extending the agreement to 31 Dec, 2004

-- Mar 2005: Supplement Agreement No. 4, extending the agreement to 31 Dec, 2009



Baker

Michael Baker Jr., Inc.

ALLEGHENY COUNTY AIRPORT AUTHORITY

911th AIRLIFT WING

L:\PROJECTS\PIT\Current\Dgn\GEN\Zpit_911_airwing.dgn 01-JUN-2005 12:29

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 53 Acres

BRIEFING BULLET: Additional Ramp Space Available

Briefer: Maj Bosley
Analysis POC(s): Bob Moeslein, Maj Nardozzi, Kent George

SUPPORTING ANALYSIS:

- **Land offered as early as 1994 when new terminal slated to be built**
  - **AF chose not to add it to lease because mission did not require it**
  - **Still set aside for the expansion of the Base**
  - **Not an 11th hour agreement**
- **22 acres included in MOA + 31 additional acres offered = 53**
  - **Can amend lease to include 53 acres**
  - **Can amend MOA to include 53 acres**
- **All paved concrete ramp space**
- **Parking Spots Including 53 acres**
  - **24 C-130's**
  - **12 C-17's**
- **Minimum cost - "Services in kind"**
  - **Ramp Maintenance and Security provided by 911 AW**

SUPPLEMENTAL AGREEMENT NO. 12
TO
DEPARTMENT OF THE ARMY LEASE
NO. DA-15-029-ENG-7929
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND
THE UNITED STATES OF AMERICA

WHEREAS, on October 20, 1964, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as the Lessor, and the United States of America, hereinafter referred to as the Government, entered into a lease agreement whereby the Lessor leased to the Government approximately 87.977 acres of land at the Greater Pittsburgh International Airport, and by subsequent supplemental agreements increased the acreage to ~~103.38~~ 103.78; and

WHEREAS, the Government desires to delete approximately one half of an acre; and

WHEREAS, it has been determined to be in the best interest of both parties to amend the lease as stated above.

NOW THEREFORE, effective upon the execution hereof, Department of the Army Lease No. DA-15-029-ENG-7929 is amended as follows:

1. Paragraph No. 1 is changed in part to read "...decreasing the total leased area to ~~102.88~~ 103.28 acres..."

2. The Lessor hereby agrees to delete that parcel of land containing approximately 0.50 of an acre of land, thus decreasing the total leased area to ~~102.88~~ 103.28, more or less, as described in Exhibit "E" attached hereto and made a part hereof.

THAT ALL OTHER TERMS AND CONDITIONS of the lease and all amendments shall remain in full force and effect.

IN WITNESS WHEREOF, this Agreement is duly executed on the 16 day of May 1994, by the parties hereto, intending themselves to be legally bound hereby.

ATTEST:

Chief Clerk

COUNTY OF ALLEGHENY, Pennsylvania
By its Board of County Commissioners

APPROVED:

Director, Dept of Aviation

UNITED STATES OF AMERICA

JAMES S. TURKEL
Acting Chief, Real Estate Division

APPROVED AS TO FORM:

County Solicitor

Assistant County Solicitor

This agreement is entered into by County pursuant to the authorization duly given by the Board of County Commissioners on April 14, 1994 at Agenda no. 531-B-94

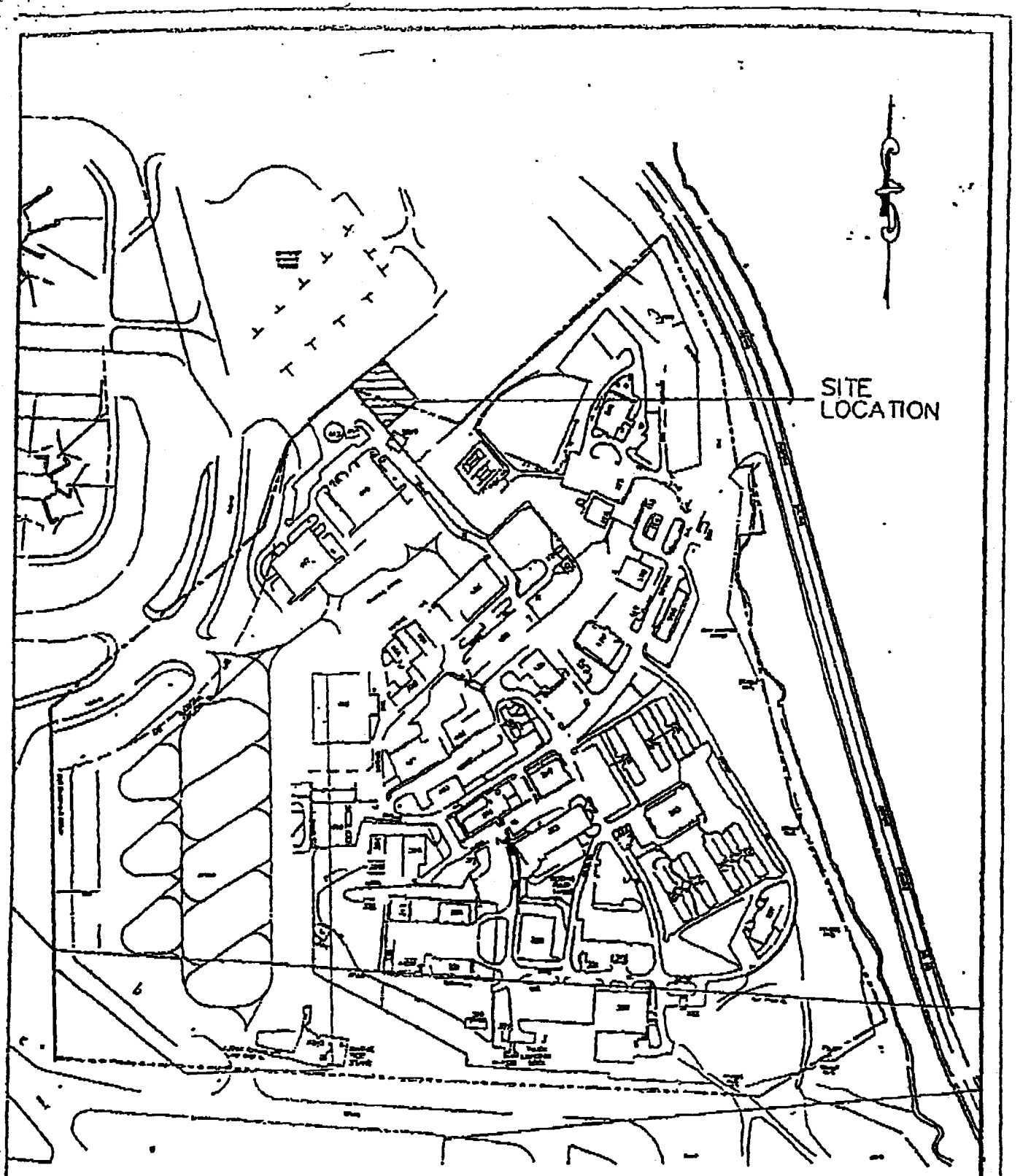
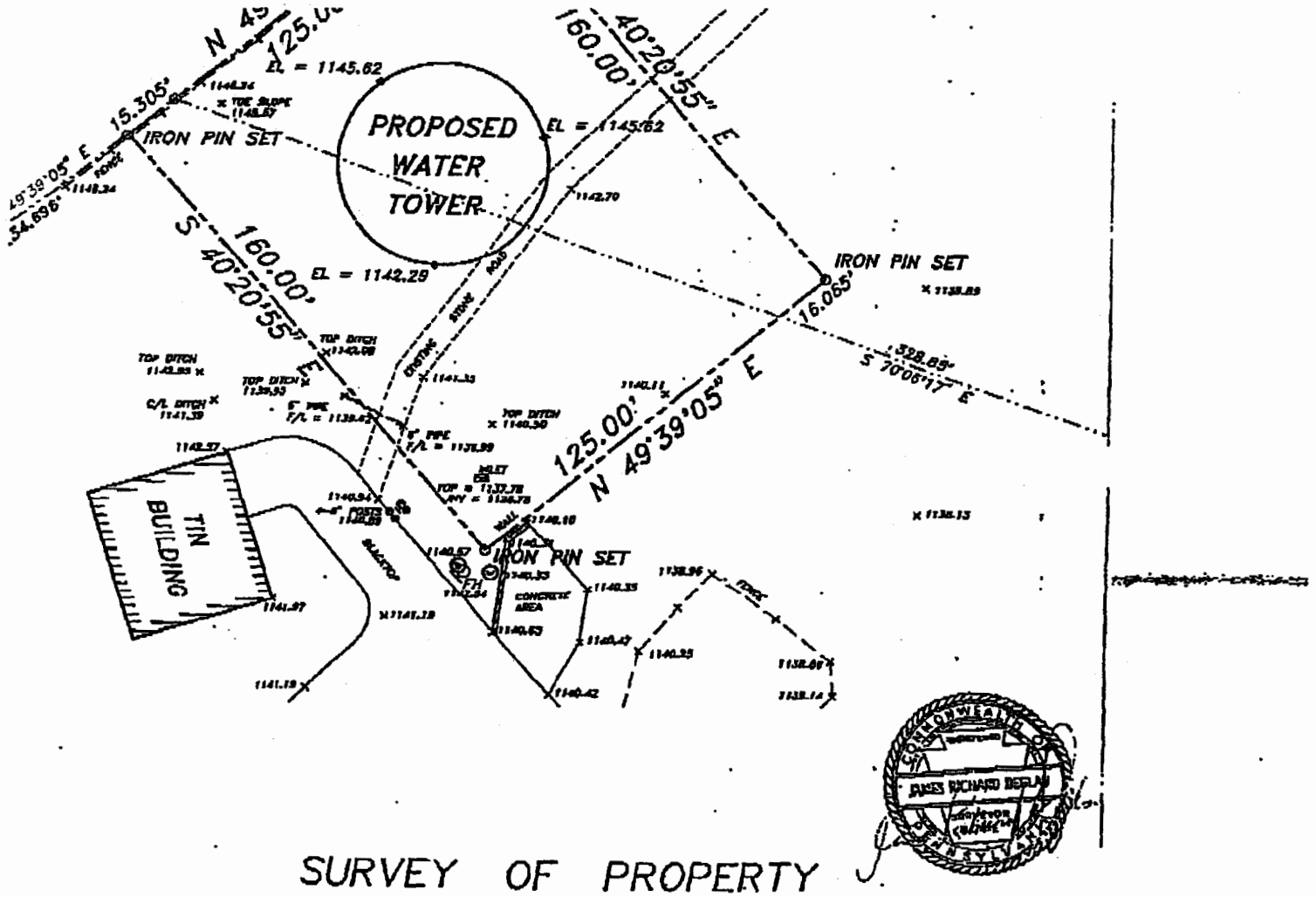


FIGURE 2

SITE LOCATION
911th AIRLIFT GROUP



SURVEY OF PROPERTY

MADE FOR

MOON TOWNSHIP MUNICIPAL AUTHORITY

SITUATE IN

MOON TOWNSHIP
ALLEGHENY COUNTY
PENNSYLVANIA

EXHIBIT E

NICHOLS & SLAGLE ENGINEERING, INC. — PROFESSIONAL ENGINEERS
230 HIGHLAND ROAD — PITTSBURGH, PA 15235

1" = 30'

SUPPLEMENTAL AGREEMENT NO. 11
DEPARTMENT OF THE ARMY
LEASE NO. DA-15-029-ENG-7929
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND
THE UNITED STATES OF AMERICA

WHEREAS, on the 20 October 1964, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as the Lessor, and the United States of America, hereinafter referred to as the Government, entered into a lease agreement whereby the Lessor leased to the Government approximately 87.977 acres of land at the Greater Pittsburgh International Airport; and

WHEREAS, the aforesaid lease has been amended by Supplemental Agreement Nos. 1-10; and

WHEREAS, the acreage described in Supplemental Agreement No. 10 should read 103.38 acres; and

WHEREAS, the Government desires to add an additional 0.40 acre parcel to the lease; and

WHEREAS, it has been determined to be in the best interest of both parties to amend the lease as stated above.

NOW THEREFORE, effective upon the execution hereof, Department of the Army Lease No. DACA-15-029-ENG-7929 is amended as follows:

1. Paragraph No. 1 in Supplemental Agreement No. 10 is changed to read, "...increasing the total leased area to ~~103.38~~ 103.78 acres..."

2. The Lessor hereby agrees to lease to the Government the full time exclusive use of a parcel of land which contains approximately 0.40 of an acre of land, thus increasing the total leased area to 103.78 acres, more or less, as described in Exhibit "D" attached hereto and made a part hereof.

THAT ALL OTHER TERMS AND CONDITIONS of the lease and all amendments shall remain in full force and effect.

IN WITNESS WHEREOF, this Agreement is duly executed on the day and year first above written, by the parties hereto, intending themselves to be legally bound hereby.

ATTEST:

Chief Clerk

COUNTY OF ALLEGHENY, Pennsylvania
By its Board of County Commissioners

Board of County Commissioners

APPROVED:

Director, Dept. of Aviation

UNITED STATES OF AMERICA

By:

Title:

APPROVED AS TO FORM:

County Solicitor

Assistant County Solicitor

of America duly authorized by the Board of County Commissioners on May 7, 1992 at Agenda No. 690-1-92.

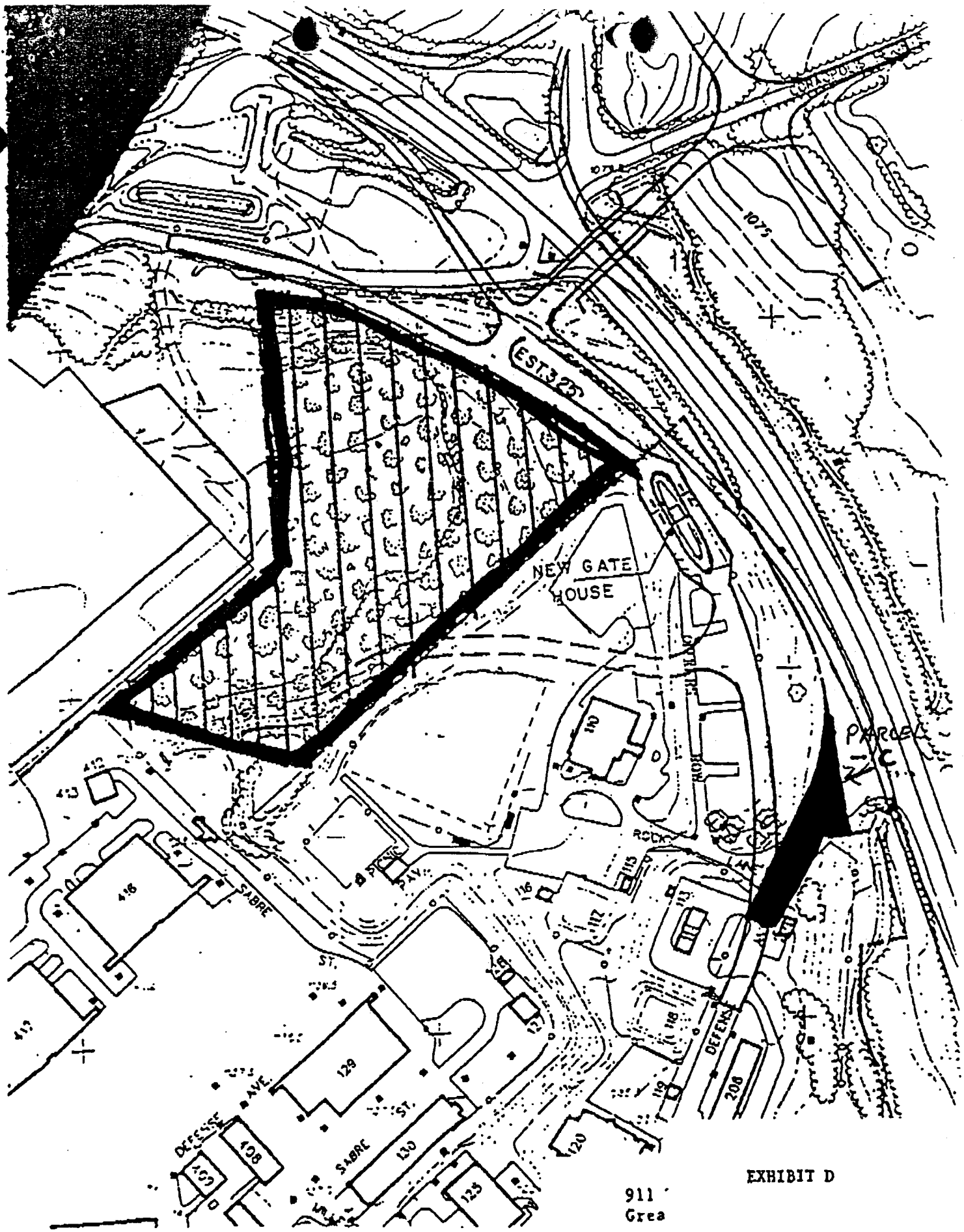


EXHIBIT D

TOTAL P.05

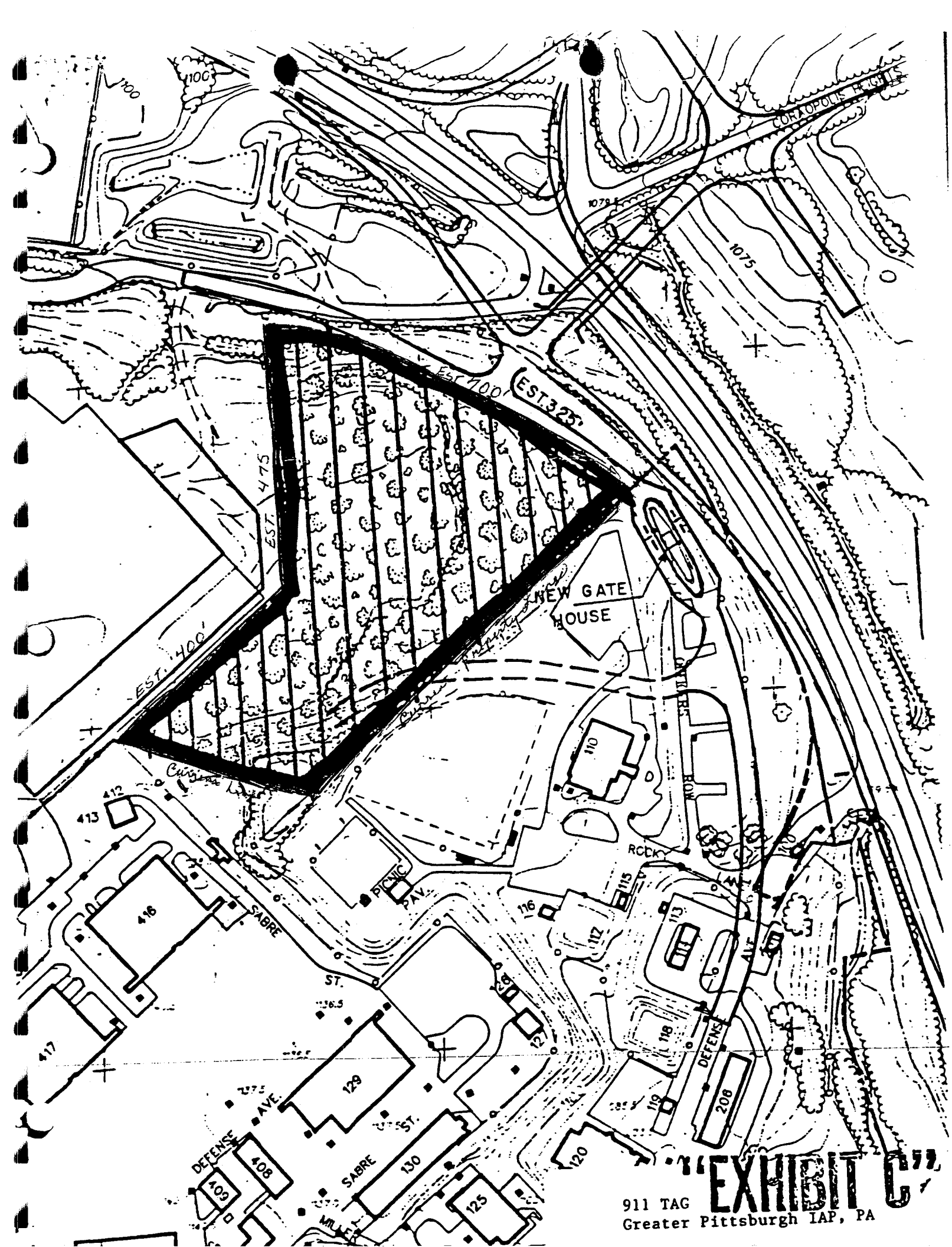


EXHIBIT C

911 TAG
Greater Pittsburgh IAP, PA

SUPPLEMENTAL AGREEMENT NO. 10

DEPARTMENT OF THE ARMY

LEASE NO. DA-15-029-ENG-7929

BY AND BETWEEN

COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA

AND

THE UNITED STATES OF AMERICA

WHEREAS, on 20 October 1964 the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as the lessor, and the United States of America, hereinafter referred to as the Government, entered into a lease agreement whereby the lessor leased to the Government approximately 87.977 acres of land at the Greater Pittsburgh International Airport; and

WHEREAS, the aforesaid lease has been amended by Supplemental Agreement Nos. 1-9; and

WHEREAS, the Government desires to add an additional 9.35 acre parcel to the lease and extend the lease term until 30 June 2013; and

WHEREAS, it has been determined to be in the best interest of both parties to amend the lease as stated above.

NOW THEREFORE, effective upon execution hereof, Department of the Army Lease No. DA-15-029-ENG-7929 is amended as follows:

1. The lessor hereby agrees to lease to the Government the full time exclusive use of a parcel of land which contains approximately 9.35 acres of land thus increasing the total leased area to 103.80 acres, more or less.

103384

2. Exhibit "C" is added to show the area added by this agreement outlined in red.

3. Paragraph three (3) is changed in part to read as follows ".... that this lease shall in no event extend beyond 30 June 2013.

THAT ALL OTHER TERMS AND CONDITIONS of the lease and all amendments shall remain in full force and effect.

IN WITNESS WHEREOF, this Agreement is duly executed on the day and year first above written, by the parties hereto, intending themselves to be legally bound hereby.

WITNESS:

____

UNITED STATES OF AMERICA

BY ____________________________

TITLE CHIEF, REAL ESTATE DIVISION

COUNTY OF ALLEGHENY

BY ____________________________

____

____

Board of County Commissioners

ATTEST:

____

Chief Clerk

APPROVED:

____

Director, Dept. of Aviation

APPROVED AS TO FORM:

____

County Solicitor

____

Assistant County Solicitor

...of America duly authorized by the Board ... County Comm...ers on August 25, 1988, at Agenda No. 1149-D...8.

SUPPLEMENTAL AGREEMENT NO. 9
U.S. GOVERNMENT LEASE FOR GREATER PITTSBURGH AIRPORT, PENNSYLVANIA
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND
THE UNITED STATES OF AMERICA

REVISION OF LEASE NO. DA-15-029-ENG-7929

1. All terms of the existing lease and supplemental agreements 1 through 8 are reaffirmed except in the following particulars:

a. The Lessor, effective 1 March 1981, hereby agrees to lease to the Government the full-time exclusive use of two parcels of land described as Parcels A and D totaling 6.47 acres, more or less, as depicted in red on Exhibits A and B attached hereto and made a part hereof. Said Exhibit A reflects the location of Parcel A whereas Exhibit B reflects the location of Parcel D. It is the intent of the attached Exhibits A and B to depict only areas of proposed leasehold land acquisition. Any improvements located adjacent to said Parcels A and D are not included as part of the proposed leasehold acquisition.

b. The Lessor, also agrees to extend the full-time exclusive use of 87.564 acres of land, more or less, thus increasing the total leased area to 94.034 acres, more or less, all of which being located at the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania to be used for Government purposes for a term beginning 1 March 1981 through 28 February 2006.

c. The Lessee shall pay the Lessor the sum of One Dollar ($1.00) and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, for the entire term.

2. In consideration of the foregoing, the parties hereto agree to the following:

a. The Government shall not locate, place or construct nor shall it cause to be located, placed or constructed any physical structures or obstructions; including, without

limiting the generality of the foregoing, any building, fixtures, equipment, or other similar permanent structure whatsoever, on Parcel D located within the obstruction limit line as shown on the attached exhibits A & B; which, in the judgment of the County of Allegheny, may and/or will interfere with or endanger the free and unobstructed passage of aircraft within said obstruction limit line.

B. Government understands that lessor is currently in the process of designing a terminal building outer taxiway for the southeast dock of Greater Pittsburgh International Airport. Upon completion of plans and specifications for said outer taxiway by Lessor, Government agrees to further amend Lease No. DA-15-029-ENG-7929 executed October 20, 1964 between the County of Allegheny and the United States of America, including Supplements 1 through 9 of said Agreement, to delete from the lease premises that portion of the premises needed by the County for construction of said taxiway and that portion of the premises located within the obstruction limit line to said taxiway. The taxiway and obstruction limit lines shown on the exhibits to the agreement are preliminary and are subject to further review and definition by the County. In the event that County determines it is not necessary to delete from the lease premises that land within the obstruction limit line to said taxiway, then Government shall execute and deliver to County an easement or right of way in the form and substance acceptable to Lessors allowing movement of aircraft and other equipment within said obstruction limit line as lessor deems necessary for its operation of said taxiway.

3. The consideration hereof is sufficient and all representations not contained herein shall not be binding on the parties hereto.

Signed and sealed this day of , 1981.

ATTEST:

Chief Clerk

COUNTY OF ALLEGHENY, PENNSYLVANIA
By its Board of County Commissioners

County Commissioner

APPROVED:

Director, Dept. of Aviation

County Commissioner

APPROVED AS TO FORM:

County Solicitor

County Commissioner

THE UNITED STATES OF AMERICA
Department of the Army, Baltimore
Corps of Engineers

BY:
G. R. BOGGS
Chief, Real Estate Division

Department of the Army, Baltimore Corps of Engineers authorized by the Board of County Commissioners duly given on March 19, 1981 at Agenda No. 478-81

SUPPLEMENTAL AGREEMENT NO. 8
TO
LEASE NO. DA-15-029-ENG-7929

THIS SUPPLEMENTAL AGREEMENT, made and entered into this 27th day of February 1978, by and between the COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, whose address Pittsburgh, Pennsylvania, hereinafter called the Lessor, for itself, its successors and assigns, and THE UNITED STATES OF AMERICA, hereinafter called the Government.

W I T N E S S E T H T H A T :

WHEREAS, on the 20th day of October 1964, Lease No. DA-15-029-ENG-7929 was entered into by and between the Lessor and the Government pertaining to leasing and EXCLUSIVE USE of 87,977 acres of land more or less and Building P-412 located on the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania, and JOINT AND CONCURRENT USE of other facilities at said Airport for a period beginning 1 July 1963 through 30 June 1979, which was subsequently amended by First, Second, Third, Fourth, Fifth, Sixth and Seventh Supplemental Agreements, which clarified the lease, augmented the weight frequency formula: and extended the term of the lease; and

WHEREAS, it has become necessary and is agreeable to both parties to transfer title to facility No. 604, storage igloo to Allegheny County in lieu of removal and land restoration; and to delete Parcel 2A, 0.413 acres and facility 604 located thereon; and to delete Building 412, Telecom Center, 2367 square feet of space.

NOW THEREFORE, in consideration of the promises and other good and valuable consideration recited herein, the receipt and sufficiency of which is hereby acknowledged, the parties hereto mutually covenant and agree that, effective 27 February 1978, Lease No. DA-15-029-ENG-7929, as amended, is further amended in the following particulars but in no others:

a. That the U.S. Government shall transfer title to facility No. 604, Storage Igloo to the County of Allegheny in consideration of which the County shall release and discharge any obligation the U.S. Government shall have to remove said facility and restore the land upon which it is located.

b. That the U.S. Government's leasehold interest in Parcel 2A consisting of 0.413 acres of land located at Greater Pittsburgh International Airport is terminated effective 27 February 1978.

c. That reference to building No. 412 as found in Lease No. DA-15-029-ENG-7929, as amended, be deleted and the U.S. Government's leasehold interest in the 2367 square feet of space upon which Building No. 412 was located shall be terminated.

d. That any references to the above as found in Paragraphs 1(b) and 1(c) of this agreement be deleted in their entirety.

It is mutually understood and agreed by and between the parties hereto that all other terms and conditions of Lease No. DA-15-029-ENG-7929, as amended, shall apply with equal force and effect to the space covered by this Eighth Supplemental Agreement.

It is further mutually understood and agreed by and between the parties hereto that no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this Supplemental Agreement unless expressly stated herein.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

ATTEST:

Chief Clerk

COUNTY OF ALLEGHENY PENNSYLVANIA
By its Board of County Commissioners

County Commissioner

APPROVED:

Director, Dept. of Aviation

County Commissioner

APPROVED AS TO FORM:

County Solicitor

County Commissioner

County Solicitor

THE UNITED STATES OF AMERICA
Department of the Army, Baltimore
Corps of Engineers

BY:
G. R. BOGGS
Chief, Real Estate Division

SIXTH SUPPLEMENTAL AGREEMENT REVISED

TO

LEASE NO. DA-15-029-ENG-7929

THIS SUPPLEMENTAL AGREEMENT, made and entered into this 17th day of July 1975, by and between the COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, whose address Pittsburgh, Pennsylvania, hereinafter called the Lessor, for itself, its successors and assigns, and THE UNITED STATES OF AMERICA, hereinafter called the Government.

W I T N E S S E T H T H A T :

WHEREAS, on the 20th day of October 1964, Lease No. DA-15-029-ENG-7929 was entered into by and between the Lessor and the Government pertaining to leasing and EXCLUSIVE USE of 87.977 acres of land more or less and Building P-412 located on the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania, and JOINT AND CONCURRENT USE of other facilites at said Airport for a period beginning 1 July 1963 through 30 June 1979, which was subsequently amended by First, Second, Third, Fourth, Fifth and Sixth Supplemental Agreements, which clarified the lease and augmented the weight frequency formula; and

WHEREAS, it has become necessary and is agreeable to both parties to extend the term of the lease to 30 June 2001 and delete the JOINT AND CONCURRENT USE area from this lease and provide for notification of the Lessor of the intention to construct a new facility.

NOW THEREFORE, in consideration of the premises and mutual benefits to be derived therefrom and One Dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto covenant and agree that, effective 1 July 1975, Lease No. DA-15-029-ENG-7929, as amended, is further amended in the following particulars but in no other:

Paragraphs 3 and 6 as amended are deleted in their entirety and the following substituted therefor:

"3. TO HAVE AND TO HOLD the said premises with their appurtances for the term beginning 1 July 1975 through 30 June 1976 provided that unless and until the Government shall give notice of termination in accordance with Provision 11 hereof, this lease shall remain in force thereafter from year to year without further notice

provided furt that adequate appropriations e available from year to year for payment for services and provided further, that this lease shall in no event extend beyond 30 June 2001."

"6. It is understood and agreed by and between the parties hereto not withstanding the provisions of Paragraph 2, that a new separate agreement providing for reimbursement to the Lessor for a portion of the cost of maintaining and servicing the joint use area shall be renegotiated and entered into between the Using Service and the Lessor."

Paragraph 20 is added hereto and made a part hereof:

"20. In the event that any permanent construction is planned on the leased area, the Airport Director shall be informed in writing and advised that construction is being planned when the Using Service requests approval by the FAA."

It is mutually understood and agreed by and between the parties hereto that all other terms and conditions of Lease No. DA-15-029-ENG-7929, as amended, shall apply with equal force and effect to the space covered by this Seventh Supplemental Agreement.

It is further mutually understood and agreed by and between the parties hereto that no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this Supplemental Agreement unless expressly stated herein.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

ATTEST:

Chief Clerk

COUNTY OF ALLEGHENY PENNSYLVANIA
By its Board of County Commissioners

County Commissioner

County Commissioner

County Commissioner

APPROVED:

Director, Dept. of Aviation

APPROVED AS TO FORM:

County Solicitor

THE UNITED STATES OF AMERICA
Department of the Army, Baltimore
Corps of Engineers

BY:
B. J. FRANKEL
Chief, Real Estate Division

(USAF INTERNAL)

(DISTRIBUTION:
(CG, Fin Ctr, PED Dr (Acq)
(C/S, USAF (AFCCERS), Wash
(Cmdr, AF Reserve (AFRSEC),
(Robins AFB, Ga
(FAA, Harrisburg-York-State
(Airport, New Cumberland,
(Cmdr, 911th Mil Airlift Gp
((GCO), Greater Pittsburgh
(Airport, Pittsburgh, Pa
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(ORLRE-P
(DATE: 8 JUN 1970

DEPARTMENT OF THE ARMY
LOUISVILLE DISTRICT, CORPS OF ENGINEERS
P. O. BOX 59, 600 FEDERAL PLACE
LOUISVILLE, KENTUCKY 40201

SIXTH SUPPLEMENTAL AGREEMENT

TO

LEASE NO. DA-15-029-ENG-7929

THIS SUPPLEMENTAL AGREEMENT made and entered into this 26th day of January 1970, by and between the COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, whose address is Pittsburgh, Pennsylvania, hereinafter called the Lessor, for itself, its successors and assigns, and THE UNITED STATES OF AMERICA, hereinafter called the Government, WITNESSETH THAT:

WHEREAS, on the 20th day of October 1964, Lease No. DA-15-029-ENG-7929 was entered into by and between the Lessor and the Government pertaining to leasing and EXCLUSIVE USE of 87.977 acres of land more or less and Building P-412 located on the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania, and JOINT AND CONCURRENT USE of other facilities at said Airport for a period beginning 1 July 1963 through 30 June 1979, which was subsequently amended by First, Second, Third, Fourth and Fifth Supplemental Agreements, which clarified the lease and augmented the weight frequency formula, and

WHEREAS, it has become necessary and is agreeable to both parties to extend the term of the EXCLUSIVE USE AREA only to 30 June 1994 with the JOINT AND CONCURRENT USE area to expire 30 June 1979.

NOW THEREFORE, in consideration of the premises and mutual benefits to be derived therefrom and One Dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto covenant and agree that, effective 1 July 1969, Lease No. DA-15-029-ENG-7929, as amended, is further amended in the following particular but in no other:

Paragraph 3 is deleted in its entirety and the following substituted therefor:

PARAGRAPH DELETED 7TH SUPP. AGREEMENT

"3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning 1 July 1969 through 30 June 1970 provided that unless and until the Government shall give notice of termination in accordance with Provision 11 hereof, this lease shall remain in force thereafter from year to year without further notice, provided further that adequate appropriations are available from year to year for payment for services and provided further, that that portion of the lease covering and providing for Joint and Concurrent use by the Government with the Lessor shall in no event extend beyond 30 June 1979; and further, that portion of the lease covering and providing for Exclusive Use by the Government shall in no event extend beyond 30 June 1994."

It is mutually understood and agreed by and between the parties hereto that all other terms and conditions of Lease No. DA-15-029-ENG-7929, as amended, shall apply with equal force and effect to the space covered by this Sixth Supplemental Agreement.

It is further mutually understood and agreed by and between the parties hereto that no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this Supplemental Agreement unless expressly stated herein.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

ATTEST: _____ Chief Clerk

APPROVED: _____
Director, Dept. of Aviation

COUNTY OF ALLEGHENY PENNSYLVANIA
By its Board of County Commissioners

_____
_____
_____
(County Commissioners)

APPROVED AS TO FORM:

_____
(County Solicitor)

_____
(Assistant County Solicitor)

THE UNITED STATES OF AMERICA

BY: _____
FRED MORGAN
Chief, Real Estate Division

(COR[illegible]OLIS, PENNSYLVANIA)
(USA [illegible]ESERVE)

U. S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
830 WEST BROADWAY
LOUISVILLE, KENTUCKY 40203

FIFTH SUPPLEMENTAL AGREEMENT

TO

LEASE NO. DA-15-029-ENG-7929

THIS SUPPLEMENTAL AGREEMENT made and entered into this 1st day of November 1968 by and between the COUNTY OF ALLEGHENY, Commonwealth of Pennsylvania, whose address is, Pittsburgh, Pennsylvania, hereinafter called the Lessor, for itself its successors and assigns and the UNITED STATES OF AMERICA hereinafter called the Government,

WITNESSETH THAT:

WHEREAS, on the 20th day of October 1964, Lease No. DA-15-029-ENG-7929 was entered into by and between the Lessor and the Government pertaining to leasing and exclusive use of 87.977 acres of land more or less and building P-412 located on the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania and joint and concurrent use of certain other facilities of said Airport for a period beginning 1 July 1963 through 30 June 1979, and was subsequently amended by First, Second, Third, and Fourth Supplemental Agreements; and

WHEREAS, it has become necessary and agreeable to both parties to change the credit allowance for the use of snow removal equipment, effective 1 January 1969.

NOW THEREFORE, in consideration of the premises and mutual benefits to be derived therefrom, the parties hereto covenant and agree that, effective 1 January 1969, Lease No. DA-15-029-ENG-7929, as amended, is further amended in the following particulars but in no others:

Paragraph 6 b of this lease, as amended, is deleted and the following substituted therefor:

AREA IS DELETED AMENDED SEE SEVENTH SUPPLEMENTAL AGREEMENT

"6. b. In consideration for loan of snow removal equipment to the Lessor as provided in the terms and conditions of the Separate Agreement heretofore entered into between the United States and the County of Allegheny, beginning with the effective date of this Fifth Supplemental Agreement and for the remaining period of Fiscal Year 1969 and effective each 1 July thereafter a credit of $500.00 shall be allowed to the Government. Upon withdrawal or return of all snow removal equipment in accordance with Paragraph 6 c of this lease, as amended, no allowance will be credited to the Government in accordance with the terms and conditions above stated."

It is mutually understood and agreed by and between the parties hereto that all other terms and conditions of the subject lease, as amended, shall remain unchanged and shall apply with equal force and effect to this Fifth Supplemental Agreement unless expressly stated herein.

It is further mutually understood and agreed by the parties hereto that no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this Fifth Supplemental Agreement unless expressly stated herein.

IN WITNESS WHEREOF the parties hereto have subscribed their names as of the dates and year first above written.

ATTEST:

M. J. Griffin
Director, Dept. of Aviation

COUNTY OF ALLEGHENY PENNSYLVANIA
By its Board of County Commissioners

(County Commissioners)

Attest:
J. B. Carpenter
Chief Clerk

APPROVED AS TO FORM:

Maurice Rosenberg
(County Solicitor)

Walter D. Kelley
(Assistant County Solicitor)

THE UNITED STATES OF AMERICA

Fred Morgan
FRED MORGAN
Chief, Real Estate Division

'ORAOPOLIS, PENNSYLVANIA)
S AI: FORCE RESERVE)

(DISTRIBUTION:
(CG, Fin Ctr, P&D Branch (dup)
(C/S, USAF, AFOCE-F, Wash, DC
(Cmdr, CAC, EEC-R, Robins AFB,
(Ga (dup)
(FAA, Harrisburg-York State
(Airport, New Cumberland, Pa
(Cmdr, 911th Military Airlift
(Gp, GCO, Gr Pitts Arpt, Pitts
(RECORD COPY ORLRE-AL
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(ORLRE-P
(DATE: 29 DEC 1967

DEPARTMENT OF THE ARMY
LOUISVILLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 59, 830 WEST BROADWAY
LOUISVILLE, KENTUCKY 40201

FOURTH SUPPLEMENTAL AGREEMENT

TO

LEASE NO. DA-15-029-ENG-7929

THIS SUPPLEMENTAL AGREEMENT, made and entered into this 21st day of November 1967, by and between the COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, whose address is Pittsburgh, Pennsylvania, hereinafter called the Lessor, for itself, its successors and assigns and THE UNITED STATES OF AMERICA, hereinafter called the Government:

WITNESSETH:

WHEREAS, on the 20th day of October 1964, Lease No. DA-15-029-ENG-7929 was entered into by and between the Lessor and the Government pertaining to leasing and exclusive use of 87.977 acres of land more or less and Building P-412 located on the Greater Pittsburgh Airport, County of Allegheny, Commonwealth of Pennsylvania and joint and concurrent use of certain other facilities of said Airport for a period beginning 1 July 1963 through 30 June 1979, and was subsequently amended by First, Second and Third Supplemental Agreements; and

WHEREAS, it has become necessary and agreeable to both parties to abolish the weight frequency formula and substitute a fixed charge of $20,000.00 per year, subject to renegotiation each year by either party during a 90-day period prior to 30 June commencing with 30 June 1969.

NOW THEREFORE, in consideration of the premises and mutual benefits to be derived therefrom, the parties hereto covenant and agree that, effective 1 January 1968, Lease No. DA-15-029-ENG-7929, as amended, is further amended in the following particulars but in no others:

FOURTH SUPPLEMENTAL AGREEMENT TO LEASE NO. DA-15-029-ENG-7929 (CONTINUED)

1. All Supplemental Agreements heretofore entered into or proposed are null and void and of no further force and effect.

2. Paragraph 6 and all sub-paragraphs (a through f) are deleted and the following substituted therefor:

PARA 6 DELETED (IN ENTIRETY) SUPPLEMENTAL AGREEMENT, 17 JULY 75

"6. Effective as of the date of this Supplemental Agreement, subject to the availability of funds, the Government will reimburse the Lessor for the cost of maintaining and servicing the runways, taxiways and appurtenances, including, but not limited to, weed cutting, grass mowing, turf maintenance, operation and maintenance of high intensity lighting system and glide angle, weed clearing, marking and painting of runways, structural fire protection and aircraft fire and crash rescue services, snow removal, ice control and all other maintenance and services necessary for the proper operation of said airport, including maintaining the clearance criteria in the transition approach and clear zones, all pursuant to the Standards prescribed by the Federal Aviation Agency or its successor in function, for the operation of Civil Airports of the same type and character at a rate indicated in "a" below."

"a. For joint use of the landing field and maintenance of the flying facilities by the Lessor, the rate payable by the Government to the Lessor shall be $20,000.00 per year, subject to renegotiation each year during a 90-day period prior to 30 June beginning with 30 June 1969. The fixed annual charge may be renegotiated upon 30 days' notice by the Government provided that a substantial change (programmed or actual) occurs in the Air Force missions located at Greater Pittsburgh Airport. Payment under the terms of this agreement shall be effective 1 January 1968 and shall provide for annual payment in the first quarter of each fiscal year starting 1 July 1968. The rental for the period from 1 January 1968 to 30 June 1968 shall be $10,000.00 and shall be payable in the third quarter of FY 68."

Para 6b amended per 5th Supplemental Agreement, Nov 68.

"b. ~~In consideration for loan of snow removal equipment~~ to the Lessor as provided in the terms and conditions of the Separate Agreement heretofore entered into between the United States and the County of Allegheny, beginning with the effective date of this Supplemental Agreement and for the remaining period of Fiscal Year 1968 and effective each 1 July, thereafter a credit for $1,500.00 shall be allowed to the Government. Upon withdrawal or return of all snow removal equipment in accordance with "c" below, no allowance will be credited to the Government ~~in accordance with the terms and conditions above stated~~."

"c. The Government may withdraw all of the equipment furnished under the above-referenced lease. The Lessor may return any or all of the equipment furnished by the United States under the above-referenced lease; providing any withdrawal or return of equipment is preceded by 30 days' notice in writing given by the party withdrawing or returning the equipment to the other party affected."

It is mutually understood and agreed by and between the parties hereto that all other terms and conditions of subject lease shall remain unchanged and shall apply with equal force and effect to this Supplemental Agreement unless expressly stated herein.

It is further mutually understood and agreed by the parties hereto that no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this Supplemental Agreement unless expressly stated herein.

IN WITNESS WHEREOF, the parties hereto have subscribed their names as of the day and year first above written.

12-12-67

ATTEST:

COUNTY OF ALLEGHENY PENNSYLVANIA
by its Board of County Commissioners

(County Commissioners)

APPROVED:

Dir. Dept of Aviation

APPROVED AS TO FORM:

(County Solicitor)

(Assistant County Solicitor)

THE UNITED STATES OF AMERICA

BY:
FRED MORGAN 26 DEC 1967
Chief, Real Estate Division

8-W 3

(GREATER PITTSBURGH AIRPORT, PA)
(UNITED STATES AIR FORCE RESERVE)

DISTRIBUTION:
(CG USArmy Fin Ctr P&D Br. (Dup)
(DCS/C USAF ATTN: D/I RE Div (Dup)
(Attn: AFOCE-R & AFSPPCA)
(Comdr ConAC ATTN: ERP (Dup))
(Comdr 911thTrp.Carr.Gp, Greater)
(Pitts Airport , Coraopolis Pa.)
((Dup))
(FAA, Harrisubrg-York State Arpt)
(New Cumberland, Pa 17070)
(RECORD COPY: OKLRE-AL, Pitts RE Of)
(ORLRE-P)
(DATE: 28 OCT 1964

U. S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
830 WEST BROADWAY
LOUISVILLE, KENTUCKY 40203
w/DD 1354 trip
LEASE
NO. DA-15-029-ENG-7929
Between
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
and
THE UNITED STATES OF AMERICA

THIS LEASE made and entered into this 20 day of October 1964 by and between the COUNTY OF ALLEGHENY, Commonwealth of Pennsylvania, whose address is Pittsburgh, Pennsylvania and whose interest in the property hereinafter described is that of owner, for itself, its successors and assigns, hereinafter called the Lessor, and THE UNITED STATES OF AMERICA, hereinafter called the Government.

WHEREAS, on the 4th day of May 1944, Lease No. W-18-010-ENG-485 was entered into by and between the Lessor and the Government pertaining to the leasing and exclusive use of 87.9077 acres of land more or less and Building P-412 located thereon of the Greater Pittsburgh Airport in the County of Allegheny, Commonwealth of Pennsylvania and joint and concurrent use of certain facilities of said Airport for a period of 4 May 1944 until 30 June 1969 unless sooner cancelled, and said lease was subsequently amended to modify the term of the lease and certain other conditions by the First Supplemental Agreement thereto, and to extend the term to 30 June 1979, and was further amended by Supplemental Agreement Number Two to provide for crash, fire protection, snow removal, etc., and certain specified landing and take-off weights predicated upon the weight frequency formula; and,

WHEREAS, it is to the mutual benefit of both parties to cancel said Lease No. W-18-010-ENG-485 as amended and enter into a new lease combining the terms and conditions of the former lease into one instrument and to amend legal description of joint use area and landing and take-off fees.

NOW THEREFORE, in consideration of the premises and the mutual benefits to be derived therefrom the parties hereto covenant and agree as follows:

1. The County of Allegheny hereinafter called the Lessor, for itself, its successors and assigns, hereby leases to the Government certain premises at the Greater Pittsburgh Airport in the Townships of Moon and Findley, County of Allegheny, Commonwealth of Pennsylvania, described as follows:

(a.) The exclusive use of the area outlined in green on the attached map containing approximately 87.364 acres and designated as Parcel No. 2, reserving unto the Lessor the right to enter thereon at such times as approved by the Commanding Officer of the Airport Installation, to maintain and repair its existing utility lines.

(b.) The exclusive use of the area outlined in green on the attached map, containing approximately 0.413 acres designated as Parcel No. 2-A reserving unto the Lessor the right to enter thereon at such times as approved by the Commanding Officer of the Air Force installation, to maintain and repair its existing utility lines.

c. The exclusive use of Building P-412 located on Parcel No. 2, and hereby designated a portion of said Parcel No. 2, said demised premises to be used for the requirements of the Department of the Air Force.

d. All or any part of the above premises to be used by the Government for Air Navigation and Air Terminal purposes and military aviation purposes.

(2.) Joint and Concurrent Use. The Government shall have the right to use jointly with the Lessor, its officers, agencies, assignees, permittees, licensees, or other lessees, the landing field area of said Airport and appurtenances necessary thereto, in the take-off and landing of aircraft, and provided further that the rights of the Government set forth herein shall include the use of all additions, extensions and improvements to the existing runways, taxiways and appurtenances thereto, together with the right of ingress and egress thereto.

3. TO HAVE AND TO HOLD the said premises with their appurtenances for the term beginning 1 July 1963 through 30 June 1964, provided that unless and until the Government shall give notice of termination in accordance with Provision 11 hereof, this lease shall remain in force thereafter from year to year without further notice, provided further that adequate appropriations are available from year to year for payment for services and provided further, that this lease shall in no event extend beyond 30 June 1979.

PARA 3 DELETED SEE SEVENTH SUPPLEMENTAL AGREEMENT 17 SEPT 75

4. The Government shall pay the Lessor rent at the following rate: The sum of One Dollar ($1.00) for the entire term and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged.

5. The Government shall not assign this lease in any event and shall not sublet the demised premises except by written approval of the Lessor.

6. Effective as of the date of this lease subject to the availability of funds, the Government will reimburse the Lessor for the cost of maintaining and servicing and maintaining the runways, taxiways, and appurtenances including, but not limited to, weed cutting, grass mowing, turf maintenance, operation maintenance of high intensity lighting system, glide angle, weed clearing, marking and painting of runways, fire and crash rescue service, snow removal, ice control and all other maintenances and services necessary for the proper operation of said airport, including maintaining the clearance criteria in the transition approach and clear zones, all pursuant to the Standards prescribed by the Federal Aviation Agencies or its successors in function, for the operation of Civil Airports of the same type and character at a rate indicated below, predicated upon the Weight Frequency Formula, that is to say, the landing weight of each United States Aircraft based at the subject installation multiplied by the number of actual landings thereof, in accordance with the terms and conditions as follows:

PARA 6 DELETED. SEE 7TH SUPPLEMENTAL AGREEMENT, 17 SEPT 75

DELETED a. For Joint Use of the landing field and maintenance of the flying facilities, by the Lessor the rate for each 1,000 pounds of landing weight of based aircraft shall be twelve (12) cents. For the purpose of determining the landing weights, the C-119 type aircraft shall be considered as 39,000 pounds and the landing weights of the C-45 47 type aircraft shall be considered as 6,750 pounds.

DELETED b. United States transient aircraft shall not be included for payment purposes. For the purpose of this lease transient aircraft is defined as "all United States aircraft visiting the Air Force activity for landing at said airport, for servicing while en route to another airport." Based aircraft is defined as "all United States Aircraft assigned to U. S. Air Force Reserve facilities at said airport."

DELETED c. The United States Air Force will maintain accurate records of based United States Aircraft by type and military identification number and the number of landings for the calendar month and furnish this information to the Lessor on or before the 10th day of the month next succeeding the month of account. Touch and go operations shall be included in the count and recorded as a landing. Landing shall be defined as "actual contact with the runway surface."

DELETED d. The rate per 1,000 pounds for landing weight specified herein shall be for an initial term commencing the 1st day of July, 1963, and ending on 30 June, 1968. Said rate shall be subject to re-negotiation within a 90-day period immediately prior to the end of the term set forth above and each successive five year term thereafter. It is expressly understood and agreed, however, that during the term of this lease, the rate per 1,000 pounds of landing weight as provided herein or as may be hereafter negotiated shall not at any time exceed seventy-five per cent (75%) of the average rate per 1,000 pounds landing weight used in determining the landing rates of commercial aircraft operating from said airport and in effect as of the date of any re-negotiation of rates under this Lease.

DELETE e. In consideration for loan of snow removal equipment to the Lessor as provided in the terms and conditions of the Separate Agreement to be entered into between the United States and the County of Allegheny, beginning with the execution of this lease and for the remaining period of Fiscal Year 1964 and effective each July 1, thereafter, no charge shall be made for U. S. Aircraft landings until such time as the accumulated charges for such landings for the Fiscal Year exceeds $2,000.00. After the accumulated charges have exceeded $2,000.00 for U. S. Aircraft landings made in that Fiscal Year, or after withdrawal or return of all snow removal equipment in accordance with Paragraph 5f below, the Lessor may charge the Government for all subsequent landings made within that Fiscal Year in accordance with the terms and conditions above stated.

DELETE f. The Government may withdraw all of the equipment furnished under the above referenced lease. The Lessor may return any or all of the equipment furnished by the United States under the above referenced lease; providing any withdrawal or return of equipment is preceded by 30 days' notice in writing given by the party withdrawing or returning the equipment to the other party affected.

7. The Government shall not require the Lessor to furnish any services in connection with Parcel No.2-A or improvements located thereon.

8. The Government shall have the right during the existence of this lease to make alterations and improvements and to attach fixtures in and upon the exclusive use Parcels herein demised. All alterations, improvements and fixtures made or erected by the Government shall remain the property of the Government and may be removed or otherwise disposed of by the Government.

9. The Government shall surrender possession of the premises upon expiration or termination of this lease and if required by the Lessor, shall within 30 days thereafter, or within such additional time as may be mutually agreed upon, return the premises in as good condition as that existing at the time of entering upon the same under this lease, reasonable ordinary wear and tear and damages by the elements or by circumstances over which the Government has no control excepted, provided that the Lessor requires the return of the premises in such condition, the Lessor shall give written notice thereof to the Government at least fifteen (15) days before the expiration or termination of the lease, said notice to specify the exceptions of the Lessor to the then existing conditions and provided further, that should the Lessor give such notice within the time specified above, the Government and the Lessor shall immediately enter into negotiations for the purpose of determining whether the Government shall make a cash settlement with the Lessor or leave in place part or all of the said alterations, improvements and fixtures in lieu of performance of the Government's obligation to restore said premises.

10. No alterations, improvements or fixtures shall be made or erected on the joint and concurrent use area without prior written consent of the Lessor.

11. The Joint Inventory and Condition report of all personal property of the Lessor and the Joint Physical Survey and Inspection Report of the demised premises made upon entering upon the premises under Lease No. W-18-010-ENG-485 shall be applicable to this lease and no new Survey of Premises and Condition report shall be necessary.

12. The Government may terminate this lease at any time by giving 30 days' notice in writing to the Lessor and no rental shall accrue after the effective date of the termination.

13. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of the party giving such notice and if given by the Government shall be addressed to the Lessor in the County of Allegheny, Commonwealth of Pennsylvania, Pittsburgh, Pennsylvania, and if given by the Lessor shall be addressed to the Office of the District Engineer, U. S. Army Engineer District, Louisville, Post Office Box 59, Louisville, Kentucky 40201.

14. This lease shall be subordinate to the provisions of any existing or future agreement entered into between the Lessor and the United States to obtain Federal Aid for the improvement or operation and maintenance of the subject Airport.

15. No member or delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

a. The Government may, by written notice to the Lessor, terminate the right of the Lessor to proceed under this lease if it is found, after notice and hearing, by the Secretary of the Army or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessor, or any agent or representative of the Lessor, to any officer or employee of the Government, with a view toward securing a lease or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such lease; provided, that the existence of facts upon which the Secretary of the Army or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

b. In the event this lease is terminated as provided in Paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Lessor as it could pursue in the event of a breach of the Lease by the Lessor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined

by the Secretary of the Army or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Lessor in providing any such gratuities to any such officer or employee.

c. The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this lease.

16. The Lessor, in performing the work required by this contract, shall not discriminate against any employee or applicant for employment because of race, creed, color or national origin; provided that the Lessor shall otherwise be the sole judge of the qualifications of any worker for any particular job.

17. This transaction is not affected by Title 10 USC 2662 as amended by Section 511, Public Law 86-500, 86th Congress.

18. It is hereby agreed by and between the parties hereto that effective as of the date of this instrument, Lease No. W-18-010-ENG-485 dated 4 May 1944, Supplemental Agreement No. 1, dated 8 March 1955, and Supplemental Agreement No. 2, dated 22 May 1958, heretofore entered into between the parties hereto is hereby cancelled and of no further force and effect. Notice of termination of said lease as provided for in Paragraph 9 therein is expressly waived.

19. All terms and conditions in respect to this lease are expressly contained herein and the Lessor agrees that no representative or agent of the Government has made any representations or provisions with respect to this lease not expressly contained herein and no oral or other promise of any character made by any individual allegedly speaking for the Government shall be binding under this lease unless expressly stated herein.

A 20 ED BY SUPP. AGREEMENT 7 JULY, 1975

20. IN THE EVENT THAT ANY PERMANENT CONSTRUCTION IS PLANNED ON THE LEASED AREA, THE AIRPORT DIRECTOR SHALL BE INFORMED IN WRITING AND ADVISED THAT CONSTRUCTION IS BEING PLANNED WHEN THE USING SERVICE REQUESTS APPROVAL BY THE FAA.

LEASE NO. DA-15-029-ENG-7929 (Continued)

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the dates first above written.

COUNTY OF ALLEGHENY, PENNSYLVANIA by its Board of County Commissioners

ATTEST:

Chief Clerk

County Commissioners

APPROVED:

Acting Dir, Dept. of Aviation

APPROVED AS TO FORM:

County Solicitor

Asst. County Solicitor

THE UNITED STATES OF AMERICA

BY: FRED MORGAN

Chief, Real Estate Division
Official Title

DEPARTMENT OF AVIATION
PITTSBURGH INTERNATIONAL AIRPORT • ALLEGHENY COUNTY AIRPORT

County of Allegheny

PITTSBURGH INTERNATIONAL AIRPORT
LANDSIDE TERMINAL, SUITE 4000
P.O. BOX 12370
PITTSBURGH, PA 15231-0370
(412) 472-3500 • FAX (412) 472-3636

HERBERT C. HIGGINBOTHAM, II, P.E.
DIRECTOR

RFM 11 April 94
CEE AR
CEV/RF
CEER
CEM TEF
CEA
For your info

April 5, 1994

Col. Christopher M. Joniec, USAFR
Commander
911 Airlift Group
Pittsburgh International Airport ARS316
Defense Avenue, Ste. 101
Coraopolis, PA 15108-4403

SUBJECT: EXPANSION OF RESERVE BASE

Dear Commander Joniec:

On February 7, 1994, several members of my staff met with Dennis Weber, Executive Officer for the 911th Airlift Group, Keith A. Schmidt, Military and Veterans' Affairs Coordinator for Rick Santorum's office, Charlie Engstrom of Commissioner Dunn's office and several other military personnel. This meeting had been requested by the 911th in order to express a need to lease approximately 30 additional acres of Airport property for expansion of existing aircraft apron.

In order for the Department of Aviation to consider this request for additional lease space, it is necessary for the 911th to provide us with specific information as listed below:

1. A site plan depicting the actual and revised lease line; interface with existing and proposed Airport facilities; and access and infrastructure impacts.

2. A use plan depicting proposed facilities and aircraft parking.

3. Supporting documentation of needs including, but not limited to, the existing and future economic impact of the base, impact of potential military down sizing, and overall viability of the base.

Upon receipt of this information, my staff will review the 911th's expansion request in light of current and proposed Airport developments. Should you have any questions in the interim, please contact Richard C. Belotti, Principal Planner of my staff at 472-3545.

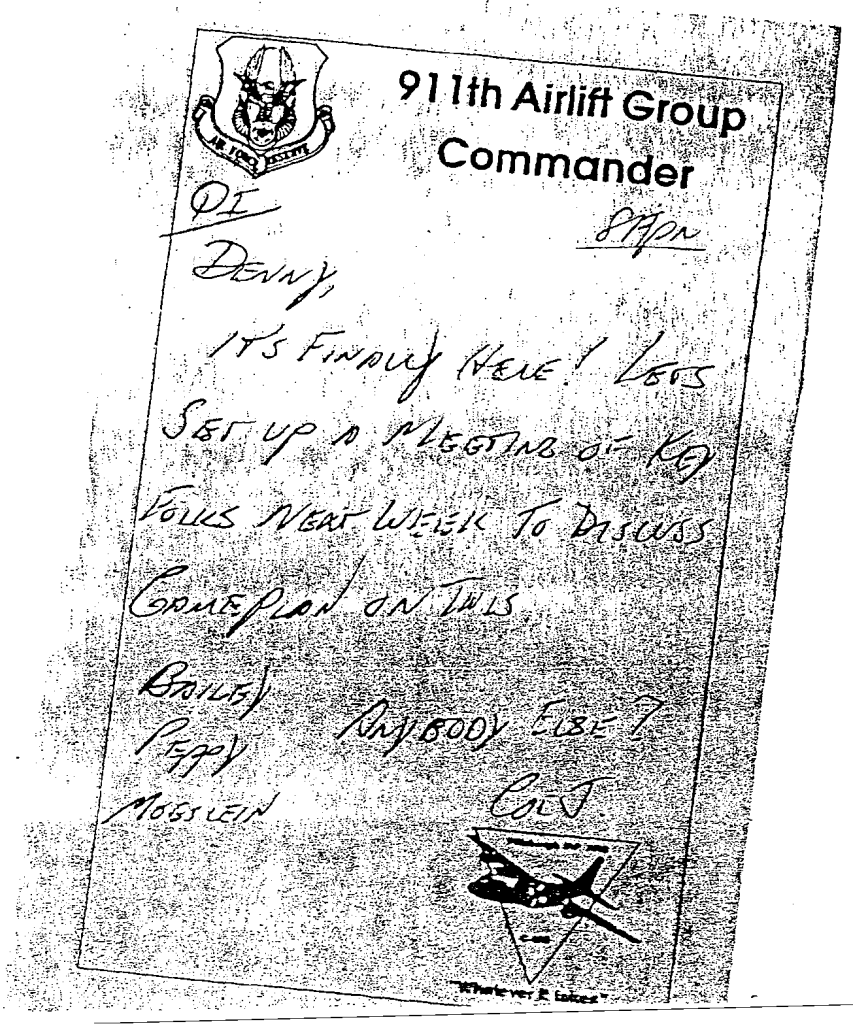
Very truly yours,

/ Herbert C. Higginbotham, II

Herbert C. Higginbotham, II, P.E.
Director

HCH/RCB/PF/jr

cc Peter Florian
Tom Jargiello
Kevin Conroy
Charles Engstrom



18th District, Pennsylvania

COMMITTEE ON
WAYS AND MEANS

[illegible]

Washington Office:
1222 Longworth House Office Building
Washington, DC 20515-3818
(202) 225-2135

Congress of the United States
House of Representatives
Washington, DC 20515-3818

District Offices:
[illegible]
Pittsburgh, PA [illegible]
(412) [illegible]

[illegible] Avenue
McKeesport, PA [illegible]
(412) [illegible]

[illegible] Road
Pittsburgh, PA [illegible]
(412) [illegible]-3206

December 12, 1994

Secretary James F. Boatright
Deputy Assistant Secretary
Of Air Force (Installations)
SAS-MII
1660 Air Force Pentagon
Washington, D.C. 20330-1660

Dear Secretary Boatright:

I am writing to urge your consideration of a proposal regarding the 911th Airlift Wing in Pittsburgh, Pennsylvania.

Through my numerous visits to the 911th as a U.S. Congressman, I became aware of the opportunity to acquire additional aircraft parking ramp space. As you may know, the old Greater Pittsburgh Airport is currently vacant and stands adjacent to the 911th. An offer has been made by the county to add to the current lease some 30 acres of land from the old airport terminal area. This land would be a valuable and extremely useful asset to the Reserve Base at no additional cost to the Reserves.

It is my understanding that approval of this action is currently pending in your office. The 911th has played an integral part in serving the Pittsburgh and international community through its humanitarian and military airlift missions. Acceptance of this proposal would enable the 911th to expand and take on additional responsibility.

Thank you for your consideration of this matter. I look forward to your reply.

Sincerely,

Rick Santorum

Rick Santorum
Member of Congress

RS:ps

DEPARTMENT OF AVIATION
PITTSBURGH INTERNATIONAL AIRPORT • ALLEGHENY COUNTY AIRPORT

County of Allegheny

PITTSBURGH INTERNATIONAL AIRPORT
LANDSIDE TERMINAL, SUITE 4000
P.O. BOX 12370
PITTSBURGH, PA 15231-0370
(412) 472-3500 • FAX (412) 472-3636

HERBERT C. HIGGINBOTHAM, II, P.E.
DIRECTOR

November 14, 1994

Colonel T. Spencer, USAF Reserve
911th Air Wing
Greater Pittsburgh International Airport
318 Defense Avenue, Suite 101
Coraopolis, PA 15108-4403

SUBJECT: REUSE OF OLD TERMINAL
GREATER PITTSBURGH INTERNATIONAL AIRPORT

Dear Colonel Spencer:

The County of Allegheny, Department of Aviation has recently been reviewing the old terminal for the Greater Pittsburgh International Airport and the associated ramp area. In reviewing this, it appears that the eastern portion of this ramp area which comprises approximately thirty (30) acres, may be suitable for use by the Air Force Reserve. If this is of interest to you, we would submit a request to the Board of Commissioners of Allegheny County to amend your lease to include this with the other land you are currently occupying. In previous discussions with the Commissioners, I am sure they will be receptive to this idea because of the value and the benefit of the 911th to this community. Based on these conversations with the Commissioners, specifically concerning the County's reuse of this area, I know that they would receive this request favorably.

Please indicate your thoughts concerning this to me so that if this is your desire, we can initiate the necessary paper work. I have been told that you have been an excellent neighbor over the years and that the Allegheny County Department of Aviation and the 911th have worked together very well. This was very evident to me in the aftermath of the tragedy of the crash of USAir Flight 427.

If there is a need for us to discuss this matter, please do not hesitate to call me at 472-3510.

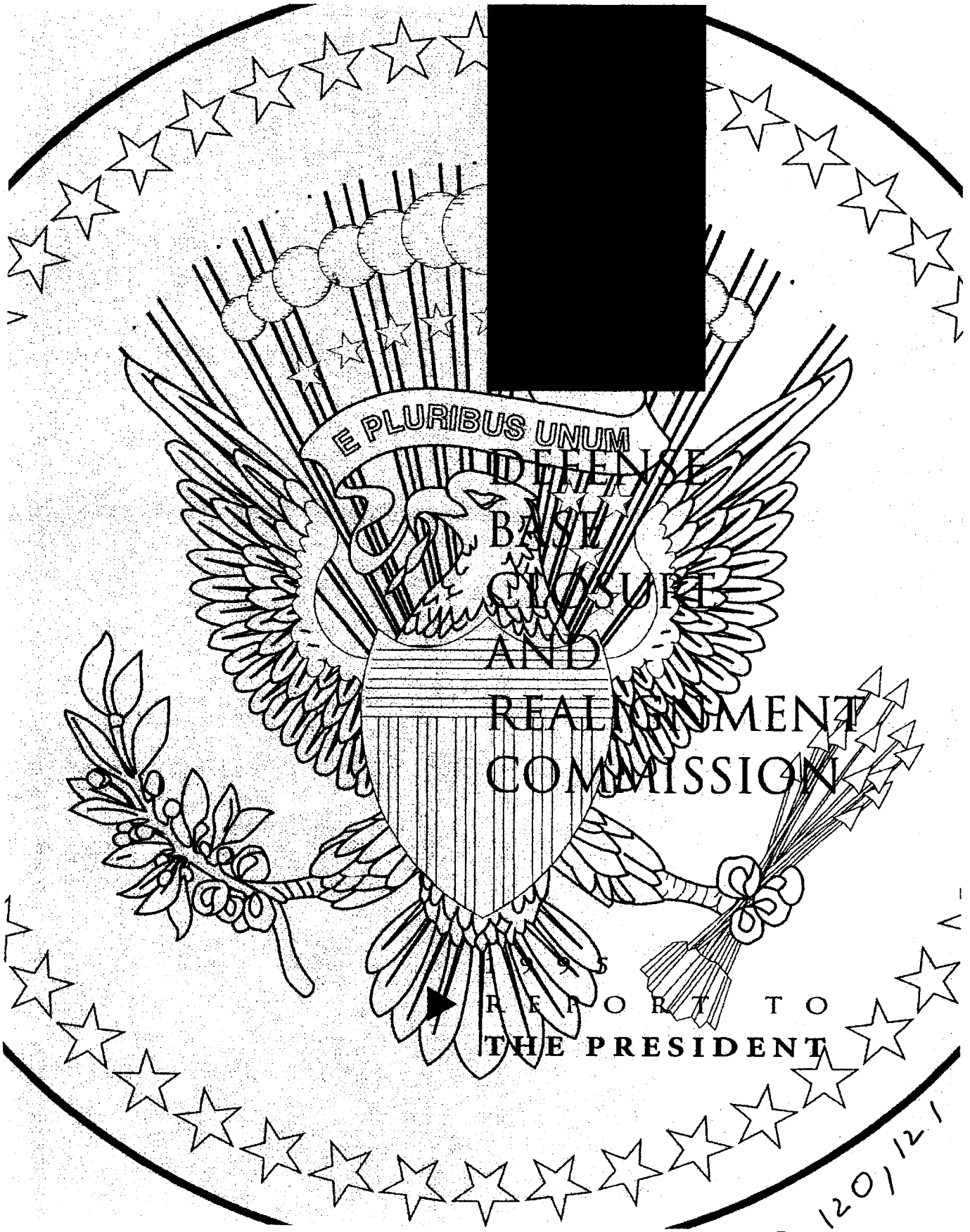
Very truly yours,

Hubert C. Higginbotham II

Herbert C. Higginbotham, II, P.E.
Director

HCH/rd

cc Commissioner Tom Foerster, Chairman
Commissioner Pete Flaherty
Commissioner Larry Dunn
Tom Jangiello, ACDA
Peter Florian, ACDA
Kevin Conroy, ACDA
Richard Belotti, ACDA



DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

1995

REPORT TO

THE PRESIDENT

Pg 120/121

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

ALAN J. DIXON, CHAIRMAN

COMMISSIONERS:
AL CORNELLA
REBECCA COX
GEN J. B. DAVIS, USAF (RET)
S. LEE KLING
RADM BENJAMIN F. MONTOYA, USN (RET)
MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

July 1, 1995

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

We are pleased to submit the 1995 Defense Base Closure and Realignment report for your consideration. This report contains the Commission's findings and recommendations based on a thorough review and analysis of the recommendations made by the Secretary of Defense together with the Commission's recommendations for closure and realignment of military installations within the United States.

Over the past four months, the Commission has reviewed thousands of pages of testimony and written documentation. We held 16 regional hearings across the country, visited 167 military activities, and met with hundreds of local community groups. In 13 hearings in Washington, D.C., we received expert testimony from Department of Defense officials, the General Accounting Office and Members of Congress. All of the Commission's activities and all of the documentation used by the Commission were open to the public.

The decision to close a military installation is a painful one. Every installation recommended for closure or realignment has enjoyed a proud history and offered a priceless service to our nation. Our review indicates that, with a concerted effort, communities can recover from the impact of a base closure, but we realize that our recommendations will result in economic hardship for many families and communities. We also realize that it is essential to our national security that we reduce our defense infrastructure in a careful, deliberate way. We believe our recommendations will help the military services maintain readiness, modernize their forces and preserve the force structure necessary to protect our nation's vital interests in the future.

The Commission has also included some recommendations in this report regarding the post-closure activities of the federal government concerning military installations, as well as some ideas on how to address base closings in the future.

basing the unit at Wright-Patterson AFB. The community is concerned about the continued existence of the Springfield-Beckley Municipal Airport if the Guard unit leaves, as a significant portion of airport revenues will be lost. The community is also concerned about the economic impact on the community if the station closes.

Commission Findings

The Commission found the extended return on investment and the inadequacy of facilities at Wright-Patterson AFB did not justify relocating the unit from its current location. Further, the Commission found the facilities and basing arrangement at Springfield-Beckley ideal for meeting the needs of the Air National Guard units. The Commission found the small savings generated by closure of the Springfield-Beckley facilities did not justify their closure and potential degradation to the units.

Commission Recommendation

The Commission finds the Secretary of Defense deviated substantially from final criteria *4* and 5. Therefore, the Commission recommends the following: Springfield-Beckley Municipal Airport Air Guard Station will remain open. The Commission finds this recommendation is consistent with the force-structure plan and final criteria.

Greater Pittsburgh IAP *Air* Reserve Station, Pennsylvania

Category: Air Force Reserve
Mission: Tactical Airlift
One-time Cost: None
Savings: 1996 2001: None
Annual: None
Return on Investment: None
FINAL ACTION: Remain Open

Secretary of Defense Recommendation

Close Greater Pittsburgh IAP Air Reserve Station (ARS). The 911th Airlift Wing will inactivate and its C-130 aircraft will be distributed to Air Force Reserve C-130 units at Dobbins ARB, Georgia, and Peterson AFB, Colorado.

Secretary of Defense Justification

The Air Force Reserve has more C-130 operating locations than necessary to effectively support the Reserve C-130 aircraft in the Department of Defense (DoD) Force Structure Plan. Although Greater Pittsburgh *ARS* is effective at supporting its mission, its evaluation overall under the eight criteria supports its closure. Its operating costs are the greatest among Air Force Reserve C-130 operations at civilian airfields. In addition, its location near a number of AFRES and Air National Guard units provides opportunities for its personnel to transfer and continue their service without extended travel.

Community Concerns

The community believes the cost analysis of the air reserve stations in this category was faulty. Specifically, the base operating support cost experienced by one Air Force Reserve C-130 base was used as the cost for two other air reserve locations, as well as Pittsburgh IAP Air Reserve Station, resulting in false savings and cost information. Further, the community argues the Air Force did not consider the 30 acres of additional aircraft parking apron currently being used under a memorandum of agreement with Allegheny County. The community disagrees with the Air Force color code ranking for the airfield evaluation, facilities condition, and air quality and maintains that higher ranking in accordance with real conditions would enhance military value.

Commission Findings

The Commission found the costs to operate Pittsburgh International Airport (IAP) Air Reserve Station (ARS) and two other Air Force Reserve C-130 locations were inaccurate. With corrected data applied to the COBRA model, the commission found Pittsburgh was one of the least costly installations to operate. The Air Force indicated they had received the offer of additional acreage at Pittsburgh IAP ARS, but determined it was inappropriate to act on the offer pending the outcome of the base closure process. Review of the November 1994 Airfield Pavement Evaluation substantiated the community's assertions the airfield can accommodate all types of aircraft. Information submitted by the community demonstrates Allegheny County Bureau of Environmental Quality has applied to the US Environmental Protection Agency for air quality redesignation to attainment, having met air quality standards during 1991-93. The Commission found that the low operating costs and expansion opportunities were not fully considered by the Air Force.

Commission Recommendation

The Commission finds the Secretary of Defense deviated substantially from final criteria *4* and 5.

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE

5 October 1995

MEMORANDUM FOR HQ AFRES/CE

FROM: 911 AW/CC

SUBJECT: Pittsburgh IAP ARS Land Transfer

1. The 911 Airlift Wing currently operates efficiently and effectively on 115 acres of land primarily leased from Allegheny County for one dollar per year. The installation has a compact and efficient infrastructure, with all facilities and buildings well maintained. In February 1994, the 911 Airlift Wing signed a Memorandum of Agreement with Allegheny County to utilize an additional 21.7 acres of adjacent ramp space for surge capacity, at no cost to the government.

2. The County additionally offered 30 acres of prime, ready ramp space to the Air Force in 1994. Subsequently, the Commissioners of Allegheny County offered an additional 47 acres of concrete ramp space, adjacent to the existing ramp, at no cost to the Air Force. The development of this offer was not a reaction to BRAC 95. The offer is the outcome of a $500,000 study commissioned by HQ AFRES in 1983 and presented in 1988 as the 911 Airlift Wing Base Comprehensive Plan (see attached BCP Executive Summary).

3. The completion of the billion dollar Pittsburgh Mid-field Terminal complex in 1992, released additional acreage for the 911 AW when the old terminal and ramp space was abandoned. The 1995 Base Closure Executive Group ranked Pittsburgh IAP ARS as one of the top two installations in military value. Pittsburgh IAP ARS demonstrates the greatest capacity and capability of all AFRES units, located at commercial airfields, for cost effective expansion and the ability to react to and accommodate contingency, mobilization and future total force requirements.

4. The Department of Defense justification to close Pittsburgh IAP ARS during the 1995 BRAC process was based on inaccurate data provided by the Air Force Reserve. With corrected data applied to the COBRA model, Senator Dixon and the 1995 BRAC Commission found "Pittsburgh was one of the least costly installations to operate." With regard to the base's capability to expand, the Air Force indicated they had received the offer of additional acreage at Pittsburgh IAP ARS, but determined it was inappropriate to act on the offer, pending the outcome of the base closure process. The Commission found that the low operating costs and expansion opportunities were not fully considered by the Air Force.

5. A large portion of the acreage offered to the Air Force Reserve is ready ramp space, capable of supporting any and all aircraft in the military or commercial inventory with no known MILCON requirements. Acceptance and subsequent use of the offered property will not adversely affect any existing ecosystems.

6. Of the six (6) AFRES installations at civilian airfields compared in the 1995 BRAC process, Pittsburgh IAP ARS had the lowest projected MILCON. The concern over the latest MILCON bid prices at Pittsburgh exceeding the programmed amounts, are the result of base estimates that were not updated in eight years, unforeseen environmental requirements, unknown siting criteria during the programming process in 1987 and inaccurate estimating during the design process by the Army Corp of Engineers. These bid prices should not be interpreted to assume that Pittsburgh is a high cost area for construction as demonstrated by the construction of the Midfield Terminal facility, completed under budget and on time.

7. The greatest concern to the 911 AW at the initial offer of the proposed acreage from Allegheny County was the extent of environmental contamination that may be encountered. Discussions with the Allegheny County Commissioners on this issue, indicated that the County and/or US Air would assume responsibility for any necessary remediation. In addition, preliminary discussions between the County and the Pennsylvania Department of Environmental Resources also indicated that remediation may not be necessary if the proposed site is utilized for the same purpose as originally utilized - airport operations.

8. Acquisition of this additional acreage from Allegheny County is necessary to enhance the current posture of the Pittsburgh IAP ARS for the following reasons:

a. The 21.7 acres of ramp space, currently in use under a 1993 Memorandum of Agreement, has been utilized for the past two years to park displaced aircraft on the primary apron while construction projects, such as the installation of an environmentally benign deicing pad and a three phase concrete repair project were in process. Most recently, a portion of the MOA acreage has been utilized as a staging area for the construction of an elevated 1.5 million gallon water storage tank as a joint effort between the Moon Township and the Air Force Reserve. In addition, a portion of the MOA acreage will be utilized as a staging area for construction of the new MILCON project to construct a Jet Fuels Storage Complex.

b. This additional acreage has also enabled the 911 Airlift Wing to host several joint military exercises to include Patriot Pitt, Veteran's Tribute, Patriot Express and Provide Pitt, thus providing invaluable joint service training. Also, current billeting facilities and operational services provided by fuels, civil engineering, aircraft maintenance and transportation can support large volumes of transient aircraft and associated personnel during surge or contingency operations with no additional investment.

c. The 911 AW currently conducts apron aircraft operations under an AFRES approved waiver due to insufficient wing tip clearances between taxing aircraft and the Operations Building, B419 and the Aircraft Maintenance Shop, B418. Acceptance of this additional acreage can eliminate the need for a waiver and provide for safer, less congested operations on the flightline.

d. The 911th AW is scheduled for the construction of a new Jet Fuels Storage Facility. The site for this facility requires commercial refueling vehicles to drive through the heart of the installation. On a weekly basis, the base receives an average of four truckloads of jet fuel, consisting of approximately 8000 gallons each. The route through the base is hilly with numerous bends, heavy traffic and densely populated work areas. Conversely, there is a fully paved rear access road through Allegheny County property which was offered to the Air Force Reserve as part of the 77 acre no cost lease, which will provide a more direct route to the new facility. This access road cuts the driving distance for commercial refuelers in half, bypassing the hills, bends, traffic and densely populated work areas.

e. The 911 AW currently has only one entrance to the facility. The Base Comprehensive Plan identified the need for an emergency secondary gate for use during rush hours, UTA weekends and for special delivery needs. In times of crisis, as occurred when PennDOT ruptured a high pressure natural gas line outside the main gate, there is no alternate means of ingress or egress from the installation proper. A second means of access does exist however, adjacent to the abandoned fuel farm on Allegheny County property as identified in item 8d.

f. Since July, 1993, the 911 AW has hosted Lockheed modification teams under an AFRES contract that completed the modification and installation of "electronic equipment" on C-130 E and H models. Since that time, the base has supported, concurrently, up to three additional aircraft undergoing modification. The additional aircraft were parked on the area that is currently being used under the aforementioned MOA. The projection for completion of the modifications is sometime in the spring of 1997. Just this past week, AFRES has inquired as to the possibility of additional modifications on AFRES aircraft. The modifications proposed will upgrade the Electronic Countermeasures capabilities of selected AFRES aircraft and will extend the work of the contractors for an additional period of time.

g. The additional acreage provides an unobstructed area for engine run-ups. The existing ramp space is limited to only ground idle runs because of safety concerns relating to prop blast and the restricted parking arrangement on the existing apron. Prior to utilization of this additional acreage, engine run-ups had to be performed by contacting the FAA and utilizing an aircrew to taxi aircraft to a remote, unobstructed available area in the airport complex. This new process eliminates costly delays involving aircrew and maintenance personnel as well as excessive down time.

h. As directed in the 14 November 1994 letter from HQ AFRES/LG, C-130 and C-141 aircraft have an operational need to deploy with an initial load of flares for en-route self protection capability. In order to implement a flare prepositioning program at Pittsburgh, a flare build-up and storage area must be constructed. While an existing site is available on the current 115 acre site at Pittsburgh, it is located in a hilly area behind the engine test stand and immediately adjacent to an active airport taxiway/runway. A more ideal site is located on the additional offered acreage, which is more readily accessible to the apron, in a less restricted and less noisy area and more importantly, in a remote location relative to the base proper.

i. The 911 AW currently provides billeting and dining facilities for approximately forty (40) MEPS (Military Entrance Processing Station) authorized personnel on a daily basis. The MEPS organization has officially requested to construct a 28,000 SF facility on a three (3) acre parcel of land at the 911 AW in FY 96. Estimated savings of $600,000 per year in lease costs alone, at the Federal Building in downtown Pittsburgh, are expected. (See attached letters dated 8 April 1993 and 12 July 1991).

j. The Defense Commissary Agency has expressed an interest in constructing a new 40,000 SF commissary on a 6.4 acre site in FY 98 and relocating their current operations from the Kelly Support Facility in Oakdale, PA to the 911 AW. Forecasted monthly sales volume is estimated at $550,000 - $1,000,000. (See attached letter dated 31 July 1995 along with undated Commissary Site Plan). Preliminary discussions with Commissary personnel also indicate that a similar interest exists for the construction of a new BX facility of similar proportions, immediately adjacent to the new Commissary facility.

9. The demographics of the Pittsburgh area provide for abundant recruiting. The 911 AW maintains exceptional manning numbers, exceeding 100% for each of the last five years running. Retention rates are also very high with eligible airmen reenlistment exceeding 97%. The two medical units at the 911 AW are continuously fully manned with recruits from Pittsburgh's world class medical community. In addition, 80% of reservists live within a 50 mile radius of the base, comprising a four county area. Pittsburgh International Airport, the hub of a major US airline, provides a significant pool of experienced personnel and is an invaluable resource for aircrew recruiting and aircraft maintenance technology.

10. The outstanding relationship between the neighboring communities and the Air Force Reserves is evidenced by events relating to the recent BRAC process. The local community of Moon Township donated working space and utilities for personnel involved in efforts to save the 911 AW. The State of Pennsylvania, Counties of Allegheny and Beaver, City of Pittsburgh and local community leaders attended many meetings and offered their total support and assistance in efforts to save the 911th. In addition, the current joint use agreement with Allegheny County, provides many services to the Air Force Reserve at a minimal cost. For only $20,000 per year, the 911 AW receives the following services from Allegheny County: aircraft and fire rescue, structural fire protection, landing and take-off fees, runway maintenance and repair, emergency ambulance and medical services, control tower services and runway/taxiway snow removal services.

11. As highlighted in the 1988 Base Comprehensive Plan, Pittsburgh is America's third largest corporate city, and is located mid-way between the first, New York, and the second, Chicago. Due to its central location and transportation and distribution facilities, it is one of the most desirable and diversified economic markets in the country. In addition, in the urgent contingency of actual major war, the national mobilization of the Civil Reserve Air Fleet (all the airlines) would make Pittsburgh International Airport a crucial national center of operations - - vastly better than other competing sites in the traffic-gridlocked East Coast or Great Lakes areas or in small non-international airports to the west or south of Pittsburgh.

12. It is very difficult to acquire land for airport expansion - it is either too costly or non-existent. In this case, the land exists at no additional cost to the government. For these and the above mentioned reasons in this letter, acceptance of this additional acreage from Allegheny County is a once in a life time opportunity, a phenomenal value to the Department of Defense, especially the Air Force Reserve. This offer is the "ultimate real-estate bargain."

Thomas W. Spencer

THOMAS W. SPENCER, Col, USAFR
Commander

5 Attachments:
1. BCP Executive Summary
2. MEPS Facility Ltr, Dtd 8 Apr 1993
3. Trip Report-MEPS Site Survey, Dtd 12 Jul 1991
4. DCA Ltr, Dtd July 31, 1995
5. DCA Commissary Site Plan, Undtd

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

21 May 96

HQ USAF/RE
1150 Air Force Pentagon
Washington DC 20330-1150

Mr. Larry Dunn
Chairman, Office of the Commissioners
County of Allegheny
119 Courthouse
Pittsburgh PA 15219-2499

Dear Mr. Dunn

General Fogleman asked me to respond to the County of Allegheny Board of Commissioners' offer to provide additional property adjacent to the Air Force Reserve's (AFR) Air Reserve Station (ARS) at Pittsburgh.

My Headquarters plans and programs staff did an analysis of present and future operational requirements and found no requirement for additional land at Pittsburgh ARS.

I sincerely appreciate Allegheny County's generous offer and regret that the AFR cannot accept the property. I do, however, look forward to a continued successful partnership between Allegheny County and the Air Force Reserve.

Regards

JOHN A. BRADLEY, Brig Gen, USAF
Deputy to the Chief of Air Force Reserve

AF/RE
AIR FORCE PENTAGON
HINGTON DC 20330-1150

RECEIVED
COMM. DUNN
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DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE

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ALL	

29 December 1997

Mr. Patrick J. Sullivan, P.E.
Federal Aviation Administration
Airport District Office
3911 Hartzdale Drive, Suite 1
Camp Hill PA 17011

911 Airlift Wing/CE/Mr. Robert F. Moeslein
Pittsburgh International Airport
1113 Herman Avenue
Coraopolis PA 15108-4421

Re: Pittsburgh International Airport Joint Planning Conference of 25 November 1997

Dear Mr. Sullivan:

I would like to take this opportunity to thank you for your efforts to include the 911th Airlift Wing in the Pittsburgh International Airport's joint planning process. The 25 November 1997 meeting in the FAA tower conference room was the first opportunity we had been offered to become a part of the planning process since the early 1990's.

As you know, several projects that will affect our lease property and our facilities were discussed, and we had the opportunity to begin to explain our concerns and the potential impacts of these projects on our current flying mission. Because aircraft operating criteria on Air Force controlled property differ somewhat from those prescribed by the FAA, some of the participants in the 25 November meeting may have heard of our concerns for the first time. As a tenant of the Airport, we are again thankful for this opportunity to have our voice heard as part of the Airport's development planning process.

While we barely skimmed the surface of the issues associated with the proposed Airside Business Park, Mr. Fredericks mentioned a 22 May 1996 letter from General Bradley which stated unequivocally that the U.S. Air Force had no interest in acquiring the additional 85 acres offered by the Allegheny County Board of Commissioners in 1995 (offered by the previous Board of Commissioners immediately following the failed BRAC process that had targeted the 911th for closure). General Bradley's letter was written in response to the 10 May 1996 letter from the Allegheny County Board of Commissioners, which was addressed directly to General Fogelman, USAF Chief of Staff. Although the 911th Airlift Wing was not copied on this letter, a copy of it and other correspondence was ultimately provided by an interested third party. Consequently, the Commissioners effectively completed an "end run" on previously established communication protocols between the ACDA, the Allegheny County Board of Commissioners, and the 911th Airlift Wing. In the past, my engineering staff would have been contacted first and would have prepared appropriate supporting information (a point paper) to accompany the request for Command, and the Secretary of the Air Force. Unfortunately, this chain of communication was circumvented and did not allow us to prepare information for Generals Bradley, McIntosh, and Fogelman to consider in drafting their response.

Because the Commissioners' 10 May 1996 letter did not detail the County's plans to "expand the economic vitality of the region" nor the ACDA intention to develop an Airside Business Park immediately adjacent to the 911th facilities and within historically secure Aircraft Operating Areas, it is likely that the 22

May 1996 response from the Pentagon was drafted without the benefit of being fully and appropriately informed. While this may still be an accurate statement of the Air Force's present position on land acquisition, it is important to understand that a more thorough discussion of the potential impacts of the adjoining development may have influenced how the Pentagon's response was drafted. Consequently, please do not be confused by the simplified format of the 22 May 1996 letter, and please do not interpret it as the final word on this issue.

To emphasize this point, on 27 August of this year our Wing Commander, Col. Thomas W. Spencer, was directed by the Assistant Secretary of the Air Force for Installations to conduct a review of the economic feasibility of various land acquisition alternatives. If nothing else, the fact that his review has been directed suggests that land acquisition may not have been ruled out as more information has surfaced regarding the proposed Airside Business Park. At the very least, the Air Force Reserve Command and the Pentagon are soliciting information on potential impacts of the Airside Business Park. They apparently desire that our Wing's existing mission not be compromised and that we will be able to continue to provide security and appropriate operational clearances for military aircraft.

Additionally, we want you to know that we are currently in the process of updating our Base Comprehensive Plan (which examines our vision of existing and future missions and looks into potential changes and the viability of the installation over the next 8 to 10 year time frame). This document emphasizes the importance of flexibility in planning for the future. Unfortunately, should missions change, the current configuration of the proposed Airside Business Park will stifle any potential for our organization to adjust to future mission changes (i.e., conversion to 767 NDAA aircraft). This will undoubtedly impact the long-term viability of this Wing and, in these leaner times, has the potential to be a direct cause for closure of this Air Reserve Station. Zero flexibility ultimately translates into zero future.

It is important that we go on record with the FAA, the ACDA, and Allegheny County regarding the potential impacts of the Airside Business Park, the permanence of the ILS on Runway 28C, and, to a lesser extent (if modified as discussed in our 25 November Joint Planning Conference), the widening/relocation of taxiway "E".

As the preceding suggests, we are extremely appreciative of your efforts to get us back into the Airport's Joint Planning process. We look forward to continuing our dialogue and hope to foster a productive and cooperative working relationship with all parties. We are optimistic that our renewed participation in the process will ensure the long-term existence of a military installation with a proud tradition and history of service and sacrifice throughout the world in wartime and in peace.

Again, thank you for your time and consideration.

Sincerely,

Robert F. Moeslein

ROBERT F. MOESLEIN
Base Civil Engineer
911th Airlift Wing

cc:
PaDOT, Bureau of Aviation
911th SPTG/CC/CD
911th AW/CC

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

26 February 1998

HQ USAF/RE
1150 Air Force Pentagon
Washington, DC 20330-1150

Mr. William DeGraaff
Federal Aviation Administration
Fitzgerald Federal Building
JFK International Airport
Jamaica, NY 11430

Dear Mr. DeGraaff

Please accept my apologies for not responding to your 2 February 1998 letter within your requested timeframe. The Air Force Reserve has not changed its position in any way on our requirement for land at Pittsburgh International Airport. As stated in my 26 May 1996 memorandum to Mr. Larry Dunn, the Air Force Reserve has adequate land available at Pittsburgh, has no plans to expand the size of the unit, and has no new mission requirement that would require acquisition of any new land.

This is the Air Force Reserve Command and Air Force position on this issue. The Civil Engineer at the 911th Airlift Wing is not in a position to tell anyone outside of the unit what our requirements are. I do, however, have great concern regarding the installation of a temporary instrument landing system that does, under certain weather conditions, impact our capability on existing ramps and taxiways.

It would have been helpful had the airport authority and FAA coordinated with the Air Force and our unit when the planning process began for installation of the temporary ILS. The instrument flight rules hold line passing through our ramp will, at times, impact our ability to operate. We would like to have your help in resolving this issue and look forward to working with you.

Sincerely

JOHN A. BRADLEY, Brig Gen, USAF
Deputy to the Chief
of Air Force Reserve

cc:
SAF/MII
HQ AFRC/CV/CE
22AF/CC
911 AW/CC/CE

FEB 0 2 1998

Brig. General John A. Bradley
United States Air Force
Deputy to the Chief of Air
Force Reserve
HQ USAF/RE
1150 Air Force Pentagon
Washington, DC 20330-1150

Dear Brig. General Bradley:

The enclosed correspondence from your office (22 May 96 and Agenda No. 945-96 dated 20 July 96) advises of no requirement or need for additional ramp space for the USAF Reserve (911 Airlift Wing/CE) at Pittsburgh Int'l Airport (PIT).

However, the enclosed 29 December 97 letter from the 911 Airlift Wing/CE presents an apparent contradiction concerning the need for the subject airport property.

The Allegheny County Department of Aviation and the Federal Aviation Administration are actively pursuing the planning and environmental review for reuse of the PIT Old Terminal Building and adjacent property.

Given the comments of the 911 Airlift Wing, we are respectfully requesting a response from your office as to whether you wish to change your position presented in the aforementioned correspondence. Given the pressing need to address any "feasible and prudent" use(s) for the subject property in the planning/ environmental stage of proposed development, we would greatly appreciate an expeditious response within two (2) weeks.

The above subject may be discussed with either Mr. Frank Squeglia of this office (718 553-3325) or Mr. Patrick Sullivan of our Harrisburg Airports District Office (717 730-2832).

Sincerely,

Thomas Foltz

for William DeGraaff
Assistant Manager, Airports Division

Enclosures
cc: ACDA (K. Fredericks), 911 Airlift (R. Moeslein), HAR-ADO, AEA-7, AEA-600
AEA-610:FSqueglia:af:2/2/98

File: PIT AFP/Old Term. Envir.

Congressional Inquiry

Office of Budget and Appropriations Liaison (SAF/FML)

Action OPR: AF/REI **Suspense Date:** 10 Sep 1998 14:00 **Inquiry No:** RE-027

Action OCR: OPR Tasked Date: **09 Sep 1998 12:22**

Required Coordination:

Subject: **Pittsburgh IAP/ARS PA**

ACTION REQUIRED:

1. Mr. Carmen Scialabba, Appropriations Associate Staff for Rep John P. Murtha requests the status of the following issues at the 911 TAG:

   a. Air Force review of land allocation options. Told that options have been sent to 22nd AF.

   b. Proposed air cargo air terminal at the old Pittsburgh Airport.

2. Please respond with a fully coordinated response via e-mail in fact sheet to SAF/FMBL (inquire.fml@saffmb.hq.af.mil). I can be contacted at 614-8113 if you require assistance.

SUSAN E. LUKAS, Capt, USAF
Assistant for Congressional Matters

SAF/FML
Liaison Officer: Captain Lukas, Susan I
Room: 5D911
Phone (703) 614-8113 Fax (703) 614-3043
Information Distribution:

FACT SHEET

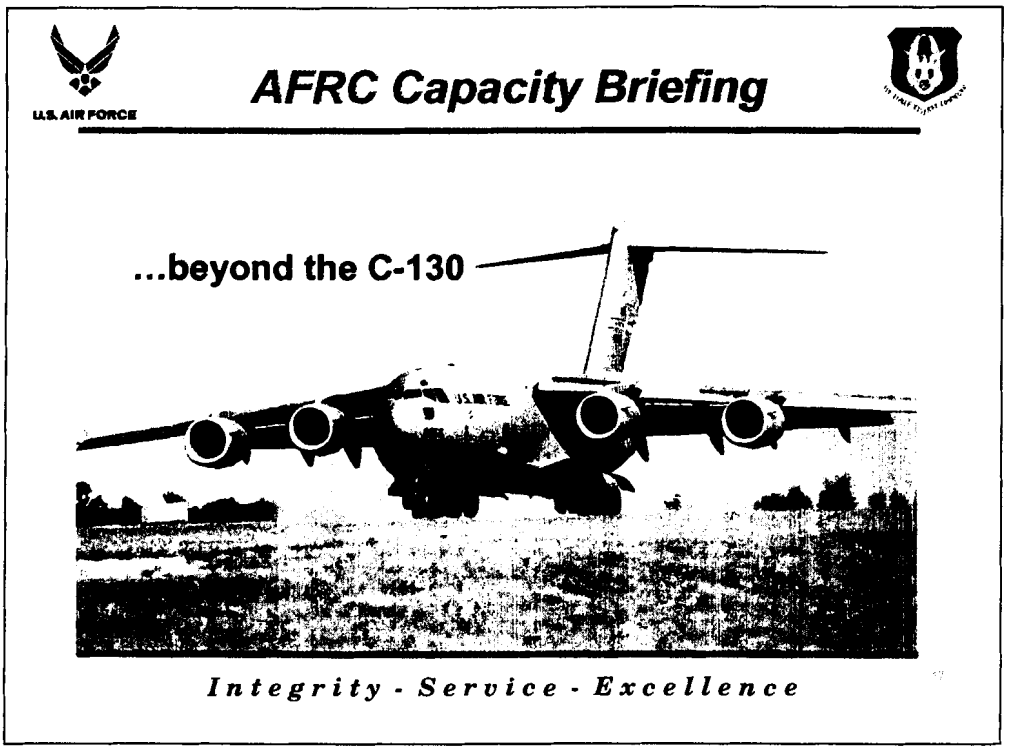
SUBJECT: Pittsburgh IAP/ARS PA Date: 11 Sep 98

QUESTION: Status of Air Force review of land allocation options:

ANSWER: The Air Force Reserve is currently reviewing the options provided by Allegheny County and will participate in a 17 Sep 98 public hearing for the airport. The Air Force Reserve has no need for additional land at Pittsburgh IAP. The existing property is adequate to support the existing mission of the 911th AW and no additional missions are planned in the forseeable future. If future development or expansion impacts the Air Force Reserve mission and installation security, all agencies must re-evaluate the proposal.

QUESTION: Status of proposed air cargo air terminal at the old Pittsburgh Airport:

ANSWER: The Air Force Reserve has no requirement for the old air cargo terminal. If there is any potential commercial or private use or development of this area, the Air Force Reserve must be represented to ensure any development does not impact the Air Force Reserve mission and installation security at Pittsburgh IAP.



Taking this land into account, we see our military value beyond the C-130.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Brifing

BRIEFING BULLET:

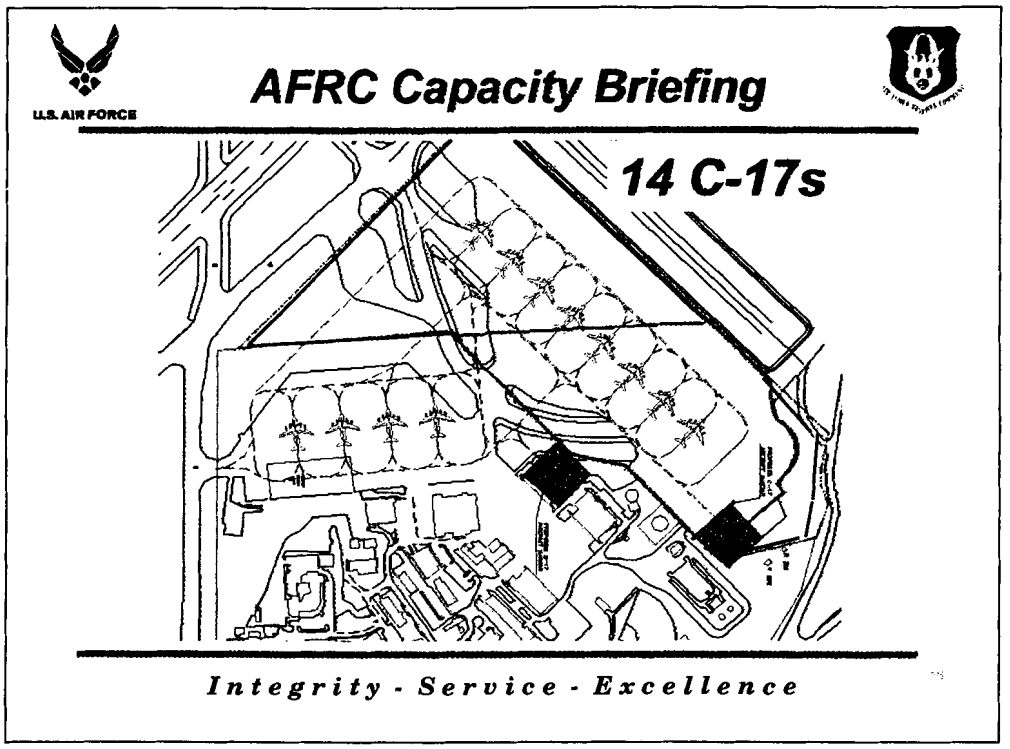
- Beyond the C-130

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



The 53 acres available for expansion would allow us to park 14 C-17's at our base.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- 14 C-17's

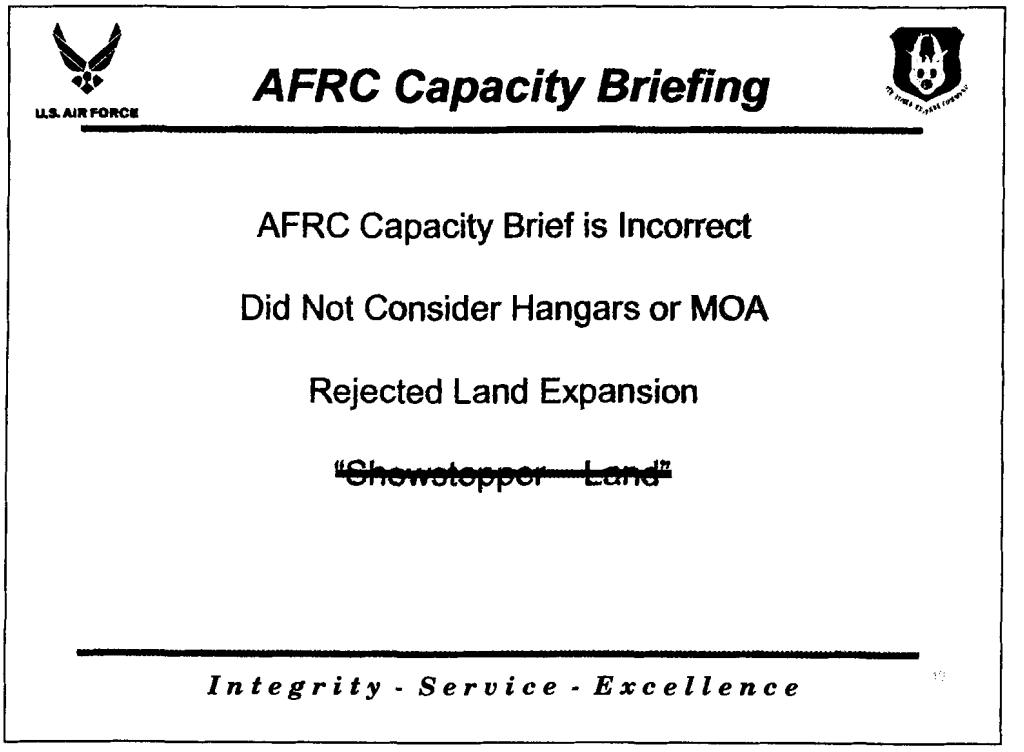
BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- Slide depicts a CAD conceptual graphic showing accommodation of 14 C-17's on the 911th Airlift Wing's additional land offer

SUPPORTING DOCUMENTATION: n/a



The AFRC Capacity Briefing to the BRAC is incorrect. It did not count our hangars nor the MOA Ramp that AFRC has approved for our use for the past 12 years.

The 95 BRAC Commission findings stated that the AF did not recognize the expansion capability of the base[1], yet AFRC rejected the offer for land for expansion three times!

Isn't it ironic that in the past we were denied the additional land for lack of a mission, and now we are denied the mission for lack of land?

Sir, you saw not only the MOA Ramp, but all of the 53 acres during our tour earlier this morning. The land is still there, it has been waiting for us for 11 years.

LAND IS *NOT* A SHOWSTOPPER!!

[1]1995 BRAC Commission report to the President, p. 1-104

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: AFRC Capacity Briefing

BRIEFING BULLET:

- AFRC Capacity Brief is incorrect
  - Did not Consider MOA
  - Rejected Land Expansion
  - "Showstopper – Land"

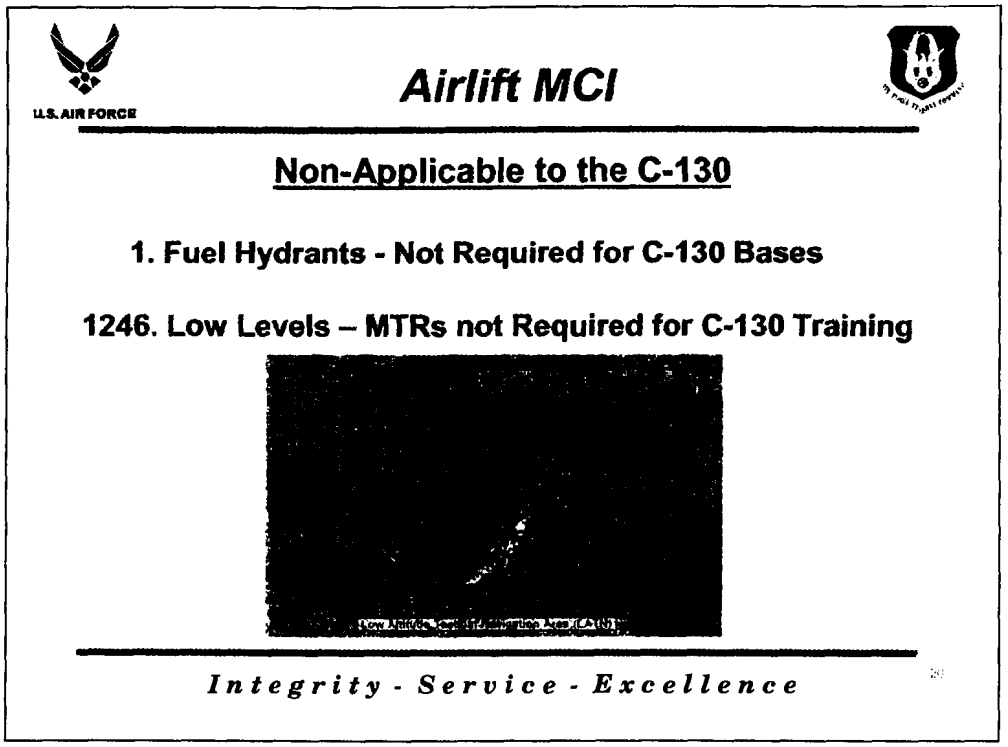
BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS:

- Summary slide
  - Refer to documents attached to slides 13 through 16

SUPPORTING DOCUMENTATION: n/a



I am now going to talk about the Airlift MCI, and its qualitative flaws. Some of the questions were simply not applicable to the C-130.

<u>Question 1</u> measures fuel hydrant capability. Fuel hydrant systems are for planes that carry over 20,000 gallons of fuel[2]. C-130's carry at most 9,000 gallons. We don't need them.

<u>Question 1246</u> measures our proximity to Military Training Routes (MTRs). This is irrelevant because they are not required for C-130 low level training. We have a Low Altitude Training and Navigation (LATN) Area that is 85,000 square miles of airspace surveyed to 500' AGL, made up of varying terrain that is flat, rolling and mountainous, and allows us to design our own dynamic routes to optimize our training.

[2]AFRCH32-1001, Standard Facility Requirements para. 4.2

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Airlift MCI

BRIEFING BULLET:

- Fuel Hydrants
- Low Levels

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi, Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1. Fuel Hydrant Systems Support Mission Growth

- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1246. Proximity to Low Level Routes Supporting Mission

SUPPORTING DOCUMENTATION: 7 Pages

Mission	Airlift
Criterion	Condition of Infrastructure
Attribute	Key Mission Infrastructure
Formula #	1
Label	Fuel Hydrant Systems Support Mission Growth
Effective %	4.32
Question	Check the current fuel hydrant system capability. If installation has no runway or no active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. 20% of the score is based upon the best type of fuel hydrant available. 80% of the score is based upon the number of qualified refueling points/outlets. **Type of Fuel Hydrant:** Check each Fuel System. See OSD question 1 for this data. Ignore those that are not aircraft fueling hydrants. See OSD Question 1, column 2 for this data, where the value is not an 'A'. If any one of them is a Type III, get 100 points. See OSD Question 1, column 3 for this data. Otherwise, If any one of them is a Type I or II, get 75 points. Otherwise, If any one of them is a Type IV or V, get 25 points. Otherwise, get 0 points. **Number of Qualified Refueling Points/Outlets:** Sum the number of qualified refueling points/outlets. See OSD Question 1, column 6 for this data, but ignore those that are not aircraft fueling hydrants. See OSD Question 1, column 2 for this data, where the value is not an 'A'. Also ignore those that are not Type I, II, III, IV or V. See OSD Question 1, column 3 for this data. If the sum of qualified refueling points/outlets >= 24, get 100 points. Otherwise, if the sum of qualified refueling points/outlets = 0, get 0 points. Otherwise, pro-rate the sum between 0 and 24 on a 0 to 100 scale. **Example:** There are three refueling facilities. One is a Type I, one a Type IV, and one is a Truck Fill Stand. There are no Type III facilities, so we check for Type I or II. Since there

	is a Type I, the score for the type of fuel hydrant is 75. There are 3 Type 1 refueling points/outlets, 9 Type IV refueling points/outlets, and 22 Truck Fill Stand refueling points/outlets. The Type 1 and Type IV refueling points/outlets sum to 12, the 22 Truck Fill Stand refueling points/outlets do not count. 12 is halfway between 0 and 24, for a number of qualified refueling points score of 50. (20% of 75) plus (80% of 50) = an overall score of 55.
Source	ACES-RP; existing record drawings or physically verification;

Mission	Airlift
Criterion	Current / Future Mission
Attribute	Geo-locational Factors
Formula #	1246
Label	Proximity to Low Level Routes Supporting Mission
Effective %	13.98
Question	Check the distance to all Airspace for Special Use (IR/VR routes) within 150NM radius of the installation. If installation has no runway or active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. For a list of routes, see OSD Question 1246. The type of route can be found in column 1. Entry point distances are found in column 2. Exit point distances are found in column 3. For distances, N/A means 0 points. IR Entry points, IR Exit points, VR Entry points and VR Exit points are each worth 25% of the score. (.25 * "IR Entry") + (.25 * "IR Exit") + (.25 * "VR Entry") + (.25 * "VR Exit") **Entry and Exit Point:** Within each of the above four categories, award each route points as follows: If the distance = N/A, get 0 points. Otherwise, the distance is <= 50 Nautical Miles (NM), get 100 points. Otherwise, if the distance is = 150 NM, get 10 points. Otherwise, pro-rate the distance between 50 NM and 150 NM on a 100 to 10 point scale. Total the number of points received above for each base for each of the above four categories. Get the highest base score in each of the above four categories. Get the lowest, non-zero score in each of the above four categories. If the installation's score for one of the above categories = 0, it remains 0. Otherwise, if the installation's score for one of the above categories = the highest score in its respective category, get 100 points. Otherwise, if the installation's score for one of the above categories = the lowest non-zero score in its respective category, get 10 points. Otherwise, pro-rate the installation's score between the lowest non-zero

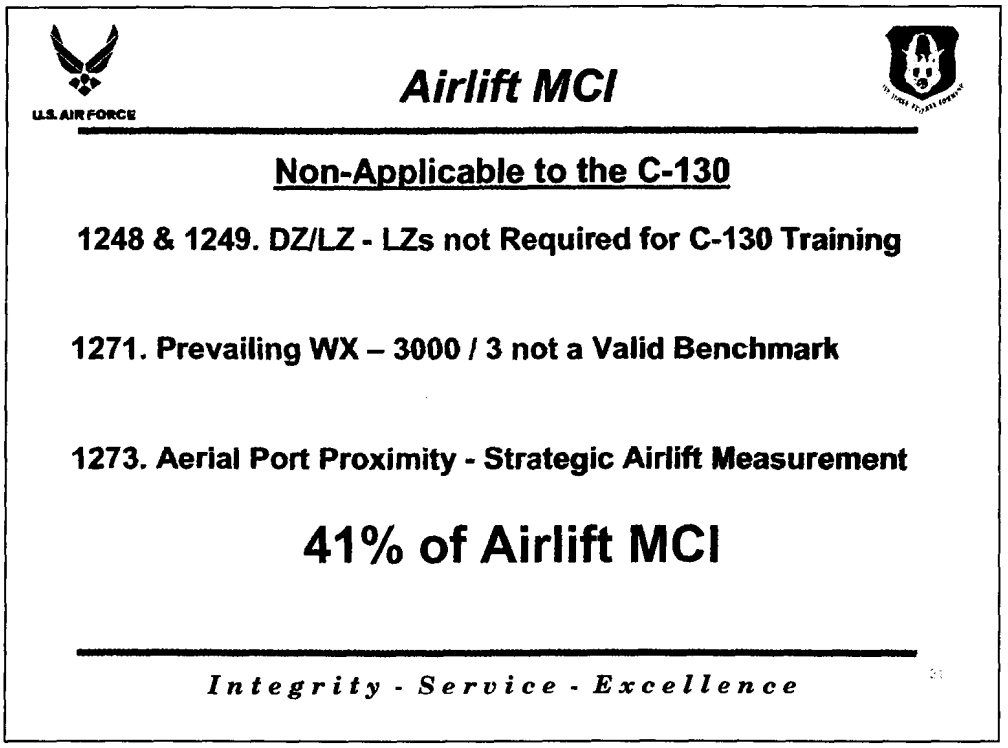
	and highest score in its respective category on a 10 to 100 point scale. **Example:** Two IR routes and 1 VR route. IR Route Alpha has an entry point 35 miles away and an exit point 100 miles away. IR Route Bravo has an entry point 150 miles away and an exit point 160 miles away. Alpha's entry point is within 50 miles, so its IR Entryamount is 100 points. The exit point 100 miles distant is 50 percent of the way between 50 and 150 miles, so its IR Exit point amount is 55 points. Bravo's entry point is 150 miles away, so its IR Entry amount is 10 points. The exit point is 160 miles away, so its amount is 0 points. The IR Entry total for these two routes is 100 + 10 for 110 points. The total IR Exit total for these two routes is 55 + 0 for 55 points. The highest IR Entry total for any base is 165 and the lowest non-zero IR Entry total for any base is 30. The highest IR Exit total for any base is 105 and the lowest non-zero IR Exit total for any base is 5. So, this base's IR Entry score is 100, because 165 is equal to the highest score of any base. Pro-rating the IR Exit total of 55 between 5 and 105 on a 10 to 100 point scale gives this base an IR Exit score of 55. VR Route Charlie has an entry point 40 miles away and an exit point 45 miles away. Both the entry and exit point are within 50 miles, so both the VR Entry and VR Exit category amounts get 100 points. As there is only one VR route, that makes the VR route totals the same, 100 points each. The highest VR Entry total for any base is 300 and the lowest non-zero VR Entry total for any base is 50 points. Ditto for the VR Exit totals. So, this base's VR Entry score of 100 is pro-rated between 50 and 300 on a 10 to 100 scale. Since 100 is 20% of the way from 50 to 300, the VR Entry score is 28 points. Ditto for the VR Exit totals.

	By applying the 25% weighting to each of the four category scores, in IR Entry, IR Exit, VR Entry and VR Exit order, we get the overall score: (.25 * 100) + (.25 * 55) + (.25 * 28) + (.25 * 28), for an overall score of 52.75 points.
Source	FLIP AP-1B; IFR Supp; Falcon View or other certified flight planning software

Section 1 Air/Space Operations, Question 1246 Airspace - Distance to Routes

Org	1 Route Designator (Text)	2 Distance to Primary Route Entry Point (NM)	3 Distance to Primary Route Exit Point (NM)	
85	IR609	134	201	Gen Mitchell IAP ARS
85	SR771	53	36	
85	SR776	135	135	
85	SR785	119	119	
85	VR1616	240	123	
85	VR1626	160	118	
85	VR1650	163	123	
85	VR634	124	168	
85	VR664	168	124	
88	IR605	177	142	Minn/St Paul IAP ARS
88	IR606	142	177	
88	SR727	21	24	
88	SR728	26	24	
88	SR729	26	24	
88	SR730	22	24	
88	SR731	22	24	
88	SR776	123	123	
88	SR785	140	140	
88	VR1616	55	140	
88	VR1650	101	140	
88	VR604	203	117	
88	VR607	117	203	
89	IR801	297	138	Niagara Falls IAP ARS
89	SR823	53	1	
89	SR825	34	1	
90	IR079	322	133	Pittsburgh IAP ARS
90	IR080	322	120	
90	IR608	111	239	
90	IR723	120	315	
90	IR761	177	140	
90	SR707	114	107	
90	SR708	114	107	
90	SR709	128	107	
90	SR710	114	107	
90	SR711	114	131	
90	SR712	128	107	
90	SR713	114	107	
90	SR714	114	131	
90	SR715	128	107	
90	SR802	112	122	
90	SR803	112	122	
90	SR804	112	122	
90	SR806	112	122	
90	SR807	113	122	
90	SR808	112	122	
90	SR822	25	12	
90	SR823	117	168	
90	SR871	146	145	
90	SR872	146	145	
90	SR873	146	145	
90	SR874	146	145	
90	VR1631	134	289	
90	VR1632	133	177	
90	VR1633	133	219	
90	VR1757	120	103	
90	VR1758	89	335	
90	VR704	139	166	
90	VR705	139	166	
90	VR708	134	112	
92	SR800	44	33	Willow Grove ARS, NAS Willow Grove Joint Reserve
92	SR801	44	33	
92	SR802	143	140	
92	SR803	143	140	
92	SR804	143	140	
92	SR805	44	33	
92	SR806	143	140	
92	SR807	142	140	

92	SR808	143	140	
92	SR820	134	160	
92	SR821	134	160	
92	SR835	134	140	
92	SR844	46	40	
92	SR845	46	40	
92	SR846	46	40	
92	SR847	41	37	
92	VR1709	104	45	
92	VR1711	104	128	
92	VR1712	104	128	
92	VR1713	104	271	
92	VR1757	116	170	
92	VR704	98	70	
92	VR705	98	70	
92	VR707	86	70	
92	VR708	109	138	
93	IR080	358	150	Youngstown-Warren Regional APT ARS
93	IR608	133	279	
93	IR723	150	354	
93	SR701	145	126	
93	SR702	148	126	
93	SR703	145	126	
93	SR707	104	88	
93	SR708	104	88	
93	SR709	112	88	
93	SR710	104	88	
93	SR711	104	135	
93	SR712	112	88	
93	SR713	104	88	
93	SR714	104	135	
93	SR715	112	88	
93	SR822	50	54	
93	SR823	94	135	
93	SR825	165	135	
93	VR1624	150	276	
93	VR1625	150	273	
93	VR1631	144	286	
93	VR1632	141	191	
93	VR1633	141	253	
93	VR1644	276	150	
93	VR1645	273	150	
93	VR1757	153	150	
93	VR1758	140	384	



Questions 1248 & 1249 address Surveyed Landing Zones (LZs) that are part of the AMC Database. 1248 measures proximity to these zones, and 1249 the quality of the zones. It is not relevant because these LZs are not required for C-130 LZ training. In fact, LZs can be accomplished to a zone painted on a normal runway[3], just like the one that is going to be painted on the center runway here at Pittsburgh. This has been planned for quite some time and is in the final approval phase with the FAA.

Question 1271 measures the numbers of days where the prevailing weather was greater than 3000/3. This is not a valid benchmark for C-130s. We are IMC airdrop qualified aircrews, and we can fly formation with the weather as low as 200/1. We only need 1500/3 for VFR single ship training, and 2000/3 for VFR formation training.

All that aside, the AF chose only two years, 2002 & 2003, for the data, rather than the 30 year average that the AFCCC, the weather agency that supplied the data, strongly advised they use. A two year sampling of weather is hardly a valid capture of data.

Question 1273 measured how far the base was from select overseas APOE locations. This is a Strategic Airlift measure. C-130s are Theater Airlift Assets. It is not our role to carry strategic cargo through APOE ports.

All totaled, these six questions, that are not relevant to the C-130, made up 41% of the Airlift MCI. This is an invalid measurement.

[3]MCI 11-2C130 Vol. I, para. 7.5, page 79

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Airlift MCI

BRIEFING BULLET:

- 1248 and 1249. DZ/LZ
- 1271. Prevailing WX
- 1273. Aerial Port Proximity
- 41% of Airlift MCI

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi, Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- Air Force Instruction 11-2C-130, Volume 1 dated 5 November 2004
  - Flying Operations, C-130 Aircrew Training
- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1248. Proximity to DZ/LZ
- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1249. Airspace Attributes of DZ/LZ
- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1271. Prevailing Installation Weather Conditions
- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1273. Aerial Port Proximity
- USAF BRAC 2005 Base MCI Score Sheets

SUPPORTING DOCUMENTATION: 42 Pages

BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-2C-130
VOLUME 1

5 NOVEMBER 2004

Flying Operations

C-130 AIRCREW TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at: **http://www.e-publishing.af.mil.**

OPR: HQ AMC/A37TA (Mr. Tom Witt)

Certified by: HQ USAF/XOO
(Maj Gen Teresa M. Peterson)

Supersedes AFI 11-2C-130, Volume 1,
1 November 1998

Pages: 162
Distribution: F

This volume implements AFPD 11-2, *Aircraft Rules and Procedures*. It establishes the aircrew training policy for C-130 aircrews to safely and successfully accomplish their worldwide mobility missions. Capability requirements for the vast majority of C-130 platforms include: airland or airdrop personnel, equipment, and supplies; medical evacuation of casualties; assault airland operations to 3000' unimproved landing zones; employ in visual, instrument, and night-vision goggle (NVG) combat environments from low, medium, or high altitude in formation or single ship using tactics, techniques and procedures as defined in AFTTP 3-1.25, AFTTP 3-3.25 and AFI 11-2C-130 volume 3. The C-130 is a diverse aircraft (includes C-130E, C-130H, C-130H1, C-130H2, C-130H3, LC-130 and WC-130) tasked with performing a variety of missions. It demands a robust and flexible training program allowing commanders to train to capability requirements while meeting operational demands. This AFI provides the foundation for building a C-130 combat capable aircrew. Ultimately it is the responsibility of the Operations Group Commander to ensure that training profiles are relevant to meeting the needs of the combat environment. (*Note*: Aeromedical Evacuation Crewmembers see AFI 11-2AE, Volume 1, *Aeromedical Evacuation Aircrew Training*).

The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. This instruction applies to Air National Guard (ANG) and Air Force Reserve Command (AFRC) units.

The Privacy Act of 1974 affects this instruction. Privacy Act System Number F011 AF XO A, Aviation Resource Management Systems (ARMS) covers required information. The Paperwork Reduction Act of 1974 as amended in 1996 affects this instruction. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFPD 37-1, *Information Management* and AFMAN 37-123, *Management of Records* and disposed of in accordance with the *Air Force Records Disposition Schedule (RDS)* located at **https://webrims.amc.af.mil**.

AS09 Assault Takeoff

Purpose: Training designed to give pilots experience taking off from a short and austere airfield within a relatively short distance.

Description: Accomplish a max-effort takeoff.

OPR: AMC/A37T/A39

Training Media: Aircraft or Level C or better WST.

Instructor: Not required for continuation training.

Additional Information: See the C-130 technical orders (Dash 1) for detailed procedures and AFI 11-2C-130, Volume 3 for training restrictions. See AFTTP 3-3.25. May be dual logged with P020 by the pilot flying the aircraft.

AS11 Assault Landing

Purpose: Training designed to give pilots experience landing the aircraft at short and austere airfields.

Description: Accomplish assault landings IAW AFTTP 3-3.25 on appropriately marked landing zones of 3000 ft or more (zone may be marked on larger runways to satisfy assault continuation training). Meet the following requirements in order to log the landings: (1) Touchdown within the first 500-feet. (2) Do not credit go-arounds.

OPR: AMC/A37T/A39

Training Media: Aircraft.

Instructor: Not required for continuation training.

Additional Information: See the C-130 technical orders (Dash 1) for detailed procedures and AFI 11-2C-130, Volume 3 for training restrictions. See AFTTP 3-3.25. Will be dual logged with P190 by the pilot flying the aircraft. May be dual logged with P192 (by the pilot flying) if accomplished at night.

AS12 Night Assault Landing

Purpose: Pilot training for landing on assault zones at night.

Description: Accomplish an un-aided vision assault landing in the period between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac.

OPR: HQ AMC/A37T/A39

Training Media: Aircraft.

Instructor: Not required for continuation training.

Additional Information: Will be dual logged with P190 and P192 by the pilot flying the aircraft. Both pilots may dual log with AS11.

AS21 Heavyweight Assault Landing

Purpose: Continuation training for aircraft commanders.

Mission	Airlift
Criterion	Current / Future Mission
Attribute	Geo-locational Factors
Formula #	1248
Label	Proximity to DZ/LZ
Effective %	14.72
Question	Check the distance to all USAF-certified Landing Zones/Drop Zones within 150NM radius of the installation that meet zone requirements. OSD Question 1249 is assigned to a notional base unit (Widget Unit #216) for technical reasons since the data is identical for all bases. So, regardless of the organization being checked, all references to OSD Question 1249 will find their data under Widget Unit # 216, which was a technical way to avoid having to enter the exact same data once per base. Widget Unit # 216 does not exist in real life. If installation has no runway or active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. Drop Zones (DZ) count for 50% of the overall score, Landing Zones (LZ) count for the remaining 50%. The data on the DZs and LZs is split across two OSD questions, 1249 and 1248. This means that the data in one question has to be matched with its respective data in the other question. This is done by matching the ZAR code, which is found in column 1 of both OSD Questions 1248 and 1249. Compute the points received for each LZ as follows, then total them into an LZ total: If the LZ is < 3500' by 90', and < 3000' by 60', get 0 points. See OSD Question 1249, columns 3 and 4 for this data. (N/A means no.) Otherwise, if the distance to the LZ > 150 miles, get 0 points. See OSD Question 1248, column 3 for this data. (N/A or no matching LZ in OSD question 1249 means > 150 miles.) Otherwise, if the distance to the LZ = 150 miles, get 10 points. Otherwise, if the distance to the LZ <= 50 miles, get 100 points. Otherwise, get 0 points. Compute the points received for each DZ as follows, then total them into a DZ total: If the DZ is < 1000 yds by 1500 yds, and < 700 yds by 1000 yds, get 0 points. See OSD Question 1249, columns 6 and 7 for this data. (N/A means no.) Otherwise, if the distance to the DZ > 150 miles, get 0 points. See OSD Question 1248, column 3 for this data. (N/A or no matching DZ in OSD

	question 1249 means > 150 miles.) Otherwise, if the distance to the DZ = 150 miles, get 10 points. Otherwise, if the distance to the DZ <= 50 miles, get 100 points. Otherwise, get 0 points. After the above LZ and DZ totals have been computed for each base, determine the score for each as follows: Get the Highest LZ total of any base and the Lowest non-Zero LZ total of any base. Get the Highest DZ total of any base and the Lowest non-Zero DZ total of any base. If the total = 0, then the respective points for that total = 0. Otherwise, pro-rate the total from the respective lowest non-zero total to the respective highest score on a 10 to 100 scale. Take 50% of the LZ score just calculated and add to it 50% of the DZ score just calculated for the overall score. Example: There are two drop zones within 150 miles, Alpha and Bravo. Alpha is 3100' by 65' and Bravo is 2000' by 100'. Alpha is 50 miles away and Bravo is 100 miles away. Alpha is bigger than 3000' by 60', so it qualifies for points. Since it is 50 miles away, it gets 100 points. Bravo is smaller than 3000' by 60', so it is too small and gets 0 points. The DZ total is 100 points. The highest DZ total across all bases is 500 and the lowest non-zero DZ total across all bases is 100. The DZ score is 10 points, since it equals the lowest overall DZ total. There are two landing zones within 150 miles, Charlie and Delta. Charlie is 1000 yds by 1500 yds and so is Delta. Charlie and Delta are both 10 miles away. Both are >= the 1000 yds by 1500 yds size, so both qualify for points. Since both are 10 miles away, they both get 100 points. The LZ total is 200 points. The highest LZ total across all bases is 200 and the lowest non-zero LZ total across all bases is 50. The LZ score is 100 points, since it equals the highest overall LZ total. Now, take 50% of each of the two totals to make the overall score: (.50 * 10) + (.50 * 100) gives an overall score of 55.
Source	IFR Supp; ZAR (AMC Zone Availability Report): AF Form 3822 (Landing Zone Survey) or AF Form 3823 (Drop Zone Survey); Falcon View or other certified flight planning software

Section 1 Air/Space Operations, Question 1248 Airspace - Distance to Zones

Org		1 Zone Name (Text)	2 ZAR Doc / Index Number (#)	3 Distance to Zone (NM)	
85		Badger	245	135	Gen Mitchell IAP ARS
85		Central Wisconsin	795	134	
85		Delbert	34	51	
85		Fejardo	248	139	
85		Harris	252	123	
85		Plunk North	250	123	
85		Plunk South	251	123	
85		Tomah	246	135	
85		Tomah	247	136	
85		Warrens	249	139	
85		Young	1426	136	
88		Arno	221	98	Minn/St Paul IAP ARS
88		Arno S to N	220	98	
88		Badger	245	123	
88		Fejardo	248	120	
88		Harris	252	139	
88		Kalahar	259	87	
88		Plunk North	250	140	
88		Plunk South	251	139	
88		Ripley	222	92	
88		Rochester East to West	94	65	
88		Tomah	247	122	
88		Tomah	246	123	
88		Warrens	249	120	
88		Young	1426	123	
89		Devil's Hole	212	1	Niagara Falls IAP ARS
89		Mushroom	203	1	
89		Slagle 06	512	150	
89		Slagle 18	505	150	
89		Slagle 2	511	150	
89		Slagle Circular/Reversed	1391	150	
89		Slagle Tree	477	150	
89		Wadsworth	39	52	
89		Whirlpool	305	1	
90	✓	Babich	229	79	Pittsburgh IAP ARS
90	✓	Dawson South	76	68	
90	✓	Jenica	376	66	
90	✓	Joker	273	94	
90	✓	Mansfield # 2	3	107	
90	✓	Mansfield 5	1358	107	
90	✓	Mansfield 6	356	106	
90	✓	Mansfield 7	357	106	
90		Melon	375	65	
90	✓	Rhinhart	277	62	
90	✓	Shepherd	63	122	
90	✓	Shipley	1433	98	
90		Sky Meadows	382	140	
90	✓	Slagle 06	512	59	
90	✓	Slagle 18	505	59	
90	✓	Slagle 2	511	59	
90	✓	Slagle Circular/Reversed	1391	59	
90	✓	Slagle Tree	477	59	
90	✓	Starvaggi	406	12	
90	✓	Steel East	1402	1	
90	✓	Steel West	433	1	
90		Valley Point	1364	61	
90	✓	Vinyl	278	57	
90	✓	Walnut	298	131	
92		Andrews Airshow	380	115	Willow Grove ARS, NAS Willow Grove Joint Reserve
92		Arden	379	121	

92	Belfair Crossroads	150	144	
92	Coyle	1387	41	
92	Dover Short	156	66	
92	Egret	383	148	
92	Jersey Devil	1366	37	
92	McLean	377	70	
92	McLean East	378	70	
92	Metz	731	122	
92	Pudgy	1365	37	
92	Red Wing	171	146	
92	Shepherd	63	140	
92	Sky Meadows	382	148	
92	Tatum	952	78	
92	Wallops HALO	180	136	
93	Babich	229	130	Youngstown-Warren Regional APT ARS
93	Dawson South	76	118	
93	Devil's Hole	212	135	
93	Hockeytown	574	126	
93	Jenica	376	117	
93	Joker	273	144	
93	Kaz	573	125	
93	Mansfield # 2	3	88	
93	Mansfield 5	1358	88	
93	Mansfield 6	356	88	
93	Mansfield 7	357	88	
93	Melon	375	116	
93	Motown	575	125	
93	Mushroom	203	135	
93	Rhinhart	277	112	
93	Selfridge 01/19 LZ	529	126	
93	Selfridge 28/10 LZ	530	125	
93	Shipley	1433	142	
93	Six Pack II	572	126	
93	Slagle 06	512	20	
93	Slagle 18	505	20	
93	Slagle 2	511	20	
93	Slagle Circular/Reversed	1391	20	
93	Slagle Tree	477	20	
93	Starvaggi	406	53	
93	Steel East	1402	51	
93	Steel West	433	51	
93	Valley Point	1364	112	
93	Vinyl	278	107	
93	Walnut	298	135	
93	Whirlpool	305	135	

Mission	Airlift
Criterion	Condition of Infrastructure
Attribute	Operating Areas
Formula #	1249
Label	Airspace Attributes of DZ/LZ
Effective %	8.30
Question	Check the attributes of USAF-certified Landing Zones / Drop Zones which have current AMC surveys. OSD Question 1249 is assigned to a notional base unit (Widget Unit #216) for technical reasons since the data is identical for all bases. So, regardless of the organization being checked, all references to OSD Question 1249 will find their data under Widget Unit # 216, which was a technical way to avoid having to enter the exact same data once per base. Widget Unit # 216 does not exist in real life. If installation has no runway or active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. Drop Zones (DZ) count for 50% of the overall score, Landing Zones (LZ) count for the remaining 50%. The data on the DZs and LZs is split across two OSD questions, 1249 and 1248. This means that the data in one question has to be matched with its respective data in the other question. This is done by matching the ZAR code, which is found in column 1 of both OSD Questions 1248 and 1249. Compute the points received for each LZ as follows, then total them into an LZ total: If the distance to the LZ > 150 miles, get 0 points. See OSD Question 1248, column 3 for this data. (N/A or no matching LZ in OSD question 1249 means > 50 miles.) Otherwise, if the LZ is >= 3500' by 90', get 100 points. See OSD Question 1249, column 4 for this data. (N/A means no.) Otherwise, if the LZ is >= 3000' by 60', get 50 points. See OSD Question 1249, column 3 for this data. (N/A means no.) Otherwise, get 0 points. Compute the points received for each DZ as follows, then total them into a DZ total: If the distance to the DZ > 150 miles, get 0 points. See OSD Question 1248, column 3 for this data. (N/A or no matching DZ in OSD question 1249 means > 50 miles.) Otherwise, if the DZ is >= 1000 yds by 1500 yds, get 100 points. See OSD Question 1249, column 7 for this data. (N/A means no.)

	Otherwise, if the DZ is >= 700 yds by 1000 yds, get 50 points. See OSD Question 1249, column 6 for this data. (N/A means no.) Otherwise, get 0 points. After the above LZ and DZ totals have been computed for each base, determine the score for each as follows: Get the Highest LZ total of any base and the Lowest non-Zero LZ total of any base. Get the Highest DZ total of any base and the Lowest non-Zero DZ total of any base. If the total = 0, then the respective points for that total = 0. Otherwise, pro-rate the total from the respective lowest non-zero total to the respective highest score on a 10 to 100 scale. Take 50% of the LZ score just calculated and add to it 50% of the DZ score just calculated for the overall score. **Example:** There are two drop zones within 50 miles, Alpha and Bravo. Alpha is 3100' by 65' and Bravo is 2000' by 100'. Alpha is between 3000' by 60' and 3500' by 90' in size, so it gets 50 points. Bravo is too small, so it gets 0 points. The DZ total is 50 points. The highest DZ total across all bases is 500 and the lowest non-zero DZ total across all bases is 50. The DZ score is 10 points, since it equals the lowest overall DZ total. There are two landing zones within 50 miles, Charlie and Delta. Charlie is 1000 yds by 1500 yds and so is Delta. Both are >= the 1000 yds by 1500 yds size, so both get 100 points. The LZ total is 200 points. The highest LZ total across all bases is 200 and the lowest non-zero LZ total across all bases is 50. The LZ score is 100 points, since it equals the highest overall LZ total. Now, take 50% of each of the two totals to make the overall score: (.50 * 10) + (.50 * 100) gives an overall score of 55.
Source	IFR Supp; ZAR (AMC Zone Availability Report): AF Form 3822 (Landing Zone Survey) or AF Form 3823 (Drop Zone Survey); Falcon View or other certified flight planning software

Section 1 Air/Space Operations, Question 1249 Airspace Attributes - Zones

Org	1 Zone Survey Name (Text)	2 ZAR Doc/Index Number (#)	3 Landing Zone: >=3000' x 60' (Yes/No)	4 Landing Zone: >=3500' x 90' (Yes/No)	5 Landing Zone Surface (Text)	6 Drop Zone: >=700 yds x 1000yds (Yes/No)	7 Drop Zone: >=1000 yds x 1500 yds (Yes/No)	8 IMC (Yes/No)	9 VMC (Yes/No)
216	A Shau	1002	No	No	N/A	Yes	Yes	No	Yes
216	Abken	304	No	No	N/A	No	No	No	Yes
216	Acorn	37	No	No	N/A	Yes	No	No	Yes
216	Adams	315	Yes	No	Unpaved	No	No	No	Yes
216	Air Commando	325	No	No	N/A	Yes	No	No	Yes
216	Albatross	233	No	No	N/A	No	No	No	Yes
216	All American	113	Yes	No	Unpaved	No	No	No	Yes
216	All American	385	No	No	N/A	Yes	Yes	No	Yes
216	All American Circ	387	No	No	N/A	No	No	No	Yes
216	Allen	10	No	No	N/A	Yes	No	No	Yes
216	Amedee	241	No	No	N/A	Yes	Yes	No	Yes
216	Americus	72	No	No	N/A	Yes	No	No	Yes
216	Anderson	170	Yes	Yes	Paved	No	No	No	Yes
216	Anderson	3104	No	No	N/A	Yes	No	No	Yes
216	Andrews Airshow	380	No	No	N/A	Yes	Yes	No	Yes
216	Anniston Runway	987	No	No	N/A	No	No	No	Yes
216	Anniston Runway	988	No	No	N/A	No	No	No	Yes
216	Antelope	260	No	No	N/A	Yes	Yes	No	Yes
216	Arden	379	No	No	N/A	No	No	No	Yes
216	Ardmore	621	No	No	N/A	Yes	No	No	Yes
216	Aries Madras	328	No	No	N/A	No	No	No	Yes
216	Arizona Memorial	3315	No	No	N/A	No	No	No	Yes
216	Arno	221	No	No	N/A	Yes	No	No	Yes
216	Arno S to N	220	No	No	N/A	Yes	Yes	No	Yes
216	Arrowhead	58	No	No	N/A	Yes	Yes	No	Yes
216	Arrowhead Revers	59	No	No	N/A	Yes	Yes	No	Yes
216	Au Sable	555	No	No	N/A	No	No	No	Yes
216	Auman	1449	No	No	N/A	No	No	No	Yes
216	Aux Field 6	1423	Yes	Yes	Paved	No	No	No	Yes
216	Avelino	4	No	No	N/A	Yes	Yes	No	Yes
216	Avon Park	67	No	No	N/A	No	No	No	Yes
216	B-70 South	275	No	No	N/A	Yes	Yes	No	Yes
216	BG South	292	No	No	N/A	Yes	No	No	Yes
216	Babbit	183	No	No	N/A	No	No	No	Yes
216	Babich	229	No	No	N/A	No	No	No	Yes
216	Bad Monkey	1097	No	No	N/A	Yes	Yes	No	Yes
216	Badger	245	No	No	N/A	Yes	Yes	No	Yes

216	Bak	3007	No	No	N/A	Yes	No	No	Yes
216	Baker One Delta	123	No	No	N/A	Yes	Yes	No	Yes
216	Barbara	1179	No	No	N/A	Yes	Yes	No	Yes
216	Barcardi	2105	No	No	N/A	No	No	No	Yes
216	Basilone Nuevo	1	No	No	N/A	Yes	Yes	No	Yes
216	Bastogne	319	No	No	N/A	Yes	No	No	Yes
216	Beanbag	770	No	No	N/A	Yes	Yes	No	Yes
216	Bear	21	No	No	N/A	Yes	No	No	Yes
216	Bear Butte	151	No	No	N/A	Yes	No	No	Yes
216	Bearbait	3037	No	No	N/A	No	No	No	Yes
216	Beaver	186	No	No	N/A	Yes	No	No	Yes
216	Beaver	1409	No	No	N/A	Yes	Yes	No	Yes
216	Beaver Oaks Circu	137	No	No	N/A	No	No	No	Yes
216	Becca 2000	1172	No	No	N/A	Yes	Yes	No	Yes
216	Bedrock	551	No	No	N/A	No	No	No	Yes
216	Belfair Crossroads	150	No	No	N/A	No	No	No	Yes
216	Belvedere	434	Yes	No	Unpaved	No	No	No	Yes
216	Bemiss	448	No	No	N/A	Yes	Yes	No	Yes
216	Big Country	1445	No	No	N/A	Yes	No	No	Yes
216	Big Country S - N	1446	No	No	N/A	Yes	No	No	Yes
216	Big Toe	95	No	No	N/A	No	No	No	Yes
216	Bison	29	No	No	N/A	Yes	No	No	Yes
216	Blackbird	244	No	No	N/A	No	No	No	Yes
216	Blackjack	374	No	No	N/A	Yes	No	No	Yes
216	Blackstone	1370	No	No	N/A	Yes	Yes	No	Yes
216	Blackwell	282	No	No	N/A	Yes	No	No	Yes
216	Blue	191	No	No	N/A	Yes	Yes	No	Yes
216	Blue Nile East	3019	No	No	N/A	Yes	No	No	Yes
216	Blue Nile West	3018	No	No	N/A	Yes	No	No	Yes
216	Bluebird	230	No	No	N/A	No	No	No	Yes
216	Boardman South	1361	No	No	N/A	No	No	No	Yes
216	Boca Chica	115	No	No	N/A	No	No	No	Yes
216	Borden Springs	1439	No	No	N/A	Yes	Yes	No	Yes
216	Borinquen	3118	No	No	N/A	No	No	No	Yes
216	Borinquen Parallel	2003	Yes	No	Paved	No	No	No	Yes
216	Bowden	51	No	No	N/A	Yes	No	No	Yes
216	Bowling Alley	3040	No	No	N/A	No	No	No	Yes
216	Box Car	262	No	No	N/A	Yes	Yes	No	Yes
216	Brewer	30	No	No	N/A	Yes	Yes	No	Yes
216	Bronte	358	No	No	N/A	No	No	No	Yes
216	Bronte	600	No	No	N/A	Yes	Yes	No	Yes
216	Buck	1442	No	No	N/A	Yes	No	No	Yes
216	Buffalo Corral	44	No	No	N/A	Yes	Yes	No	Yes
216	Bug Eater	254	No	No	N/A	Yes	No	No	Yes

216	Bullis	599	Yes	No	Paved	No	No	No	Yes
216	Bushy	1452	No	No	N/A	No	No	No	Yes
216	Butch Lake	227	No	No	N/A	No	No	No	Yes
216	Buzz	503	No	No	N/A	No	No	No	Yes
216	Buzz	1333	No	No	N/A	Yes	No	No	Yes
216	Buzz North -South	193	Yes	No	N/A	Yes	Yes	No	Yes
216	Buzz South - North	194	No	No	N/A	Yes	Yes	No	Yes
216	C-52 Airpower	411	No	No	N/A	No	No	No	Yes
216	C-52 Highspeed	153	No	No	N/A	Yes	No	No	Yes
216	C-52 MFF	152	No	No	N/A	No	No	No	Yes
216	CCT	125	No	No	N/A	No	No	No	Yes
216	Cal City	1392	No	No	N/A	No	No	No	Yes
216	Calvin	1317	No	No	N/A	Yes	Yes	No	Yes
216	Camp Guernsey H.	437	No	No	N/A	No	No	No	Yes
216	Camp Rudder	145	No	No	N/A	Yes	No	No	Yes
216	Campbell Army A	395	No	No	N/A	Yes	No	No	Yes
216	Canary	234	No	No	N/A	No	No	No	Yes
216	Capehart	352	No	No	N/A	No	No	No	Yes
216	Carano	5	No	No	N/A	Yes	Yes	No	Yes
216	Carter	444	No	No	N/A	Yes	No	No	Yes
216	Cecil Field	119	No	No	N/A	Yes	No	No	Yes
216	Central Wisconsin	795	Yes	No	Paved	No	No	No	Yes
216	Chain	990	No	No	N/A	No	No	No	Yes
216	Charleston Airshov	187	No	No	N/A	Yes	Yes	No	Yes
216	Charlotte Airport I	1359	No	No	N/A	No	No	No	Yes
216	Cheyenne	100	Yes	Yes	Paved	No	No	No	Yes
216	Chip	263	No	No	N/A	Yes	Yes	No	Yes
216	Choctaw	195	No	No	N/A	Yes	No	No	Yes
216	Choctaw	239	No	No	N/A	Yes	No	No	Yes
216	Chuck	1393	No	No	N/A	Yes	Yes	No	Yes
216	Chute	312	No	No	N/A	Yes	Yes	No	Yes
216	Clerkin	1413	No	No	N/A	Yes	Yes	No	Yes
216	Clester	31	No	No	N/A	No	No	No	Yes
216	Coin	264	No	No	N/A	Yes	Yes	No	Yes
216	Cole	1437	Yes	No	Unpaved	No	No	No	Yes
216	Columbus AFB	218	No	No	N/A	Yes	No	No	Yes
216	Condor	243	No	No	N/A	Yes	Yes	No	Yes
216	Condor	279	No	No	N/A	No	No	No	Yes
216	Condron	205	No	No	N/A	Yes	No	No	Yes
216	Conehead	397	No	No	N/A	No	No	No	Yes
216	Connor	1395	No	No	N/A	No	No	No	Yes
216	Coolidge	190	No	No	N/A	No	No	No	Yes
216	Coronado	1343	No	No	N/A	Yes	No	No	Yes
216	Corregidor East	318	No	No	N/A	Yes	No	No	Yes

216	Corregidor Revers	317	No	No	N/A	Yes	Yes	No	Yes
216	Cotentin	16	No	No	N/A	Yes	Yes	No	Yes
216	Coulee	124	Yes	Yes	Paved	No	No	No	Yes
216	Coupeville	604	No	No	N/A	Yes	No	No	Yes
216	Cowherd	154	No	No	N/A	No	No	No	Yes
216	Cox Field	396	No	No	N/A	No	No	No	Yes
216	Coyle	1387	No	No	N/A	Yes	No	No	Yes
216	Cunningham	281	No	No	N/A	No	No	No	Yes
216	DODO	232	No	No	N/A	No	No	No	Yes
216	Dade Collier	364	No	No	N/A	Yes	No	No	Yes
216	Danielson	474	No	No	N/A	Yes	No	No	Yes
216	Davis Mothan	189	No	No	N/A	No	No	No	Yes
216	Dawson South	76	No	No	N/A	No	No	No	Yes
216	Deadhorse	439	No	No	N/A	Yes	No	No	Yes
216	Death Viper	602	No	No	N/A	Yes	No	No	Yes
216	Delbert	34	No	No	N/A	Yes	No	No	Yes
216	Deridder	1405	No	No	N/A	Yes	No	No	Yes
216	Desert Center	87	No	No	N/A	Yes	No	No	Yes
216	Desert Rescue	41	No	No	N/A	Yes	Yes	No	Yes
216	Desert Rock North	26	No	No	N/A	No	No	No	Yes
216	Devil's Hole	212	No	No	N/A	No	No	No	Yes
216	Diablo	1349	No	No	N/A	No	No	No	Yes
216	Dillard	625	No	No	N/A	Yes	No	No	Yes
216	Dixie	513	No	No	N/A	Yes	No	No	Yes
216	Dodd	307	No	No	N/A	Yes	No	No	Yes
216	Donna	236	No	No	N/A	Yes	Yes	No	Yes
216	Donnelly Flats	45	No	No	N/A	Yes	Yes	No	Yes
216	Donnely Flats	324	Yes	Yes	Unpaved	No	No	No	Yes
216	Dove	1371	No	No	N/A	Yes	Yes	No	Yes
216	Dover Short	156	No	No	N/A	Yes	No	No	Yes
216	Downey	440	No	No	N/A	Yes	Yes	No	Yes
216	Dropzone 21	18	No	No	N/A	Yes	Yes	No	Yes
216	Duke	196	No	No	N/A	No	No	No	Yes
216	Easy	601	No	No	N/A	Yes	No	No	Yes
216	Eddy	47	No	No	N/A	Yes	Yes	No	Yes
216	Edisto North	1115	No	No	N/A	Yes	No	No	Yes
216	Egret	383	No	No	N/A	No	No	No	Yes
216	Elberta	311	Yes	Yes	Unpaved	No	No	No	Yes
216	Elberta Freefall	99	No	No	N/A	No	No	No	Yes
216	Elizabeth	400	No	No	N/A	Yes	No	No	Yes
216	Elizabeth E - W	521	No	No	N/A	Yes	Yes	No	Yes
216	Elizabeth W - E	522	No	No	N/A	Yes	Yes	No	Yes
216	Ellis	449	No	No	N/A	No	No	No	Yes
216	Ellis East	499	No	No	N/A	Yes	Yes	No	Yes

216	Ellis West	496	No	No	N/A	Yes	Yes	No	Yes
216	Elmendorf CDS	208	No	No	N/A	No	No	No	Yes
216	Elmendorf Halo	49	No	No	N/A	No	No	No	Yes
216	Embassy	40	No	No	N/A	No	No	No	Yes
216	Emerson Lake	38	No	No	N/A	Yes	No	No	Yes
216	Emporia	321	No	No	N/A	No	No	No	Yes
216	Enad	78	No	No	N/A	Yes	Yes	No	Yes
216	Everett West PJ	138	No	No	N/A	Yes	No	No	Yes
216	Exchange	353	No	No	N/A	No	No	No	Yes
216	Fahzah	550	No	No	N/A	Yes	No	No	Yes
216	Fairchild	1430	No	No	N/A	No	No	No	Yes
216	Fairchild Demo	975	No	No	N/A	No	No	No	Yes
216	Falcon	1394	No	No	N/A	Yes	Yes	No	Yes
216	Falcon North	967	No	No	N/A	Yes	No	No	Yes
216	Falcon South	976	No	No	N/A	Yes	No	No	Yes
216	Farm	695	No	No	N/A	Yes	Yes	No	Yes
216	Farmer	228	No	No	N/A	Yes	No	No	Yes
216	Fejardo	248	No	No	N/A	Yes	Yes	No	Yes
216	Fentress	1332	No	No	N/A	Yes	No	No	Yes
216	Ferreira	453	No	No	N/A	Yes	No	No	Yes
216	Field 6	1350	No	No	N/A	Yes	No	No	Yes
216	Firebird	3039	No	No	N/A	Yes	No	No	Yes
216	Firebird Circular	3038	No	No	N/A	No	No	No	Yes
216	Forget	3036	No	No	N/A	No	No	No	Yes
216	Forney	398	No	No	N/A	No	No	No	Yes
216	Frisco Ridge	276	Yes	No	Unpaved	No	No	No	Yes
216	Fryar	88	No	No	N/A	Yes	Yes	No	Yes
216	Gadsden	50	No	No	N/A	Yes	No	No	Yes
216	Galahad	122	No	No	N/A	Yes	Yes	No	Yes
216	Gann	1283	No	No	N/A	No	No	No	Yes
216	Gela	1199	No	No	N/A	Yes	Yes	No	Yes
216	Geronimo	1001	Yes	Yes	Unpaved	No	No	Yes	Yes
216	Geronimo North	101	No	No	N/A	Yes	Yes	No	Yes
216	Geronimo South	102	No	No	N/A	Yes	Yes	No	Yes
216	Gila Bend Circular	1344	No	No	N/A	Yes	No	No	Yes
216	Gipson Ranch	35	No	No	N/A	Yes	No	No	Yes
216	Glorieta Pass	413	No	No	N/A	Yes	No	No	Yes
216	Glorieta Pass Reve	1401	No	No	N/A	Yes	No	No	Yes
216	Golden Eagle	1388	Yes	No	Unpaved	No	No	No	Yes
216	Golf Range	1422	No	No	N/A	Yes	No	No	Yes
216	Goose	235	No	No	N/A	No	No	No	Yes
216	Graham	1397	No	No	N/A	Yes	No	No	Yes
216	Granada	672	No	No	N/A	Yes	Yes	No	Yes
216	Grandma	91	No	No	N/A	Yes	Yes	No	Yes

216	Grange North	404	No	No	N/A	Yes	Yes	No	Yes
216	Grange South	207	No	No	N/A	Yes	Yes	No	Yes
216	Grant County	192	No	No	N/A	Yes	Yes	No	Yes
216	Grassland East	1356	No	No	N/A	Yes	Yes	No	Yes
216	Greenleaf Lake	214	No	No	N/A	No	No	No	Yes
216	Greer	1225	No	No	N/A	Yes	Yes	No	Yes
216	Grenada	295	No	No	N/A	Yes	No	No	Yes
216	Gulch	813	No	No	N/A	Yes	No	No	Yes
216	Gypsum	36	No	No	N/A	Yes	No	No	Yes
216	Hagler AAF	1420	Yes	No	Paved	No	No	No	Yes
216	Hall	1441	No	No	N/A	Yes	Yes	No	Yes
216	Hammond	1462	No	No	N/A	Yes	No	No	Yes
216	Hardcore	237	No	No	N/A	Yes	No	No	Yes
216	Hardluck East to V	213	No	No	N/A	Yes	Yes	No	Yes
216	Hardluck West to I	405	No	No	N/A	Yes	Yes	No	Yes
216	Harris	252	No	No	N/A	No	No	No	Yes
216	Hathcock	1389	No	No	N/A	No	No	No	Yes
216	Hayford	722	No	No	N/A	Yes	No	No	Yes
216	Herlong	240	No	No	N/A	Yes	Yes	No	Yes
216	Herlong	242	No	No	N/A	Yes	Yes	No	Yes
216	Hickam	169	No	No	N/A	Yes	No	No	Yes
216	High Rock	121	Yes	No	Paved	No	No	No	Yes
216	Hillbilly	56	No	No	N/A	No	No	No	Yes
216	Hockeytown	574	No	No	N/A	Yes	No	Yes	Yes
216	Hodge	303	No	No	N/A	Yes	No	No	Yes
216	Hole	1451	No	No	N/A	No	No	No	Yes
216	Holland	301	Yes	Yes	Paved	No	No	No	Yes
216	Holland	1448	No	No	N/A	Yes	Yes	No	Yes
216	Honor	1360	No	No	N/A	No	No	No	Yes
216	Hotel	289	No	No	N/A	No	No	No	Yes
216	Hubbard	1418	Yes	No	Unpaved	No	No	No	Yes
216	Humor	1398	No	No	N/A	Yes	Yes	No	Yes
216	Humor	1414	No	No	N/A	No	No	No	Yes
216	Hunter 10	287	No	No	N/A	Yes	Yes	No	Yes
216	Hunter 28	313	No	No	N/A	Yes	Yes	No	Yes
216	Hurlburt HALO	326	No	No	N/A	No	No	No	Yes
216	Hurley	184	No	No	N/A	No	No	No	Yes
216	Husker	386	No	No	N/A	Yes	No	No	Yes
216	Husky	3110	No	No	N/A	Yes	No	No	Yes
216	Indian Springs	28	No	No	N/A	No	No	No	Yes
216	Ireland	436	No	No	N/A	Yes	No	No	Yes
216	Ironwood	77	No	No	N/A	Yes	Yes	No	Yes
216	Italian Flats	158	No	No	N/A	No	No	No	Yes
216	Jackalope	435	No	No	N/A	Yes	Yes	No	Yes

216	Jackrabbit	1419	Yes	No	Unpaved	No	No	No	Yes
216	James Rowe	104	No	No	N/A	No	No	No	Yes
216	Jax	1202	No	No	N/A	Yes	No	No	Yes
216	Jean Airfield	159	No	No	N/A	No	No	No	Yes
216	Jenica	376	No	No	N/A	No	No	No	Yes
216	Jerky	1453	No	No	N/A	No	No	No	Yes
216	Jersey Devil	1366	No	No	N/A	Yes	Yes	Yes	Yes
216	Joe Wright	441	No	No	N/A	Yes	No	No	Yes
216	John R. Towle	52	No	No	N/A	Yes	No	No	Yes
216	Joker	273	No	No	N/A	Yes	No	No	Yes
216	Jon Gildan	103	No	No	N/A	Yes	No	No	Yes
216	Jordan	1192	No	No	N/A	Yes	No	No	Yes
216	Joshua	608	No	No	N/A	Yes	Yes	No	Yes
216	Kalahar	259	Yes	No	Unpaved	No	No	No	Yes
216	Kamuela	3114	No	No	N/A	Yes	No	No	Yes
216	Kanes	3001	No	No	N/A	Yes	No	No	Yes
216	Kathy	1134	No	No	N/A	Yes	Yes	No	Yes
216	Kaufman	9	No	No	N/A	No	No	No	Yes
216	Kaz	573	No	No	N/A	No	No	No	Yes
216	Keno	48	Yes	Yes	Unpaved	No	No	No	Yes
216	Keno North	265	No	No	N/A	Yes	Yes	No	Yes
216	Keno South	266	No	No	N/A	Yes	Yes	No	Yes
216	Keystone Long	198	No	No	N/A	No	No	No	Yes
216	Keystone Short	199	No	No	N/A	No	No	No	Yes
216	Khafji	200	No	No	N/A	Yes	No	No	Yes
216	Kingsley Field	160	No	No	N/A	No	No	No	Yes
216	Knots	1431	No	No	N/A	Yes	Yes	No	Yes
216	Laatsch	430	No	No	N/A	Yes	Yes	No	Yes
216	Lackland High Sch	161	No	No	N/A	No	No	No	Yes
216	Lager	1457	No	No	N/A	No	No	No	Yes
216	Langley	294	No	No	N/A	No	No	No	Yes
216	Langley II	297	No	No	N/A	No	No	No	Yes
216	Lark HALO	231	No	No	N/A	No	No	No	Yes
216	Larkin	971	No	No	N/A	Yes	Yes	No	Yes
216	Larkin Reverse	53	No	No	N/A	Yes	No	No	Yes
216	Larson	1135	No	No	N/A	Yes	Yes	No	Yes
216	Las Cruces MFF	162	No	No	N/A	No	No	No	Yes
216	Law	182	No	No	N/A	No	No	No	Yes
216	Leap Frog	291	No	No	N/A	No	No	No	Yes
216	Leap Frog East	984	No	No	N/A	No	No	No	Yes
216	Lightning	3009	No	No	N/A	Yes	No	No	Yes
216	Luzon	302	No	No	N/A	Yes	Yes	No	Yes
216	Luzon	510	Yes	Yes	Unpaved	No	No	No	Yes
216	Mackall	1259	No	No	N/A	Yes	Yes	No	Yes

216	Mackall	1281	No	No	N/A	No	No	No	Yes
216	Mackenzie	223	No	No	N/A	Yes	Yes	No	Yes
216	Mackenzie	224	No	No	N/A	Yes	No	No	Yes
216	Magdalene	1355	No	No	N/A	No	No	No	Yes
216	Main E AC	163	No	No	N/A	No	No	No	Yes
216	Malemute	1459	Yes	No	Unpaved	No	No	No	Yes
216	Malemute	3031	No	No	N/A	Yes	Yes	No	Yes
216	Mansfield # 2	3	No	No	N/A	No	No	No	Yes
216	Mansfield 5	1358	No	No	N/A	No	No	No	Yes
216	Mansfield 6	356	No	No	N/A	No	No	No	Yes
216	Mansfield 7	357	No	No	N/A	Yes	No	No	Yes
216	March CDS	985	No	No	N/A	No	No	No	Yes
216	March HALO	986	No	No	N/A	No	No	No	Yes
216	Marrion 152	1443	No	No	N/A	Yes	Yes	Yes	Yes
216	Marrion 341	1444	No	No	N/A	Yes	No	No	Yes
216	Maurice Roy	528	No	No	N/A	Yes	No	No	Yes
216	Maxton	969	No	No	N/A	Yes	Yes	No	Yes
216	McKay Saddle	143	No	No	N/A	No	No	No	Yes
216	McLean	377	No	No	N/A	Yes	No	No	Yes
216	McLean East	3778	No	No	N/A	Yes	No	No	Yes
216	McWadan	105	No	No	N/A	Yes	No	No	Yes
216	Meat	225	No	No	N/A	No	No	No	Yes
216	Mellan	82	Yes	No	Paved	No	No	No	Yes
216	Mellan East	267	No	No	N/A	Yes	Yes	No	Yes
216	Mellan West	268	No	No	N/A	Yes	Yes	No	Yes
216	Melon	375	No	No	N/A	No	No	No	Yes
216	Merril	1345	No	No	N/A	Yes	No	No	Yes
216	Metz	731	No	No	N/A	Yes	No	No	Yes
216	Mikulua	3107	No	No	N/A	No	No	No	Yes
216	Mohave	147	No	No	N/A	Yes	Yes	No	Yes
216	Monroe	210	No	No	N/A	Yes	Yes	No	Yes
216	Moody Airshow	410	No	No	N/A	Yes	No	No	Yes
216	Moon	391	No	No	N/A	No	No	No	Yes
216	Moss	443	No	No	N/A	Yes	Yes	No	Yes
216	Motown	575	No	No	N/A	Yes	No	No	No
216	Mudduck	57	No	No	N/A	No	No	No	Yes
216	Mullet	314	No	No	N/A	Yes	Yes	No	Yes
216	Mushroom	203	No	No	N/A	Yes	No	No	Yes
216	NOLF Barin	1258	No	No	N/A	Yes	No	No	Yes
216	Nervous	2099	No	No	N/A	Yes	Yes	No	Yes
216	Netherlands	1447	No	No	N/A	Yes	Yes	Yes	Yes
216	New Bravo	81	No	No	N/A	No	No	No	Yes
216	New Hope 1	978	No	No	N/A	Yes	Yes	No	Yes
216	Nezhad	920	Yes	No	N/A	No	No	No	Yes

216	Niebhur	3041	No	No	N/A	No	No	No	Yes
216	Nielson	3032	No	No	N/A	Yes	Yes	No	Yes
216	Nijmegen	80	No	No	N/A	Yes	Yes	No	Yes
216	No Boat	3043	No	No	N/A	Yes	No	No	Yes
216	Nord Target 22	447	Yes	No	Unpaved	No	No	No	Yes
216	Norfolk NAS Dem	202	No	No	N/A	No	No	No	Yes
216	Normandy	2	No	No	N/A	Yes	Yes	No	Yes
216	North Dixie Valley	42	No	No	N/A	Yes	Yes	No	Yes
216	North Field Circula	1469	No	No	N/A	No	No	No	Yes
216	North Field E -W	1464	No	No	N/A	Yes	Yes	No	Yes
216	North Field S- N	1463	No	No	N/A	Yes	No	No	Yes
216	North Glaze PJ	140	No	No	N/A	Yes	No	No	Yes
216	North Special	164	No	No	N/A	Yes	Yes	No	Yes
216	Northwest Field	3122	Yes	No	Paved	No	No	No	Yes
216	On Time	3034	No	No	N/A	No	No	No	Yes
216	Oran	1280	No	No	N/A	Yes	No	No	Yes
216	Orchard PJ	141	No	No	N/A	No	No	No	Yes
216	Orville	3042	No	No	N/A	No	No	No	Yes
216	Oscura	62	No	No	N/A	Yes	Yes	No	Yes
216	Palestine	15	No	No	N/A	Yes	No	No	Yes
216	Palmdale	1421	Yes	No	Paved	No	No	No	Yes
216	Panther	1440	No	No	N/A	Yes	Yes	No	Yes
216	Par	1351	No	No	N/A	Yes	Yes	No	Yes
216	Parade	73	No	No	N/A	No	No	No	Yes
216	Parade Field	165	No	No	N/A	No	No	No	Yes
216	Paradise Circular	3033	No	No	N/A	No	No	No	Yes
216	Pathfinder	106	No	No	N/A	No	No	No	Yes
216	Patricia	1274	No	No	N/A	Yes	Yes	No	Yes
216	Peason Ridge	20	Yes	Yes	Paved	No	No	No	Yes
216	Pecan	363	No	No	N/A	No	No	No	Yes
216	Penguin	114	No	No	N/A	No	No	No	Yes
216	Pete	577	No	No	N/A	Yes	No	No	Yes
216	Phantom	1465	No	No	N/A	Yes	No	No	Yes
216	Phantom Circular	1466	No	No	N/A	No	No	No	Yes
216	Pheasant	1400	No	No	N/A	Yes	Yes	No	Yes
216	Phelps Collins	576	No	No	N/A	Yes	No	No	No
216	Phillips	751	No	No	N/A	Yes	No	No	Yes
216	Phillips Hills	139	No	No	N/A	Yes	No	No	Yes
216	Pickel Meadows	19	No	No	N/A	No	No	No	Yes
216	Pinion Circular	98	No	No	N/A	Yes	Yes	No	Yes
216	Pinion North	97	No	No	N/A	Yes	No	No	Yes
216	Pino	215	No	No	N/A	Yes	No	No	Yes
216	Pinon Canyon	1408	Yes	No	Unpaved	No	No	No	Yes
216	Pipeline	261	No	No	N/A	Yes	Yes	No	Yes

216	Pitsenbarger	977	No	No	N/A	No	No	No	Yes
216	Plover	327	No	No	N/A	No	No	No	Yes
216	Plunk North	250	No	No	N/A	Yes	Yes	No	Yes
216	Plunk South	251	No	No	N/A	Yes	No	No	Yes
216	Point Salinas	296	No	No	N/A	Yes	Yes	No	Yes
216	Pony	651	No	No	N/A	Yes	No	No	Yes
216	Pony 01	650	No	No	N/A	Yes	Yes	No	Yes
216	Pony 19	652	No	No	N/A	Yes	Yes	No	Yes
216	Pope Demo	70	No	No	N/A	Yes	No	No	Yes
216	Pope Demo Revers	71	No	No	N/A	Yes	No	No	Yes
216	Pope Park	414	No	No	N/A	No	No	No	Yes
216	Pronghorn	93	No	No	N/A	Yes	Yes	No	Yes
216	Pudgy	1365	No	No	N/A	Yes	No	No	Yes
216	Puu Kapu	3117	No	No	N/A	No	No	No	Yes
216	Raeford Runway	1006	No	No	N/A	No	No	No	Yes
216	Raeford Tree	1424	No	No	N/A	No	No	No	Yes
216	Rafael Hernandez	3024	Yes	No	Paved	No	No	No	Yes
216	Rainier	855	No	No	N/A	Yes	Yes	No	Yes
216	Ram	253	No	No	N/A	Yes	Yes	No	Yes
216	Ramp	64	No	No	N/A	No	No	No	Yes
216	Range Operations	1348	No	No	N/A	No	No	No	Yes
216	Raven Tree	1376	No	No	N/A	No	No	No	Yes
216	Razor	1410	No	No	N/A	Yes	Yes	No	Yes
216	Razorback	283	No	No	N/A	Yes	No	No	Yes
216	Razorback	284	No	No	N/A	No	No	No	Yes
216	Recon	606	No	No	N/A	Yes	Yes	No	Yes
216	Red Devil	1458	Yes	No	Unpaved	No	No	No	Yes
216	Red Mile	168	No	No	N/A	No	No	No	Yes
216	Red Wing	171	No	No	N/A	No	No	No	Yes
216	Remegan	362	No	No	N/A	Yes	Yes	No	Yes
216	Rhine	306	No	No	N/A	Yes	Yes	No	Yes
216	Rhinhart	277	No	No	N/A	No	No	No	Yes
216	Ripley	222	No	No	N/A	Yes	No	No	Yes
216	Risky	6011	No	No	N/A	Yes	No	No	Yes
216	Risky Circular	2108	No	No	N/A	Yes	No	No	Yes
216	Roadrunner	146	No	No	N/A	Yes	Yes	No	Yes
216	Robby	1053	No	No	N/A	Yes	Yes	No	Yes
216	Robertson	359	No	No	N/A	No	No	No	Yes
216	Robertson	360	No	No	N/A	Yes	No	No	Yes
216	Robin Tree	166	No	No	N/A	Yes	Yes	No	Yes
216	Robinson	1005	No	No	N/A	Yes	No	No	Yes
216	Rochester East to	94	No	No	N/A	Yes	No	No	Yes
216	Rock	269	No	No	N/A	Yes	Yes	No	Yes
216	Rock	65	No	No	N/A	No	No	No	Yes

216	Rocky Top	280	Yes	Yes	Paved	No	No	No	Yes
216	Rogers	1336	No	No	N/A	Yes	Yes	No	Yes
216	Roosevelt Roads	2114	No	No	N/A	Yes	Yes	No	Yes
216	Roszov	167	No	No	N/A	Yes	No	No	Yes
216	Rough Terrain	172	No	No	N/A	Yes	No	No	Yes
216	Rudd	43	No	No	N/A	No	No	No	Yes
216	Ryan	89	No	No	N/A	Yes	No	No	Yes
216	Sabra	504	No	No	N/A	Yes	Yes	No	Yes
216	Salerno	83	No	No	N/A	Yes	Yes	No	Yes
216	Sally	8	No	No	N/A	Yes	Yes	No	Yes
216	San Marcos	1390	No	No	N/A	No	No	No	Yes
216	Sand	270	No	No	N/A	Yes	Yes	No	Yes
216	Sand North	271	No	No	N/A	Yes	Yes	No	Yes
216	Sand South	272	No	No	N/A	Yes	Yes	No	Yes
216	Sanderson	527	No	No	N/A	Yes	Yes	No	Yes
216	Saylor Circular	1467	No	No	N/A	Yes	No	No	Yes
216	Saylor Creek	1088	No	No	N/A	Yes	Yes	No	Yes
216	Scarf	1454	No	No	N/A	No	No	No	Yes
216	Schoonover	712	Yes	No	Unpaved	No	No	No	Yes
216	Scotia	902	No	No	N/A	Yes	No	No	Yes
216	Scuba	1450	No	No	N/A	No	No	No	Yes
216	Selah Airfield	188	No	No	N/A	Yes	Yes	No	Yes
216	Selah Creek	1412	Yes	No	Paved	No	No	No	Yes
216	Self	118	Yes	Yes	Paved	No	No	No	Yes
216	Self	293	No	No	N/A	No	No	No	Yes
216	Selfridge 01/19	529	Yes	No	Paved	No	No	No	Yes
216	Selfridge 28/10	530	Yes	No	Paved	No	No	No	Yes
216	Seymour East	1368	No	No	N/A	No	No	No	Yes
216	Sharon	238	No	No	N/A	Yes	No	No	Yes
216	Shaw	110	No	No	N/A	No	No	No	Yes
216	Shaw	308	No	No	N/A	Yes	No	No	Yes
216	Shawnee	322	No	No	N/A	No	No	No	Yes
216	Shelby Revised	974	No	No	N/A	Yes	Yes	No	Yes
216	Shepherd	63	No	No	N/A	No	No	No	Yes
216	Sherman Field	109	No	No	N/A	No	No	No	Yes
216	Shipley	1433	No	No	N/A	Yes	No	No	Yes
216	Shock	966	No	No	N/A	No	No	No	Yes
216	Sicily	1200	No	No	N/A	Yes	Yes	No	Yes
216	Sicily	1456	Yes	Yes	Unpaved	No	No	No	Yes
216	Sidewinder	90	No	No	N/A	Yes	No	No	Yes
216	Six Pack II	572	No	No	N/A	Yes	Yes	No	Yes
216	Skillet	32	No	No	N/A	No	No	No	Yes
216	Skull Saddle PJ	142	No	No	N/A	No	No	No	Yes
216	Sky Meadows	382	No	No	N/A	No	No	No	Yes

216	Slagle 06	512	No	No	N/A	Yes	No	No	Yes
216	Slagle 18	505	No	No	N/A	Yes	No	No	Yes
216	Slagle 2	511	No	No	N/A	No	No	No	Yes
216	Slagle Circular	1391	No	No	N/A	Yes	No	No	Yes
216	Slagle Tree	477	No	No	N/A	Yes	Yes	No	Yes
216	Sling Shot	92	No	No	N/A	Yes	Yes	No	Yes
216	Slugger Field Dem	173	No	No	N/A	No	No	No	Yes
216	Smokey Hill	111	No	No	N/A	No	No	No	Yes
216	Snafu	1455	No	No	N/A	No	No	No	Yes
216	Snow Ridge	381	No	No	N/A	Yes	No	No	Yes
216	Sontay	211	No	No	N/A	No	No	No	Yes
216	Sontay	219	No	No	N/A	Yes	No	No	Yes
216	Sooner Circular	1374	No	No	N/A	Yes	No	No	Yes
216	Sooner North	452	No	No	N/A	Yes	Yes	No	Yes
216	Sooner South	1375	No	No	N/A	Yes	Yes	No	Yes
216	Southermost	415	No	No	N/A	Yes	No	No	Yes
216	Southern Comfort	126	No	No	N/A	No	No	No	Yes
216	Spence Field	66	No	No	N/A	No	No	No	Yes
216	Spence Field	85	No	No	N/A	No	No	No	Yes
216	Spider	310	No	No	N/A	Yes	Yes	No	Yes
216	Spirit of St Louis A	174	No	No	N/A	No	No	No	Yes
216	St Mere Eglise	309	No	No	N/A	Yes	Yes	No	Yes
216	Stallion	96	No	No	N/A	No	No	No	Yes
216	Starvaggi	406	No	No	N/A	Yes	No	No	Yes
216	Steel East	1402	No	No	N/A	Yes	No	No	Yes
216	Steel West	433	No	No	N/A	Yes	No	No	Yes
216	Steinhawk	135	No	No	N/A	No	No	No	Yes
216	Stennis	175	No	No	N/A	No	No	No	Yes
216	Stewart	54	No	No	N/A	Yes	Yes	No	Yes
216	Stinson	3044	No	No	N/A	No	No	No	Yes
216	Strastburg	176	No	No	N/A	Yes	No	No	Yes
216	Suckchon	1302	No	No	N/A	Yes	Yes	No	Yes
216	Suckchon North	1300	No	No	N/A	Yes	Yes	No	Yes
216	Sullivan Field	369	No	No	N/A	Yes	No	No	Yes
216	Survival	354	No	No	N/A	Yes	No	No	Yes
216	Sutter Field	177	No	No	N/A	No	No	No	Yes
216	Sweetwater	144	No	No	N/A	Yes	No	No	Yes
216	Swift	671	No	No	N/A	No	No	No	Yes
216	Tang	674	No	No	N/A	Yes	No	No	Yes
216	Tang	675	No	No	N/A	Yes	No	No	Yes
216	Taro	285	No	No	N/A	No	No	No	Yes
216	Tatum	952	No	No	N/A	No	No	No	Yes
216	Taylors Creek	290	No	No	N/A	Yes	Yes	No	Yes
216	Tennyson	74	No	No	N/A	Yes	Yes	No	Yes

216	Tension 2003	2098	No	No	N/A	Yes	No	No	Yes
216	Texas	226	No	No	N/A	No	No	No	Yes
216	Tiger North	1297	No	No	N/A	Yes	No	No	Yes
216	Tiger Shark	3008	No	No	N/A	No	No	No	Yes
216	Tiger South	1298	No	No	N/A	Yes	No	No	Yes
216	Timber Creek	112	No	No	N/A	No	No	No	Yes
216	Todd	185	No	No	N/A	No	No	No	Yes
216	Toggles	178	No	No	N/A	No	No	No	Yes
216	Tomah	246	No	No	N/A	Yes	Yes	No	Yes
216	Tomah	247	No	No	N/A	Yes	Yes	No	Yes
216	Tombstone	1415	No	No	N/A	Yes	Yes	No	Yes
216	Tombstone Circ	1416	No	No	N/A	Yes	No	No	Yes
216	Trident	127	No	No	N/A	Yes	No	No	Yes
216	Trojan	33	No	No	N/A	No	No	No	Yes
216	Tularosa Valley	69	No	No	N/A	Yes	No	No	Yes
216	Turner SKE	526	No	No	N/A	Yes	Yes	Yes	Yes
216	Umatila North	1362	No	No	N/A	No	No	No	Yes
216	Valley Point	1364	No	No	N/A	No	No	No	Yes
216	Veghel	320	No	No	N/A	Yes	No	No	Yes
216	Victoria Anne	179	No	No	N/A	No	No	No	Yes
216	Victory	286	No	No	N/A	Yes	Yes	No	Yes
216	Vinyl	278	No	No	N/A	No	No	No	Yes
216	Voight	1325	No	No	N/A	No	No	No	Yes
216	Volturno	84	No	No	N/A	Yes	Yes	No	Yes
216	Wadsworth	39	No	No	N/A	No	No	No	Yes
216	Wagner Eglin Aux	1468	Yes	Yes	Paved	No	No	No	Yes
216	Waimea	3116	No	No	N/A	Yes	No	No	Yes
216	Walker	442	No	No	N/A	Yes	Yes	No	Yes
216	Walker North	445	No	No	N/A	Yes	Yes	No	Yes
216	Wallops HALO	180	No	No	N/A	No	No	No	Yes
216	Walnut	298	No	No	N/A	Yes	No	No	Yes
216	Warrens	249	No	No	N/A	Yes	No	No	Yes
216	Weinberg	86	No	No	N/A	Yes	Yes	No	Yes
216	Wessly Well	209	No	No	N/A	No	No	No	Yes
216	Whirlpool	305	No	No	N/A	No	No	No	Yes
216	White	3035	No	No	N/A	No	No	No	Yes
216	White Hills	968	No	No	N/A	Yes	Yes	No	Yes
216	Wilde Benton	60	Yes	Yes	Unpaved	No	No	No	Yes
216	Wilde Benton	61	No	No	N/A	Yes	Yes	No	Yes
216	Wilson	1432	No	No	N/A	Yes	No	No	Yes
216	Wing	438	No	No	N/A	Yes	No	No	Yes
216	Woodchuck	1116	No	No	N/A	Yes	No	No	Yes
216	Young	1426	Yes	No	Unpaved	No	No	No	Yes
216	Yuma	181	No	No	N/A	No	No	No	Yes

216	Zittoria	288	No	No	N/A	No	No	No	Yes
216	Zoomer	68	No	No	N/A	No	No	No	Yes
216	Zug	1367	No	No	N/A	No	No	No	Yes

Mission	Airlift
Criterion	Current / Future Mission
Attribute	Operating Environment
Formula #	1271
Label	Prevailing Installation Weather Conditions
Effective %	3.22
Question	Check the average number of days annually the prevailing weather is better than 3000'/3 Nautical Miles (NM). If installation has no runway or no active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. If the average number of days >= 300, get 100 points. Otherwise, if the average number of days <= 250, get 0 points. Otherwise, pro-rate the average number of days between 250 and 300 on a 0 to 100 scale. **Example:** The average number of days annually where the prevailing weather is better than 3000'/3 NM is 275. 275 is halfway between 250 and 300, for a score of 50.
Source	AFCCC Climatological tables

266
DAYS with
GT 3NM VISABILITY

300 = 100
275 = 50
250 = 0

266 = 32 points

Section 39 Airfield Management, Question 1271 Air Operations - Prevailing Weather

Org	1 Installation Name (Text)	2 ICAO Identifier (Text)	3 Weather > 3000'/3NM (Days/yr)	
85	Gen Mitchell IAP ARS	KMKE	271	Gen Mitchell IAP ARS
88	Minn/St Paul IAP ARS	KMSP	290	Minn/St Paul IAP ARS
89	Niagara Falls IAP ARS	KIAG	258	Niagara Falls IAP ARS
90	Pittsburgh IAP ARS	KPIT	261	Pittsburgh IAP ARS
92	Willow Grove ARS,NAS Willow Grove Joint Reserve	KNXX	275	Willow Grove ARS, NAS Willow Grove Joint Reserve
93	Youngstown-Warren Regional APT ARS	KYNG	238	Youngstown-Warren Regional APT ARS

----------INTERNATIONAL STATION METEOROLOGICAL CLIMATE SUMMARY----------

:STA 725200 | KPIT | PITTSBURGH WSCMO ,PA,US
:LAT 40 30N :LONG 080 13W :ELEV 1150(ft) 351(m) :TYPE NOAA SMOS V3 28061996
20 - Percent Hours with FLYING WEATHER

CEILING LESS THAN 3000 FEET &/OR VISIBILITY LESS THAN 3.00 MILES

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	#YRS
01	43	38	28	19	15	12	12	12	13	16	29	41	23	44
04	46	39	32	22	19	21	19	22	23	22	30	44	28	44
07	49	45	39	28	28	35	38	46	39	32	38	46	39	44
10	53	47	41	29	27	24	28	31	27	31	40	51	36	44
13	53	45	36	25	21	16	18	19	19	22	34	49	30	44
16	46	38	31	20	15	11	10	10	11	17	29	42	23	44
19	40	34	26	17	13	10	8	7	9	14	26	38	20	44
22	38	33	25	15	11	9	8	7	10	15	26	42	20	44
ALL	46	40	33	22	19	17	18	19	19	21	32	44	27	44

* = VALUE > 0 AND < 0.5 PERCENT
\# = EXCESSIVE MISSING DATA - VALUE NOT COMPUTED
\- = MISSING DATA

----------FEDERAL CLIMATE COMPLEX ASHEVILLE----------

365 days / year

27% less than 3 NM visability

365
× 73%
266.45

SAY 266 DAYS VISABLITY GREATER THAN 3 NM

Hello all:

The data is complete and was sent to XOO-W, SAF/IEBB, and your MAJCOM. Once again, they should be sending you the data. Please check with them.

Take care

Hugh

-----Original Message-----
From: Freestrom, Hugh Capt AFCCC/DOPT
Sent: Friday, July 09, 2004 4:02 PM
To: 'christopher.stock@seymourjohnson.af.mil'; 'yates@eglin.af.mil'; 'john.ridley@dobbins.af.mil'; 'steven.whitehead@mcguire.af.mil'; 'jennifer.chance@mcconnell.af.mil'; 'kimberly.matwick@sheppard.af.mil'; 'christopher.peterson@altus.af.mil'; 'scott.smith@mountainhome.af.mil'; 'michael.lewis@robins.af.mil'; 'michael.bielas@columbus.af.mil'; 'william.roeder@patrick.af.mil'; 'barbara.costa@laughlin.af.mil'; 'keith.johnson@keelser.af.mil'; 'bryan.garton@kirtland.af.mil'
Subject: EFI Support

Hello all:

AFCCC is starting to run <1500/3 stats for FY02, FY03, FY02&FY03 combined, and a 30 year POR (period of record) for your sites using official sunrise/sunset as the day/night delineator. We should be able to complete this by COB 15 July 04. The results will be shipped directly to the EFI office (w/ cc to MAJCOM reps). Since we have approval from the EFI office and the MAJCOMs have been informed of the consolidation effort, the MAJCOMs will be sending you the results. I understand that you might be feeling pressure from your respective base (AFMs), but please keep in mind that (a.) making climatological decisions off a 2-year POR is very dangerous (b.) AFCCC has around 140 stations to process (c.) the MAJCOM level is aware of the current situation. Once again, they should be contacting you soon with further information.

Please contact me (DSN 673-9016, COMM 828-271-4323) if you have any further concerns or questions.

Take care

Capt Hugh Freestrom

Air Force Combat Climatology Center,
Tailored Climatology Products Team
AFCCC/DOPT

Year	VFR Days	Total Days
1973	222	364
1974	216	365
1975	207	364
1976	228	366
1977	224	365
1978	211	365
1979	215	365
1980	216	366
1981	208	365
1982	210	365
1983	201	365
1984	218	366
1985	212	365
1986	187	365
1987	197	365
1988	214	366
1989	187	365
1990	214	365
1991	248	365
1992	221	366
1993	216	365
1994	247	365
1995	239	365
1996	210	366
1997	225	365
1998	252	365
1999	256	364
2000	235	366
2001	234	365
2002	252	365
2003	238	365
2004	247	366

Average
222.0585508

1500/3

Year	VFR Days	Total Days
1973	196	364
1974	189	365
1975	184	364
1976	200	366
1977	188	365
1978	187	365
1979	187	365
1980	186	366
1981	181	365
1982	189	365
1983	187	365
1984	200	366
1985	194	365
1986	171	365
1987	192	365
1988	196	366
1989	172	365
1990	188	365
1991	220	365
1992	193	366
1993	201	365
1994	214	365
1995	207	365
1996	188	366
1997	202	365
1998	231	365
1999	231	364
2000	215	366
2001	218	365
2002	230	365
2003	208	365
2004	229	366

Average
199.1459478

2003

Year	VFR Days	Total Days
1973	179	364
1974	164	365
1975	166	364
1976	184	366
1977	167	365
1978	174	365
1979	168	365
1980	164	366
1981	166	365
1982	166	365
1983	173	365
1984	181	366
1985	180	365
1986	157	365
1987	180	365
1988	178	366
1989	158	365
1990	172	365
1991	199	365
1992	168	366
1993	176	365
1994	196	365
1995	181	365
1996	166	366
1997	173	365
1998	207	365
1999	212	364
2000	192	366
2001	194	365
2002	211	365
2003	175	365
2004	200	366

Average
178.9852335

3000 / 3

The AF assigned Pittsburgh a value of 261 days of flying weather with higher than 3000 feet ceiling and/or 3 miles visibility. This calculates to a score of 22 points.

Using the weather data from the AFCCC site for Pittsburgh, the annual average percentage of flying hours with a ceiling less than 3000 feet and/or visibility less than 3 miles is 27%, therefore the percentage of flying days with higher than 3000 feet ceiling and/or 3 miles visibility is 73%.

365 days/year x 0.73 = 266 days/year

Based on the formula # 1271 the base is to pro rate the average number of days between 250 and 300 on a 0 to 100 point scale.

266 is 32% of the way between 250 and 300 for a score of **32 points**.

This calculation would raise the score received for question #1271 from 0.71 to 1.03.

Worldwide Surface Climate Summaries

Select a Table

for US/PA/KPIT

Fleet Numerical METOC Detachment	Air Force Combat Climatology Center
• Station Climatic Summary • Cig < 5000' and/or Vsby < 5 miles • Cig < 3000' and/or Vsby < 3 miles • Cig < 1000' and/or Vsby < 3 miles • Cig < 500' and/or Vsby < 1 mile • Cig < 200' and/or Vsby < 3/4 mile • Cig >= 1000' and Vsby >= 2-1/2 miles and Wind Speed <= 10 knots • Cig >= 2500' and Vsby >= 5 miles and Wind Speed <= 13 knots • Cig >= 1500' and Vsby >= 3 miles and Wind Speed <= 13 knots • Cig >= 1500' and Vsby >= 3 miles and Wind Speed <= 17 knots • Cig >= 1500' and Vsby >= 3 miles and Wind Speed <= 20 knots • Wind Speeds >= 17 knots and No Precipitation • Wind Speeds 4-10 knots, Temperatures 33-89 fahrenheit and No Precipitation • Total Sky Cover <= 3/10 and Vsby >= 2-1/2	• Air Force Operational Climatic Data Summary

Please refer to the Contacts Page for questions, comments or suggestions.

----------INTERNATIONAL STATION METEOROLOGICAL CLIMATE SUMMARY----------

:STA 725200 | KPIT | PITTSBURGH WSCMO ,PA,US
:LAT 40 30N :LONG 080 13W :ELEV 1150(ft) 351(m) :TYPE NOAA SMOS V3 28061996
20 - Percent Hours with FLYING WEATHER

CEILING LESS THAN 3000 FEET &/OR VISIBILITY LESS THAN 3.00 MILES

HOUR (LST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	#YRS
01	43	38	28	19	15	12	12	12	13	16	29	41	23	44
04	46	39	32	22	19	21	19	22	23	22	30	44	28	44
07	49	45	39	28	28	35	38	46	39	32	38	46	39	44
10	53	47	41	29	27	24	28	31	27	31	40	51	36	44
13	53	45	36	25	21	16	18	19	19	22	34	49	30	44
16	46	38	31	20	15	11	10	10	11	17	29	42	23	44
19	40	34	26	17	13	10	8	7	9	14	26	38	20	44
22	38	33	25	15	11	9	8	7	10	15	26	42	20	44
ALL	46	40	33	22	19	17	18	19	19	21	32	44	27	44

* = VALUE > 0 AND < 0.5 PERCENT
# = EXCESSIVE MISSING DATA - VALUE NOT COMPUTED
- = MISSING DATA

----------FEDERAL CLIMATE COMPLEX ASHEVILLE----------

Mission	Airlift
Criterion	Current / Future Mission
Attribute	Geo-locational Factors
Formula #	1273
Label	Aerial Port Proximity
Effective %	8.10
Question	For installations with active runways, identify distance in NM to RAF Mildenhall, Rota Naval Station, Lajes Field, Hickam AFB and Elmendorf AFB. If installation has no runway or no active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. 50% of the score is based upon proximity to the East coast locations of Mildenhall, Rota or Lajes. The other 50% of the score is based upon proximity to the West coast locations of Elmendorf and Hickam. See OSD Question 1273, columns 1,2,3,4 and 5 respectively, for the distance to these locations. **East Coast Locations:** If both Mildenhall and Rota are within 3200 NM, get 100 points. Otherwise, if either Mildenhall or Rota are within 3200 NM, get 75 points. Otherwise, if only Lajes is within 3200 NM, get 25 points. Otherwise, get 0 points. **West Coast Locations:** If both Elmendorf and Hickam are within 3200 NM, get 100 points. Otherwise, if only Elmendorf is within 3200 NM, get 75 points. Otherwise, get 0 points. **Example:** The base is 4525 NM from Mildenhall, 4913 NM from Rota, 4022 NM from Lajes, 1995 NM from Elmendorf and 2409 NM from Hickam. All three East coast locations are more than 3200 NM away, so 0 points for the East coast aerial port proximity. Elmendorf and Hickam are within 3200 NM, so 100 points for West coast aerial port proximity. (50% * 0) + (50% * 100) equals a score of 50.
Source	Distances between all BRAC bases with runways taken from IVT; Guard, AFRC and specific overseas locations derived from DAFIF and measured using IVT. Aerial Ports identified in Defense Travel Regulation (DTR), DoD Regulation 4500.9-R-Part II (Mobility), Appendix M. The measurements are taken from the center of mass of the runway complex for the bases and the center of mass of the IVT polygon for the ranges. The distances are the great circle arcs over the surface of the Earth at sea level elevation.

12.5
+
37.5
50 pts

verified 6/13/05 (w/ PTPS)

Section 1 Air/Space Operations, Question 1273 Aerial Port Proximity						
Org	1 RAF Mildenhall, UK (NM)	2 Naval Station Rota, Spain (NM)	3 Lajes Field, The Azores (NM)	4 Elmendorf AFB, AK (NM)	5 Hickam AFB, HI (NM)	
85	3402	3640	2716	2424	3685	Gen Mitchell IAP ARS
88	3488	3798	2902	2183	3453	Minn/St Paul IAP ARS
89	3099	3270	2331	2674	4076	Niagara Falls IAP ARS
90	3245	3379	2423	2759	4045	Pittsburgh IAP ARS
92	3081	3168	2202	2917	4276	Willow Grove ARS, NAS Willow Grove Joint Reserve
93	3230	3381	2431	2709	4016	Youngstown-Warren Regional APT ARS

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: Airlift

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.
Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.
Lost Points
The difference between Max Points and Earned Points.
Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	5.98	5.98	0.00	100.00
1271.00	Prevailing Installation Weather Conditions	3.22	0.71	2.51	97.49
1246.00	Proximity to Low Level Routes Supporting Mission	13.98	2.27	11.71	85.78
1248.00	Proximity to DZ/LZ	14.72	3.68	11.04	74.74
1273.00	Aerial Port Proximity	8.10	4.05	4.05	70.69
1.00	Fuel Hydrant Systems Support Mission Growth	4.32	0.00	4.32	66.37
8.00	Ramp Area and Serviceability	5.98	1.49	4.48	61.89
9.00	Runway Dimension and Serviceability	5.98	5.98	0.00	61.89
19.00	Hangar Capability - Large Aircraft	3.32	0.89	2.43	59.46
1207.00	Level of Mission Encroachment	1.66	1.66	0.00	59.46
1235.00	Installation Pavements Quality	11.95	5.98	5.98	53.48
1249.00	Airspace Attributes of DZ/LZ	8.30	1.62	6.68	46.80
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	2.20	0.37	1.83	44.97
1241.00	Ability to Support Large-Scale Mobility Deployment	2.20	2.20	0.00	44.97
213.00	Attainment / Emission Budget Growth Allowance	1.68	1.01	0.67	44.30
1205.10	Buildable Acres for Industrial Operations Growth	1.96	0.02	1.94	42.36
1205.20	Buildable Acres for Air Operations Growth	1.96	0.00	1.96	40.40
1250.00	Area Cost Factor	1.25	0.84	0.41	39.99
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	39.93
1402.00	BAH Rate	0.88	0.61	0.27	39.66
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	39.63

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: Bomber

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	5.52	5.52	0.00	100.00
1271.00	Prevailing Installation Weather Conditions	3.68	0.81	2.87	97.13
1245.00	Proximity to Airspace Supporting Mission (ASM)	20.24	5.22	15.02	82.11
1246.00	Proximity to Low Level Routes Supporting Mission	16.56	2.97	13.59	68.52
1.00	Fuel Hydrant Systems Support Mission Growth	2.03	0.00	2.03	66.49
8.00	Ramp Area and Serviceability	3.49	0.87	2.61	63.88
9.00	Runway Dimension and Serviceability	5.52	4.83	0.69	63.19
19.00	Hangar Capability - Large Aircraft	2.91	0.78	2.12	61.07
1207.00	Level of Mission Encroachment	2.03	2.03	0.00	61.07
1231.00	Certified Weapons Storage Area	2.03	0.00	2.03	59.04
1232.00	Sufficient Explosives-sited Parking	3.20	0.00	3.20	55.84
1233.00	Sufficient Munitions Storage	2.91	0.00	2.91	52.93
1235.00	Installation Pavements Quality	4.94	0.00	4.94	47.99
1266.00	Range Complex (RC) Supports Mission	12.45	4.59	7.86	40.13
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	2.64	0.45	2.19	37.94
1241.00	Ability to Support Large-Scale Mobility Deployment	1.76	1.76	0.00	37.94
213.00	Attainment / Emission Budget Growth Allowance	1.68	1.01	0.67	37.27
1205.10	Buildable Acres for Industrial Operations Growth	1.96	0.02	1.94	35.33
1205.20	Buildable Acres for Air Operations Growth	1.96	0.00	1.96	33.37
1250.00	Area Cost Factor	1.25	0.84	0.41	32.96
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	32.90
1402.00	BAH Rate	0.88	0.61	0.27	32.63
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	32.60

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: C2ISR

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	8.05	8.05	0.00	100.00
1251.00	Frequency Spectrum Limitations (FSL)	8.05	8.05	0.00	100.00
1245.00	Proximity to Airspace Supporting Mission (ASM)	29.90	16.26	13.64	86.36
1.00	Fuel Hydrant Systems Support Mission Growth	2.08	0.00	2.08	84.28
8.00	Ramp Area and Serviceability	9.13	2.28	6.85	77.43
9.00	Runway Dimension and Serviceability	9.13	9.13	0.00	77.43
19.00	Hangar Capability - Large Aircraft	2.91	0.78	2.12	75.31
1207.00	Level of Mission Encroachment	2.08	2.08	0.00	75.31
1235.00	Installation Pavements Quality	16.19	8.09	8.09	67.22
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	2.80	0.47	2.33	64.89
1241.00	Ability to Support Large-Scale Mobility Deployment	1.20	1.20	0.00	64.89
213.00	Attainment / Emission Budget Growth Allowance	2.40	1.44	0.96	63.93
1205.10	Buildable Acres for Industrial Operations Growth	1.80	0.02	1.78	62.15
1205.20	Buildable Acres for Air Operations Growth	1.80	0.00	1.80	60.35
1250.00	Area Cost Factor	1.25	0.84	0.41	59.94
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	59.88
1402.00	BAH Rate	0.88	0.61	0.27	59.61
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	59.58

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: Fighter

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	5.98	5.98	0.00	100.00
1271.00	Prevailing Installation Weather Conditions	5.52	1.21	4.31	95.69
1245.00	Proximity to Airspace Supporting Mission (ASM)	22.08	2.38	19.70	75.99
1246.00	Proximity to Low Level Routes Supporting Mission	7.25	0.82	6.42	69.57
1270.00	Suitable Auxiliary Airfields Within 50NM	5.18	0.00	5.18	64.39
8.00	Ramp Area and Serviceability	2.97	0.74	2.23	62.16
9.00	Runway Dimension and Serviceability	2.28	2.28	0.00	62.16
1207.00	Level of Mission Encroachment	2.28	2.28	0.00	62.16
1221.00	Hangar Capability - Small Aircraft	3.88	1.78	2.10	60.06
1232.00	Sufficient Explosives-sited Parking	3.65	0.00	3.65	56.41
1233.00	Sufficient Munitions Storage	4.79	0.00	4.79	51.62
1235.00	Installation Pavements Quality	2.97	2.23	0.74	50.88
1203.00	Access to Adequate Supersonic Airspace	6.72	0.00	6.72	44.16
1266.00	Range Complex (RC) Supports Mission	11.95	6.17	5.78	38.38
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	2.64	0.45	2.19	36.19
1241.00	Ability to Support Large-Scale Mobility Deployment	1.76	1.76	0.00	36.19
213.00	Attainment / Emission Budget Growth Allowance	1.68	1.01	0.67	35.52
1205.10	Buildable Acres for Industrial Operations Growth	1.96	0.02	1.94	33.58
1205.20	Buildable Acres for Air Operations Growth	1.96	0.00	1.96	31.62
1250.00	Area Cost Factor	1.25	0.84	0.41	31.21
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	31.15
1402.00	BAH Rate	0.88	0.61	0.27	30.88
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	30.85

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: SOF / CSAR

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	4.14	4.14	0.00	100.00
1271.00	Prevailing Installation Weather Conditions	5.06	1.11	3.95	96.05
1243.00	Airfield Elevation	3.68	2.10	1.58	94.47
1245.00	Proximity to Airspace Supporting Mission (ASM)	14.72	2.32	12.40	82.07
1246.00	Proximity to Low Level Routes Supporting Mission	3.68	0.28	3.40	78.67
1248.00	Proximity to DZ/LZ	14.72	2.64	12.08	66.59
8.00	Ramp Area and Serviceability	4.67	3.50	1.17	65.42
9.00	Runway Dimension and Serviceability	2.80	2.80	0.00	65.42
1207.00	Level of Mission Encroachment	1.49	1.49	0.00	65.42
1232.00	Sufficient Explosives-sited Parking	2.24	0.00	2.24	63.18
1233.00	Sufficient Munitions Storage	2.80	0.00	2.80	60.38
1235.00	Installation Pavements Quality	4.67	3.50	1.17	59.21
1249.00	Airspace Attributes of DZ/LZ	7.99	1.15	6.84	52.37
1266.00	Range Complex (RC) Supports Mission	14.84	3.27	11.57	40.80
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	1.76	0.30	1.46	39.34
1241.00	Ability to Support Large-Scale Mobility Deployment	2.64	0.00	2.64	36.70
213.00	Attainment / Emission Budget Growth Allowance	1.68	1.01	0.67	36.03
1205.10	Buildable Acres for Industrial Operations Growth	1.96	0.02	1.94	34.09
1205.20	Buildable Acres for Air Operations Growth	1.96	0.00	1.96	32.13
1250.00	Area Cost Factor	1.25	0.84	0.41	31.72
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	31.66
1402.00	BAH Rate	0.88	0.61	0.27	31.39
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	31.36

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: Space Ops

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1210.00	Line-of-Sight Encroachment	23.00	7.59	15.41	84.59
1226.00	Population Density Impact on USAF Mission	23.00	0.00	23.00	61.59
30.00	Buildable Acres (Space Mission Bed Down Area)	41.50	3.81	37.69	23.90
213.00	Attainment / Emission Budget Growth Allowance	3.00	1.80	1.20	22.70
1205.10	Buildable Acres for Industrial Operations Growth	7.00	0.07	6.93	15.77
1250.00	Area Cost Factor	1.25	0.84	0.41	15.36
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	15.30
1402.00	BAH Rate	0.88	0.61	0.27	15.03
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	15.00

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: Tanker

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	6.90	6.90	0.00	100.00
1245.00	Proximity to Airspace Supporting Mission (ASM)	39.10	21.27	17.83	82.17
1.00	Fuel Hydrant Systems Support Mission Growth	4.15	0.00	4.15	78.02
8.00	Ramp Area and Serviceability	7.89	1.97	5.91	72.11
9.00	Runway Dimension and Serviceability	9.55	9.07	0.48	71.63
19.00	Hangar Capability - Large Aircraft	3.32	0.89	2.43	69.20
1207.00	Level of Mission Encroachment	2.08	2.08	0.00	69.20
1235.00	Installation Pavements Quality	14.53	7.26	7.26	61.94
1214.00	Fuel Dispensing Rate to Support Mobility and Surge	3.85	0.65	3.20	58.74
1241.00	Ability to Support Large-Scale Mobility Deployment	1.65	1.65	0.00	58.74
213.00	Attainment / Emission Budget Growth Allowance	1.35	0.81	0.54	58.20
1205.10	Buildable Acres for Industrial Operations Growth	1.58	0.02	1.56	56.64
1205.20	Buildable Acres for Air Operations Growth	1.58	0.00	1.58	55.06
1250.00	Area Cost Factor	1.25	0.84	0.41	54.65
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	54.59
1402.00	BAH Rate	0.88	0.61	0.27	54.32
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	54.29

USAF BRAC 2005 Base MCI Score Sheets

Base Score Sheet for Pittsburgh IAP ARS
MCI: UAV / UCAS

Max Points
This is the maximum number of points this formula can contribute to the overall MCI score.

Earned Points
This is the number of points this formula did contribute to the overall MCI score for this base.

Lost Points
The difference between Max Points and Earned Points.

Running Score from 100
The maximum MCI score is 100 and the minimum is 0. This is a running balance that shows the impact of the lost points from the formula evaluation on the overall MCI score for the base.

Formula		Max Points	Earned Points	Lost Points	Running Score from 100
1242.00	ATC Restrictions to Operations	6.33	6.33	0.00	100.00
1251.00	Frequency Spectrum Limitations (FSL)	6.58	6.58	0.00	100.00
1271.00	Prevailing Installation Weather Conditions	3.29	0.72	2.57	97.43
1272.00	Installation Crosswind Conditions	9.11	9.11	0.00	97.43
1245.00	Proximity to Airspace Supporting Mission (ASM)	20.70	4.01	16.69	80.74
8.00	Ramp Area and Serviceability	5.23	3.92	1.31	79.43
9.00	Runway Dimension and Serviceability	5.23	5.23	0.00	79.43
1207.00	Level of Mission Encroachment	1.45	1.45	0.00	79.43
1232.00	Sufficient Explosives-sited Parking	5.81	0.00	5.81	73.62
1233.00	Sufficient Munitions Storage	5.81	0.00	5.81	67.81
1235.00	Installation Pavements Quality	5.52	4.14	1.38	66.43
1266.00	Range Complex (RC) Supports Mission	12.45	7.35	5.10	61.33
1241.00	Ability to Support Large-Scale Mobility Deployment	3.00	3.00	0.00	61.33
213.00	Attainment / Emission Budget Growth Allowance	0.70	0.42	0.28	61.05
1205.10	Buildable Acres for Industrial Operations Growth	3.50	0.04	3.46	57.59
1205.20	Buildable Acres for Air Operations Growth	2.80	0.00	2.80	54.79
1250.00	Area Cost Factor	1.25	0.84	0.41	54.38
1269.00	Utilities cost rating (U3C)	0.13	0.07	0.06	54.32
1402.00	BAH Rate	0.88	0.61	0.27	54.05
1403.00	GS Locality Pay Rate	0.25	0.22	0.03	54.02

U.S. AIR FORCE

Airlift MCI

Exclusion

1235. Pavements Quality – Excluded Because PCN is "N/A"

2.98 Points Lost

Integrity - Service - Excellence

I am now going to talk about the MOA ramp again. I mentioned before that the MCI process allowed for inclusion of such property, even though the capacity brief did not. The issue with question 1235 is not accepting the use of the ramp, but the weight bearing capacity of its pavement.

The ramp does not have a "published" Pavement Condition Number (PCN). This is an index representing the weight bearing capacity of the surface. The question was designed such that no PCN available equated to a score of zero for that ramp. All concrete or asphalt has a PCN. Sir, even my driveway at home has a PCN value.

The strength of the apron pavement is not in doubt. This thick pavement was used as a taxiway for heavy aircraft, including 747s, to the old Pittsburgh International Airport terminal. Parts of the ramp are on an old runway. The area is used all the time by our C-130 aircraft. As recently as two weeks ago a C-5 taxied and parked on this pavement while loading military equipment.

This picture shows a C-5 and a B-52 parked in the area during one of our airshows.

The question did not allow us to capture any value for a fully functional ramp.

Exclusion of the 90,000 sq. yds of MOA Ramp cost us 2.98 points towards our overall score.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Airlift MCI

BRIEFING BULLET:

- Exclusion
  - 1235. Pavements Quality
- 2.98 Points Lost

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi, Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 1235. Installation Pavements Quality

- Quantitative Component in Military Value Analysis Overlooked Pavement Conditions at Pittsburgh ARS

SUPPORTING DOCUMENTATION: 14 Pages

Mission	Airlift
Criterion	Condition of Infrastructure
Attribute	Key Mission Infrastructure
Formula #	1235
Label	Installation Pavements Quality
Effective %	11.95
Question	Identify if the installation pavement for the primary runway can support Airlift aircraft operations. If installation has no runway or no active runway, or no serviceable, suitable runway then score 0 pts. See section 1.9 "Shared" for details. Compute the runway pavement suitability score and the apron pavement suitability score. Each of these is worth 50% of the overall score. **Runway Pavement Suitability:** Find the highest PCN among all the runways. See OSD Question 1235, column 3 for this data. (N/A means 0.) Compute a score for every runway with that PCN and use the highest scoring runway. Score the runway for runway pavement suitability as follows: Get the C-17 ACN. See OSD Question 1236, column 4 for the C-17 ACN. (N/A means 0.) Get the C-5B ACN. See OSD Question 1236, column 6 for the C-5B ACN. (N/A means 0.) If the PCN is N/A or 0, get 0 points. Otherwise, if the C-17 ACN divided by the PCN > 0 and <= 1.0, then get 100 points. Otherwise, if the C-5B ACN divided by the PCN > 0 and <= 1.0, then get 75 points. Otherwise, if the C-5B ACN divided by the PCN > 0 and <= 1.1, then get 50 points. Otherwise, get 0 points. **Apron pavement suitability:** Score each apron for pavement quality and choose the highest scoring apron. Get the C-17 ACN. See OSD Question 1240, column 6 for this data. (N/A means 0.) Get the C-5B ACN. See OSD Question 1240, column 8 for this data.

	(N/A means 0.) If the PCN is 0 or N/A, get 0 points. See OSD Question 1239, column 4 for this data. Sum the apron pavement square yardage (see OSD Question 1239, column 2, N/A means 0) where the C-17 ACN divided by the PCN > 0 and <= 1.0. Sum the apron pavement square yardage (see OSD Question 1239, column 2, N/A means 0) where the C-5B ACN divided by the PCN > 0 and <= 1.0. If the C-17 square yardage >= 1,040,000, get 100 points. Otherwise, if the C-5B square yardage >= 416,000, get 75 points. Otherwise, if the C-5B square yardage >= 137,000, get 50 points. Otherwise, get 0 points. **Example:** There are 2 runways on the base, but one has the highest runway pavement PCN value, which is 60. The ACN for an C-17 on that runway is 40, 40 divided by 60 is <= 1.0, so the base gets 100 pts for runway pavement suitability. In this case, the C-5B ACN/PCN ratio was a moot point. There are 2 apron pavements on the base. Apron Alpha has a PCN of 50 and 100,000 square yards of surface. Apron Bravo has a PCN of 30 and 150,000 square yards. The ACN for C-17s on both aprons is 43, and for C-5Bs it is 45. Apron Alpha's ACN/PCN ratio for C-17s is 43/50, which is less that 1.0. This counts as 100,000 square yards for the C-17. Apron Bravo's ACN/PCN ratio for C-17s is 43/30, which is more than 1.0, so it's square yards aren't counted towards C-17 square yardage. This gives us a total of 100,000 C-17 square yards, which is not greater than 1,040,000 square yards. Apron Alpha's ACN/PCN ratio for C-5Bs is 45/50, which is less that 1.0. This counts as 100,000 square yards for the C-5B. Apron Bravo's ACN/PCN ratio for C-5Bs is 45/30, which is more than 1.0, so it's square yards aren't counted towards C-5B square yardage. This gives us a total of 100,000 C-5B square yards, which is not greater than 137,000 square yards, which gives us a score of 25 points for apron pavement suitability. 50% of the Runway pavement suitability score of 100 equals 50. 50% of the apron pavement score of 0 equals 0. 50 plus 0 equals a score of 50.
Source	AFCESA Pavement Evaluation Report and Base General Plan; Existing Record Drawings or Physical Verification; Base Real Property Records; FLIP; ASSR

Section 37 Airfield Pavements, Question 1235 Airfield Pavements - Runway (1 of 2)

Org	1 Primary Facility Name as Indicated in Base General Plan (e.1) (Text)	2 Controlling Feature Identifier from AFCESA Pavements Report (e.2) (Text)	3 Controlling Feature PCN (#)	4 Date of AFCESA Report (e.3) (date)	5 Type Pavement (Rigid or Flexible) (e.4) (Text)	6 ACN for F-15E at 81 Kips (#)	7 ACN for KC-135R at 323 Kips (#)	8 ACN for B-1B at 477 Kips (#)	9 ACN for F-16C/D at 38 Kips (#)	
85	RUNWAY 13/31	N/A	32	N/A	Rigid	37	51	93	18	Gen Mitchell IAP ARS
85	RUNWAY 1L/19R	N/A	70	N/A	Rigid	37	51	93	18	
85	RUNWAY 1R/19L	N/A	34	N/A	Rigid	37	51	93	18	
85	RUNWAY 7L/25R	N/A	11	N/A	Flexible	33	54	98	16	
85	RUNWAY 7R/25L	N/A	70	N/A	Rigid	37	51	93	18	
88	RWY-04/RWY-22	N/A	60	N/A	Rigid	37	43	80	18	Minn/St Paul IAP ARS
88	RWY-12L/RWY-30R	N/A	51	N/A	Rigid	37	43	80	18	
88	RWY-12R/RWY-30L	N/A	61	N/A	Rigid	37	43	80	18	
89	10L-28R	R02A	43	1-Jul-97	Rigid	37	51	93	18	Niagara Falls IAP ARS
90	Runway 10/28L	N/A	77	N/A	Flexible	33	54	98	16	Pittsburgh IAP ARS
90	Runway 10/28R	N/A	76	N/A	Rigid	37	51	93	18	
90	Runway 14-32	N/A	76	N/A	Rigid	37	51	93	18	
90	Runway 28/10C	N/A	49	N/A	Flexible	33	54	98	16	
92	RW 15/33	N/A	50	N/A	Rigid	37	51	93	18	Willow Grove ARS, NAS Willow Grove Joint Reserve
93	14/32	N/A	71	N/A	Flexible	33	54	98	16	Youngstown-Warren Regional APT ARS
93	RWY 5/23	N/A	59	N/A	Flexible	33	54	98	16	
93	Assult Strip	N/A	40	N/A	Flexible	33	40	69	16	

- QUANTITATIVE COMPONENT IN MILITARY VALUE ANALYSIS OVERLOOKED PAVEMENT CONDITIONS AT PITTSBURGH ARS

QUANITATIVE ASSESSMENT ISSUE ON MILITARY VALUE ANALYSIS

- ISSUE - CONDITION OF INFRASTRUCTURE CRITERION DOES NOT CREDIT INSTALLATION PAVEMENT THAT DOES NOT HAVE A "PUBLISHED" PCN (PAVEMENT CONDITION NUMBER)
  - OVER 90,000 SQUARE YARDS OF PAVEMENT ON NORTH AIRCRAFT APRON PARKING RAMP
  - THIS PAVEMENT IS CONSTANTLY USED TO PARK C-130s, AS WELL AS HEAVIER AIRCRAFT
- PCN IS SCHEDULED TO BE OBTAINED IN FY06
- WE FOLLOWED BRAC INSTRUCTIONS TO ANSWER THE QUESTION
- HOWEVER, THIS APRON PAVEMENT IS CREDITED TOWARDS ANOTHER QUESTION (RAMP AREA AND SERVICEABILITY)

APRON AIRCRAFT AREA IN QUESTION

MAP OF APRON

QUANITATIVE ASSESSMENT ISSUE ON MILITARY VALUE ANALYSIS

- IMPACT ON MCI SCORE
  - INSTALLATION PAVEMENTS QUALITY WEIGHTED AT 29% OF CONDITION OF INFRASTRUCTURE ATTRIBUTE
    - HALF OF QUESTION SCORING BASED ON IF APRON PAVEMENT CAN SUPPORT A C-5B
    - INDIVIDUAL QUESTION SCORE INCREASES FROM 50 TO 75 POINTS
    - PITTSBURGH SCORE INCREASES FROM 42.44 TO 49.62
  - CONDITION OF INFRASTRUCTURE WEIGHTED AT 41.5% OF OVERALL MCI VALUE
    - PITTSBURGH SCORE CHANGES FROM 39.64 TO 42.62

AIRLIFT MISSION COMPATABILITY INDEX (MCI)
SCORE SUMMARY FOR PITTSBURGH ARS

Criterion	Name	Effective Weight	BRAC MCI	911th MCI
1	Current and Future Mission	46%	36.28	36.28
2	Condition of Infrastructure	41.50%	42.44	49.62
3	Contingency, Mobilization, Future Forces	10%	36.01	36.01
4	Cost of Ops/Manpower	2.50%	69.59	69.59
	TOTALS	100%	39.64	42.62

C-130 INSTALLATION AIRLIFT MCI SCORES

Base	Overall MCI Score	BRAC Recommendation*
Charlotte/Douglas AGS	56.27	O
Carswell ARS	50.57	O
Will Rogers World APT AGS	47.79	X
Boise Air Terminal AGS	47.32	X
Selfridge ANGB	47.27	X
Keesler AFB	46.80	O
Dobbins ARB	46.50	O
Savannah IAP AGS	45.10	O
Louisville IAP AGS	44.66	O
Harrisburg IAP AGS	42.89	O
Pittsburgh IAP ARS (911th Calculated)	42.62	?
Channel Islands AGS	41.92	O
Minn/St Paul IAP ARS	41.52	O
Reno-Tahoe IAP AGS	40.51	X
Youngstown-Warren Regional APT ARS	40.09	O
Niagara Falls IAP ARS	40.03	X
Nashville IAPAGS	39.77	X
[redacted]		
Kulis AGS	38.93	X
Rosecrans Memorial APT AGS	38.22	O
Schenectady County APT AGS	37.72	X
Cheyenne APT AGS	37.65	O
Mansfield Lahm MAP AGS	37.28	X
New Castle County Airport AGS	36.96	X
Willow Grove ARS	35.85	X
Quonset State APT AGS	35.29	X
Greater Peoria Reginal APT AGS	34.56	X
Arnold AFS	34.22	O
Gen Mitchell IAP ARS	33.77	X
Yeager APT AGS	31.90	X

* "O" MEANS NO CHANGE; "X" MEANS CLOSE OR REALIGN

AIRLIFT MISSION COMPATABILITY INDEX (MCI)
CONDITION OF INFRASTRUCTURE CRITERION

Col B	Col C	Col D	Col E (C x D / 100)	Col F	Col G (C x F / 100)
Attributes	**Effective Weights in MCI Score**	**BRAC Calculated Points**	**BRAC Calculated Effective Score***	**911th Calculated Points**	**911th Effective Score****
Fuel Hydrant Systems Support Mission Growth	4.32	0	0.00	0	0.00
Ramp Area and Serviceability	5.98	25	1.50	25	1.50
Runway Dimension and Serviceability	5.98	100	5.98	100	5.98
Hangar Capacity - Large Aircraft	3.32	26.92	0.89	26.92	0.89
Level of Mission Encroachment	1.66	100	1.66	100	1.66
Installation Pavements Quality	11.95	50	5.98	75	8.96
Airspace Attributes of Drop Zone/Landing Zone	8.30	12.62	1.05	12.62	1.05
TOTALS =	**41.50**		**17.05**		**20.04**
CRITERION SCORE = Column E or G /Column C (100)			**41.09**		**48.29**

INSTALLATION PAVEMENTS QUALITY SCORE
(SLIDE 1 OF 4)

BRAC QUESTIONS 1235, 1236, 1239 AND 1240
APRON PAVEMENT SUITABILITY

APRON NAME	SY	SUBGRADE STRENGTH CATEGORY*	PCN**	ACN***
MAIN APRON	67,875	A	114	29
NOSE DOCK HANGAR APRON	18,072	A	107	29
NORTH AIRCRAFT PARKING AREA	90,381	UNKNOWN	UNKNOWN	UNKNOWN

*VARIES FROM A TO D. DETERMINED BY AFCESA PAVEMENTS EVALUATION TEAM
**PAVEMENT CONDITION NUMBER. DETERMINED BY CORPS OF ENGINEERS COMPUTER PROGRAM
***READ FROM A CHART PROVIDED IN BRAC QUESTION, BASED ON SUBGRADE STRENGTH CLASS AND TYPE OF PLANE

INSTALLATION PAVEMENTS QUALITY SCORE
(SLIDE 2 OF 4)

POINTS ARE EARNED IF PAVEMENT IS SUITABLE FOR C-5B (i.e. IF ACN/PCN <1)

APRON NAME	SY	ACN/PCN	BRAC SY CREDIT	911th SY CREDIT
MAIN APRON	67,875	0.25	67,875	67,875
NOSE DOCK HANGAR APRON	18,072	0.27	18,072	18,072
NORTH AIRCRAFT PARKING AREA	90,381	UNKNOWN	O	90,381
TOTALS			85,947*	176,328**

*SINCE THE TOTAL IS LESS THAN 137,000 SQUARE YARDS, THEN 0 POINTS RECEIVED.
**SINCE THE TOTAL IS GREATER THAN 137,000 SQUARE YARDS, THEN 50 POINTS RECEIVED.

INSTALLATION PAVEMENTS QUALITY SCORE
(SLIDE 3 OF 4)

RUNWAY PAVEMENT SUITABILITY

RUNWAY	PCN	SUBGRADE STRENGTH CATEGORY	ACN	ACN/PCN	CREDITED BY BRAC*
10/28L	77	C	68	0.88	YES

* 100 POINTS RECEIVED (FULL POINT VALUE) IF PAVEMENT IS SUITABLE FOR C-17 (i.e. ACN/PCN < 1)

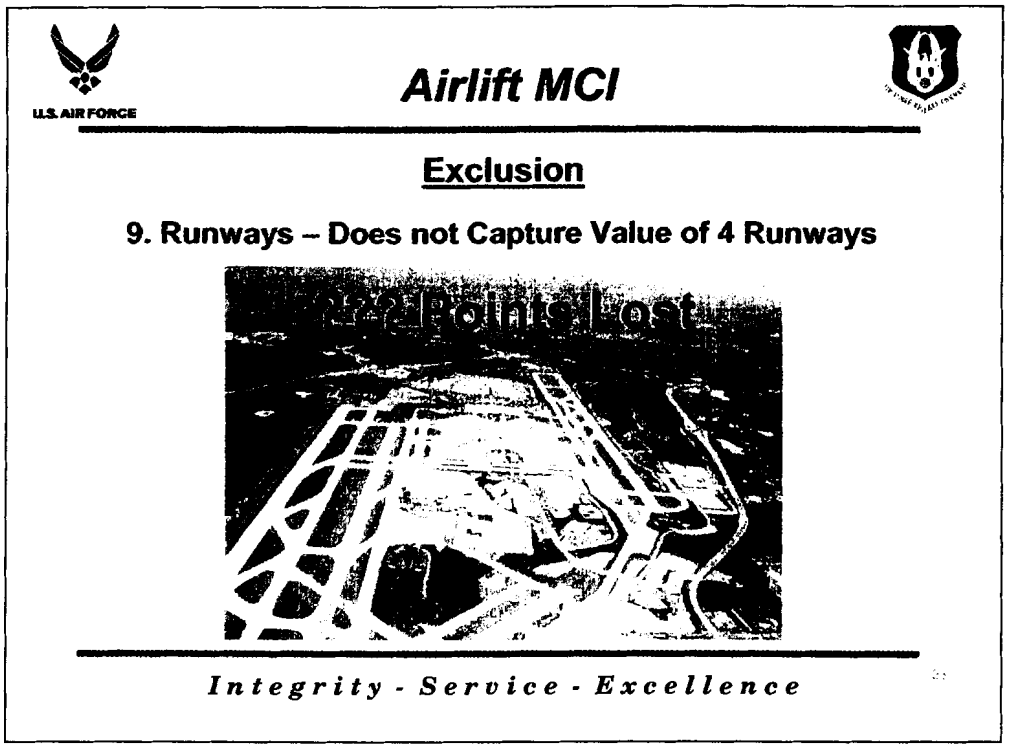
INSTALLATION PAVEMENTS QUALITY SCORE (SLIDE 4 OF 4)

INSTALLATION PAVEMENT QUALITY SCORE IS SUM OF APRON AND RUNWAY PAVEMENT SUITABILITY DIVIDED BY 2

BRAC ANALYSIS SCORE IS 0 POINTS + 100 POINTS DIVIDED BY 2 OR 5O POINTS

911th ANALYSIS SCORE IS 50 POINTS + 100 POINTS DIVIDED BY 2 OR 75 POINTS

DIFFERENCE OF 25 POINTS!



Question 9 addressed runways available at the location.

One 11,000' by 150' runway gained the installation the max score. We received the max score.

The question is flawed, however, because it in no way measures the benefit of having more than one runway. You could have 1 or 100 runways 11,000' long and still get the same score.

With one runway, you are a blown tire away from shutting down all runway operations for hours.

We have four runways, the smallest is 8000'. There are five ILS approaches available for recovery. The runways are far enough apart that we conduct airshow aerial demonstrations, like a 9-Ship C-130 formation dropping 100 Paratroopers on the south side of the field while normal commercial operations continue on the north side. This speaks to the ability to surge while not affecting the rest of the airport. None of this is taken into account.

Although we cannot increase our score on this question, a better measure of our outstanding runway complex would have brought the scores down at other bases, helping our relative MCI score.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Airlift MCI

BRIEFING BULLET:

- Exclusion
  - 9. Runways
- ??? Points Lost

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Major David P. Nardozzi, Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- BRAC, Vol V, Part 2, Airlift Mission Compatability Index Detail
  - 9. Runway Dimension and Serviceability

SUPPORTING DOCUMENTATION: 2 Pages

Mission	Airlift
Criterion	Condition of Infrastructure
Attribute	Key Mission Infrastructure
Formula #	9
Label	Runway Dimension and Serviceability
Effective %	5.98
Question	Check the dimension of all serviceable runways that support the installation. Calculate a score for each runway at the installation as follows: If the runway is not serviceable, get 0 points. See OSD Question 9, column 15 for this data. (N/A means not serviceable.) Otherwise, if the runway is < 150' wide, get 0 points. See OSD Question 9, column 8 for this data. (N/A means 0.) Otherwise, if the runway is < 7,000' long, get 0 points. See OSD Question 9, column 7 for this data. (N/A means 0.) Otherwise, if the runway is >= 11,000' long, get 100 points. Otherwise, pro-rate the runway length from 7,000' to 11,000' on a 50 to 100 scale to get the points. The overall score is the highest score received by any one runway. **Example:** An installation has two runways, Alpha and Bravo. Alpha is 12,000' long, 160' wide, and full of huge holes because it has partially been demolished, so it is not serviceable. Bravo is 9,000' long and 152' wide, plus it is fully serviceable. Runway Alpha scores 0 points because it isn't serviceable. Runway Bravo meets all the specified criteria so it gets some points. 9,000' is halfway between 7,000' and 11,000', so Runway Bravo gets 75 points. Runway Bravo has the highest score for any runway at the installation, so its score of 75 is used for the installation's score.
Source	FLIP; AFCESA Pavement Evaluation/Condition Report/Survey; Existing Record Drawings or Physical Verification; Base Real Property Records

10R/28L = 100
10C/28C = 21
10L/28R = 31
14/32 = 64

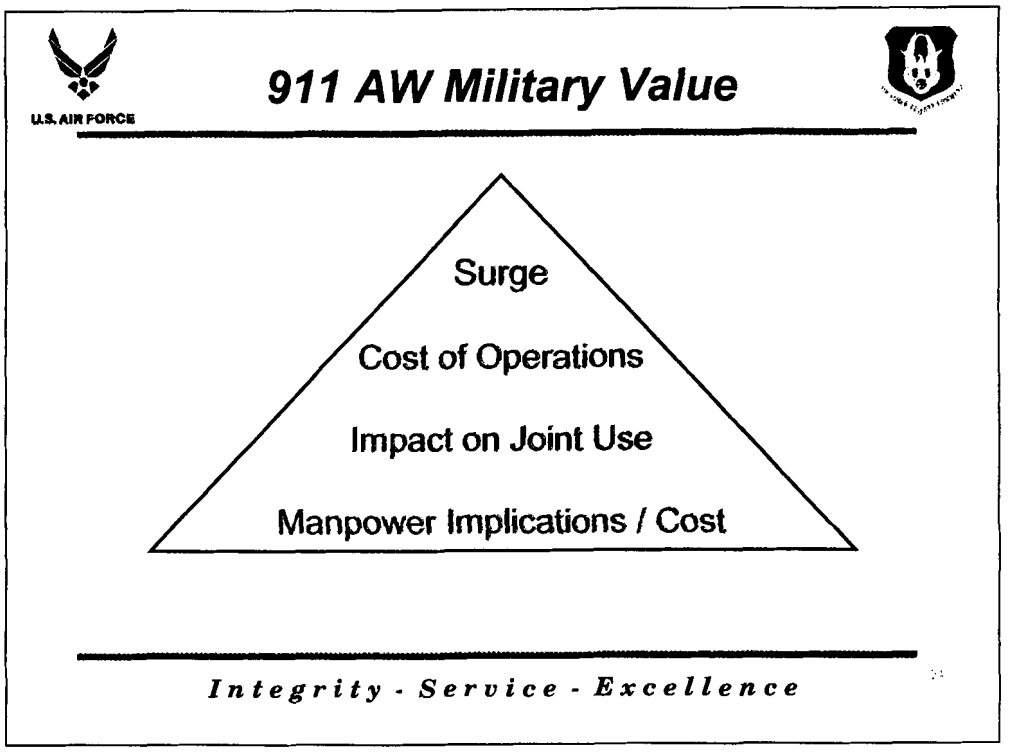
100 pts

YNG =

Verified 6/3/05 DPW

Section 1 Air/Space Operations, Question 9 Runways

Org	1 Airfield Identifier (ICAO 4 character identifier) (Text)	2 Runway Designator (First End)) ()	3 Runway Designator (Second End) ()	4 PCN (1) ()	5 PCI (2) ()	6 Date of Evaluation (3) (dd mmm yyyy)	7 Length (Ft)	8 Width (Ft)	9 Type of Arresting Gear, if available (First End, First Set) ()	10 Type of Arresting Gear, if available (First End, Second Set) ()	11 Type of Arresting Gear, if available (Second End, First Set) ()	12 Type of Arresting Gear, if available (Second End, Second Set) ()	13 Pavement Type (4) ()	14 Closed (Yes/No)	15 Serviceable (5) (Yes/No)	16 Own/controlled or Access only to runway ()	17 Airfield name (Text)	18 IFR Capable (Yes/No)	19 Night Capable (Yes/No)
85	KMKE	01L	19R	70	N/A	1-Apr	9690	200	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	Aitchell Inte	Yes	Yes
85	KMKE	07R	25L	70	N/A	1-Apr	8012	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	Aitchell Inte	Yes	Yes
85	KMKE	13	31	32	N/A	1-Apr	5868	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	ral Mitchel	Yes	Yes
85	KMKE	01R	19L	34	N/A	1-Apr	4183	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	ral Mitchel	No	Yes
85	KMKE	07L	25R	11	N/A	1-Apr	4800	100	N/A	N/A	N/A	N/A	Asphalt	No	Yes	A	ral Mitchel	Yes	Yes
86	KHST	5	23	89	70	1-May-97	11200	300	Other	BAK-14	Other	BAK-14	Concrete	No	Yes	O	ad Air Rese	Yes	Yes
87	KRIV	12	30	23	N/A	15-Mar-01	3110	100	N/A	N/A	N/A	N/A	Asphalt	No	No	O	Air Reserv	No	No
87	KRIV	32	14	45	58	15-Mar-01	13300	200	BAK-12	N/A	BAK-12	N/A	Concrete	No	Yes	O	Air Reserv	Yes	Yes
88	KMSP	4	22	60	N/A	16-Jan-03	11006	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	chamberla	Yes	Yes
88	KMSP	12L	30R	51	N/A	16-Jan-03	8200	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	Chamberla	Yes	Yes
88	KMSP	12R	30L	61	N/A	16-Jan-03	10000	200	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	-Chamberla	Yes	Yes
89	KIAG	10L	28R	35	18	26-Jul-98	9825	150	N/A	N/A	N/A	N/A	alt over Co	No	Yes	A	gara Falls I	Yes	Yes
89	KIAG	6	24	24	N/A	1-Jan	5188	150	N/A	N/A	N/A	N/A	Asphalt	No	Yes	A	ARA FALLS	Yes	Yes
90	KPIT	32	14	76	N/A	22-Jan-98	8101	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	GH INTERI	Yes	Yes
90	KPIT	28L	10R	76	N/A	22-Jan-98	11500	200	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	GH INTERI	Yes	Yes
90	KPIT	28C	10C	49	N/A	22-Jan-98	9708	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	GH INTERI	Yes	Yes
90	KPIT	28R	10L	77	N/A	22-Jan-98	10502	150	N/A	N/A	N/A	N/A	Concrete	No	Yes	A	GH INTERI	Yes	Yes
91	KCEF	5	23	54	88	17-Oct-98	11600	300	N/A	N/A	N/A	N/A	Concrete	No	Yes	O	STOVER A	Yes	Yes
91	KCEF	15	33	25	64	17-Oct-98	7081	150	N/A	N/A	N/A	N/A	alt over Co	No	Yes	O	STOVER A	No	Yes
92	KNXX	15	33	50	82.5	10-Sep-99	8002	200	Other	N/A	Other	N/A	Other	No	Yes	O	V GROVE I	Yes	Yes
93	kyng	5	23	55	100	1-Nov-94	5002	150	N/A	N/A	N/A	N/A	Asphalt	No	Yes	A	Warren Reg	Yes	Yes
93	kyng	14	32	68	100	1-Nov-94	9003	150	N/A	N/A	N/A	N/A	Asphalt	No	Yes	A	Warren Reg	Yes	Yes



I am now going to talk about our Military Value. Namely, that which is not measured in the BRAC analysis.

Surge capability

Cost of Operations

Impact on Joint Use

and

Manpower Implications & Cost

It is significant that manpower is at the bottom of this stack, because it is truly the foundation of our Military Value.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: 911th Airlift Wing Military Value

BRIEFING BULLET:

- Surge
- Cost of Operations
- Impact on Joint Use
- Manpower Implications and Cost

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a

U.S. AIR FORCE

Surge

911 AW Potential

- Airport Can Support 600+ Additional Operations per Day
- 2,400 Beds / 720 Meals per Hour
- Example: Army / Marine RRF

  18 C-130s and 588 Troops

  Homeland Defense

Integrity - Service - Excellence

Our potential to surge is highlighted by the ability of the airport and its four runways to support 600+ additional operations per day.

Factor in the base's 2,400 contingency beds and 720 meals per hour, and we have a facility capable of handling just about anything.

There is an MOA in place for the support of an Army and Marine Ready Reaction Force (RRF), which calls for the throughput of up to 18 C-130's and 588 Marines in support of Homeland Defense.

It was the first of its kind, created right after 9/11, and the exercise they conducted back then, involving Nuclear facility security, became the benchmark for others to follow.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Surge

BRIEFING BULLET:

- 911th Airlift Wing Potential
  - Airport Can Support 600+ Additional Operations per Day
  - 2,400 Beds / 720 Meals per Hour
  - Example: Army / Marine RRF
    - 18 C-130's and 588 Marines
    - Homeland Defense

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Lt Colonel Joseph Poznik, SMSgt Gregory Gogets, MSgt David Riley

SUPPORTING ANALYSIS:

- Supporting Analysis briefing data
- Memorandum of Agreement between 911th Airlift Wing and 2nd Battalion, 312th Regiment
- Supporting Analysis briefing data
- Pittsburgh ARS/SV/SVS Update of Base Contingency Plans

SUPPORTING DOCUMENTATION: 10 Pages

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE:

BRIEFING BULLET:

Briefer:
Analysis POC(s): Lt Col Poznik

SUPPORTING ANALYSIS:

Post 9/11 the 911AW was a test bed site for a Quick Response Force (QRF) deployment. The wing provided, via an MOA negotiated in November 2001, parking and support for 2 deployed C-130 aircraft, billeting and meals for approximately 100 Marines. The MOA also allows for additional support for up to 16 more C-130s (not anticipated to be on the ground at the same time) and 488 Marines.

The 911 AW provides equipment operators, bus drivers, tractor/trailer drivers to download equipment and personnel for transport to forward operating locations, access to secure communications and storage for weapons and ammunition.

SUPPORTING DOCUMENTATION:

Attached MOA between 911 Airlift Wing and 2nd Battalion, 312th Regiment

MEMORANDUM OF AGREEMENT
BETWEEN
911th AIRLIFT WING (AFRC)
AND
2nd BATTALION 312th REGIMENT

1. PURPOSE: The purpose of this MOA is to identify what is required of the 911th AW in response to a Quick Response Force (QRF) mission deployed to the local area.

2. AUTHORITY: DoD Instruction 4000.19 and AFI 25-201.

3. GENERAL:

a. SCOPE: Based on current and projected threats, there is a need for federal military forces to rapidly respond to requests for assistance from other federal agencies in deterring and/or preventing terrorist attacks in the United States.

b. ASSUMPTIONS:

(1) The 911th Airlift Wing is the supplier.

(2) The 2nd Battalion, 312th Regiment is the receiver.

(3) It is mutually agreed that, in the event of a QRF Ready Reaction Force (RRF) deployment of forces to this area, the 911th AW will provide aircraft parking spaces for **2** C-130's. Later, this support may increase up to **16** C-130's. It is not anticipated all 16 aircraft will be on the ground at the same time.

(4) It is mutually agreed upon that the 911th AW and Griffin Services (contractor) will handle the download of cargo from aircraft received

(5) Notification for this support will be provided by one single source thru the 911th Command Post. It is agreed upon that initial response will be within a 4-hour time frame.

(6) **HOURS OF OPERATION:** Normal hours of operation for Greater Pittsburgh International Airport – Air Reserve Station are from 0730 until 1600 Monday thru Friday. Should response outside of the normal duty hours time window occur, a recall of key personnel has been arranged and a single call to the Command Post will kick off this response.

(7) **PERSONNEL REQUIREMENTS:** The 911th AW and Griffin Services will provide equipment operators, bus drivers, tractor/trailer drivers to download equipment and personnel for transport to forward operating locations.

4. MISSION SUPPORT: The 911th AW will provide the necessary support to receive aircraft, download cargo and equipment, and troops. Arrange for or provide transportation of equipment, cargo and troops to a forward operating location in the local area. The 911th AW Services can billet either in hangers, billeting or whatever means necessary the troops for a short period of time. Troop feeding can be immediately accomplished via the snack bar or Consolidated Open Mess. The dining facility could be opened for operation within 24 hours of notification.

5. COMMUNICATIONS:

a. Supplier Will: Provide access and use of STU III, GCCS, secure net, secure fax and SARA-LITE Message Program if needed.

6. RESPONSIBILITIES:

a. FINANCIAL MANAGEMENT: Expenses incurred outside of the normal scope of operations would require reimbursement to the Base Operating Services Contractor, Griffin Services. If the need arose to operate the dining facility, the supplier would also require reimbursement for meals and contractor food handlers. It will be the receiver's responsibility to reimburse any outside agency for services procured on the local economy as well.

7. AGREEMENTS AND ADMINISTRATION:

a. This MOA is valid upon signature of the 911th Airlift Wing Commander and the US Army Reserve Aviation Commander.

b. This MOA may be cancelled by either party with written notice of 180 days.

8. SECURITY REQUIREMENTS:

a. Receiver will:

(1) Abide by base traffic regulations.

(2) Adhere to established procedures required by 911th Airlift Wing regulatory and policy guidance when protecting sensitive or classified information.

(3) Follow instructions in emergency situations or force protection conditions during increased security.

(4) Notify 911th Airlift Wing (AFRC) Security Forces of any emergency that may occur while on the Greater Pittsburgh International Airport Air Reserve Station.

9. WEAPONS AND AMMUNITION STORAGE:

a. The 911AW Security Forces will provide courtesy storage of up to 7 pistols, semi-automatic 9MM and 1,350 rounds of cartridge, ball, 9MM Ammunition. These weapons and ammunition will be stored in the armory located in Building #208.

b. A letter will be provided by the 2nd Battalion, 312th Regiment identifying individuals authorized to withdraw these weapons and ammunition. In addition to those individuals authorized to withdraw, a letter identifying the weapons custodian must also be provided and maintained on file with the 911th Security Forces armory.

c. The 2nd Battalion, 312th Regiment will be responsible for the routine cleaning and maintenance of the weapons stored.

10. Original copy filed in safe along with supporting documentation.

11. This MOA supersedes previous copy dated 14 November 2001.

F. BAXTER LANE, Colonel, USAFR
Commander

_____
DATE

DAVID T DUNN, Lt Col, AV, USAR
Commanding

_____
DATE

MEMORANDUM OF AGREEMENT
BETWEEN
911th AIRLIFT WING (AFRC)
AND
2nd BATTALION 312th REGIMENT

ATTACHMENT 1

WEAPONS AND AMMUNITION STORAGE

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c. The 2nd Battalion, 312th Regiment will be responsible for the routine cleaning and maintenance of the weapons stored.

F. BAXTER LANE, Colonel, USAFR
Commander

_____
DATE

DAVID T DUNN, Lt Col, AV, USAR
Commanding

_____
DATE

Received request from 2nd Battalion 312 Regiment Oakdale PA, who has been given the task of homeland defense of Region 3 to include Pennsylvania, West Virginia and Part of Virginia. They are looking for support from the 911AW to accept 2 C-130's download of 100 Marines and 2 pallets to include transportation to whatever location needed in our area. After the initial team it could be followed later with 16 C-130 and 488 Marines and 20 pallets of cargo, support maybe expanded based on need to include billeting and messing. Meeting 5 November with the army, who must present a plan to army headquarters 8 November including the above mention support from the 911AW. Need guidance if this will be acceptable. 911AW and Griffin Services the contractor have met with the Army and feel they could provide needed support if called upon.

911th AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Joint Air Reserve Station

BRIEFING BULLET: (BULLET 2 OF 2): Location and accommodations of the 911th JRS are ideal for routine and emergency response situations

Briefer:
Analysis POC(s): SMSgt Gregory Gegets, MSgt David Riley

SUPPORTING ANALYSIS:

- The 911 contingency plan lists a total surge sleeping capacity of 2,400 personnel with a surge feeding capacity of 720 meals per hour
- Sole provider of lodging for the 171st ARW Tanker Alert personnel directly supporting Homeland Defense and contingency operations

SUPPORTING DOCUMENTATION: NO. OF PAGES 3

DEPARTMENT OF THE AIR FORCE
Air Force Reserve Command

Pittsburgh IAP ARS/SV/SVS update of base contingency plans

As of 25 August 2004

1. Lodging Capacity:

BLDG#	#ROOMS	Designated Use	Normal Use	Major Emergency
206	24	VOQ	24	48
209	28	VAQ	28	56
216	28	VAQ	44	72
217	28	VAQ	28	56
218	0	N/A	0	0
219	28	VAQ	44	72
Totals	**136**		**168**	**304**

Note: Once the base has exceeded its existing capacity, one mattress per room will be placed on the floor to expand the room capacity for emergency purposes to 3 individuals.

2. **Contract Quarters**:

Hotel	#Beds (EST)
Holiday Inn	25
Sleep Inn	40
Amerisuites	40
Country Inn	30
Laquinta	30
Mainstay	30
Four Points	45

Note: May not be available if airlines put up customers.

3. **Emergency Capacity**:

Building Number	Square Feet total	Easy Access Space available	EST Capacity (50 Sq ft per person)	Major Emergency (using offices, etc)
416 (Hanger)	23,714	13,724	275	500
417 (Hanger)	23,714	13,724	275	500
418 (Hanger)	12,810	10681	214	284
129 (Hanger)	16,040	11,537	231	356
120 (Gym)	5,320	5,320	0	107

TOTALS:	**995**	**1640**

Note #1: Fitness Center/Gym would not be used for bed space unless it was a major emergency.
Note #2: If the hangers/tents were used for bed down, porta-potties would be required. Also Shower facilities for 1000 additional personnel may be an issue.
The hangers do have aprox 3 showers, 8 stalls, 5 urinals in each hanger plus 5 showers, 5 stalls in the fitness center as well as 4 Lodging buildings with central showers and latrines. Staggering personnel could use these facilities. Shampoo, soap, and other personal hygiene items issued by Services would be ordered and express mailed overnight and paid for by Government Purchase Card.
Note #3: At this time and date, the base has approximately 23 general-purpose medium tents that could provide temporary housing for up to 460 personnel, assuming these tents are not tasked for mobility purposes. Actual numbers have already been provided by CES and APS.

Limiting Factors:

a. Not enough mattresses/cots on hand for emergency capacity. (354 cots available if they are not deployed somewhere)
b. The assumptions made above are dependent on the availability of the local economy to furnish linens on a temporary basis. (Sleeping bags will be required to augment linens).

4. Food Service Capabilities: (i.e., dining facility, club, snack bar)

a. **Building/Number**	**Per Hour Feeding Capacity**
Dining Facility / 213	720
Club / 110	650
Snack Bar / 300	132

b. Field Kitchen: The base could use a Kitchen tent, which can feed up to 250 personnel per hour. Services Military personnel must be available to operate the field equipment. A 4-section Temper Tent from CES will be also needed.

LIMITING FACTORS: It will be necessary to adjust the locally approved menus to minimize impact on the food service operation. The Prime Vendor contract states that they can deliver to us on a next day basis. This permits a basic hot meal within 24 hours. Full manning will take at least 48-72 hours. Military Services Personnel (if not deployed) can be in place within 24 hours.

a. Menu patterns will be limited to the following for each meal (one soup, one entrée, one starch, two vegetables, two desserts, three beverages, and two salads)
b. No snack line
c. Simple breakfast – no omelets

5. **Laundry Capabilities:**

Build#	#Washers	Washer Capacity	#Dryers	Dryer Capacity
206	2	96/Day	2	96/Day
216	2	96/Day	2	96/Day
217	2	96/Day	2	96/Day

Contract Laundry

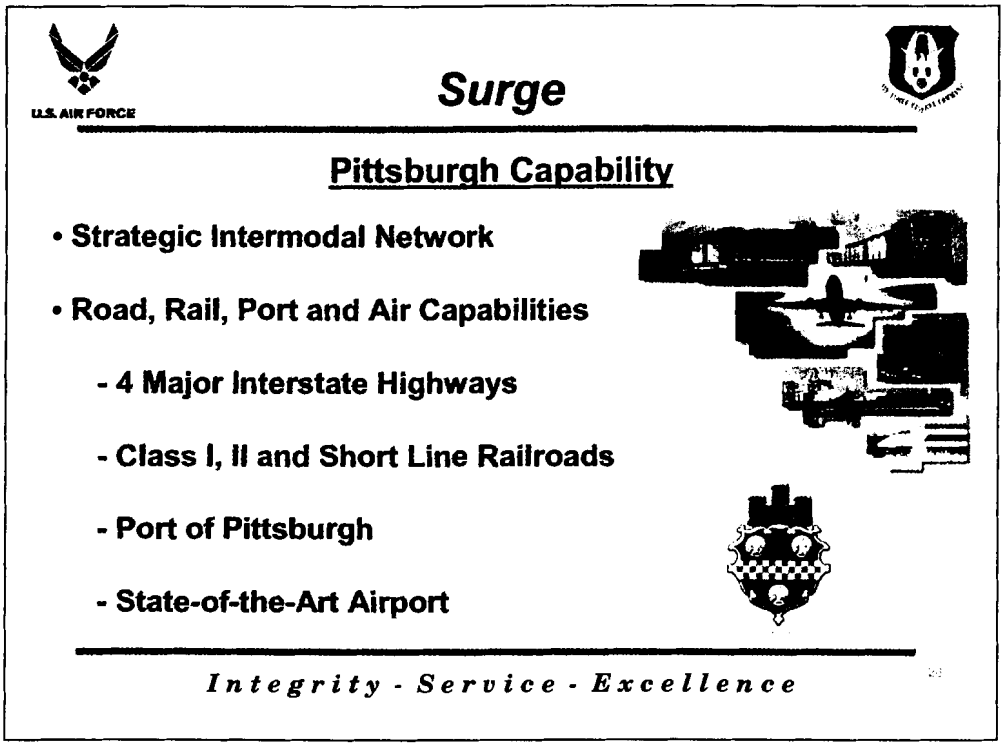
Woodlawn	F36629-99-A-0006	40,000 pounds per 5-work week

6. **Mortuary Capabilities:**
   a. We have no funeral home under contract, but our contracting office will accept AF Form 9's And use of the IMPAC card is anticipated, as applicable.

   b. Buildings that are designated for emergency lodging space would be used as temporary Morgues if required and as available
   LIMITING FACTORS: Lack of sufficient manpower, equipment, and supplies are limiting factors.

7. **Key Personnel:**

Name:	Position Title:	DSN Phone:	DSN FAX Phone:
Christopher McIntire	Director of Services	277-8757	277-8282
Raymond McCarthy	Lodging Manager	277-8090	277-8752
Donna M Penland	Services Technician	277-8259	277-8282
Samuel Roberts	Recreation Director	277-8245	277-8315
Elaine Meredith	Club Manager	277-8227	277-8734



The Pittsburgh region is an integral part of our ability to surge as well.

The strategic intermodal network of road, rail, port and air capabilities offer:

4 major interstate highways,

Class I (long haul), Class II (intermediate haul) and Short Line (Local Haul) railroads,

The Port of Pittsburgh, which is second in the nation in tonnage hauled per year

and of course, a state-of-the-art airport.

The AF Recommendations to the BRAC states that inter-modal transportation was considered as part of the analysis, yet it was not measured in the MCIs.[4]

[4]Dept of the Air Force, Analysis and Recommendations, BRAC 2005, Vol. V, part 1, page 44

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Surge

BRIEFING BULLET:

- Pittsburgh Capability
  - Strategic Intermodal Network
  - Road, Rail, Port and Air Capabilities
    - 4 Major Interstate Highways
    - Class I, II and Short Line Railroads
    - Port of Pittsburgh
    - State-of-the-Art Airport

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Lt Colonel Joseph Poznik

SUPPORTING ANALYSIS:

- Supporting Analysis data sheet
- Top 20 Inland U.S. Ports for 2003
- Markets Served by the Region's Railroads
- Motor Carrier Services
- Pennsylvania Department of Transportation News Release
- Pittsburgh Information and Statistics
- Pittsburgh Market Assessment
- Market Analysis for the Port of Pittsburgh Commission

SUPPORTING DOCUMENTATION: 96 Pages

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Inter-Modal

BRIEFING BULLET:

Briefer:
Analysis POC(s): Lt Col Poznik

SUPPORTING ANALYSIS:

Air – Pittsburgh International Airport was ranked one of the top five US airports (Conde Nast Traveler)

Water – Pittsburgh is the 3rd largest inland port in the US
Tonnage Inbound – 24.8 million
Tonnage Outbound – 14.9 million

Rail – Pittsburgh has 2 Class I, 4 Class II, and 10 Class III (Shortlines)
(Class I is long haul, Class II is intermediate haul – feeding Class I and Shortline is local rail – also feeding others)
Tonnage Inbound – 11.8 million
Tonnage Outbound – 31.1 million

Pennsylvania leads the nation with 70 operating railroads and fifth in total track mileage (5600).

Land – Pittsburgh has 112 Truck Load Van Carriers, 139 Flatbed carriers and multiple other smaller carriers
Tonnage Inbound – 76.2 million
Tonnage Outbound – 56.5 million

Major Inter-Modal Ports:

Ambridge and McKeesport have ports that will allow transfer of materials between water, land and rail.

New Stanton has a land and rail link.

SUPPORTING DOCUMENTATION:

Top 20 Inland U.S. Ports for 2003 – US Corps of Engineers

911TH AW BRAC Commissioner's Briefing
DATA CARD

Motor Carrier and Rail data is from the Southwestern Pennsylvania Freight Transportation Guidebook

Other supporting documentation: Market Analysis for the Port of Pittsburgh Commission

Top 20 Inland U.S. Ports for 2003

Trip ton-miles for an inland port is a measure that indicates the contribution that an inland port makes to the whole waterway system. The methodology used to compute trip ton-miles for an inland port is as follows: first, every commercial cargo-carrying vessel that was loaded or unloaded at the port is identified; next, the product of the tons times the total trip-miles (the distance from the vessels point of loading to its point of unloading) for all inland vessel trips from that port are summed. This measure takes into account the distances traveled on all the waterways traversed. The following table ranks the top 20 inland ports by their CY 2003 trip ton-miles and also displays the tonnage at each port. The number one port in 2003, Huntington-Tristate, had more than twice the tonnage of number 2 ranked St. Louis; however it had only 8 percent more trip ton-miles.

For more information on this new measure contact WCSC, 504-862-1424 or 504-862-1404 CEIWR-NDCWCSC.WEBMASTER@usace.army.mil.

Top 20 U.S. Inland Ports[1] ranked by CY 2003 Trip Ton-Miles

Rank	Port Name	Tons			Trip Ton-Miles[2]		
		Average CY 98-02	CY 03	Percent Diff.	Average CY 98-02	CY 03	Percent Diff.
		(Millions)			(Billions)		
1	Huntington – Tristate[3]	78.2	77.6	-0.7	28.3	26.7	-5.7
2	St. Louis, MO and IL	33.0	32.4	-1.6	24.6	24.2	-1.7
3	Pittsburgh, PA	53.0	41.7	-21.3	18.3	16.1	-12.3
4	Memphis, TN	17.1	18.1	5.7	7.2	8.5	17.7
5	Cincinnati, OH	13.5	11.8	-12.7	9.0	8.2	-9.4
6	St. Paul, MN	5.2	5.2	-0.5	5.2	4.8	-7.7
7	Louisville, KY	8.7	8.5	-2.9	3.6	2.9	-19.8
8	Mount Vernon, IN	3.7	3.9	4.1	3.4	2.7	-20.9
9	Tulsa, Port of Catoosa, OK	2.1	2.2	4.9	2.1	2.2	3.7
10	Guntersville, AL	2.3	2.1	-10.6	1.9	1.8	-5.8
11	Nashville, TN	4.5	4.0	-11.0	2.0	1.6	-20.1
12	Vicksburg, MS	5.2	3.7	-28.3	2.1	1.5	-29.7
13	Chattanooga, TN	2.8	2.8	1.8	1.7	1.4	-17.6
14	Greenville, MS	3.0	3.2	6.2	1.3	1.3	5.8
15	Minneapolis, MN	1.7	1.7	0.5	1.5	1.1	-23.8
16	Elvis Stahr Harbor, KY	0.6	0.8	34.8	0.5	0.6	33.6
17	Helena, AR	1.8	1.8	0.6	0.6	0.6	3.4
18	Lake Providence, LA	0.5	0.8	58.4	0.2	0.4	72.2
19	Rosedale, MS	0.6	0.7	29.6	0.3	0.3	18.9
20	Knoxville, TN	0.3	0.3	-3.2	0.3	0.3	-11.4

1. "Inland Ports" are ports that are located on rivers and do not handle deep draft ship traffic.
2. Trip Ton-Miles compiled for inland moves only.
3. Huntington-Tristate was defined in CY 2000 as mile 256.8 to mile 356.8 on the Ohio River, plus the navigable portions of the Kanawha and Big Sandy rivers. In prior years the Port of Huntington, WV, was defined from mile 303 to mile 317 on the Ohio River.

Source: Compiled by the Waterborne Commerce Statistics Center.

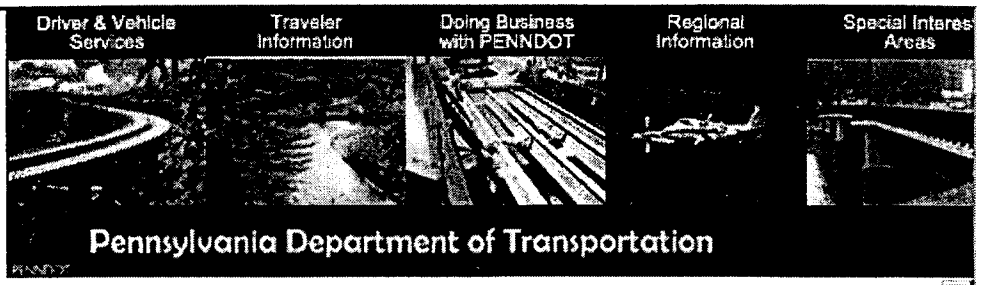
Markets Served by the Region's Railroads

	Class	Regional	Northeastern States	Southern States	Midwestern States	Entire US*	Canada	Mexico
Aliquippa & Southern Railroad Co.	3	•						
Allegheny Valley Railroad	3	•						
Amtrak Express Service	1					•		
Bessemer and Lake Erie Railroad Company	2	•						
Buffalo & Pittsburgh Railroad, Inc.	2	•	•					
CSX Transportation	1	•		•	•	•	•	
Kiski Junction Railroad	3	•						
Knox & Kane Railroad Company	3	•						
McKeesport Connecting Railroad Company	3	•						
The Midland Terminal Company	3	•						
Monongahela Connecting Railroad Company, Inc.	3	•						
Norfolk Southern Corporation	1		•	•	•	•	•	
Pittsburgh & Ohio Central	2	•						
R.J. Corman Railroad	3							
Southwest Pennsylvania Railroad	N/A	•						
Turtle Creek Industrial Railroad, Inc.	3	•						
Union Railroad Company	3	•						
Wheeling & Lake Erie Railway Company	2	•			•			

*Via strategic relationships with other railroads

Motor Carrier Services

Service	Number of Carriers
Truck Load Van	112
Less Than Truck Load Van	98
Truck Load Flatbed	139
Less Than Truck Load Flatbed	102
Temperature Protection	43
Heavy Hauling	68
Rigging	19
Household Goods	60
Dump Trucking	85
Local Drayage	45
Dry Bulk	44
Liquid Bulk	19
TOFC/COFC Intermodal	24
Other Intermodal	22
Small Package	31
Local Courier	32
Express	29
Armor Transport	1
Automobile Hauling	1
Cement/Concrete	2
Coal Hauling	5
Sand, Gravel, Stone	1
Construction Material/Equipment	2
Electronics	3
Food, Produce	4
General Freight	8
Hazardous Materials	4
Wood/Lumber Products	2
Mobile Home Hauling	1
Newspaper/Paper Hauling	2
Office Moving/Supplies	5
Oversize/Overlength Cargo	7
Refuse Hauling	4
Steel Hauling	7
Tankers	1
Machinery Hauling	1
Other Services	54



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SCHWEIKER ADMINISTRATION ANNOUNCES $900,000 FOR RAIL-FREIGHT IMPROVEMENT PROJECTS

02/06/2002

SCHWEIKER ADMINISTRATION ANNOUNCES $900,000 FOR RAIL-FREIGHT IMPROVEMENT PROJECTS

Projects are expected to create more than 350 new jobs

HARRISBURG (Feb. 6) -- On behalf of Gov. Mark Schweiker, Transportation Secretary Bradley L. Mallory today said that more than $900,000 has been awarded for projects that will help preserve rail-freight service and stimulate economic development across Pennsylvania. The 10 projects are expected to create more than 350 new jobs.

"Railroads and their **intermodal** transportation connections play an important role in building a strong jobs climate in Pennsylvania," Secretary Mallory said. "Transportation is an important ingredient in the economic-development mix. Keeping short-line and regional railroads in good operating condition means we're keeping the freight moving, supporting employers, jobs and families."

The Pennsylvania Department of Transportation's (PennDOT) Rail Freight Assistance Program funding will be used for the construction, maintenance, repair and rehabilitation of rail lines, rail sidings and grade crossings.

Pennsylvania leads the nation with 70 operating railroads. With 5,600 miles of track, the state ranks fifth in the nation in total track mileage.

A list of recipients and grant amounts follow:

Adams County

Gettysburg and Northern Railroad Company

Thursday, 16 June 2005

Info and Statistics
Top Ten Reasons to Visit
How to Spell Pittsburgh

Other Pittsburgh Sites
Greater Pittsburgh Convention and Vistors Bureau
City of Pittsburgh
Three Rivers Free-Net
PittsburghLive.com
RealPittsburgh.com
VisitPittsburgh.com
Pittsburgh on WorldWeb.com
PGHevents.com
Pittsburgh Regional Alliance
PittsburghHeritage.com
Pittsburgh City Search
New Pittsburgh Publications

Suggest a Link

Pittsburgh Information and Statistics

Established: 1758
City Population (2000): 369,879
County Population (2000): 1,281,666
Location: South Western Pennsylvania

Average High Temperature (July): 82.5° F
Average Low Temperature (January): 20.8° F

Port: Pittsburgh is the largest inland port in the U.S., providing access to the nation's 9,000 mile inland waterway system.

Bridges: Allegheny County has more than 1,700 bridges and 720 are within the Pittsburgh city limits.

Media: Two Major Newspapers: Pittsburgh Post-Gazette, and Pittsburgh Tribune Review; Thirty Two Radio Stations; and Five Major Television Stations: KDKA (CBS), WPXI (NBC), WTAE (ABC), WQED (PBS), and WNPA (FOX).

Colleges and Universities: There are 29 colleges and universities in southwestern Pennsylvania including Carnegie Mellon University, University of Pittsburgh, Duquesne University, Point Park College, Robert Morris University, and Geneva College.

Sports: Pittsburgh cheers for four major sports teams, the Penguins, Pirates , Steelers, and Riverhounds.

Airport: The Pittsburgh International Airport was ranked one of the top five U.S. airports by Conde Nast Traveler.

Tourism: An average of 3.9 million people visit Pittsburgh annually.

Pittsburgh ranked in the top five Most Livable Cities in the 1983, 1985 and 1989 editions of the "Places Rated Almanac."

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6. Appendix A: Pittsburgh Market Assessment

6.1 Overview

The purpose of this section is to provide an assessment of the Pittsburgh transportation market, focusing particularly on water markets. According to TRANSEARCH, a total of 249 million tons were carried in to, out of, and within the Pittsburgh Port District in 2001; 22% of tonnage involved a water movement. The goods had a total value of $133 billion, 7% ($9 billion) of which was carried by water.

Water is a strong contender in lanes where it is active – 68% of all available traffic by tonnage is carried by water in water lanes. In this analysis, 'water lanes' is defined as any market with waterborne volume in the base year of 2001. This definition includes some markets that may be too circuitous for general development, although water is effective for some classes of goods; indeed, there is substantial movement by barge of waste & scrap between Pittsburgh and the East Coast using such out-of-the-way routing. Thirty-three percent of total Pittsburgh market freight tonnage occurs in water lanes – reflecting in part the constraint of the Mississippi River System franchise and its ocean connections.

The top water commodities were: Coal (66%), Sand & Gravel, Waste & Scrap – consistent with the relative low valuation of goods compared to the tonnage. The top water markets by tonnage were: movements within the Port District; movement to/from the West Virginia portion of the Pittsburgh business economic area (BEA, see 3.1.1); and movements to/from Charleston and Wheeling market areas in West Virginia. In terms of tonnage, it is clearly evident that the Port of Pittsburgh is dominated by coal traffic from the Western Appalachians.

6.1.1 Freight Distribution by Mode and Direction

As TRANSEARCH data demonstrate in Figure A.1, the Pittsburgh Port Commission service area (refer to 3.1.1) has approximately equal inbound and outbound tonnages. However, because of different commodity values inbound and outbound, the tonnages are not distributed equally amongst the different modes, leading to modal imbalances.

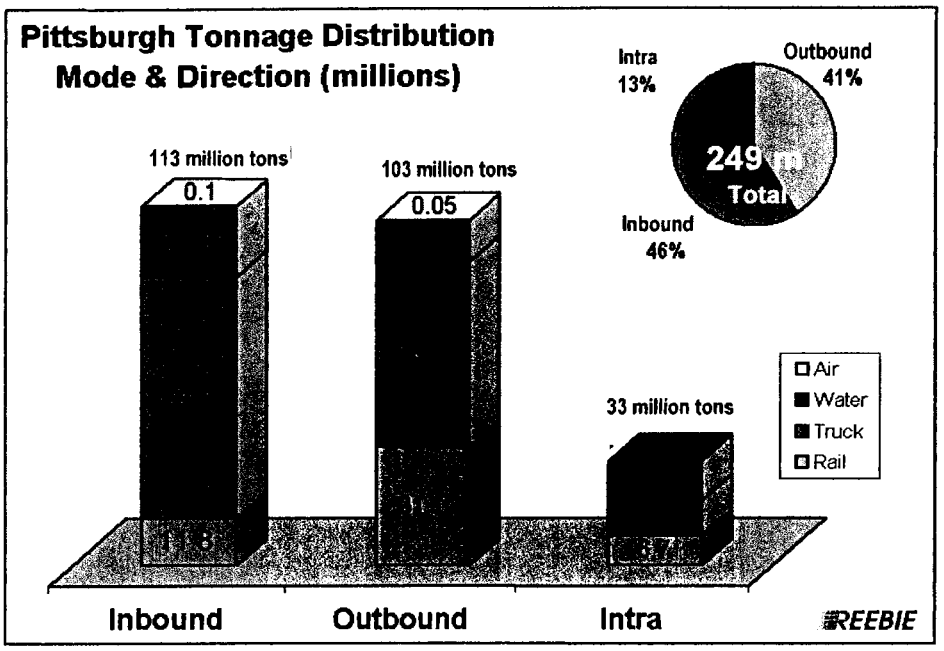

Figure A.1: Pittsburgh Tonnage Distribution, by Mode & Direction

In terms of water traffic, barges carry a significant portion of the intra-market service area freight – coal or other bulk commodities moving for short distances within the service area. Trucks are however dominant in both the inbound and outbound in terms of tonnages, exceeding in both cases the total of all other modes combined.

The dominance of trucking in North American freight transportation is clear from a value distribution graph, and Pittsburgh is no exception (Figure A.2). Trucks carry 81% of value in the inbound direction, and 86% of value in the outbound direction, in line with national trends. Despite significant intra-market volume, water achieves only 17% of value, due to the nature of commodities that lends itself to water transportation.

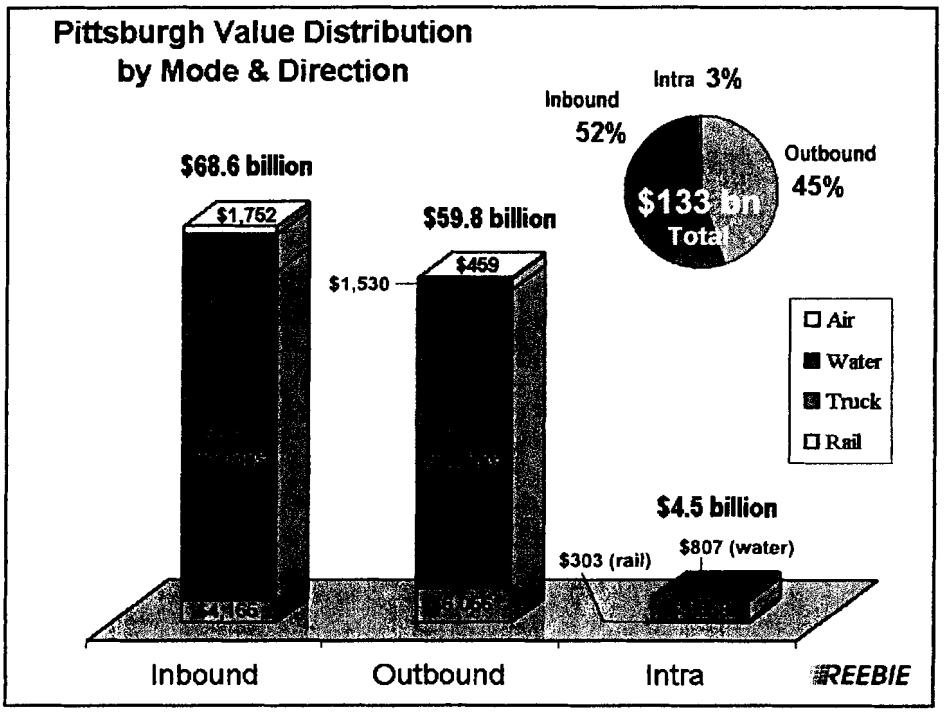

Figure A.2: Pittsburgh Value Distribution, by Mode & Direction

Market Analysis for the Port of Pittsburgh Commission

SCOPE OF POTENTIAL AND NEW BUSINESS DEVELOPMENT OPPORTUNITIES

Final Report

Prepared for

PORT OF PITTSBURGH

Mr. James McCarville, Director

Prepared by

Reebie Associates

with

Martin & Associates

REEBIE

Study Participants

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- Jeffrey Sweeney, Research Associate

Market Analysis for the Port of Pittsburgh Commission

FINAL REPORT

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1. Executive Summary

The Port of Pittsburgh is important to the economy of the Pittsburgh region, providing high volume supply and distribution services to industry and supporting the efficiency of their logistics systems. The Port is the easternmost deep-river terminus of the Mississippi & Ohio waterway system, which has traditionally helped attract business to the region, and gives it a strategic ascendancy over other inland ports for access to the eastern consuming markets, and as a conduit to the growing producing centers of the south. As the U.S. economy has shifted toward the service sector and away from heavy manufacturing, businesses throughout the industrial heartland have adapted with more sophisticated products and processes, and with complex supply chains linking global enterprises. These trends have favored highway transportation more than the rivers or rails, yet the congested roads of America are evidence that the highways cannot do it all, and the inland water system is vital not only for the tremendous tonnage it continues to carry, but as part of the capacity solution for the nation's freight. The Port of Pittsburgh was able to grow during the manufacturing shifts of the 1990's, it performs extremely well in its traditional markets, and it remains an engine of local economic activity. The question it now faces is how to define its opportunities, and how to adjust to new patterns of business with appropriate capabilities and institutions, that integrate waterborne transport in modern supply chains.

The objective of this study is to evaluate freight traffic patterns in markets the Port serves or could serve, examine ways to remarket or adapt barge services and support capabilities for new opportunities, and to consider institutional responses by the Port that may improve the competitive effectiveness of waterway transportation. In a two-phase research effort, the study team began with a quantitative analysis of commodity transportation markets, utilizing freight traffic data resources to define the competitive position of the Port and the scope of its development options. The subsequent phase undertook fieldwork to refine and assess particular market niches through customers who exemplified them. A series of 190 interviews was conducted in stages, focusing on chemical and metals industries and other market participants, and supported by analysis of competitive logistics. The analytic approach used throughout the study was a kind of drill-down method, which is a process of examining data and opportunities at increasingly detailed levels to zero-in on attractive prospects and the ways of acting upon them. Based on the character and scope of its options, several steps were recommended for the Port to take, which extend its strategic advantage and strengthen the logistical capabilities of the region for the benefit of the waterway.

The initial phase concluded that the Port of Pittsburgh has done well in traditional markets and compares favorably to other inland ports. This is a positive result, but it implies there is little low hanging fruit left for rapid harvest. In general, water transport dominates water lanes, although some traffic prospects currently handled by rail and truck are available for conversion, and there are certain kinds of backhaul options worth pursuing. The larger opportunities are also the most challenging ones, involving longer drays into the surrounding region, or extended dray operations utilizing Pittsburgh as a transload hub. More complex logistical management is called for, but that also helps adapt the capabilities of waterborne transport to the information intensive control requirements of current industrial supply chains.

The fieldwork phase derived a set of eight market niches or tactics for waterborne business opportunities. For each of these, a general analysis was carried out to define the magnitude of benefits to the shippers, the operators, and the Port of Pittsburgh. The categories fell mainly into variants of forward distribution and catchment area exploitation; in terms of market development, forward distribution for certain classes of chemicals is by far the most important, while rationalization, geographic competition, and backhaul utilization contribute to other opportunities. Container traffic presents substantial obstacles, yet the market is unavoidably important in the contemporary economy. The introduction of basic service could well attract incremental volume, and be the foundation for long-term business expansion. Thus, forward distribution and the container market become the key opportunities for pursuit. Prospects across the board hinge on new levels of service partnership with ground transportation firms, on alliances that ensure higher degrees of service and market coordination, and on the exploration of new roles for the Port in stimulating such developments.

Four strategic conclusions were drawn from the study:

- *First,* the geographic position of the Pittsburgh Port as a gateway to the inland water system is a valuable asset that should be developed as such, and therefore a tactical focus should be on ways to extend the waterway's scope of services beyond the local market. Doing so requires efficient access to eastern markets, and this implies a higher degree of control over access cost factors.

- *Second*, new business opportunities mean adaptation to categorically new logistics systems, with complex coordination and again, control over cost factors. The development of such capabilities in the Pittsburgh region should be a target for the Port Commission, identifying third party logistics firms or other agents with an intrinsic interest in the bulk business where the waterway has particular strength, or with a credible connection to water for the container business.

- *Third,* there is a need for a coordinating function that consolidates waterway volume – not operationally, but institutionally, for the sake of creating bargaining power to drive down pickup and delivery costs. This function would act as a negotiating agent and a kind of 'core carrier' program for the Port, fostering partnerships and efficiency in the pickup, delivery, and transload process. A particular payoff is that the capacity to modify access costs may facilitate the production of baseload volumes for new container services, which would yield a beachhead into one of the major contemporary freight markets.

- *Fourth,* is that while forward distribution and the container market differ in their handling and transport requirements, they demand comparable skill sets in logistics management and access cost control. Thus, pursuit of both can be productive and mutually supporting to a degree, and make new institutional initiatives more worthwhile.

These points all affect the marketing and coordinating role of the Port Commission, and could lead it to consider new functions. Three actions are critical to the continued growth of Pittsburgh as a waterway freight port and influence that role: (1) Facilitate consolidated bargaining and promote cost-reducing practices; (2) Recruit 3rd party logistics providers to organize the complex management of forward distribution; (3) Attract, develop and nurture expertise in container-on-barge operations.

1) The Commission as Agent: The strategic utility of lower dray costs, supported by improved utilization of truck equipment, has been asserted in this study. To achieve it, a coordinating agent negotiating with motor carriers on behalf of multiple waterway operators, could cut pickup and delivery costs to their mutual benefit, and to the advantage of the region. The Port should explore establishment of an agency function, to be undertaken by a qualified party or conceivably by the Port itself, with appropriate staffing and resources. Either inside the agency or parallel to it, the Port should consider steps that modify access costs in other ways. One is to arrange financing for modern transloading equipment or facility upgrades, another is to institute a best practices benchmarking program with interested operators, and a third is to improve landside access to port districts via transportation improvement programs, organized with the Regional Planning Commission.

2) The Commission as Recruiter: Management of intermodal container or forward distribution systems requires complex logistical coordination among multiple entities. The marketing of such services to large organizations must overcome modal stovepiping, appeal to business developers in addition to transportation departments, and win the support of finance and manufacturing groups. Third party logistics companies make a business out of this, and can bring such functions together not only in Pittsburgh, but at

remote origins and destinations for which Pittsburgh may function only as a hub. The Port Commission should identify and qualify third party firms, then extend their capabilities into the Pittsburgh region, by involving these parties in marketing programs, connecting them to local companies, and aiding their local efforts.

3) The Commission as Developer: Container-on-barge is an infant market that will require groundbreaking marketing efforts to establish a regularly scheduled service at Pittsburgh. Such a service will require fixed sailing schedules and be "induced" into the Pittsburgh area by a sufficient volume of cargo to justify the Pittsburgh call. This may require innovative pricing in order to penetrate the rail/truck market, and as a result, a detailed cost based analysis will not likely be representative of the pricing that will be required in order to initiate and grow the business. Furthermore, it is unlikely that one shipper will be the catalyst for such an inducement volume, and as a result, it will be necessary to consolidate multiple shippers/consignees in the Pittsburgh region. The fact that the service will require such steps opens a role for the Port of Pittsburgh Commission. The Port can engage in active marketing to key shippers/consignees in the area along with direct marketing to potential barge operators; it also will be necessary that the Port initiate discussions with ocean carriers regarding intermodal pricing, and potential repositioning of empties into the Gulf. The pricing can be divided into its components for analysis, but only the total price will be relevant. A high or low barge component rate, terminal rate or dray rate can be offset by an advantageous component rate in the supply chain. Steps can, and should be undertaken to reduce all component rates and recommendations follow for each.

Barge carriers typically quote barge load rates, usually on a long term contract with an invoice to a single shipper. This method of pricing does not lend itself to the numerous customers that would make up a container-on-barge movement. The service delivery must be regular and predictable with pricing quoted on a per container basis. The barge needs to sail as scheduled, whether it is full or not. Therefore, the per container rate must anticipate varying load factors.

The total quoted per container rate will reflect terminal charges at the river terminals, the linehaul barge cost, the inland dray costs to and from the river terminal, and the ocean cost and stevedoring charge from barge to vessel or vessel to barge for an international move. The quoted terminal charges, which include stevedoring as well as truck loading, mounting on chassis, weighing, container inspection and repair, account for a significant share of the total inland river cost of moving a container. These are fixed charges and represent about one-third of the transportation cost (excluding the dray to and from the river terminal). In order for the river system to be competitive with competing deep sea ports and inland modes, it is necessary that the river terminals need to competitively price

their terminal charges. Some indications are that initial rates quoted in Pittsburgh were more than 50% higher than similar inland ports in the Lower Mississippi handling container-on-barge movements. The handling cost can be expected to be reduced with experience and with more appropriate equipment.

Currently, a number of Pittsburgh terminals have experience with steel coils and other heavy lifts and do have equipment appropriate to start a container-on-barge terminal operating service. However, the terminal costs will most likely fall as terminal operators gain experience and new specialized equipment is added at the terminals. This will require investments in equipment with greater productivity than currently exists at the terminals. However, the private sector will likely be reluctant to make investments in new terminal equipment due to risk factors. The Port of Pittsburgh Commission considers this concept as a regional economic development tool, and the Port of Pittsburgh Commission could provide certain financing incentives to the private terminals to upgrade equipment, or, if there is no interest, consider more drastic measures such as direct investment in equipment.

The establishment of an inaugural service is crucial, because a baseload volume operating on a schedule attracts incremental business that will not come to the waterway otherwise, and that solidifies but could not justify the service in itself.

Another role that the Port of Pittsburgh Commission can pursue is the continued marketing of the river system for the traditional cargo moving on the river system, as well as for the potential container business. The Port should be in contact with the barge operators interested in service in the Pittsburgh area as well as with steamship line operators and local shippers/consignees. The Port should continue to work to identify potential opportunities to attract a regular container-on-barge service, marketing the system as a whole to potential users, and have in place a system to disseminate this information to interested parties including barge operators, steamship lines and terminal operators. Again, the importance is on aggressive marketing to the ocean carriers to integrate intermodal service via barge to customers in the Pittsburgh region.

Finally, the Port can work on project specific issues brought forward by terminal operators or local shippers/consignees. These could include specific feasibility analyses, funding assistance, and/or working directly with the ocean carriers in developing innovative pricing techniques.

Conclusions: New business opportunities in traditional waterborne traffic have become fewer in the changing marketplace. However, new business of material magnitude is available that will require creativity and new marketing expertise, as the assessment of

container-on-barge, forward distribution, and its variants determined. The steps required to exploit such a market niche, and the concomitant capabilities and cost elements that must be developed, in fact would move the Port toward the complex management of logistics that modern supply chains have adopted and nurtured for competitive advantage. Recognizing that conventional markets are not wholly exhausted, and that some actions should be taken in that direction for prospects identified in this research, the larger steps forward are steps in transition that develop new capabilities for industries that are themselves in transition into global markets and global-to-local logistics. Whether the role of the Port Commission – or just the capabilities it fosters – should change along with its opportunities, is a subject the Commission must explore.

2. Introduction

The Port of Pittsburgh is important to the economy of the Pittsburgh region today as it has been historically, providing high volume supply and distribution services to industry and supporting the efficiency of their logistics systems. As the U.S. economy has shifted toward the service sector and away from heavy manufacturing, businesses throughout the industrial heartland have adapted with more sophisticated products and processes, and with complex supply chains linking global enterprises. These trends have favored highway transportation more than the rivers or rails, yet the congested roads of America are evidence that the highways are strained, and the inland water system is vital not only for the tremendous tonnage it continues to carry, but as part of the capacity solution for the nation's freight. The Port of Pittsburgh was able to grow during the manufacturing shifts of the 1990's, and it remains an engine of local economic activity. However, it must continue to adapt to a changing market place, locate new business opportunities, and perhaps remarket old solutions to new players. Encouraging the investment of capital resources, reaching out to new customers, and evolving in its own role, may open markets that are otherwise unavailable to waterways.

The Port of Pittsburgh is the easternmost deep-river terminus of the Mississippi & Ohio waterway system. As such, it enjoys a strategic ascendancy over other inland ports for access to the Northeastern and Middle Atlantic consuming markets, and as a potential conduit for through freight providers connecting to the growing industrial south. Its location is a strategic asset whose benefits the region enjoyed historically, and whose advantages should be sharpened and extended for modern logistics.

The objective of this study is to determine to what extent barge services can be remarketed or redesigned for better competitiveness in today's marketplace, and what support capabilities and improvements will enhance the barge's competitive position. The Port Commission recognizes that its traditional markets, such as Coal and Aggregates, are slowing. This study was designed to verify if any traditional markets have been overlooked, and to explore new markets that have unfulfilled potential.

In a two-phase research effort, the study team began with a quantitative analysis of commodity transportation markets in multiple dimensions, utilizing freight traffic data resources to define the competitive position of the Port and its potential development options. The initial phase was designed to lay the ground and establish focus for the subsequent stage of research, in which fieldwork and logistics assessment would examine the more promising market niches in finer detail. At the conclusion of Phase I, options were reviewed with the Port Commission and avenues for further pursuit were agreed

upon. In Phase II, the remainder of market analysis became concerned with narrowing and evaluating specifics, and turned on particular categories of opportunity and customers who exemplified them. Forward distribution, geographic sourcing, and hinterland dray opportunities, among others, were investigated. This report begins with the characterization of markets and classification of available opportunities, and will provide a variety of details from Phase I of the study. While the second phase is summarized more broadly in this report, the Port has received additional analyses on a confidential basis.

3. Phase I: Results of Quantitative Analysis

To determine the scope of potential new business opportunities, Reebie Associates analyzed its TRANSEARCH and FREIGHT LOCATER databases [1] for characteristics of freight movement to, from, and through the region (the former is a database of freight traffic flows for geographic, commodity, and modal markets; the latter is a database of freight shipping establishments). In this phase, the team evaluated Pittsburgh freight traffic in terms of geographic concentrations, commodity composition, benchmark comparisons with other ports, modal competition, market imbalances, and other market development opportunities such as spot-barging and catchment area traffic from the Pittsburgh hinterlands. The results of this analysis shaped the Phase II fieldwork, which will be presented in Section 4.

The major conclusions of Phase I was that Pittsburgh barging does well in its primary markets, there is not much low hanging fruit in consequence, and new business prospects are complex ones. In general, water transport dominates water lanes, although there were a few prospects for business conversion now moving by rail and truck, and there were certain prospects for backhaul. The larger opportunities were also the most challenging opportunities, involving longer drays into the service area, or extended dray operations utilizing Pittsburgh as a transload hub.

3.1 Pittsburgh Market Overview

The purpose of this section is to provide an overview of the Pittsburgh freight transportation market, focusing particularly on the current position of the inland water

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[1] Data resources are described further in Section 7.

mode in that market, and the extent of the mode's opportunities. Various analyses conducted in the study's initial phase are summarized and highlighted here; more details on trends and profiles be found in Appendix A – Pittsburgh Market Assessment. Analysis methodology appears in Appendix B.

According to quantifications from the TRANSEARCH database, a total of 249 million tons were carried in to, out of, and within the Pittsburgh Port District in 2001; and 22% of tonnage involved a water movement. The goods had a total value of $133 billion, 7% ($9 billion) of which was carried by water.

Water is a strong contender in lanes where it is active – 68% of all available traffic by tonnage is carried by water in water lanes. In this analysis, 'water lanes' is defined as any market with waterborne volume in the base year of 2001. This definition includes some markets that may be too circuitous for general development, although water is effective for some classes of goods traveling such routes; indeed, there is substantial movement by barge of waste and scrap between Pittsburgh and the East Coast using an out-of-the-way routing via the Gulf. Thirty-three percent of total Pittsburgh market freight tonnage occurs in water lanes – reflecting in part the constraint of the Mississippi River System franchise and its ocean connections.

The top water commodities were: Coal (66%), Sand and Gravel, Waste and Scrap – consistent with the relative low valuation of goods compared to the tonnage. The top water markets by tonnage were: movements within the Port District; movement to/from the West Virginia portion of the Pittsburgh business economic area (BEA, see 3.1.1); and movements to/from Charleston and Wheeling market areas in West Virginia. In terms of tonnage, it is clearly evident that the Port of Pittsburgh is dominated by coal traffic from the Western Appalachians.

3.1.1 Geographical Definitions

The ports in the Pittsburgh Port District are marketed under an umbrella organization known as the Port of Pittsburgh Commission. The Port District (hereafter the "service area") covers water activity in the following eleven counties in Pennsylvania: Allegheny, Armstrong, Beaver, Butler, Clarion, Fayette, Greene, Indiana, Lawrence, Washington, Westmoreland (See Figure 1).

Ten out of the eleven counties (excluding Clarion) also form the Pennsylvania portion of the Bureau of Economic Analysis's Business Economic Areas (BEA). The Pittsburgh BEA represents the counties adjacent or close to Pittsburgh which are culturally and

economically connected with Pittsburgh. In addition to the Pennsylvania portion, the BEA also includes a West Virginia portion, consisting of the following nine counties in West Virginia: Barbour, Doddridge, Harrison, Lewis, Marion, Monongalia, Preston, Taylor, and Upshur. For the purpose of this analysis, this nine-county market area is shown as "Pittsburgh, WV", to distinguish it from the service area of "Pittsburgh, PA."

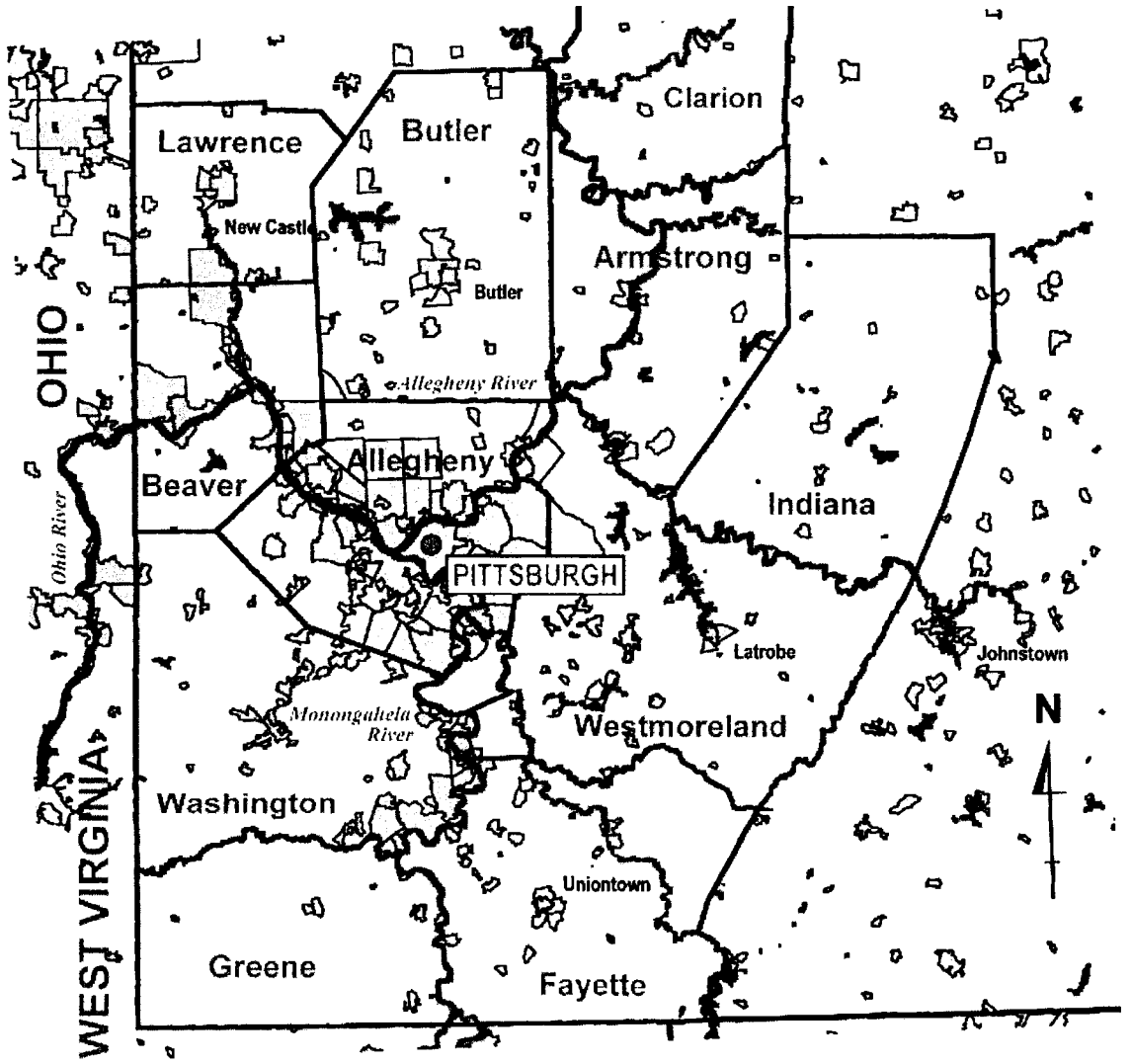


Figure 1: The Port of Pittsburgh –Three Rivers Service Area, in Southwestern Pennsylvania

3.1.2 *Analysis of Traffic Data*

Analysis of TRANSEARCH traffic data demonstrates that the Pittsburgh Port Commission service area (refer to 3.1.1) has approximately equal inbound and outbound volumes measured as total tonnage, as Figure 2 depicts. However, because of different commodity values inbound and outbound, the tonnages are not distributed equally amongst the different modes, leading to modal imbalances. In terms of water traffic, the inbound volume is two-thirds higher than the outbound. Barges also carry a significant portion of the intra-market freight, which is composed of coal and other bulk and non-bulk commodities moving for short distances within the service area.

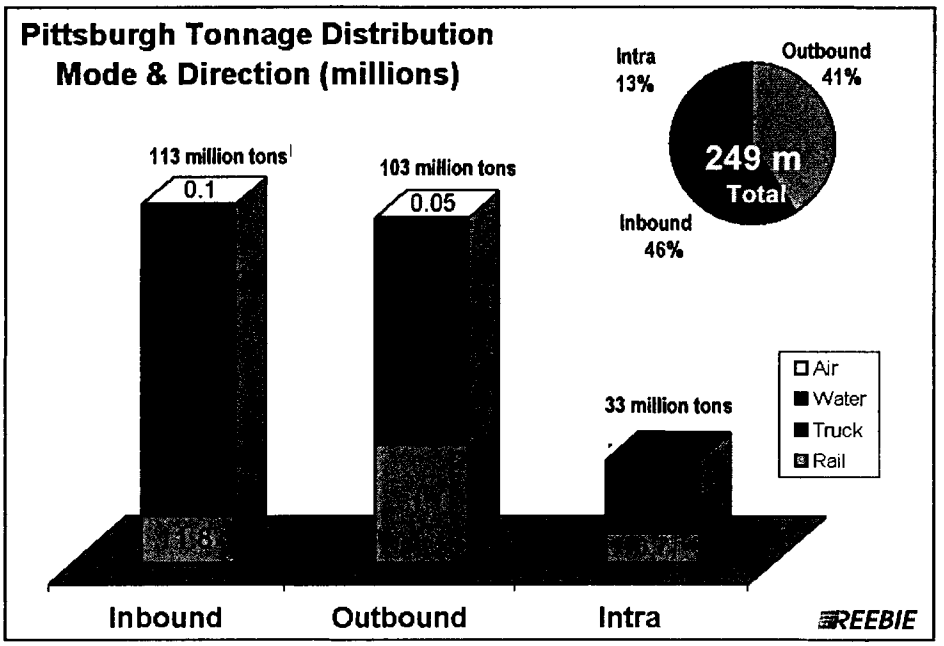


Figure 2: Pittsburgh Tonnage Distribution, by Mode & Direction

The New York metro market is the top source of Pittsburgh inbound freight by tonnage, as New York is an economic center of national importance and host to several international deepwater ports. In close second place are inbound goods from Charleston, WV – dominated by coal, a logical market for the Port of Pittsburgh. Regional and east coast markets also figure prominently for outbound freight; Cleveland and New York are major off-river points, and West Virginia markets are large on-river. The geographic

distribution of freight traffic for water markets linked to the service area manifests the natural constraint of the water mode in its Mississippi River System franchise, which is best positioned to serve a northeast – Gulf Coast and southwest market. Within that franchise, waterborne freight accounts for the majority of tonnage, although truck and rail modes certainly are active, especially in lanes that lie away from the core of the river routes. In sum, water dominates lanes where convenient river access is available: Charleston, Wheeling, New Orleans, Louisville; trucks dominate in most other markets.

In 2001, water carried 55 million tons in the Pittsburgh market. Coal is the chief commodity in this profile, accounting for 74% of the top five commodity groups. Barge mode share is good in coal and excellent in waste/scrap and non-metallic minerals, but is not nearly as dominating in the smaller and higher-value commodities: petroleum products and chemicals. Some commodity shipments are more concentrated in certain geographic origin-destination pairs than others; the transportation of certain ones represents a gathering network where product from many origins is funneled into a central collection point for processing.

3.1.3 Geographic Origins and Destinations by Mode

As already discussed, the geographic distribution of inbound freight traffic from water markets to the service area (Figure 3) demonstrates the natural constraint of the water mode in its Mississippi River System franchise. Within the franchise, waterborne freight dominates, although truck and rail are active, especially in lanes that lie away from the core of the river routes. For example, while there is significant amount of Pittsburgh-Philadelphia traffic moving by water via New Orleans and the Florida Peninsula, the more direct highway route from the Middle Atlantic markets displays heavy truck volume.

The map also demonstrates that railroads have traditionally thrived in an East-West traffic direction, with the Upper Mississippi River originating much less Pittsburgh traffic than the Lower Mississippi River.

The Pittsburgh Outbound Traffic (Figure 4) similarly shows the constraint of the Mississippi River System, and the effect of the core river routes. In the Pittsburgh water markets as a whole, barging captures a commanding 68% of the total 81 million tons of freight, followed by rail at 17% and truck at 16%.

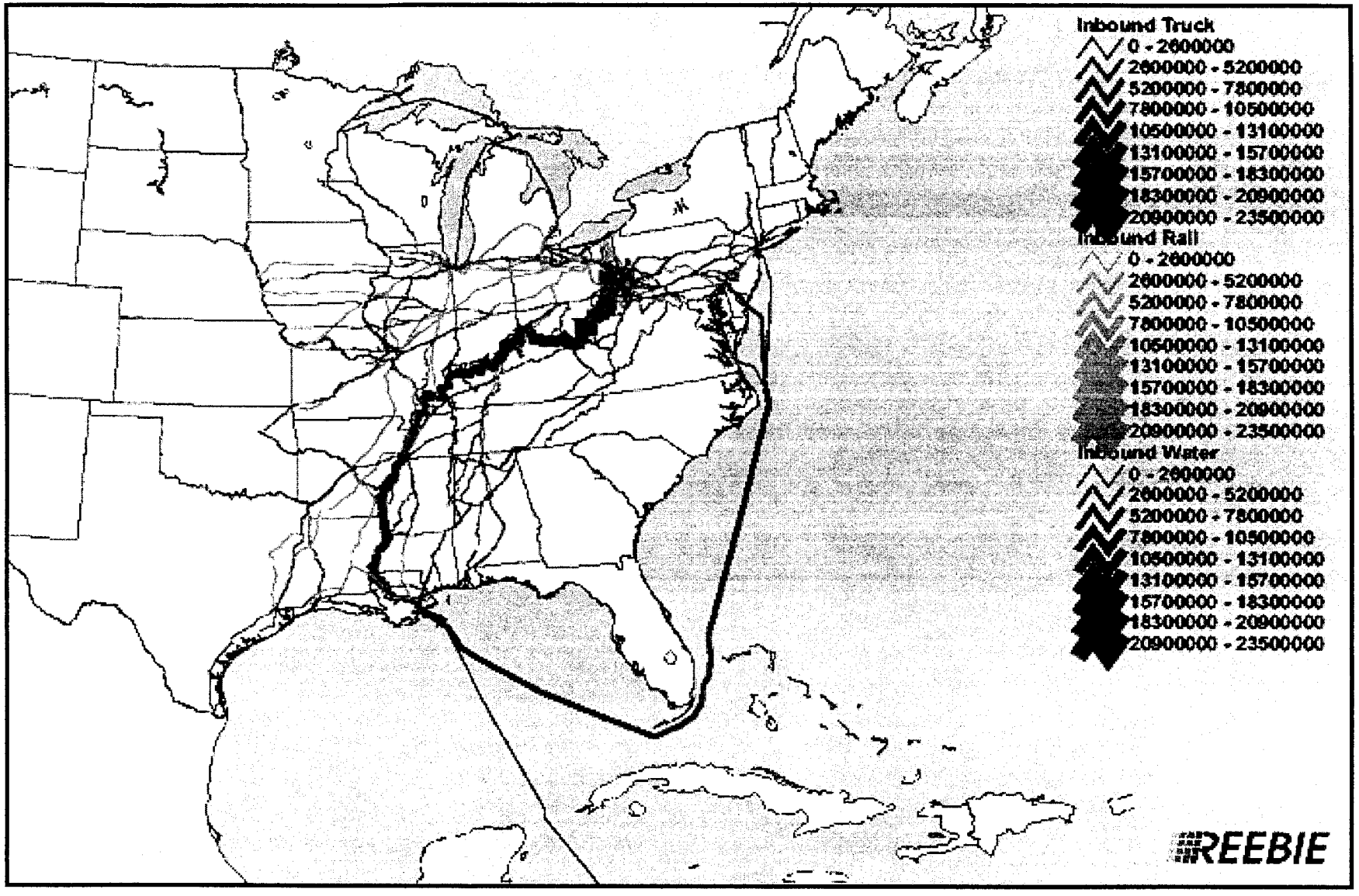


Figure 3: Pittsburgh Inbound Traffic from Water Markets, by Mode & Geography

June 28, 2004

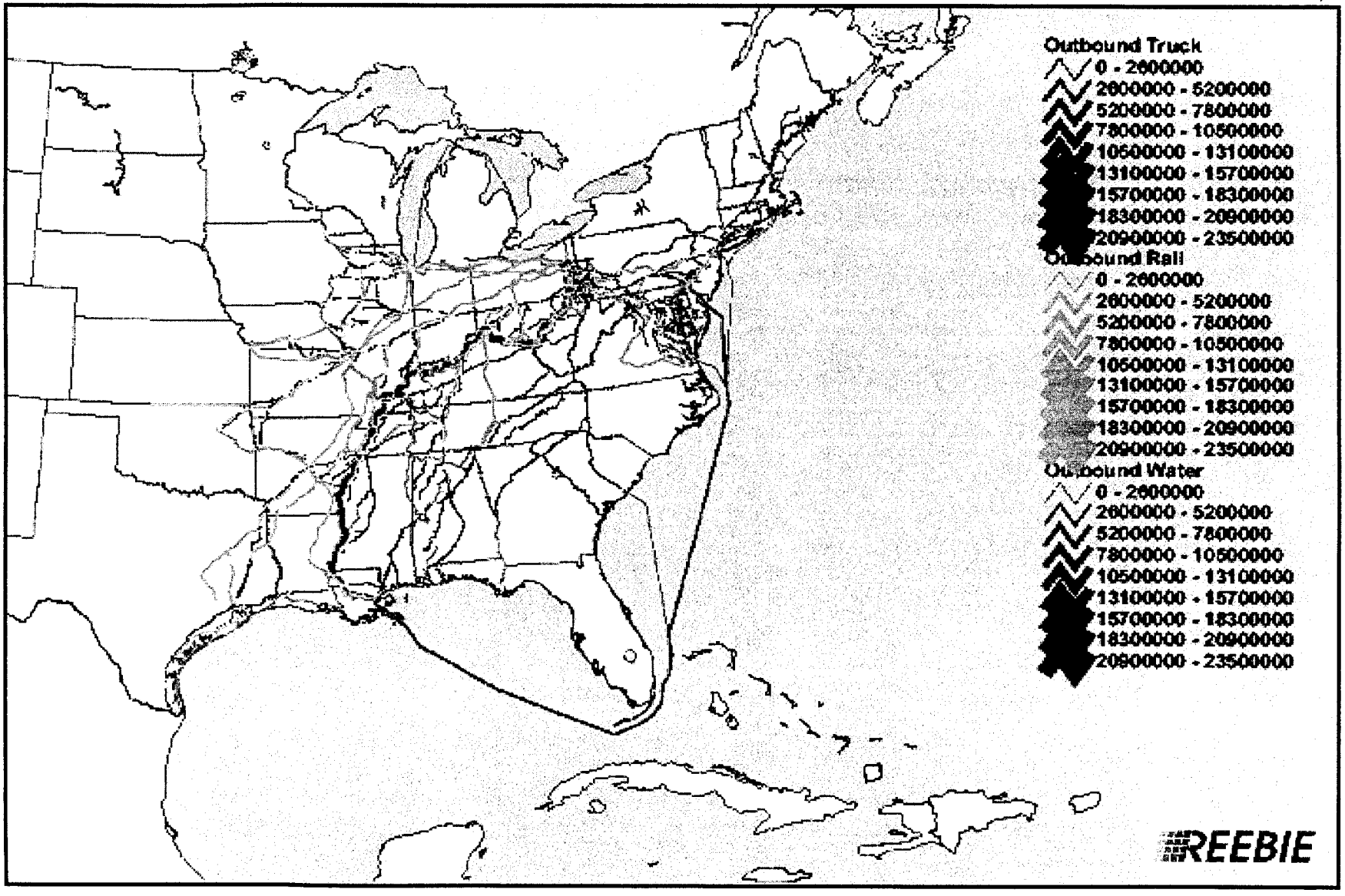

Outbound Truck
0 - 2600000
2600000 - 5200000
5200000 - 7800000
7800000 - 10500000
10500000 - 13100000
13100000 - 15700000
15700000 - 18300000
18300000 - 20900000
20900000 - 23500000
Outbound Rail
0 - 2600000
2600000 - 5200000
5200000 - 7800000
7800000 - 10500000
10500000 - 13100000
13100000 - 15700000
15700000 - 18300000
18300000 - 20900000
20900000 - 23500000
Outbound Water
0 - 2600000
2600000 - 5200000
5200000 - 7800000
7800000 - 10500000
10500000 - 13100000
13100000 - 15700000
15700000 - 18300000
18300000 - 20900000
20900000 - 23500000
REEBIE

Figure 4: Pittsburgh Outbound Traffic from Water Markets, by Mode & Geography

3.1.4 Pittsburgh Market & Modal Benchmark Comparisons

By comparison to national waterborne traffic and to activity at other ports, the Pittsburgh Port has maintained a vigorous market for waterway transportation. The commodity composition of its traffic is appropriate to its economy and did not indicate under-participation in areas where water should be active. It ranks very favorably against other ports on the water system, again allowing for differences in economic base, and does better than some for carriage of local traffic.

Modal benchmarking also revealed favorable results, but consequently limited opportunities. Analysis identified the chief commodities moving by rail and truck in water-served lanes, and compared the traffic captured by barge to that by other modes. Evaluation of Coal traffic demonstrated that water dominates both rail and truck, in both inbound and outbound directions in Pittsburgh. All other commodities combined, whose tonnage total is not as large as Coal, show water as being strong in most bulk commodities with significant volume. Any increase in barge revenue thus is likely to be incremental, from capturing the small remaining part of bulk flow.

Assessment of the modal length of haul profile revealed that Pittsburgh water is equally strong in all strata except the over-1,500 mile category, where the efficient limits of the waterway system are reached. For certain commodities where volume seemed attractive and water under-represented, a closer examination revealed that origins or destinations were well off-water, and lengths-of-haul too short to justify transloading and dray operations. Certain others ultimately explored in Phase II interviews with shippers proved to be high value goods, shipped in consignments too small for barge movement.

The conclusions from this effort confirmed that there were no immediately obvious large or highly leveraged opportunities, as market saturation has already been achieved with water dominating most water lanes. Marketing then would have to consider the consolidation of smaller commodity volumes – or more usefully, ways to penetrate an extended geographical market. For Phase II development from a modal perspective, the chief focus was directed toward traffic currently handled by rail, on the grounds that its volume concentrations and service requirements are closer to what a barge can accommodate – and to the extent that rail also engages in transload during pickup or delivery, it neutralizes a disadvantage to barge transportation. The fragmented volumes, and the far faster, door-to-door service characteristic of traffic moved by truck meant that this was regarded as a secondary prospect, and was considered mainly for shippers or lanes that also had rail activity.

3.1.5 *Market Imbalance*

Market balances are of particular marketing importance because, while barges are cost-competitive on a head-haul, equivalent empty-return basis with rail and other modes, they can be exceptionally effective against competition if even a partial back-haul can be found. When the head-haul is fully compensatory, back-hauls can allow for an extended drayage range and smaller shipment quantities than otherwise possible. Backhauls, however, are not always possible, since freight in opposing directions may require different equipment types due to the commodities carried – and commodity incompatibility may compel barge cleaning between runs, consuming asset time.

The low incremental costs of the backhaul operation thus can become a significant competitive factor in some cases, and the Pittsburgh water traffic is marked by a significant inbound imbalance. Figure 5 shows the waterborne balance profile in terms of tonnage differential and implied empty movements, and demonstrates that the greatest empty volumes are incurred by the coal shipments from Charleston, West Virginia, but the most significant empty miles are incurred by chemical shipments from Louisiana. Because of the long distance involved, Louisiana can offer attractive opportunities for full or partial backhaul, provided equipment types are suitable.

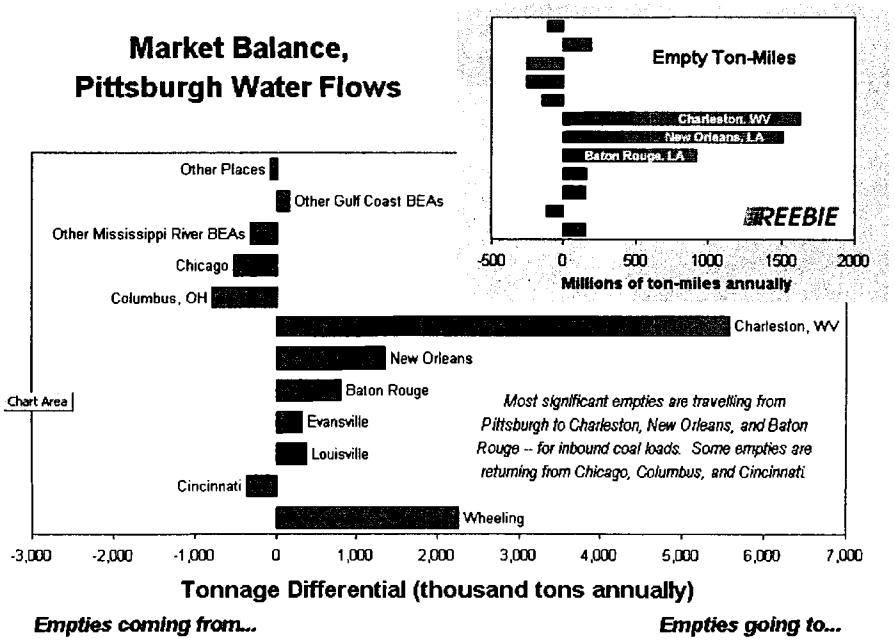


Figure 5: Pittsburgh Barge Imbalances, Implied Empty Movements

For business development purposes, balance analysis was applied in two ways. First, certain commodity prospects in backhaul lanes were identified for Phase II evaluation. Second, and of more systematic significance, backhaul economics as an offset to water access (drayage and transloading) costs have a role in a number of the niche opportunities developed in Phase II, strengthening those opportunities where equipment balance can be brought effectively into play.

3.2 Market Development Opportunities

There are ways to grow the traffic at the port other than head-to-head competition for concentrated local volume. Two strategies are: (1) to enter the "spot" transportation market, where consolidation of fragmented commodity volumes results in loads sufficiently large to operate barge service; and (2) to extend the effective range of the port by providing drayage between Pittsburgh and other markets. Both were evaluated in the initial phase of this study.

There are three different types of dray possible: (a) Pittsburgh toward non-water lanes, where barge service is not active today; (b) Pittsburgh toward its catchment area or 'hinterlands'; and (c) Very long or "extended" drays routed via Pittsburgh. Pittsburgh non-water lanes involve a dray from an inland location to a port on the Mississippi River System, and the load is then barged to Pittsburgh. The Pittsburgh hinterland comprises of the four BEAs adjacent to Pittsburgh, which cannot be served from the Mississippi River System directly (Cleveland, Ohio; Erie, Penn.; Buffalo, N.Y.; State College, Penn.; and the West Virginia portion of the Pittsburgh BEA). Hinterlands will be served by transload to regional truck or rail moves. The Extended Drays aim to capture long-distance ground traffic that parallels the Mississippi River System, coming within 100 highway miles of Pittsburgh en-route to or from northeastern markets. Instead of being railed or trucked all the way, barges could conceivably replace the long-haul ground section as far as the terminus of the waterway system at Pittsburgh, where products then would be offloaded and drayed to or from their ultimate markets.

The analysis suggests that a few opportunities may exist in Pittsburgh non-water lanes, detailed below. As for consolidation, the main volume is in the wrong direction; most fragmented freight flows northward, which is the head-haul direction for Pittsburgh and makes new business development less attractive and unlikely. The main opportunities are the more challenging ones: regional drays for the Upper Mississippi markets, and especially Gulf Coast traffic now moving by rail or truck to the Middle Atlantic markets.

3.2.1 Pittsburgh Spot Market

As shown in Figure 6, the Pittsburgh spot market for low-volume commodities is not only small (combined total of about 1 million tons per year), it is also in the wrong direction, the predominant traffic being northbound. In addition, it is comprised of more than 30 discrete commodities, the management of which is bound to be a challenge. (The size of the pie in the chart is approximately proportional to the amount of traffic available.) Without backhaul economics, the transfer and delay costs associated with barge make this market an improbable prospect.

3.2.2 Pittsburgh Non-Water Lanes

As demonstrated in Figure 7, Pittsburgh non-water lanes offer limited volumes and circuitous routing (via New Orleans to Jacksonville, via Minneapolis and extended dray from Casper, WY). However, certain bulk movements may be developable, and were investigated in the second phase of research.

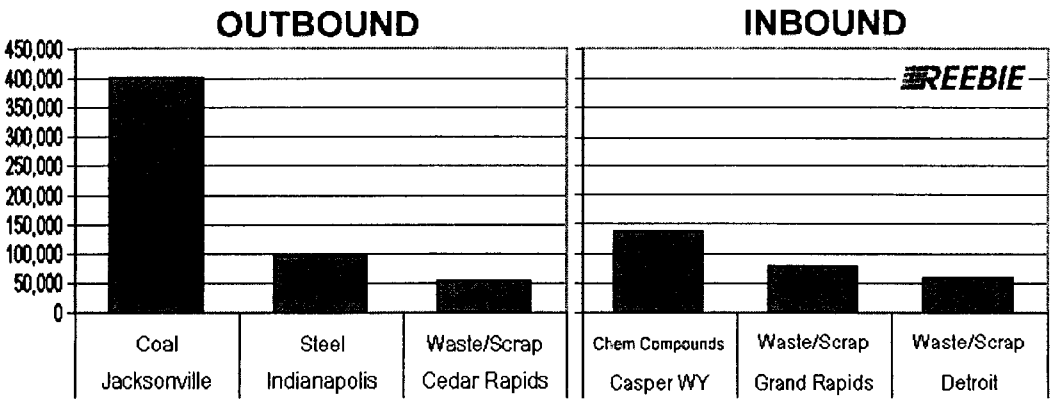


Figure 7: Pittsburgh Non-Water Lanes with >50,000 Annual Tonnages

Consolidation: Spot Bargeable Pittsburgh Non-Bulk Commodities Market Potential Distribution

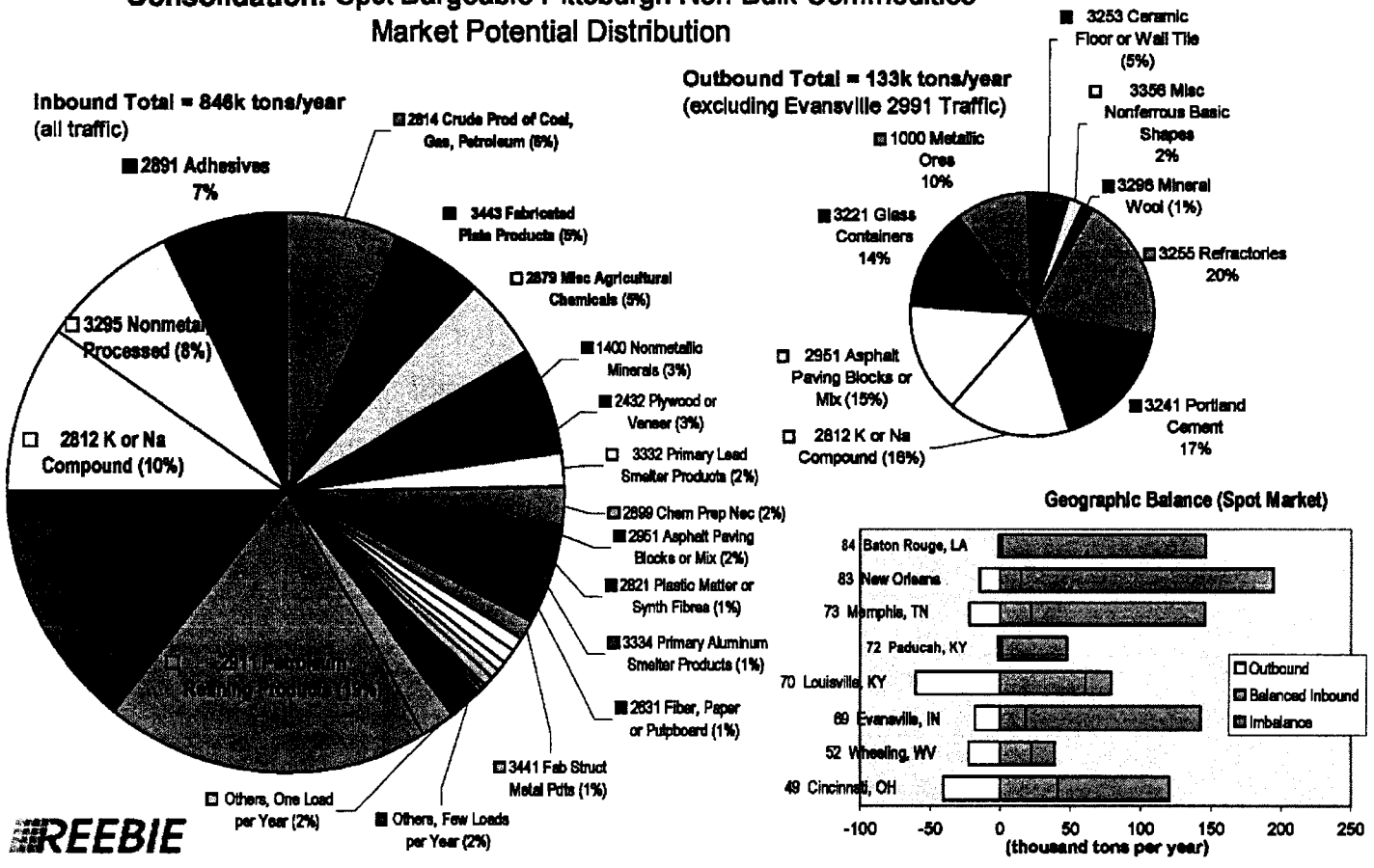


Figure 6: Pittsburgh Non-Bulk Commodities, Market Potential Distribution

3.2.3 *Pittsburgh Catchment Area*

Most of the traffic moving to or from the Pittsburgh Catchment Area travels by truck, with more than half the inbound originating from the Lower Mississippi River (see Figure 8a). A variety of commodities is carried; the largest inbound volumes are Petroleum Products, Metal Products and Chemicals (See Figure 8b). The water system carries such goods today, so some of them potentially are transload opportunities for barge service.

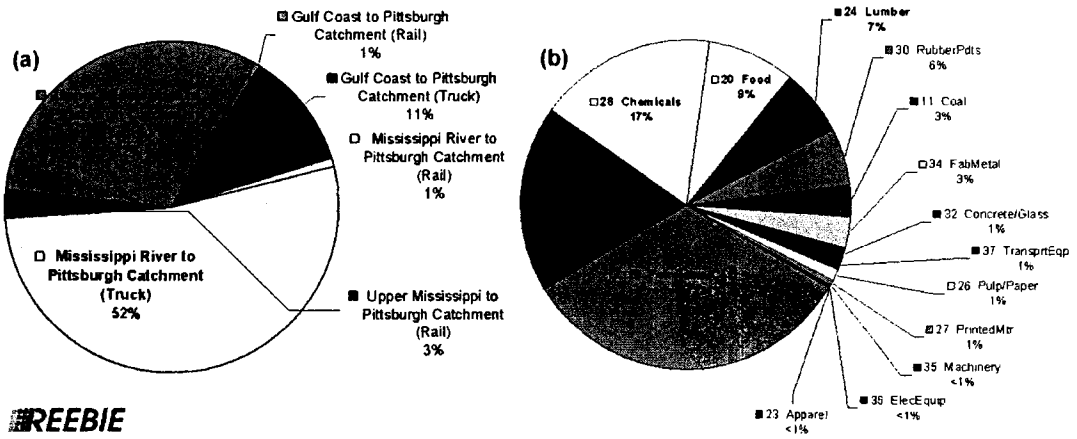


Figure 8: Pittsburgh Catchment Area Freight Characteristics

As shown in other analyses, trucks dominate most of this traffic, but there is rail volume in both directions, most notably on the inbound side. Figure 9 is a map showing the northbound rail flows, with volumes for selected commodities from selected origins. In Phase II development, traffic options were explored and prospects identified northbound and south; while the former involved more traffic, the latter introduced a waterborne backhaul that might offset the cost of hinterland handling and drayage.

3.2.4 *Extended Dray Markets (Forward Distribution)*

Extended drayage, executed logistically as forward distribution, is a way for barges to divert long distance traffic by carrying some of it over water to Pittsburgh, where it is landed, perhaps stored, and then trucked to the final destination in the Middle Atlantic region. The criterion used to qualify traffic for opportunity analysis was that the shortest highway route from origin to destination must pass within 100 miles of the Port of

Pittsburgh, and that the origin must have water access. This screening method produced a list of flows that could potentially be diverted to water with a single transload at Pittsburgh. This operation could result in traffic that is price-competitive with rail carload, and somewhat time-competitive as well.

To assess if the traffic is viable, mileage-based modal average cost factors extracted from Reebie's COSTLINE product were applied to both the incumbent (highway or rail) and the challenger (barge-dray) routings. This further screening technique gave rise to a list of eligible flows that quantified the size of the market. Figure 10 displays the qualifying traffic that is handled today by rail. In Phase II, interviews were held to locate this traffic, and competitive analyses were conducted to determine feasibility for barge transport.

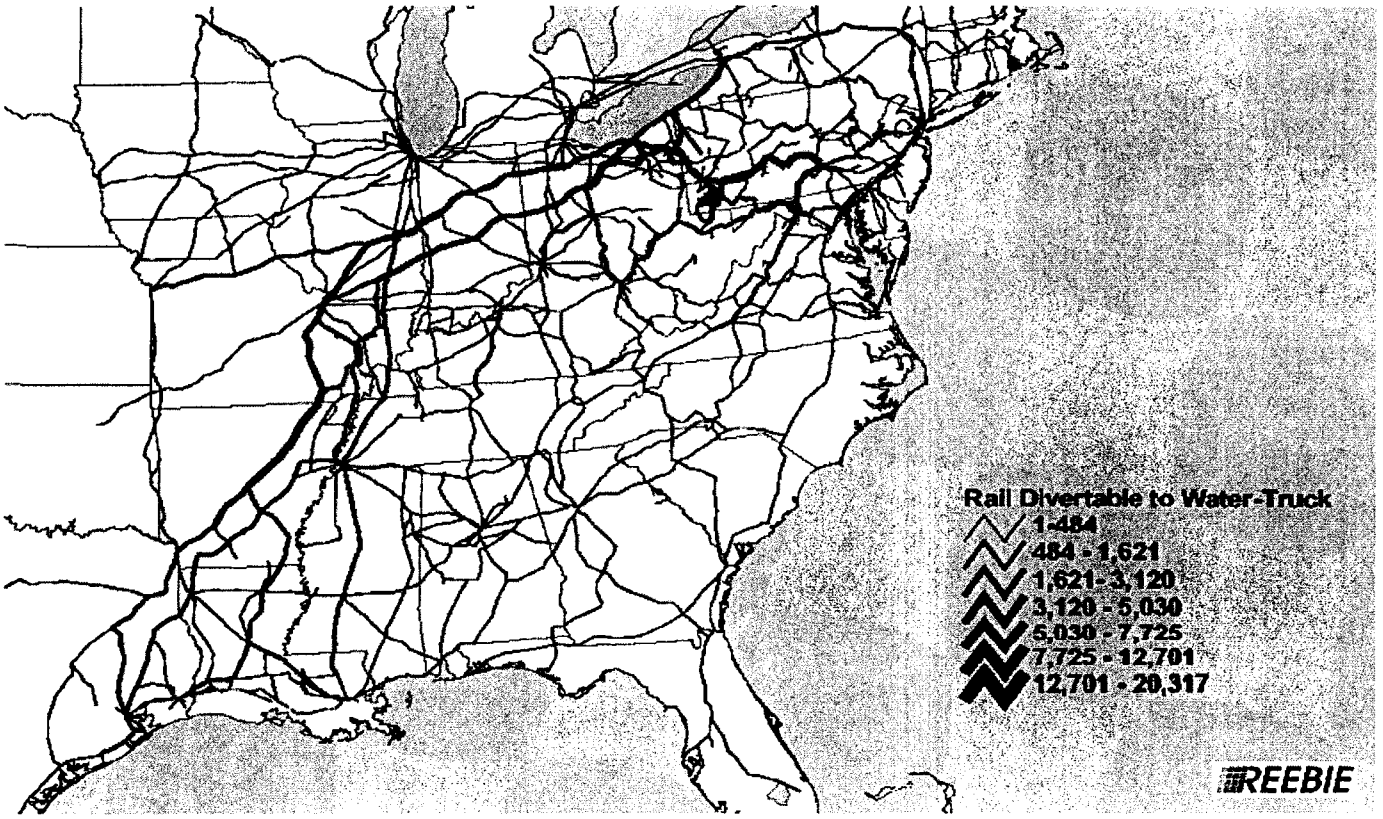


Figure 10: Potential Rail Market Opportunities for Extended Dray

In that phase, a number of opportunities were found for forward distribution, including: certain chemicals from the Gulf coast; bulk commodities subject to geographic sourcing; and new market access. These will be discussed further in the subsequent section.

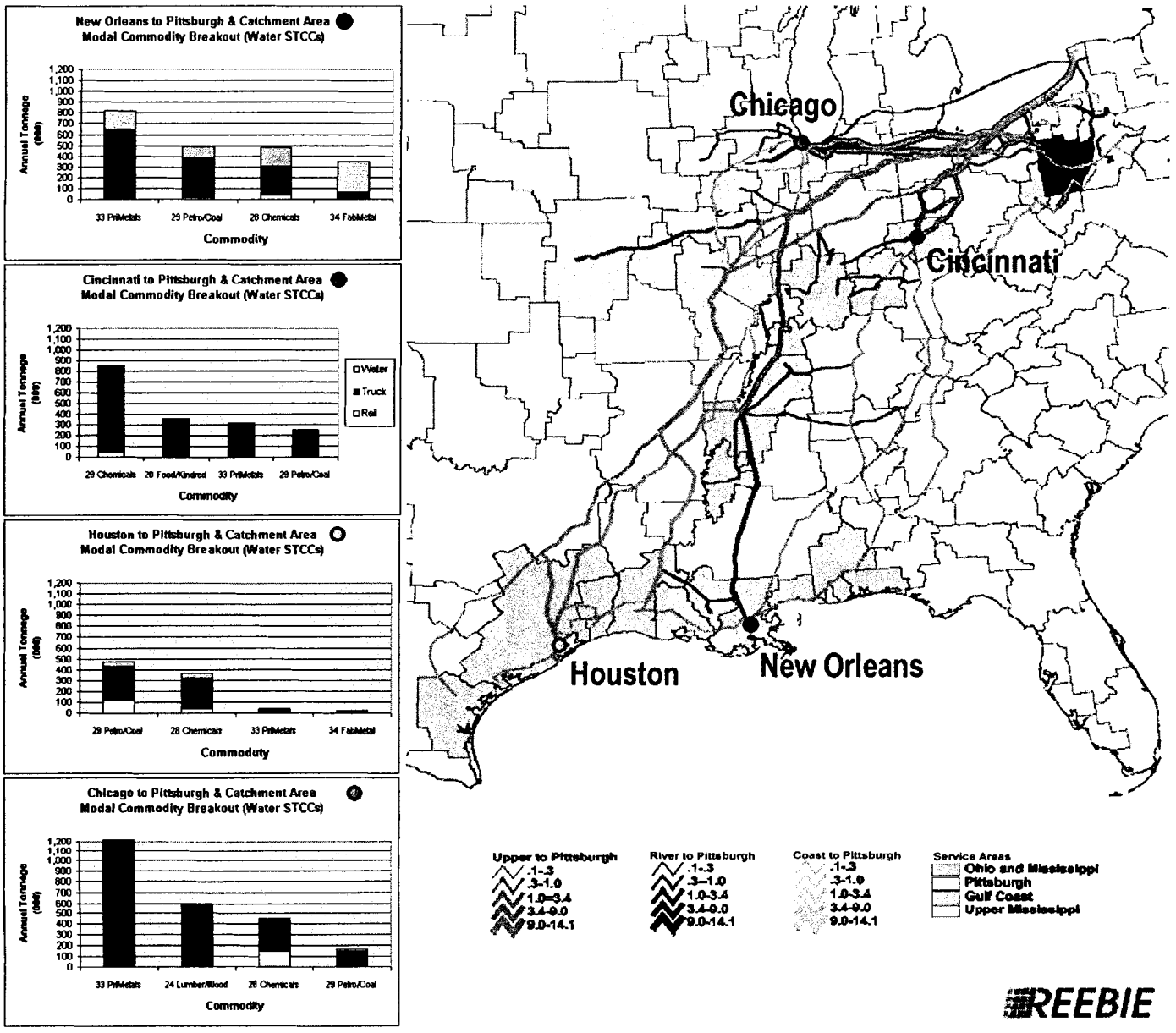


Figure 9: Inbound Rail Commodity Flows to Pittsburgh Catchment Area

3.3 Summary of Phase I (Quantitative Analysis)

In assessing freight market data for the Pittsburgh Port Commission, the research team found that the development effort by the Port and its constituents has been quite successful in traditional markets. Logical water markets both out of and into Pittsburgh are dominated by water, and Pittsburgh is very strong in comparison to its peers. Nevertheless, as the U.S. and the regional economies shift toward new sectors, the Port is seeking ways to participate in a business environment that is less oriented to the waterway. Comparative modal analysis suggests that traffic from the extended area around Pittsburgh is available, and some diversion from direct rail or direct truck to a truck-barge or rail-barge combination would be likely.

Pittsburgh lies at a terminus of the Mississippi River System and represents a port that can serve consuming markets in the northeastern US. For this reason, it is difficult to balance the flows originating from Pittsburgh, as geographic end-points have fewer options than intermediate locations, and national traffic tends to flow from the industrious and productive South and Midwest to the service-oriented consuming markets of the Northeast. On the other hand, the location that gave rise to the City of Pittsburgh to begin with, also makes it a strategic staging point for traffic moving east.

The most promising markets for field exploration in Phase II were those that were located further from the water, and were not traditionally water lanes. This makes them more difficult to develop, requires a higher degree of coordination than individual barge lines or terminal operators are able to muster, and should be seen as underscoring the need for active intermediaries. Intermediation is required in logistics design and execution, and in consolidated negotiating and marketing for the region, suggesting roles that the Port should seek parties to fulfill, or in some ways may undertake or facilitate itself.

4. Phase II: Fieldwork Results

Following consultation with the Port Commission, customer interviews were employed in Phase II to uncover specific avenues for waterborne business, surveying within the range of opportunities established in the opening phase, and applying cost assessments where appropriate for support. A series of 190 interviews was conducted, focusing on the petrochemical and metals industries, bulk motor carriers, and some others. Respondents helped to define market niches and benefits, and were able to confirm a number of traffic development options, discourage others, and suggest elements that were not visible from quantitative analysis. One class of opportunity proved to offer a material volume of new business, although most were less compelling – and in keeping with the first phase finding that the low-hanging fruit had been picked, development mainly required coordination and effort.

Fieldwork was conducted in stages. A first round of interviews explored a large number of shippers identified as having eligible flows through the traffic analyses using FREIGHT LOCATER and TRANSEARCH data; a second round of interviews and site visits allowed the team to 'drill down' with a number of more promising customers who were exemplars of attractive market niches. Finally, an analysis of costs and requirements to serve this customer traffic was conducted, to assess the extent to which the service could be competitive and the traffic compensatory, and the results were reported to the Pittsburgh Port Commission for follow-on action.

The design of this study had envisaged that fieldwork would take place in Pittsburgh with local receivers and operators, to find business opportunities that had previously been underdeveloped. However, the traffic analysis made it clear that useful development opportunities lay further abroad, requiring the survey of customers operating in the catchment or Middle Atlantic markets, and serving these markets in many cases from the Gulf Coast. The Phase I research had indicated a high concentration of industrial bulk shippers in the Gulf region, with good and often direct access to the Mississippi River and Intracoastal System; as a result, the site visits in particular were directed to this region.

Waterborne business opportunities fell into a set of market niches or tactics, each of which will be discussed in the following section. For each category, a general analysis was carried out to define the magnitude of benefits to the shippers, the operators, and the Port of Pittsburgh. The categories, falling mainly into variants of forward distribution and catchment area exploitation, were as follows:

(1) Forward Distribution;

(2) Product & Plant Rationalization;

(3) Rail Backhaul Diversion;

(4) New Market Access;

(5) Rail Gateway Arbitrage;

(6) Regional Rail Diversion;

(7) Awakening/Revisiting Barge Options;

(8) Container Markets.

In cases where concrete development opportunities were found, specific cost modeling and service requirement analyses were carried out to determine feasibility. In terms of market development, Forward Distribution for certain classes of chemicals is by far the most important, while rationalization, geographic competition, and backhaul exploitation contribute to other opportunities. The development prospects hinge on service partnerships with trucking firms, and perhaps short line railroads where they combine industry and water access.

The Port Commission has received confidential strategic analyses featuring a greater level of detail than reported here; however, this section will report on the flavor of opportunities available and suggest relevant approaches for marketing.

4.1 Forward Distribution

Forward distribution is a logistics system in which plant production is transported in consolidated lots to a staging point much closer to end-markets than the point of production, and then either cross-docked or held and distributed in smaller lots to customers. This method substitutes for direct shipments from plant to customers, reducing costs and potentially improving customer service. In the context of waterborne market development, the strategic position of Pittsburgh as the location on the inland river network closest to the industrial and consuming markets of the Middle Atlantic and Northeastern states, acts as a catalyst to this form of distribution. Barge-truck combinations substitute for direct shipments from water-served industrial centers, utilizing the low-cost volume capabilities of barge transportation and the service capabilities of trucking on the well-developed highway routes between Pittsburgh and the east.

The concept also broadly applies to logistics chains that may involve intermediate processing or stockpiling – for example, instead of shipping finished product from a

remote plant, an intermediate product with lower value is shipped via barge to a staging area or a processing facility near Pittsburgh, where it is assembled or further manufactured, and then trucked to a final destination. This can also apply to geographic sourcing, where a high-capacity plant in Pittsburgh can replace smaller plants elsewhere in the country, by supplying local needs with regular inbound barge loads to a distribution center; this takes advantage of low transportation costs since the Pittsburgh plant can send goods downriver in backhaul capacity, and it greatly reduces the cost of production.

4.1.1 Petrochemicals from the Gulf

The largest new market opportunity uncovered in this study exploits Forward Distribution for certain types of petrochemicals currently moving by rail from the Gulf coast to Mid-Atlantic markets, by substituting service by barge via Pittsburgh. Barge is competitive with direct rail on a cost basis, and has an advantage when rail is transloaded for delivery. Some commodity types are better suited to productive truck utilization, and allow efficient drayage for a long enough distance from the staging point at Pittsburgh to reach the Middle Atlantic. The interline rail service to these markets from most Gulf origins can be inconsistent, allowing barge transportation to be a closer competitor to rail in performance quality. The potential market for this service, mapped out and supplied privately to the Port Commission, is a very material volume.

Some customers interviewed are already engaged in this type of process; others are interested in this concept. The storage and transloading arrangements would have to be worked out to demonstrate the concept, and participation of trucking partners is very important to the success of this type of scheme. Because complex coordination between plants, staging facilities, barge lines, and motor carriers is required for implementation, a logistics specialist working for one of the benefiting parties may be the most practical agent to begin development of this market. Examples of appropriate agents have been given to the Commission.

4.1.2 Product and Plant Rationalization

Low cost barging into truck-served storage at Pittsburgh allows production to be consolidated at a water-served plant, either freeing up plants for different production, or permitting plants to be dropped entirely. Distribution centers, or simply direct-to-customer shipping replaces the plant. This form of opportunity works well for commodity types produced at multiple factories, where transportation is a significant component of delivered cost. The service area from Pittsburgh could be regional, or larger via forward distribution. The cost savings from rationalization of product lines and

of plants in particular, can be large enough to diminish the importance of other economic factors. The key requirement in that case is that logistics performance be reliable, in capacity, transport, and staging.

The key parties for production decisions will not be located in transportation departments, nor will the opportunities necessarily be evident to those groups. This poses a pragmatic challenge for market development, and again a logistics intermediary may be more effective at preparing the argument and reaching the right audience than a carrier or the Commission can be. Ultimately, the determination as to whether this arrangement works lies with the customer, and the requirements for execution extend well beyond transportation into facilities contracting, acquisition or construction; production planning and materials management; and product marketing by the shipper.

Rationalization should be a standard part of Pittsburgh marketing to appropriate clientele, because it can overwhelm other arguments to sway the business to water. While it is a two edged sword that competing ports may use against one another, Pittsburgh has the advantage of significant backhaul capacity to offer to plants, and is not exposed to river competitors on its eastern side. This can make it the preferred location for the plant to be retained, all other factors being equal. Use of the strategy was encountered in interviews among large bulk shippers; others brought up the possibility as an infrequent but important option.

4.1.3 Geographic Competition

Low cost barging into truck-served storage at Pittsburgh allows a business or plant to compete in a geographic market for which it otherwise is not viable. This is an effective waterborne niche for goods where transportation is a significant component of delivered cost. Geography is a well-recognized competitive factor in bulk industries; during fieldwork, some forms of chemical manufacturing emerged as specific candidates in the Pittsburgh market. Some of the key development issues are shown below, and indicate how coordination with facility operators and motor carriers can support implementation. The role the Port Commission may play in this is considered in Section 5 – Directions for Development.

- Direct water access on at least one end of the transportation lane, because of the cost effect from drayage;
- Appropriate storage facilities where product can be accumulated and staged – these might be shared use, so as to improve facility utilization and hold down costs, and in some cases special commodity handling may be required;

- Truck delivery rates, because of the necessity of low delivered cost as a requirement for market entry.

4.2 Pittsburgh Catchment Area Penetration

Catchment area penetration is a way for barges to divert freight traffic located off the water at some distance from Pittsburgh, but within its region and requiring only a moderate dray. The tactic is to utilize some form of economic advantage to offset the costs of off-water drayage and transloading, with backhauling being the most obvious type. This means that outbound goods shipped to the west and southwest, where barges can backhaul them down the Ohio and potentially down the Mississippi, are most of interest. The target typically is freight currently handled by rail, because of the better probability of barge offering competitive service performance, especially where rail relies on less-consistent interline operations. Since the market lies outside the normal range of Pittsburgh water service, there are apt to be undeveloped prospects to tap. Three variations of catchment area penetration were explored in Phase II research: straight backhauls, regional rail opportunities, and gateway arbitrage.

4.2.1 Rail Backhaul Diversion

The niche is to substitute backhaul barge/truck combination for direct rail or transloaded rail into Gulf markets. The opportunity arises because of the low cost of barge backhaul economics, accentuated by distance, and facilitated by the weaker rail interline carload service. The reduced linehaul cost is essential to offset the added expense of draying to the river at Pittsburgh and transferring to barge, and the prospect is far stronger when the Gulf consignee is on or close to water – which is not uncommon, however. For customers with sufficient volume to consolidate to barge-load lots, the railroad's difficulty in keeping car lots together during interline transport can be an added advantage for water. Attractive but not substantial new business volumes were uncovered during fieldwork, and were shared with the Commission. Barge lines generally are capable of acting on such prospects with the normal coordination requirements of their business, although the Commission may be useful particularly in common negotiation for the conditions and rates for truck drayage, over the longer distance from the Port.

Development issues included:

- Barge pricing for moderate load volumes, so that the advantage of excess (backhaul) capacity is put into play;

- Turn-around times (the load-to-load cycle) for drayage trucks, because daily utilization has a decisive effect on truck pricing. The Port can assist on the northern end by stressing the importance of fast processing to terminal operators, perhaps helping them benchmark best practices, and to the regional MPO, where street access may be an issue. Facilitation of financing for transload equipment also may be explored;

- Transfer facilities, which must be available and of adequate capacity, and have good proximity to customers on at least the delivery end.

4.2.2 Regional Rail Diversion

The niche is to exploit the relative economies of a barge transload via Pittsburgh versus a direct interline rail service or transloaded rail service from the Pittsburgh Catchment Area. Any transloaded rail is more susceptible, but in some markets direct rail traffic is also available. This is generally an extension of the traditional barge market, thus opportunities hinge on transfer and pickup and delivery costs, and in some cases on volume economics. Prospects in this niche unsurprisingly are few, but the Phase II research indicated one opportunity of magnitude that has been shared with the Commission. The role of the Port is the fairly traditional one of support and coordination, to bring effective waterborne bids to the business.

4.2.3 Rail Gateway Arbitrage

The niche is to substitute barge to a western railroad at a Mississippi gateway, for direct rail in interline service heading to the Pacific Coast. The westbound movement from Pittsburgh again is a backhaul by water, and again the rail interline carload service traditionally is inconsistent. More uniquely, the network structure of Class I railroads is divided between eastern and western systems more or less at the line of the Mississippi River, and there is a relatively short distance for eastern roads to travel from the Pittsburgh market to the interline gateway. Because railways are more cost-effective carriers at longer distances, this means that the leg of the journey west of the Mississippi gateway is relatively efficient, and the eastern leg is relatively inefficient. This is a classic condition for arbitrage, where inefficiencies are turned to advantage.

The target of arbitrage is the comparatively high rail cost on the eastern leg of the shipment, for which barge may be able to substitute. It is important for the barge to do this without harm to the revenues of western railroads, by whom delivery in the west must be accomplished (trucks being too expensive an option), and thus they must be willing parties. In order to preserve the length of haul – and thus the revenue, and interest – of western railroads, barge-to-rail transfer at St. Louis is preferable to other river points.

There is ample precedent for this arbitrage tactic: railroads dray into one another's territories frequently, and customers make use of revenue differentials in rate negotiations. However, the current bulk volume opportunity for water at Pittsburgh is minor. One catchment area customer candidate uncovered in fieldwork did not welcome the extra handling of barge transfer, and the added cost to stage through Pittsburgh proved too high, although a customer closer to water (or reduced drayage and handling costs) might improve the prospects. Factors beyond these that matter to development include:

- The total length of haul for the shipment, so there is sufficient revenue opportunity on the western leg – this implies that Pacific Coast markets offer better possibilities;

- Service must be acceptable, and railcar lots consolidated into barges must be capable of being parceled back into carload shipments for final delivery, without risk to order integrity.

Direct-to-rail transfer at the western gateway also is important for cost reduction; this is available for rail carload service, but not for containers. In an assessment of arbitrage opportunities for container traffic conducted for the Port and supplied confidentially, the cost to connect at the gateway from water to rail proved a sensitive component of the overall economics. Interest in container-on-barge at Mississippi ports, and support of local MPO authorities desiring alternative freight capacity, could lead to lower costs through water-convenient rail access, provided that the rail feed into the intermodal train network is effective. Contact by the Pittsburgh Port Commission with a party such as the East-West Gateway Coordinating Council (the St. Louis MPO) could add support to any initiatives that may be contemplated.

4.3 Awakening or Revisiting the Barge Option

During fieldwork, the team talked to some clients who were not considering barge when the economic case for barge transport could be compelling. This may be due to historical reasons ("we've never used barge"), or due to unfamiliarity with the mode, inexperienced

traffic managers, or a combination of the above. Barge may be an effective option for customers who have not otherwise considered it.

This is especially true in less-obvious applications, or among non-barge users. There may be a great deal of institutional resistance, functional stovepiping, and habits that keep barge from being considered for traffic bids. Unfortunately, customers who use some barge are more susceptible than those who use none. There is even greater risk here of barge becoming a tool to drive down rates without actually getting business. Many normal concerns such as access, lot sizes, rates, would also need to be resolved, when signing on a new customer alien to barge. As a traffic opportunity for the Port, this is a tactic or a rule for doing business, and not a market niche; however, it is clear that customer awareness is a true issue, and one that is susceptible to marketing communications programs and alert sales work.

4.4 Container-on-Barge Market Analysis

Reflecting rising passenger and commercial vehicle traffic, congestion on U.S. highways is steadily climbing, with the effect that the capacity of infrastructure is strained, supply chain logistics performance is compromised, and vehicle emissions (especially freight diesel emissions) are reducing air quality. Due to the projected growth in freight traffic by both highway and rail, there has been renewed emphasis on the movement of general cargo, particularly containerized cargo, by barge and short sea shipping operations. In the past, the container-on-barge has not seen wide success in the United States, in consequence of such factors as the relatively slow service speed on water, the high fixed terminal costs at ports for loading and discharge, the inland dray to and from the river terminal, and the relatively fast transit time associated with truck deliveries. There are notable exceptions, however. Apart from the recognized success of short sea shipping in the European environment, a prominent U.S. example is the container movements of agricultural products along the Columbia/Snake River system into the Port of Portland, for transshipment onto westbound ocean going vessels. This is a dedicated move from inland river ports in Eastern Oregon and Washington, and the terminal operations at the Port of Portland's Terminal 6 have integrated these barge moves into their overall pricing structure. The ability to develop innovative, entrepreneurial pricing and service is essential to the development of such container-on-barge operations.

Recently, container-on-barge service has been introduced between New Orleans and Houston, as well as on the US inland waterway system between Baton Rouge and Memphis. Service to private inland river terminals such as in Ghent, KY has also been established. Osprey Lines has been the leading force in the container-on-barge concept. In addition, several other carriers including MEMCO Barge Lines, Ingram Barge and ACBL have shown interest in the development of container-on-barge operations. Key in

the success of such a service will be the identification of a significant volume of less time-sensitive cargo that currently moves or potentially could move between the Pittsburgh region and other inland river destinations, or deepwater ports like New Orleans for transshipping onto ocean going vessels. It will be necessary to develop a dedicated, regularly scheduled service that can be marketed to local shippers/consignees as an alternative to rail and truck. It is to be emphasized that at the outset, a critical baseload volume of containers must be established in order to "induce" the barge call/service.

The focus of this section is to review container moves potentially divertible to barge, which were identified and evaluated during the second phase of this study, and to assess the competitive surface routing presently used. Several potential markets were analyzed: export lumber and logs, imports of lumber, Middle East and South American opportunities, the shipment and receipt of domestic products such as plastics and resins, and the repositioning and utilization of empty containers. Each market is discussed in the following paragraphs.

4.4.1 Lumber Exports

Pennsylvania leads the nation in export sales of grade hardwood lumber, which is primarily used in the production of furniture. In 2003, Pennsylvania export lumber sales were $300 million, an increase of 13% above the previous year's sales. About 53% of Pennsylvania's export sales are to Canada, followed by exports to Europe, which account for more than 26% of the export sales. China and Hong Kong account for 6% of export sales from Pennsylvania. Interviews with Pennsylvania exporters indicated these overseas markets are served primarily by East Coast ports.

In contrast to the overseas markets, the export market to Mexico, which represents 2% of Pennsylvania export hardwood lumber sales, could potentially be served by barge transportation from Pittsburgh to Brownsville, Texas. The principal markets are near Mexico City, Guadalajara, Nuevo Laredo and Monterey. While this market is relatively small, Martin Associates evaluated the competitive costs of moving the lumber to Mexican destinations by barge, and compared this cost to direct truck moves.

Based on interviews with lumber exporters in Pennsylvania, a container-on-barge service at the Port of Pittsburgh would likely draw from mills within a 200 mile radius. The current cost to truck the lumber into Mexico ranges from $3,000 per container into Monterey, to about $3,800 per container into Guadalajara. These direct trucking costs are the current rates paid by lumber exporters into Mexico. Therefore, the cost of using

barge would need to be less than the current trucking rates, as the barge operation would require a longer transit time, which would need to be reflected in lower shipping costs.

It is to be emphasized that if the containers could be stuffed to a weight in excess of the allowable truck weight, the barge could provide additional economies to the lumber exporters. However, such an overweight container operation would require overweight permitting from Brownsville into Mexico. This permitting process or the need to transload the lumber from overweight containers at the Port of Brownsville into domestic truck trailers could offset cost savings from the overweight operation.

For both a barge/truck and direct truck routing, border crossing operations are in place in Laredo to process lumber into Mexico. These include USDA inspection, working relationships between Mexican brokers and US forwarders, and Mexican trucking operators moving the goods across the border. These relationships have been established over time and have created a streamlined coordinated operation between all parties that permits a smooth movement of lumber across the border into Mexico.

A similar coordinated operation would have to be developed in Brownsville in order to compete with the Laredo operation. Exporters are unlikely to use a routing across the border that may result in transit delays and added costs due to problems in coordinating the movement of lumber across the border at Brownsville. Initially, this market is very limited in volume, and not sufficient to entice a barge operator to make a direct call. However, the lumber market could be a user of an established service, but not a driver of the service.

4.4.2 Log Exports

Pennsylvania hardwood log export sales have grown from $53 million in 2001 to $71 million in 2003. During this period, Germany and Canada were the top two importers of Pennsylvania hardwood logs. Sales to Germany grew from $10 million in 2001, about 19% of the Pennsylvania export log market, to $18 million in 2003, representing 26% share of the market. Exports to Canada increased from nearly $11 million in 2001 to $13 million in 2003. Despite the slight increase in sales, the Canadian market share decreased from 20% in 2001 to 18% in 2003. The third largest export market for Pennsylvania hardwood logs in 2003 is China, accounting for 7% of the Pennsylvania log sales in 2003. Sales to China grew from under $4 million in 2001 to over $5 million in 2003. Ten major Pennsylvania log exporters were surveyed to determine their current shipping needs for this market and the potential to use a barge service from the Port of Pittsburgh to the Gulf of Mexico, and then onto the overseas export markets. The exporters indicated that the most competitive alternative would be to use the river system to move export logs to New Orleans for export to China, rather than an East Coast port for exports

to China. East Coast ports such as Baltimore and Norfolk are now used to serve both European and Asian log export markets. The surveys identified that typically the logs destined for China are being stuffed into containers at the logging facilities, trucked to the ports, fumigated and loaded onto ships for overseas delivery. A majority of the exporters truck their containers to the Port of Baltimore and/or Norfolk. On average, the inland truck rate is $500-$650/box and is received at the port within a day. (This truck rate is a roundtrip rate, which includes dropping off a full container at the port and bringing an empty back.)

A majority of the log exporters indicated they use a freight forwarder to arrange the transportation routings, retrieve the cheapest rates and locate the available equipment. The ocean transit from the East Coast to the Far East and China is approximately 32 days.

Interviews with the exporters indicated the current cost of export using Norfolk and/or Baltimore is about $1,900 per container. The log exporters that were interviewed expressed a strong interest in using the barge service from the Port of Pittsburgh to the Port of New Orleans for overseas transportation to the Far East and China. These shippers' concerns include the overall cost, transit time from the Port of Pittsburgh to the Port of New Orleans, and the adequacy of a fumigation facility at the Port of New Orleans to handle the expected volume. (The Port of New Orleans has an area available for fumigation). A total transit time of less than 50 days would be acceptable. It will be necessary to work with the ocean carriers or a third party logistics provider to develop a door-to-door rate for the log exports.

4.4.3 Potential South American Imports

The ability to import products from South America into the Pittsburgh market for use in local manufacturing was identified by Port staff as a potential opportunity for a container-on-barge service. The scenario analyzed involved a discharge of the imported products at New Orleans and a barge move to Pittsburgh. The alternative routing is a discharge in Baltimore and a truck or rail move to Pittsburgh. Currently the products move via Baltimore at a cost of about $3,400 per container, setting a rate for which the import move using barge must compete.

Overweight containers could also use this barge service, thereby effectively reducing the cost per ton over a rail/truck movement. The overweight move would be most attractive for imports moving to a Pittsburgh customer with a riverfront location. This would minimize the cost of drayage of an overweight container and most likely eliminate the need to transload the container into domestic truck trailers, in order to comply with over the road weight regulations.

In order to participate in this market, it is necessary to establish a total in-bound rate from overseas origins to Pittsburgh. This will require direct discussions with the carriers as well as barge operators, and innovative financing and pricing of the move.

4.4.4 Potential Middle East Exports

The potential of exporting containerized products from Pittsburgh to the Middle East was also identified as a possible market lead to the Port of Pittsburgh Commission. The analysis assumes the products are produced at a riverfront location, which would be ideal for barging the containerized products to New Orleans for export. The alternative would be to export the products via one or more North Atlantic ports. It is estimated that the export of these containerized products from Pittsburgh to the Middle East via Baltimore is about $2,200 per container, based on interviews with steamship lines. This again sets the competitive rate for which a barge move via New Orleans would have to compete.

4.4.5 Domestic Plastics & Resins

Earlier in this report, the potential plastics and resins market produced on the Gulf Coast and destined for the Pittsburgh area was presented. These same products are also produced in the Pittsburgh area and are destined for Gulf Coast markets. The outbound Pittsburgh plastics and resins market to the Gulf Coast presents a potential market opportunity for a container-on-barge service in Pittsburgh and was included for analysis to assess the potential of this market. Plastics/resins and petrochemical companies located in proximity to the Greater Pittsburgh area were surveyed to assess the potential of using a container-on-barge service from the Port of Pittsburgh to the Gulf of Mexico. As part of the interview process, 30 companies were contacted.

Currently, the majority of raw materials and/or finished products in this industry are trucked to their origins/destinations. Approximately 60% of the companies interviewed stated their major concern with the container-on-barge service is the transit time rather than the cost. The products are time-sensitive materials that must be delivered rather quickly and on-time. On average, the typical transit time for a truck trip to Houston from the Greater Pittsburgh area is approximately 2-3 days.

Of the respondents surveyed, 80% identified the container-on-barge service would not benefit their operations due to several factors:

- Shipping/Receipt locations are not relevant to waterborne activity
- Shipping/Receipt locations are not relevant to the Gulf of Mexico
- Barge service would not be quick enough (Time-sensitive materials)

- Barge service would not be cost efficient
- Volume is not large enough to be relevant
- Operate their own terminal
- Has rail access at manufacturing plant

Three companies indicated a potential interest in the container-on-barge service from the Port of Pittsburgh to the Gulf of Mexico if their shipping time requirements can be met and the cost is competitive with their existing truck freight rates. On average, the truck freight rates are approximately $1,250-$1,650/truckload to Texas destinations with a typical transit time of 2-3 days. Barging costs from Pittsburgh to Houston is estimated to be $1,500, including barge freight, stevedoring in Houston and Pittsburgh, pick-up and drop-off of an empty container in Pittsburgh and dray to a river terminal for loading. This rate is based on cost data provided by barge lines, shippers and terminal operators. The potential to move overweight containers on this routing could reduce the barge cost per ton by 20%. Such a reduction due to the movement of an overweight container and working with an aggressive barge company could result in a cost effective routing via barge for these domestic cargoes. However, transit time still remains an issue.

4.4.6 Demurrage Penalties

The demurrage charges by ocean carriers on their import and export containers have the potential of increasing container-on-barge costs significantly. The longer barge transit times on the inland river system to Pittsburgh will exceed the number of free days allowed by the carriers, generally ten days. Within this timeframe, however, containers barged to Memphis, for example, would not incur demurrage charges due to the short transit time on the Mississippi River. Osprey Lines reported carriers are routinely waiving demurrage charges, if incurred, to ensure that their containers will be put into service rather than remaining at inland locations unused. The policies regarding demurrage relating to container-on-barge services vary by carrier – will demurrage be charged, when will it be charged and the amount of the charge is at the discretion of the ocean carrier. Penalties could be waived, or they could be imposed and significant. For example, the demurrage tariff of one carrier out of New Orleans is $14 per FEU per day for the first 4 days after free days and $37 per FEU per day thereafter. Based on this tariff, ten days of demurrage charges would add $278 to the cost of barging the container. Two possible solutions to reduce or eliminate demurrage charges are:

- Establishing door-to-door or port-to-port rates – the ocean carrier would enter into an arrangement with a barge liner service that would determine a time of delivery and an appropriate number of free days and subsequent demurrage charges. Osprey

has such arrangements with ocean carriers who are offering door-to-door rates to inland customers.

- An entity (shipper, consignee, barge line, etc.) would enter one-way leases with container owners (steamship lines, third party lessors) for each movement and set the timing of the lease to ensure there is no demurrage charge.

4.4.7 Repositioning of Empties

There exists a surplus of empty ocean containers stored at the Port of New York and New Jersey due to the imbalance between imports and exports. In contrast, there is also generally a lack of containers in production and exporting regions of the country, such as the Houston area. Key exports from the Houston area are driven by the export of plastics and plastic pellets. Martin Associates evaluated the potential to move the empty containers from New York to Pittsburgh for eventual export loading. This way the ocean carrier could collect some revenue to reposition the container back to Asia. Cost models were used to evaluate railing an empty international container from New York to Pittsburgh. In Pittsburgh, the empty container would be transshipped to barge for the final move to Houston.

To assess this potential market, Martin Associates interviewed steamship carriers located in the New York area who call both the Port of New York/New Jersey and the Port of Houston:

- CMA/CGM
- COSCO
- Hapag Lloyd
- Maersk Sealand
- Mediterranean Shipping
- NYK Line
- OOCL
- P&O Nedlloyd

The carriers interviewed do reposition empty containers overland between coastal ranges to meet equipment shortfalls. However, empty containers from Norfolk, Charleston and Savannah are railed to the Gulf Coast for $300-$600 per container. Empty containers are also repositioned by rail from major inland markets in the Southeast and Midwest. The carriers indicated that Pittsburgh is not a major source of empty containers. One carrier moves empties from Pittsburgh via rail to Los Angeles, loaded with domestic cargo from the Pittsburgh area. The rail rate is $600 per container. Carriers also operate dedicated trains between the East and West Coasts and utilize these trains for repositioning as well. With respect to the empty containers in New York, the majority of the carriers interviewed load empties back onto their vessels in New York for repositioning. The carriers indicated it is not cost effective to reposition empty containers from New York through the Port of Pittsburgh to the Gulf Coast. In fact, the annual storage costs for

empties at New York are not much greater than the cost of local drayage to the railhead if the empties were to be railed westward for repositioning. Moreover, as imports via New York have grown, the traffic lanes westbound from the Port of New York and New Jersey have become a head-haul for rail, eliminating the opportunity for the depressed rates that successful empty repositioning requires. With the cost of new containers from Chinese manufacturers low, and container ship lines able to find additional alternatives for container supply, the business prospect for Pittsburgh does not appear to be strong.

Pittsburgh itself generates a small number of empty containers that would not be a basis for supporting a container-on-barge service to the Gulf Coast. Interviews were conducted with Container Port (CPG), who operates container yards in Cleveland, Columbus and Cincinnati, Ohio to identify whether the empty containers in their yards originated from the Port of Pittsburgh and/or the Greater Pittsburgh area. The container yards in both Columbus and Cincinnati have very few containers coming or going from the Greater Pittsburgh area and less than 0.5% of the containers in the Cleveland yard are from the Pittsburgh market.

However, there is a potential to move empty containers from Pittsburgh to Ghent, KY via the inland waterways. Currently, full containers are loaded onto barges in Ghent for delivery to the Gulf Coast. Empty containers are being delivered to Ghent by truck, rail and barge to meet the demand to serve markets in New Orleans and Houston. The empties are stuffed in Ghent and the loaded containers are barged down the inland river system by Ingram Barge to the Port of New Orleans, where they are transloaded onto barges operated by Osprey Lines for barge transport to the Port of Houston and then further loaded onto vessels for overseas transportation. The typical transit time from Ghent, KY to New Orleans via barge is 14-19 days and approximately an additional week from New Orleans to Houston.

4.4.8 Land Bridge Arbitrage

Options to assemble a baseload of traffic for container-on-barge service could include a variation on rail gateway arbitrage, substituting water service to a St. Louis transfer for direct rail from the Pittsburgh region to the west. Analyses prepared during the second phase of research and provided to the Commission, found that water could be competitive with rail on a backhaul cost basis, but could not produce a compelling cost advantage due to transloading and drayage expenses. As mentioned above, private and public entities at the gateway may be able to change this profile, and the Commission can support any steps they may plan. However, the service deficit by water, compared to the generally good railroad performance in the intermodal sector, remains an obstacle for many shipments.

Even so, customer contacts made by Commission staff and other members of the research team suggest that customers with relatively modest individual volumes and relaxed service needs could find use for a water-based container service, but could not support one by themselves. This points once more to the need for a baseload of traffic with which to introduce an initial service. One of the options for securing such volume is to drive down the delivered cost of waterborne containers to the level of a compelling advantage, by reducing the cost of transfer and drayage. This could be done via temporary subsidy, designed to support a new service long enough for it to establish a viable body of business, and doing so perhaps by funding a public intermodal terminal. Alternately, a group negotiating effort may be effective. Individual container ship lines, or individual barge lines or shippers approaching transload operators, may have inadequate volumes to offer high asset utilization and attract low rate bids. A coordinated negotiating group acting on behalf of a consolidated volume may have more success. Facilitating such steps within its own jurisdiction in the Pittsburgh region makes more practical sense (and gives the Commission more control) than to do so at other entry and exit points on the river system, even though transload and dray costs at those points may affect the competitiveness of the barge product just as much. Of course, the Commission may find port partners willing to take similar steps at other locations on the water system.

4.5 Movement of Oversized (Breakbulk) Cargo

An analysis of the cost to move oversized project cargo manufactured in the Pittsburgh area via barge or truck to markets in West Virginia was conducted. As part of the survey process, seven trucking firms were interviewed, but only one is capable of transporting the oversized project cargo and provided a cost estimate for the service.

A comparison of potential barging and trucking costs identified barging as the least cost transportation alternative for the movement of oversized project cargo from the Pittsburgh area to West Virginia. The Port of Pittsburgh staff provided a barge rate of $4,500 from the Pittsburgh area to West Virginia. Assuming the manufacturing facility is located on riverfront property, this is far less costly than the estimated trucking cost provided by the trucking company of approximately $8,100/load, with potential variations depending upon the exact location in Pittsburgh and/or costs incurred due to detouring, as a result of construction along the intended routing. The truck trip will take approximately three days.

Additional permits and an escort service are required for the transportation of the oversized project cargo; and time of day restrictions, diversion from main highways due to height restrictions, and utility service (lift truck to raise utility lines) might be required.

In addition, a similar assessment was conducted of transporting the same oversized project cargo from the Greater Pittsburgh area to Minnesota either by truck or barge. However, the comparative cost analysis became moot since it was found the transportation laws in both Ohio and Kentucky state that cargo exceeding 13.6' cannot pass through either state unless the cargo was manufactured within that state. Thus, oversized project cargo manufactured in Pennsylvania cannot be trucked from Pittsburgh to Minnesota in a direct routing and would require barge service.

4.6 Summary of Phase II (Fieldwork)

Forward distribution and its variations offer a meaningful new market for waterborne traffic at Pittsburgh, and one that customers already have pioneered. It requires complex steps for development and promises attractive, if not tremendous new tonnage for the river system. Moreover, in an economy that has shifted away from the long-time sources of water traffic, it represents an appropriate response to new industrial realities, it utilizes a genuine strategic strength of the Port, and it creates a logistical capability that suits the intricate supply chain systems of contemporary business.

Development of traffic from the catchment area is a useful step for the Port, yet its prospects are individual, and dependent on a string of favorable costs to balance the disadvantage of distance from water. Container traffic is a different matter: equally challenging to develop, but representing a true growth sector of U.S. business, with interest and initiatives by the private and public sectors, and offering a number of prospects. It is important to note that the logistical capabilities that can build forward distribution, the associated relationships with motor carriers, and the capacity to affect transfer and inland costs, all suit the requirements to build container traffic where it is not today. Thus there is a synergy in opportunities that enable the Port to explore a future beyond its traditional trade base, and that create skills and present alternatives that will take time to develop, but are necessary for building opportunities into long term business.

5. Directions for Development

There are three different classes of traffic broadly available to the Port of Pittsburgh: (1) traditional heavy-bulk business; (2) general commodity traffic involving an extended dray, or service to the larger Pittsburgh catchment area; (3) container-on-barge traffic. The Port of Pittsburgh has already captured most of the traditional heavy-haul traffic available in water lanes, reflecting the effectiveness of its existing marketing strategy. Even so, the Port may develop additional business by encouraging geographic consolidation of bulk manufacturing and processing activities in Pittsburgh, to create jobs and create traffic. The extended dray markets are significant, and while transload and

dray costs are critical to the viability of such traffic, an important segment offers favorable conditions now. Container-on-barge traffic is a nascent market; if a critical baseload volume can be established from a number of prospects, the intermodal opportunities could prove a source of long-term growth for the Port.

Strategically, a number of conclusions can be drawn from the foregoing analysis and its implications.

- *First* is that the geographic position of the Pittsburgh Port as a gateway to the inland water system is a valuable asset that should be developed as such, and therefore a tactical focus should be on ways to extend the waterway's scope of services beyond the local market. In a sense, waterway operators naturally understand this, but the position of Pittsburgh at the end of the system gives it greater significance and greater opportunity. Doing so requires efficient access to eastern markets, and this implies a higher degree of control over access cost factors.

- *Second*, new business opportunities mean adaptation to categorically new logistics systems, with complex coordination and again, control over cost factors. The development of such capabilities in the Pittsburgh region should be a target for the Port Commission, identifying third party logistics firms or other agents with an intrinsic interest in the bulk business where the waterway has particular strength. Such firms professionally oversee multiple functions and contributing parties, and at least as important, perceive how to build business opportunities out of complex requirements, and can market that capability to large shippers. Others exist who can manage container services, although their commitment to water-based options must be scrutinized.

- *Third* and relatedly, is the need for a coordinating function that consolidates waterway volume – not operationally, but institutionally, for the sake of creating bargaining power to drive down pickup and delivery costs. This function would act as a negotiating agent much like freight carriers have bargaining groups to treat with organized labor, and it can also seek to foster efficiency in the pickup, delivery, and transload process. Productivity of that sort can come from arrangement of financing for better equipment, from review of best practices among operators willing to learn from each other, and from landside access improvements pursued with the Southwestern Pennsylvania Regional Planning Commission (the regional MPO). A particular payoff is that the capacity to modify access costs may facilitate the production of baseload volumes for new container services, which would yield a beachhead into one of the major contemporary freight markets.

- *Fourth,* is that while forward distribution and the container market differ in their handling and transport requirements, they demand comparable skill sets in logistics management and access cost control. Thus, pursuit of both can be productive and

mutually supporting to a degree, and make new institutional initiatives more worthwhile.

These points all affect the marketing and coordinating role of the Port Commission, and could lead it to consider new functions.

5.1 The Role of the Pittsburgh Port Commission

The Port of Pittsburgh Commission is a non-operating marketing organization that represents the interest of barge operators, terminal owners, government entities, bulk shippers, and others who have an interest in developing the Pittsburgh area as a water-transportation hub. As it does not directly control any assets, its role is one of facilitation and designing schemes that produce a win-win situation for all parties. It issues advertising, participates in trade shows, and distributes sales leads to members, without directly engaging in transacting business. This role could be likened to a 'business development' or 'strategic planning' department in a large corporation, where business plans are constructed, feasibility explored, and once funding agreement is secured, the plan is passed to project delivery (i.e. the individual private operators) for implementation.

Given the strategic conclusions of this study, three actions are critical to the continued growth of Pittsburgh as a waterway freight port: (1) Facilitate consolidated bargaining and promote cost-reducing practices; (2) Recruit 3rd party logistics providers to organize the complex management of forward distribution; (3) Attract, develop and nurture expertise in container-on-barge operations. The following sections expand on these recommendations, as they influence the role of the Commission.

5.1.1 *The Commission as Agent*

Reach out to stakeholders and explore their support of an agency function for consolidated bargaining. As shippers have demonstrated with core carrier programs, the ability to consolidate traffic volume for rate negotiation has a pronounced effect on price levels, performance quality, and underlying efficiency. The strategic utility of lower dray costs, supported by improved utilization of truck equipment, has been asserted in this study. To achieve it, a coordinating agent negotiating with motor carriers on behalf of multiple waterway operators, could cut pickup and delivery costs to their mutual benefit, and to the advantage of the region. Portrayed as a core carrier program for the Port, this approach can foster partnerships with better performing truck lines, and raise their asset commitments while boosting their level of service. Waterway operators could

recommend motor carriers to the agency, who would have no direct control of traffic, and they need not surrender sovereignty over their operational decisions.

The Port should explore establishment of an agency function, to be undertaken by a qualified party or conceivably by the Port itself, with appropriate staffing and resources. While this initiative is focused on drayage costs, it could perhaps be extended to fuel, maintenance, and equipment purchases. Either inside the agency or parallel to it, the Port should consider steps that modify access costs in other ways. One is to arrange financing for modern transloading equipment or facility upgrades, another is to institute a best practices benchmarking program with interested operators. A third step is to seek transportation improvement programs (TIPs) with the Regional Planning Commission, aimed at better landside access and approach routes to Port districts; the purpose of this is to accelerate turnaround time for drayage providers, cutting their costs and widening the service range of the waterway.

5.1.2 ***The Commission as Recruiter***

Recruit willing and capable operating parties to handle logistical coordination and marketing for complex supply chains. Management of intermodal container or forward distribution systems can require work with, monitoring of, and precision from pickup and delivery firms, transfer terminals, warehouses, linehaul operators, and equipment suppliers, as well as shippers and consignees. Moreover, the marketing of such services to large organizations must overcome modal stovepiping, appeal to business developers in addition to transportation departments, and perhaps win the support of finance and manufacturing groups. The better third party logistics companies make a business out of this, and can bring such functions together not only in Pittsburgh, but at remote origins and destinations for which Pittsburgh may function only as a hub. They have tracking and control systems, and are able to negotiate input cost factors at every stage of transportation, regardless of its geographic location. The Port Commission should identify and qualify third party firms (some have been suggested by the study team), then nurture such capabilities for the Pittsburgh region, by involving these parties in marketing programs, connecting them to local companies, and aiding their local efforts. The benefits are long term as well as more immediate, because management of complex systems can be a prerequisite not only for winning business in contemporary supply chains, but for identifying the best opportunities to pursue, and for building traffic volumes to maturation.

Third party firms the Port Commission might consider should fulfill the following criteria. A prequalification and bid process might earn the firms some sort of formal certification:

- Have demonstrable capabilities in supply chain logistics;
- Have an intrinsic interest in using the waterway to reduce total shipment costs – asset ownership in bulk transportation would be one sign of this;
- Be committed to developing a Pittsburgh regional expertise for organizing complex logistical undertakings;
- Be financed adequately by the owning company;
- Be national (or international) as well as regional in scope, providing broad coverage of potential opportunities.

5.1.3 *The Commission as Developer*

Develop and nurture inaugural service and local expertise in container-on-barge operations. Container-on-barge is an infant market, in that it will require groundbreaking marketing efforts to establish a regularly scheduled service at Pittsburgh. Such a service will require fixed sailing schedules and be "induced" into the Pittsburgh area by a sufficient volume of cargo to justify the Pittsburgh call. This may require innovative pricing in order to penetrate the rail/truck market, and as a result the cost based analysis conducted in this report may not be representative of the pricing that will be required in order to grow the business. Furthermore, it is unlikely that one shipper will be the catalyst for such an inducement volume, and as a result, it will be necessary to consolidate multiple shippers/consignees in the Pittsburgh region. The fact that the service will require innovative marketing and pricing opens a role for the Port of Pittsburgh Commission. The Port can engage in the active marketing to key shippers/consignees in the area along with direct marketing to Osprey Lines, MEMCO, Ingram Barge and ACBL. In addition to involvement of the potential barge operators, it is necessary that the Port initiate discussions with ocean carriers regarding intermodal pricing, and potential repositioning of empties into the Gulf. Pittsburgh access costs are important, but so too are the cost absorption policies of containership lines, and aggressive marketing of one element may help to swing the other. The pricing can be divided into its components for analysis, but only the total price will be relevant. A high or low barge component rate, terminal rate or dray rate can be offset by an advantageous component rate in the supply chain. Steps can, and should be undertaken to reduce all component rates.

Barge carriers typically quote barge load rates, usually on a long term contract with an invoice to a single shipper. This method of pricing does not lend itself to the numerous customers that would make up a container-on-barge movement. The service delivery must be regular and predictable with pricing quoted on a per container basis. The barge

needs to sail as scheduled, whether it is full or not. Therefore, the per container rate must anticipate varying load factors.

The Port of Pittsburgh should continue its marketing of the system for traditional cargoes, as well as for the potential container business. Coordination with other ports should be an element of this, especially in new markets where both parties may derive new traffic. It also is useful to note that the new or extended roles for the Port this study has suggested can be mutually reinforcing, so that the agency role, for instance, supports the developer role. To take an example, one key impediment to the success of container shipments via the Port of Pittsburgh is the level of terminal charges quoted by terminal operators along the Mississippi River system. The quoted terminal charges, which include stevedoring as well as truck loading, mounting on chassis, weighing, container inspection and repair, account for a significant share of the total inland river cost of moving a container. These are fixed charges and represent about one-third of the transportation cost (excluding the dray to and from the river terminal).

It is necessary that the proposed terminal rates be reduced significantly, for the river system to be competitive with competing deep-sea ports and inland modes. Investments in equipment with greater productivity would be required. The private sector is unlikely to make major speculative investments, which exacerbates the productivity situation. The Port of Pittsburgh Commission could provide incentive plans/financing assistance for investment in terminal equipment, which lower terminal costs per container, and aid development. And, it could encourage partner ports to provide the same.

Finally, the Port can work on project specific issues brought forward by terminal operators or local shippers/consignees. These could include specific feasibility analyses, funding assistance, and/or working directly with the ocean carriers in developing innovative pricing techniques.

5.2 Conclusions

New business opportunities in traditional waterborne traffic have become fewer in the changing marketplace. However, new business of material magnitude is available that will require creativity and new marketing expertise, as the assessment of container-on-barge, forward distribution, and its variants determined. The steps required to exploit such a market niche, and the concomitant capabilities and cost elements that must be developed, in fact would move the Port toward the complex management of logistics that modern supply chains have adopted and nurtured for competitive advantage. Recognizing that conventional markets are not wholly exhausted, and that some actions should be taken in that direction for prospects identified in this research, the larger steps forward are steps in transition that develop new capabilities for industries that are

themselves in transition into global markets and global-to-local logistics. Whether the role of the Port Commission – or just the capabilities it fosters – should change along with its opportunities, is a subject the Commission must explore.

6. Appendix A: Pittsburgh Market Assessment

6.1 Overview

The purpose of this section is to provide an assessment of the Pittsburgh transportation market, focusing particularly on water markets. According to TRANSEARCH, a total of 249 million tons were carried in to, out of, and within the Pittsburgh Port District in 2001; 22% of tonnage involved a water movement. The goods had a total value of $133 billion, 7% ($9 billion) of which was carried by water.

Water is a strong contender in lanes where it is active – 68% of all available traffic by tonnage is carried by water in water lanes. In this analysis, 'water lanes' is defined as any market with waterborne volume in the base year of 2001. This definition includes some markets that may be too circuitous for general development, although water is effective for some classes of goods; indeed, there is substantial movement by barge of waste & scrap between Pittsburgh and the East Coast using such out-of-the-way routing. Thirty-three percent of total Pittsburgh market freight tonnage occurs in water lanes – reflecting in part the constraint of the Mississippi River System franchise and its ocean connections.

The top water commodities were: Coal (66%), Sand & Gravel, Waste & Scrap – consistent with the relative low valuation of goods compared to the tonnage. The top water markets by tonnage were: movements within the Port District; movement to/from the West Virginia portion of the Pittsburgh business economic area (BEA, see 3.1.1); and movements to/from Charleston and Wheeling market areas in West Virginia. In terms of tonnage, it is clearly evident that the Port of Pittsburgh is dominated by coal traffic from the Western Appalachians.

6.1.1 Freight Distribution by Mode and Direction

As TRANSEARCH data demonstrate in Figure A.1, the Pittsburgh Port Commission service area (refer to 3.1.1) has approximately equal inbound and outbound tonnages. However, because of different commodity values inbound and outbound, the tonnages are not distributed equally amongst the different modes, leading to modal imbalances.

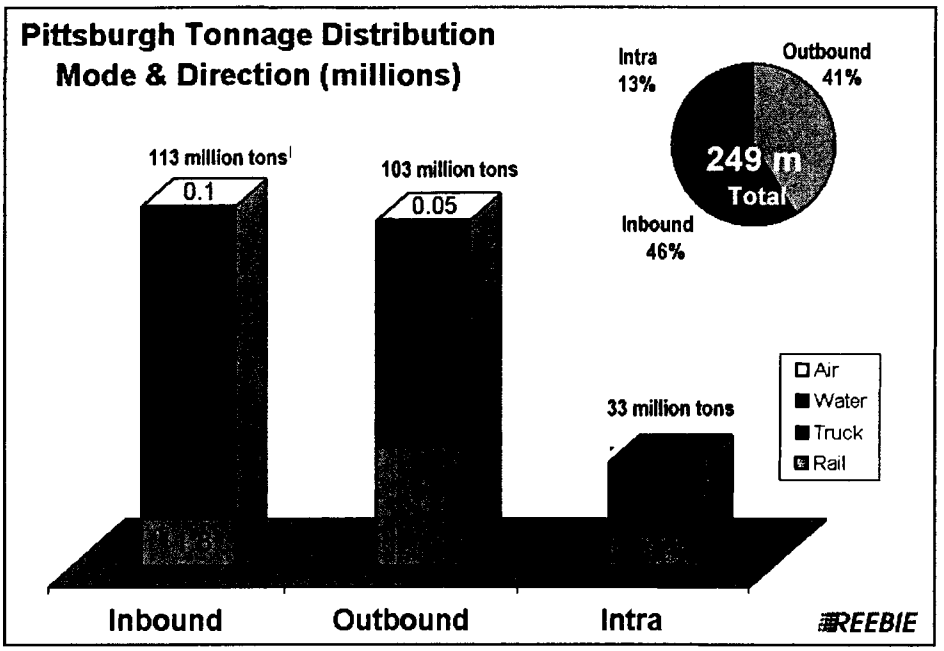


Figure A.1: Pittsburgh Tonnage Distribution, by Mode & Direction

In terms of water traffic, barges carry a significant portion of the intra-market service area freight – coal or other bulk commodities moving for short distances within the service area. Trucks are however dominant in both the inbound and outbound in terms of tonnages, exceeding in both cases the total of all other modes combined.

The dominance of trucking in North American freight transportation is clear from a value distribution graph, and Pittsburgh is no exception (Figure A.2). Trucks carry 81% of value in the inbound direction, and 86% of value in the outbound direction, in line with national trends. Despite significant intra-market volume, water achieves only 17% of value, due to the nature of commodities that lends itself to water transportation.

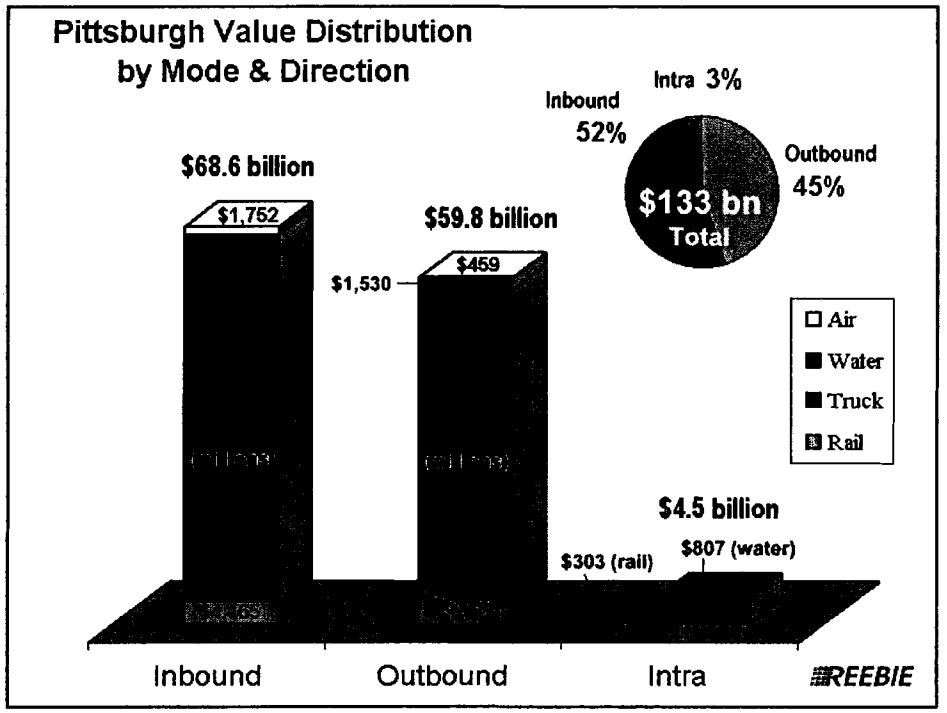


Figure A.2: Pittsburgh Value Distribution, by Mode & Direction

6.1.2 *Geographic Origin and Destination Rankings for Pittsburgh Traffic*

The New York metro market is the top source of Pittsburgh inbound freight by tonnage, as New York is an economic center of national importance and host to several international deepwater ports. In close second place are inbound goods from Charleston, WV – dominated by coal, a logical market for the Port of Pittsburgh. The Pittsburgh, WV area in third place represents local movements between the West Virginia portion and the Pennsylvania portion of the Pittsburgh BEA (the service area). Rail and water divides the available freight there evenly.

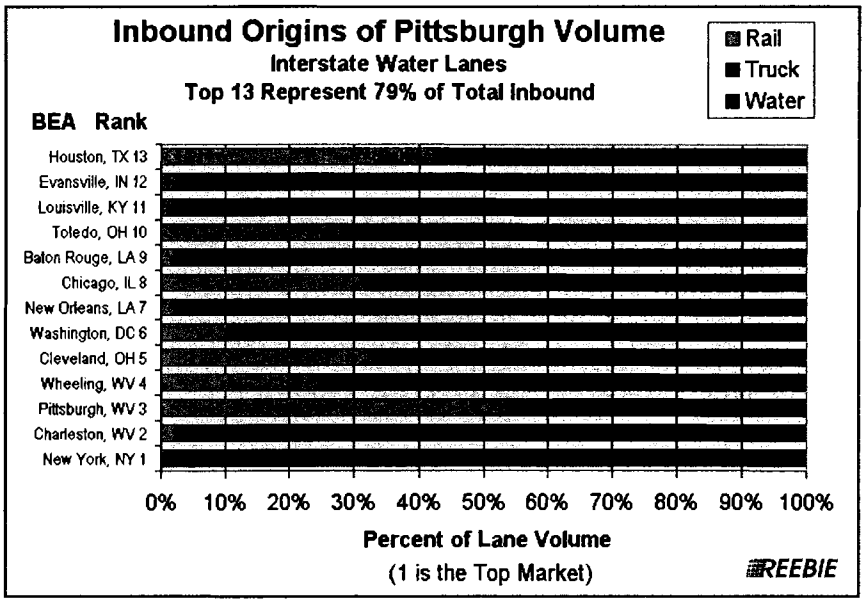


Figure A.3: Inbound Origins of Pittsburgh Volume

The geographical constraint of the Mississippi River System is also evident in Figure A.3. Water dominates lanes where convenient river access is available: Charleston, Wheeling, New Orleans, Louisville; trucks dominate in most other markets.

In the outbound direction (Figure A.4), water similarly is strongest around the primary river and Gulf coastal routes. In the Middle Atlantic markets like New York and Washington DC, water access produces a certain amount of waterborne activity, but the time penalty of route circuity leaves the traffic in these areas chiefly on trucks.

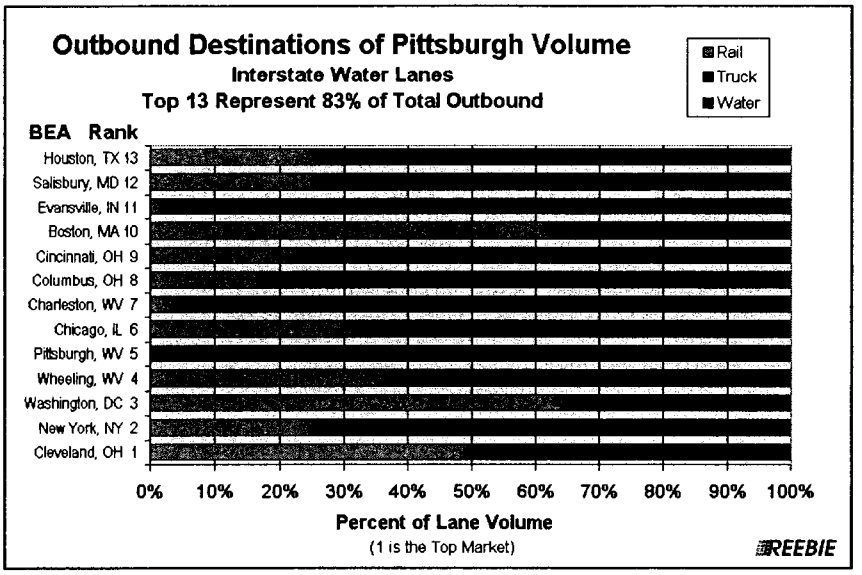


Figure A.4: Outbound Destinations of Pittsburgh Volume

6.1.3 *Pittsburgh Commodities in Water Lanes*

In 2001, water carried 55 million tons in the Pittsburgh market. Coal dominates this profile, accounting for 74% of the top five commodity groups (Figure A.5). Barge mode share is good in coal and excellent in waste/scrap and non-metallic minerals,[2] but is not nearly as dominating in the smaller and higher-value commodities: petroleum products and chemicals.

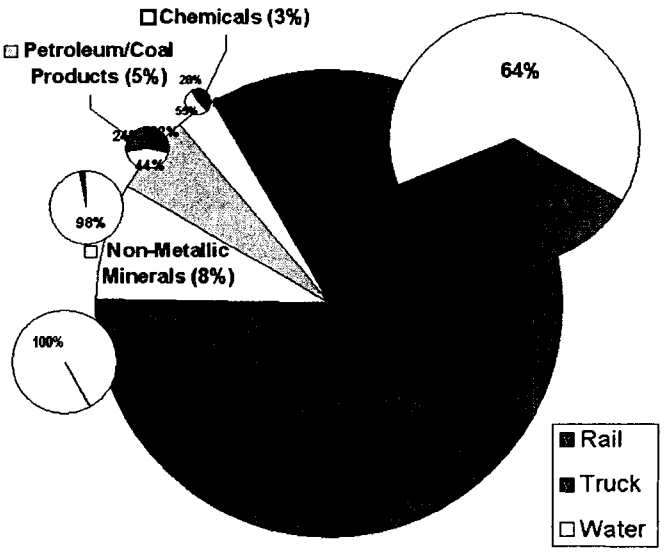


Figure A.5: Top Five Pittsburgh Commodities in Water Lanes

[2] The market share is overstated for waste products, because the underlying market data capture rail but not truck traffic in this commodity; others are captured fully.

6.1.4 *Top Pittsburgh Water Commodities*

Some commodity shipments are more concentrated in certain geographic origin-destination pairs than others; the transportation of certain ones represents a gathering network where product from many origins is funneled into a central collection point for processing. Figure A.6 shows coal, the primary inbound commodity to Pittsburgh, moving from many points into a central location, with tonnages equally distributed between Charleston, Wheeling, and the West Virginia portion of the Pittsburgh BEA. Pittsburgh serves as a processing and consumption center for coal. However, for waste/scrap, almost all the traffic is moving from Philadelphia.

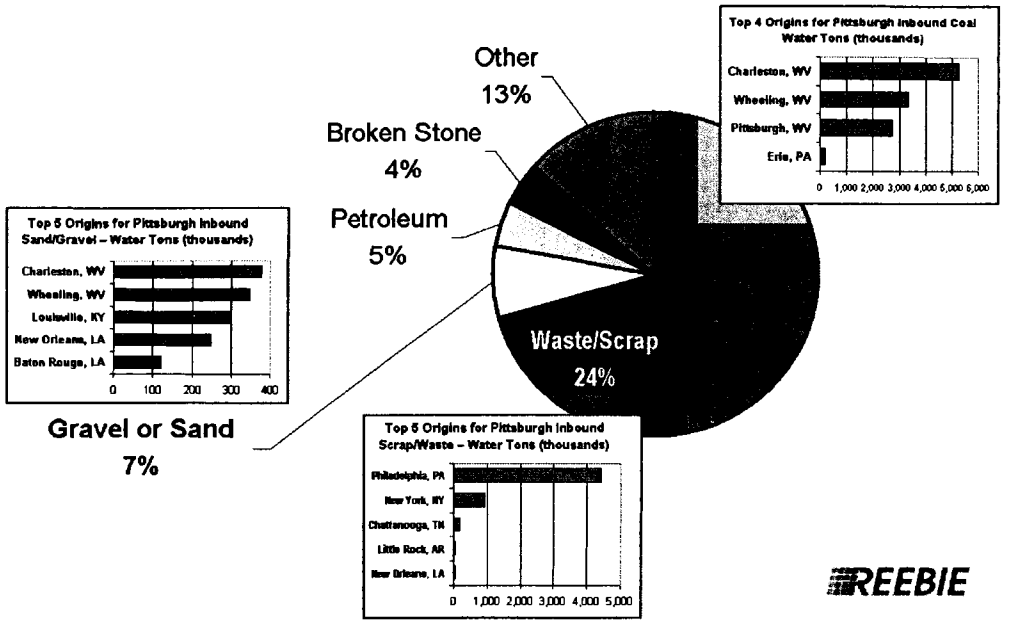


Figure A.6: Top Pittsburgh Inbound Commodities in Water Lanes

Most other waterborne commodities show a comparably even distribution by origins and destinations, reflecting centralized networks for many bulk commodity movements. This implies a difficulty for water in entering markets with greater dispersion, because of its clear geographic constraint and its need for volume consolidation – besides the requirement for drays and transloads.

6.2 *Pittsburgh Benchmark Comparisons*

The purpose of this section is to benchmark Port of Pittsburgh district performance to similar domestic water shipping lanes to assess freight capture performance. Shipping lanes will be identified and port-to-port comparison statistics presented, including average length of haul, modal market share, lane density, commodity mix, and shipment value. Significant traffic imbalances also will be evaluated in the context of their markets.

Pittsburgh proves to be a healthy market for water where it should be one. Its reliance on coal instead of petroleum stands out – coal is 66% of Pittsburgh water traffic versus the national average of 20%, while petroleum crude and products stand at 3% of the mix versus 30% nationally (Table A.1). Waste and scrap (including scrap metal) in Pittsburgh are somewhat above the national figure. These results reflect the traditional Pittsburgh economy – which was heavily based on coal and steel – and the industrial mix of other cities on the waterway system, especially the petroleum centers on the Gulf. The overall conclusion is that Pittsburgh performs well versus other waterway activity, especially given the industries available to feed it.

Commodity	US Waterborne Rank	Percent Of US Water	Pittsburgh Rank	Percent Of Pittsburgh Water
Petroleum Pdts	1	23%	5	3%
Coal	2	20%	1	66%
Waste/Scrap	3	10%	2	13%
Crude Petro	4	7%	N/A	0%
Sand/Gravel	5	7%	3	6%
Grains	6	5%	35	<1%
Ores	7	5%	22	<1%
Stone/Riprap	8	4%	4	4%
Seed/Nut Oils	9	2%	33	<1%
Cyclic Dyes	10	1%	13	<1%

Table A.1: Top Waterborne Commodities, Pittsburgh vs. National

6.2.1 *Pittsburgh vs. National Mode Shares*

As demonstrated in Figure A.7, Pittsburgh achieves a much higher waterborne share of total freight tonnages than the nation on average, not all of which is water-served. Water is very effective for transportation of heavy tonnages where it is available, economic geographies of the past have been dictated at least partly by access to bodies of water, and water historically fostered the industries that could use it.

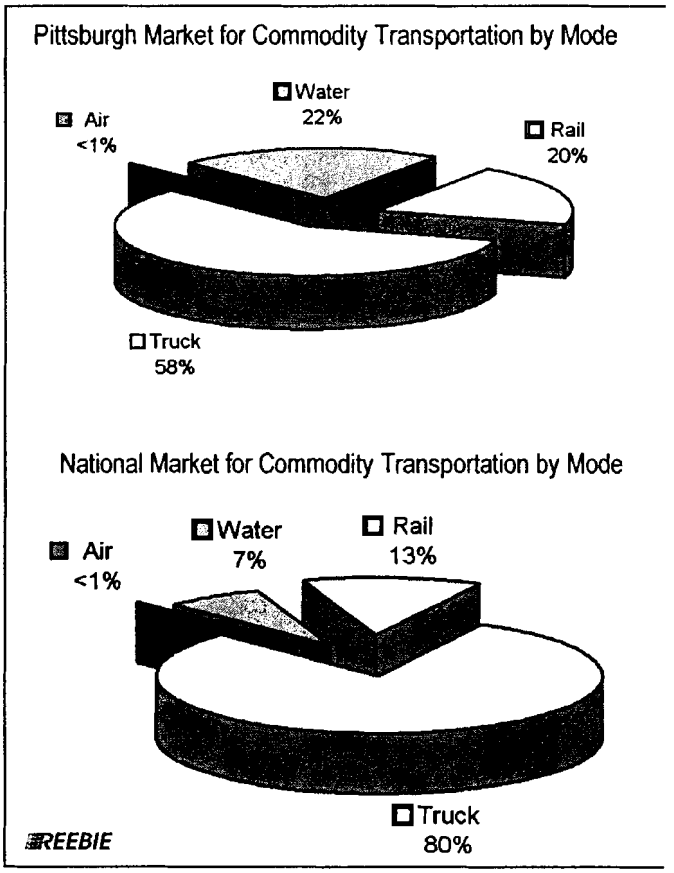


Figure A.7: Pittsburgh vs. National Mode Shares

6.2.2 *Length of Haul Distributions, Pittsburgh vs. National*

In terms of lengths of haul, Pittsburgh traffic tended to be shorter and longer than the national average (Figure A.8). There is a significant amount of intra-port traffic and coal from neighboring areas, hence the prominence of shorter-haul traffic; the fact that Pittsburgh is the northeastern terminus of the Ohio River means that traffic in general has to travel further before reaching ocean or southern destinations. This produces a length-of-haul profile that has representation from every strata, unlike the national average where medium-haul traffic is more common.

REEBIE	MILEAGE RANGE									
	<250		250 to 499		500 to 1499		1500 and >			
Commodity	National	Pittsburgh	National	Pittsburgh	National	Pittsburgh	National	Pittsburgh	National Volume	Pittsburgh Volume
Farm Products	9.3%	0.0%	12.2%	0.0%	77.9%	100.0%	0.6%	0.0%	76,841,946	39,719
Forest Products	40.8%		55.5%		3.8%		0.0%		19,726	0
Fish & Marine Pdts	11.7%	0.0%	11.8%	0.0%	76.3%	100.0%	0.2%	0.0%	2,166,872	65,814
Metallic Ores	10.8%	0.7%	20.1%	1.8%	69.0%	97.2%	0.1%	0.1%	51,340,885	295,469
Coal	55.7%	81.6%	26.2%	16.4%	18.1%	2.0%	0.0%	0.0%	322,121,058	46,673,746
Crude Petroleum	26.3%		5.7%		1.8%		66.1%		65,406,738	0
Non-Metallic Minerals	60.0%	66.2%	21.4%	17.8%	18.5%	15.9%	0.0%	0.0%	128,116,930	6,186,934
Food	7.7%	0.0%	14.3%	0.0%	77.3%	100.0%	0.8%	0.0%	41,204,011	26,697
Tobacco	2.2%		27.2%		70.3%		0.3%		41,478	0
Textile Pdts	35.9%		5.3%		5.4%		53.4%		166,942	0
Apparel	41.7%		6.7%		6.4%		45.3%		1,151,022	0
Lumber	73.0%	0.0%	18.3%	0.0%	7.2%	100.0%	1.5%	0.0%	40,408,193	23,204
Furniture	38.4%		6.2%		5.8%		49.6%		596,836	0
Pulp/Paper	30.7%	0.0%	25.6%	100.0%	32.6%	0.0%	1.1%	0.0%	1,638,212	0
Printed Matter	40.7%		6.6%		5.1%		47.5%		1,099,761	0
Chemicals	45.5%	37.1%	15.8%	14.7%	33.0%	39.1%	5.6%	9.1%	147,819,320	2,193,520
Petroleum	60.3%	52.8%	14.7%	13.6%	22.7%	33.5%	2.3%	0.0%	583,673,241	3,923,979
Rubber/Plastics	27.2%		4.1%		34.1%		34.5%		1,046,931	0
Leather	38.1%		5.3%		5.3%		51.3%		121,527	0
Clay, Glass, Stone	28.1%	0.0%	45.0%	43.8%	26.1%	56.2%	0.7%	0.0%	22,315,550	590,553
Primary Metal	11.9%	2.0%	17.2%	11.9%	69.9%	84.1%	1.0%	2.0%	26,369,048	3,026,406
Fabricated Metal	11.9%	1.7%	16.0%	3.5%	71.4%	93.0%	0.7%	1.8%	6,875,105	614,958
Machinery	39.9%		11.1%		7.6%		42.3%		2,037,310	0
Electrical Equipment	41.3%		6.8%		5.7%		46.2%		290,093	0
Transportation Equip	42.9%		5.4%		4.1%		47.5%		2,798,320	0
Instr., Photo, Optical Equip	37.7%		4.0%		5.8%		52.4%		213,835	0
Waste/Scrap	40.0%	1.5%	26.4%	82.0%	30.1%	16.3%	3.5%	0.3%	105,792,588	7,258,095
Misc Freight Shipments	50.8%	3.3%	7.5%	36.9%	29.4%	59.8%	12.3%	0.0%	5,253,512	35,495
Shipping Containers	50.7%		4.5%		4.0%		40.8%		82,164	0

Figure A.8: Length of Haul Distribution for Water Commodities

6.2.3 Port Benchmark Comparisons

For a number of key port cities on the Mississippi River System, head-to-head benchmarks on the other port's largest commodities were compared with those of Pittsburgh, an example of which was shown in Figure A.9. In the case of local traffic moving within the port district of Cincinnati, the five largest commodity groups were Non-metallic Minerals, Coal, Waste/Scrap, Petroleum or Coal Products, and Clay Concrete Glass or Stone. For the largest category in Cincinnati, Non-metallic Minerals, most of the traffic moves by truck as shown by the mostly maroon-colored stacked bar. In Pittsburgh, the corresponding commodities moving locally within the port shows significantly larger volumes, a substantial slice of which moves by water.

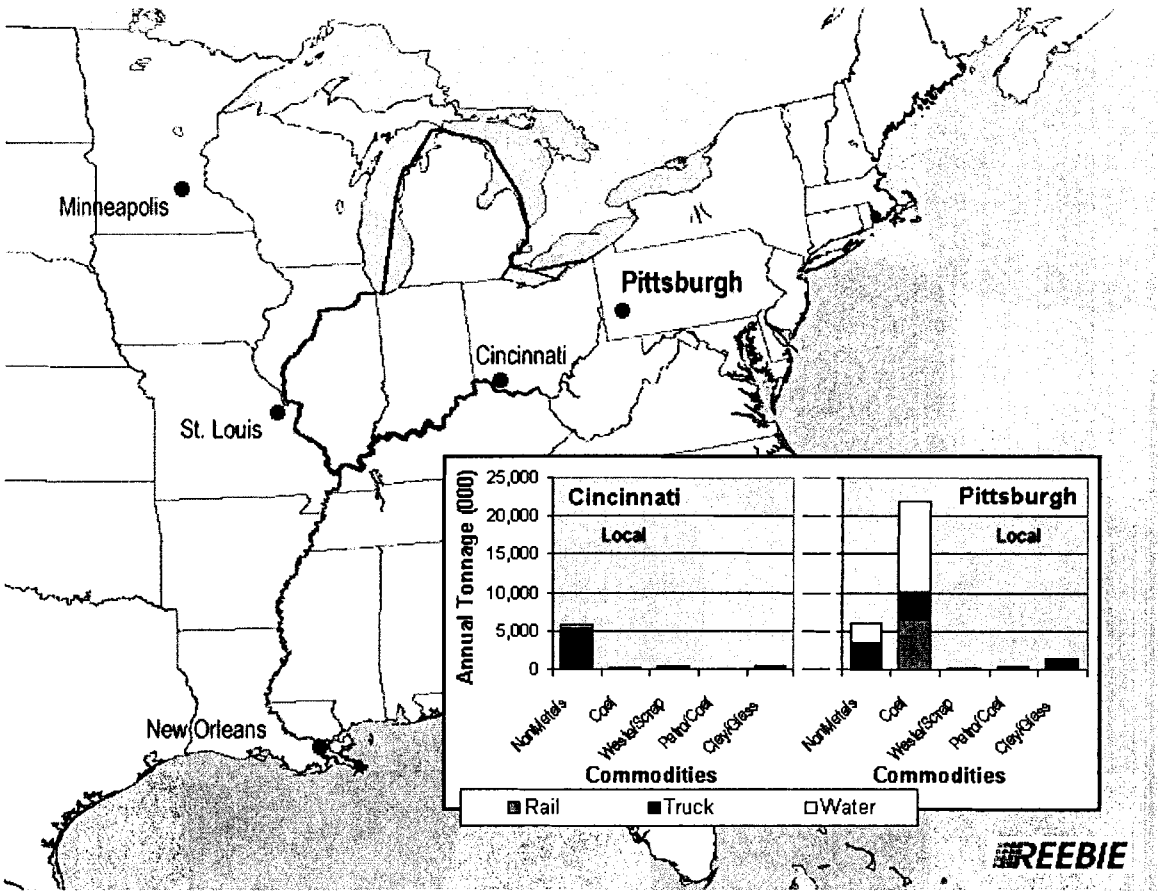


Figure A.9: Port Benchmarking Analyses for Key Mississippi River Ports (Cincinnati Local Traffic vs. Pittsburgh Local Traffic)

These charts, all of which were provided privately to the port, demonstrated that Pittsburgh in general ranks very favorably with the ports the team chose to analyze based on their similarity in attributes. The notable exception was Petroleum Products and Chemicals moving out of New Orleans. Water has a substantial presence carrying these commodities out of New Orleans, whereas in Pittsburgh water does not. There is also much less volume of said commodities moving out of Pittsburgh, most of which are trucked. This is an effect of the Petrochemical production centers concentrated on the Gulf, and the traffic densities they generate.

REEBIE

6.3 *Modal Competition in Pittsburgh Water Lanes*

The purpose of this section is to explore commodity markets in other modes, to reveal traffic that could potentially be water marketing opportunities. Examination by lengths-of-haul revealed a few general opportunities: Petroleum Products and Metal Alloys by truck, in regional and long-haul markets; Coal and metal by rail in regional markets, and local Coal by rail and local Sand & Gravel by truck.

Closer examination of the local Coal and Sand/Gravel flows revealed that although water would be capable of handling these commodities, the origins or destinations were off-water some distance from the river and the length-of-haul was too short to justify any type of transloading or dray operations. The single mode service was found to be more economical. Interviews with shippers in Phase II also revealed that the alloys tended to be shipped in consignments too small for barge movement. Although reported under the same commodity code, most of the alloys being shipped are high-value, highly specific alloys that are ordered by specialist manufacturing firms on a truckload basis. Barge service would be too slow, and the many different type of alloys make consolidation difficult. Petroleum products and chemicals held some promise, as will be discussed in a later section.

In general, the conclusions from this effort confirm the earlier benchmarking analyses. There are no immediately obvious large or highly leveraged opportunities, as market saturation has already been achieved with water dominating most water lanes. Market development would have to consider the consolidation of fragmented commodity volumes, or drayage from an extended geographical market.

6.3.1 *Modal Length of Haul Profiles*

The Pittsburgh modal length of haul profile is shown in Figure A.10. Pittsburgh water is equally strong in all strata except the >1,500 mile category. Compared to rail and truck, rail has an advantage in intra-Pittsburgh movement, while trucks are important in the 250~499 mile category.

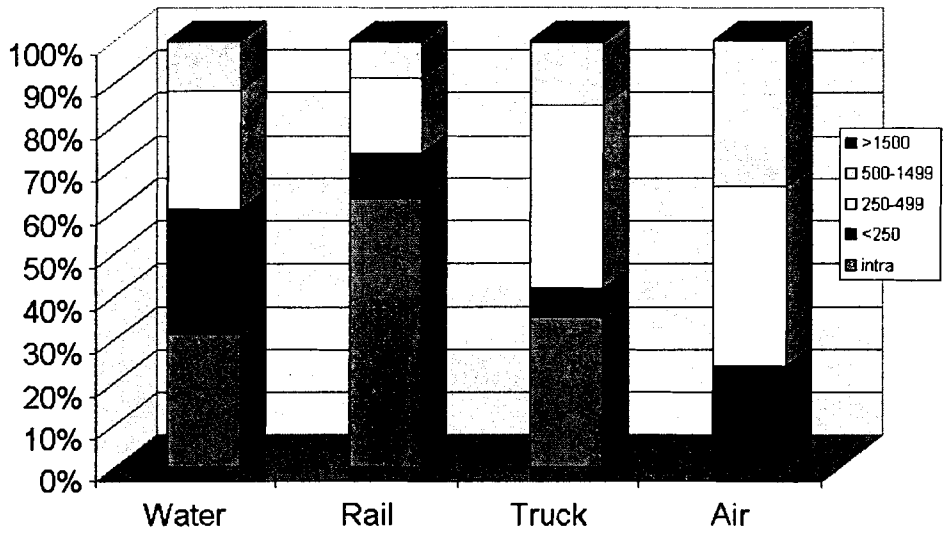


Figure A.10: Pittsburgh Length of Haul Distribution in Water Lanes

6.3.2 Commodity Drill Down

Sharpened focus on commodities and modal competitors can reveal telling specifics, thus targeting the Phase II interview process and helping to narrow the search for potential customers. The team analyzed Pittsburgh commodities at a detailed (four-digit STCC commodity code) level, both by tonnage and by value, to home in on important market opportunities. Examples of this type of analysis are shown below (Figure A.11).

In this particular chart, barge is shown to be the predominant mode for many types of commodities, with notable exceptions. Electrometallurgical Alloys, Malt Liquors, and certain classes of Chemicals, shown in yellow, have substantial truck involvement. The volume patterns, and service and handling requirements that brought these goods to highway carriage are not favorable for barge conversion; most were not pursued in the second phase, and for the few that were, these factors proved to be major obstacles.

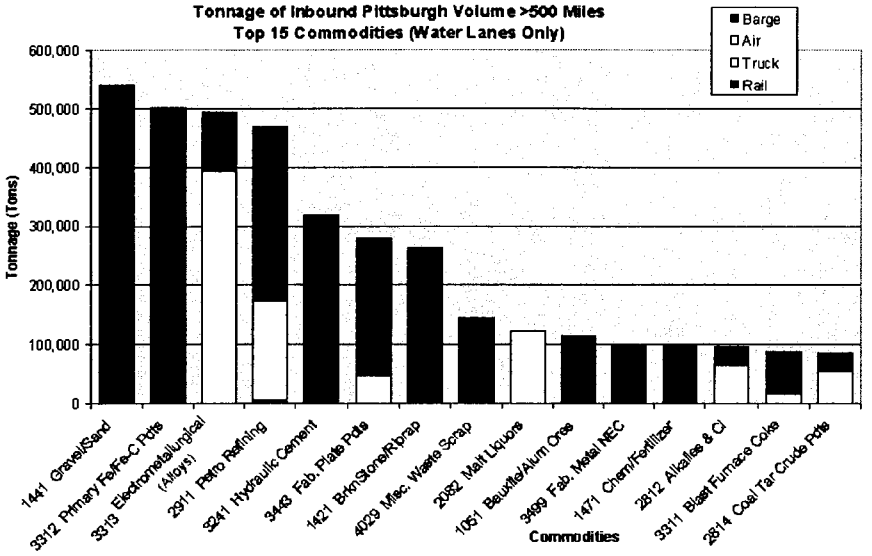


Figure A.11: Commodity Drill Down Tonnage Analysis

In Figure A.12, where commodity flows are converted to monetary values, truck is clearly shown to dominate the landscape. The Alloys sector is shown as a high-value item, and an unlikely market for barge. Subsequent second phase interviews confirmed that the customers tended to order alloys by the truckload, and firms could not accept barge load volumes.

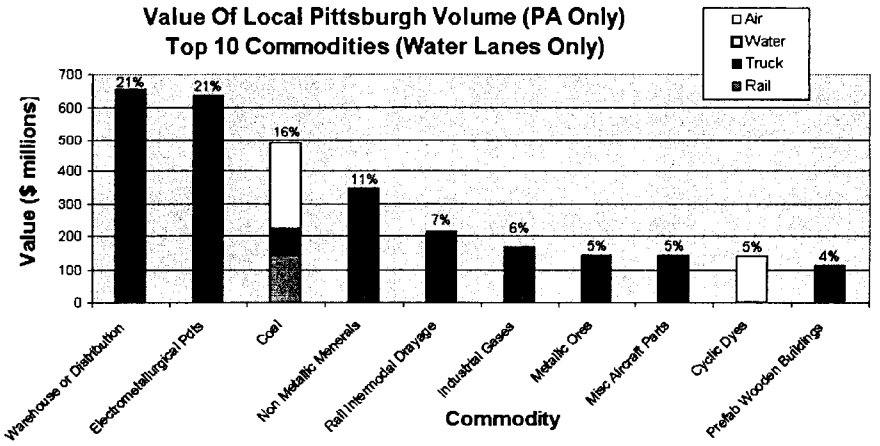


Figure A.12: Commodity Drill Down by Value

6.3.3 *Modal Benchmarking*

Modal benchmarking was undertaken to identify the chief commodities moving by rail and truck in water-served lanes, and to compare the traffic captured by barge to that by other modes. Analysis of Coal traffic shows that water dominates both rail and truck in both inbound and outbound directions in Pittsburgh. All other commodities combined, whose tonnage total is not as large as Coal, show water as being strong in most bulk commodities with significant volume. Any increase in barge revenue is likely to be incremental – from capturing the small remaining part of bulk flow, or from capturing a new type of commodity with higher revenue potential.

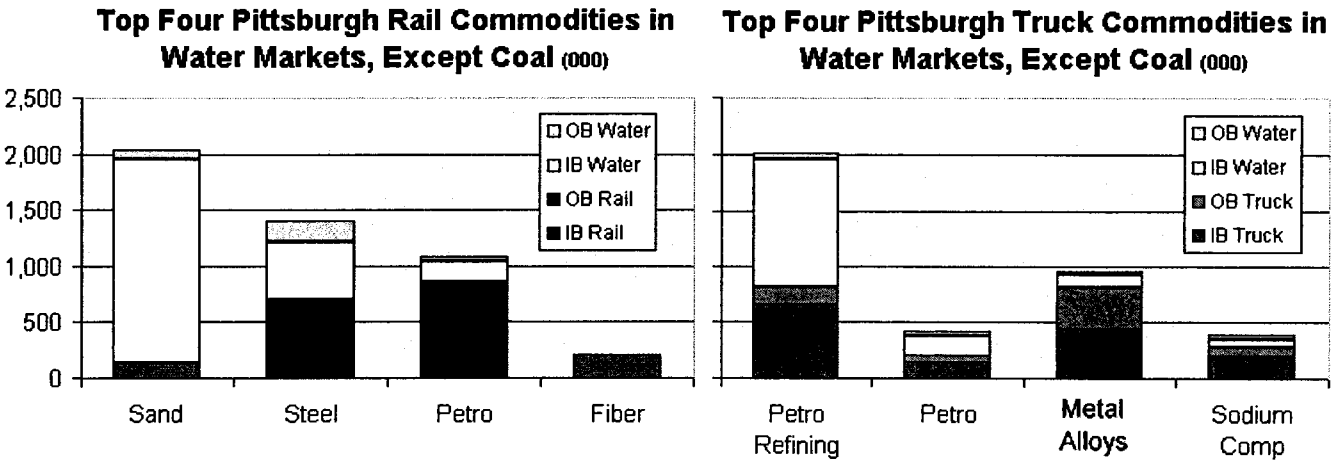


Figure A.13: Modal Benchmarking, Rail and Truck

This analysis clearly demonstrates that barge is superior in Sand, so that while this is a relatively important rail commodity, the rail role in fact is small. On the other hand, there is more substantial traffic in Steel, Petroleum Products, and Petroleum Refining Intermediates that is untapped by water. With the exception of Alloys, volume for other goods is light. For Phase II purposes, this meant that the Petrochemical and Steel, and perhaps the Alloy sectors potentially offered business opportunities worth further evaluation.

To further sharpen the focus on the hunt for traffic, the team further drilled down on the market area lane-commodity level, for water commodities, and the results were ranked by non-barge activity. 'Water commodities' were defined as any that recorded water movements during 2001. Of course, this necessarily included certain one-off movements that do not usually travel by barge (e.g. Refrigeration Assemblies), however, such movements tend to be low in volume and thus did not affect the tonnage-oriented analyses. An example of the analyses conducted is shown in Figure A.14.

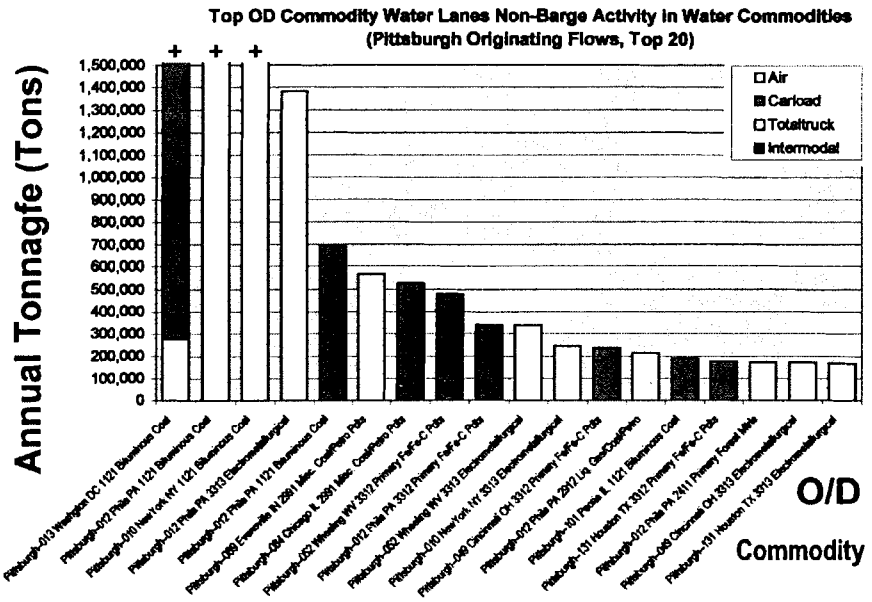


Figure A.14: Non-Barge Lane-Commodity STCC4 Drill Down, by Tonnage

This analysis is fairly typical of what the study found. In general, in areas that the team examined, truck was by far the dominant competition although rail also accounts for substantial non-barge activity. In general the lane-commodity combination is likely to yield flows carried by only one mode, although in major flows sometimes rail and truck will split a flow (e.g. Coal going from Pittsburgh to Washington, D.C., see column 1.)

For Phase II development, the chief focus was directed toward traffic currently handled by rail, on the grounds that its volume concentrations and service requirements are closer to what a barge can accommodate – and to the extent that rail also engages in transload during pickup or delivery, it neutralizes a disadvantage to barge transportation. The fragmented volumes, and the far faster, door-to-door service characteristic of traffic moved by truck meant that this was regarded as a secondary prospect, and was considered mainly for shippers or lanes that also had rail activity.

6.4 *Market Imbalance*

Market balances are of particular interest to the freight marketer because while barges are cost-competitive on a head-haul, equivalent empty-return basis with rail and other modes, barges can be daunting for their competitors if even a partial back-haul could be found. If the head-haul is fully compensatory, back-haul could allow for an extended drayage range and smaller quantities than otherwise possible. Backhauls, however, are not always possible, since the freight may require different equipment types – and the barge may require cleaning between runs due to incompatible freight, which consumes valuable asset time. The low incremental costs of the backhaul operation can become a significant competitive factor in some cases.

Pittsburgh water traffic is marked by significant inbound imbalance. West Virginia and Louisiana markets are the chief sources of goods flowing northbound into Pittsburgh. These barges sometimes return south empty. The imbalance is fairly typical of the market and pattern in Pittsburgh water lanes. This study conducted balance analysis for non-bulk flows and found some back-haul opportunities originating from Cincinnati, Columbia, and Wheeling southbound. In terms of bulk flows, some steel and petrochemicals are moving south from Lower Mississippi, Evansville, and Louisville to destinations in the Deep South and the Gulf Coast. However, these flows will only support the barge's operation part of the way, and operators based in other ports will also be after the same traffic since such northbound imbalance exists also at Cincinnati and Wheeling.

6.4.1 *Implied Empty Movements*

Traffic or market imbalance analysis could paint a suggestive picture of where the implied empty movements are. If tonnage moving from A to B (head-haul) is greater than that from B to A (back-haul), it is likely that some barges will travel empty from B back to A. However, this is not always an accurate picture, because of the freight incompatibility problem discussed earlier (which will increase the empty return ratio), but also because the same barges may pick up a load at C while en-route from B to A, which will decrease the empty mileage.

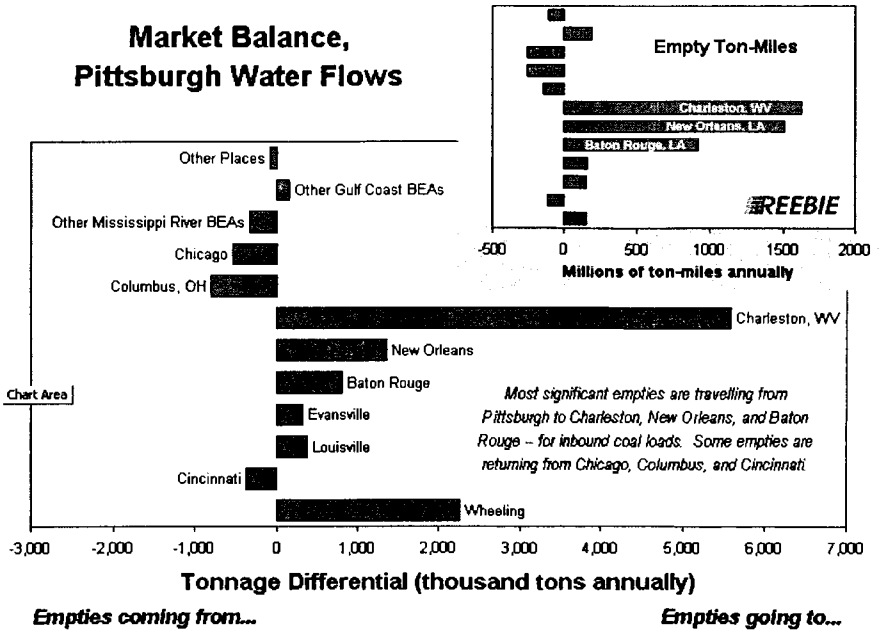


Figure A.15: Pittsburgh Barge Imbalances, Implied Empty Movements

Figure A.15 shows a modal traffic-imbalance analysis, demonstrating that the greatest empty tonnages are incurred by the coal moves from Charleston, West Virginia, but the most significant empty ton-miles are incurred by the chemical moves from Louisiana. Because of the long distance involved, Louisiana offers better opportunities for partial backhaul than the others. However, one clear problem is that chemicals tend to be produced in the south and consumed in the north, so there is limited traffic suited to carriage in tank barges southbound from Pittsburgh and other points on the Ohio River.

6.4.2 Market Balance Analysis

Modal traffic imbalance is a function of both what traffic is moving and the levels of service that the commodities require. In a tonnage-balanced market, modal balance still might not be achievable because goods moving from A to B might be low-value bulk moving by barge while freight moving from B to A might be high-value perishables that are trucked. However, conducting a market balance analysis enables an understanding of what the upper-bound of back-haul utilization is. In other words, if market volumes are fundamentally imbalanced, some vehicles are obliged to return empty regardless of sales development efforts. Thus, from a strategic standpoint, freight carriers attempt to cede the imbalanced (additional head-haul) traffic to another operator or mode, to maintain

optimal utilization for their own equipment. The cost of empty equipment repositioning, and the reduced incremental cost when new traffic can improve fleet balance, are critical considerations for competitive market development.

Figure A.16 shows imbalance in top Pittsburgh bulk markets for all modes in water lanes. Not surprisingly, movements are dominated by Coal from the West Virginia portion of Pittsburgh BEA, and from Wheeling, West Virginia. What is perhaps remarkable is that even in that market, barges have achieved a back-haul ratio of approximately 50%, which would result from the coal-mixing and processing operations that normally occur in mining areas. Raw coal is moved from mines to processors, and the product may then move in an opposite direction, resulting in a convenient backhaul.

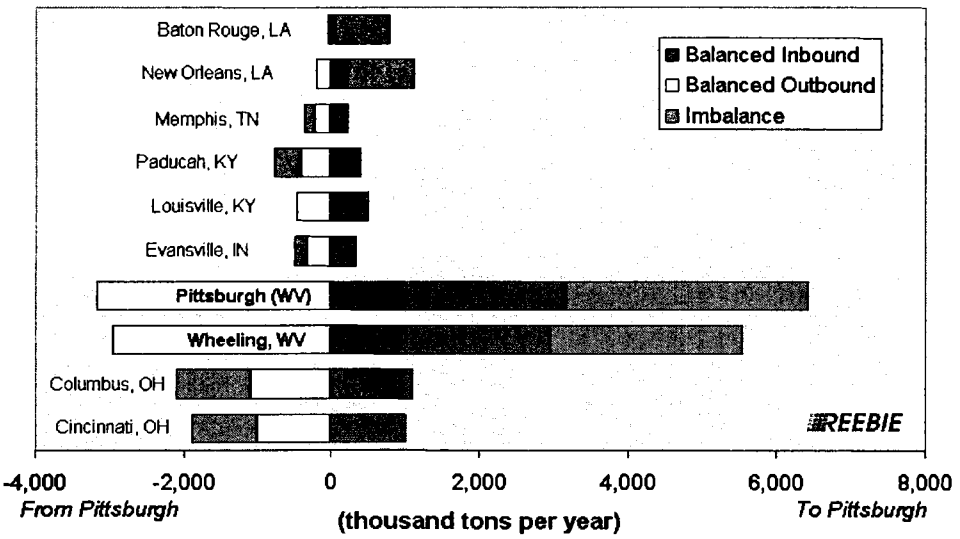


Figure A.16: Pittsburgh Bulk Market Imbalance, All Modes, Water Lanes

Figure A.17 shows the corresponding chart for the Pittsburgh non-bulk markets. Note that the chart is shown on a different scale. From the charts it is clear that some bulk head-hauls are balanced by non-bulk back-hauls, except in the Louisiana markets where the imbalances are in the same direction in both bulk and non-bulk. Due to the differences in tonnages, the bulk market on the whole remains unbalanced.

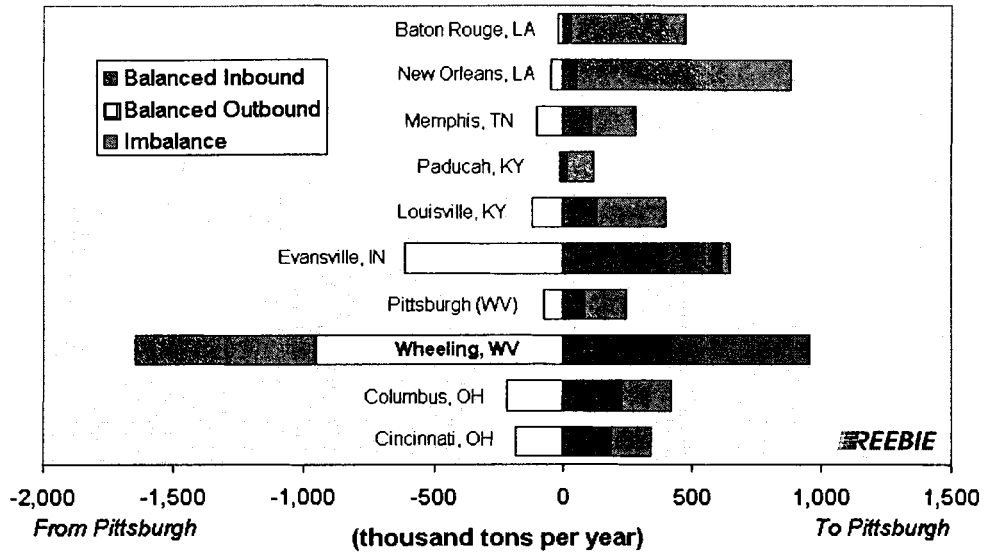


Figure A.17: Pittsburgh Non-Bulk Market Imbalance, All Modes, Water Lanes

7. Appendix B: Analysis Methodology

The Phase I research relied heavily on freight market data, both to make its assessments and to guide the Phase II process. As with the later fieldwork, the initial quantitative analysis was based on a drill-down methodology, a process of examining data at increasingly detailed levels to zero-in on opportunities and generate ways of acting on them. First, TRANSEARCH data at the summary level was examined in multiple dimensions. The data were then refined to show county-level information and commodity detail at the four-digit Standard Transportation Commodity Code (STCC4) level, which produced a list of individual flows that could be targeted. As much information as possible was gathered from the FREIGHT LOCATER database regarding potential customers and economic intelligence as to what traffic might be viable, then efforts were made to contact the shippers to obtain further information.

Martin Associates conducted the market analysis of the specific container repositioning and container-on-barge opportunities as well as the project cargo breakbulk market opportunity. The analysis was based on surveys of shippers and consignees of lumber, logs, plastics and resins, products now containerized that are produced or consumed in the Pittsburgh/Western Pennsylvania markets, barge lines, steamship lines, trucking lines freight brokers and terminal operators. In addition to cost data, the interviews provided insight into the criteria and requirements for shippers/consignees market needs. The findings from these interviews and the results of cost analyses were presented in the previous section.

Because of their importance to the development of this study, some information regarding the data sources, derivations, and definitions follow.

7.1 Definitions

The analysis was broadly conducted by Business Economic Area (BEA), with drill down to county and establishment levels as necessary. The BEA is a geographic definition generated by the Bureau of Economic Analysis (BEA) for the purposes of analyzing the national's economic activity. The BEA is based on market factors such as commuting, residences, proximity, population centers, and pattern of commercial activity, independently of jurisdictional boundaries such as state and county. It is therefore a good approximation for markets where freight is generated, and least likely to fall victim of artifacts generated by arbitrary jurisdictional boundaries.

Traffic were examined for the base year 2001. Where the term "water markets" is used, it implies a selection of BEAs that showed any degree of water activity during the base year. The term "water commodities" implies any four-digit Standard Transportation Commodity Code (STCC) that showed movement by water in the base year.

The "Port of Pittsburgh" is defined as the eleven counties that comprise of the Pittsburgh Port Commission service area (see 3.1.1). Most of the same counties, with the exception of Clarion, also make up the Pennsylvania portion of the Pittsburgh BEA (#53). The counties are: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland, some of which do not receive direct water service. This definition is distinct from the Census Bureau definition for the Pittsburgh Metropolitan Statistical Area (MSA), which is a subset of the Pittsburgh BEA consisting of six counties only: Allegheny, Beaver, Butler, Fayette, Washington, Westmoreland. The Census Bureau uses the MSA for purposes of producing metropolitan area statistics, relating mainly to commuting and social issues; the BEA is a more appropriate unit of analysis for freight movements.

The "Pittsburgh Catchment Area" is defined as the four BEAs adjacent to Pittsburgh which cannot be served from the Mississippi River System directly, including Cleveland, Ohio (#55); Erie, Penn. (#54); Buffalo, N.Y. (#8); State College, Penn. (#9); and the West Virginia portion of the Pittsburgh BEA consisting of nine counties: Barbour, Doddridge, Harrison, Lewis, Marion, Monongalia, Preston, Taylor, Upshur. For the purpose of this analysis, this nine-county market area is shown as "Pittsburgh, WV", to distinguish it from the service area of "Pittsburgh, PA." Only three of the nine counties fall within the Pittsburgh Consolidated Metropolitan Statistical Area (CMSA): Monongalia, Marion, and Preston.

7.2 Data Sources

Multiple data sources were used in the preparation of this report. The following paragraphs contain a short description on each of the data sources and/or models.

7.2.1 TRANSEARCH

TRANSEARCH® is an integrated, multimodal freight flow database constructed from direct and indirect inputs and modeling techniques. A market research data service of Reebie Associates, it is a proprietary database of freight flows that has been produced annually for two decades. It provides a market-to-market picture of freight traffic movements in the United States, for Canada/U.S., and for Mexico/U.S. TRANSEARCH services are supplied to leading carriers across the U.S. transportation industry as well as to

government agencies at the federal, state, and local levels. The database is the leading commercial source of freight traffic information, with a long record of practical guidance to marketing, operating, investment and policy decisions. The version used in this analysis corresponds to traffic level estimates for the year 2001.

TRANSEARCH is constructed from a large number of separate, partially overlapping sources. A major component in the development of TRANSEARCH is the conversion of many different information sources into a single, common framework. Not all sources are equal. Economic modeling is used to aid in the design where data are lacking or confidential, and to check such factors as spatial patterns and logic. The US database is built from approximately 100 sources; exports and vessel-borne imports are included, and NAFTA trade is captured from foreign and federal information. To supplement these sources Reebie Associates has established a large scale, long-term data exchange program with the motor carrier industry. The program, which was instituted to validate information about spatial patterns of truck traffic, has been an effective way to confirm traffic patterns in TRANSEARCH. Truck information received in the exchange program amounts to over 70 million shipments annually, and is the largest truck data sample of its kind.

Records display annual dollar value and tonnages moved by market pair, by commodity and seven modes of transportation. Thus a record for domestic U.S. contains an origin market area, destination market area, commodity code (Standard Transportation Commodity Code – STCC or Standard Industrial Classification – SIC) and alpha commodity description, volume in each traffic lane, plus volume for for-hire truckload, for-hire less-than-truckload, private truck, rail carload, rail/truck intermodal, air and water. Market definition can be at the county, Business Economic Area (BEA), metropolitan area, state or province level. Volume can be expressed in terms of tons, vehicles, value, or VMT. TRANSEARCH also includes information on secondary traffic; freight re-handled by truck from warehouse and distribution centers.

Figure B.1 shows the basic data sources for TRANSEARCH. THE 2001 database was constructed from the most recent set of freight traffic flow information available through public, commercial, or proprietary channels. The development process draws these disparate sources together, checking their completeness and basic validity, assigning commodity, geography and mode descriptions and then putting them into a uniform format.

7.2.1.1 Constructing TRANSEARCH Dataset for This Study

Development of each annual version of the TRANSEARCH database generally begins by establishing state production volumes by industry or commodity. This information is drawn from the Annual Survey of Manufacturers and the Census of Manufacturers. Once

the production volumes are established, tonnages moving by truck, rail, water, and air are developed. Import volumes are subsequently combined into the data set at the point of importation.

Mode	Traffic Flow	Production & Shipment
Truck	• RA Motor Carrier Industry Data Exchange • Department of Energy Coal Movement Statistics • Department of Agriculture Produce Movement Data • BTS Commodity Flow Survey • RA Prior Year TRANSEARCH Databases	• Department of Commerce Census/Survey of Manufactures • DRI-WEFA Industrial Production Indices • Trade Association Production & Shipment Reports • US Geological Survey Mineral Industry Reports • Motor Carrier Industry Financial & Operating Statistics • InfoUSA Industrial Employment & Activity • Railroad Industry Proprietary Rebill Factors • County Population Data • Inter-Industry Trade Patterns (Input/Output Table)
Water	• Corps of Engineers Waterborne Commerce State-State Data • Corps of Engineers Waterborne Commerce Port Statistics • RA Prior Year TRANSEARCH Databases	• Department of Commerce Census/Survey of Manufactures • DRI-WEFA Industrial Production Indices • Trade Association Production & Shipment Reports • US Geological Survey Mineral Industry Reports • Private Port Directories
Air	• BTS T-100 Domestic Traffic Data • BTS Form 41 T-3 Enplanement Statistics • BTS Commodity Flow Survey • RA Prior Year TRANSEARCH Databases • Statistics Canada International Trade Data • FAA 5010 Airport Database	• Department of Commerce Census/Survey of Manufactures • DRI-WEFA Industrial Production Indices • Trade Association Production & Shipment Reports
Rail	• Surface Transportation Board Railroad Waybill Sample • RA Rail Industry Data Exchange • RA Prior Year TRANSEARCH Databases	• Department of Commerce Census/Survey of Manufactures • DRI-WEFA Industrial Production Indices • Trade Association Production & Shipment Reports

Figure B.1: TRANSEARCH Data Sources at a Glance

Truck: The truck flow information is based primarily on the motor carrier data exchange program, supplemented by commodity production and consumption volumes from a variety of sources. Carriers that participate in the Motor Carrier Data Exchange program submit a summary of their annual traffic flows that includes origin state or zip code, destination state or zip code, commodity indicators, and tonnage. Most of the Motor Carrier Data Exchange information is now collected at the 5-digit zip code level, and all is provided on an origin-to-destination basis. Zip codes are converted to counties as part of the database preparation process. The program samples shipments at all lengths of haul, and includes considerable coverage in the bulk trucking sector.

Rail: For this study, TRANSEARCH rail traffic data is extracted and summarized from the STB Carload Waybill Sample, with appropriate permission from the Surface Transportation Board. The Waybill Sample is a statistically-based stratified sample of all shipments terminated by U.S. rail carriers. The full Waybill Sample file contains extremely detailed information on the origin, destination, commodity and volume of each sampled movement. Throughout the analysis, railroad carload and trailer-on-flat-car/container-on-flat-car (TOFC/COFC) traffic are maintained as separate volumes. The identification of which shipments utilized TOFC/COFC services was based on the combined analysis of the car type, commodity and a series of TOFC/COFC data items in the public use file.

Water: The US Army Corps of Engineers annually collects information on all shipments moving on the nation's waterways to support its management and planning activities. TRANSEARCH uses various components of the data issued by the Corps to develop its waterborne flow data. The primary input is the annual COE file of waterborne commerce. This source provides state-to-state annual volumes of broad commodity groupings. Supplementing this flow data are originating and terminating volumes by port and more specific commodity type, which are also provided by the COE. The less detailed state-to state flow data is disaggregated to the port level using the more detailed origination and termination information, supplemented with port profiles from commercial sources.

Air: Air cargo represents by far the smallest portion, on a tonnage basis, of the TRANSEARCH database. Air activity is constructed using the Federal Aviation Administration's (FAA's) Airport Activity Statistics.

7.2.2 *FREIGHT LOCATER Industrial Establishment Data*

FREIGHT LOCATER® is a proprietary database of shipping establishments marketed by Reebie Associates, based on information provided by InfoUSA. This data set provides information on the specific locations of manufacturing and distribution facilities, along with descriptions of their industrial output and employment and sales level. It offers market intelligence on who is shipping, what commodities are being shipped, estimates of annual tonnage, equipment needs, and rates of business growth or contraction. The database contains information on over 168,000 U.S. manufacturing and warehousing establishments.

FREIGHT LOCATER is a tool to increase freight volume and revenue, improve sales force productivity, or expand a customer base. Its applications include telemarketing and sales prospecting, customer profile development, sales territory assessment, facility location decision-making, market shift assessment, and equipment allocation planning. It includes coverage of shipping establishments with over 20 employees, covering over 450 industries and 22 vehicle types. It portrays elements such as:

- Market Area
- County
- State
- Zipcode
- Area code
- City
- Business Economic Area
- Annual tons
- Annual sales
- Employees
- Rates of growth/contraction
- Industry activity
- Company profile information

Establishments captured in this data source include current and potential users of the inland waterway system, and shippers by rail, truck, and air.

7.2.3 COSTLINE Family of Cost Models

Reebie's COSTLINE® products are used to calculate the shipment costs of U.S. and Canadian freight carriers. The models are designed to improve and speed rate negotiations by shippers; provide cost analysis capabilities to carriers; and allow for the economic analysis of corridors, policies and investments by public sector users.

COSTLINE analyses typically reveal comparative advantages between modes and carriers, as well as providing informed bargaining and systematic benchmarking of transport profit margins to users. The following mode-specific costing services were relied on for the purposes of this study:

- COSTLINE ***Rail Cost Analysis Model (RCAM)*** – assesses origin-to-destination shipment transportation costs by rail on a carrier-specific basis. As an example, the pie chart below illustrates components of rail carload shipping rates that are developed by the rail cost model. The various components vary with the shipments' parameters, such as weight, distance, routing, and car type.

- COSTLINE ***Truck Cost Analysis Model (TCAM)*** – used to assess shipment profitability and cost components that vary with shipment parameters, such as weight, distance, and trailer type.

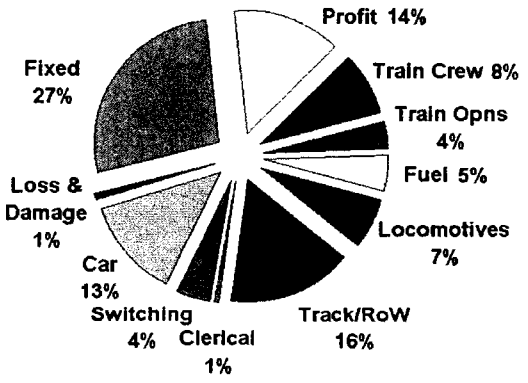


Figure B.2: Typical Cost Breakdown Report from Reebie's COSTLINE Rail Cost Allocation Model (RCAM)

- COSTLINE ***Intermodal Cost Analysis Model (ICAM)*** – used to assess cost to the carrier of intermodal shipments and cost components that vary with the shipments' parameters, such as weight, distance, routing, service code, and trailer/container type.

- COSTLINE ***Barge Cost Analysis Model (BCAM)*** – provides detailed and summary insights about the costs of operations on the inland waterway network. The various components vary with the shipments' parameters, such as weight, distance, lock delays and barge type.

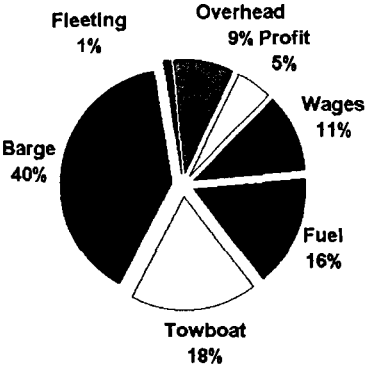


Figure B.3: Sample Cost Breakdown Report Generated Using Reebie's COSTLINE Barge Cost Analysis Model (BCAM)

ENDS

DRAFT SUBJECT TO CHANGE

Proposed Agenda for International Delegation Visit to Pittsburgh
Thursday, June 23, 2005

Contact	Contact Numbers	Hotel
Suzi Pegg	**Office:** 412-392-4555 ext. 4544 **Cell:** 412-983-3683	Omni William Penn Hotel 530 William Penn Place Pittsburgh, PA 15219 412-281-7100
Serena Rajakumar	**Office:** 412-392-4555 ext. 3540 **Cell:** 724-413-0660	
Sherry Colonna	**Office:** 412-392-4555 ext. 1026	

- **7:45 AM**
  Meet Pittsburgh Regional Alliance staff in lobby of Omni William Penn Hotel
  Walk to River's Club for breakfast

- **8:00 - 9:15 AM**
  Breakfast and Introduction to the Pittsburgh Region—Pittsburgh Regional Alliance & All International Partners (River's Club)
  Speakers:
  Roger Cranville: Senior VP, Business Investment, Pittsburgh Regional Alliance
  Bernie McShea: Senior VP, Business Investment, Pittsburgh Regional Alliance

- **9:15 AM**
  Travel: Shuttle pick-up at River's Club (Cherry Way & Grant Street) to 300 Technology Drive

- **9:30 - 10:30 AM**
  Center for Biotechnology and Bioengineering (Research Facility) Tour
  University of Pittsburgh, Department of Molecular Genetics and Biochemistry
  (300 Technology Drive)
  http://www.pitt.edu/~rsup/mgbresupfac5.html

- **10:30 AM**
  Travel: Walk to 100 Technology Drive (Suite 400)

- **10:45 – 11:45 AM**
  McGowan Institute for Regenerative Medicine & Tissue Engineering Program / Pittsburgh Tissue Engineering Initiative with Dr. Alan Russell
  (100 Technology Drive, Training/Conference Room)
  http://www.mirm.pitt.edu/
  http://www.ptei.org/default.asp

- **11:45 AM – 12:30 PM**
  Break/Buffet Lunch in Tech Drive Room (adjacent to Training/Conference Room)

- **12:30 - 1:30 PM**
  Lunch with Keynote Speaker, Doros Platika, M.D., President & CEO of Pittsburgh Life Sciences Greenhouse
  (100 Technology Drive, Training/Conference Room)

http://www.pittsburghlifesciences.com/default.aspx

- **1:30 PM**
  Travel: Shuttle pick-up at 100 Technology Drive to University of Pittsburgh Cancer Institute

- **2:00 – 3:00 PM**
  University of Pittsburgh Cancer Institute—Speaker Andrew Remes, Assistant Director, Office of Enterprise Development
  (Shadyside)
  http://www.upci.upmc.edu/index.cfm

- **3:00 – 3:30**
  Break/Coffee & Tea will be available (tentative)

- **3:30 – 5:00 PM**
  The Center for Biomedical Informatics
  (Shadyside)
  http://www.cbmi.pitt.edu/content.asp?id=253

- **5:00 PM**
  Travel: Shuttle pick-up from UPCI to Omni William Penn Hotel

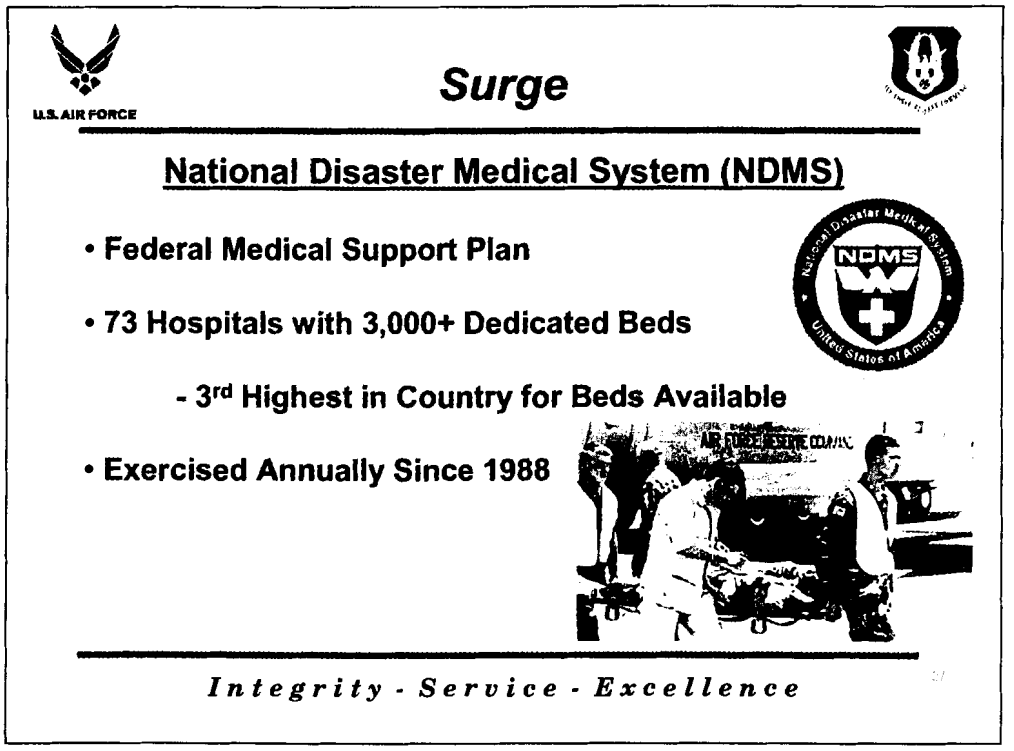
- **5:20 PM – 5:40 PM**
  Break at Omni William Penn Hotel

- **5:40 PM**
  Meet PRA staff in the lobby of Omni William Penn Hotel and walk over to the reception at the Reed Smith Building (435 Sixth Ave.)

- **5:45 – 7:00 PM**
  Reception with International BIO delegation
  Speakers: Dan Onorato & Roger Cranville
  Light refreshments and appetizers served
  (Reed Smith 9th Floor/Deck, Downtown Pittsburgh)

- **7:00/7:30 PM**
  Dinner with appropriate country leadership (eg. India—Tie, Pittsburgh; United Kingdom—BABC representatives); Biotech Company representatives; and the Pittsburgh Regional Alliance
  (TBD)

- Company Visits tentative depending on suitability of companies



Another surge plan that we participate in is the National Disaster Medical System (NDMS).

It is a Federal Medical Support Plan for disasters of great magnitude.

Pittsburgh is one of 70 centers in the country.

There are 73 local hospitals with 3,000+ dedicated beds that participate.

We rank #3 for beds available, a clear indication of the outstanding medical facilities we have in Pittsburgh.

It has been exercised annually since 1988, with a wide variety of scenarios. Last year's scenario was hurricane response.

Our exercises in the past have included actual flights, with C-141s, C-130s and Army and Civilian helicopters carrying patients around the tri-state area.

It is truly a Joint venture, with military, federal, local and private organizations all working together.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Surge

BRIEFING BULLET:

- National Disaster Medical System (NDMS)
  - Federal Medical Support Plan
  - 73 Hospitals with 3,000+ Dedicated Beds
    - 3rd Highest in Country for Beds Available
  - Exercised Annually Since 1988

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Lt Colonel Joseph Poznik

SUPPORTING ANALYSIS:

- Supporting Analysis Data
- Department of Veterans Affairs letter to the Defense Base Closure and Realignment Commission dated June 14, 2005
- After Action Report – Pitt Life 2004/Hurricane EX-04 (NDMS) Exercise

SUPPORTING DOCUMENTATION: 10 Pages

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: NDMS

BRIEFING BULLET:

Briefer:
Analysis POC(s): Lt Col Poznik

SUPPORTING ANALYSIS:

The National Disaster Medical System (NDMS) is a federal initiative, which is intended to provide a nationwide, coordinated response of emergency medical services in case of a disaster of great magnitude. It is intended to compliment state and local efforts in the event of a disaster that is so wide spread that "mutual aid" among different areas of the nation is required.

NDMS serves disasters such as earthquakes, storms, fires, nuclear reactor accidents, WMD events, or an overseas military conflict producing military casualties evacuated to the CONUS for treatment.

Pittsburgh has over 3000 hospital beds promised to the NDMS system by 73 private sector hospitals in the Greater Pittsburgh area.

SUPPORTING DOCUMENTATION:

Letter from the NDMS Area Emergency Manager

After Action Report Pitt Life 2004

DEPARTMENT OF VETERANS AFFAIRS
Emergency Management Strategic Healthcare Group
VA Pittsburgh Healthcare System
7180 Highland Drive,
Bldg. 1, Room 6036 West
Pittsburgh, PA 15206-1297

June 14, 2005

In Reply Refer To:

Chairman
Defense Base Closure and Realignment Commission

Dear Chairman,

As Area Manager for the National Disaster Medical System (NDMS), please accept the information in this letter as fact regarding the NDMS and the 911th Air Lift Wing in Pittsburgh, Pennsylvania.

The NDMS is a single system to care for large numbers of casualties from either an overseas war or domestic disaster. The NDMS is a cooperative effort of the U.S. Public Health Service (USPHS), Department of Veteran Affairs (DVA), Department of Defense (DoD), Federal Emergency Management Agency (FEMA), state and local governments and the private sector. There are more than 100,000 pre-committed nonfederal acute care hospital beds in more than 1,700 hospitals in the United States that are part of the NDMS.

The 911th ALW has been the reception site for incoming patients to Pittsburgh under the NDMS plan. For the past eighteen (18) years, we have brought together Federal, State, County, City, Joint Military Services to include the Army, Navy, and Marines, along with the private sector agencies at the 911th base to hold NDMS exercises. These exercises have determined that the 911th and Pittsburgh are ready and able to receive patients from any war or disaster that could strike our country.

The VA Pittsburgh Healthcare System is a Federal Coordinating Center (FCC) for the NDMS. The VA is responsible for 40 of the 70 FCC in the country. Out of the 40 NDMS-FCC coordinated by the VA nationwide, Pittsburgh is the third largest for NDMS hospital beds minimally set aside by private sector hospitals for the program. In addition, we are the fourth largest nationwide for the maximum number of beds set aside by private sector hospitals for the NDMS program. We have over 3000 hospital beds promised by 73 private sector hospitals in the Greater Pittsburgh area for this nationwide system. The hospitals in the Pittsburgh medical complex are world class. This makes us one of the top four sites in the entire country to deliver patients to when a large-scale disaster strikes. The 911th ALW has the expertise from these medical complexes for both an Aeromedical Evacuation Squadron, which is the medical flight crew for the patients on

the C-130's, and an Aeromedical Staging Squadron that offloads and processes the patients when they have arrived in Pittsburgh.

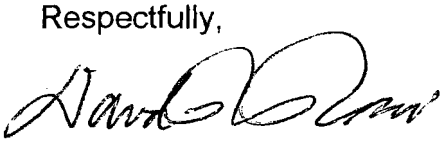
There have been many exercises with the 911th ALW, to include the Civil Air Patrol, U.S. Navy Reserves, PA Air National Guard, U.S. Army and U.S. Marines, in addition to the VA, Pittsburgh hospitals, and ambulance services. Huey and Chinook helicopters and C-141 aircraft, along with combat drop zones have been utilized in these exercises. The last exercise specifically was preparing to receive patients from an overseas conflict. The local hospitals are notified of the anticipated disaster, and the number of bed spaces is given from each area hospital. The patients are taken from the aircraft, to a hangar, triaged, and emergency care provided. The patients are then sent via ambulances and helicopters to area hospitals minutes away for treatment and admission.

During Desert Shield/ Storm, the 911th ALW at Pittsburgh was designated as one of the nation's primary areas for receiving casualties from the war. Pittsburgh has a great wealth of medical centers and trauma centers capable of receiving the most critical patients. The destination hospital of the patient would be based on the patient's needs. A patient with chemical burns would be taken to one of the City's premiere burn units.

One could argue that the NDMS might utilize the National Guard base at Pittsburgh International Airport or the Allegheny County Airport as a reception site for C-130 planes full of patients from a war or national disaster. However, those airports do not have the proper maintenance crews, spare parts, special equipment, medical crews, etc., needed to service the C-130 aircraft as the 911th base has. Youngstown could service C-130 aircraft, but it would not be in the patient's best interest to be transferred for a two or three hour ambulance drive from Ohio to the extensive civilian medical complex in Pittsburgh.

Since I am the NDMS Area Manager for Western Pennsylvania and Northern West Virginia and have the history and the knowledge of the importance of our area to this program, I would be most willing to testify to the need of the 911th Air Lift Wing to remain in Pittsburgh.

Respectfully,



David R. Rossi
Area Emergency Manager
National Disaster Medical System
VA Pittsburgh Healthcare System
7180 Highland Drive
Pittsburgh, Pennsylvania 15206

AFTER ACTION REPORT

PITT LIFE 2004/ HURRICANE EX-04 (NDMS EXERCISE)

1. BACKGROUND

a. The National Disaster Medical System (NDMS) is a federal initiative, which is intended to provide a nationwide, coordinated response of emergency medical services in case of a disaster of great magnitude. The system is a cooperative effort of the Department of Veterans Affairs, Department of Health and Human Services, Department of Defense, The Federal Emergency Management Agency, State and Local Governments, and the private sector. Nationally, NDMS is comprised of approximately 110,000 pre-committed hospital beds from approximately 2,000 hospitals, a medical evacuation and regulating system and 60 Disaster Medical Assistance Teams (DMATs).

The NDMS does not replace existing emergency medical activities, but rather is intended to complement state and local efforts in the event of a disaster that is so wide spread that "mutual aid" among different areas of the nation is required. NDMS serves "national" disasters such as earthquakes, storms, fires, nuclear reactor accidents, WMD events, or an overseas, conventional military conflict producing military casualties evacuated to the Continental United States (CONUS) for treatment.

The NDMS is designed to fulfill three main objectives:

1. To provide hospitalization through a national network of hospitals which have agreed to accept patients in the event of a national emergency.
2. To evacuate patients to designated locations elsewhere in the nation where appropriate medical care can be rendered.
3. To provide medical assistance to a disaster area in the form of DMATs, medical supplies, and equipment.

The NDMS provides coverage for all parts of the nation and is divided into 75 areas. In each area, a Federal Hospital has been designated as the area NDMS Federal Coordinating Center (FCC). The VA Pittsburgh Healthcare System located in Pittsburgh, PA. Has been designated the FCC in Western Pennsylvania/ Northern West Virginia. In the event of an activation of the NDMS, the VA Pittsburgh Healthcare System is responsible for coordinating activities to include transportation, communication, medical manpower, and establishing patient administrative procedures.

Regardless of the kind of disaster or the manner used to activate the system, the NDMS is flexible enough to provide effective medical response under almost any imagined disaster scenario.

b. The Western Pennsylvania/ Northern West Virginia area's 2004 National Disaster Medical System exercise took place on October 2, 2004. The scenario for the exercise was a catastrophic hurricane that occurred in the southern portion of the country. The hurricane generated 10,000+ casualties who needed evacuated to NDMS areas across the country. NDMS Pittsburgh site received 44 casualties that were unloaded, triaged, and sent to NDMS hospitals in the area (simulated). The exercise was called PITT LIFE 2004/ HURRICANE EX-04. A C-130 aircraft was simulated to have landed full of patients from a staging area in San Antonio, Texas.

c. The primary objective of PITT LIFE 2004/ HURRICANE EX-04 was to evaluate the adequacy of the National Disaster Medical System (NDMS) in Western Pennsylvania to receive casualties from a natural disaster that was declared a national disaster.

d. Secondary Objectives were as follows:

1. To evaluate the Western Pennsylvania NDMS system of receiving, tracking, and transporting patients under a natural disaster scenario
2. Supporting mutual objectives for NDMS hospitals to include the evaluation of the following disaster medical functions: staff recall, communications, hospital security, ER operations, staff scheduling, NDMS bed reporting, and the identification of critically needed medical supplies.
3. Objectives being evaluated at the Patient Reception Center (PRC) include communications, transportation, NDMS bed reporting procedures, patient tracking, command and control, and airfield NDMS activities.
4. EMS Systems will also be used during this exercise.
5. Test capabilities of the Disaster Medical Assistance Team (PA-DMAT 1).
6. Train PA-DMAT 1 and other medical personnel from the 339th General Hospital (USAR) in proper techniques for loading and unloading patients in a C-130 aircraft, proper stretcher carrying techniques, and medical triage and patient flow management (3 separate classes prior to the exercise).
7. Test the American Red Cross patient tracking system.
8. Test PA-DMAT 1 ability to sustain a field type hospital set up by them in the triage area at the 911th AFR base.
9. Test the field communications by the HAM radio operators.

e. The 911th Airlift Wing, U.S. Air Force Reserve Base at Pittsburgh International Airport (PIA) is the reception site for the NDMS in our area. We simulated a C-130 aircraft arriving from San Antonio, Texas with hurricane (mock) casualties. They were offloaded, triaged, and transported (simulated with seven ambulance companies) to NDMS hospitals in the area. The hospitals gave the NDMS their bed vacancies prior to the exercise.

2. PREPARATION FOR THE EXERCISE

a. Several exercise-planning meetings were held at the Allegheny County EOC and the 911th Air Lift Wing in the months preceding October 2, 2004.
b. Letters and phone calls to agencies and organizations requesting Pitt Life 2004- Hurricane EX-04 participation were made by the NDMS office several months prior to October 2, 2004.
c. Press releases were sent out to radio, television, and newspapers a week before the exercise.
d. Letters were sent to all NDMS hospitals several months before the exercise. The letters explained the exercise scenario, gave advance notice of being called upon for bed counts the week prior to the exercise and gave the hospital a packet of paper patients to use or not use at the discretion of the hospital.

3. TRAINING ON OCT. 2, 2004 PRIOR TO THE EXERCISE START TIME

a. Orientation and check-in of all exercise personnel took place at Bldg. 419 basement between 6:30 a.m. and 8:00 a.m. This was completed in an organized and timely manner.
b. Three training classes were given to all of the participants between 8:00 a.m. and 10:00 a.m. The classes were as follows:

1. Techniques of loading and unloading patients from a C-130 aircraft presented by 911th Aero-medical Evacuation Squadron.
2. Proper stretcher carrying techniques presented by 911th ASTS personnel.
3. Medical triage and patient flow management presented by PA DMAT-1 administrative personnel.

The training was established for the Disaster Medical Assistance Team (DMAT) PA-1, 339th USAR Combat Support Hospital personnel, and the Civil Air Patrol. A total of 95 participants were trained. The training was excellent and the execution of rotating the three groups through the training sessions was accomplished on time.

c. Forty-four (44) Civil Air Patrol (CAP) Cadets were moulaged at 16 different moulage stations between 10:00 a.m. and 10:45 a.m. by the 339th USAR Combat Support personnel. The forty-four CAP Cadets were made up with injuries and scenarios of hurricane victims. The moulage was performed in record time with outstanding, realistic results.

d. The Salvation Army served breakfast coffee and snacks.

e. 44 CAP mock casualties were loaded onto a C-130 aircraft.

f. The DMAT PA-1 set up the triage area in the far end of building 418. In the middle of the treatment area, the Allegheny County Coroner's Office set up a simulated morgue.

4. THE EXERCISE

a. At 10:55 a.m., the exercise started with the simulated landing of a C-130 aircraft loaded with simulated casualties. The stretcher patients were unloaded first by litter bearer teams made up of Army Reservists and CAP personnel. They were unloaded and carried into the triage area of building 419 where they were evaluated and placed in several holding areas according to their diagnosis and medical evaluation. They were then treated by DMAT personnel, new triage tags issued, and assigned hospital distribution by the DMAT. They were then placed on stretchers and loaded into ambulances and transported (simulated) to local NDMS hospitals.

b. This process was repeated for the ambulatory casualties.

c. This entire process of unloading patients from the aircraft, carrying them into the hangar, triage, treatment, assignment to local hospital and simulated transporting went extremely well. The DMAT PA-1 worked as a true team and accomplished the medical reception aspects in a timely, orderly, and medically sound manner as noted by the NDMS Area Manager.

d. The seven ambulance companies that participated in the exercise were staged at the Officer's Club and called up to the triage area as needed. DMAT PA-1 did this as if they had done it 100 times before. It was very well executed with no visible problems.

e. Dead on arrival patients or patients that expired while in the treatment area were sent to the County Coroner's morgue and processed in accordance with Allegheny County Coroner's regulations. This process also went smoothly with no visible problems.

f. DMAT PA-1 kept track of patients and the hospitals that they were transported to. Two VA chaplains administered to the spiritual needs of the casualties. One of the dead on arrival (DOA) was Catholic so the Catholic chaplain gave him the last rights.

g. At 12:00 p.m., the exercise was terminated. All 44 casualties were unloaded, triaged, evaluated, treated, assigned new triage tags, and sent to area NDMS hospitals.

h. All participants were thanked for their participation and given a bagged lunch by the Salvation Army.

5. AFTER ACTION BRIEFING

a. An after action briefing (hot wash) took place in building 419 at 1:10 p.m. with personnel from 911th, CAP, DMAT, NDMS and USAR.

b. It was unanimous that this was an outstanding exercise and training session. Cooperation of all groups was paramount to the success of the exercise. All groups felt that their organizations gained knowledge and experience from this training and exercise. Everyone felt comfortable that Western Pennsylvania is ready to accept patients through the NDMS.

c. CAP was praised by the DMAT for their great actions as mock casualties. The DMAT did an outstanding job of triage. The USAR and USAFR all did outstanding jobs of training, moulaging, and participating.

d. One problem addressed was that Life Flight, the helicopter ambulance, landed at the Air Force Base without obtaining prior permission to land. They have participated in many previous exercises and have always followed the proper procedure. This time they forgot and apologized for the error to the Air Force flight line.

e. We had an outside observer at the exercise this year. Lt. Col. Jeannette Drake, Emergency Preparedness Liaison Officer (EPLO) to Pennsylvania, shadowed Lt. Col. Ken Wheeler the entire day of the exercise. Her comments were as follows: "I was delighted to observe the NDMS exercise this weekend and see the fine work being accomplished. I felt very welcomed and was provided with a valuable learning opportunity. Having observed many exercises in my years as a Disaster Preparedness Officer, I am very impressed with the professionalism, quality of training, and the level of cooperation between the 911th and the other agencies."

f. Dr. Vic Tucci, Chairman of the Western Pennsylvania Metropolitan Medical Response System (MMRS), was also an observer at the exercise. He commented that the exercise went smoothly and participation and coordination of all agencies involved in the exercise was excellent (See attached report).

6. COMMENT FROM NDMS AREA MANAGER

I have been coordinating and conducting these NDMS exercises since 1988. This year's exercise brought unique challenges that we have not had in the past. For the last two months, an unprecedented four hurricanes have hit our southern states, especially Florida. Operation Iraqi Freedom is still in progress. As a result, we did not have the usual complement of participants. DMAT personnel were still deployed or had just returned from deployments for the hurricanes. 171st PANG

Refueling Wing medical personnel were deployed or just returning from an assignment and could not participate. The American Red Cross was busy doing relief work in Florida and Western Pennsylvania for the hurricane relief efforts and could not participate. Despite the lack of our usual amount of participants, the exercise and training was well planned, coordinated, and executed. All of the organizations contributed their best efforts, and it showed in the results. It was a great display of teamwork, cooperation, and cohesiveness between all the individuals, organizations, and agencies. I want to thank the 911th Air Lift Wing for hosting the exercise. Without the use of their base, aircraft, hangers, and personnel, these exercises would not be very realistic. I also want to thank the DMAT PA-1, Civil Air Patrol, Ham Radio Operators, Air National Guard, 339th CSH US Army Reserve, Salvation Army, Allegheny County Coroner's Office, Department of Veterans Affairs Chaplain Service, and the NDMS hospitals and ambulance companies from Western Pennsylvania whose dedication to the NDMS program has made Western Pennsylvania one of the strongest NDMS areas in the Country.

Sincerely,

David R. Rossi
NDMS Area Manager
VA Pittsburgh Healthcare System

dlr 365-5599

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Sincerely,

David R. Rossi
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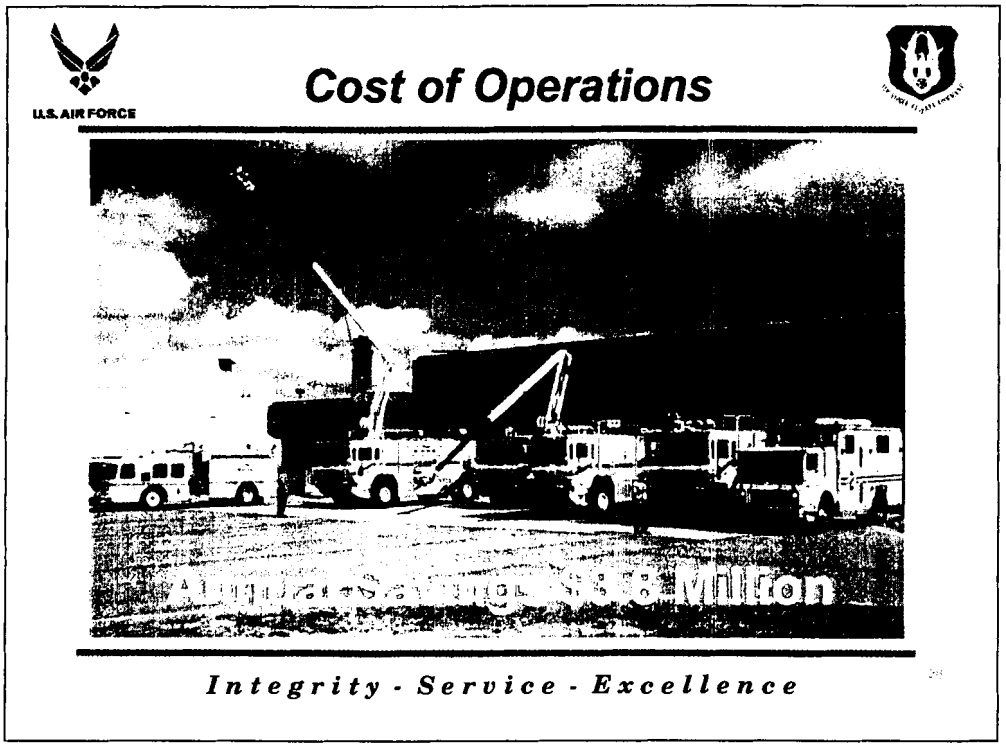
VA Pittsburgh Healthcare System



We are a very low-cost AF organization. Our Airport Use Agreement with the County costs the AF $20,000 per year. The average cost for Airport usage fees at similar AFRC bases is $115,000.

Our base Fire Department O&M cost is $46,000 per year. That is for our Base Fire Inspector. The average O&M costs for AFRC bases with Fire Departments is $3.7 Million.

All together, that is an annual savings of $3.8M. That amount does not even consider the cost of maintaining, repairing and replacing the equipment and facilities like the County Firehouse shown here.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Cost of Operations

BRIEFING BULLET:

- Annual Savings $3.8 Million

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- Cost Comparison
- Firefighter Expenses
- Airport User Fees
- Budget figures for Firefighter Expenses

SUPPORTING DOCUMENTATION: 7 Pages

COST COMPARISON

	Lease Costs*	Fire Dept Cost Avoidance**
Pittsburgh ARS	$20K	---
Ave Other AFRC Bases	$115K	$3.7M

*From FY2000-2005, for 6 AFRC bases with leases.

**Includes labor and training costs for 7 AFRC bases with fire departments. Does not include facilities and vehicle costs.

Firefighter Expenses

Installation	Actual Expenses 1 Oct – 3 Jun	Projected 4 Jun – 30 September	Total
March	$3,511,970	$1,170,656	$4,682,627
Dobbins	$2,898,934	$966,311	$3,865,246
Homestead	$2,863,553	$954,517	$3,818,070
Westover	$2,719,489	$906,496	$3,625,986
Niagara Falls	$2,693,958	$897,986	$3,591,944
Youngstown	$2,621,115	$873,705	$3,494,820
Gen Mitchell	$1,896,921	$632,307	$2,529,228
Grissom	$264,264	$88,088	$352,352
Minn-St. Paul	$51,933	$17,311	$69,244
Pittsburgh	$35,136	$11,712	$46,848

Airport User Fees								
		2000	2001	2002	2003	2004	2005	Total
Gen Mitchell	46	$106,575	$110,275	$119,609	$123,975	$342,756	$250,100	$1,053,290
Youngstown	40	$75,820	$88,575	$95,563	$105,430	$451,521	$196,033	$1,012,942
Minn-St. Paul	47	$107,050	$86,375	$145,770	$138,836	$274,032	$259,568	$1,011,631
Niagara Falls	48	$78,311	$77,426	$104,738	$89,322	$137,776	$76,875	$564,448
March	85	$59,758	$57,488	$47,768	$103,909	$78,141	$36,823	$383,887
Pittsburgh	30	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$120,000
Westover	19	$20,221	$9,554	$4,894	$41,807	$2,578	$5,000	$84,054
Grissom	86	$11,148	$16,655	$0	$0	$0	$0	$0
Homestead	23	$0	$0	$0	$0	$0	$0	$0
Dobbins	31	$0	$0	$0	$0	$0	$0	$0

	October - 3 June	Projection July - September	Total
Westover	$ 2,719,489.98	$ 906,496.66	$ 3,625,986.64
Homestead	$ 2,863,553.16	$ 954,517.72	$ 3,818,070.88
		$ -	$ -
Pittsburgh	$ 35,136.02	$ 11,712.01	$ 46,848.03
		$ -	$ -
Dobbins	$ 2,898,934.97	$ 966,311.66	$ 3,865,246.63
		$ -	$ -
Youngstown	$ 2,621,115.60	$ 873,705.20	$ 3,494,820.80
		$ -	$ -
Gen Mitchell	$ 1,896,921.49	$ 632,307.16	$ 2,529,228.65
		$ -	$ -
Minneapolis-St Paul	$ 51,933.00	$ 17,311.00	$ 69,244.00
		$ -	$ -
Niagara Falls	$ 2,693,958.14	$ 897,986.05	$ 3,591,944.19
		$ -	$ -
March	$ 3,511,970.32	$ 1,170,656.77	$ 4,682,627.09
		$ -	$ -
Grissom	$ 264,264.39	$ 88,088.13	$ 352,352.52

Fire Protection & Search Rescue

RCCC Report by EEIC (Summary query on 'PSR (Field Site OBL/AL))
6/3/2005 10:50:35 AM
Scaling: None
Where... Source Name = 'PSR' AND Status Code = 'C' AND FT not in list (T, X, Z) AND FC = '54' AND FY (4 Char) = '2005' AND OAC = '62' AND RCCC = '134425'

+25%

RCCC	OBAN	EEIC (All 5)	Ann Dir	Qtr Dir	Comm Dir	GrObl Dir	Uncomm Qtr Dir	
134425	19	391	0.00	0.00	0.00	25,477.91	(25,477.91)	
		392	0.00	0.00	0.00	1,922,555.70	(1,922,555.70)	
		393	0.00	0.00	0.00	685,303.54	(685,303.54)	
		394	0.00	0.00	0.00	25,000.00	(25,000.00)	
		396	0.00	0.00	0.00	0.00	0.00	
		409	20,942.00	20,942.00	0.00	20,942.00	0.00	
		59218	920.00	920.00	0.00	920.00	0.00	
		59219	0.00	0.00	0.00	0.00	0.00	
		609	0.00	0.00	0.00	0.00	0.00	
		619	0.00	0.00	0.00	0.00	0.00	
		61950	58,600.00	48,600.00	6,609.85	34,990.15	7,000.00	
		641	5,000.00	5,000.00	0.00	4,300.68	699.32	
		Total	85,462.00	75,462.00	6,609.85	2,719,489.98	(2,650,637.83)	Weitzer
	23	391	0.00	0.00	0.00	51,213.94	(51,213.94)	
		392	0.00	0.00	0.00	1,892,854.55	(1,892,854.55)	
		393	0.00	0.00	0.00	761,777.43	(761,777.43)	
		394	0.00	0.00	0.00	24,800.00	(24,800.00)	
		396	0.00	0.00	0.00	16,663.97	(16,663.97)	
		409	7,000.00	7,000.00	0.00	2,936.47	4,063.53	
		47303	1,000.00	1,000.00	0.00	0.00	1,000.00	
		53360	65,000.00	65,000.00	0.00	63,989.11	1,010.89	
		56909	28,000.00	28,000.00	4,745.80	15,419.95	7,834.25	
		609	0.00	0.00	0.00	0.00	0.00	
		61950	53,900.00	53,900.00	0.00	33,897.74	20,002.26	
		Total	154,900.00	154,900.00	4,745.80	2,863,553.16	(2,713,398.96)	Homestead
	30	392	0.00	0.00	0.00	26,408.71	(26,408.71)	
		393	0.00	0.00	0.00	8,327.31	(8,327.31)	
		394	0.00	0.00	0.00	400.00	(400.00)	
		409	1,000.00	250.00	0.00	0.00	250.00	
		609	0.00	0.00	0.00	0.00	0.00	
		Total	1,000.00	250.00	0.00	35,136.02	(34,886.02)	Pittsburgh
	31	391	0.00	0.00	0.00	64,728.13	(64,728.13)	
		392	0.00	0.00	0.00	1,962,815.55	(1,962,815.55)	
		393	0.00	0.00	0.00	744,671.73	(744,671.73)	
		394	0.00	0.00	0.00	19,099.70	(19,099.70)	
		396	0.00	0.00	0.00	5,732.21	(5,732.21)	
		409	0.00	0.00	0.00	0.00	0.00	
		533	8,500.00	8,500.00	0.00	8,387.00	113.00	
		591	0.00	0.00	0.00	0.00	0.00	
		609	1,000.00	1,000.00	0.00	3,216.42	(2,216.42)	
		619	50,300.00	50,300.00	0.00	50,209.27	90.73	
		61950	52,000.00	38,500.00	9,233.49	35,766.51	(6,500.00)	
		641	0.00	0.00	0.00	4,308.45	(4,308.45)	
		642	0.00	0.00	0.00	0.00	0.00	
		Total	111,800.00	98,300.00	9,233.49	2,898,934.97	(2,809,868.46)	Dobbins
	40	391	0.00	0.00	0.00	19,939.85	(19,939.85)	
		392	3,811,000.00	1,903,000.00	0.00	1,855,282.02	47,717.98	
		393	0.00	0.00	0.00	644,382.83	(644,382.83)	
		394	0.00	0.00	0.00	20,200.00	(20,200.00)	
		396	0.00	0.00	0.00	25,379.81	(25,379.81)	
		409	10,900.00	8,000.00	0.00	1,298.21	6,701.79	
		53360	24,000.00	24,000.00	1,726.42	16,423.58	5,850.00	
		59219	0.00	0.00	0.00	0.00	0.00	
		609	7,100.00	5,900.00	0.00	3,517.08	2,382.92	
		61950	27,100.00	21,300.00	1,474.90	19,825.10	0.00	

Gross obligations divided by 3 x 4

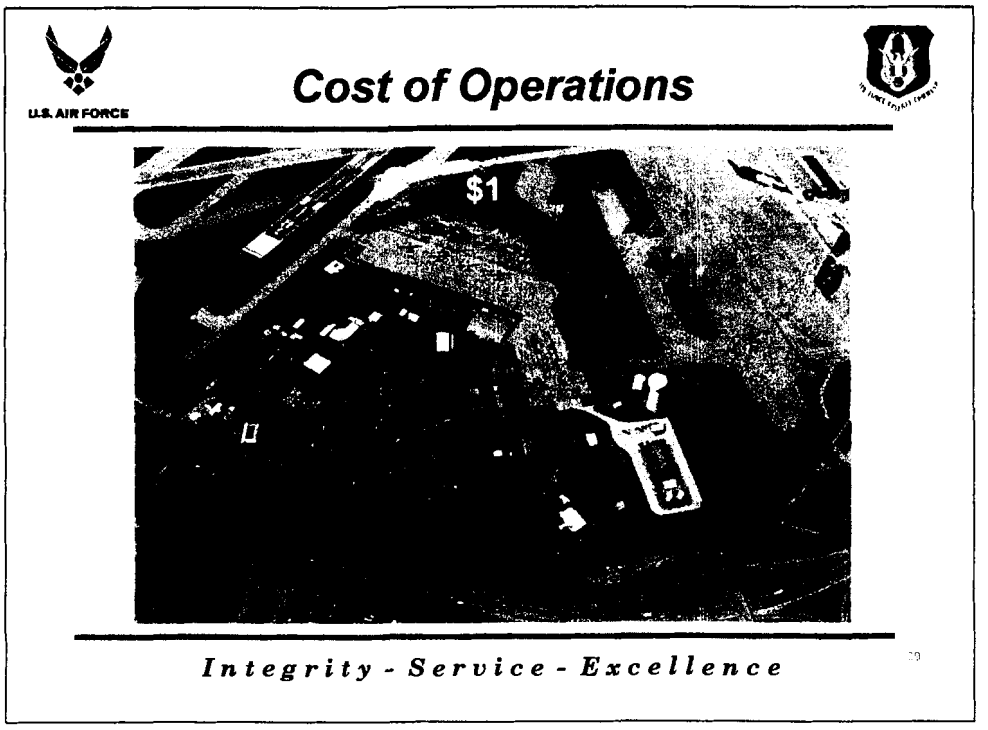
RCCC Report by EEIC (Summary query on 'PSR (Field Site OBL/AL))
6/3/2005 10:50:35 AM
Scaling: None
Where... Source Name = 'PSR' AND Status Code = 'C' AND FT not in list (T, X, Z) AND FC = '54' AND FY (4 Char) = '2005' AND OAC = '62' AND RCCC = '134425'

RCCC	OBAN	EEIC (All 5)	Ann Dir	Qtr Dir	Comm Dir	GrObl Dir	Uncomm Qtr Dir	
134425	40	641	16,800.00	12,700.00	0.00	14,867.12	(2,167.12)	
		Total	3,896,900.00	1,974,900.00	3,201.32	2,621,115.60	(649,416.92)	Youngstown
	46	391	0.00	0.00	0.00	6,744.41	(6,744.41)	
		392	2,933,000.00	2,600,000.00	0.00	1,322,960.83	1,277,039.17	
		393	0.00	0.00	0.00	500,455.43	(500,455.43)	
		394	14,000.00	14,000.00	0.00	14,400.00	(400.00)	
		396	0.00	0.00	0.00	14,279.29	(14,279.29)	
		409	0.00	0.00	0.00	27.30	(27.30)	
		59217	23,000.00	23,000.00	0.00	23,000.00	0.00	
		609	1,000.00	1,000.00	0.00	22.14	977.86	
		61950	19,000.00	19,000.00	12,463.10	13,536.90	(7,000.00)	
		641	0.00	0.00	0.00	1,495.19	(1,495.19)	
		Total	2,990,000.00	2,657,000.00	12,463.10	1,896,921.49	747,615.41	Gen Mitchell
	47	392	0.00	0.00	0.00	21,818.40	(21,818.40)	
		393	0.00	0.00	0.00	9,260.97	(9,260.97)	
		396	0.00	0.00	0.00	6,025.60	(6,025.60)	
		53360	15,000.00	0.00	1,240.00	14,564.50	(15,804.50)	
		641	0.00	0.00	0.00	263.53	(263.53)	
		Total	15,000.00	0.00	1,240.00	51,933.00	(53,173.00)	Minneapolis St.
	48	391	0.00	0.00	0.00	36,242.79	(36,242.79)	
		392	0.00	0.00	0.00	1,911,212.43	(1,911,212.43)	
		393	0.00	0.00	0.00	629,359.86	(629,359.86)	
		394	0.00	0.00	0.00	24,400.00	(24,400.00)	
		409	19,461.80	14,596.35	0.00	21,056.35	(6,460.00)	
		53350	17,929.00	13,446.75	17,888.12	0.00	(4,441.37)	
		53360	0.00	2,760.00	0.00	0.00	2,760.00	
		55301	12,696.60	9,522.45	0.00	113.67	9,408.78	
		56904	0.00	0.00	0.00	0.00	0.00	
		609	1,775.00	1,331.25	0.00	1,774.24	(442.99)	
		61950	121,000.00	90,750.00	54,935.38	66,064.62	(30,250.00)	
		641	5,000.00	3,750.00	0.00	3,734.18	15.82	
		Total	177,862.40	136,156.80	72,823.50	2,693,958.14	(2,630,624.84)	Niagara Falls
	85	391	0.00	0.00	0.00	17,931.29	(17,931.29)	
		392	4,995,000.00	2,000,000.00	0.00	2,460,000.33	(460,000.33)	
		393	0.00	0.00	0.00	916,009.54	(916,009.54)	
		394	0.00	0.00	0.00	24,400.00	(24,400.00)	
		396	0.00	0.00	0.00	5,886.41	(5,886.41)	
		409	0.00	0.00	0.00	2,222.38	(2,222.38)	
		53350	0.00	0.00	0.00	0.00	0.00	
		53360	0.00	0.00	0.00	0.00	0.00	
		55301	0.00	0.00	0.00	0.00	0.00	
		609	0.00	0.00	0.00	0.00	0.00	
		619	71,800.00	11,800.00	0.00	85,520.37	(73,720.37)	
		61950	73,000.00	0.00	0.00	0.00	0.00	
		628	0.00	0.00	0.00	0.00	0.00	
		63710	0.00	0.00	0.00	0.00	0.00	
		Total	5,139,800.00	2,011,800.00	0.00	3,511,970.32	(1,500,170.32)	March
	86	384	25,000.00	0.00	0.00	0.00	0.00	
		391	0.00	0.00	0.00	266.38	(266.38)	
		392	268,000.00	158,000.00	0.00	175,202.21	(17,202.21)	
		393	56,000.00	53,000.00	0.00	58,124.64	(5,124.64)	
		396	0.00	0.00	0.00	74.58	(74.58)	
		409	10,860.00	10,860.00	0.00	0.00	10,860.00	
		59219	27,100.00	27,100.00	0.00	27,088.52	11.48	
		609	6,000.00	6,000.00	0.00	3,508.06	2,491.94	

RCCC Report by EEIC (Summary query on 'PSR (Field Site OBL/AL))
6/3/2005 10:50:35 AM
Scaling: None
Where... Source Name = 'PSR' AND Status Code = 'C' AND FT not in list (T, X, Z) AND FC = '54' AND FY (4 Char) = '2005' AND OAC = '62' AND RCCC = '134425'

RCCC	OBAN	EEIC (All 5)	Ann Dir	Qtr Dir	Comm Dir	GrObl Dir	Uncomm Qtr Dir
134425	86	Total	392,960.00	254,960.00	0.00	264,264.39	(9,304.39)
	Total		12,965,684.40	7,363,728.80	110,317.06	19,557,277.07	(12,303,865.33)
Total			12,965,684.40	7,363,728.80	110,317.06	19,557,277.07	(12,303,865.33)

Grissom



In 1964, a one time fee of $1 was paid for the lease of 103 acres of land that makes up our base.

It doesn't get much cheaper than that.

And for the annual $20,000 Airport Usage Fee, we get access to all of this...

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Cost of Operations

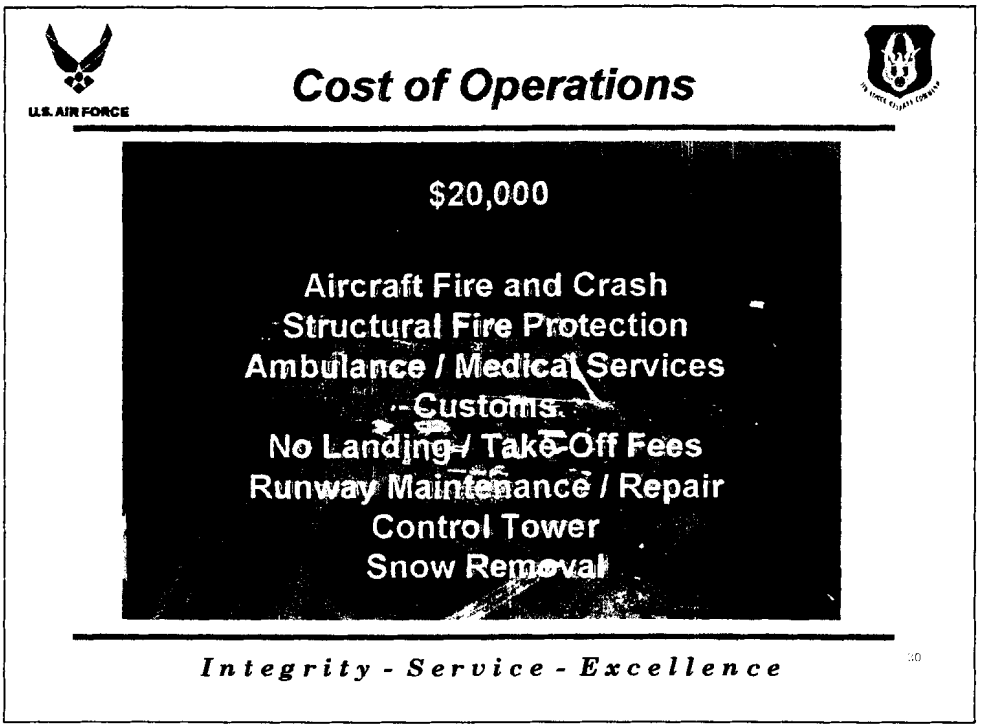
BRIEFING BULLET: Cost of Operations - $1

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): n/a

SUPPORTING ANALYSIS: n/a

SUPPORTING DOCUMENTATION: n/a



Once again, consider the cost of maintaining such a complex.

Sir, I was a T-37 FAIP at Columbus, a C-130 pilot at Yokota, a Schoolhouse Instructor at Little Rock, a commercial pilot with US Airways and still a Globally deployed Reservist at the 911th, and I can say, without any reservation, that the Airport complex and surrounding Airspace is the best in the entire world. Just about every other Crewdog here, all with similar careers, will say the same.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Cost of Operations

BRIEFING BULLET:

- Cost of Operations - $20,000
  - Aircraft Fire and Crash
  - Structural Fire Protection
  - Ambulance/Medical Services
  - Customs
  - No Landing/Take-off Fees
  - Runway Maintenance/Repair
  - Control Tower
  - Snow Removal

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): Mr. Robert Moeslein

SUPPORTING ANALYSIS:

- Joint Use Allegheny County and Allegheny County Institution District

SUPPORTING DOCUMENTATION: 5

ALLEGHENY COUNTY AND
ALLEGHENY COUNTY INSTITUTION DISTRICT
Office of the Chief Clerk
101 Courthouse
Pittsburgh, PA 15219
412-355-4750

RE: 958-87-A

DATE RECEIVED BY COMMISSIONERS: 9/22/87 - 4/25/89

DATE FORWARDED TO CONTROLLER: ~~JUL 31 1989~~

TO: Scott O'Donnell
Aviation

25509

REFER TO AGREEMENT#:_____

FROM: SALVATORE M. SIRABELLA
CHIEF CLERK

CONTRACT #:_____

SPECIFICATION #:_____

RE: USE AGREEMENT - UNITED STATES OF AMERICA

For the term effective through June 30, 2001 or and extension granted under Land Lease Agreement No. DA-15-029-ENG-7929 which provides for the lease of land and use in common facilities at Greater Pittsbugh International Airport by Allegheny County to the United States Govnt. - payment will be in the amount of $20,000.00 per annum, and as more fully set forth in the submission. I.C. 090423.

DATE AUTHORIZED: 7/23/87

****

Properly executed copies of the above-referenced agreement are returned herewith. You are requested to distribute those returned to you.

SMS/cam

cc: Controller
Law Department
United States of America

CC: HQ AFRES/DEH
AC
DOO
DEF

JOINT USE AGREEMENT BETWEEN
THE AIR FORCE RESERVE AND ALLEGHENY COUNTY

THIS AGREEMENT made and entered into this 10th day of May, 1989, by and between the County of Allegheny, Commonwealth of Pennsylvania (herein after referred to as the "County"), and the United States of America, acting by and through the Air Force Reserve (hereinafter referred to as the "Government"):

WITNESSETH: The parties hereto enter into a joint use agreement for Greater Pittsburgh International Airport (hereinafter referred to as the "Airport"), covenant and agree as follows:

1. JOINT AND CONCURRENT USE: The Government shall have the right to use jointly with the County, its officers, agencies, assignees, permittees, licensees, or other lessees, the landing field area of said Airport and appurtenances necessary thereto, in the take-off and landing of aircraft, and provided further that the rights of the Government set forth herein shall include the use of all additions, extensions and improvements to the existing runways, taxiways land appurtenances thereto, together with the right of ingress and egress thereto.

2. Subject to availability of appropriations therefore, the Government will reimburse the County $20,000 per year for a portion of the cost of maintaining and servicing the joint use areas of the Airport land for giving the Government structural fire protection, aircraft fire and crash rescue services land emergency ambulance/medical services.

a. Payment under the terms of this agreement shall be effective 1 January 1989 and shall provide for two $10,000 payments per year. The first $10,000 payment is due 1 January and the second 1 July. Future payments are due on those same dates for future years as long as this agreement is in effect. Such payments shall be made upon submission of appropriate bills to the Government.

b. The reimbursement rate is subject to renegotiation each year during a 90-day period prior to 30 June beginning with 30 June 1990. The fixed annual charge may be renegotiated upon 30 days notice by the Government provided that a substantial change (programmed or actual) occurs in the Air Force missions located at Greater Pittsburgh International Airport.

3. The County agrees to keep records and books of account, showing the actual cost to it of all items of labor, materials, equipment, supplies, services, and other expenditures made in fulfilling the obligations of this Agreement, and the Comptroller General of the United States or any of his/her duly authorized representatives shall, until the expiration of three (3) years after final payment, have access at all times to such records and books of account, or to any directly pertinent books, documents, papers, and records of any of the County's contractors or subcontractors engaged in the

Cy. to: DE
County
CC
DEF
ACB
Dco

performance of and involving transactions related to this Agreement. The County further agrees that representatives of the Air Force Audit Agency or any other designated representative of the Government shall have the same right of access to such records, books of account, documents and papers as is available to the Comptroller General.

4. The Government by giving written notice to the County may terminate the right of the County to proceed under this Agreement if it is found, after notice and hearing by the Secretary of the Air Force or his/her duly authorized representative, that gratuities in the form of entertainment, gifts, or otherwise, were offered or given by the County, or any agent or representative of the County, of any officer or employee of the Government with a view toward securing this Agreement or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such agreement, provided that the existence of the facts upon which the Secretary of the Air Force or his/her duly authorized representative makes such findings shall be an issue and may be reviewed in any competent court.

a. In the event this Agreement is terminated as provided in sub-paragraph 4 above, the Government shall be entitled to pursue the same remedies against the County as it could pursue in the event of a breach of the Agreement by the County, and in addition to any other damages to which it may be entitled by law, the Government shall be entitled to exemplary damages in an amount (as determined by the Secretary of the Air Force or his/her duly authorized representative) which shall be not less than three nor more than ten times the cost incurred by the County in providing any such gratuities to any such officer or employee.

b. The rights and remedies of the Government provided in this paragraph 4 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

5. The County shall comply with all federal, state and local laws, rules and regulations applicable to the activities conducted under this Agreement.

a. The County shall neither transfer nor assign this Agreement without the written consent of the Government, which shall not be unreasonably withheld.

b. Neither party shall be liable for damages to property or injuries to persons arising from acts of the other in the use of the Airport facilities or occurring as a consequence of the performance of responsi-bilities under this agreement.

c. No member or delegate to Congress shall be admitted to any share or part of this Agreement or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

d. It is expressly agreed that this written instrument embodies the entire financial arrangement of the parties regarding the use of the joint use areas of the Airport by the Government, including the provision of fire protection, crash rescue and emergency ambulance/medical services by the County, and there are no understandings or agreements, verbal or otherwise, between the parties in regard thereto except as expressly set forth herein. Specifically, no landing fees or other fees not provided in this Agreement will be assessed by the County against the Government in such use of such joint use areas during the term of this Agreement.

e. The Agreement may only be modified by mutual agreement of the parties in writing and signed by each of the parties hereto.

6. This Agreement will remain in effect until the expiration date of Lease No. DA-15-029-ENG-7929 between Allegheny County and the Government. Any extension of the Lease automatically extends this Agreement to the extension date of the Lease.

7. This Agreement was authorized by the Board of Commissioners of Allegheny County on July 23, 1987, at Agenda No. 958-A-87.

IN WITNESS WHEREOF, this Agreement is duly executed on the day and year first above written, by the parties hereto, intending themselves to be legally bound hereby.

WITNESS:

Realty Specialist

THE UNITED STATES OF AMERICA

BY
JAMES D. COPENHAVER, Colonel, USAFR
Commander
HQ 911 Tactical Airlift Group (AFRES)

COUNTY OF ALLEGHENY

ATTEST:

Chief Clerk

BY

Board of County Commissioners

APPROVED:

Director, Dept. of Aviation

APPROVED AS TO FORM:

County Solicitor

Assistant County Solicitor

THE UNITED STATES OF AMERICA

BY
ALAN G. SHARP, Maj Gen, USAF
HQ AIR FORCE RESERVE

Agreement between the County of Allegheny and the United States of America duly authorized by the Board of County Commissioners on July 23, 1987, at Agenda No. 958-A-87.

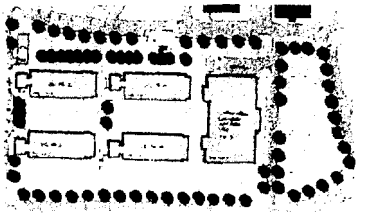
U.S. AIR FORCE

Impact on Joint Use

Military Entrance Processing Station (MEPS)

911 AW Provides...

- Annual Support: 9,000 applicants
  - Testing / Billeting / Dining Facility / Safety / Security
- Annual Savings: $1.2M
- $9M Army MCP for facilities



Integrity - Service - Excellence

Another unmeasured area is that of Joint Use or shared services.

We share our facilities with the Military Entrance Processing Station (MEPS), whose offices are in the Federal Building downtown.

We support 9,000 applicants annually by providing facilities for testing, billeting and dining, while providing safety and security for the recruits.

This saves the Army $1.2M annually. They have even gone so far as to commit $9M in MCP for FY09 to add on to our own billeting MCP project. They want to move out of their downtown offices and bring the whole operation to our Base.

Closing this base would affect them most definitely.

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: Impact on Joint Use

BRIEFING BULLET:

- Military Entrance Processing Station (MEPS)
- 911th Airlift Wing Provides
  - Annual Support: 9,000 applicants
    - Testing / Billeting / Dining Facility / Safety / Security
  - Annual Savings: $1.2M
  - $9M Army MCP for Facilities

BRIEFER: Major David P. Nardozzi

ANALYSIS POC(s): SMSgt Gregory Gogets, MSgt David Riley, Ms. Connie Withrow

SUPPORTING ANALYSIS:

- 911th offers lodging, meals, transportation, testing and MWR facilities
  - ISSA over 10 years old – long standing support
  - 9,000 applicants per year
  - $34.50 versus $150.00 per applicant
  - $1,039,500 additional costs

- Loss of testing facility
  - Additional travel expenses and time required to test
  - $187,717 additional costs

- $9M Army MCP for facilities

- Data provided by MEPS – Maj Edgar Marshall

- 911th offers MWR services at no additional cost
  - Gym, recreation center, baseball field, tennis courts
  - Recreation specialist

- Enhances recruiting effort by orienting potential recruits to military life and facilities

- Security
  - Best feature of current process
  - No safety, violence or alcohol related incidents reported
  - Commercial facilities can not offer same level of security

SUPPORTING DOCUMENTATION: 21 Pages

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: MEPS Support Provided

BRIEFING BULLET: (BULLET 1 of 2): Cost of Closure to MEPS - $1,227,217

Briefer:
Analysis POC(s): Ms. Connie Withrow

SUPPORTING ANALYSIS:

- 911th offers lodging, meals, transportation, testing and MWR facilities
  - ISSA over 10 years old – long standing support
  - 9,000 applicants per year
  - $34.50 versus $150.00 per applicant
  - $1,039,500 additional costs

- Loss of testing facility
  - Additional travel expenses and time required to test
  - $187,717 additional costs

- Data provided by MEPS – Maj Edgar Marshall

SUPPORTING DOCUMENTATION: NO. OF PAGES 20

911TH AW BRAC Commissioner's Briefing
DATA CARD

BRIEFING SLIDE: MEPS Support Provided

BRIEFING BULLET: (BULLET 2 of 2): Applicant Services and Security

Briefer:
Analysis POC(s): Ms. Connie Withrow

SUPPORTING ANALYSIS:

- 911th offers MWR services at no additional cost
  - Gym, recreation center, baseball field, tennis courts
  - Recreation specialist

- Enhances recruiting effort by orienting potential recruits to military life and facilities

- Security
  - Best feature of current process
  - No safety, violence or alcohol related incidents reported
  - Commercial facilities can not offer same level of security

SUPPORTING DOCUMENTATION: NO. OF PAGES 20

MEPS Support Provided by the 911th AW

- Pittsburgh MEPS uses the 911th AW for lodging and night testing of its applicants
- 9,000 applicants per year process through the 911th AW
- Gym, recreation center, and testing lab (ASVAB testing) available on base
- ISSA entered into over 10 years ago – long standing support
- Recruiting effort enhanced by orienting potential recruits to military facilities and life
- Security is the best feature of the process. No safety, violence, or alcohol related incidents have ever occurred – unlike other MEPS using commercial hotels

MEPS Support Provided by the 911th AW – page 2

- Lodging Savings: Cost/applicant at 911th is $34.50 – includes lodging, breakfast, transportation, testing facilities, security and the services of a recreation specialist. Cost per applicant for using commercial facilities is $150.00. Savings per year is $1,039,500 (9,000 applicants x 115.50 per applicant)
- Testing Lab Savings:

USMEPCOM (HVAC)	$79,200
USMEPCOM – Security	$27,062
Transportation	$52,500
Recruiter expenses (4,000 trips x $8 parking)	$32,000
Less rental fee for lab	($3,045)
Total annual savings for lab testing facilities	$187,717

- Total Savings to USMEPCOM - $1,227,217

Adrian,

FYI. Col Vogt would like for us to include the attached MEPS savings into our briefing also.
Bob

-----Original Message-----
From: Pittsburgh- CDR(Marshall, Maj Edgar)
[mailto:pghcdr@mepcom.army.mil]
Sent: Wednesday, May 25, 2005 5:06 PM
To: Moeslein Robert Civ 911 MSG/CE
Subject: Information Paper on the Cost Savings of MEPS Using the 911th

Mr. Moeslein,

Please forward to COL Vogt.

Some interesting numbers on this information paper. I estimate Pittsburgh MEPS saves $1.2 million using the 911th.

Savings on using the lodge:
$1,039,000
Savings on the night test lab:
$187,717

<<Cost Savings of the MEPS.doc>>

I also enclose the AAR on the night testing lab. Not really needed but it does lay out the cost savings estimates on the lab.

<<Information Paper Night Testing2.pdf>>

VR,
MAJ Marshall

INFORMATION PAPER

SUBJECT: Cost Savings for MEPS to Use 911th AF Reserve Base

1. Pittsburgh MEPS uses the 911th Air Wing base for lodging and night testing of its applicants at a significant cost savings to the government. Each year 9,000 applicants spend the night at the lodge and half of those are expected to use the night testing facility at an estimated savings to the government of $1,226,717.

2. Lodging benefits: Applicants spend the night in the lodge before they process at the Pittsburgh MEPS. They use gym, recreation center and eat dinner and breakfast at the officer club. Pittsburgh MEPS entered into an installation services & support agreement (ISSA) over ten years ago. The support provided enhances the recruiting effort by orienting potential recruits to military facilities or life. The security of the base is the best feature. No safety, violence, alcohol incidents have ever occurred unlike other MEPS that use commercial hotels.

a. ISSA: Lodging, feeding and transportation cost to the government is $34.50 per applicant. This pays for one night in the lodge, dinner, breakfast, and a coach bus ride to the MEPS. Additionally the ISSA employs a full time security guard and part time recreation specialist.

b. Cost Savings: It is estimated the government saves $1,039,000 using the 911th as its lodge provider for the MEPS (based on comparative lodging costs $150 per applicant).

Facility	Applicant Cost	Total Applicants	Cost
911th	$34.50	9,000	$310,500
Commercial Hotel	$150.00	9,000	$1,350,000
		Savings	$1,039,000

3. Testing: In November 2004, Pittsburgh MEPS installed a state of the art night testing facility collocated next to the lodge. This lab conducts night ASVAB testing of applicants before they process at the MEPS. The lab increases our processing capability and provides much better customer support to the applicants. Additionally it returns an estimated 8,000 recruiting man-hours each to recruiters avoiding rush hour traffic. Moving the Night testing lab from the MEPS to the 911th saves the government $187,717 per year.

Savings to USMEPCOM (HVAC)	$79,200
Savings to USMEPCOM (Security)	$27,062
Savings to Pittsburgh MEPS (Transportation)	$52,500
Savings to Recruiters (4,000 trips x $8 parking)	$32,000
Rent for lab at 911th	($3,045)
Realized savings to government	$187,717

4. Future Projects at the 911th:

a. Medical Processing. Pittsburgh MEPS is studying the feasibility to do medical processing to capitalize on the idle time during night testing. Processing applicants on vision, blood pressure, height/weight, and prescreening dramatically decreases processing times at the MEPS and returns enormous man-hours to the recruiters.

b. MILCON: Pittsburgh MEPS is on the USMEPCOM construction schedule to relocate to the airport FY08-11. The schedule is priority based so there is always a chance for slippage to further FY if another MEPS require facilities due to fire/flood etc. The idea location for a construction project is the 911th base. Relocating to a military installation near the airport is the most desired requirement.

MAJ MARSHALL
PITTSBURGH MEPS
(412) 395-4470

Information Paper

SUBJECT: Pittsburgh MEPS Offsite Testing Lab

1. On 15 NOV 04, Pittsburgh MEPS activated an Offsite WINCAT testing lab at the 911th Air Force Reserve Base for night ASVAB testing. This testing lab is located within yards of the applicant lodge where applicants are housed at night. See Annex A for photographs of site.

2. Background history. See Annex B.

3. The current testing configuration/process is as follows:

a. Twenty WINCAT terminals installed inside a private room at the recreation center for night testing. No night testing is conducted at the Pittsburgh MEPS.

(1) The lab is manned with one night TA. The lab has no MIRS or data communications link between the MEPS and 911th. Therefore, it is necessary for one additional person to work at the MEPS 1400-1700 to support check-in of testers via FAX/phone. This person also runs MEPS control desk until COB.

(2) Once testing is completed the night TA carries the scores via diskette (and paper backup) back to the MEPS for processing and packet build for processing the next morning. No scores have been lost. The stand-alone WINCAT concept is working well.

b. Ten WINCAT terminals installed at the Pittsburgh MEPS for Same Day Processing (Mon-Wed-Fri) to be used only during normal business hours. This lab is manned with one daytime TA.

4. Current Pittsburgh MEPS TDA authorizations cover the manning requirements for both sites. No additional manpower is necessary.

5. Operating hours at the 911th.

a. Night Testing Check-In: 1400-1700.

b. Night Testing: 1400-2000. The majority of applicants arrive 1500-1600. On most nights testing rarely goes past 1900 hours. Also the lab has not even come close to capacity due to the staged flow of arriving applicants.

c. Hotel Check-In: 1500-2300. We negotiated for the hotel front desk to accept applicants two hours earlier. No cost to ISSA.

d. Dinner: 1800-2100. We negotiated to move dinner one hour earlier. No cost to ISSA.

6. Cost estimates. See Annex C.

7. Time savings and improved customer support.

a. Applicants are getting to bed approximately 1-4 hours earlier.

b. Recruiters save $8-$10 parking fee by not coming to the MEPS.

c. The vast majority of recruiters avoid 5 O'clock rush hour traffic coming to downtown to drop off applicants. The 911th sits along a major transportation artery.

d. The new night testing lab is open for business 3 hours earlier and longer than the old testing lab.

e. Better supervision of applicants at the 911th lodge by having MEPS personnel and recruiters on the base in the evening.

8. Initial response. The IRCs report that every recruiter that used the lab is very happy with the setup. The recruiters also like that they can now use the base gym while waiting for their applicants or sit in the rec center and do work (phone lines are available for their laptops). See Annex D. No applicant has complained on survey sheets or during commander's Welcome Brief.

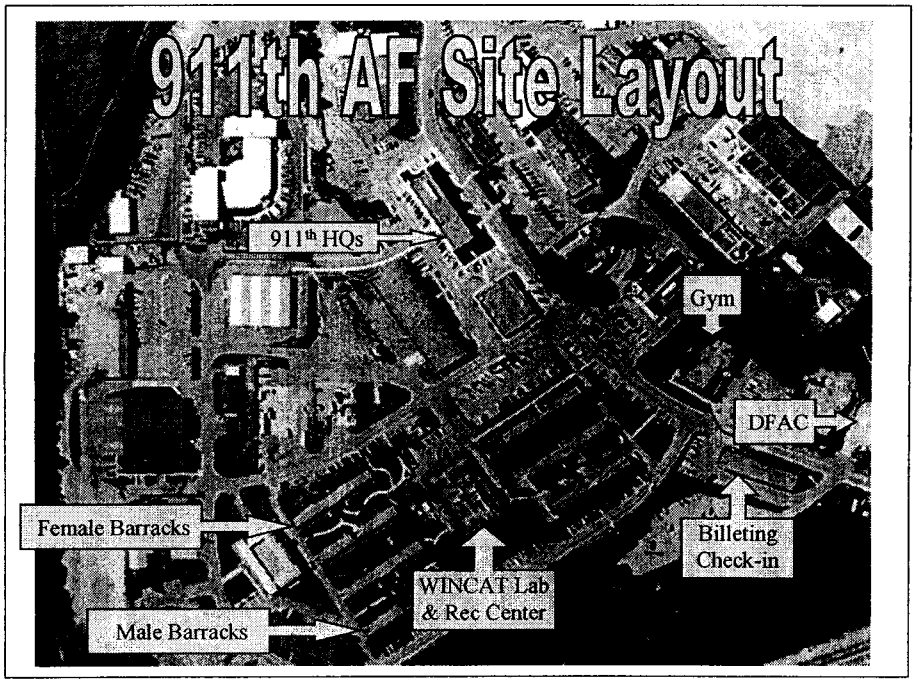
9. Open Issues. See Annex E.

5 Encls
1. Annex A. Briefing
2. Annex B. Background
3. Annex C. Cost Estimates
4. Annex D. IRC Response
5. Annex E. Open Issues
6. Annex F. Email Traffic

MAJ EDGAR A. MARSHALL
Pitt MEPS CDR
(412)395-4470

Pittsburgh MEPS

The New
WINCAT Night Testing
Laboratory



Background

- Pittsburgh scheduled to receive 30 WINCAT terminals in NOV 04
- Current space holds 20 terminals
- ~$10K expansion needed for additional 10 terminals
- Expanding old lab didn't make sense considering Pittsburgh MEPS is scheduled to move to 19th Floor in JAN 06
- The new floor can accommodate the 30 terminals but not available until JAN 06
- Decision made to establish new lab at the 911th
- Received $16K FY04 EOY funds for construction
- 911th completed work 1st week of NOV 04
- WINCAT Install completed 2nd week of NOV 04
- The new WINCAT lab operational 15 NOV 04
- Canceled night bus contract on 1 DEC 04

Justification

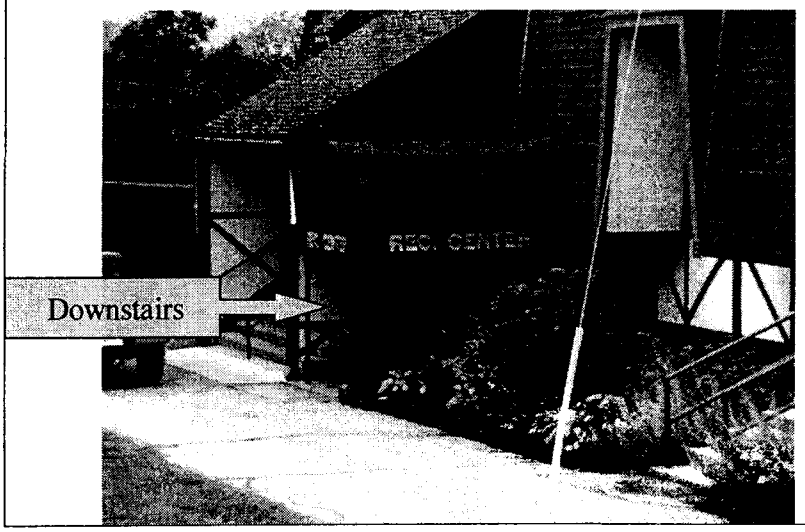
- Removes transportation cost ($250 per day) to move applicants to lodge at night (~$5K/month savings)
- Removes HVAC and Security costs at MEPS for after hours services (~$158K/year savings)
- Decreases applicant waiting time for evening bus (~1.5 hours)
- Improves customer service by allowing applicants to check-in to lodge, rest, eat, then take the test
- Improves customer service by getting applicants to bed earlier at night
- Saves recruiters time & parking costs ($10) of dropping off applicants (IRCs support the move)

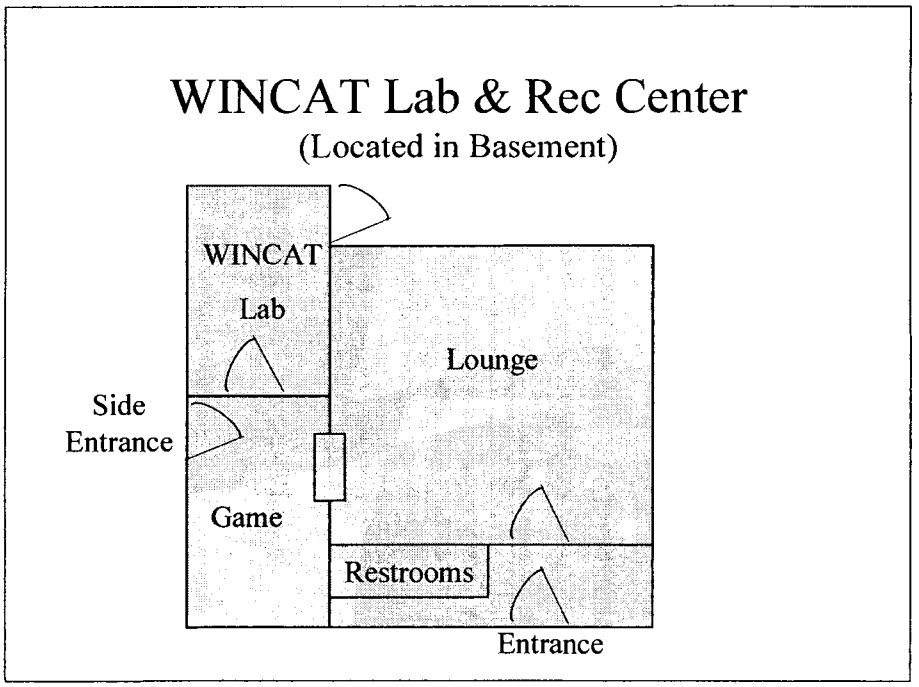
Schedule

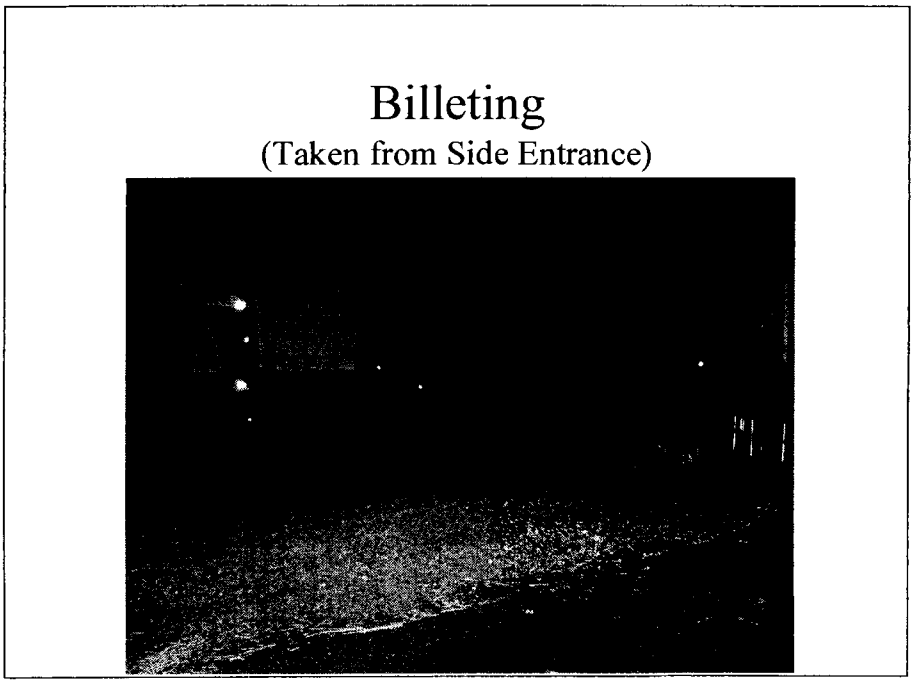
New Schedule
- 1400-1700 ASVAB Check-In
- 1400-2000 Testing
- 1400-2300 Check-In Hotel
- 1800-2100 Dinner
- 2200 Lights out

Old Schedule
- 1500-1700 ASVAB Check-In
- 1700-2000 Testing
- 2000-2030 Transport to 911th
- 2030-2300 Check-In Hotel
- 1900-2200 Dinner
- 2300 Lights out

WINCAT Lab & Rec Center

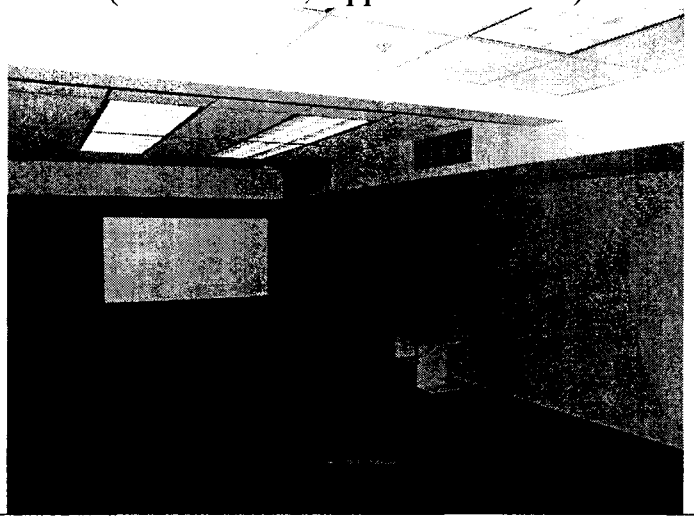



WINCAT Lab & Rec Center
(Located in Basement)
WINCAT
Lab
Lounge
Side
Entrance
Game
Restrooms
Entrance


Billeting
(Taken from Side Entrance)

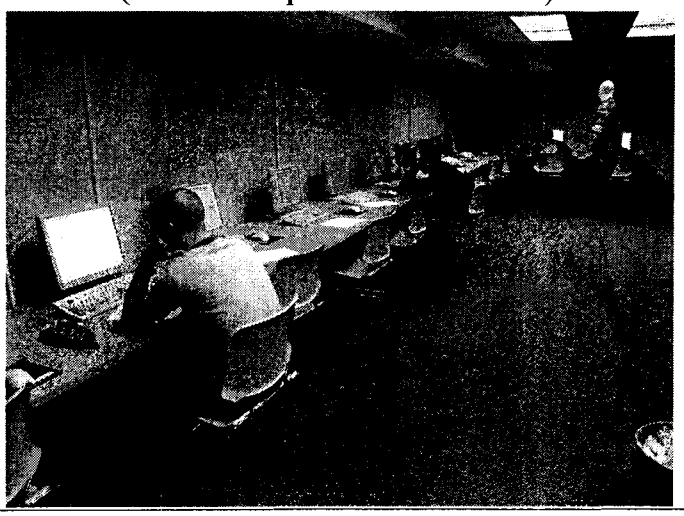
WINCAT Lab

(Before Work, Approx. 15' x 20')



WINCAT Lab

(Work Completed 14 NOV 04)



Annex B Background History

Narrative: Pittsburgh MEPS Night testing had a validated requirement for 30 terminals. The old testing room was too small to adequately accommodate all 30 terminals. Expansion of the room would cost $10K. Also the MEPS is scheduled to move OCT 2005-JAN 2006 two floors up. It didn't make much sense to spend $10K for a space that would be used for only a year. The MEPS CDR started looking at other options and came up with a proposal to conduct night testing at the hotel where the applicants are billeted. After extensive evaluation, the MEPS determined that moving the lab to the 911th would dramatically reduce operating cost and reduce applicant wait time. Pittsburgh MEPS requested $16K 2004 EOY money to prepare a space at the 911th for the night testing lab. Receiving EOY funds NLT SEP 2004 was important to ensure the room was ready for the WINCAT installation scheduled in NOV 2004. The USMEPCOM Commander approved the funding. Painting, electrical, IT wiring and WINCAT install was completed in early NOV 2004. The night testing lab became operational on 15 NOV 2004.

Chronological History:

AUG 2002: Pittsburgh MEPS met with MEPCOM about WINCAT installation. Decision was to deliver WINCAT to Pittsburgh during the same time they were scheduled to move to the 19th floor (OCT 2005). Decision was made to increase number of test stations from 20 to 30 based on workload. The new floor design for 19th floor would accommodate the terminals. Previous commander also purchased non-standard furniture for testing room.

JAN 2004: Pittsburgh MEPS discovered that the WINCAT installation was moved up 15 months to July 2004 install.

FEB 2004: Pittsburgh MEPS requested work estimates from GSA for room expansion to accommodate the additional 10 terminals.

3-5 MAR 2004: Pittsburgh Commander traveled to USMEPCOM for a QUICR conference. During breaks, the commander met with various testing, facility, IT and sector staff about a new proposal to move the WINCAT lab to the 911th. While many found the proposal interesting, the MEPS commander could not get much support.

9 MAR 2004: $8K estimates forwarded to Eastern Sector for room expansion to accommodate the 10 additional terminals.

15 MAR 2004: Pittsburgh MEPS made steps to purchase the authorized WINCAT furniture.

Annex B Background History

24 MAR 2004: Notified by TASKING MESSAGE - T-04-MAR-044 that 30 WINCAT terminals would be delivered in 21-27 JUL 04.

APR 2004: Pittsburgh Commander met with 911th representatives to ask if any space was available for testing lab. Was initially told no, after meeting with base commander, the space was offered up.

29 APR 2004: Notified USMEPCOM, facility, IT, and testing that 911th offered up space for WINCAT lab.

MAY 2004: Notified by GSA that funding for work was not received and estimate price would go up to $10K. Commander notified ESEC.

24 MAY 2004: Notified by ESEC that WINCAT install is moved to NOV 2004. LCDR Preston reports decision to delay install is made due to no funding.

JUN 2004: Pittsburgh MEPS submits a power point presentation with proposal to move the WINCAT lab to 911th.

10 JUN 2004: COL Atkins gets involved. CAPT Ackerson asks the staff to take a hard look at a proposal to move the WINCAT to the 911th. A conference call is setup for 1 JUL with IT, Budget, MOP, Testing, ESEC, Facilities, and MEPS.

JUN 2004: Pittsburgh MEPS speaks with LA MEPS about their offsite testing lab. One problem reported is how to transmit data back to the MEPS.

1 JUL 2004: The conference call is delayed. USMEPCOM staffers have competing priorities.

2 AUG 2004: COL Atkins gets involved. Conference call is rescheduled to 18 AUG.

18 AUG 2004: Conference call takes place. Attendees all agree to go ahead with WINCAT installation at 911th. Pittsburgh MEPS will provide all estimates. The agreement is that IT will find a solution to transmit data from 911th to MEPS.

19 AUG 2004: Pittsburgh submits estimates for $16K. This did not include any estimates for digitally connecting MEPS to 911th.

Annex B Background History

OCT 2004: IT does not submit any estimates or solutions. Pittsburgh MEPS submits an estimate to ESEC ($6K= $3K T1 line+$3K hardware).

OCT 2004: End of year funding is done for WINCAT install. The 911th will do all the prep work for the laboratory.

20 OCT 2004: Received 30 WINCAT terminals.

21 OCT 204: Furniture arrives.

30 OCT 204: Electrical power upgrades and telephone install completed.

1-2 NOV 2004: The TCO attends WINCAT Training in Baltimore.

5 NOV 2004: Network - Wiring and cable pulls completed, 30 drops installed.

8-14 NOV 2004: CATASVAB terminals removed from Pittsburgh MEPS. Ten WINCAT Terminal installed at the MEPS. Twenty WINCAT terminals installed at the 911th. No downtime and all work completed with no problems.

15 NOV 2004: WINCAT Night Testing Lab opens for business.

30 NOV 2004: Hardened doors installed.

Annex C Cost Estimates

1. Overall, Pittsburgh MEPS stands to save the government over $155K per year with the night testing lab operating at the 911th. The upfront cost was $16K to build the room.

2. Up front cost. $16K - One time cost funded with USMEPCOM FY04EOY funds. Money used to build the room (power upgrade, paint, doors, computer wiring).

3. Total annual reoccurring costs: $10,045.00

a. $3,045.00 per year: Annual increase cost to the ISSA. Based on standardized government square footage charges on military bases. This pays for HVAC and two phone lines. MEPS pays

b. $7K per year: Annual increase cost to the ISSA. Pay raises ($2 per hour increase) for the security guard and recreational service specialist. The raise was justified for the increased support required due to uneven applicant flow onto the base. Both positions haven't received a raise in many years.

c. At this point unless told otherwise, the plan is to transfer the cost of the lab onto the services. Estimate applicant-lodging cost to increase $1.25 to pay for 3a and 3b mentioned above. Average applicant lodging will go from $34.50 to $35.75. The IRCS have no problem with the increase (they realize a savings from recruiter parking). Recruiters save $8-$10 parking fee by not coming to the MEPS.

4. Unknown costs.

a. Security camera: Funded by USMEPCOM security (POC is TSGT Walker). USMEPCOM security inspected the site and is working the installation. As understood, the funding is available and not an issue.

b. Communication package. In the future, we would like for a data communication link between MEPS and the offsite lab (for MIRS and Scoring). High-end T1 solution cost estimate is $6k install and $6k per year. A telephone modem capability would be substantially cheaper and more reasonable.

6. Total annual cost savings: $155,717.75

a. HVAC (Night Testing): $79,200.00

Annual cost of HVAC during night test at the MEPS	$86,400.00
Present cost for mission days/extended hours	$7,200.00
Annual savings to USMEPCOM - Facilities	$79,200.00
Rent for lab at 911th	$3,045.00
Realized saving in Facilities	$76,155.00

b. Security: $27,062.75

Annual Cost of security for night test at the MEPS	$29,523.00
Present cost for mission days/extended hours	$2,460.25
Annual savings to USMEPCOM - Facilities	$27,062.75

c. Applicant Transportation: $52,500.00

Transportation from night test to lodging facility	$52,500.00
Present cost for transportation	$0.00
Annual savings to Pittsburgh MEPS*	$52,500.00

*Applicant transportation was paid by Pittsburgh MEPS Apr 04 through Nov 04. Actual cost for these 8 months was $35,000.00. Evening transportation was discontinued on 1 Dec 04 due to new testing lab at 911th. Prior to Apr 04, yearly cost of $52,500 was paid by recruiting services based on number of applicants transported.

Annex D IRC Response

On 9 NOV 2004, Pittsburgh MEPS held the quarterly IRC at the new night testing lab at the 911th. All the commanders had an opportunity to see the new laboratory and consider the impact to their operation. Every commander fully supported the location and felt that this would better support their mission. Only the Air Force voiced concerns that they would have to change some practices. The Air Force used commercial transportation to move applicants and they were concerned that there would be problems with taxis getting onto the base. We resolved this problem by staging a vehicle to pick up applicants at the front gate.

Also the IRCs were notified that applicant hotel costs would increase approximately $1.25 per applicant due to the lab. All services had no problem with the increase.

Email comments from Marine and Army commanders below:

I apologize for not getting back to you by the 10th, but I was in Harrisburg and my email has been down.

This morning I had all my Sub-station commanders in house for training and I asked them how the test site was working. All of them feel it is much more convenient than having to come downtown. The only thing we would ask is if we could adjust the hours from 1400-1700 to 1500-1800. A couple of my further stations have a hard time picking up applicants after school and getting to the base by 1700 after fighting rush hour traffic. Moving to 1800 would give them a little more time and help keep them safe on the roads. Many of them also do not use the time round 1400 because this is prime time prospecting for us.

Let me know if you can help. Thanks.

Major Michael D Sherman
Commanding Officer, RS Pittsburgh
William S Moorhead Federal Bldg
1000 Liberty Ave, Room 1512
Pittsburgh, Pa 15222
(412) 395-4917

Feedback from my guys/gals is good.
BC

LTC Diane L. Martino
Commander
Pittsburgh Recruiting Battalion
diane.martino@usarec.army.mil
(412)395-5858
"Mission Box, Nothing Less!"

Annex E Open Issues

Network connectivity between 911th and MEPS is not funded.

The lab is manned with one night TA. The lab has no MIRS or data communications link between the MEPS and 911th. Therefore, it is necessary for one additional person to work at the MEPS 1400-1700 to support check-in of testers via FAX/phone. This person also runs MEPS control desk until COB.

Once testing is completed the night TA carries the scores via diskette (and paper backup) back to the MEPS for processing and packet build for processing the next morning. No scores have been lost. The stand-alone WINCAT concept is working well.

On 13 JAN 05, Mr. Moore and Mr. O'Brien visited the lab. Both officials approved of the site. Mr. Moore was very supportive of digitally connecting the laboratory with a MIRS terminal to support in-processing.

An on-site MIRS terminal would allow the night testing lab to expand the check-in window from 1400-1800 (which the Marines specifically requested).