

**Presented for the 110<sup>th</sup> Fighter Wing  
and Battle Creek Air National Guard Base  
July 29, 2005**

In late March 2003, 12 A-10s launched from Battle Creek into the night and flew to combat over Iraq. Along with over 300 other members of the 110<sup>th</sup> Fighter Wing, these brave men and women served without hesitation and in the best traditions of the United States Air Force. They were all citizen soldiers. We owe them the opportunity to continue to serve this great nation. Anything less would be a tragedy.

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### **Evaluation of the Air Force's Determination of the Military Value of the W.K. Kellogg Air Guard Station and the Potential Cost Savings Generated by its Closing.**

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This final report has been updated and revised based on new information. Please disregard all previously dated reports. In addition, I wish to acknowledge and thank the staff of the W.K. Kellogg Air Guard Station for their excellence assistance and patience. This report could not have been completed without their assistance. Of course I take full responsibility for any remaining errors and omissions contained in the report.

### **Executive Summary**

This is an evaluation of the methodology used by the Air Force in determining the military value of the W.K. Kellogg Air Guard Station and in estimating the potential costs savings generated by its proposed closing.

#### **Loss of Future Mission Capability**

Our findings show that if the Air Force closes the W.K. Kellogg Air Guard Station, it would lose a highly effective mission ready fighter wing, which could take up to five years to rebuild. The 110<sup>th</sup> fighter wing earned the best average Fully Mission Capable (FMC) rate of the six A-10 bases during the past 10 years. Its crews have logged more flight hours than any other A-10 unit in the last eight years (Appendix B, Slides 25 - 26).

The proposed closure of the 110<sup>th</sup> Fighter Wing and movement of the A-10 aircraft to Selfridge will cause the new A-10 squadron to "drop to the lowest combat ready status and be a non-deployable unit for at least 3 to 5 years, depending on the availability of

training school assets” according to the sworn testimony of Retired Major General E. Gordon Stump (June 20, 2005). Selfridge’s F-16 pilots will be given first priority on placement and assignment for the A-10s, making it very likely that only a few of the current A-10 pilots will make the move.

### **Military Value**

The methodology used by the Air Force in determining the military value of the W.K. Kellogg Air Guard Station is highly subjective, undocumented, and, at the same time, partially based on incorrect and irrelevant data.

The final military value rankings of bases are only partially derived from the bases’ Mission Capabilities Index (MCI). A regression analysis using data from 80 Air Forces bases shows that the MCIs for the eight separate missions account for only 61 percent of the variation in assigned military values of the bases.<sup>1</sup> Of the eight MCIs, only the bomber and space operation’s MCIs were found to be statistically significant in explaining a base’s military value.

In addition, the information collected in the WIDGET data gathering process contains errors that negatively impact the calculated MCIs for the W.K. Kellogg AGS. More disturbingly, much of data gathered in the WIDGET process is not relevant in determining the mission capability of the W.K. Kellogg AGS. For example,

- The Prevailing Installation Weather Conditions (formula 1271) score for the W.K. Kellogg AGS was inappropriate. The criteria, a 3000 feet ceiling and 3 miles visibility, is not relevant when the standard conditions for flight is 300 feet and 1 mile.
- The Proximity to Airspace Supporting Mission (formula 1245) was erroneously based on distance and not on the number of mission airspaces available and useful for effective training. Pilots flying out of W.K. Kellogg AGS can and do use up to nine airspaces which offer a variety of surface environments and, due its northern location, seasonally variation as well including three Air-to-Surface ranges, two of which allow Live Munitions and Laser Guided Bombs (LGB) (Appendix B, Slides 37-38).
- The Proximity to Low Level Routes Supporting Missions (formula 1246) is not required for low altitude tactical training fighter aircraft, particularly in the A-10.
- The MCI for SOF/CSAR including A-10s is based, in part, on base capabilities that do not relate to the operation of A-10s including landing zones for helicopters and drop zones for parachutists, which are available to W.K. Kellogg at the adjacent Fort Custer military complex, but were not scored.

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<sup>1</sup>This analysis is limited by our inability to obtain, after repeated tries, the complete listing of the Air Force’s military value scores for all of its bases.

- The question on Ramp Area and Serviceability (Formula 8) is unnecessarily biased toward large bases (configured on an Active Duty model), for it does not allow for joint ramp area agreements between the base and neighboring uses. In fact, joint ramp agreements can be a cost-effective means for the Air Force to control costs while maintaining necessary surge potential.

In short, the methodology used in determining the military value of W.K. Kellogg AGS was highly subjective and based on incorrect and inappropriate data. Of course, it is well beyond the scope of this analysis to come up with an alternative methodology to determine the military value of the W.K. Kellogg AGS. However, these results do support the recommendation that the BRAC Commission broadens its scope of review to include the base's past record of performance (including recruitment), age and condition of the base's physical infrastructure, and its cost effectiveness.

### **Potential Cost-Savings Estimates**

The Air Force seriously overestimated the potential cost savings generated by closing the W.K. Kellogg Air Guard Station in Battle Creek Michigan. The Air Force estimates that the Net Present Value (NPV) of cost savings over the next 20 years from closing the base will reach \$167 million. Moreover, its analysis shows that the annual recurring savings after the closing are \$12.7 million with an immediate payback expected. **It is our estimate that it will cost the Air Force \$6.144 million (NPV) to close the W.K. Kellogg Air Guard Station.**

The Air Force's calculations are incorrect for four major reasons:

1. It failed to account for the substantial retraining costs that will occur if the 110<sup>th</sup> Fighter Wing is moved to Selfridge. Based on the assumption that the wing would lose 50 percent of its current pilots during the move, it would cost more than \$72 million and up to five years to retrain 18 F-16 fighter pilots to the same level as now maintained by today's 110th Fighter Wing (Appendix B, Slides 72 - 73).
2. Its calculated cost saving for military personnel reduction – the elimination of 50 positions – is voided by the fact that its overall end-strength remains unchanged. An issue recently addressed by a recent Government Accountability Office (GAO) report entitled *Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignments* (GAO)-05-785).
3. It inflated the potential cost savings that will be generated by eliminating the overhead costs of the W.K. Kellogg airbase. Current expenditure for base operation and maintenance is \$4.2 million annually, not \$5.7 million as reported in the COBRA model.

4. It ignored the cost of renovating Selfridge's hangars which were constructed in 1932. We estimates this cost to reach \$14.5 million (Appendix B, Slides 43-44).

## **Introduction**

The U.S. Air Force recommends that the W.K. Kellogg Air Guard Station be closed, the 110<sup>th</sup> Fighter Wing deactivated and the A-10 aircraft be relocated to Selfridge. This report examines and evaluates the methodology used by the Air Force in determining the military value of the Kellogg base and in estimating the expected cost savings of closing the base. In addition, this report examines the potential loss of the Air Force's future mission capability if the Kellogg base is closed.

It is the conclusion of this report that closing the W.K. Kellogg Air Guard Station is not in the best interest to our national defense. We find that closing the base will lead to a loss of future mission capability. Furthermore, the military value determination of the installation was based on a highly subjective and flawed methodology. Finally, we estimated that closing the base will not generate any cost savings to the Air Force. In fact, closing the base will cost the Air Force \$6.144 million (NPV) during the next 20 years.

### **Loss of Future Mission Capability**

The closure of the Kellogg Air Guard and the resulting relocation of its A-10 aircraft to Selfridge would likely cause the unit to drop "to the lowest combat ready status and be a non-deployable unit for at least three to five years, depending on the availability of training school assets" according to the sworn testimony of Retired Major General E. Gordon Stump (June 20, 2005). It is very likely that most of the unit's current pilots would not be relocated with the planes to Selfridge because of both voluntary resignations and Selfridge's current F-16 pilots enacting their right to pilot the relocated A-10s.

The performance of the 110<sup>th</sup> Fighter Wing based at the W.K. Kellogg Air Guard has been highly honored. It is the only ANG A-10 unit to receive an "outstanding" rating on an Air Combat Command (ACC) operational readiness inspection in the last nine years. Moreover, it is the only ANG A-10 unit with zero Class A or B mishaps since 1995. In addition, it holds the top average "Fully Mission Capable" (FMC) rate for A-10 aircraft out of all ANG A-10 units for last ten years and its pilots have flown more hours, regular and combat, than any other ANG A-10 unit over the last eight years (Appendix B, Slides 23-26).

The unit's maintenance personnel have more than 1,000 years of combined A-10 experience with the average maintainers holding 11 years of experience with the plane (Appendix B, Slide 25).

Table 2 lists the unit's most recent combat missions. In 2003, the 110<sup>th</sup> Fighter Wing served in Operation Iraqi Freedom after returning from being deployed in Operation Southern Watch only three weeks earlier. It was the only ANG unit to achieve such a feat. In Operation Iraqi Freedom the unit flew 455 combat sorties, logging in more than 1,164 combat hours

Fighter Wing	Fully Mission Capable Rate Average	Fleet Hours Flown in last 8 years.
<b>Kellogg 110th</b>	<b>72.8%</b>	<b>34,773</b>
Baltimore 175th	68.2%	31,546
Willow Grove 111th	67.3%	31,772
Bradley 103rd	59.9%	31,355
Boise 124th	69.8%	33,900
Barnes 104th	63.9%	34,643

Year	Combat Mission	Location
1995	Operation Deny Flight	Bosnia
1997	Operation Joint Endeavor	Bosnia
1999	Operation Noble Anvil	Kosovo
2000	Operation Southern Watch	Iraq
2002	Operation Southern Watch	Iraq
2002	Operation Enduring Freedom	Afghanistan
2003	Operation Iraqi Freedom	Iraq

In the 2003 Operation Iraqi Freedom, the Wing personnel earned 14 Distinguished Flying Crosses and 10 Bronze Stars (Appendix B, Slide 24).

Overall, Battle Creek's overall MCI was better than 4 out of the 5 other ANG A-10 units (Table 3). It scored better than four of the five other ANG A-10 bases on 5 of 8 missions. According to these measures, Battle Creek is better suited to meet the Air Force's future capability needs than four of the other five other ANG A-10 bases.

BASE	SOF/CSAR	FIGHTER	BOMBER	AIRLIFT	TANKER	C2ISR	UAV	SPACE	AVERAGE MCI
Boise	41.35	50.86	39.70	47.32	70.84	72.76	73.07	43.37	54.91
<b>Battle Creek</b>	<b>30.52</b>	<b>37.60</b>	<b>27.47</b>	<b>39.22</b>	<b>50.93</b>	<b>62.74</b>	<b>63.36</b>	<b>53.29</b>	<b>45.64</b>
Willow Grove	37.71	49.69	35.58	35.85	40.94	47.95	60.56	11.62	39.99
Barnes	35.50	42.02	29.69	37.75	39.35	46.06	61.49	23.61	39.43
Baltimore	39.45	51.42	43.55	30.37	32.26	36.39	55.54	19.75	38.59
Bradley	35.40	40.10	27.43	37.83	40.49	51.78	54.51	12.77	37.54

In short, the Air Force will throw away years of experience and know-how if it closes the 110<sup>th</sup> Fighter Wing and relocates the A-10 aircraft to Selfridge. Not only will it take three or five years to rebuild the A-10 squadron to an acceptable level of combat readiness, but will cost millions of dollars as well as will be shown below.

### **Determination of Military Value**

To assist in determining the military value of its installations, the Air Force used a Web-based Installation Data Gathering and Entry Tool (WIDGET). WIDGET provided the means to acquire a consistent data base for 154 installations, which was then used to calculate the Mission Capability Indexes (MCIs) for eight separate missions for each base. The eight missions are fighter; bomber; tanker; airlift; Special Operations/Combat search and rescue (including A-10s); Command, Control, Intelligence/Surveillance/Reconnaissance (C2ISR), Unmanned Aerial Vehicles (UAV) and space operations. The MCI tool measures the specific military value for each base for all eight of the missions. It is important to note that each of installations was given a MCI score for each of these missions even if it never performed one or more of them.

Armed with the calculated MCIs, the Air Force Base Closure Executive Group (BCEG) determined the military value of each base. How these military values were derived is unclear, however. After reviewing its 20 year force structure projections and overall principles, the BCEG went through several iterations of different base structures until “a set of potential forces structure deployments was reached that conformed to the Air Force principles, did not violate any Air Force imperatives, improved military capability and efficiency and was consistent with sound military judgment.”<sup>2</sup> Based on this “potential force structure deployment” the BCEG adopted a set of recommended base closures and realignments. This step also went through several iterations. “Lastly, the BCEG approved Air Force candidate recommendations were time-phased to balance maximized payback and minimized disruption to operational training units.”<sup>3</sup>

During this decision making process, the final military value assigned to each of the 154 installations became removed from the installations’ MCIs scores. In other words, the determination of military value became more subjective.

To estimate the importance of the data-intensive MCI process in determining the final military value assigned to each base, we conducted a regression analysis which statistically estimates the linear relationship between a base’s eight MCI scores and its final military value. Unfortunately, the analysis is based on only the 80 bases for which the military values were provided in the Department of the Air Force *Analysis and Recommendations BRAC 2005* (Volume, Part 1 of 2). We were not successful in obtaining the assigned military value for all bases. The data used in this analysis is presented in Appendix A.

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<sup>2</sup> Department of the Air Force, *Analysis and Recommendations BRAC 2005* (Volume, Part 1 of 2), page 52.

<sup>3</sup> *Ibid*, page 52.

As shown by the Adjusted R-squared Statistic on Table 4, the eight MCIs combined explain 61 percent of the variation in the military values of the 80 bases in the sample. Had the military value been calculated as some type of weighted average of the eight MCIs, then the Adjusted R-squared statistic would have been 1. In other words, approximately 40 percent of the bases' military value cannot be explained by its eight MCI scores. Regarding the individual MCIs, the Bomber and Space Operations MCIs are statistically significant and have the correct sign. For example, a one unit change in a base's Bomber MCI would, on average lower its military value (improve its ranking) by nearly 1.8 units. Surprisingly, a higher score in a base's UAV MCI would have, on average, a negative impact on its military value – pushing it higher. Statistically speaking, changes in a base's Fighter, SOF/CSAR, Tanker or CS2ISR MCIs would have an impact on its military value that could not be distinguished from zero.

The Beta statistics indicate the relative importance of each of the MCI values to explaining a change in the military value rating. For example, a one standard deviation change in a base's Bombers MCI will lead to a 0.58 standard deviation decline in the base's military value rating.

<b>Table 4 Regression Analysis on the Importance of MCI Scores to Military Value</b>			
Dependent Variable: Military Value Rating			
Number of observations: 80			
Adjusted R-Square: 0.61			
MCI Value	Coefficient	t-statistics	Beta
Fighter	-0.99	-1.33	-0.31
SOF	0.07	0.16	0.02
Bomber	<b>-1.79</b>	<b>-2.76*</b>	-0.58
Tanker	0.18	0.21	0.07
Airlift	-0.86	-1.52	-0.26
CS2ISR	-0.08	-0.08	-0.03
UAV	<b>1.57</b>	<b>2.66*</b>	0.51
Space Operations	<b>-0.53</b>	<b>-3.79*</b>	-0.30
Constant	145.39	9.20	
Statistically significant at the 5 % level.			

### Errors in Calculating Mission Capability Indexes

Although, the above analysis shows that a base's final military value is only partially determined by its Mission Capability Indexes (MCIs), it is still important to evaluate the accuracy of the MCI methodology in capturing a base's mission capability.

In the following analyses, the MCI scores for the W.K. Kellogg AGS are compared to those of Selfridge and the five other ANG A-10 bases. Table 5 shows the MCI scores for

the six comparison bases and the W.K Kellogg AGS, ranked in terms of the overall average MCI for all eight mission areas. W.K. Kellogg ranks third behind Boise and Selfridge. W.K. Kellogg's average MCI score is only 3 percent below that of Selfridge, or 1.44 points. This is in sharp contrast to the major difference in the two bases' final military values – 62 for Selfridge compared to 122 for Kellogg. Clearly, unarticulated subjective factors were added to Selfridge's score to push its military value ranking so low.

**Table 5 Overall MCI by Mission Area**

BASE	SOF/CSAR	FIGHTER	BOMBER	AIRLIFT	TANKER	C2ISR	UAV	SPACE	AVERAGE MCI
Boise	41.35	50.86	39.7	47.32	70.84	72.76	73.07	43.37	54.91
Selfridge	42.06	48.07	33.86	47.27	58.24	63.74	62.07	21.35	47.08
Kellogg	30.52	37.6	27.47	39.22	50.93	62.74	63.36	53.29	45.64
Willow Grove	37.71	49.69	35.58	35.85	40.94	47.95	60.56	11.62	39.99
Barnes	35.5	42.02	29.69	37.75	39.35	46.06	61.49	23.61	39.43
Martin State	39.45	51.42	43.55	30.37	32.26	36.39	55.54	19.75	38.59
Bradley	35.4	40.1	27.43	37.83	40.49	51.78	54.51	12.77	37.54

In addition, several of the questions used in WIDGET to assess the military capability of W.K. Kellogg to conduct SOF/CSAR and Fighter missions are irrelevant to the operation of A-10s or do not adequately address the issue they are intended to measure.

First, 22.7 percent of the total SOF/CSAR score rests on the base's proximity to Landing Zones (necessary for helicopters) and Drop Zones (parachutes) – formulas 1248 and 1249. These do not apply to A-10 operations and should not be factored into MCI for A-10 operations, further, these facilities are available through the adjacent Fort Custer military complex, but were not included in the score.

In regards to methodology used to determine a base's Fighters MCI, 22.08 percent of the total potential score depends on "The Proximity to Airspace Supporting Mission" – formula 1245. For the SOF/CSAR MCI a slightly modified question – distance is slightly reduced – accounts for 14.72 percent of the total potential score. These questions are ineffective in obtaining the information required for they only address distance to the airspace; they do not address the more important questions of how many airspace options does the base have and what is the variety of surface environments they offer. Fighters cover 5 miles per minute so to set the maximum distance at 150 miles is far too restrictive. The W.K. Kellogg Air Base offers nine different airspaces with a variety of environments within one hour fly time. In addition, the Kellogg Air Base was not allowed to list the Grayling Range as an asset as it was assigned to Selfridge even though pilots from both bases have equal access and it is supported by the W.K. Kellogg ANGB.

Regarding Ramp Area and Serviceability, the WIDGET question was heavily biased toward larger bases by not allowing for readily available shared ramp space to be counted. For smaller bases like W.K. Kellogg, that have successfully executed surge

activities, this is an unfair requirement and is not cost effective. W.K. Kellogg controls 66,000 square yards of ramp area; however, it has ready access to other 90,000 square yards if required. One of the clear advantages of shared ramp space, which can be secured by signed agreement in times of surge activity, is that the Air Force avoids maintenance and service costs.

Finally, the WIDGET questions do not adequately address the growing concern of mission encroachment. Noise migration procedures and congested air travel control environments can harm a base's ability to perform surge operations. This is strong advantage of the W.K. Kellogg base compare to other bases in urban setting (Appendix B, Slides 50 - 65).

The questions in WIDGET never established the fact that the average age of the facilities at Kellogg is only 16 years old with 80 percent being built after 1991. The base is on a 10,000 foot runway, which is an alternate shuttle landing site and is utilized by Air Force One. The base has the largest most modern munitions storage facility in southwest Michigan. Finally, the base has room to grow with over 41,000 square foot available in authorized square footage for new facilities and over 45 acres available for building (Appendix B, Slides 35-37).

In summary, the methodology used by the Air Force to determine the military value of the W.K. Kellogg AGS is unclear, subjective, and based, in part, on erroneous data.

### **Evaluation of the Air Force's Cost-Savings Estimates**

The Air Force used the Cost of Base Realignment Actions (COBRA) model to estimate the cost savings associated with curtailing operations at the W.K. Kellogg AGS. The COBRA model is a standard cost-benefit model which simply compares the cost associated with closing or realigning a military facility (e.g. moving costs and environment cost) with its potential savings (e.g. reduction in personnel costs and overhead). The model estimates the Net Present Value for a 20-year planning period. In short, the COBRA model is an accounting tool and its results are only as good as its inputs. We have independently tested the model's calculations and found them to be without error.

Table 6 presents the Air Force COBRA model's derived cost saving estimates. The COBRA model estimates that the Air Force will incur a one-time cost of \$8.3 million to close W.K. Kellogg AGS and will save \$12.7 million annually during the implementation period – 2006 to 2011. Moreover, the Net Present Value (NPV) of the cost savings derived from closing the base reaches \$166.8 million during the 20-year planning period.

The Air Force analysis carefully calculated the one-time costs of moving 182 employees from W.K. Kellogg to Selfridge, \$4,945,000. The assumptions and methodology used in these calculations appear sound.

Nearly 55 percent of the estimated annual savings of the closing the W.K. Kellogg is derived from the elimination of 92 personnel positions. Of the 274 positions currently at the W.K. Kellogg Base only 182 are scheduled to be moved to Selfridge.

(in thousands of \$)	2006	2007	2008	2009	2010	2011	Beyond
<b>Costs</b>							
Military Construction	\$25	\$284	\$0	\$0	\$0	\$0	\$0
Personnel	\$0	\$2,103	\$855	\$855	\$855	\$855	\$855
Overhead	\$441	\$616	\$593	\$285	\$285	\$285	\$285
Moving	\$0	\$4,945					
Mission	\$0		\$0	\$0	\$0	\$0	\$0
Other	\$368	\$318	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$834</b>	<b>\$8,266</b>	<b>\$1,448</b>	<b>\$1,140</b>	<b>\$1,140</b>	<b>\$1,140</b>	<b>\$1,140</b>
<b>Savings</b>							
Military Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Personnel	\$0	\$4,007	\$7,635	\$7,635	\$7,635	\$7,635	\$7,635
Overhead	\$936	\$1,239	\$5,985	\$5,985	\$5,985	\$5,985	\$6,230
Moving	\$0	\$36	\$0	\$0	\$0	\$0	\$0
Mission	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$936</b>	<b>\$5,282</b>	<b>\$13,620</b>	<b>\$13,620</b>	<b>\$13,620</b>	<b>\$13,620</b>	<b>\$13,865</b>
<b>Cost - Savings</b>	<b>-\$102</b>	<b>\$2,984</b>	<b>-\$12,172</b>	<b>-\$12,480</b>	<b>-\$12,480</b>	<b>-\$12,480</b>	<b>-\$12,725</b>
NPV	-\$101	\$2,862	-\$11,359	-\$11,330	-\$11,021	-\$10,721	-\$7,426
rate	1.4%	2.1%	2.3%	2.4%	2.5%	2.6%	2.7%
<b>Net Present Value:</b>	<b>-\$166,849</b>						

### **Retraining Costs of Pilots and Maintenance Personnel**

As discussed above, the proposed relocation of the A-10 aircraft (the 110<sup>th</sup> Fighter Wing will be closed) to Selfridge will cause the A-10 squadron to drop to a non-combat ready status and become a non-deployable unit for as long as five years. Selfridge's F-16 pilots will be given first priority on placement and assignment for the A-10s, making it very likely that only a few of the current A-10 pilots will make the move. In addition, since the move is greater than 50 miles, the 110<sup>th</sup> Fighter Wing pilots have the right to refuse to move. This will require the Air Force to spend million of dollars in extra training costs, as well as paying for the hundreds of hours of necessary flying time that it will take for the retrained pilots to achieve mission readiness.

The Air Force cost-savings estimates simply ignored these substantial retraining costs. In our calculations we make the conservative assumption that one-half of W.K. Kellogg's

pilots will not make the move. As shown in Table 7, the first year of training costs would total more than \$27 million as 14 pilots take the TX (Transition) course at either Davis-Monthan or Barksdale Air Force base, and that other four take the even more intensive B (Basic) courses. After this training, the new pilots will still have to log in the required five years of flying time to gain a combat readiness level equaling approximately 50 percent of the current unit's training and combat experience level for the A-10 mission.

Moreover, our estimates do not account for the retraining costs that will be necessary for ground personnel at Selfridge, including aircraft mechanics and munitions specialists.

<b>Table 7 - Retraining Costs</b>						
<b>Assumption: 18 pilots will have to be retrained.</b>						
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Retraining Expenditures</b>						
14 TX courses @ \$990,000 each	\$13,860					
4 B courses @ \$3,400,000 each	\$13,600					
<b>Cost of necessary flying to achieve combat readiness:</b>						
5 years of required A-10 flying		\$8,046	\$8,046	\$8,046	\$8,046	\$8,046
5 years of required A-10 flying to		\$864	\$864	\$864	\$864	\$864
<b>Total (in millions)</b>	<b>\$27,460</b>	<b>\$8,910</b>	<b>\$8,910</b>	<b>\$8,910</b>	<b>\$8,910</b>	<b>\$8,910</b>

In total, the military will be burdened with more than \$72 million in retraining costs (not discounted) before for A-10 squadron returns to approximately 50 percent of the combat readiness it currently holds at the W.K. Kellogg AGS.

### **Military Personnel Costs**

The Air Force erroneously claims that the elimination of 50 military positions at the Kellogg AGS would generate a cost savings of \$4.8 million annually. However, these should not be taken as cost savings, but instead, personnel cost transfers as the Air Force's end military personnel strength does not change during the BRAC restructuring. As summarizes by the General Accountability Office (GAO):

The Air Force was unable to provide us documentation showing at the present time to what extent each of these [eliminated] positions will be required to support future missions. According to Air Force officials, they envision that most active slots will be needed for formal training and all the Air Reserve and Air National Guard personnel will be assigned to stressed career fields and emerging missions. Furthermore, Air Force officials said that positions will also be revised during the Quadrennial Defense Review, which could decrease end strength. Either way, claiming such personnel as BRAC savings with reducing end strength does not provide dollar savings that can be reapplied outside personnel accounts and could result in the Air Force having to find other sources of funding

for up-front investment costs needed to implement its BRAC recommendations.<sup>4</sup>

In short, the \$4.8 millions generated by the elimination of the 50 military personnel positions will be used by the Air Force to fund necessary personnel slots required to retain military readiness in the face of its planned base closures and realignments. These funds will not be “saved” nor invested in other future Air Force activities.

We do accept the Air Force’s estimated annual cost savings of \$2.8 million associated with the elimination of the 42 civilian positions at Kellogg if it is closed.

### **Cost of Overhead – Operations and Maintenance**

The Air Force over estimated the cost savings that will be derived from the elimination of W.K. Kellogg AGS. As shown in Table 8, we estimate that annual cost savings that would be gained by closing Kellogg would be \$4.2 million, not the \$5.7 million as promised by the Air Force.<sup>5</sup> The largest cost savings will be the elimination of the fire protection service agreement at the base, a savings of \$2.2 million annually.

Eliminated Activities:	Annual Cost Savings
Supply & Equipment	\$401,760
Contract Services	\$91,192
IT Support	\$240,759
Environmental	\$14,400
FOMA/RPS	\$803,000
Security Agreement	\$406,000
FireFighter Agreement	\$2,260,300
<b>Total Annual Savings:</b>	<b>\$4,217,411</b>

### **Base Construction Costs at Selfridge to House the A-10s**

Additional military construction expenditures will be incurred to bed-down the 110FW at Selfridge. These added costs are on top of the Air Force’s plans to construct a new Fire and Rescue Station at Selfridge. First, a new structure will be required to house the A-10

<sup>4</sup>Government Accountability Office, *Analysis of DOD’s 2005 Selection Process and Recommendations for Base Closures and Realignment* (GAO)-05-785), July 2005, pg124.

<sup>5</sup> In an earlier version of our analysis (released on June 27), we seriously underestimated the potential cost savings associated with closing the base, \$707,000 annually. We regret and apologize for this error.

flight simulators. In addition, there will be the added construction costs associated with building new fences for force protection due to the closing of the U.S. Army Garrison at Selfridge (Appendix B, Slide 45).

Furthermore, as shown in Table 9, four of the current structures at Selfridge were constructed in 1932, while another seven were built in the 1950s and 1960s. Such old structures require added maintenance and operating costs and several may require to be replaced in the near future. Many of the newer structures on the base are located on its West Ramp and are in excess of the base missions.

We estimate that the Air Force will be required to make renovations to its 1932 and 1955 Hangar space (structures 3 and 36) which will total \$14.2 million.<sup>6</sup> Additional required renovation costs on the base's structures including its Fuel System Maintenance Dock, which is incompatible to A-10 aircraft, could reach up to \$15 million; however, these were not included in our analysis. In addition, a new A-10 Simulator Facility will have to be constructed, which was also not included in the cost calculations.

Structure Number	Use	Year Built	Size (SF)
3	Hangar	1932	26,880
5	Weapons Release	1932	33,535
7	Aircraft Maintenance	1932	32,890
9	Deployment Processing	1932	34,243
36	Hangar	1955	62,983
154	Fuel System Maintenance	1991	17,000
35	Fuel System Maintenance	1999	30,171

Note: Existing aircraft related facilities would be in excess to the new mission. The lost square footage is 244,017 square feet.

In comparison, the average age of the facilities at Kellogg is 16 years, with 80 percent of the structures constructed after 1991.

### **Revised Cost-Saving Estimate**

Table 10 presents our revised cost saving estimates. The re-estimation includes 1)the necessary retraining costs that can be expected in moving the A-10 aircraft to Selfridge, 2)the elimination of the erroneous military personnel savings, 3)the correction in the expected overhead cost saving and 4)the cost of renovating required hanger space at Selfridge. We find that the NPV of the costs to the Air Force of closing the W.K. Kellong ANG is \$6,144 million.

<sup>6</sup> Renovation construction costs are estimate to be \$158.35 per square foot with 89,863 square feet of hangar space being renovated.

Table 10 Upjohn Institute's Benefit Cost Analysis of Closing W.K. Kellogg Air Guard Base								
<b>Costs at Selfridge</b>								
	2006	2007	2008	2009	2010	2011	2012	Beyond
Military Construction	\$25	\$14,514	\$0	\$0	\$0	\$0	\$0	\$0
Personnel	\$0	\$28,315	\$8,950	\$8,950	\$8,950	\$8,950	\$8,950	\$855
Civilian	\$0	\$728	\$728	\$728	\$728	\$728	\$728	\$728
Mil. Housing All.	\$0	\$127	\$127	\$127	\$127	\$127	\$127	\$127
Retraining costs	\$0	\$27,460	\$8,910	\$8,910	\$8,910	\$8,910	\$8,910	\$0
Overhead	\$0	\$285	\$285	\$285	\$285	\$285	\$285	\$285
Other	\$368	\$375	\$0	\$0	\$0	\$0	\$0	\$0
HAP/RSE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Environmental	\$218	\$240	\$0	\$0	\$0	\$0	\$0	\$0
Misc Contract	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1-time cost	\$150	\$78	\$0	\$0	\$0	\$0	\$0	\$0
Mothball	\$0	\$57	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Costs Selfridge</b>	<b>\$393</b>	<b>\$43,489</b>	<b>\$10,050</b>	<b>\$10,050</b>	<b>\$10,050</b>	<b>\$10,050</b>	<b>\$10,050</b>	<b>\$1,140</b>
<b>Costs at Kellogg</b>								
	2006	2007	2008	2009	2010	2011	2012	2013
Military Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Personnel	\$0	\$938	\$0	\$0	\$0	\$0	\$0	\$0
Civ. RIF	\$0	\$746	\$0	\$0	\$0	\$0	\$0	\$0
Civ Retire	\$0	\$192	\$0	\$0	\$0	\$0	\$0	\$0
Moving	\$0	\$4,915	\$0	\$0	\$0	\$0	\$0	\$0
Civilian	\$0	\$4,546	\$0	\$0	\$0	\$0	\$0	\$0
Freight	\$0	\$271	\$0	\$0	\$0	\$0	\$0	\$0
Unemployment	\$0	\$58	\$0	\$0	\$0	\$0	\$0	\$0
Military	\$0	\$40	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$441	\$614	\$308	\$0	\$0	\$0	\$0	\$0
Info Tech	\$0	\$31	\$0	\$0	\$0	\$0	\$0	\$0
Prog Manage	\$441	\$331	\$248	\$0	\$0	\$0	\$0	\$0
Mothball	\$0	\$0	\$60	\$0	\$0	\$0	\$0	\$0
Elim PCS	\$0	\$252	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Costs Kellogg</b>	<b>\$441</b>	<b>\$6,467</b>	<b>\$308</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Savings at Kellogg</b>								
	2006	2007	2008	2009	2010	2011	2012	2013
Military Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Personnel	\$0	\$1,396	\$2,793	\$2,793	\$2,793	\$2,793	\$2,793	\$2,793
Civilian	\$0	\$1,396	\$2,793	\$2,793	\$2,793	\$2,793	\$2,793	\$2,793
Military	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overhead	\$936	\$1,239	\$4,217	\$4,217	\$4,217	\$4,217	\$4,217	\$4,217
Other	\$0	\$36	\$0	\$0	\$0	\$0	\$0	\$0
Moving	\$0	\$36	\$0	\$0	\$0	\$0	\$0	\$0
Mission	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Savings Kellogg</b>	<b>\$936</b>	<b>\$2,707</b>	<b>\$7,010</b>	<b>\$7,010</b>	<b>\$7,010</b>	<b>\$7,010</b>	<b>\$7,010</b>	<b>\$7,010</b>
<b>Total Cost Savings</b>	<b>-\$102</b>	<b>\$47,285</b>	<b>\$3,348</b>	<b>\$3,040</b>	<b>\$3,040</b>	<b>\$3,040</b>	<b>\$3,040</b>	<b>-\$5,870</b>
<b>Net Present Value:</b>	<b>\$6,144</b>							

### Other Factors to be Considered

First, the U.S. Army estimates that they will save \$260 million over 20 years by closing the Army Garrison at Selfridge. In order to avoid encroachment issues that would

endanger operations, the Air Force will have to assume responsibility for the property at Selfridge garrison, and thus they will assume some of its overhead costs. The Air Force analysis does not account for these potential costs. Moreover, the costs will likely run much higher than the need to construct a new fence, as mentioned above. Demolition costs may be required as well.

Second, in preparing its cost analysis the Air Force used a very low discount rate schedule, which slowly increases from 1.4 percent in 2005 to 2.7 percent in 2025. Using such a low discount rate places greater value on expected long-term cost savings than most analysts are willing to accept. Twenty years is a very long time period in the rapidly changing environment of national defense. It would have been prudent to introduce a risk factor during the later years of the forecast period. Table 11 shows the impact of the project's Net Present Value under different discount rates and risk scenarios. In all scenarios, the expected NPV is reduced.

	Current Discount	3% Discount	3% Discount & 3% Risk in last 5 years
Air Force NPV	-\$166,712	-\$160,971	-\$145,953
Upjohn Institute NPV	\$6,144	\$3,599	\$10,537

### Conclusion

The Air Force justifies the closing of W.K. Kellogg Air Guard State solely on its military value.

The Air Force placed one squadron at Selfridge (62 – *military value*) because it is significantly higher in military value than Kellogg (122 – *military value*). The Air Force retired the older F-16 from Selfridge and combined the two fighter units into one squadron at retain trained and skilled ANG Airmen from both locations. (*Italics added*)

It is the finding of this report that the large difference in military value between Selfridge and Kellogg cannot be supported by the data gathered in the WIDGET process.

Second, it is very likely that the Air Force's expectation of retaining trained and skilled ANG Airmen, especially its current A-10 pilots based at Kellogg, will not hold true. It is likely that more than 50 percent of the A-10 pilots will not following the aircraft to Selfridge. This will require million of dollars in retraining dollars to be spent to ready Selfridge's F-16 pilots for the relocated A-10 positions. This will eliminate a mission ready squadron and activate a new squadron that will not be mission ready until its new

pilots receive the necessary retraining and log-in the required flying hours. It could take up to five years before the A-10 squadron would reach 50 percent of level of mission readiness it has today, at a cost of more than \$72 million to the Air Force.

Finally, the Air Force seriously erred in its estimation that the closing of the W.K. Kellogg ANG would result in a cost savings of \$166.8 million. We estimate that closing W.K. Kellogg will cost the Air Force more than \$6 million (NPV) over the next 20 years.

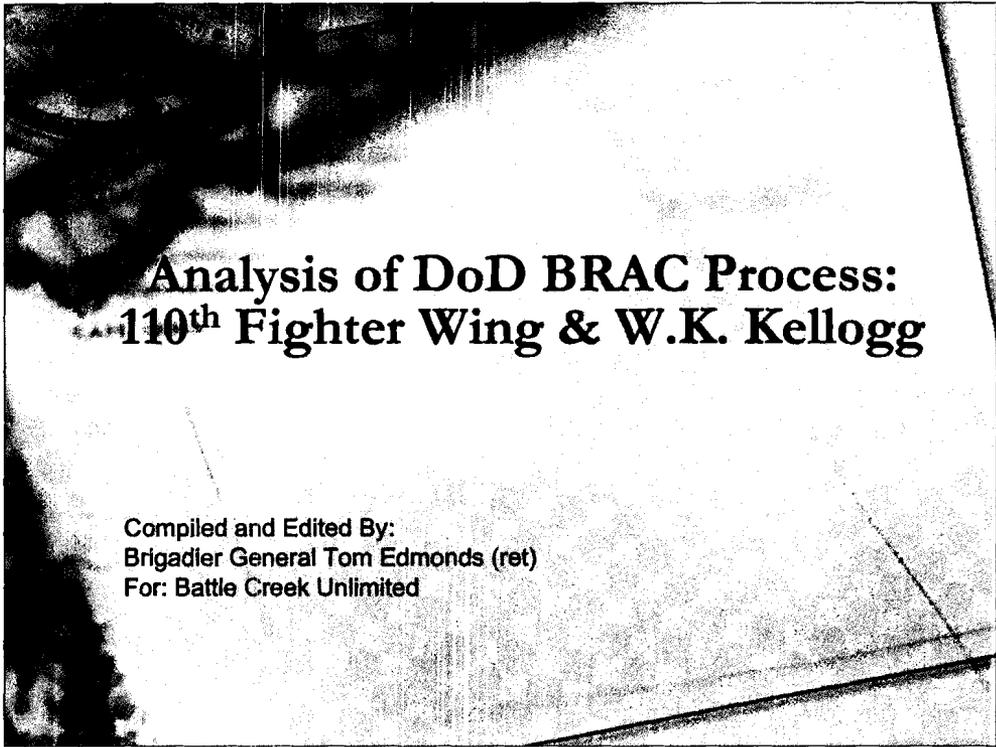
In summary, the methodology used by the Air Force did not provide an accurate evaluation of the military value of the W.K. Kellogg Air Base nor did it adequately measure the cost of closing the facility. In short, the Air Force's recommendation to close the W.K. Kellogg Air Guard Station cannot be supported by this analysis.

**Appendix A - Data Used in Regression Analysis**

Base Name	Military Value	MCI Scores								
		SOF				tanker	airlift	CS2ISR	UAV	Space
		Fighter	CSAR	Bomber						
Andrews	21	64.83	55.23	57.19	68	62.05	74.6	75.8	53.96	
Atlantic city	61	50.22	41.94	39.38	23.51	45.55	41.04	67.55	55.53	
Bangor	123	34.47	31.77	31.45	42.68	43.83	52.05	52.64	40.33	
Barksdale	33	61.49	49.81	60.74	84.14	72.43	87.27	78.15	84.01	
Barnes	97	42.02	35.5	29.69	39.35	37.75	46.06	61.49	23.61	
Birmingham	63	39.24	42.46	41.19	57.3	50.93	60.7	57.58	33.63	
Bradley	98	40.1	35.4	27.43	48.55	37.83	51.78	54.51	12.77	
Buckley	64	49.82	37.52	30.16	62.71	54.62	68.94	71.28	84.96	
Cannon	50	55.22	41.03	45.7	56.18	45.43	61.46	68.91	66.56	
Capital	115	38.18	32.43	30.83	51.84	36.96	55.95	56.07	39.12	
Carswell	53	51.01	39.87	41.01	57.81	50.57	67.4	64.57	11.21	
Channel Island	96	47.27	37.68	40.56	56.85	41.92	67.65	58.21	44.22	
Charlotte	33	38.49	40.12	46.03	63.42	70.45	58.36	56.07	15.25	
Dane-Truax	122	37.22	30.35	26.74	50.41	38.59	53.83	54.4	35.14	
Dannelly	60	50.66	46.01	47.39	44.06	49.46	46.99	65.21	36.54	
Des Moines	137	32.35	29.46	26.79	53.07	33.54	58.26	59.73	33.18	
Dobbins	71	40.33	34.84	44.89	54.14	51.35	58.07	70.03	18.05	
Duluth	136	32.55	24.68	23.75	40.43	30.43	44.87	55.85	4.24	
Dyess	20	58.96	53.14	56.7	78.56	65.95	85.14	72.37	79.98	
Eielson	11	69.09	53.27	52.12	57.97	67.34	69.62	77.36	82.5	
Ellington	80	45.39	41.22	33.67	50.71	51.65	62.34	68.78	19.75	
Ellsworth	39	58.06	43.91	50.81	83.73	59.4	87.72	69.73	84.12	
Elmendorf	51	58.35	51.21	44.49	56.87	51.6	66.24	72.76	82.31	
Fairfield	17	60.32	45.83	52.78	77.09	64.22	85.25	74.12	79.8	
Forbes Field	35	46.55	40.95	43.47	66.07	51.93	74.73	60.48	37.88	
Fort Smith	110	38.63	42.12	35.67	55.12	42.58	58.75	66.4	77.76	
Fort Wayne	130	34.49	79.17	25.12	52.43	48.09	57.57	54.87	35.89	
Fresno	87	43.09	46.99	40.71	51.39	46.12	51.51	66.19	35	
General Mitchell	86	33.55	59.38	25.93	54	41.98	56.4	51.32	10.87	
Great Falls	117	37.85	62.23	25.48	55.65	35.51	60.79	57.35	36.64	
Hector	125	36.11	27.74	25.57	46.78	30.78	54.39	56.74	38.37	
Hill	14	68.02	54.44	58.73	88.93	58.83	93.97	79.39	70.93	
Homestead	31	59.17	50.71	51.44	57.34	48.15	70.3	74.95	20.62	
Hulman	119	37.45	29.48	28.72	51.48	38.63	55.94	59.1	35.22	
Jacksonville	24	61.8	55.66	52.71	48.21	45.79	53.81	75.01	14.96	
Joe Foss	112	38.59	30.7	27.41	55.36	39.59	62.64	62.15	39.59	
Kellogg	122	37.6	30.52	27.47	50.93	39.22	62.74	63.36	53.29	
Key Field	92	42.66	41.96	43.24	52.83	56.39	63.66	61.23	36.53	
Kirtland	16	66.44	50.63	55.27	74.73	55.47	79.11	79.62	82.93	
Kulis	110	40.76	41.92	26.28	36.28	38.93	45.79	57.67	42.62	

## Appendix A - continued

	Military Value	MCI Scores							
		SOF			tanker	airlift	CS2ISR	UAV	Space
Fighter	CSAR	Bomber							
	47	55.79	45.78	44.03	58.3	47.44	67.2	63.92	37.23
Lambert St. Louis	127	35.93	30.36	29.78	51.61	32.04	55.1	51.04	10.88
Little Rock	17	60.78	53.81	55.78	79.98	63.25	86.18	78.75	82.99
Louisville	79	36.56	32.31	25.96	54.72	44.66	57.84	50.76	35.44
MacDill	36	75.6	61.04	61.87	65.67	60.12	75.34	87.68	45.34
March	16	64.84	54.41	58.79	77.38	59.86	81.72	80.41	37.22
Martin State	140	51.42	39.45	43.55	32.26	30.37	36.39	55.54	19.75
Maxwell	21	59.61	53.73	47.77	52.43	59.9	60.61	71.67	36.78
McConnell	15	56.47	45.17	56.28	77.69	54.65	81.48	74.09	51.76
McEntire	48	55.74	50.55	53.76	48.51	59.35	56.98	75.68	45.31
McGhee Tyson	74	37.24	35.93	37.15	55.32	48.32	64.42	56.22	53.26
Mountain Home	23	63.01	49.68	58.44	86.64	59.77	91.75	78.18	83.8
Nashville	104	41.1	35.61	35.06	54.26	39.77	60.09	55.89	12.69
Nellis	12	68.73	53.81	68.33	77.7	63.95	83.28	82.35	77.45
New Castle	120	44.4	34.12	36.34	41.41	36.96	43.48	53.6	11.26
New Orleans	49	45.54	43.96	35.59	47.42	41.65	54.47	68.17	36.9
Orizuka	124	3.72	2.92	3.46	3.31	3.09	3.94	2.29	21.43
Otis	88	42.83	34.97	28.25	43.12	38.95	57.17	64.68	63.83
Pease	105	40.83	33.89	27.84	50.62	46.65	57.86	55.73	47.03
Peoria	127	34.4	30.64	28.26	72.03	35.77	59	56.57	46.03
Phoenix	37	52.3	38.54	41.64	65.27	48.12	65.31	61.46	33.05
Portland	71	45.95	36.36	33.4	55.44	42.32	62.84	67.22	12.15
Quonset State	125	41.1	28.81	24.32	39.4	35.29	45.72	49.76	33.5
Reno	101	51.34	35.24	39.43	61.85	40.51	65.22	59.47	33.57
Richmond	49	55.34	51.8	51	45.32	42.64	51.81	68.08	13.74
Robins	18	59.13	61.64	66.62	75.6	63.89	82.86	86.43	77.9
Rosecrans	114	41.25	37.76	33.71	55.88	38.22	59.74	70.09	35.63
Savannah	77	57.8	49.54	49.22	47.07	45.1	55.75	67.27	38.52
Schenectady	117	33.59	27.74	27.35	34.42	37.72	34.25	49.44	37.17
Schriever	1	6.41	5.61	6.15	5.66	5.78	6.58	6.11	96.54
Scott	38	47.91	39.96	33.83	65.12	44.55	67.77	61.57	58.1
Selfridge	62	48.07	42.06	33.86	58.24	47.27	63.74	62.07	21.35
Seymour Johnson	25	83.24	71.86	78.41	71.7	78.03	80.64	93.59	56.51
Sioux Gateway	67	39.5	28.98	31	56.36	39.3	60.23	60.63	36.26
Springfield-Beckley	128	35.37	24.54	27.16	44.7	33.54	46.86	48.5	34.48
Tinker	4	58.47	42.61	60.4	84.08	68.62	89.52	73.31	33.51
Toledo	123	36.85	31.16	28.79	51.84	41.45	57.76	56.55	36.29
Tulsa	114	38.41	37.72	41.3	58.73	43.2	61.51	57.5	13.34
Vandenberg	2	46.05	43.54	43.19	54.38	44.16	58.32	71.94	90.49
Whiteman	28	58.18	50.93	56.03	81.45	57.82	87.7	75.06	50.56



**Analysis of DoD BRAC Process:  
110<sup>th</sup> Fighter Wing & W.K. Kellogg**

Compiled and Edited By:  
Brigadier General Tom Edmonds (ret)  
For: Battle Creek Unlimited

## Overview

- Understanding the BRAC Plan
- The BRAC Process
- BRAC Implementation
- The DATA – Terms Defined
- Comparative Analysis
- Concerns
- Conclusions

## The BRAC Plan

- BRAC Report Anatomy
- Purpose and Goals
- Basic Process
- Criteria
- Implementation

## Plan Anatomy

- Volume I:
  - Describes overall BRAC selection process
  - Unclassified version of Force Structure Plan
  - Details DoD's closure and realignment recommendations and justifications
- Volume II:
  - Classified Force Structure Plan
- Volumes III – XII:
  - Detailed description of analytical processes and recommendations of each DoD proponent Organization
  - Includes 3 Military Depts (USAF – Vol V) and 7 Joint Cross Service Organizations (JCSGs)

## Purpose and Goals

- Secretary of Defense – Align Base structure with expected force structure over the next 20 years (By Law – PL101-510 – required to base recommendations on a 20 year Force Structure Plan)
- Goals
  - Transformation
  - Eliminate excess physical capacity
  - Rationalizing the base infrastructure with new Defense Strategy
  - Maximize both war fighting capability and efficiency
  - Examine opportunities for Joint Activities

### Source for Stated BRAC Goals:

(Vol V para3.3.5 pg 52) This iterative process continued until a set of candidate recommendations was reached that best promoted transformation, provided military value, and was fiscally sound.

## Basic Process

- I. Capacity Analysis
- II. Military Value Analysis
- III. Scenario Development
- IV. Scenario Analysis
- V. Results Analysis
  - Determining Payback
  - Determining Economic Impact
  - Assessing Community Infrastructure
  - Environmental Impact

## Basic Process

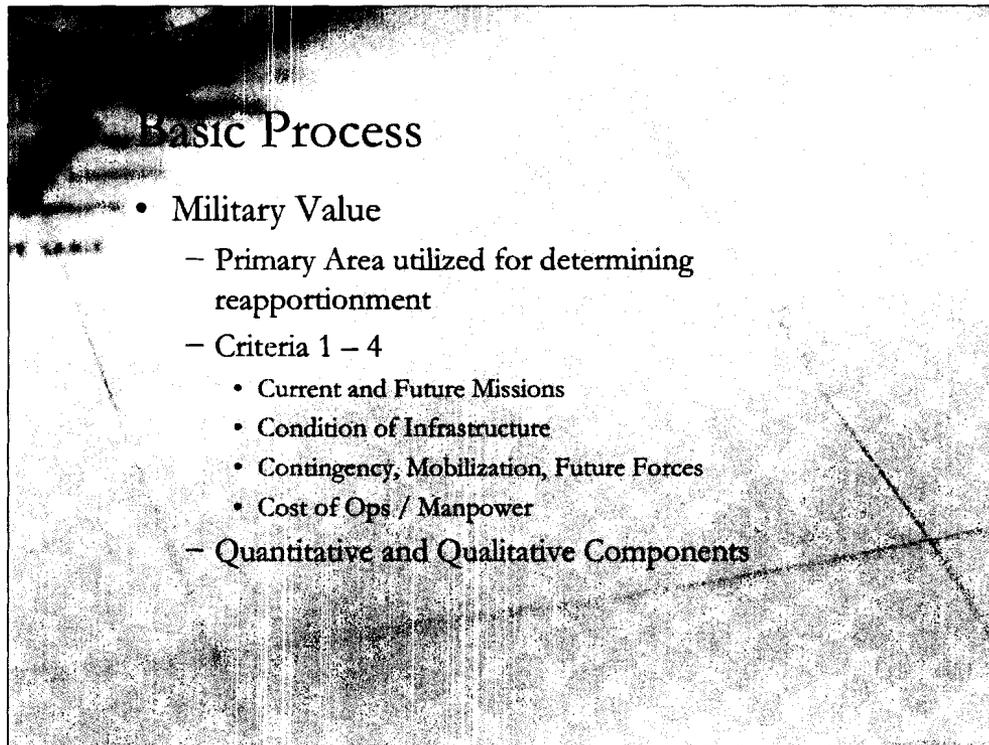
- Capacity Analysis

- Determine Physical and Operational capacity of an installation
- Determine if “Surge” capabilities meet contingency needs (Note: neither “surge” nor “contingency needs” are defined)

### Capacity Analysis as described by DoD BRAC report:

Vol 1 Part 1 DoD BRAC Report (pg17, 3<sup>rd</sup> Para under Analytical Framework) – Surge Capability Assessment:

As part of the assessment of probable threats to national security, the National Defense Authorization Act for 2004 requires the Department to “determine the potential, prudent, [sic] surge requirements to meet those threats.” The Military Departments and JCSGs incorporated surge assessments in multiple steps of their analyses. Each determined the surge capacities needed to support the Department’s force structure plan, evaluated the capability of assigned installations and facilities to surge, and incorporated these capabilities in their capacity assessments. During the military value analysis, analytical proponents evaluated infrastructure supporting their functions within the framework provided by the BRAC selection criteria. **Criteria 1, “current and future” mission capabilities, and criteria 3, “ability to accommodate contingency, mobilization, surge, and future total force requirements,” capture the concept of surge.** By appropriately weighting criteria attributes and metrics, Military Departments and JCSGs ensured that surge was appropriately reflected in military value analyses.



Source: Vol I Part 1 DoD BRAC Report

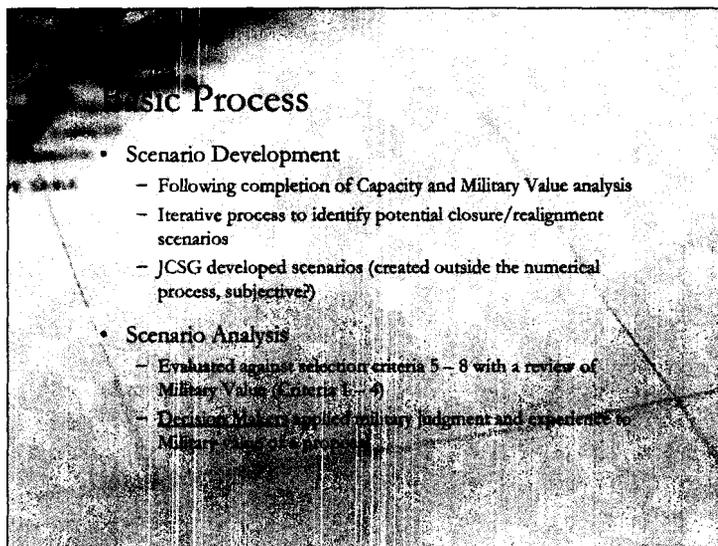
As required by statute, the military value of an installation or activity was the primary consideration in developing the Department's recommendations for base realignments and closures. (Pg 21, Military Value Analysis, para 1)

Quantitative: The quantitative component, explained in greater detail below, assigns attributes, metrics, and weights to the selection criteria to arrive at a relative scoring of facilities within assigned functions. (WIDGET) (Pg 21, Military Value Analysis, para 1)

Qualitative: The exercise of military judgment and experience to ensure rational application of the criteria. This component is discussed further in the context of scenario analysis. (Pg 21, Military Value Analysis, para 1)

Comparative Analysis – Focus Areas:

1. Coast Savings
2. Joint Basing
3. Surge Capabilities
4. Contingency Support



Source: Vol 1 Part 1 DoD BRAC Report (Pg 15, Joint Cross-Service Groups, para 1)

Important: note the ability of the JCSG and Decision Makers to work outside the “objective” process. To facilitate a robust joint analysis during BRAC 2005, the Secretary of Defense chartered seven joint cross-service groups (JCSGs) to make realignment and closure recommendations related to common business-oriented support functions. The JCSGs, each of which had representatives from the Military Services, the Office of the Secretary of Defense, and the Joint Staff, were chartered as analytical proponents with exclusive authority to make recommendations related to assigned support functions. Each performed a broad, comprehensive review of these functions. **The final BRAC 2005 package illustrates that these JCSGs generated a significant portion of the overall recommendations.**

Source: Vol V para 3.3.5 (pg 52)

The initial force structure deployment was refined by the **BCEG** in subsequent iterations to remove unrealistic or impracticable actions that the Cueing Tool was unable to recognize, actions that did not improve military value in the aggregate, or that were not supported by compelling military rationale. These subsequent iterations, termed second look, third look, and so on, were refined until a set of potential force structure deployments was reached **that conformed to the Air Force principles, did not violate any Air Force imperatives, improved military capability and efficiency and was consistent with sound military judgment.**

Source: DoD Vol I Ch3 (pg 22)

“Scenario Analysis” - **Decision makers** also applied their military judgment and experience to assess the overall military value of the proposal. Once the decision makers determined that the scenario was consistent with or enhanced military value, they proceeded to evaluate the scenario against the remaining selection criteria DoD Vol I Ch3 (pg 21) Qualitative Aspect of Military Value: The qualitative component is the exercise of military judgment and experience to ensure rational application of the criteria.

## Basic Process

- Results Analysis
  - Determine Payback (Criterion 5)
    - COBRA applied
  - Determine Economic Impact (Criterion 6)
    - Economic Impact Tool (EIT): measures total potential job change (direct and indirect) in the economic region or Region of Influence
  - Assessing Community Infrastructure (Criterion 7)
    - Ability to support incoming personnel
    - Evaluation of 10 Attributes

Note: no definitions offered for “economic region” or “Region of Influence”

Source: Vol I Part 1 DoD BRAC Report (pg 24)

10 Attributes:

1. Demographics
2. Childcare Costs
3. Cost of Living
4. Education
5. Employment (rates?)
6. Housing (availability? Cost?)
7. Medical Care (“”, “”)
8. Safety / Crime
9. Transportation (?)
10. Utilities

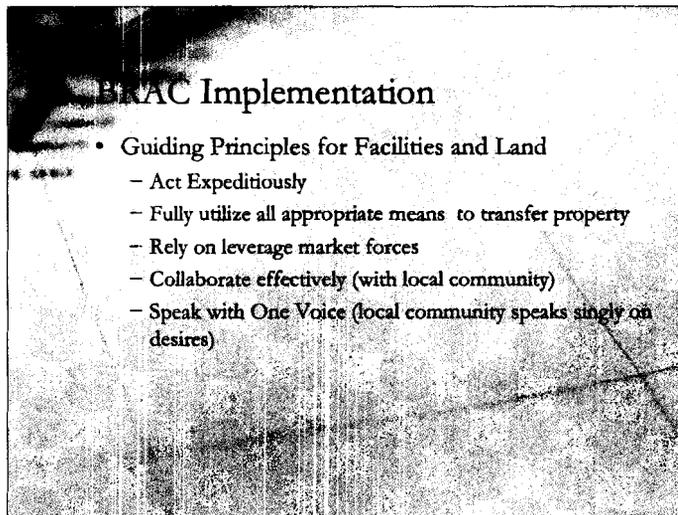
## Basic Process

- Results Analysis (con't)
  - Environmental Impact (Criterion 8)
    - Cost relative to potential environmental restoration, waste management and environmental compliance activities
    - Environmental Resource Impact
      - 10 Areas
      - Note: Costs associated with Environmental Restoration are not included in payback calculations
- Overall Criteria for Comparisons
  - Military Value
  - Cost Savings
  - Economic Impact
    - Local Communities
    - Community Support Infrastructure
    - Environmental Impact

Source: Vol I Part 1 DoD BRAC Report (pg 24)

### 10 Areas of Environmental Impact

- Air Quality
- Cultural/archeological/tribal resources
- Dredging
- Land use constraints/sensitive resource areas
- Marine mammals/marine resources/marine sanctuaries
- Noise
- Threatened and Endangered species / critical habitat
- Waste Management
- Water resources
- Wetland



Source: Vol 1 Part 1 DoD BRAC Report Ch 4 (Pg 27, Implementation and Reuse, para 3+)

#### **Guiding Principles**

Out of its experience assisting communities during the implementation of previous BRAC rounds, the Department believes that the following principles will be particularly useful in the transition in communities supporting the Department's mission:

- **Act expeditiously whether closing or realigning.** Relocating activities from installations designated for closure will, when feasible, be accelerated to facilitate the transfer of real property for community reuse. In the case of realignments, the

Department will pursue aggressive planning and scheduling of related facility improvements at the receiving location.

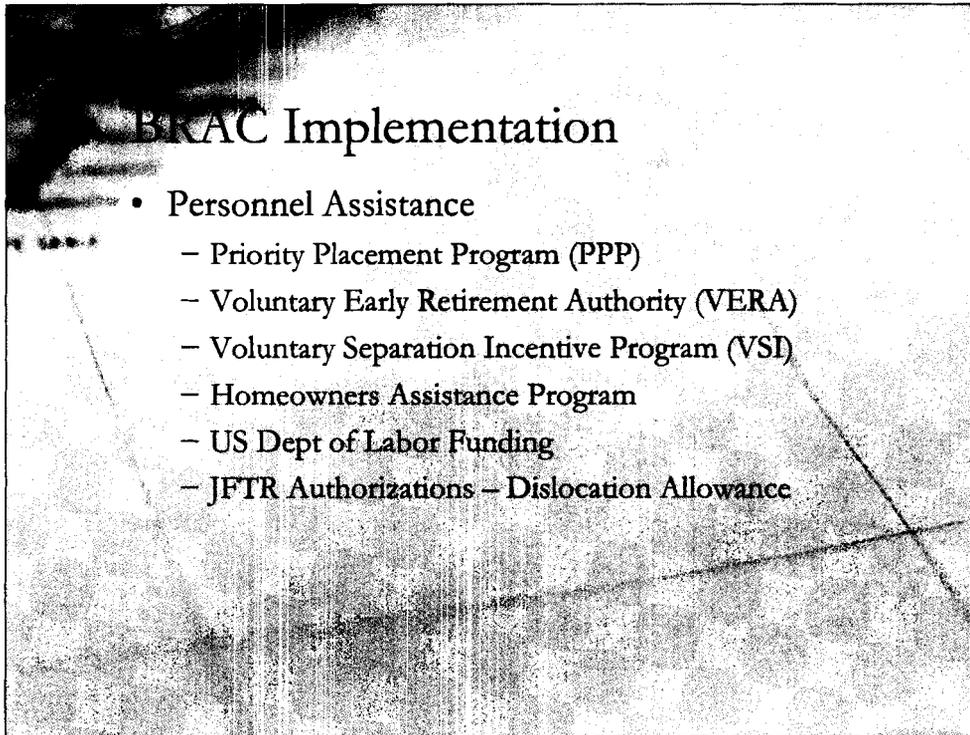
- **Fully utilize all appropriate means to transfer property.** Federal law provides the Department with an array of legal authorities, including public benefit transfers, economic development conveyances at cost and no cost, negotiated sale to state or local government, conservation conveyances, and public sale, by which to transfer on closed or realigned installations. Recognizing that the variety of types of facilities available for civilian reuse and the unique circumstances of the surrounding communities does not lend itself to a "one-size-fits-all-solution," the Department will use this array of authorities in a way that considers individual circumstances.

#### Chapter 4: Implementation and Reuse 28

- **Rely on and leverage market forces.** After four rounds of BRAC, both the public and private sectors are aware of the range of opportunities available for property reuse. A broad spectrum of practitioners has gained experience in all phases of base closure and redevelopment. This expertise should allow market forces to work effectively. Community redevelopment plans and military conveyance plans should be integrated to the extent practical and should take account of any anticipated demand for surplus military land and facilities. If installation growth is substantial, the Department will work with the surrounding community so that the public and private sectors can provide the services and facilities needed to accommodate new personnel and their families.

- **Collaborate effectively.** Experience suggests that collaboration is the linchpin to successful installation redevelopment. Only by collaborating with the local community can the Department close and transfer property in a timely manner and provide a foundation for solid economic redevelopment. While BRAC sometimes challenges the existing supportive partnership between the installation and the community, both parties can benefit from the change if they continue to recognize themselves as partners whose individual interests in carrying out BRAC decisions are interrelated. Existing partnerships may need to expand to include state officials because of their environmental, historic preservation, and economic development responsibilities. Military-community partnerships need to be flexible enough to adapt to the specific market forces and other circumstances at each location.

- **Speak with one voice.** The Department, executing disposal and reuse activities through the Military Departments and Defense Agencies, will provide clear and timely information through single focal points and will encourage affected communities to do the same. Timely information regarding facility and environmental conditions and closure and realignment schedules are critically important. In the past, when communities spoke with one voice about their reuse goals and activities, the Department was better positioned to consider local redevelopment plans. This was also true when installations and communities experienced substantial personnel increases. The Department recognizes that installation base commanders and local officials need to integrate elements of their growth planning so that appropriate off-base facilities and services are available for arriving personnel and their families.

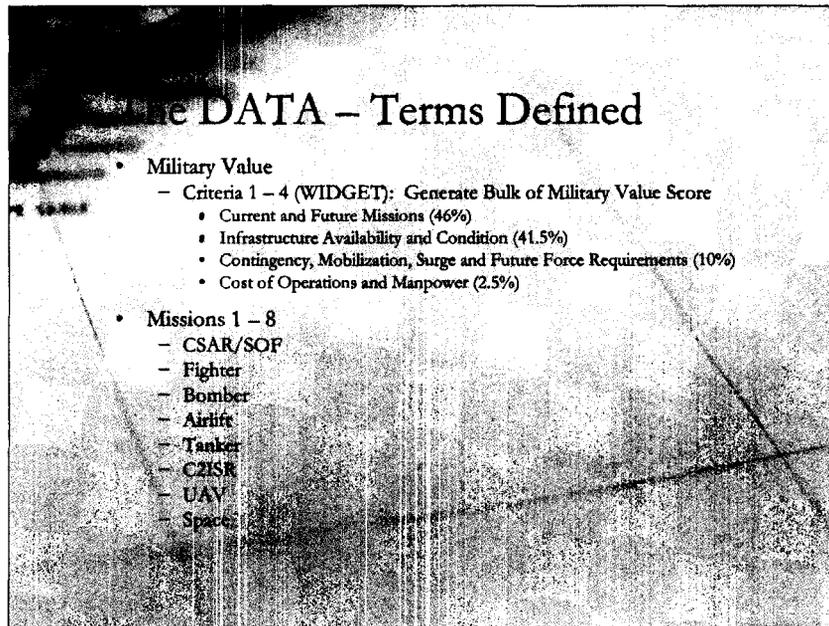


**Source: DoD Vol I Part 1 BRAC Report (pg 29)**

**Assistance for Personnel**

One of the Department's challenges at installations subject to BRAC decisions is the fair and effective management of human resources. The closure of installations with the potential for separating a large number of civilian employees presents major challenges to commanders and human resource personnel. While these installations will still have missions to accomplish, the employees will be stressed about their careers and employment security. In this atmosphere, productivity will suffer and the employees' overall quality of life may diminish. The Department has a number of mitigating placement, transition, and worker assistance programs to draw from, including the following:

- The Priority Placement Program provides for the referral and mandatory placement of displaced employees who are qualified for other vacancies within the Department. Other programs provide various types of referral and priority considerations for Defense and other Federal agencies' job vacancies.
- The Department's permanent Voluntary Early Retirement Authority allows eligible employees to retire early and receive a reduced annuity.
- The Voluntary Separation Incentive Program (with a cash payment) authorizes the Department to encourage displaced employees to separate voluntarily by resignation or retirement to avoid an involuntary separation of another employee.
- The Department's Homeowners Assistance Program provides financial assistance to relocating military and DoD civilians when they must sell their homes in a market that has been adversely impacted by a BRAC action.
- The U.S. Department of Labor provides funding for assistance to displaced Federal employees. Under the Workforce Investment Act, assistance may include counseling, testing, placement assistance, retraining, and other related services. This assistance is available through the appropriate state employment security agencies.



Source: Vol 1 Part 1 DoD BRAC Report (Pg 18, BRAC 2005 Selection Criteria, para 2 / Pg D-35, Section 2913 Selection Criteria for 2005 Round, para b)

**(b) MILITARY VALUE CRITERIA** — The military value criteria are as follows:

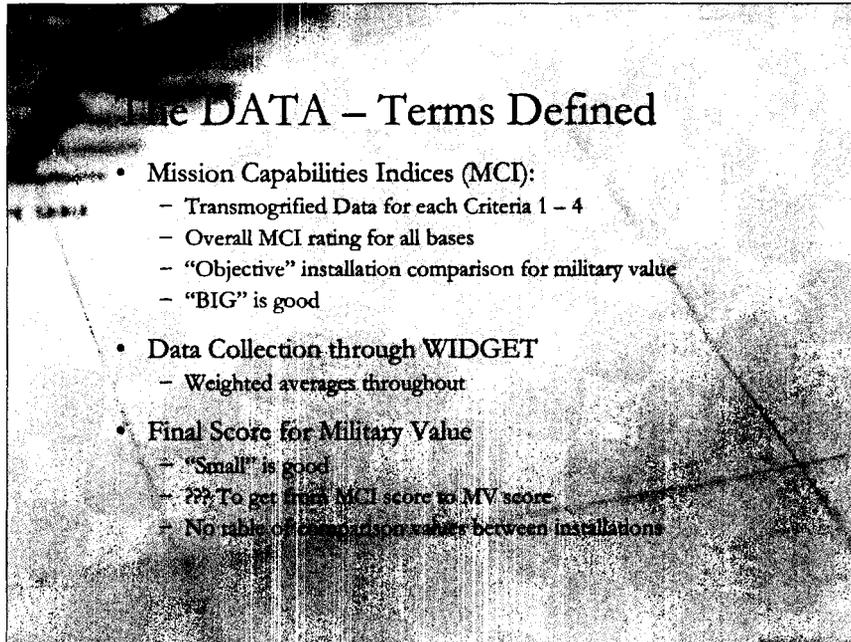
- (1) The current and future mission capabilities and the impact on operational readiness of the total force of the Department of Defense, including the impact on joint warfighting, training, and readiness.
- (2) The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
- (3) The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.
- (4) The cost of operations and the manpower implications.

Source: Vol 1 Part 1 DoD BRAC Report (Pg 21, Military Value Analysis, para 1)

**Military Value Analysis (Criteria 1-4)**

As required by statute, the military value of an installation or activity was the primary consideration in developing the Department's recommendations for base realignments and closures. The Department determined that military value had two components: a quantitative component and a qualitative component. The qualitative component is the exercise of military judgment and experience to ensure rational application of the criteria. This component is discussed further in the context of scenario analysis. The quantitative component, explained in greater detail below, assigns attributes, metrics, and weights to the selection criteria to arrive at a relative scoring of facilities within assigned functions.

To arrive at a quantitative military value score, the proponents began by identifying attributes, or characteristics, for each criterion. The proponents then weighted attributes to reflect their relative importance based upon things such as their military judgment or experience, the Secretary of Defense's transformational guidance, and BRAC principles. A set of metrics was subsequently developed to measure these attributes (WIDGET). These were also weighted to reflect relative importance, again using, for example, military judgment, transformational guidance, and BRAC principles. Once attributes had been identified and weighted, the proponent developed questions for use in military value data calls. If more than one question was required to assess a given metric, these were also weighted. Each analytical proponent prepared a scoring plan, and data call questions were forwarded to the field. These plans established how answers to data call questions were to be evaluated and scored. With the scoring plans in place, the Military Departments and JCSGs completed their military value data calls. These were then forwarded to the field by the Military Departments and Defense Agencies. The analytical proponents input the certified data responses into the scoring plans to arrive at a numerical score and a relative quantitative military value ranking of facilities/installations against their peers (COBRA).



Source: Vol I Part 2 DoD BRAC Report (Pg AF2, Military Value Analysis, para 1) & Vol V Part 1 DoD BRAC Report AF (Pg 43, para 3.1.2)

### **Military Value Analysis**

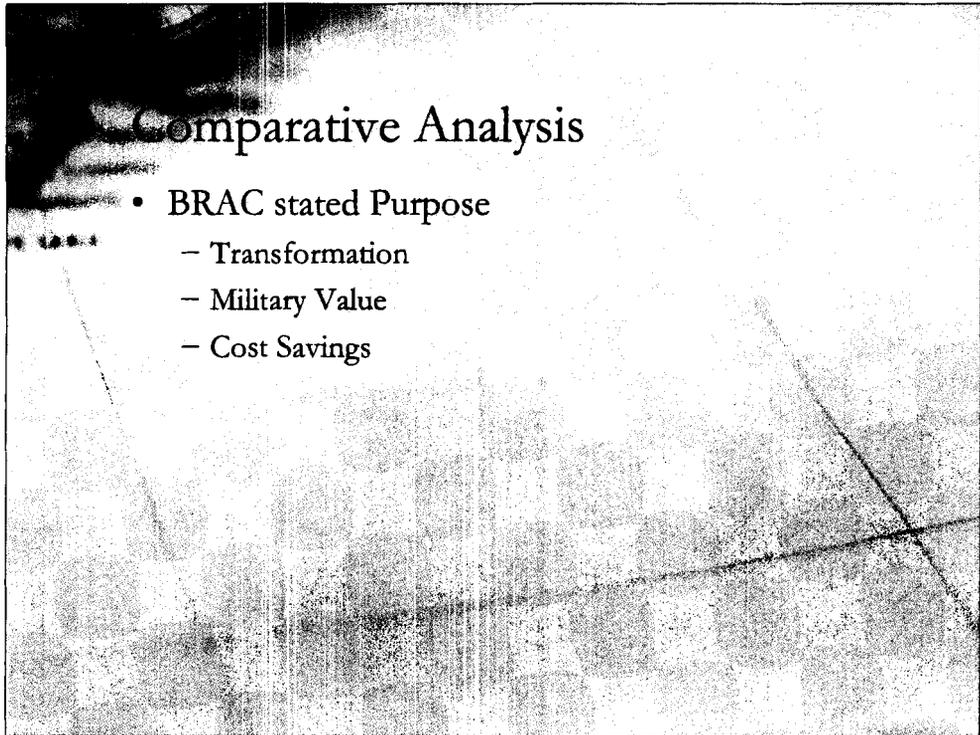
The Service assessed the military value of its operational bases using certified data derived from individual installations. Rather than focus on fungible attributes like assigned personnel or relocatable equipment and forces, the military value assessment stressed installation characteristics that were either immutable or outside the control of the Air Force or were difficult to replicate elsewhere due to expense or complexity. Immutable characteristics include geographic location and proximity to other physical features or defense activities, terrain, and prevailing weather. Difficult-to-reconstitute characteristics include the installation's transportation infrastructure, missile silos, or basic airfield infrastructure.

**Applying operational capability data collected through a web-based installation data gathering and entry tool to BRAC Selection Criteria 1-4 and the weighing guidance assigned by the BCEG, each of the Air Force's 154 installations was given a Mission Capability Index (MCI). For a given installation, there was a separate MCI for each of the eight mission areas (fighter, bomber, tanker, airlift, special operation / combat search and rescue, intelligence / surveillance / reconnaissance, unmanned aerial vehicles, and space control).**

Ultimately, using these data to assess all Active and Reserve Component installations on an equal basis, all installations were rank ordered on their relative ability to support the eight Air Force missions. The objective was to find an optimal long-term basing plan that, within physical and operational constraints, located the Air Force's long-term force structure at installations with the highest military value.

### ***tr.v.* trans·mog·ri·fied, trans·mog·ri·fy·ing, trans·mog·ri·fies**

To change into a different shape or form, especially one that is fantastic or bizarre



DoD Vol I, Cover Letter, bottom of 1<sup>st</sup> to 2<sup>nd</sup> page.

## Comparative Analysis: Transformation

- Definition: a process by which the Air Force achieves and maintains advantage through changes in Operational Concepts, Organizations and/or Technologies that significantly improve its war fighting capabilities or ability to meet the demands of a changing security environment
- Take-Away
  - Ability to accept new missions is important
  - Rating “HI” in more missions should be better than just one.

Source: AF Transformation WEB

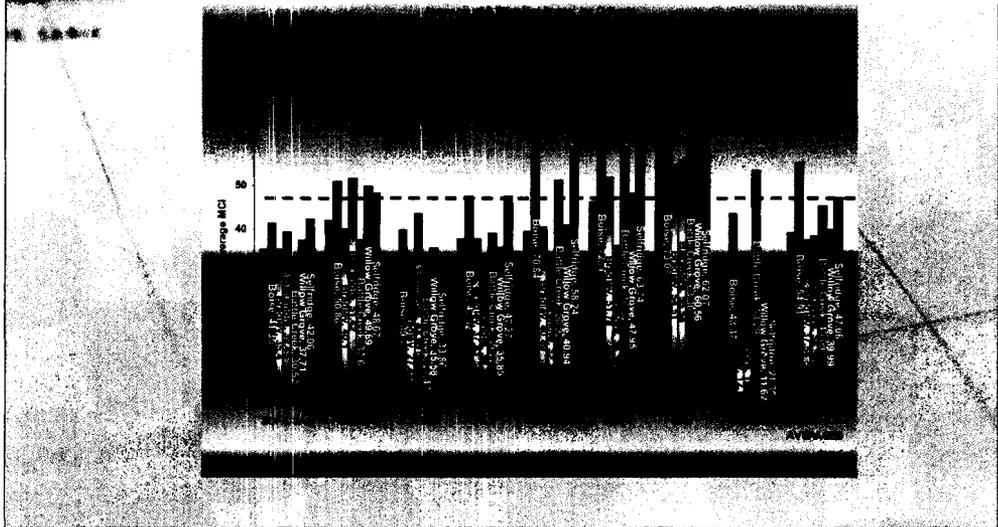
## Comparative Analysis: Transformation

- Battle Creek scored better than the 4 of 5 other ANG A-10 bases on 5 of 8 missions
- Battle Creek's overall MCI was better than 4 out of the 5 other ANG A-10 bases
- Bottom Line: Looking at Future Capability, BC better suited for more missions than 4 of the other 5 ANG A-10 bases.

Note: The comparative analysis was done utilizing the AF data which is flawed (see BRAC process concerns later in brief)

Source: Dept of the Air Force, Analysis and Recommendations – Vol V Part 1 (pg 61, 67, 73, 79, 85, 91, 97, 103)

# Comparative Analysis: Transformation



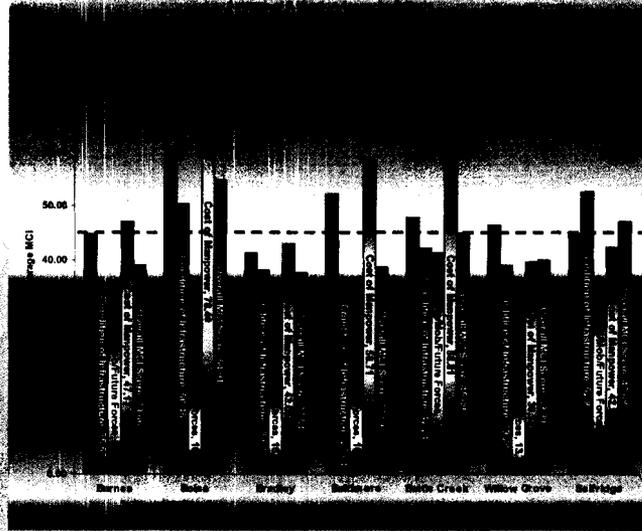
# Comparative Analysis: Transformation

• Raw Data

Overall MCI by Mission Area

BASE	SOF/CSAR	FIGHTER	BOMBER	AIRLIFT	TANKER	C2ISR	UAV	SPACE	MMN AVERAGES
Barnes	35.5	42.02	29.69	37.75	39.35	48.06	61.49	23.61	39.43
Boise	41.35	50.86	39.7	47.32	70.84	72.78	73.07	43.37	54.91
Bradley	35.4	40.1	27.43	37.83	40.49	51.78	54.91	12.77	37.54
Baltimore	39.45	51.42	43.55	30.37	32.26	36.39	56.94	19.75	38.59
Battle Creek	30.52	37.6	27.47	39.22	50.93	62.74	63.36	53.29	45.84
Willow Grove	37.71	48.89	35.59	35.25	46.94	47.95	60.65	11.82	39.99
Selfridge	43.08	48.67	33.86	47.27	56.24	63.74	62.07	21.35	47.08

# Comparative Analysis: Transformation



# Comparative Analysis: Transformation

• Raw Data Criteria 1 - 4 Averages Across 8 Mission Areas

<b>BASE</b>	Current and Future Missns	Condition of Infrastructure	Confling/Mob/Future Forces	Cost of Manpower	Overall MCI Score
Barnes	44.93	35.57	28.18	47.17	39.43
Boise	60.70	50.45	16.08	78.40	64.91
Bradley	41.41	38.07	19.08	43.06	37.54
Baltimore	52.30	27.64	16.30	58.71	38.59
Battle Creek	47.73	42.24	41.40	68.81	45.84
Willow Grove	46.43	39.20	13.71	39.74	34.59
Selfridge	44.76	52.83	35.00	42.51	47.08

**Comparative Analysis: Military Value**  
**Criterion 1 – Current and Future Missions**

**Current Mission: Combat Proven Superior Performing A-10 Fighter Wing**

- Only ANG A-10 unit to Receive an “OUTSTANDING” rating on an Air Combat Command (ACC) Operational Readiness Inspection (ORI) in the last 9 years.
- 1 of 3 ANG Fighter Units to Support 3 Combat Operations in the Last 8 Years
- Only ANG unit to Deploy to Operation Southern Watch – return home – within 3 weeks return to Southwest Asia for Operation Iraqi Freedom (OIF) – Deployed twice the personnel and equipment
- 466 Combat Sorties and over 1164 Combat hrs flown in support of OIF by 110<sup>th</sup> A-10s
- Unit **Volunteered** and was Selected to Deploy into Iraq (Tallil Airfield) within 1 week of initiation hostilities in OIF
- 110 FW has supported 39 Deployments with over 3,000 personnel and nearly 1000 short tons of cargo in the last 10 yrs

\*OIF – ANG/AFRC A-10s comprised the bulk of the deployed A-10s. Of 6 deployed A-10 units, 5 were ARC aircraft.

\*\*If OEF is included, 6 of 7 deployed A-10 units were ANG/AFRC during the time of “major combat operations” in OIF (Mar-Apr 2003)

**Combat Operations – Last 10 Years**

- 1995 – Operation Deny Flight (Bosnia)
- 1997 – Operation Joint Endeavor (Bosnia)
- 1999 – Operation Noble Anvil (Kosovo)
- 2000 – Operation Southern Watch (Iraq)
- 2002 – Operation Southern Watch (Iraq)
- 2002 – Operation Enduring Freedom (Afghanistan)
- 2003 – Operation Iraqi Freedom (Iraq)

A number of folks (mostly transportation, chaplains and security) have been activated to support on-going operations in Iraq and Afghanistan, since “major” combat ended.

## Comparative Analysis: Military Value Criterion 1 – Current and Future Missions

Current Readiness = Future Mission Capability

- **COMBAT Experienced Force**
  - From OIF: 14 Distinguished Flying Crosses and 10 Bronze Stars
  - Avg A-10 Time per Pilot (Full Time) = 2340hrs
  - Avg Combat Time per Pilot (Full Time) = 191hrs
  - Avg Pilot has served a minimum of 2 Combat Tours
- **Highly Qualified Pilot Force**
  - Special Qualifications: Flight Leads – 93%; Instructors 55%; Forward Air Controllers – 86%; Night Vision Goggle – 100%; Joint Air Attack Team – 69%; Targeting POD – 80%; Combat Search and Rescue – 79% Combat Experience – 80%

Source: 110 FW Flight records & 110 OG Stan/Eval (Letter of "X")

	Total A-10 Hrs	Total Time	Combat Hours
Total hrs all pilots	52381.4	78606.5	5054.5
Averages Hours All Pilots	1689.72	2535.69	163.05
Total Part-Time Hours	25795.6	44975.9	2950.2
Average Part-Time Hours	1289.78	2248.80	147.51
Total Full Time Hours	25735.5	33630.6	2104.3
Average Full-Time Hours	2339.59	3057.33	191.30

Special Qual	Number with Qual	Percentage
2-Ship Flt Lead	27	93.10%
4-Ship Flt Lead	21	72.41%
IP	16	55.17%
FAC	25	86.21%
NVG	29	100.00%
JAAT	20	68.97%
CSAR	24	82.76%
MCC	14	48.28%
LASDT 300'	27	93.10%
ACM ATTKR	26	89.66%
BARON	20	68.97%
LT POD	23	79.31%
NVG T/O + LND	13	44.83%
Combat Experience	23	79.31%

## Comparative Analysis: Military Value

### Criterion 1 – Current and Future Missions

- Only ANG A-10 Unit with 0 Class A or B Mishaps since 1995
- Current Readiness = Future Mission Capability
  - Top Average "Fully Mission Capable" (FMC) Rate for A-10 aircraft out of all ANG A-10 Units for last 10 yrs
  - 110<sup>th</sup> A-10 Fleet has flown more hours than any other ANG A-10 unit over the last 8 yrs
  - Most Combat Hours for any ANG A-10 unit during OIF
  - Maintenance Personnel 1,039 yrs combined A-10 experience - 14 yrs Avg for each Maintainer
  - Full Partner in Total Force: 110 FW has fulfilled ALL Air Expeditionary Force (AEF) and Expeditionary Combat Support (ECS) Taskings Issued - 0 Shortfalls
  - ECS Support of Operations Allied Force, Enduring Freedom and Iraqi Freedom

Source: AF Safety Center Mishap Records

Safety: 10 Class A or B mishap in ANG A-10 units since 1995, Cost = approx \$31.9 million

Source: 103 FW/MX00A/MXQ, 104 FW/MX00A/MXQ, 110 FW/MX00A/MXQ, 111 FW/MX00A/MXQ, 124 FW/MX00A/MXQ, 175 FW/MX00A/MXQ, ANG

A10 Guard Fleet Mission Capable Rate Average (Last 10 years).

110th	72.8%
175th	68.2%
111th	67.3%
103rd	59.9%
124th	69.8%
104th	63.9%

A10 Reserve Fleet Mission Capable Rate Average (Last 5 years).

926	62.4%
917	75.3%
442	74.3%

Mission Capable Rate Average (Last 5 years)

110th	75.7%
-------	-------

A10 Guard Fleet Hours Flown (Last 8 years).

110th	34,772.9
175th	31,546.2
111th	31,772.6
103rd	31,355.1
124th	33,900.2
104th	34,643

Reserves fly comparable hours to the A10 Guard Fleet.

Active Duty A10 Units do not send us their stats but from Air Force Periodicals their MC rates are generally in the 50% range, as printed in these AF publications.

As far as Combat Sorties/Hours March 2003 the 110th flew 466 sorties and 1,164.2 hours

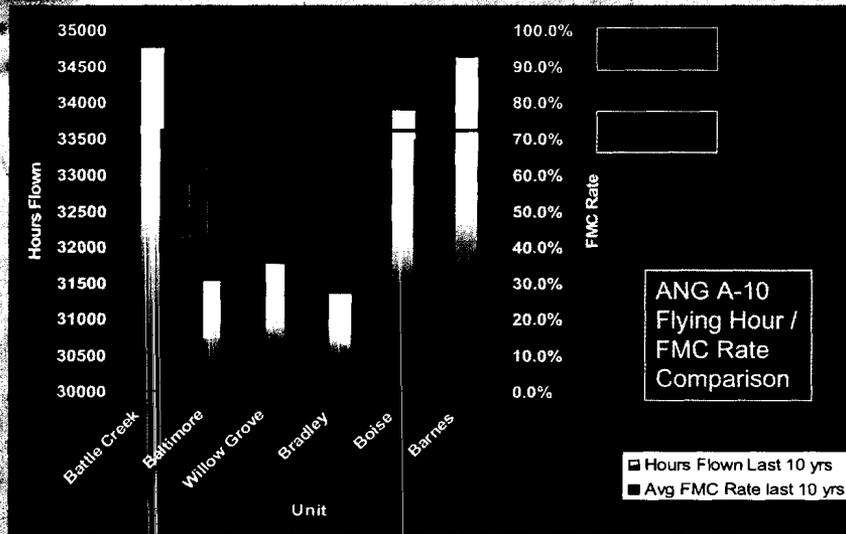
Source: 110 FW Personnel and Training Records

Our A-10 Technicians/Specialists average **over 11 years** of experience on the A-10, some have 20 years

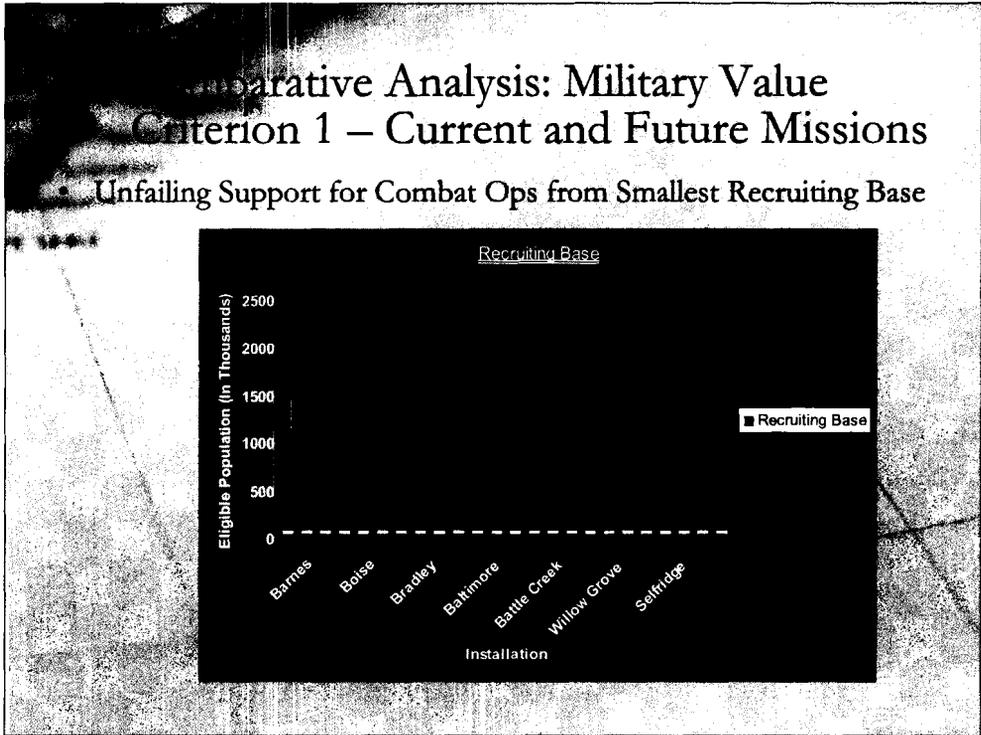
Weapons	11.6 years average	209 total years	18 workers
Crew Chiefs	12 years	218 years	18 workers
Avionics	10.7 years	204 years	19 workers
Propulsion	12 years	170 years	14 workers
Accessories	10.1 years	172 years	17 workers
Sheet metal	11 years	<u>66 years</u>	6 workers

1039 years experience by 92 Specialists

## Comparative Analysis: Military Value Criterion 1 – Current and Future Missions



Unit	Hours Flown Last 10 yrs	Avg FMC Rate last 10 yrs
Battle Creek	34772.9	72.8
Baltimore	31546.2	68.2
Willow Grove	31772.6	67.3
Bradley	31355.1	59.9
Boise	33900.2	69.8
Barnes	34643	63.9



Source: ANG/DP

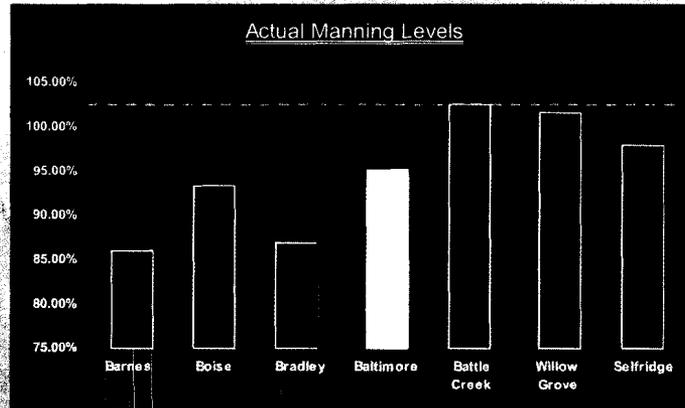
110 FW Manning: Assigned 1096, Full Time Federal (GS or AGR) 206 AGR / 66 AGR, 824 Traditional

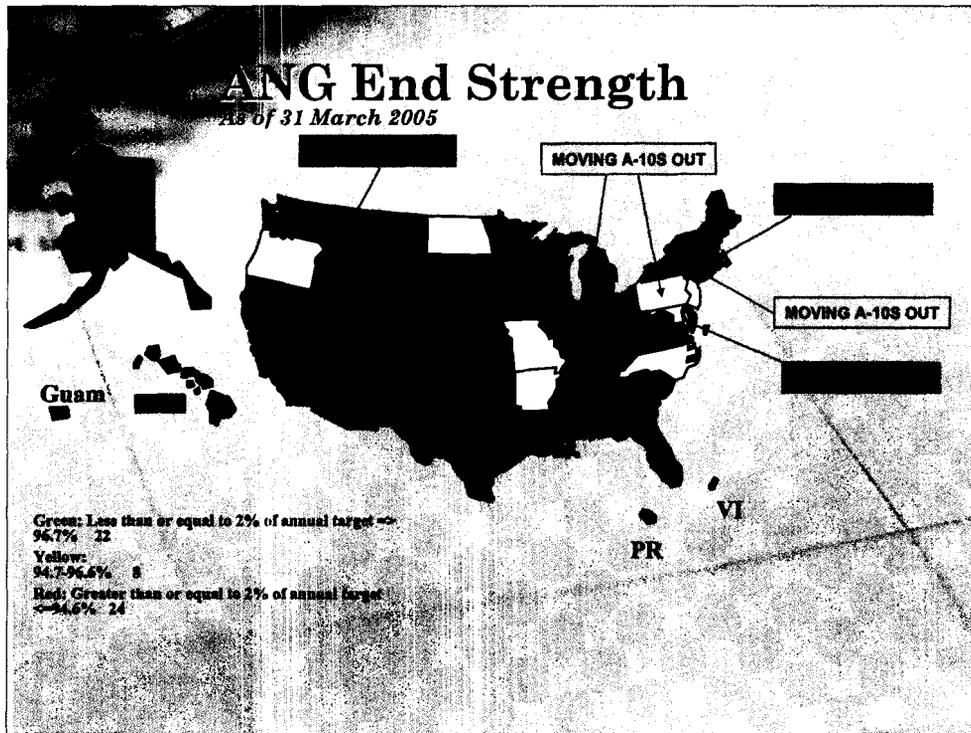
Manning Levels

<u>Base</u> -----	Recruiting Base (K)	Actual
Barnes	374.117	85.60%
Boise	314.811	93.10%
Bradley	760.935	87.10%
Baltimore	1568.14	95.20%
Battle Creek	74.652	101.90%
Willow Grove	2273.372	100.90%
Selfridge	1505.252	97.80%

## Comparative Analysis: Military Value Criterion 1 – Current and Future Missions

- Highest Manning Levels of ALL ANG A-10 Units since 2001





Source: ANG/DP

#### Manning Levels

<u>Base</u>	Recruiting Base (K)	Actual
Barnes	374.117	85.60%
Boise	314.811	93.10%
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Baltimore	1568.14	95.20%
Battle Creek	74.652	101.90%
Willow Grove	2273.372	100.90%
Selfridge	1505.252	97.80%

## Comparative Analysis: Military Value Criterion 1 – Current and Future Missions

- Joint Operations
  - SEAL Deployment
  - Ft Campbell
  - Israel – Civil Engineers
  - Honduras - Medical
- Homeland Defense / Homeland Security
  - Operation Vigilant State
  - On-Going support of MI State Police
  - Alternate Command Facility for Federal Center

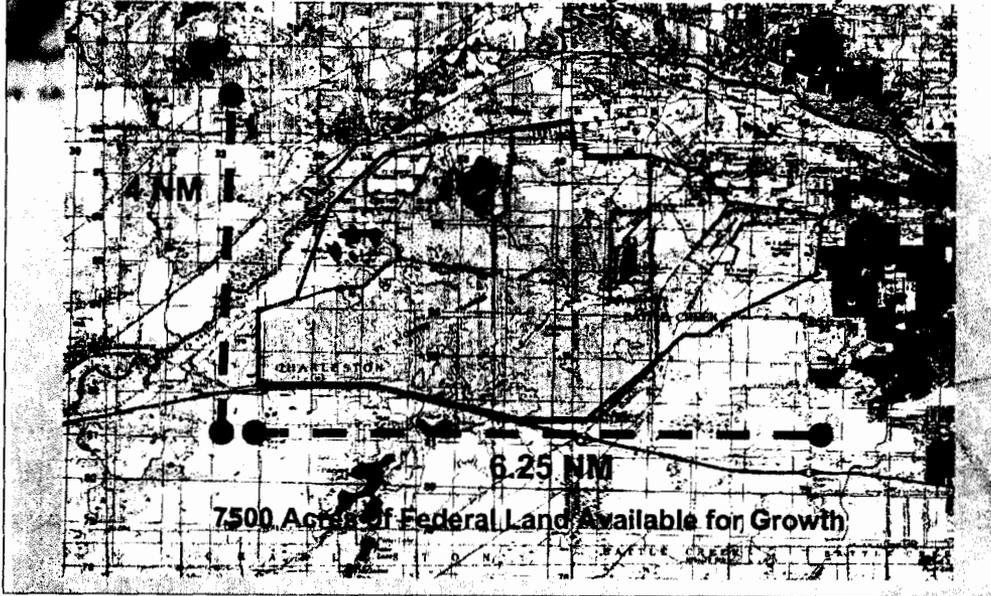
Source: 110 FW/XP Deployment records

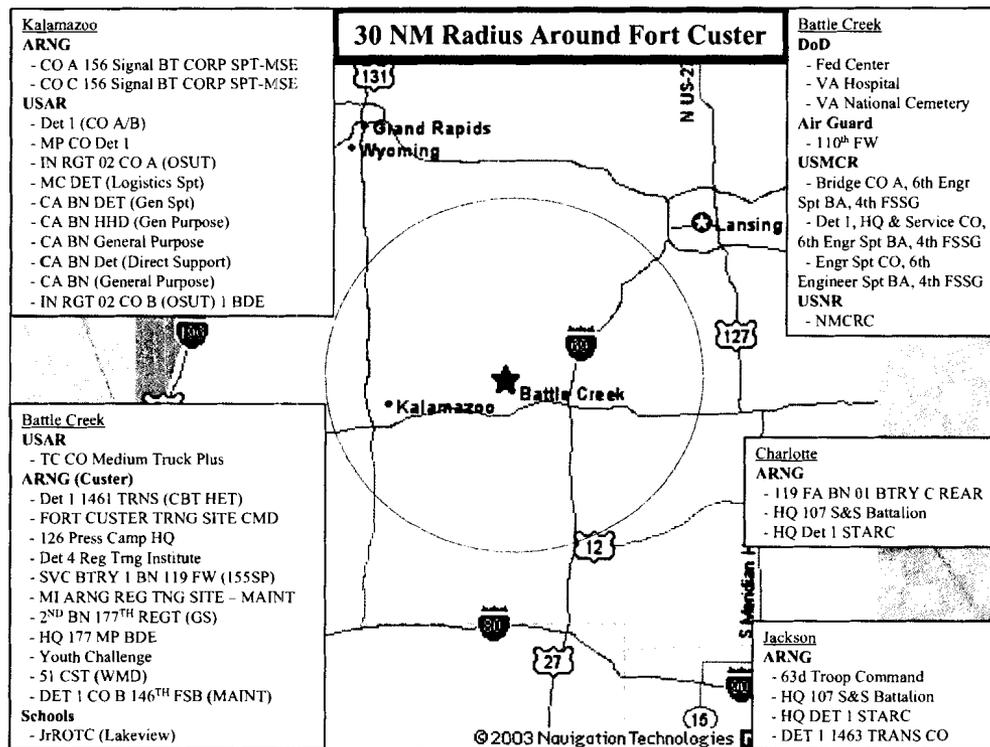
Source: MI NG/HQ Operation Vigilant State AAR

Operation Vigilant State:

1. An Exercise conducted in combination with MI Dept of HMS, FBI, BATFE, Dept of Military and Veterans Affairs (Air & Army Guard), Coast Guard, Federal Air Marshals, FAA, Immigration & Customs Enforcement, Transportation and Security Administration, MI State Police, Wayne County Airport Authority, Local Law Enforcement
2. Reaction to and Suppression of a potential MANPAD threat targeted against the Detroit Metropolitan Airport.
3. Exercise occurred from 9 – 12 May 2005.
4. After action report available upon request.

Value Analysis: Military Value  
Mission 1 – Current and Future Missions  
Battle Creek – Ft Custer Joint Facility





## DoD Joint Integration Board

### Why a Southwest Michigan Joint Complex?

JOINT TRAINING OPPORTUNITIES

CROSS-SUPPORT

POSSIBLE CONSOLIDATION

IMPACT AWARENESS/VISIBILITY

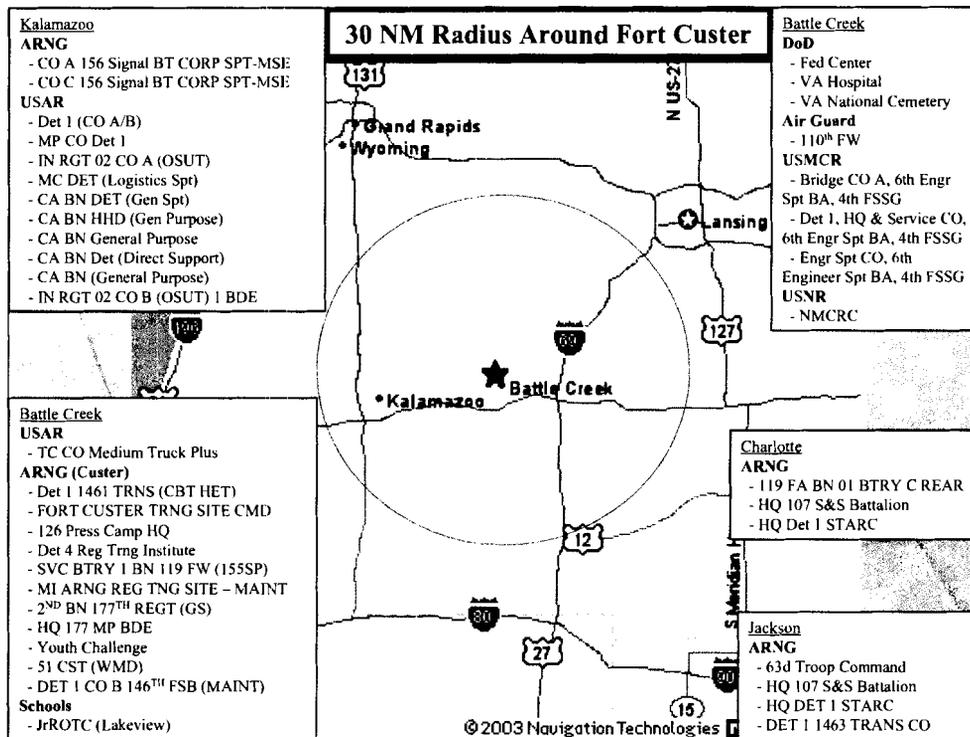
A COMMUNICATIONS CONDUIT

Number of Units within 30 miles: Approximately 40

Number of Personnel: Over 4000

Number of Congressional Districts: 2

Total Economic Impact: Est. Over \$200,000,000



**DoD Joint Integration Board**

Highlighted Units Indicate those units Battle Creek ANGB directly supports or operates Jointly with on a regular basis.

## Comparative Analysis: Military Value Criterion 2 – Condition of Infrastructure

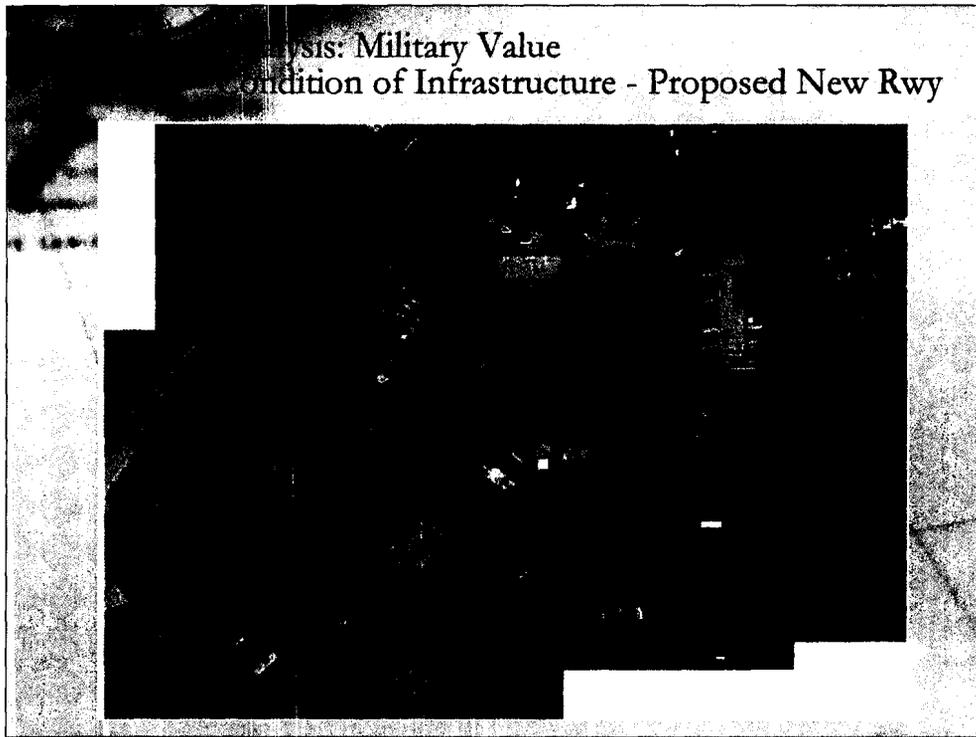
- 16yr Average Age of Facilities
  - 80% Built after 1991 – focused on A-10 mission
- No Encroachment Challenges
- 10,000' Runway – Alternate Shuttle Landing Site, Utilized by Air Force One
- Largest Most Modern Munitions Storage Facility in Southwest MI
- Room for Growth
  - Over 41,000 sq ft available in authorized square footage for new facilities
  - Over 45 acres available for building
- New Control Tower
- Planned Parallel Runway to Facilitate Larger Fighter Presence
- Facility can support 36 A-10s TODAY, without modification

Source: 110 FW Real Property Records, W.K. Kellogg Airfield Management

Auth Space = 373,680 sq ft

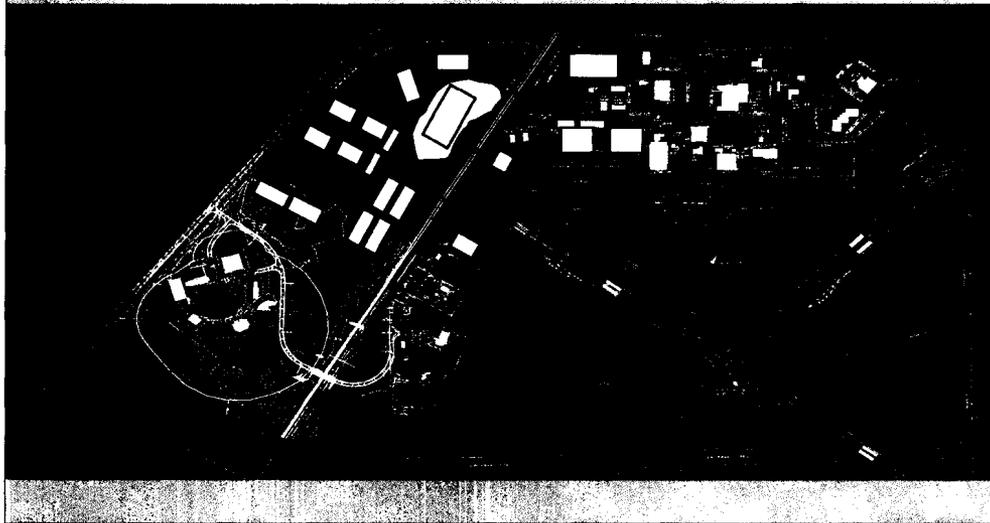
Actual Space = 332,377

Space Shortage = 41,303 (89%)



Source: W.K. Kellogg Planning Commission (Airfield Management)  
Proposed New parallel RWY and supporting taxiways

Comparative Analysis: Military Value  
Criterion 2 – Condition of Infrastructure



Source: 110 FW Real Property Records, 110 FW Land Use Plan

**Comparative Analysis: Military Value**  
**Criterion 2 – Condition of Infrastructure**

- **Prime Training Location**
  - Access to 3 Air-to-Surface Ranges – 2 Allow LIVE weapons within 200nm (Including Laser Guided Munitions – very rare due to munition footprint)
  - Access to 6 Military Operating Areas (MOA) within 200nm
  - 2 Army Maneuver Areas within 200nm
- **Allows for large numbers of aircraft training simultaneously**
- **Ideal Location for Increased Operations**

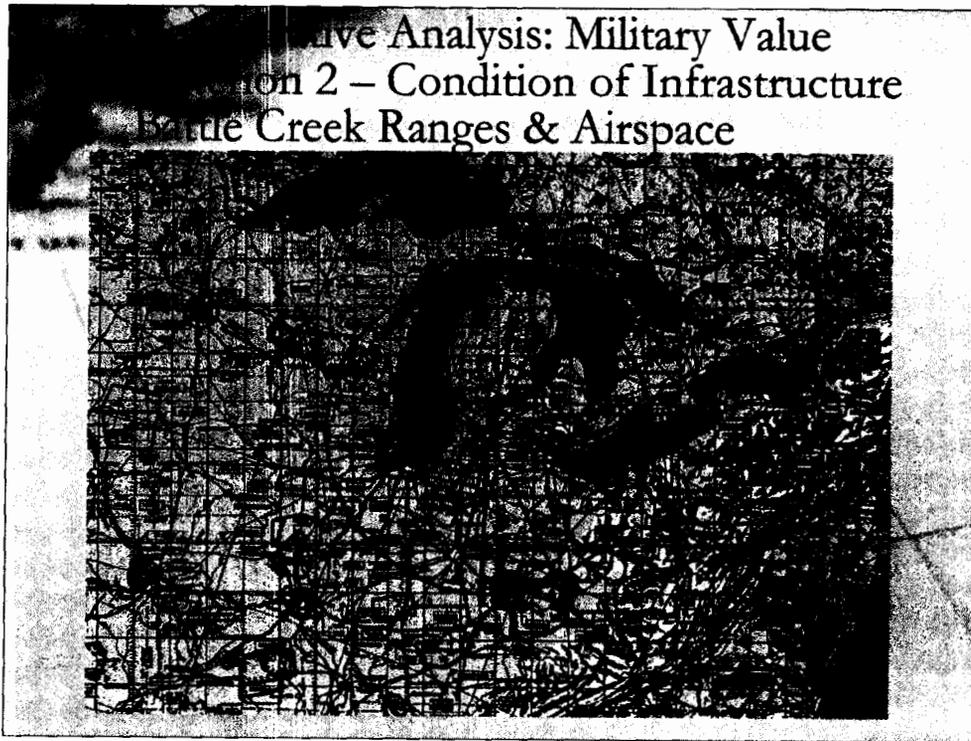
DoD FLIP Publications, Applicable Range Regulations

Air-to-Surface Ranges:

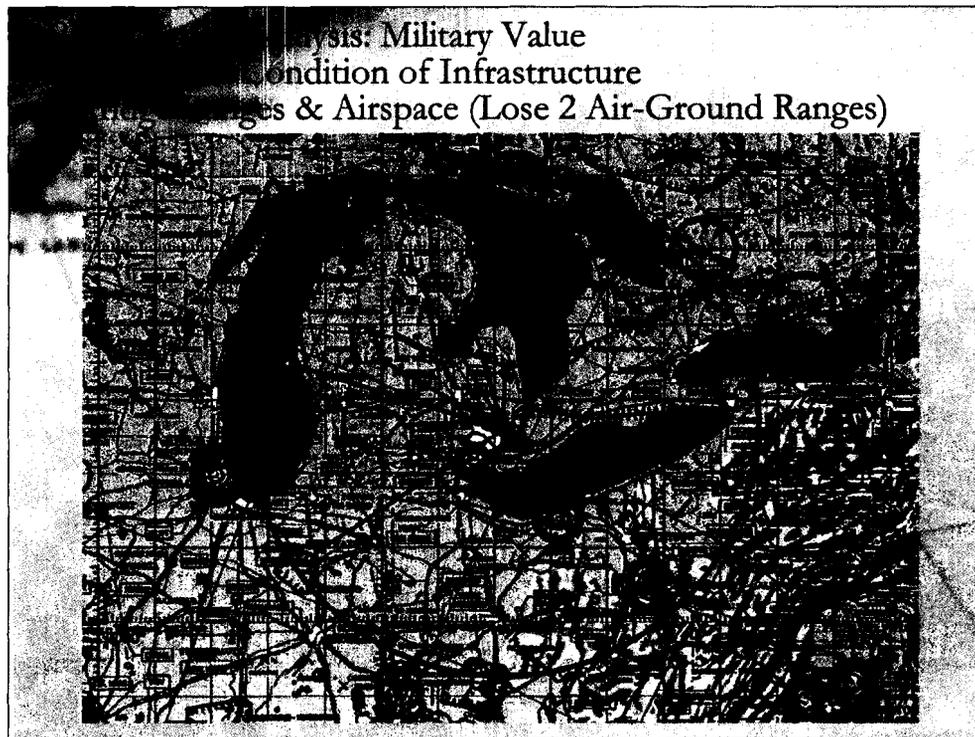
Range	Sq Miles	Airspace	Live Drop	Dist From BC (NM)
R-4201 Grayling Range	70	Surf – 23,000	Yes (LGB)	150
R-3401 Atterbury Range	81	Surf – 25,000	No (Inert Only)	175
R-3403 Jefferson Range	90	Surf – 24,000	Yes (LGB)	193

Military Operating Areas

Hersey	660	5,000 – 23,000	Dry Only	70
12 Mile	264	500' – 10,000	Dry Only	90
Hilltop	1120	10,000 – 34,000	Dry Only	94
Steelhead	3240	6,000 – 18,000 (ATCAA 50,000)		110
Pike(E/W)	10144	6,000 – 18,000 (ATCAA 50,000)		137
Buckeye	2040	5,000 – 18,000		191
AR-107 Air Refueling Track	N/A	14,000 – 23,000		86

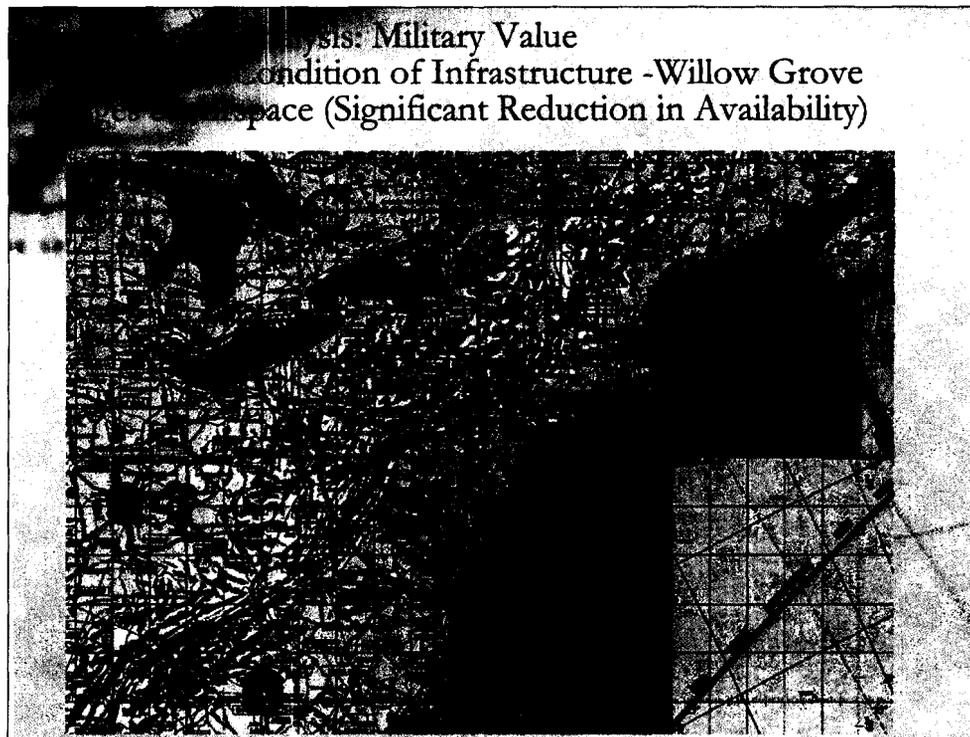


200nm Range from BC – Range chosen based on normal sortie duration (1.5 – 2.0hrs) with 45 – 60 minutes of range time available for training.



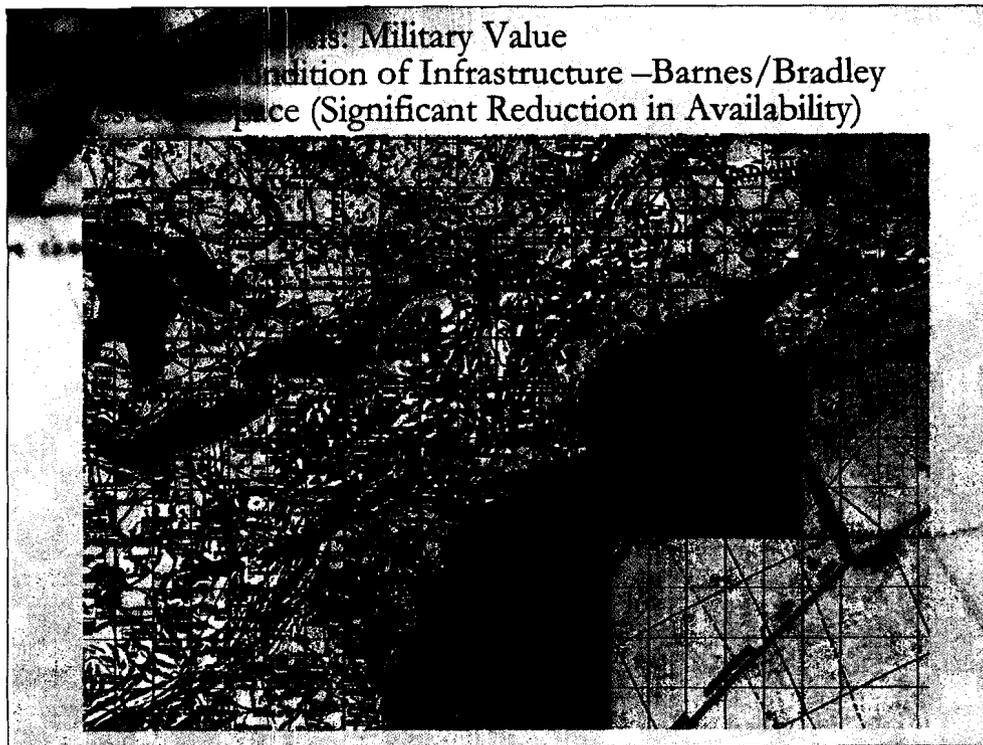
Compared to BC

1. Loss of 2 Air-to-Ground Ranges, including 1 with Live Munition and LGB capability
2. Place 2 MOAs at Max training range, limiting low altitude training – navigation of Detroit Airspace, to/from MOAs



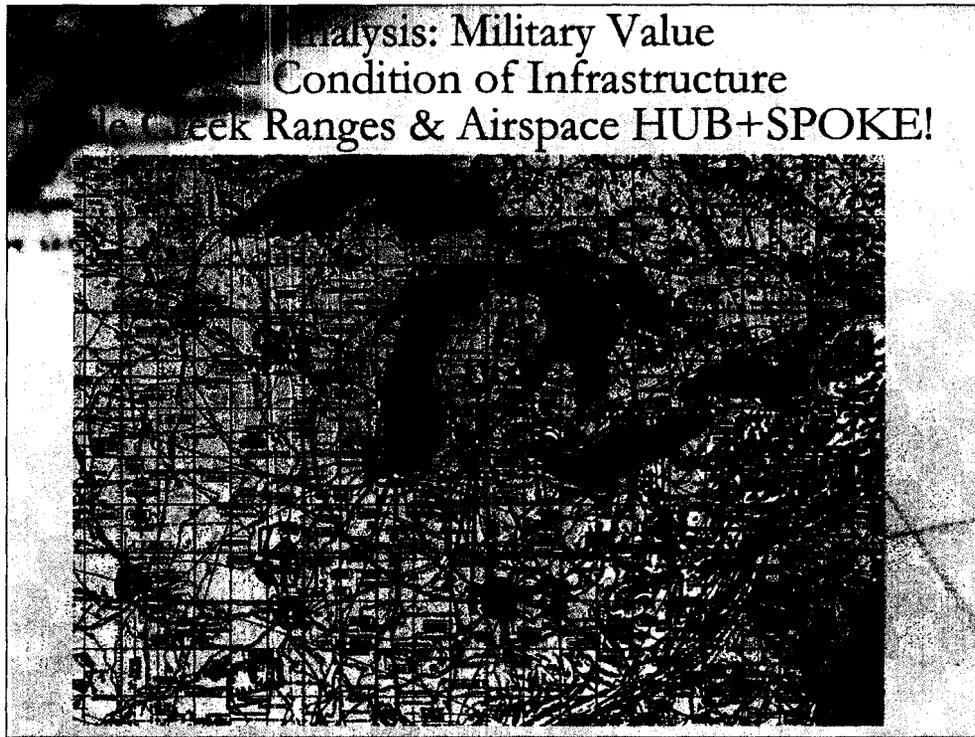
Notes:

1. Ft Drum complex – primary range – greater than 200nm from WG
2. MOA airspace extremely limited – only MOA within 200nm limited to 8,000 – 17,999
3. Whiskey areas available off coast – extremely limited use to A-10 aircraft
4. Navigation of complex east coast airspace – Washington / New York / Boston
- 5. Range Encroachment** – Warren Grove – Accidental 20mm Firing hits school (Nov 2004), 2002 F-16 on Range – Engine Failure – Pilot Ejects – Jet lands on Garden State Pkwy



Note:

1. Congested East Coast Airspace
2. Long Distance to Air-to-Surface ranges through congested airspace
- 3. Range Encroachment** – Warren Grove – Accidental 20mm Firing hits school (Nov 2004), 2002 F-16 on Range – Engine Failure – Pilot Ejects – Jet lands on Garden State Pkwy



Stark comparison to other airfields.

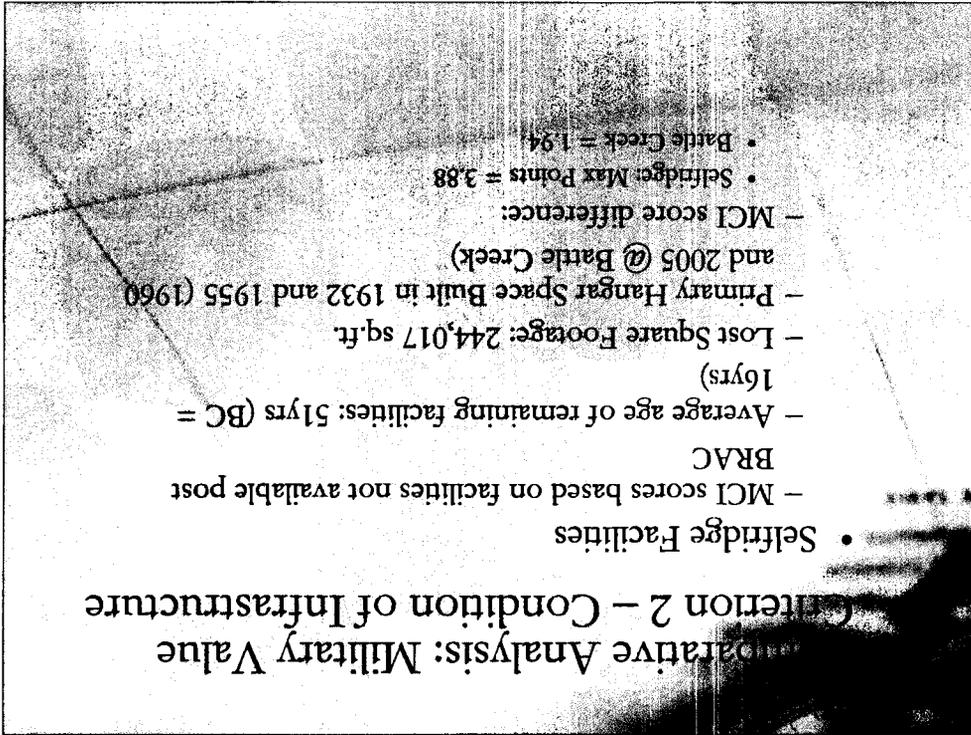
Note: Bid 154 square footage not included as the facility cannot support A-10 aircraft (too short) and will require significant modification to accommodate new mission.

Building	Size	Year Built	Selfridge Building	Size	Year Built	Difference
6900	26,118	1960	36	62,983	1955	36,865
6901	12,551	2005	3	26,880	1932	14,329
6917	17,096	1988	154	17,000	1991	-17,096
						34,098

Available Hangar Space Comparison (sq ft):

Source: 110 FW & 127 WG Real Property Records, BRAC CE assessment (Facilities to be lost), Dept of the AF BRAC Analysis and Recommendations Vol V Parts 1 & 2.

Note: Hangar Space is referenced in formula 1221 (Fighter MCI)



## Comparative Analysis: Military Value Criterion 2 – Condition of Infrastructure

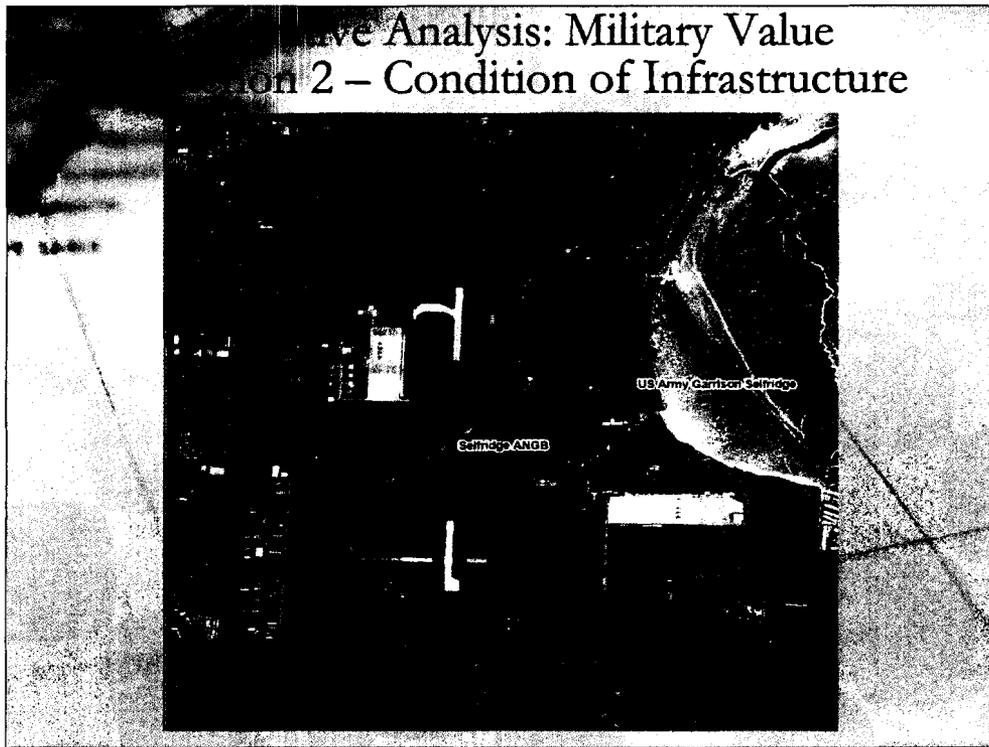
- Selfridge Facilities
  - Required Renovations:
    - Fuel Cell: Not Large enough for A-10, **Cost ?**
    - Hangars: 89,863 sqft of 1932/55 vintage Hangar space
    - Cost to Renovate: \$14,229,806
  - Other Possible Renovations:
    - Facilities Built in 1932 = 100,668 sqft total
    - Cost to renovate = \$15,940,777
- Closure of the Army Garrison
  - Additional Security costs?
  - Additional Encroachment Challenges

Source: Recent remodel of W.K. Kellogg Hanger completed in March of 2005 (20,208 sq ft) \$3.2 million. \$158.35 per sqft for renovation of hangars

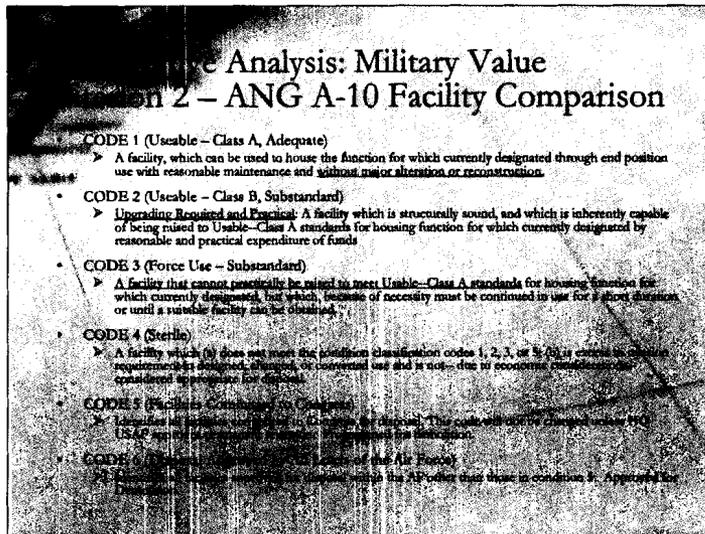
Seldridge Facilities (Real property records):

Bld	Year Built	Size (sq ft)	Cost to Renovate
154	1991	17,000	? (Not Large enough for A-10)
5	1932	33,535	\$5,310,267
7	1932	32,890	\$5,208,131
9	1932	34,243	\$5,422,379
<b>Total</b>		<b>100,668</b>	<b>\$15,940,777</b> (Bld 154 not included)

Source: Army Garrison Closure, Vol I Part 2 DoD BRAC Report (pg Army-106)

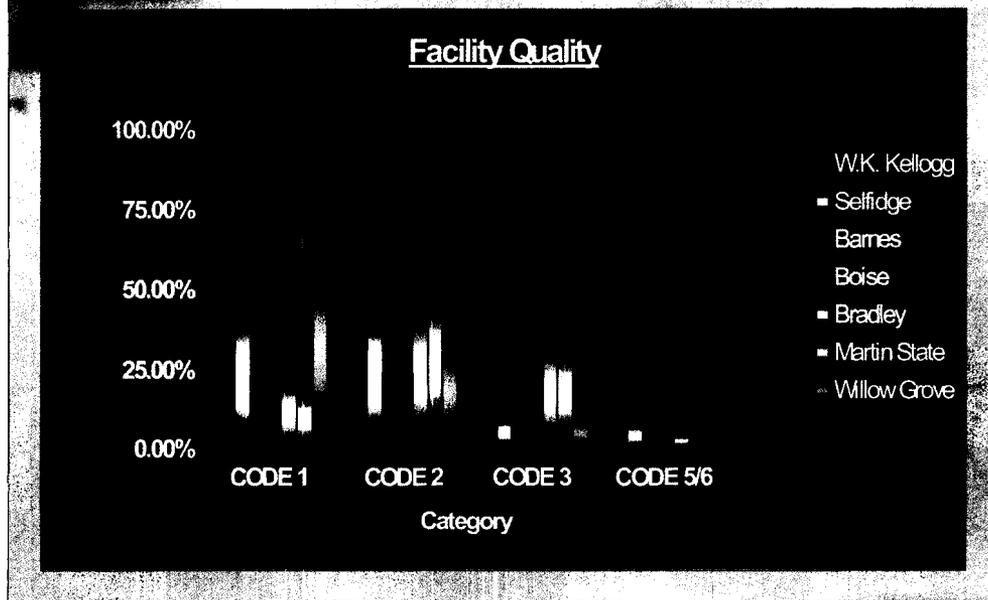


Source: AF BRAC IVT

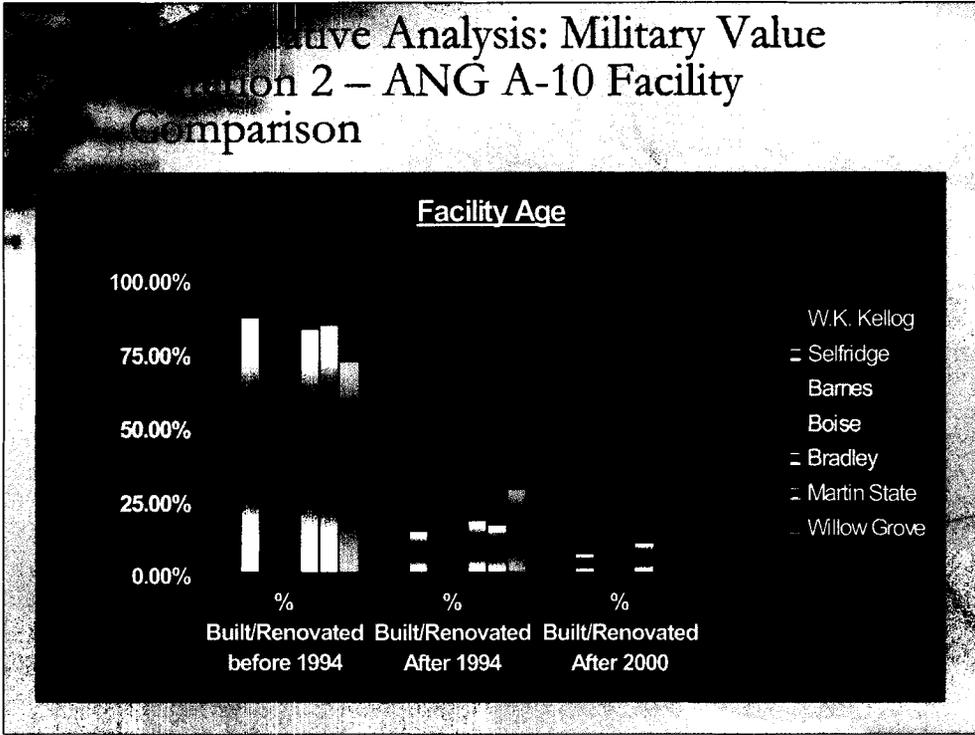


Source: Air Force Institute of Technology (AFIT) Real Estate Business Practices Manual, Sixth Edition, July 2004 (PP I.201 - I.202)

## Facility Quality Analysis: Military Value 2 - ANG A-10 Facility Comparison



Source: ANG A-10 Base Real Property Records

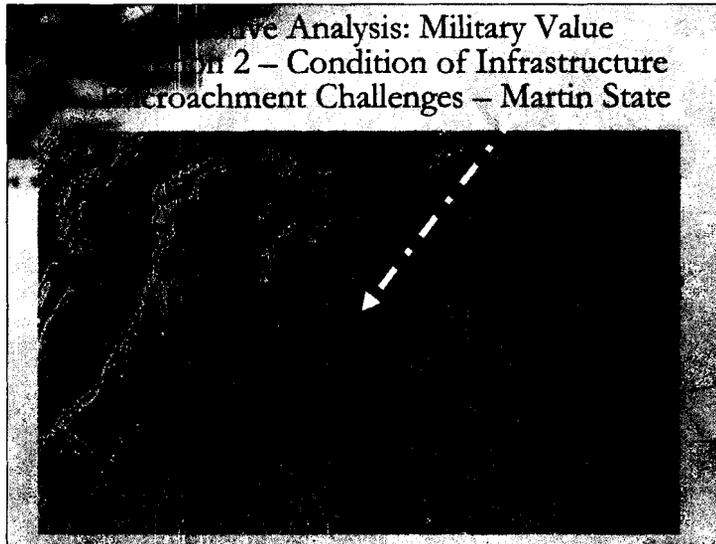


Source: ANG A-10 Base Real Property Records

### Comparative Analysis: Military Value Attention 2 – ANG A-10 Facility Comparison

BASE	CAT 1	CAT 2	CAT 3	CAT 5/6	% Built/Renovated before 1994	% Built/Renovated After 1994	% Built/Renovated After 2000
W.K. Kellogg	85.71%	11.90%	2.38%	0.00%	23.81%	76.19%	33.33%
Selfridge	42.86%	43.30%	8.04%	5.80%	86.61%	13.39%	6.25%
Barnes	60.78%	27.45%	9.80%	1.96%	72.95%	27.05%	6.65%
Bole	47.85%	44.00%	3.78%	4.30%	89.25%	10.75%	2.15%
Bradley	20.00%	45.00%	32.50%	2.50%	62.50%	37.50%	18.00%
Martin State	16.25%	51.25%	32.25%	0.25%	83.75%	16.25%	1.25%
Willow Grove	58.76%	32.64%	7.46%	1.14%	71.64%	28.36%	2.99%

Source: ANG A-10 Base Real Property Records



Note:

1. Congested Airspace
2. Dense Population

**AF Study to see where accidents occur in relation to airport**  
 Conducted in 1973 and updated in 1995

Results found:

- 61% of accidents related to landing operations
- 30% of accidents related to takeoff operations
- 80% were fighter or training aircraft

**CLEAR ZONE**

- Adjacent to end of runway
- 3000' X 3000'
- 27.4 % of all Air Force Accidents

**ACCIDENT POTENTIAL ZONE I (APZ I)**

- Adjacent to Clear Zone
- 3000' X 5000'
- 10.1 % of all Air Force Accidents

**ACCIDENT POTENTIAL ZONE II**

- Adjacent to APZ I
- 3000' x 7000'
- 5.6 % of all Air Force Accidents

**CLEAR ZONE USE PROHIBITED**

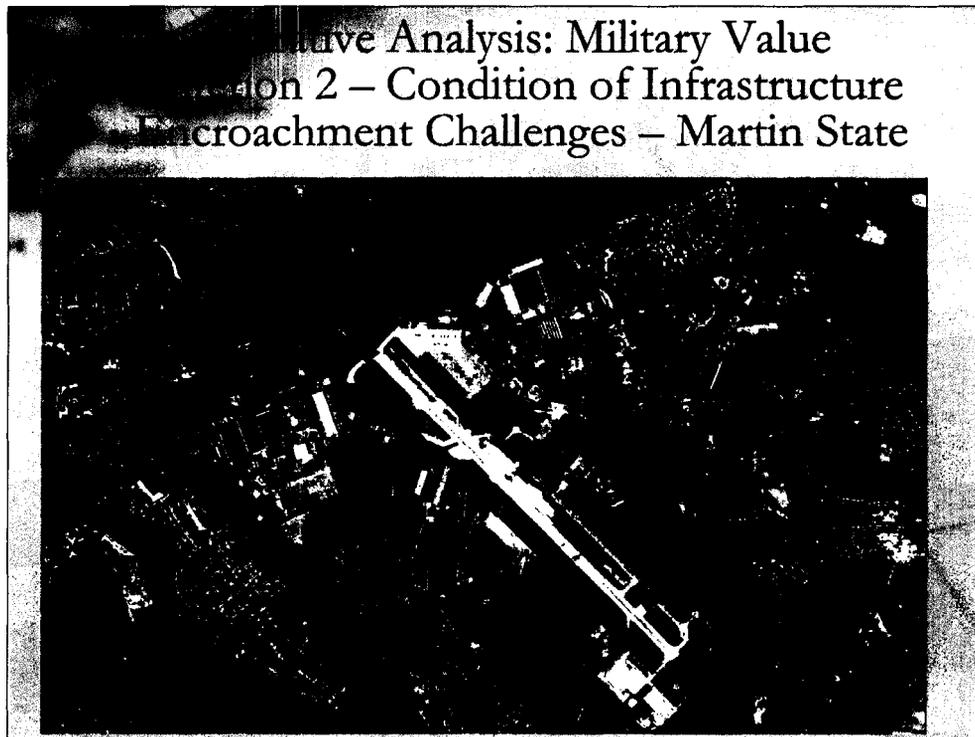
- For anything that produces light emissions
- For anything that unnecessarily attracts birds or waterfowl
- Generally acquires the land through purchase or easement to prevent development

**ACCIDENT POTENTIAL ZONE I (APZ I)**

- Less critical but still possesses significant hazards
- Allows industrial/manufacturing, transportation, communications/utilities, whole sale trade, open space, recreation and agriculture

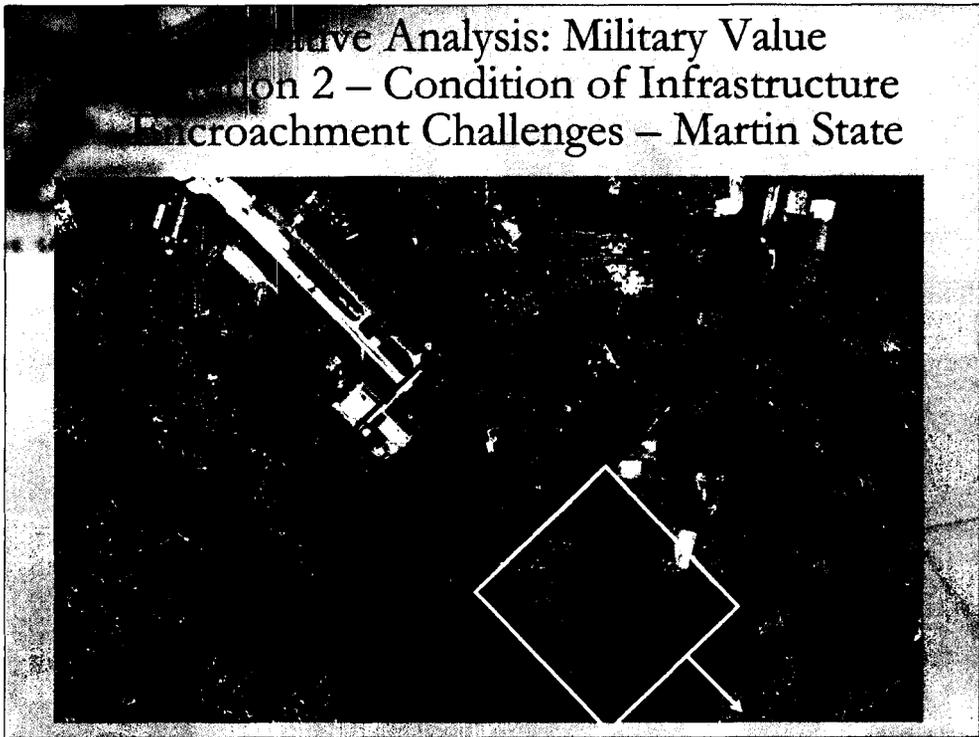
**ACCIDENT POTENTIAL ZONE II**

- Less critical but still possesses significant hazards
- Same uses as APZ I
- as well as low density single family residential personal and business services
- commercial/retail trade uses of low intensity or scale of operations.
- High people density should be limited to the maximum extent possible
- Optimum density recommended for residential usage is one dwelling per acre

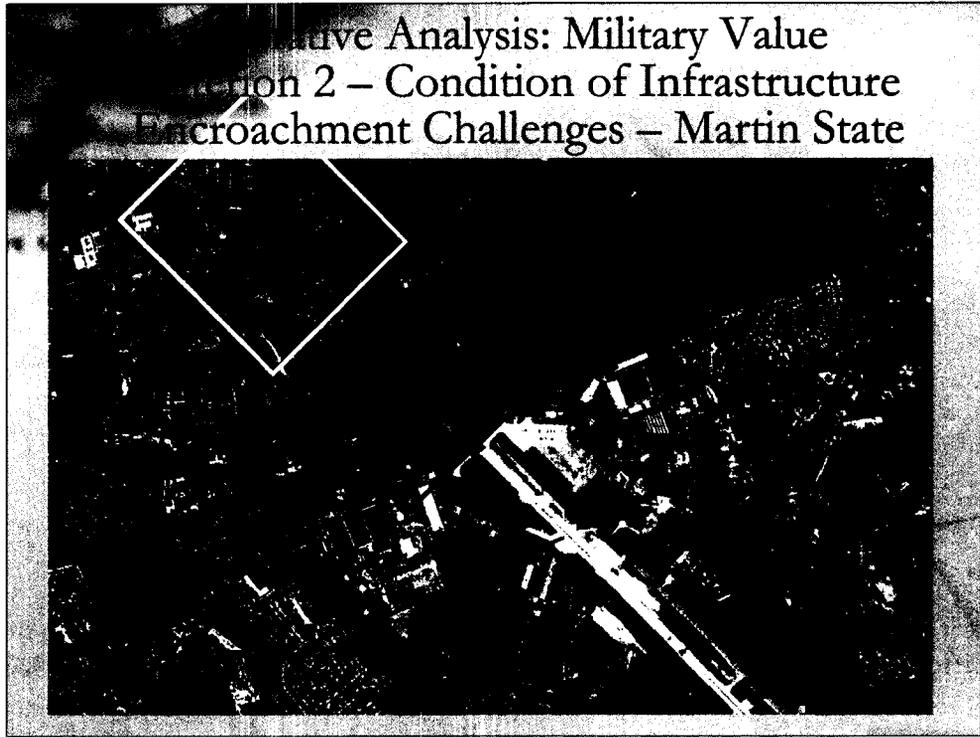


Note:

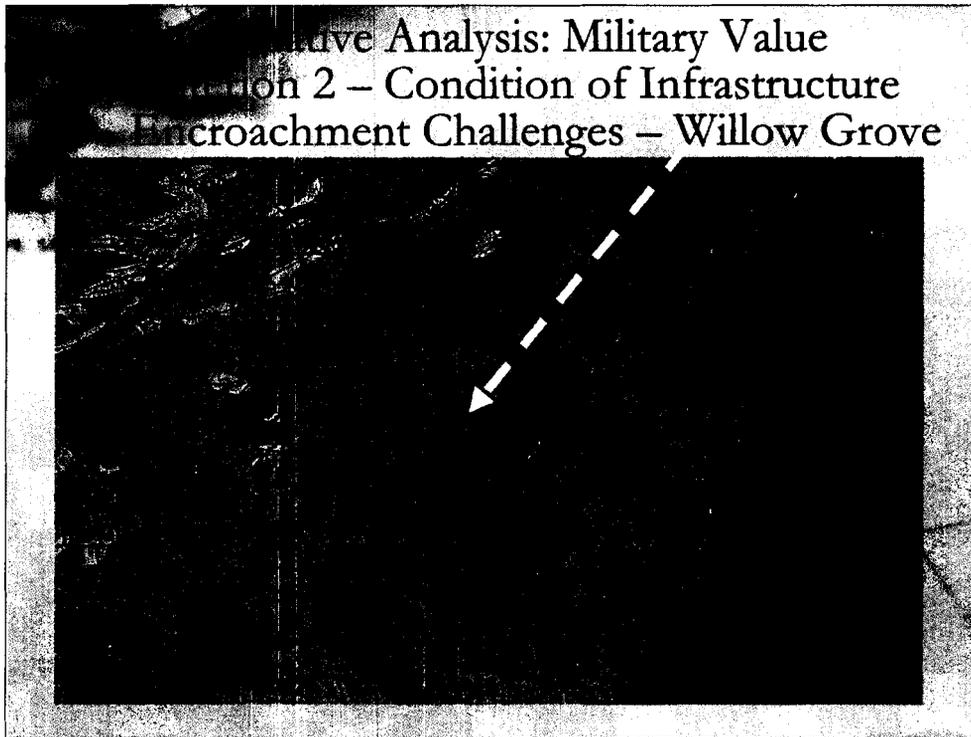
1. Short Runway
2. Dense Population



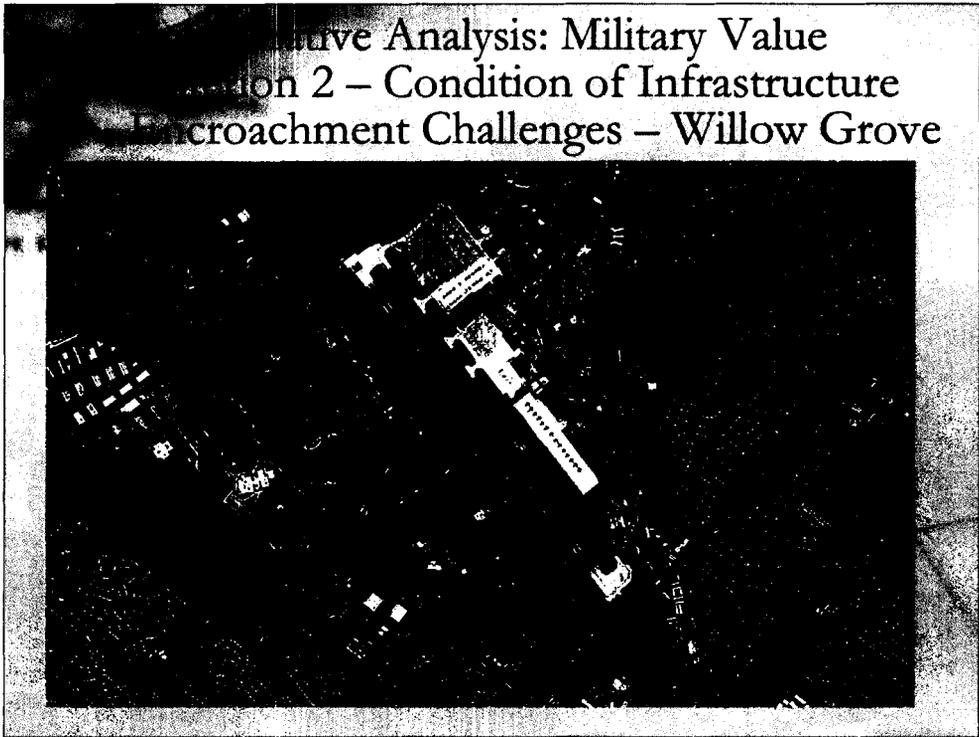
Housing in clear zones



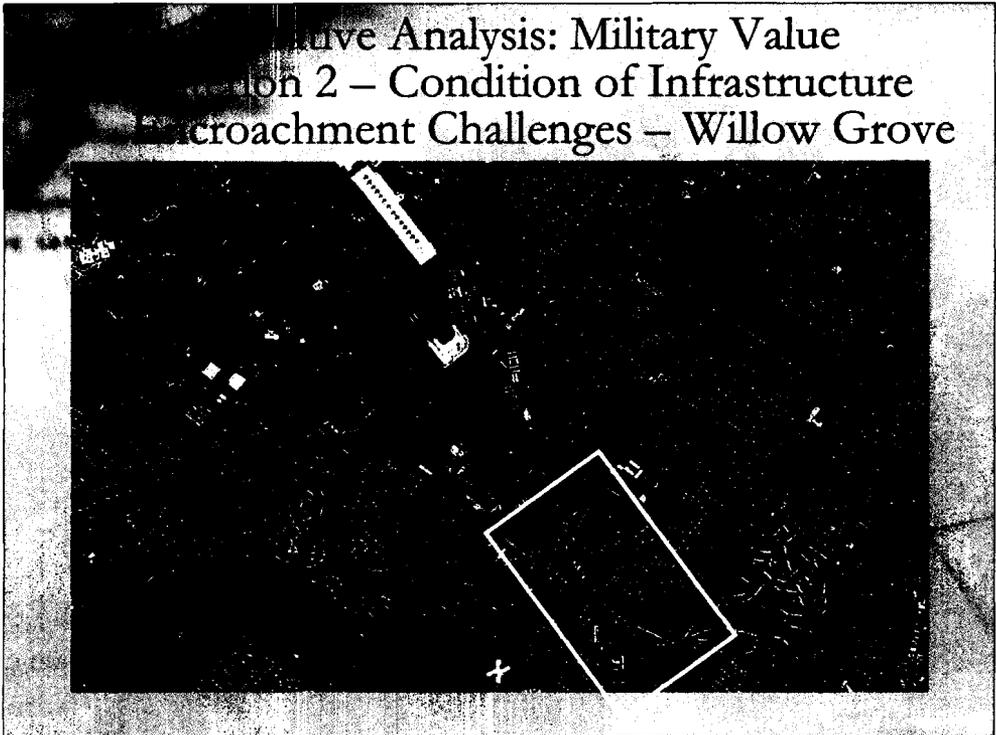
Housing in clear zones – increased since photo taken



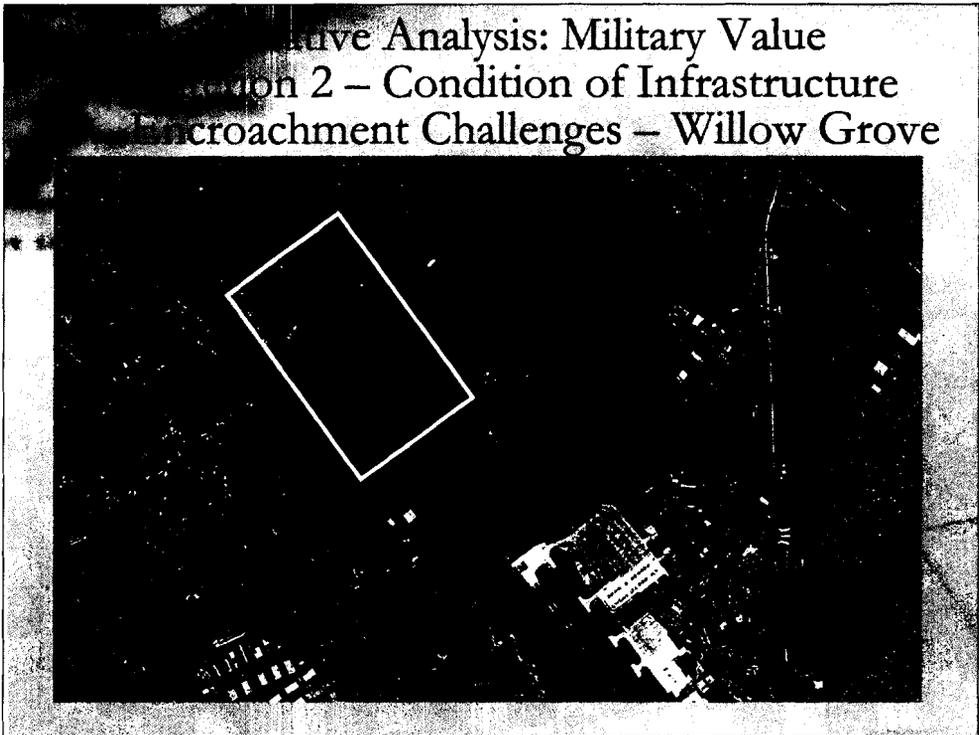
Congested location – proximity to large metropolitan area

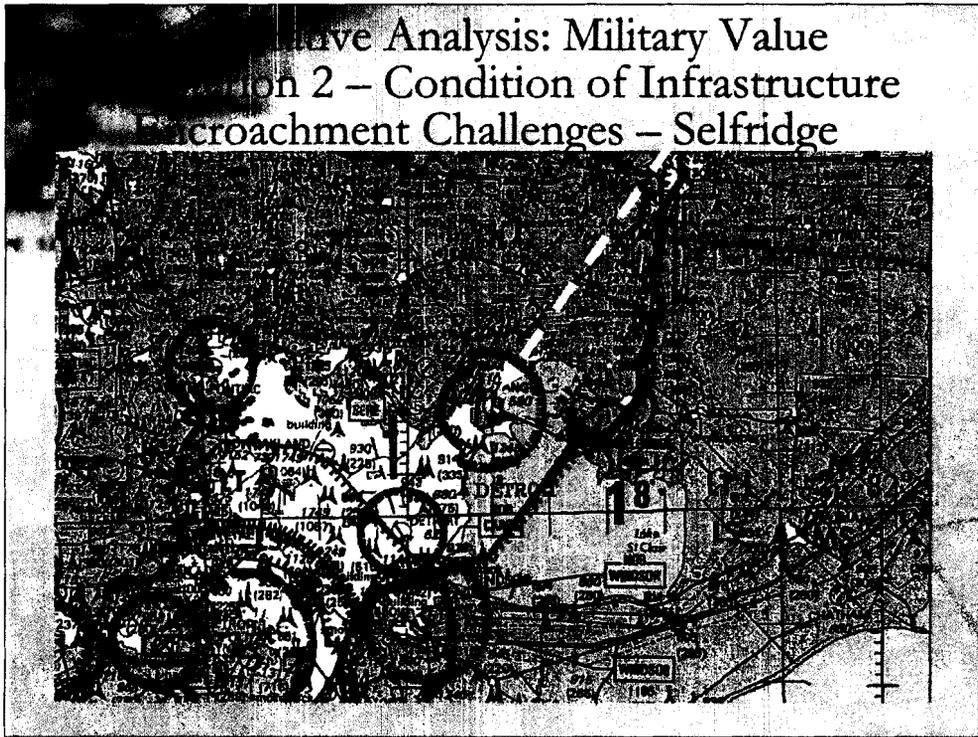


Heavily populated in close proximity to Airfield

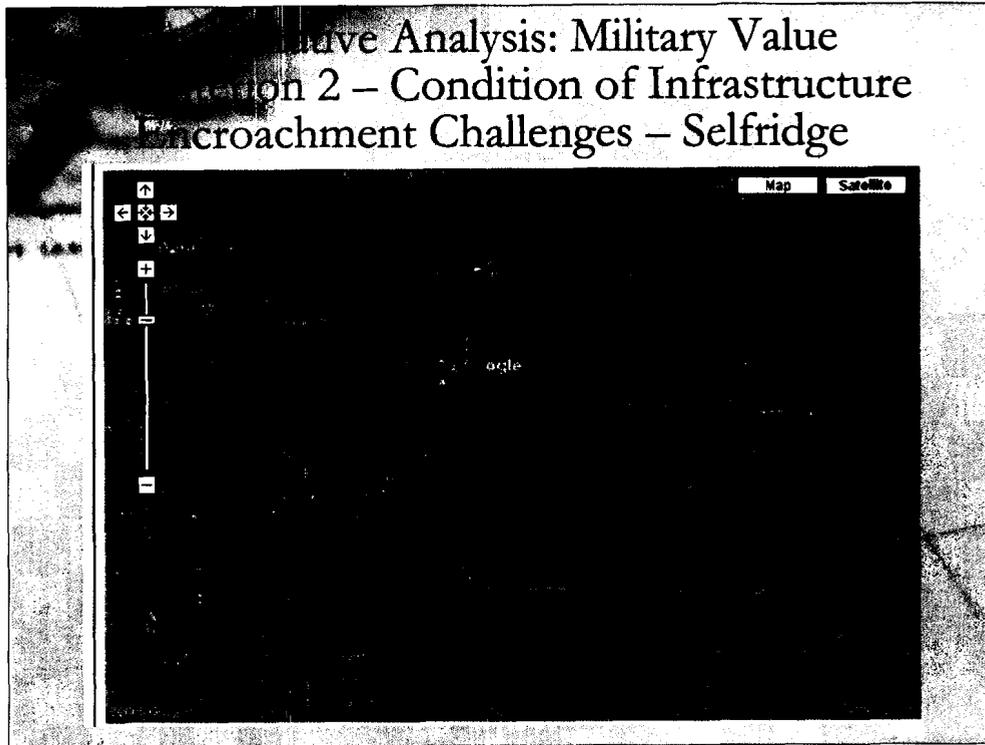


Dense population in clear zones

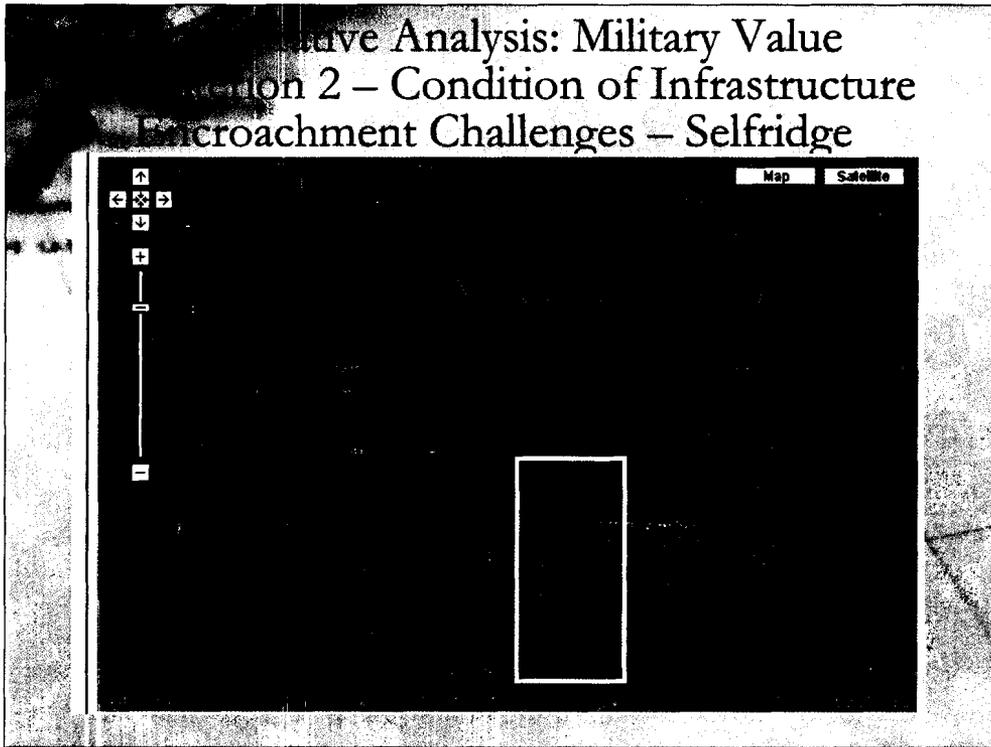




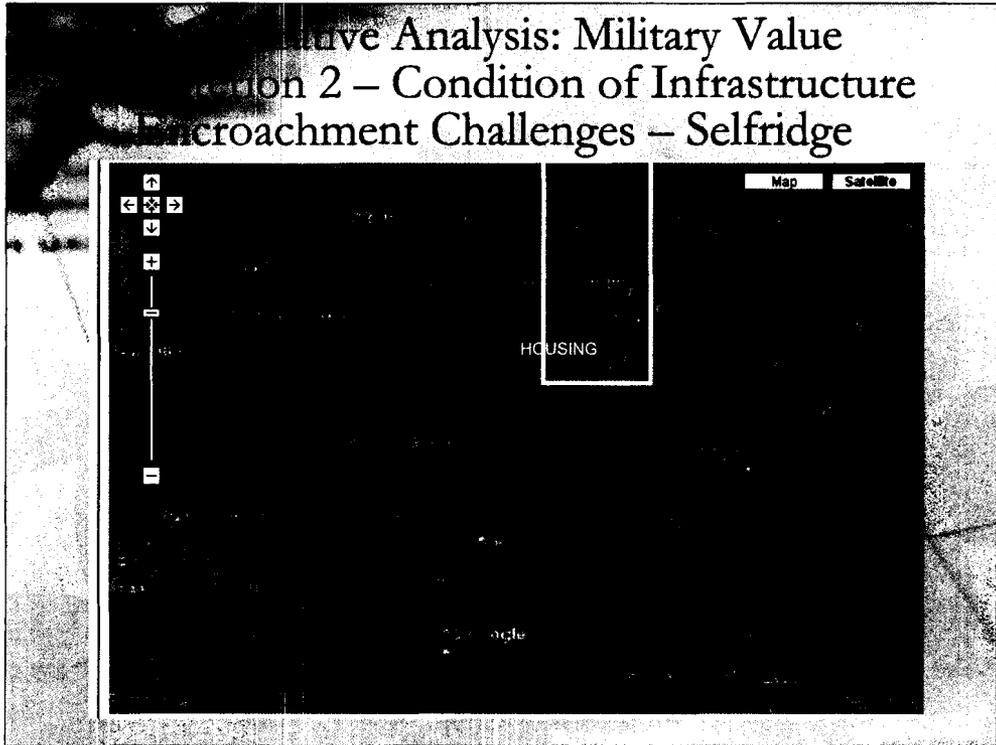
Congested location – proximity to large metropolitan area and Canada



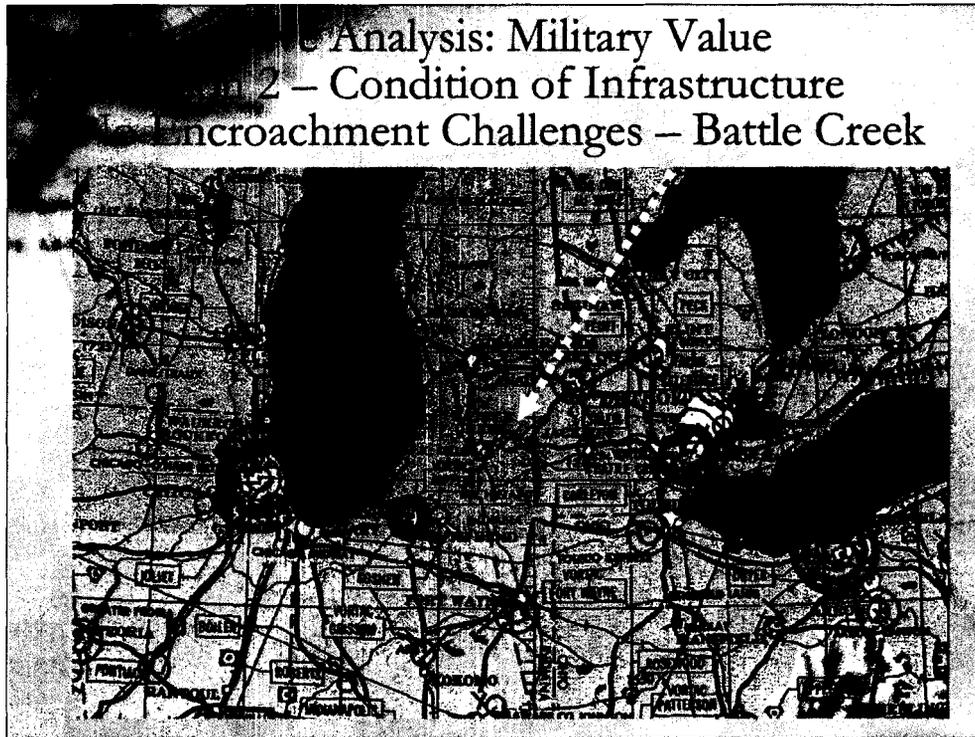
AF was forced to purchase 2,562 acres off the southern end of RWY 01/19 (\$720,563) to limit current encroachment problems.



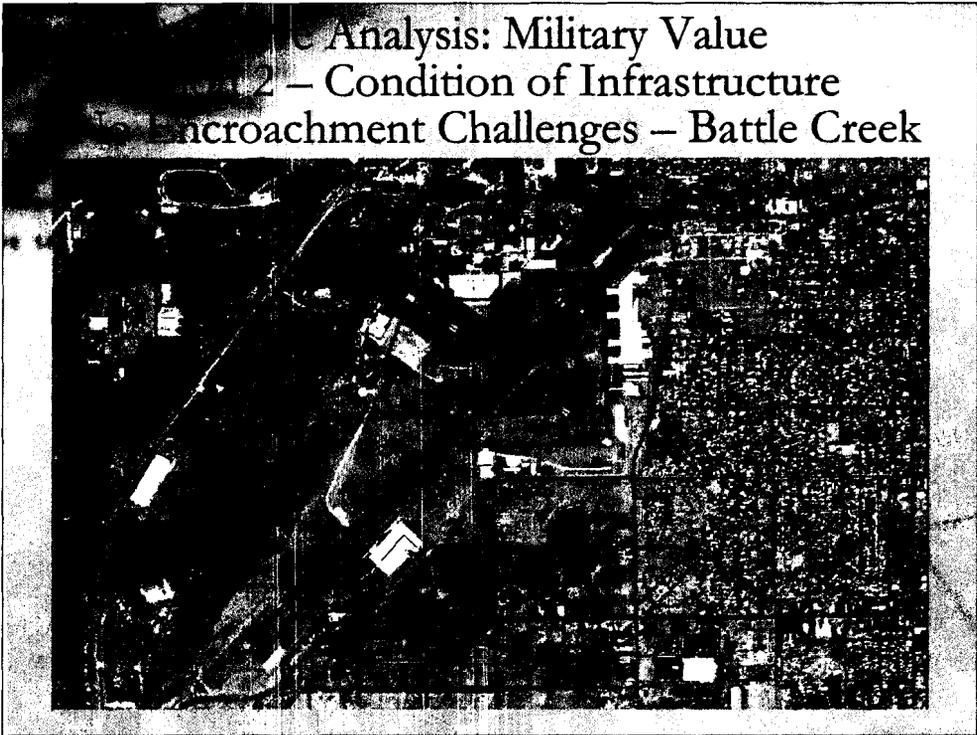
Dense population

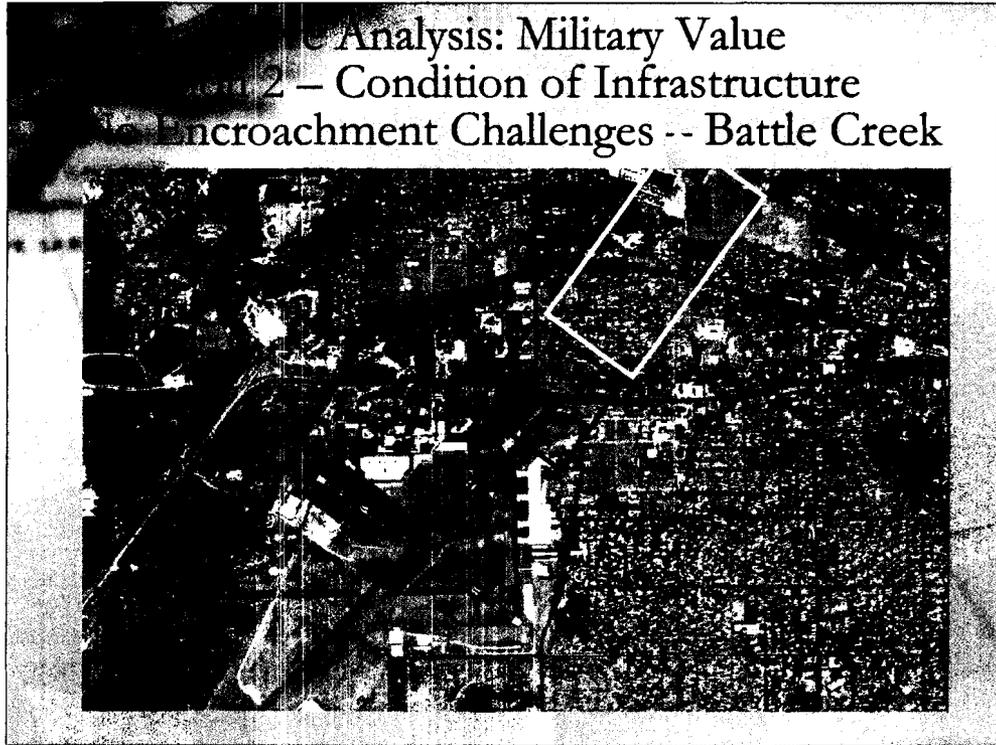


Housing continues to be built in clear zones, additional land purchase by AF may be required to avoid further encroachment

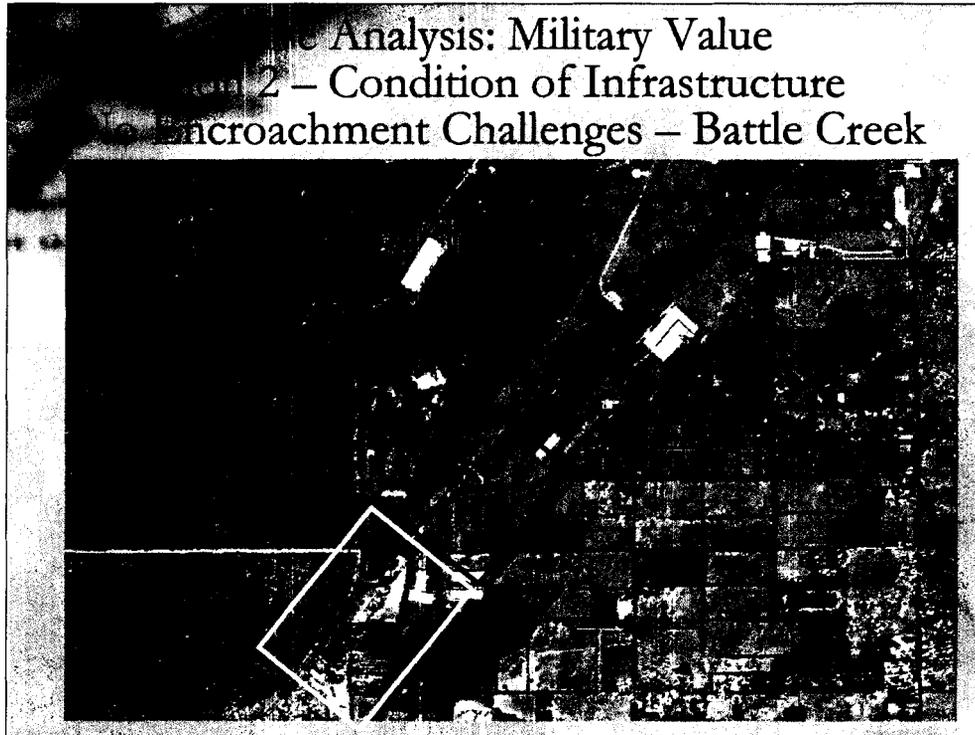


“Middle of nowhere” but convenient to metropolitan areas for HMD/HMS missions.





0 housing in clear zone



O housing in clear zones and majority of airfield is surrounded by farm land and Ft Custer

**Operative Analysis: Military Value**  
**Criterion 3 – Contingency, Mobilization & Future Forces**

- Supporting 39 AF Deployments with over 3,000 personnel, nearly 1000 short tons of cargo in the last 10 yrs
- OIF – ANG/AFRC A-10s comprised the bulk of the deployed A-10s. Of 6 deployed A-10 units, 5 were ARC aircraft.
- **Combat Operations – Last 10 Years**
  - 1995 – Operation Deny Flight (Bosnia)
  - 1997 – Operation Joint Endeavor (Bosnia)
  - 1999 – Operation Noble Anvil (Kosovo)
  - 2000 – Operation Southern Watch (Iraq)
  - 2002 – Operation Southern Watch (Iraq)
  - 2002 – Operation Enduring Freedom (Afghanistan)
  - 2003 – Operation Iraqi Freedom (Iraq)

Source: 110 FW/XP, AF/XP

ive Analysis: Military Value  
3 – Contingency, Mobilization & Future  
Forces

- Joint Operations & Capabilities
  - Since 2002, 110 FW provided deployment support for multiple Non-AF Units – 10 deployments, 1076 PAX & 245 short tons cargo
  - Primary Deployment center for 51<sup>st</sup> Civil Support Team – Regional Disaster Response Team
- Joint Training Facility for ARNG, ANG, Marine and Navy Reserve utilizing Ft Custer – W.K. Kellogg Facilities
- Ideal Location for “Aeroport” Operations - Deploying Aircraft, Personnel & Equipment throughout the Globe

Source: 110 FW/XP

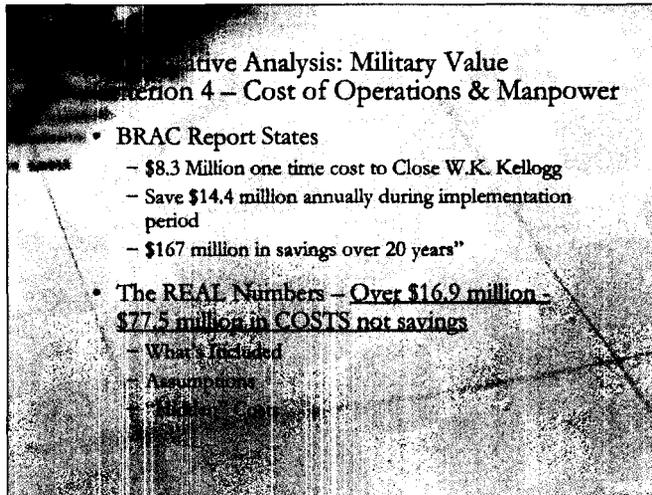
ive Analysis: Military Value  
 3 – Contingency, Mobilization & Future  
 Forces

• Raw Deployment Data

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Totals
Personnel	211	160	44	0	225	446	143	750	1035	469	3483
Cargo	77.4	18.6	0	0	186	84.7	42.6	205.2	242.4	81.5	918.4
Deployments	2	3	2	0	3	4	1	12	8	4	39

Non-AF	2002	2003	2004	2005	Total
PAX	360	372	245	89	1076
Cargo	16.1	102.8	24.8	102.1	245.8
# Deps	2	3	2	3	10



Areas Included to determine actual cost savings when closing BC:

1. Infrastructure Maintenance and Support
2. All other costs are transferred (see assumptions)

Areas included to determine cost to move unit:

1. Personnel retraining costs based on 50% new unit – current costs do not include MX (still researching)
2. Additional Annual Training and Drill Costs
3. Cost to move the “required” personnel (PCS)
4. Did not include costs to repair/upgrade facilities at new location (difficult to accurately quantify)

Assumptions:

1. ARC End Strength remains unchanged through FY11

DoD BRAC Report Vol I (pg11) End-strength (k) & (GAO)-05-785

	FY05	FY07	FY09	FY11
<b>USAF AC</b>	360	356	350	350
RC	183	182	182	183

2. 50% of the “Combined” unit will require complete retraining
3. Number of personnel commuting would not change, used actual numbers based on BC personnel
4. AFIs were utilized to the max extent possible to define “combat capable”, i.e. AFI 11-202 Vol I for pilots on training/hours required for upgrades
5. Based on Current BRAC plan, there will be overlap between 110 FW and 127 FW personnel.
6. A-10 TX and B Course costs provided by ANG Training
7. ACC/DO provided flying hour costs = \$3433 per hour for the A-10 (AF/FMC)
8. Retraining costs include cost of additional sorties to return squadron to previous quals, but does not include the extra IP sorties expended on the training (difficult to quantify as most will count towards IP training, but some will not)
9. Overall personnel operating costs do not change as the ARC end strength is unchanged
10. No savings on equipment as the new unit will require all the same equipment
11. No savings from closing the F-16 and C-130 unit at Selfridge should be attributable to the closure of BC
12. All training course can be accomplished when desired (i.e. no waiting for class dates)

Hidden Costs

- Loss of Readiness – Fighter Squadron, CST Support, Marine Support, HMD Support
- Removal of the Citizenry from the Military
- Family Costs

Comparative Analysis: Military Value  
 Criterion 4 – Cost of Operations & Manpower

- ACTUAL Cost to Operate W.K. Kellogg
  - \$650,000 Annually in facility operating and maintenance
  - \$0 property lease
  - \$0 personnel cost – TRANSFERRED
  - \$0 equipment cost – TRANSFERRED
  - \$57,000 Airfield support costs (snow removal, etc.)
  - \$4,217,411 Operations Maintenance Budget Savings  
 (Note: some of these costs may transfer with personnel and equipment)
- Savings over 20 years = \$84.35 million (no discount applied)

Source: 110 FW/FM Budget Records

Potentially Non-Transferred Operations and Maintenance Costs

Supply & Equipment	\$401,760
Contract Services	\$91,192
IT Support	\$240,759
Environmental	\$14,400
FOM/RPS	\$803,000
Security Agreement	\$406,000
Firefighter Agreement	\$2,260,300
Potential (Maximum) Savings	\$4,217,411
Over 20 years	\$84,348,220

Note: No discount rates applied to savings numbers – actual savings would be significantly less.

## Comparative Analysis: Military Value Criterion 4 – Cost of Operations & Manpower

- The REAL cost of the closure and move
  - FACILITIES – construction of new buildings, modification of existing facilities at new location as they do not accommodate the A-10  
Operations= \$Unknown
    - Selfridge Remaining Facilities Average Age > 51yrs
    - Most Selfridge Maintenance Facilities built in 1932
    - Note: Many facilities included in BRAC analysis will be “moth balled” or demolished – inaccurate collection
    - New Simulator Building / Fire Station Upgrade / Fuel Cell Modifications
  - PERSONNEL
    - PCS Moves
      - 206 GS Employees = \$7,821,138
      - 66 AGR Employees = \$846,994
  - TRAINING
    - Increase in Annual Training (AT) and Drill Costs  
\$1,023,276 / (12 UTA's @ \$85,273/UTA's)
    - Retraining Costs

Source: Cost analysis basis derived from JFTR (Joint Federal Travel Regulation)  
New Commuters Annual

### Training

Additional Per Diem Expense/day	\$	21	
600 @ 15 days/ year	\$	189,000	additional per diem for 15 AT days for 600 traditional guardsmen

### Additional Mileage Expense

600 @ .37 @ 150 miles	\$	33,300	per AT day
600 @ 15 AT days	\$	499,500	for 15 AT days for 600 guardsmen

### UTA

377 people Fri & Sat Nights	\$	27,898	*additional cost to cover new commuters outside 50 mile radius
12 UTA's	\$	334,776	Total cost for contract quarters

\$ 1,023,276

## Comparative Analysis: Military Value

### Criterion 4 – Cost of Operations & Manpower

#### • TRAINING

##### – PILOT TX/B COURSES

- B Course \$3.4 Million per pilot
- TX Course \$990,000 per pilot
- 50% Unit Retraining: Cost for 14 TX and 4 B Courses = \$27,460,000
- 100% Unit Retraining: 32 TX and 4 B Courses = \$45,280,000

##### – 5 Years A-10 Flying (IOC)

- 18 Pilots = \$40,227,894
- 36 Pilots = \$80,455,788

##### – Additional Sorties over 5 Years to regain Qualifications (Based on Current Qual Levels)

- Flying Cost to regain Quals (18 pilots) = \$4,322,137
- Flying Cost to regain Quals (36 pilots) = \$6,962,982

##### – TOTAL Pilot Retraining (Over 5 Years)

- ~~\$72,010,031~~ to \$132,698,770

Source: AFI 11-2A/OA-10 Vol 1 (Cost per flying Hour AF/FMC)

All sortie counts are minimums:

18 Pilots

1 year to get experienced = 84 sorties/pilot

4 years training to regain all quals = 288 sorties/pilot

Avg sortie duration 1.75 hrs

372 sorties/pilot X 1.75 hrs = 651 hrs Avg time per pilot (\*\*Compared to now – 1700hrs)

651hrs X 18 pilots X \$3,433 per flight hour = \$40,227,894

**Experienced Aircrew (EXP)**—For pilots: hours are FP/IP/MP and fighter time is defined as FP/IP/MP hours logged in aircraft with an assigned an AFSC of 11FX. OA-10 is considered fighter time. An experienced pilot has: 500 hrs PAI, or 1,000 hrs (FP/IP/MP), of which 300 are PAI, or 600 fighter hrs, of which 200 hrs are PAI, or previously fighter EXPERIENCED and 100 hrs PAI.

Sorties to regain quals:

Retrain 18 pilots to Qual percentages

# Pilots	Sorties	Hours
16.8	167.6	293.28
13.0	65.2	114.05
9.9	99.3	173.79
15.5	77.6	135.78
18.0	72.0	126.00
12.4	12.4	21.72
14.9	89.4	156.41
8.7	8.7	15.21
16.8	33.5	58.66
16.1	16.1	28.24
12.4	12.4	21.72
14.3	57.1	99.93
8.1	8.1	14.12
Totals	719.4	1258.91

Retrain 36 Pilots

Sorties	Hours
270.0	472.5
105.0	183.75
160.0	280.00
125.0	218.75
116.0	203.00
20.0	35.00
144.0	252.00
14.0	24.50
54.0	94.50
26.0	45.50
20.0	35.00
92.0	161.00
13.0	22.75
1159.0	2028.25

1259 hours X \$3,433/hr = \$4,322,137

\$6,962,982

Comparative Analysis: Military Value  
Criterion 4 – Cost of Operations & Manpower

- How Long Will the Retraining Take?
  - TX Course – 4 Months
  - B Course – 7 Months (PCS)
  - Davis Monthan AFB can support 2 classes per year with 15 students Max
  - Barksdale AFB can support 1 class per year (B Course) with 4 Students Max, TX course – 5 per year with 6 – 8 students Max
- How many slots will be available for ANG retraining?

Source: Det 3 TRSS/OTD Davis Monthan AFB & 442 FW Barksdale AFB Training

Comparative Analysis: Military Value  
Criterion 4 – Cost of Operations & Manpower

- Training – MX personnel
  - Although an unlikely scenario – 100% full retraining of MX personnel would cost over \$6.6 Million
  - This cost is not included in the overall retraining totals; however, the cost is more than \$0 as currently defined in COBRA

Supporting Data located in MX DATA Collection file.

Comparative Analysis: Military Value  
Criterion 4 – Cost of Operations & Manpower

- Bottom Line Cost Analysis

- Savings Over 20 years = \$84.35 million

- Costs over 20 Years

- Personnel Movement = \$8.7 million
- Retraining Costs = \$72 million - \$132.6 million
- Increased AT/Drill Cost = \$20.5 million

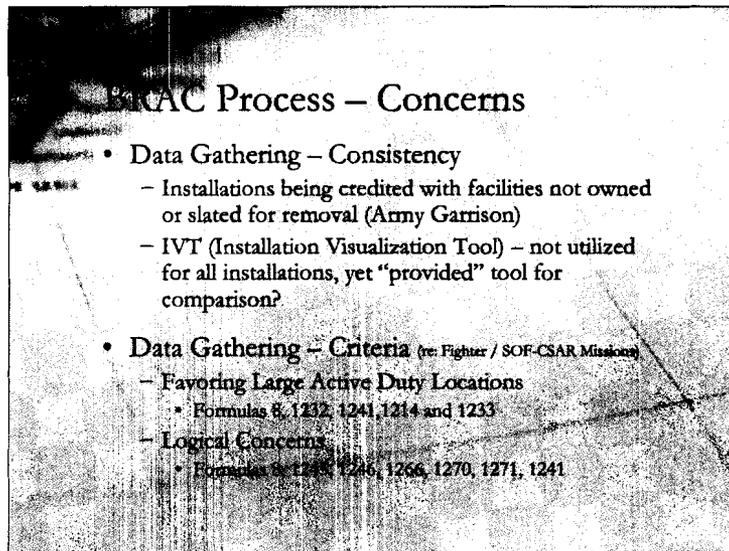
- NET:

- Savings \$84.35 Million
- Costs \$101.2 Million - \$161.8 Million

**Bottom Line: \$16.85 - \$77.45 MILLION in Costs**

Note: Costs not included –

1. Infrastructure
  - a. Fire Station
  - b. Sim Bld
2. Retirements and other early out incentive programs (double bill)
3. MX personnel retraining costs



Source: Dept of the AF BRAC Recommendations and Analysis Vol V Part 1 (Pg 61-103) Vol V Part 2 (MCI Formulas)

Favoring AD Bases:

8 – Joint Civil-Military fields utilize shared ramp space (ANG units not authorized large ramps, i.e. BC is authorized 30,000 sq yds)

1232 – Sufficient Explosive sited parking

1241 – Ability to Support Large scale mobility deployment

1214 – Fuel dispensing rate to support mobility and Surge

1233 – Sufficient Munitions storage

•All of these areas are going to favor a large AD facility and put small Joint Civil-Military facilities at a disadvantage.

•Because of QD (safety) criteria – munitions storage on a Joint Civil-Military facility is going to be limited regardless of facility capacity

•The questions did not take into account MOUs with civil partners to increase capability

•Further, they ignore the cost savings inherent by not maintaining these large facilities + equipment

Logical Concerns:

8 – BC not authorized 241,000 sq yds (Max points) yet graded against that criteria? Not funded for 241,000 sq yds, BC has significant acreage available for increased ramp space if it was authorized

1245 – Proximity to airspace supporting mission \*Arbitrary distances assigned without regard for mission accomplishment, i.e. is 150 miles too much or no effect

\*\* See Airspace Slides – BC has more in quantity and quality of all types of training airspace \*\*

1246 – Proximity to Low Level Routes Supporting Mission \*Not required for most low altitude tactical training in Fighter Aircraft – dated requirement

1266 – Range Complex Supports mission \*Again distance and mission impact is the criteria, further units were assigned "ownership" which is irrelevant

1270 – Suitable Aux Airfield within 50nm \*Not relevant based on fighter fuel requirements and capabilities – not utilized in training

1271 – Prevailing installation weather conditions \*3000/3 is arbitrary, further the question should be based on weather effecting mission accomplishment. Given a standard of 300/1 for most fighter aircraft, range weather is of more significance than home station weather.

1241 – Ability to support large scale mobility deployment \*Question did not intimate a "surge" requirement. MOUs on Joint civil-military fields can drastically increase the capability of a small installation for the fraction of the cost of maintaining the facilities as DoD. This was not asked.

*Installation Visualization Tool (IVT)*

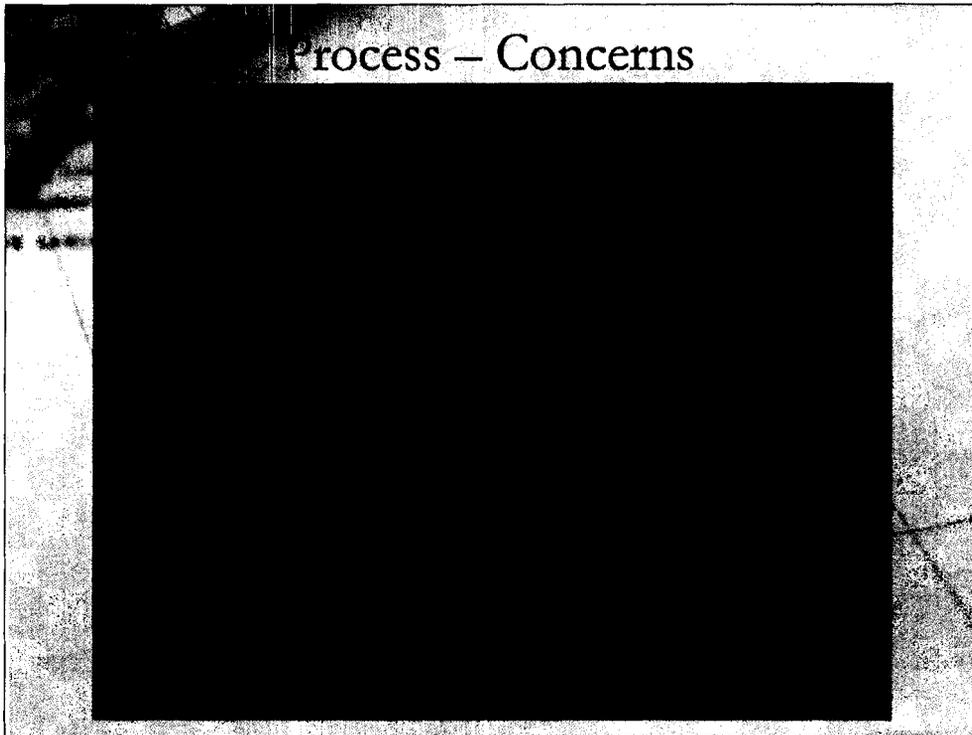
IVT provides the BRAC 2005 process a means of viewing imagery and geospatial data a consistent fashion for all installations meeting BRAC 2005 threshold criterion. BRAC policy memo number one (16 Apr 03, OSD/AT&L) identifies IVT as a tool to be used during the BRAC 2005 process that will enhance the Department's overall ability to manage its infrastructure. The BRAC Infrastructure Steering Group (ISG) developed requirements for us IVT. **\*\*\*Required for Use, yet NONE of the ANG A-10 bases were scored utilizing this tool, further the Selfridge IVT was incomplete\*\*\***

# Process – Concerns

Description	% Of Overall MCI Score	Selfridge	Battle Creek	Adjusted Selfridge Score	Adjusted Battle Creek Score	Cumulative Selfridge	Cumulative Battle Creek
1243 Proximity to Airspace Supporting Mission	22.06%	3.42	3.13	44.85	34.47	44.85	34.47
1246 Proximity to Low Level Routes	7.25%	0.87	0.86	47.2	36.75	43.78	33.62
1271 Prevailing Weather Conditions	5.52%	3.64	0	44.43	37.5	40.14	33.62
1205.2 Buildable Acres for Growth	1.98%	0.78	0.31	47.31	37.29	38.38	33.31
1221 Hangar Capability – Small Aircraft	3.88%	3.88	1.94	44.19	35.88	36.5	31.37
<b>Total % Effected</b>	<b>36.61%</b>						

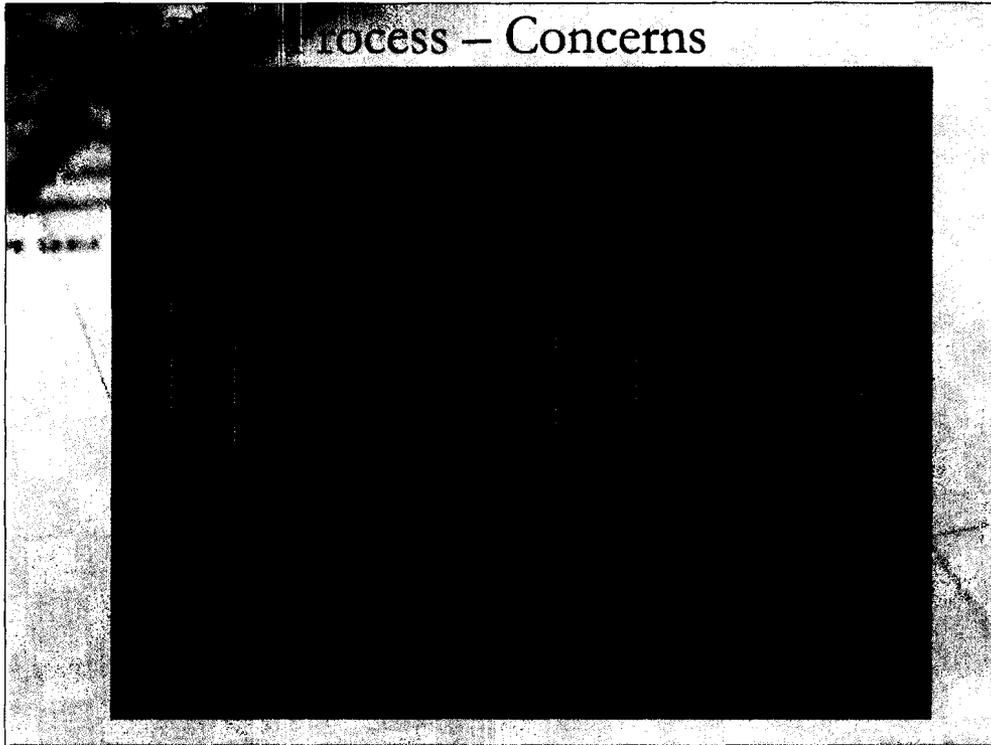
  

SOFICBAR MCI Formula Discrepancy Analysis								
Formula	Description	% Of Overall MCI Score	Selfridge Score	Battle Creek Score	Adjusted Selfridge Score	Adjusted Battle Creek Score	Cumulative Selfridge	Cumulative Battle Creek
1246	Proximity to DZ/LZ	14.72%	7.06	1.47	41.01	36.13	41.01	36.13
1246	Proximity to Airspace Supporting Mission	14.72%	2.5	2.84	45.57	34.68	35.57	33.46
1246	Proximity to Low Level Routes	3.89%	0.34	0.26	47.73	37.26	38.17	33.21
1271	Prevailing Weather Conditions	5.88%	3.24	0	44.73	37.7	38.55	33.21
1205.2	Buildable Acres for Growth	1.98%	0.78	0.31	47.31	37.29	38.67	32.8
1242	Airfield Elevation	3.89%	2.88	2.43	45.15	35.17	31.16	30.47
1246	Airspace Attributes to DZ/LZ	7.46%	2.44	0.6	48.61	38.8	28.88	28.87
<b>Total % Effected</b>	<b>51.61%</b>							

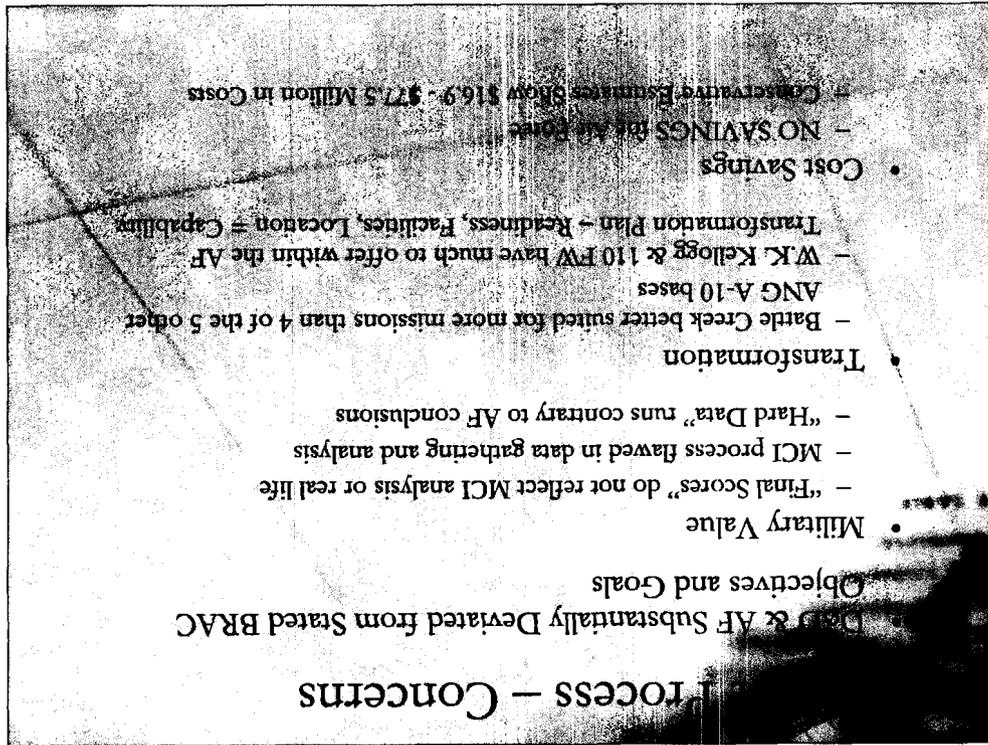


As scores are adjusted for Formula discrepancies and flaws – the difference in scores becomes statistically insignificant.

## Process – Concerns



As scores are adjusted for Formula discrepancies and flaws the installations actually reverse position.



Military Value

1. One of the Top A-10/Fighter Units in the ANG, by performance - scored very poorly - doesn't make sense
2. Installation designed for the A-10, scores poorly in its primary mission - doesn't make sense

Readiness

1. ANG A-10's scheduled for AEF Cycle 6, AEFs 5 - 8 with 26 aircraft. Occurs during transfers, moves and closures. Volunteerism? These are not activations.

Citizen Soldier

1. What is the cost of keeping the public involved through the Citizen Soldier?
2. Over 800 positions will be terminated with the closure of the 110<sup>th</sup>

## in Line: What Do I Lose? What do I Gain?

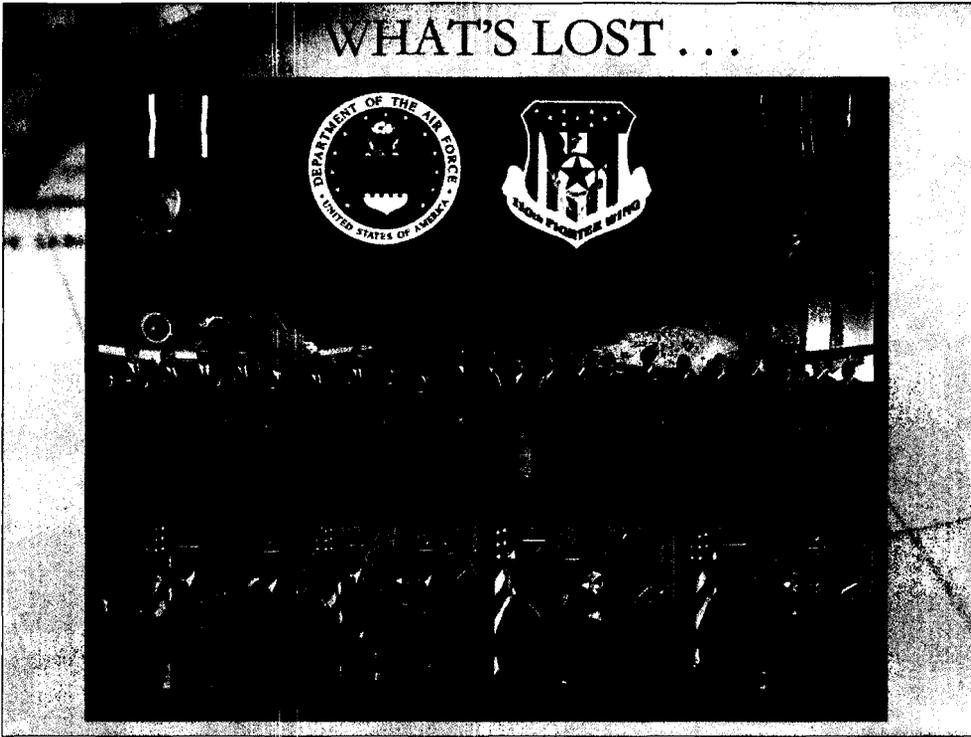
- **Lost:**

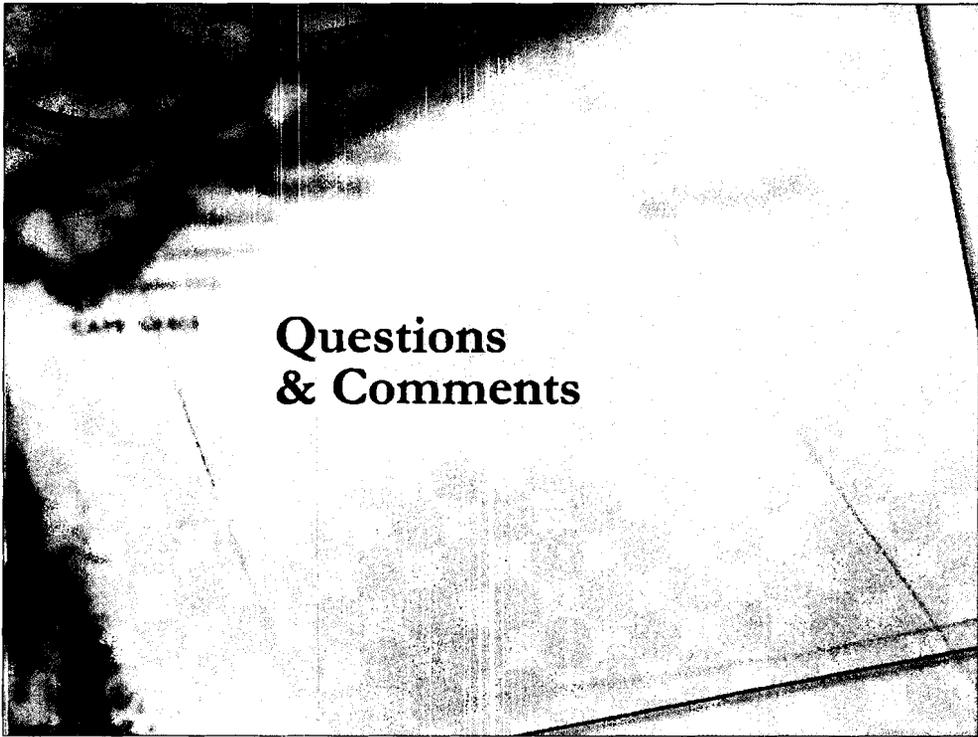
- Top Combat Unit – Capability Does NOT Transfer
  - Over 800 Fully Trained Deployable Combat Experienced Member of the ANG
  - Pilots – One of the most Experienced and Decorated Units
  - Maintenance – Highest FMC Rate for A-10
  - Support – Unfailing World-Wide Expeditionary Combat Support
  - COMBAT Capability for Half a Decade!
- Top Notch Facility – Designed for A-10 Operations
- Optimum Training Location
- Key Joint Deployment Location and Facility
- Leading Recruiting Base of ALL ANG A-10 Units and SW MI
- Military Connection to SW MI

- **Gain:**

- NOTHING (No Increase in Capability, Does not support Transformation, No Cost savings)

# WHAT'S LOST . . .







STATE OF MICHIGAN

**OFFICE OF THE GOVERNOR**

LANSING

JENNIFER M. GRANHOLM  
GOVERNOR

JOHN D. CHERRY, JR.  
LT. GOVERNOR

July 28, 2005

Honorable Samuel K. Skinner  
Base Closure and Realignment Commission  
2521 South Clark Street, Suite 600  
Arlington, VA 22202

Dear Secretary Skinner:

Re: Site Visit to Warren and Battle Creek, Michigan

As the Governor of Michigan, I welcome you to our great state, and thank you for taking the time to visit the W.K. Kellogg Airport Air Guard Station in Battle Creek (Battle Creek ANG). Your visit earlier today to Warren and this visit to Battle Creek are an important opportunity for us to demonstrate why we believe that the Defense Department (DoD) recommendations relating to TACOM in Warren deserve your support, and why we so strongly disagree with the DoD recommendations to close Battle Creek ANG, move the A-10s, and retire the F-16s at Selfridge.

Unfortunately, I could not be with you today due to a long planned trade mission to Japan. I hope that the presence of my husband, Dan Mulhern and our Adjutant General, Tom Cutler, will show the importance that I place, both personally, and as the Commander and Chief of the Michigan Air National Guard, on your visit.

During the visit today, you and your staff will be able to see a modern and sophisticated facility that enjoys deep and longstanding community support. You will be meeting today with leaders of Michigan's military community who will demonstrate why, from a military readiness perspective, it is so important to keep the A-10s here in Battle Creek and to keep the F-16s in Selfridge. As Governor, I want to highlight two additional key points that I hope you will remember as the BRAC Commission makes its decisions next month.

First, I strongly object to the fact that DoD did not consult with either our Adjutant General or me about the planned changes to the Michigan Air National Guard prior to the BRAC announcement on May 13th. I recently wrote Secretary Rumsfeld to express my concern about the lack of consultation, and to clearly state



Secretary Skinner

Page 2

July 28, 2005

that I do not consent to the plan to close Battle Creek, move the A-10s, or to retire the F-16s from Selfridge. And, as your own counsel's office has opined, the consent of the Governor is required for these changes to be legal.

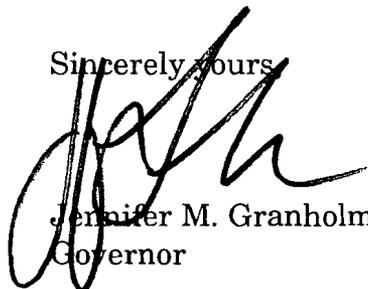
Second, I want to be sure that you understand the critical importance that Battle Creek ANG plays in the homeland security plans of our state and at the local level. Battle Creek ANG is an integral part of our state's homeland security plan. It is a reconnaissance point (alternate work site) with C4 (command, control, communications and computers) for 1,800 Defense Logistics Agency personnel in Battle Creek's Hart-Dole-Inouye Federal Center. Not only does it house the State of Michigan Card Access servers, but in the event of a bioterror attack, it has substantial vaccine storage capability critical for an effective response.

On the local level, the City of Battle Creek Police, Fire and Emergency Services have a longstanding cooperative relationship specific to homeland security with the Battle Creek ANG, including joint exercises and a joint terrorism taskforce. The City's enhanced 9-1-1 relies on back up trunks installed at the base and has an airfield crash and rescue, as well as mutual aid fire fighting agreements.

Michigan's homeland security would also be negatively affected by the loss of the F-16s from Selfridge. The F-16s are critical to our homeland security missions. With several international border crossings and potentially significant industrial and economic targets in Southeastern Michigan, it is important to retain the squadron of F-16s at the centrally located Selfridge ANGB.

Thank you again for taking the time to visit Michigan. I trust that once you have considered our arguments and have seen our facilities, you will agree with me that Battle Creek ANG should stay open, the A-10s should remain where they are, we should keep the F-16s at Selfridge, and that TACOM is the fully able to integrate the new employees coming from other facilities.

Sincerely yours



Jennifer M. Granholm  
Governor

JMG/DC:JCB

THE SENATE  
STATE OF MICHIGAN  
**MARK H. SCHAUER**  
19TH DISTRICT  
DEMOCRATIC FLOOR LEADER

Commissioner Skinner, my name is Mark Schauer, and I am Battle Creek's State Senator in the Michigan Legislature. I live here in Battle Creek, and I am very grateful that you have chosen to spend these precious hours of your schedule with us today at the W.K. Kellogg Air Guard Station.

On behalf of the citizens of this great community, allow me to thank you for your service to our nation as a member of the BRAC Commission. With your outstanding career in public service and private business, it is clear why the President chose you to wisely and judiciously review and evaluate the Pentagon's recommendations. We are truly honored to have you here in Battle Creek today. We also thank Mr. Kenneth Small for the hours and hours he has spent hearing and analyzing our case, both in Washington and in Battle Creek.

Mr. Secretary, our journey in this process, of course, began with Secretary Rumsfeld's May 13 announcement. To be honest, we were shocked that this facility was on the closure list. But knowing what we know about the outstanding facility here at W.K. Kellogg Field and the excellent track record of the 110th Fighter Wing, we immediately began our work, delving into the COBRA and WIDGET methodology and analysis. Before Commissioners Gehman, Hansen and Turner at the June 20 St. Louis regional hearing, we pointed out specific flaws in the Air Force's data, raising serious questions and doubts about projected cost savings of this closure and move to Selfridge and about the negative impact on our war fighting capability and ability to protect our homeland. Based on the questions we raised, a team from Battle Creek was invited the next week to meet with Mr. Small and his team for in-depth review of the DoD's flawed analysis.

Over the past weeks our group has met individually with Commissioners Newton, Bilbray, Coyle and Hill, and this upcoming Monday we will fly to Washington to meet with Chairman Principi to make our case. But clearly, Mr. Secretary, we understand the importance of your site visit to Battle Creek, as you now are the Commissioner most knowledgeable and familiar with this facility and the invaluable role of the 110<sup>th</sup> Fighter Wing.

Mr. Secretary, as you experienced when you arrived here in Battle Creek today, we are a community that supports its military. The thousand or so people proudly wearing their Air Force blue t-shirts across the runway—neighbors of mine—are not here because of the potential loss of jobs or economic impact on the community. Instead, they are here, and I am here, as a demonstration to you of west Michigan's nearly 60-year association with and commitment to the Air National Guard. The mayor spoke a moment ago about the community's spirit, financial support, and coming together in support of this base and the 110<sup>th</sup> in every way possible.

But, our region's support for the air guard directly translates into recruiting and retention excellence. We here are literally second to none in supporting the Air National Guard, reflected in an actual manning level of 101.90 percent, the highest of all ANG A-10 units in the nation since 2001.

And, Mr. Secretary, today you have seen first-hand a first-class, modern facility. You have seen the results of over \$40 million spent over the last decade. Eighty-five percent of the base has been constructed in the last 12 years, and two new facilities are on the way. This, effectively, is a new base that must not be closed. Even the Air Force's MCI scores rate W.K. Kellogg second only to Boise and significantly higher, for example, than Baltimore and Willow Grove among the nation's A-10 installations.

Today, sir, you have heard about joint military activities that are occurring and, with a lack of encroachment issues, available additional land, and the Ft. Custer Military Training facility directly to the west, additional defense and homeland security joint operations that can occur in Battle Creek.

You also received testimony today from our Governor Jennifer M. Granholm and directly from her Adjutant General Thomas Cutler about the vital function that this base and the 110th plays to our homeland security, with important collaborations with the community and militarily, for example, with the Weapons of Mass Destruction Civil Support Team located next door and to the Defense Logistics Agency's worldwide cataloging function that occurs in downtown Battle Creek.

In closing, Commissioner Skinner, the Air Force's justification to close Battle Creek and move its A-10s is just plain wrong. The cost savings are not there, and by moving these A-10s across the state, their war-fighting capability will be lost for three to five years, all during time of war. And I would be remiss not to again point out the deployments, superior mission capability ratings, hours flown, combat hours flown, decorations received, and even the 110<sup>th</sup>'s recent ORI rating. As a convenient reminder, we've printed this on the back of the t-shirt that you received today.

By any measure, it would be a serious mistake to shutter this base and stand down the 110th Fighter Wing. We ask that you take what you have seen and heard today and act to remove the Battle Creek Air National Guard Base from the closure list.

We thank you very much for your attention.



**B A T T L E C R E E K**  
OFFICE OF THE MAYOR

July 28, 2005

Honorable Samuel Skinner, Commissioner  
2005 Base Realignment and Closure Commission

Commissioner Skinner:

Battle Creek, Michigan is a medium-sized Midwestern city best known for three things: cereal manufacturing, automotive suppliers, and support of the military.

Since 1917, when we first trained soldiers for WW I, Battle Creek has eagerly supported tens of thousands of permanent and temporary military personnel. Today, Battle Creek is the proud home of the 110<sup>th</sup> Fighter Wing, housed at the W. K. Kellogg Airport, the Hart-Dole-Inouye Federal Center, and the U.S. Army Guard Training Center at Ft. Custer. My focus today is on the 110<sup>th</sup> Fighter Wing of the Michigan Air National Guard located here at the W. K. Kellogg Airport.

This base has experienced an estimated federally-funded investment of over \$44 million dollars over the past decade, plus the benefit of a 10,000-foot runway paid for by a voter-approved bond issue. A brand new 110-foot control tower has just been completed and put into operation this month. Plans are now underway for a new parallel runway to be constructed at the airport to divert smaller private and commercial aircraft from the 10,000-foot runway, thus freeing up its use for the combat aircraft of the 110<sup>th</sup> Fighter Wing. The City of Battle Creek has willingly provided matching funds for the new traffic control tower, parallel runway, and other infrastructure improvements. City crews maintain the grassy areas and perimeter fences in and around the airport. As you can see, our airport is a superior facility.

We have unencumbered airspace and, because of our relative isolation in southwest Michigan, all indications are that it will stay that way. We have aggressively prevented residential and commercial encroachment near the airport. Over the past six years, the Battle Creek Planning Commission and City Commission have vigorously maintained the land barrier south of the airport by prohibiting residential and commercial development, thus ensuring the necessary land margins to ensure the 110<sup>th</sup> Fighter Wing has room to train and deploy. This land barrier extends to the west as well, thus ensuring the Guard Base the necessary land to grow if and when needed. The City of Battle Creek has dedicated these 320 acres for military expansion at the W. K. Kellogg Airport and, Commissioner, we will honor that commitment.

When the Air National Guard Base projected the need for a safety buffer area surrounding the new munitions facility, the City of Battle Creek offered to reroute Business Loop 94. We have even considered the possibility of building a land bridge over this public highway in order to link the Air Guard Base with the Army Training Center, ensuring unrestricted movement from one base to the other, thus enhancing training possibilities.

Further, the City has ensured there are not any noise restrictions, noise abatements, or noise sensitive areas within a 25-mile radius of the airport.

Our BC/CAL/KAL Customs and Border Patrol Port of Entry allows for convenient clearance of military personnel and their personal effects when returning from overseas. On a number of occasions following recent deployments, this Port of Entry allowed the men and women of the 110<sup>th</sup> the opportunity to return to their families and homes more efficiently by arriving here in Battle Creek.

Battle Creek has invested \$1.2 million in local dollars to build an optical Ethernet fiber ring providing dedicated, secure strands to the Air National Guard Base. Although, since September 11, 2001, military installations have provided their own secure networks, this dedicated fiber remains available for redundancy.

The 110<sup>th</sup> Fighter Wing is at home in Battle Creek, and we are proud to support the most deployed and combat ready A-10 fighter wing in the nation. Our history, culture, environment, pride, participation, capability, and enthusiasm for the 110<sup>th</sup> Fighter Wing are unmatched. As you saw today, thousands of citizens from Battle Creek and the surrounding area have given up a portion of their business day to come out to the W. K. Kellogg Airport to show their support for the 110<sup>th</sup> Fighter Wing.

In Battle Creek, *we put our money where our mouth is* by providing space, the legal protections, and superior infrastructure to support the Air National Guard and our war fighters.

Thank you for taking your time to visit Battle Creek and your consideration of this very important matter.

Respectfully,

John K. Godfrey, III  
Mayor of Battle Creek

**Remarks of Dr. Celeste Clark**  
**Senior Vice President, Corporate Affairs**  
**Kellogg Company**  
**BRAC Presentation**  
**July 29, 2005**

Commissioner Skinner, on behalf of my colleagues on the Citizens' Base Retention Committee and the people of Southwest Michigan, I welcome you. We are most appreciative that you would add an inspection visit to Battle Creek to your already demanding schedule.

I am a senior executive with Kellogg Company, a business established here in Battle Creek coming up on 100 years in 2006. Today our World Headquarters, our global Food and Nutrition Research Center and one of our most advanced and productive manufacturing facilities are in Battle Creek. We recently made the decision to transfer out Snacks Food business including a significant number of our employees from the Chicago suburb of Elmhurst to Battle Creek.

In addition, Battle Creek is also home for the W.K. Kellogg Foundation, the world's sixth largest private foundation which is in the midst of celebrating 75 years of philanthropy.

Clearly, there are strong ties between Kellogg and Southwest Michigan. As one who has lived in this area for more than 25 years I can say there are two reasons why Kellogg and many other companies choose to be here. The first is quality of life. It's simply a great place to live, work and have fun...I might add: not necessarily in that order!!!

The second is the quality of this area's private/public partnerships. This is evident in the way that public and private sectors work together for community improvement. A prime example of this is the 10,000 foot runway upon which your aircraft just landed. This runway was financed by the taxpayers of Battle Creek specifically to accommodate our Air Guard Unit. You will hear much more today about this outstanding military facility, the dedicated men and women who are part of it, and the ways our community embraces their important work.

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Thank you, again, for visiting Battle Creek. We hope you leave here today as convinced as we are that Battle Creek is an exceptional host city for this exemplary military unit.



**Battle Creek Tax Increment Finance Authority**  
4950 West Dickman Road  
Battle Creek, Michigan 49015  
Telephone: (269) 962-3682 Fax: (269) 962-8096

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My name is Karl Dehn. I am the Administrator of the Battle Creek Tax Increment Finance Authority (TIFA), which is established by Michigan public act to create jobs and enhance the tax base of Battle Creek. Through the use of tax increment financing, we capture a portion of the incremental increase in property tax values from within a large development district that encompasses the W.K. Kellogg Airport and the adjacent 3,000-acre Fort Custer Industrial Park. We are required by law to use that tax capture to make infrastructure improvements and fund other activities that will further economic growth. We are also the primary funding body for Battle Creek Unlimited, the economic development arm for the City of Battle Creek.

We fully recognize that jobs and economic activity at Kellogg airport enhance our ability to diversify our economic base and further private investment. Defense jobs are equally as important to us as civilian jobs. The 13 members of our TIFA's Board of Directors are each committed to supporting the needs of the Battle Creek Air National Guard Base. I will note that among our Board members are a former Commander of the Battle Creek Air National Guard Base, a member of the Michigan Aeronautics Commission, and the Chief Operating Officer of Duncan Aviation in Battle Creek.

We have never hesitated to put our resources towards supporting the Battle Creek Air National Guard Base and the 110<sup>th</sup> Fighter Wing. In 2004, we purchased acreage south of the airport at a cost of \$580,000, to preclude residential encroachment. Our TIFA funds 40% of airport operations and funds 100% of the local funding requirements for airport capital improvement projects. Over the last five years, we have provided an average of \$1.16 million per year in funding for airport operations and capital infrastructure improvements combined. In addition, our government affairs staff works diligently to ensure federal appropriations continue to fund airport improvements here in Battle Creek.

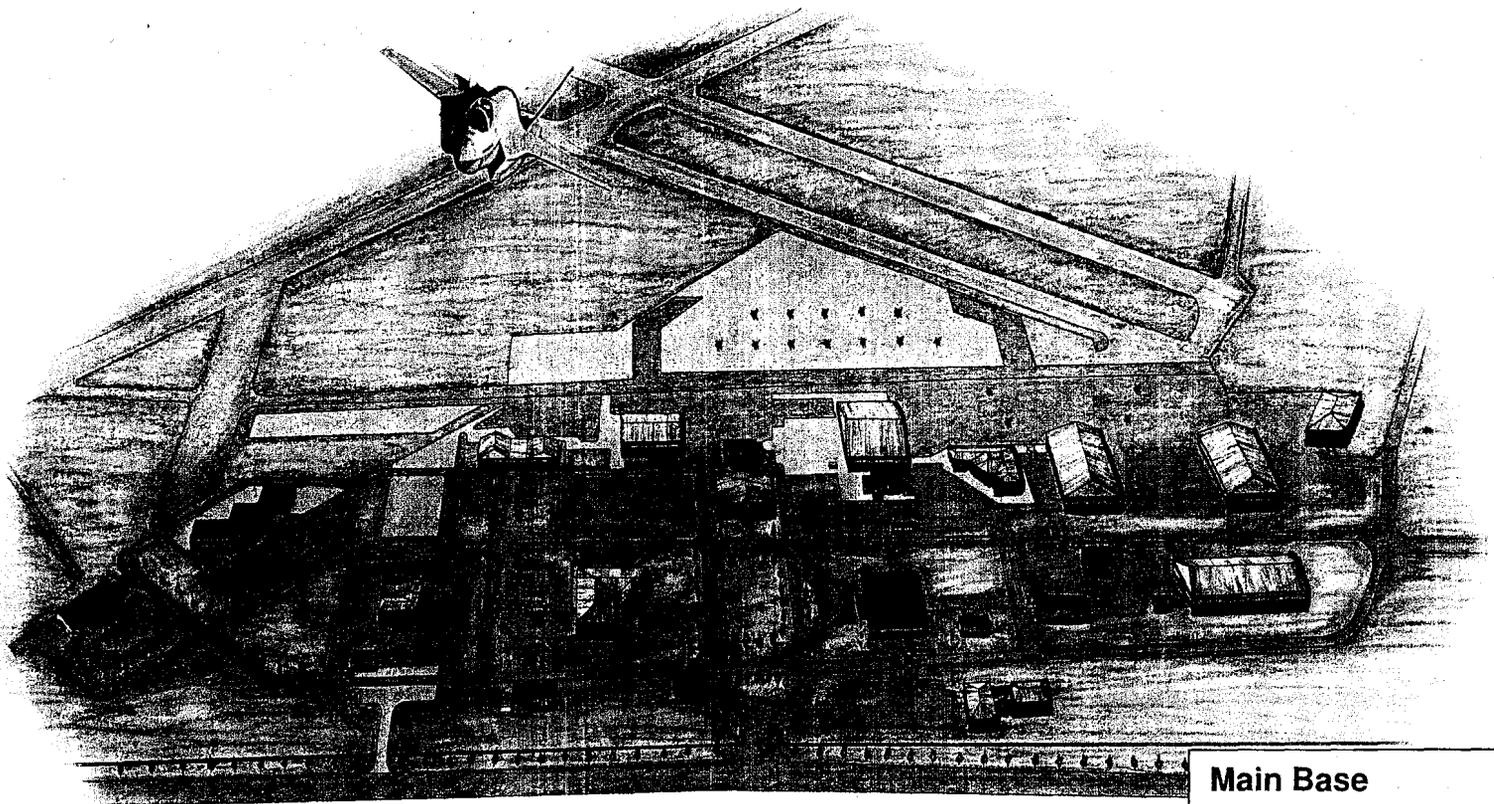
We have always come to the table for the 110<sup>th</sup>. When recent discussions between the nearby Michigan Army National Guard, the US Navy Reserves and US Marine Corps Reserves indicated the need for a land bridge between the Air National Guard Base and the Fort Custer Training Center, we pledged to assemble property and make the project succeed.

We are also the financial force behind the new parallel runway now in the airport's master plan, as well as continuing improvements for air traffic control.

This airport is an asset to the City of Battle Creek, and we will always advocate and support improvements that serve both civilian and military growth.

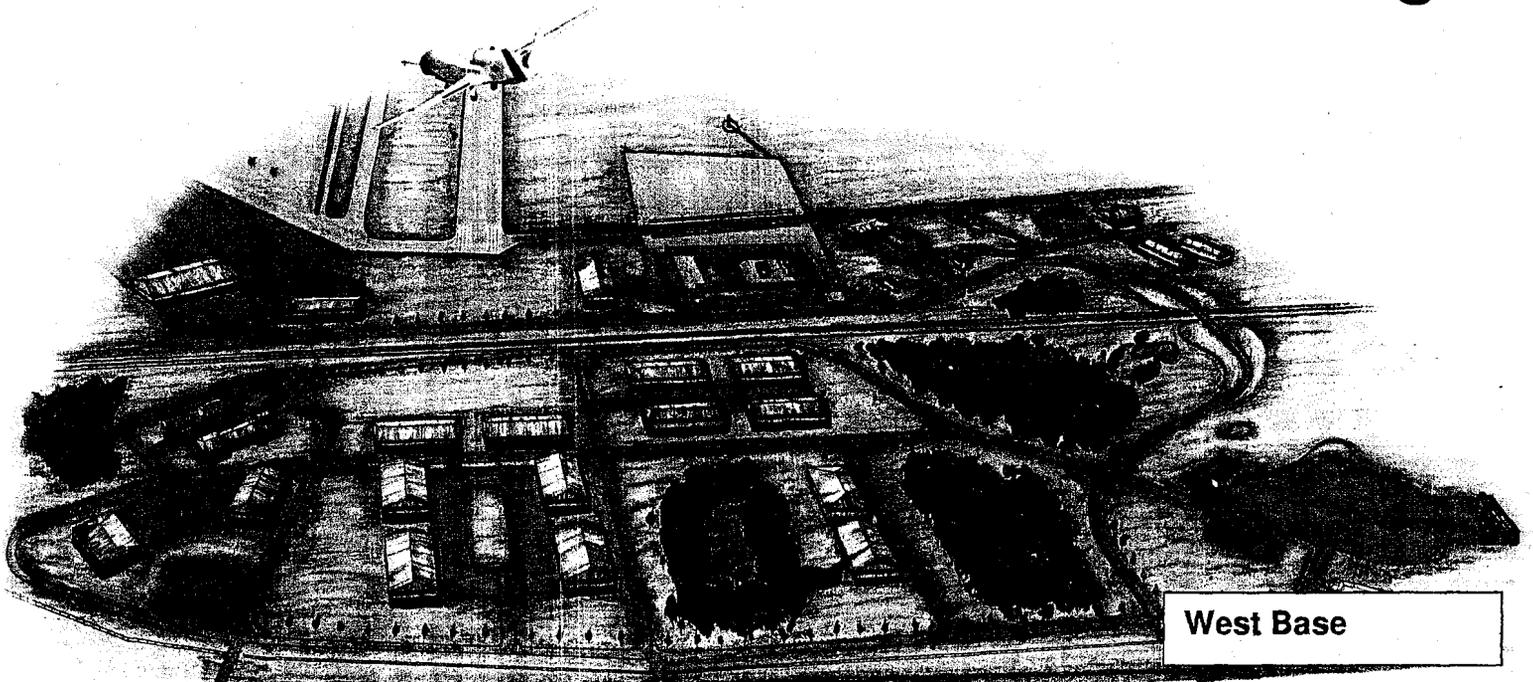
Karl Dehn, Administrator  
Battle Creek Tax Increment Finance Authority

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Main Base

# 110<sup>th</sup> Fighter Wing Land Use Plan Battle Creek Air National Guard Base, Michigan



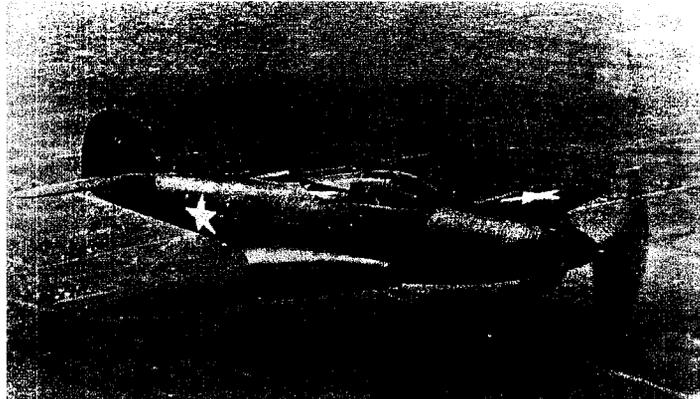
West Base

The purpose of this study is to provide a comprehensive land use plan to identify areas available for development at the Battle Creek Air National Guard Base. This information will give key personnel in the base development process detailed information on space available for future development, identify potential constraints on land use, and identify types of functions that would be best suited to the areas available. The study also identifies constraints associated with "open" areas. An initial base master plan was completed in 1987. Since that time various new facilities have been constructed, as well as several renovations and additions to existing facilities. In addition, the master plan was prepared reflecting a contingent of 18 OA-37 aircraft, which are no longer operating on the premises. This land use plan includes construction activities that have occurred, as well as those that are under construction or funded/planned for the near future. It takes into account the current A-10 squadron and future mission planning.

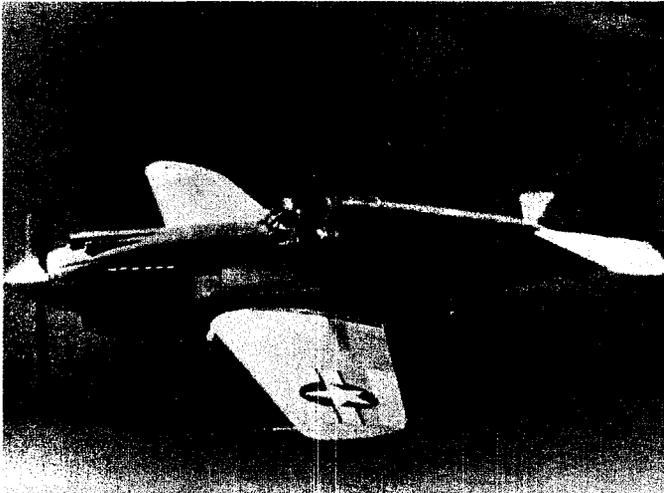


## History and Mission

**History:** The 110 Fighter Wing lineage traces from the 361st Fighter Group, 375th Fighter Squadron, assigned to the Eighth Army Air Force during World War II. The 361<sup>st</sup>, based in Bottisham,



England during the war, flew the famed P-47 Thunderbolts and P-51 Mustangs. When the War ended, these units deactivated but in 1946 were reactivated as the 127th Fighter Group and 172nd Fighter Squadron, respectively.



Governor Kim Sigler designated Kellogg Field as the location for the 172nd Fighter Squadron in 1946. One year later, P-51 Mustangs arrived as the first assigned combat aircraft. In 1951, the 172nd FS mobilized for the Korean War and became attached

to the 56th Fighter Wing at Selfridge AFB, MI. After deactivation, the 172nd continued flying the Mustang, re-designated the F-51 by the Air Force, until it acquired its first jet aircraft in 1954.

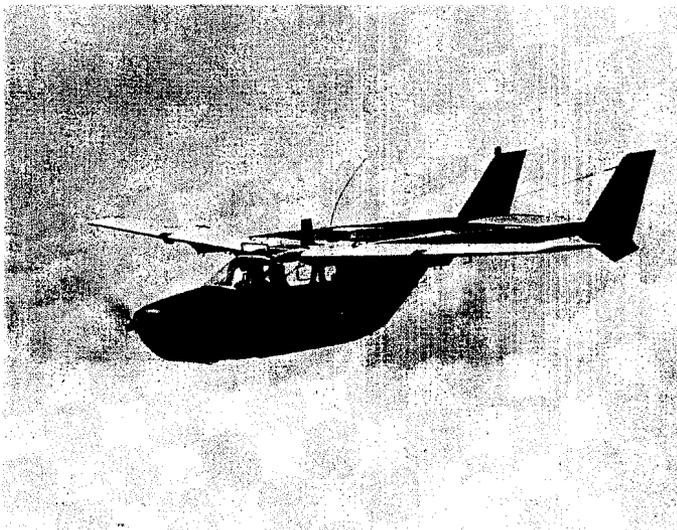
From 1954 through 1957, the 172nd carried out fighter-bomber and fighter-interceptor missions flying the F-86 Sabre and F-89 Scorpion. In 1956, the unit expanded when National Guard Bureau changed the unit from squadron to group status and designated the new group the 110 Fighter Group.



In 1958, the unit mission changed to tactical reconnaissance and the unit began flying the RB-57 Canberra. The unit flew RB-57's thirteen years, longer than any other assigned aircraft to the 110th.



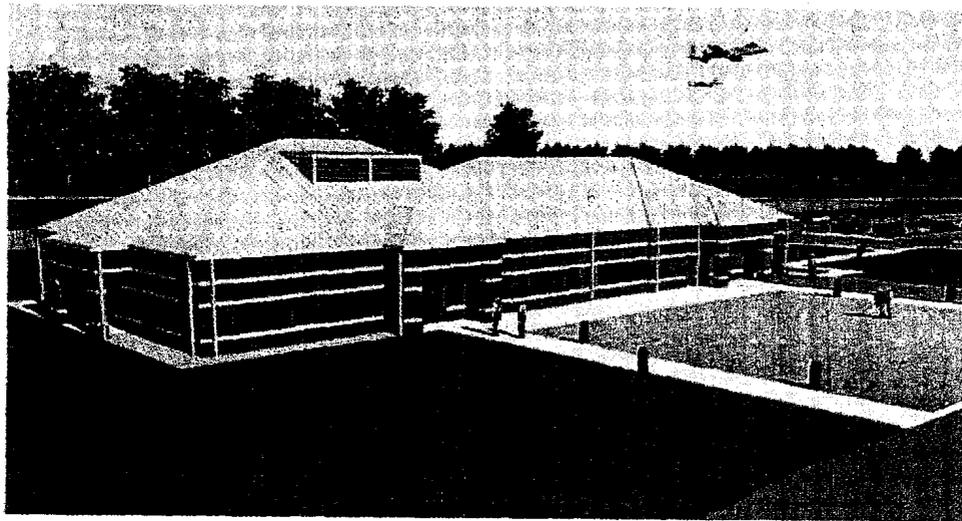
In June 1971, the unit was redesignated the 110 Tactical Air Support Group. The new



mission changed to tactical air support and forward air control (FAC) tasking. The unit began this mission flying the propeller driven O-2 Skymaster, then in 1980 converted to jets again, flying the

OA-37 Dragonfly. In 1991, the 110 TASG transitioned to a new aircraft, the A-10 Thunderbolt. Since the arrival of the A-10 in 1991, the base has executed over \$28 million dollars in new facility construction including 29 new facilities.

**Mission:** The Battle Creek Air National Guard Base, located at W.K. Kellogg Regional Airport, received federal recognition in September 1947. During its over fifty years, the unit has carried out a variety of combat reconnaissance and tactical air support



missions. It has grown from sixty-six men who attended the first squadron Unit Training

Assembly (UTA) in 1947, to almost one thousand men and women who comprise the 110 Fighter Wing today.

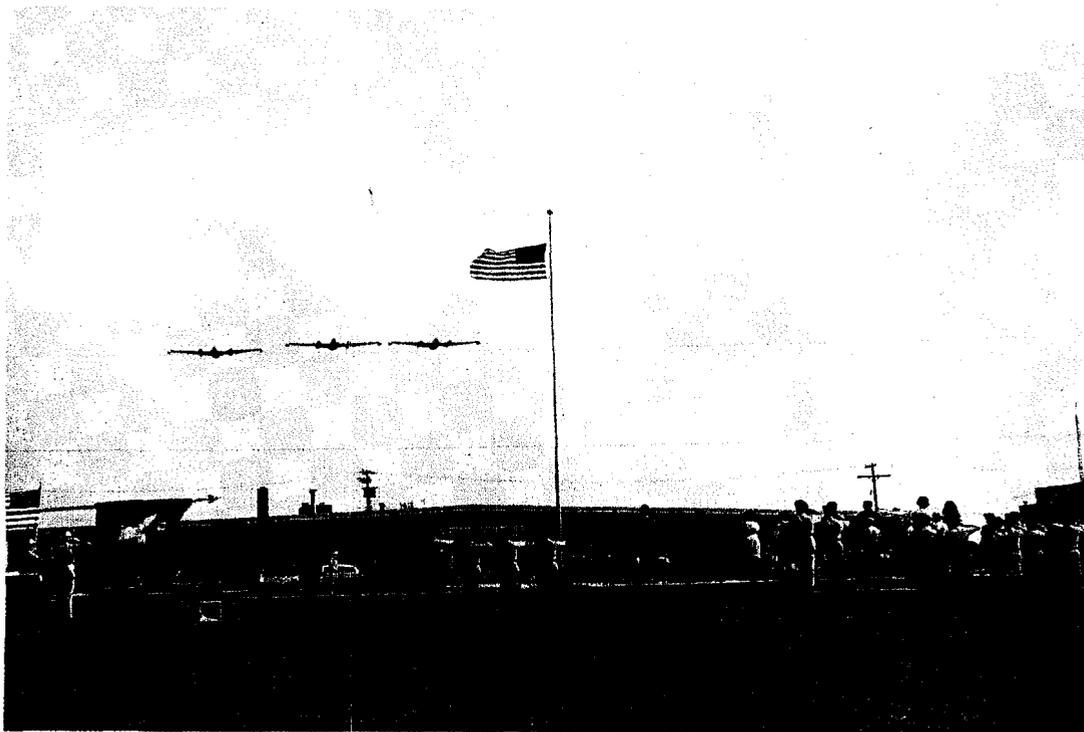


Since 1991, the 110 Fighter Wing at Battle Creek Air National Guard Base has been federally tasked with a close air support (CAS) mission. This includes the

capability to carry out a forward air control (FAC) role.

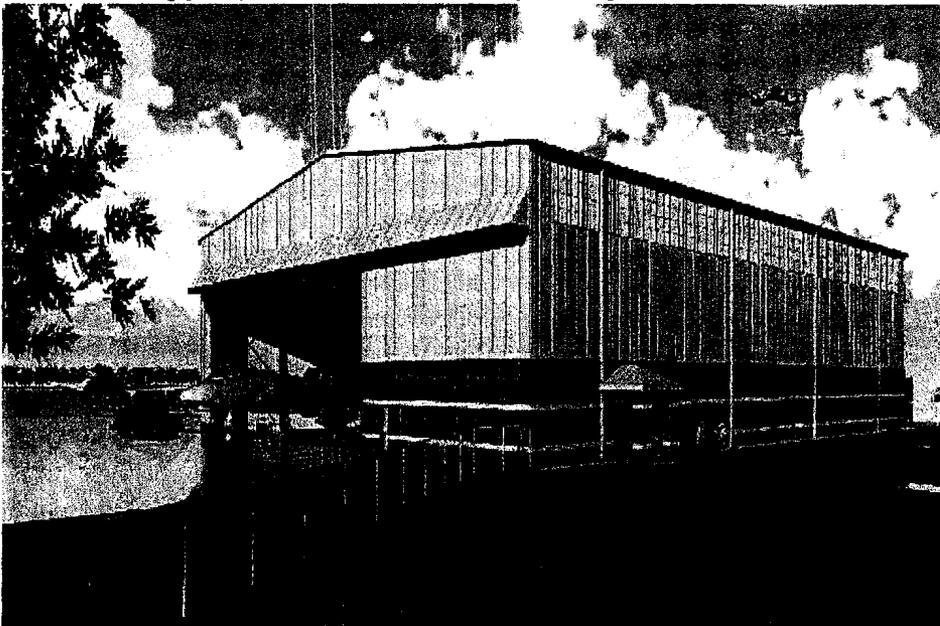
Mission success depends on the contributions of all members of the 110 Fighter Wing, who work together to provide a variety of support and administrative functions. Members require continual training to maintain their readiness and capability for assigned missions. Members continually deploy, throughout the United States and overseas, for training and to support active duty forces. During peacetime, the 110 Fighter Wing comes under the jurisdiction of the Michigan Governor through the Adjutant General, Department of Military and Veterans Affairs, Michigan National Guard. When directed by the state, the 110 Fighter Wing can aid in natural disasters, assist in controlling civil disorders, and provide humanitarian relief activities.

When federally activated by the President of the United States, the 110 Fighter Wing falls under its gaining command, Air Combat Command (ACC) with assignment to the Eighth Air Force, headquartered in Louisiana. The 110 Fighter Wing might be activated in its entirety to carry out its primary mission. In addition, wing personnel possess the individual skills and abilities needed to deploy as single or small group elements in support of worldwide tasking.



In real-world operations, close air support requires air action against any hostile targets that threaten or lie in proximity to friendly forces. The CAS role also requires coordinated integration of air missions with the movement of those forces: Forward air controllers (FACs) assist in that coordination by forward air observation in the battle area. From there, they direct the action of combat aircraft specifically engaged in support of land forces.

The 110- Fighter Wing flies the Fairchild Republic A/OA-10 Thunderbolt II. The Air Force acquired the Thunderbolt II specifically for the CAS role. The A-10 inherited its name from the historic P-47 Thunderbolt, often used for close air support during World War II. The current Thunderbolt II can easily maneuver at low speeds and altitude. This gives it the ability to deliver accurate and deadly firepower, especially against enemy tanks. Its rugged platform allows it to fly a long combat radius, loiter for lengthy periods

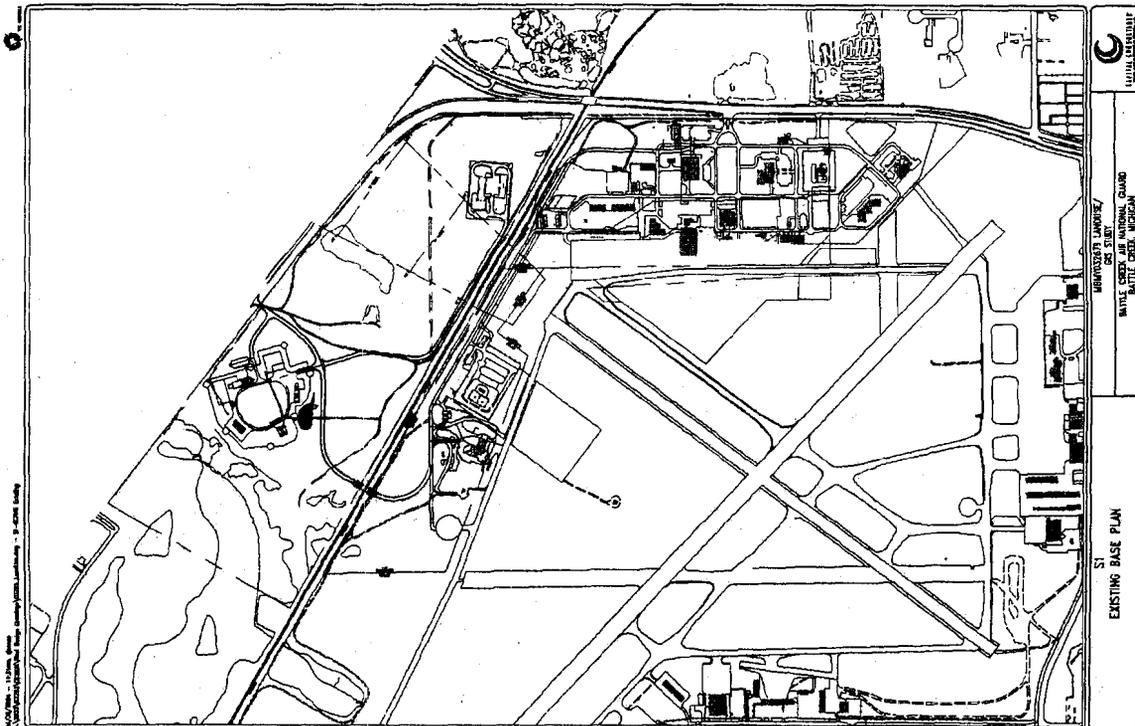


in the battle area, and still survive in a hostile environment. Its design permits operation from forward area

bases, which often have limited service facilities and short takeoff and landing access.

**Existing Facilities/Overall Base Plan – Sheet S1**

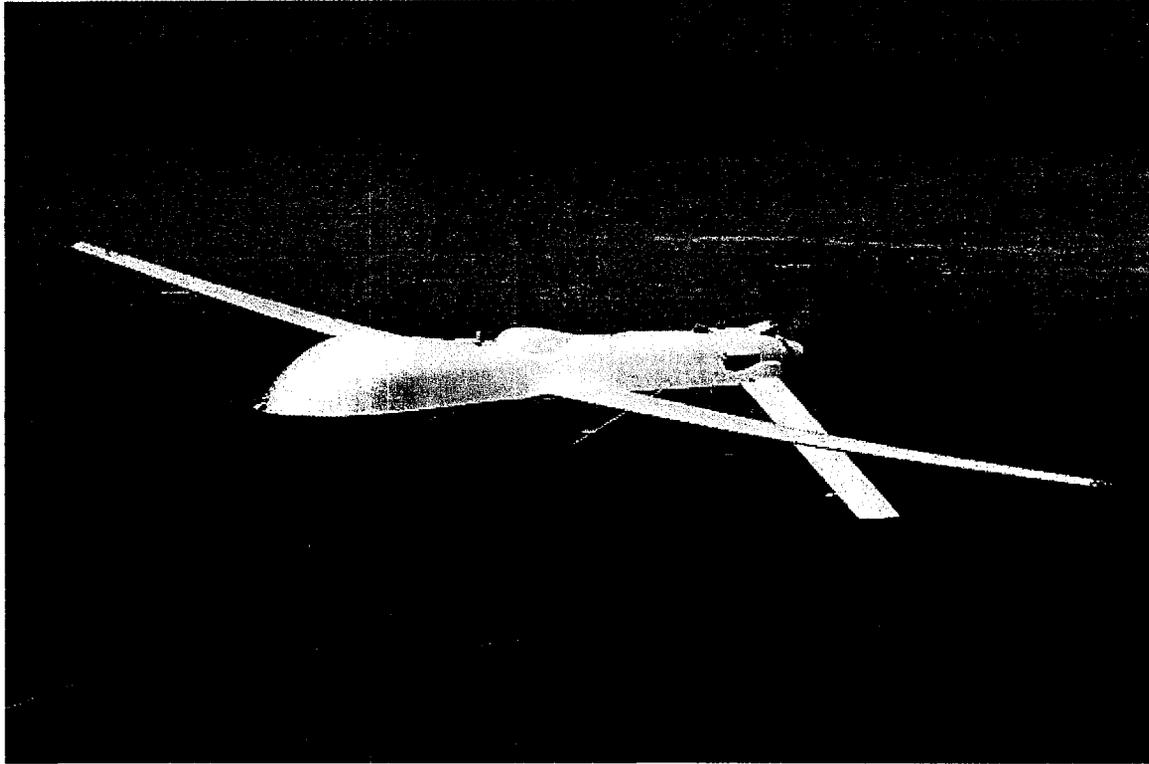
The existing base consists of approximately 320 acres of land leased from the City of Battle Creek adjacent to the W.K. Kellogg Airport, located in Battle Creek, MI. The current lease expires in 2036. The base is currently pursuing a new lease to be signed in 2009 and expiring in 2059. The base is bounded by the airport on the east and south sides, Martin Luther King Drive on the West, and Dickman Road on the north. The base is divided into east and west sides by the Canadian National Railroad, which runs north and south through the center of the base. The east side is the original base site, and contains the majority of the existing base facilities. The recently completed Munitions project included construction of a bridge over the railroad tracks, connecting the two sides of the base and opening the west side for future development. Apron and taxiway space are located on the south side of the base.



## Utilities

The east side of the base is currently served electric from Consumers Energy, natural gas from SEMCO, and domestic water and sanitary sewer from the City of Battle Creek. These services are each routed to a single service point, adjacent to the main entrance, and distributed on base. The base is provided communication services through a main feed east of the main gate off Dickman Road. The main feed is then distributed at building 6905, with plans to put the main hub in building 6904 in the near future. On-site storm utilities are collected and routed to a detention pond on the west parcel.

The west side of the base has a separate electric service from Consumers Energy, routed from Martin Luther King Drive. The Munitions complex and Vehicle Maintenance complex each have separate gas feeds from SEMCO. Storm drainage is performed with local (within or adjacent to each complex) on-site drainage and retention. Utility pipes under the Canadian National Railroad right of way provided as part of the Vehicle Maintenance Project provide the opportunity to loop electrical and water service giving the base a redundant source in case of service interruption.

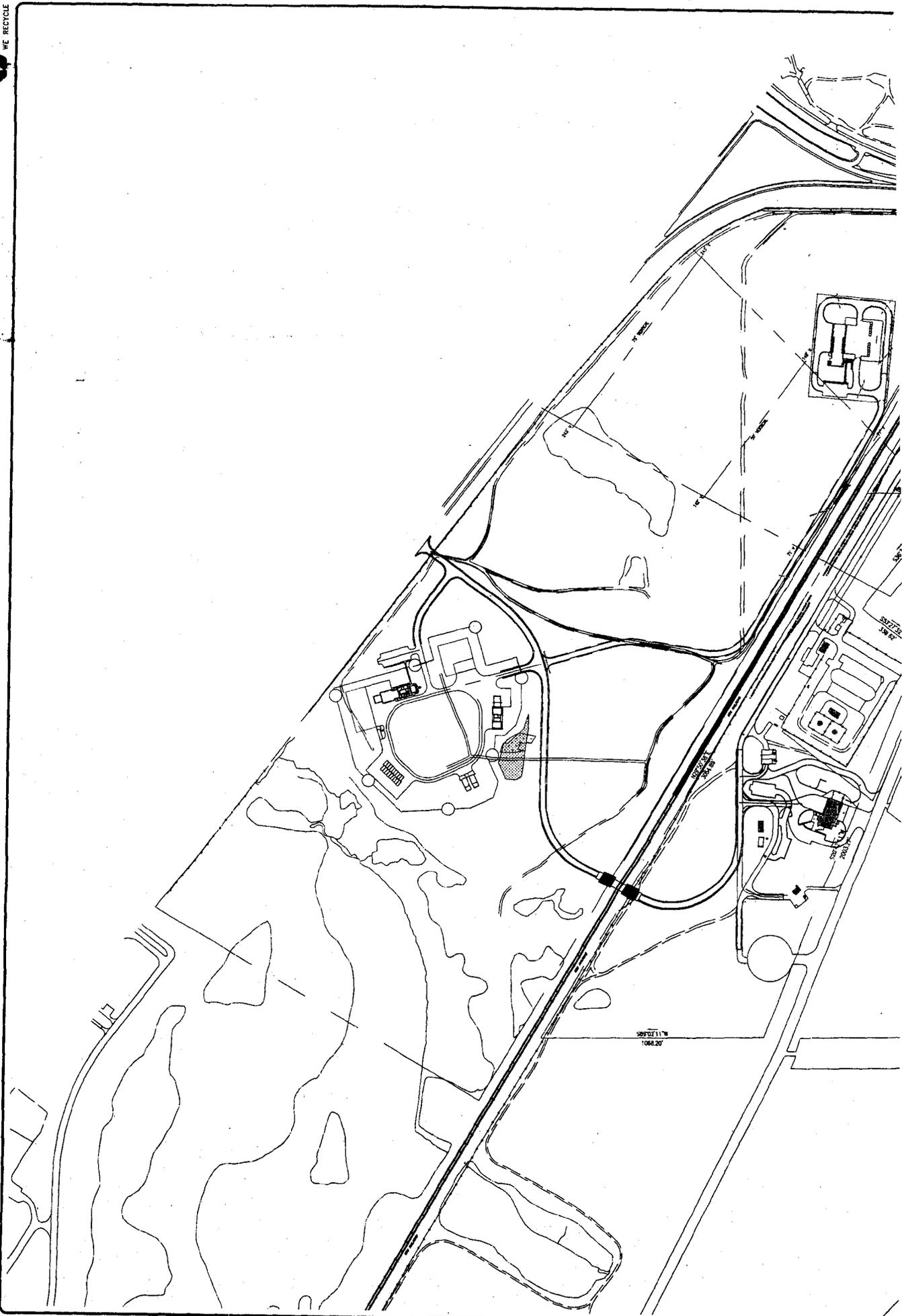


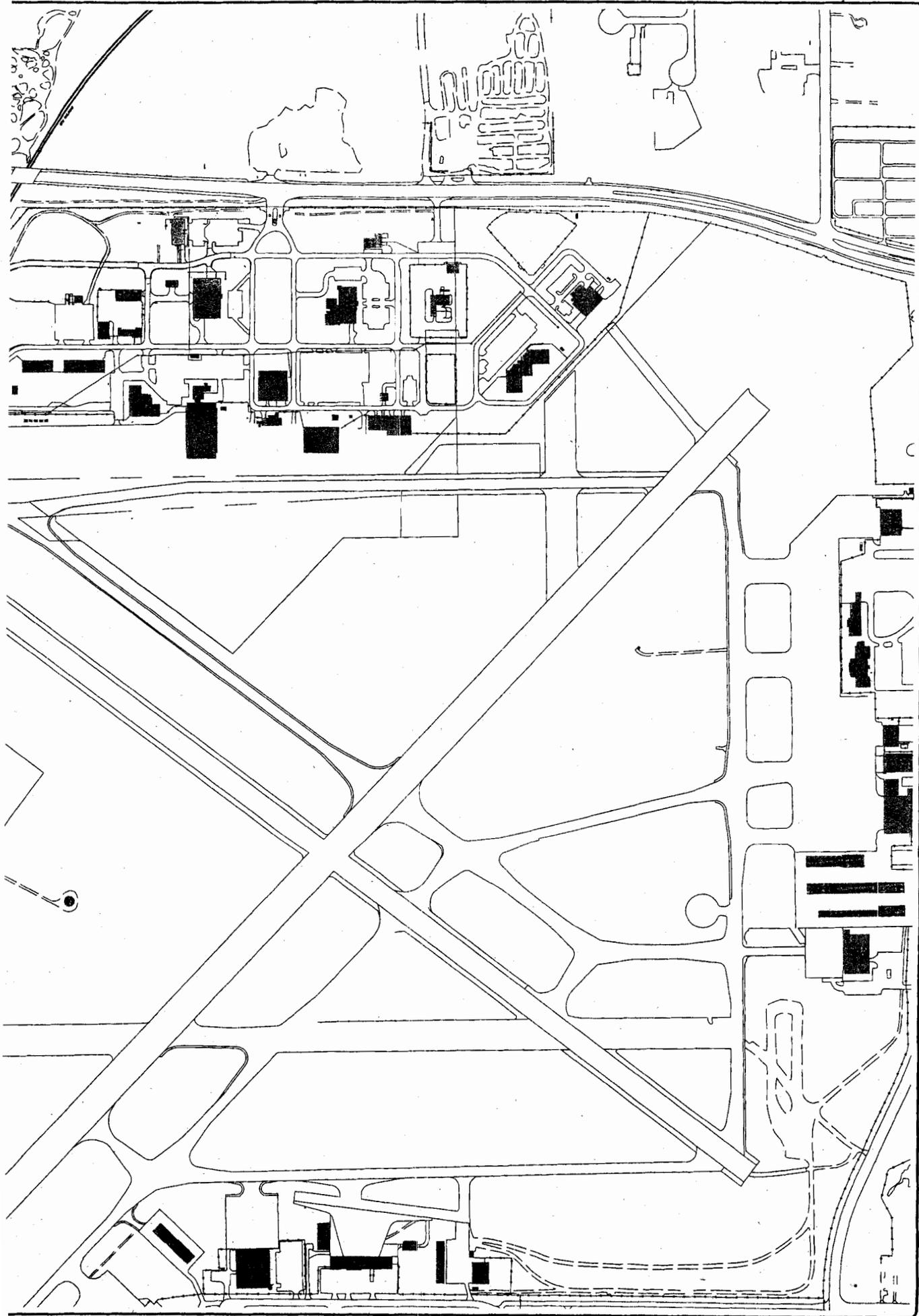
### **Ground Transportation Network**

The existing ground transportation network consists of a main access gate off Dickman Road with two alternate gates. The first alternate gate is located east of the main gate with access from Dickman Road. The second alternate gate is located adjacent to the new munitions complex off Martin Luther King Drive. Existing streets and parking are in good condition and are adequate to handle existing traffic loads as well as any loads conceivably generated by new missions. Existing base parking is adequate to meet current loads. There is an on-going effort to bring the existing parking lots into conformance with AT/FP standards. This should not have a significant impact on capacity.



Jun/06/2005 - 3:36pm, jgilroy  
S:\2003\03293\DESIGN\Final Design Drawings\03293\_LandUse.dwg - S1-BCANG Existing





S1  
EXISTING BASE PLAN

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GIS STUDY

BATTLE CREEK AIR NATIONAL GUARD  
BATTLE CREEK, MICHIGAN

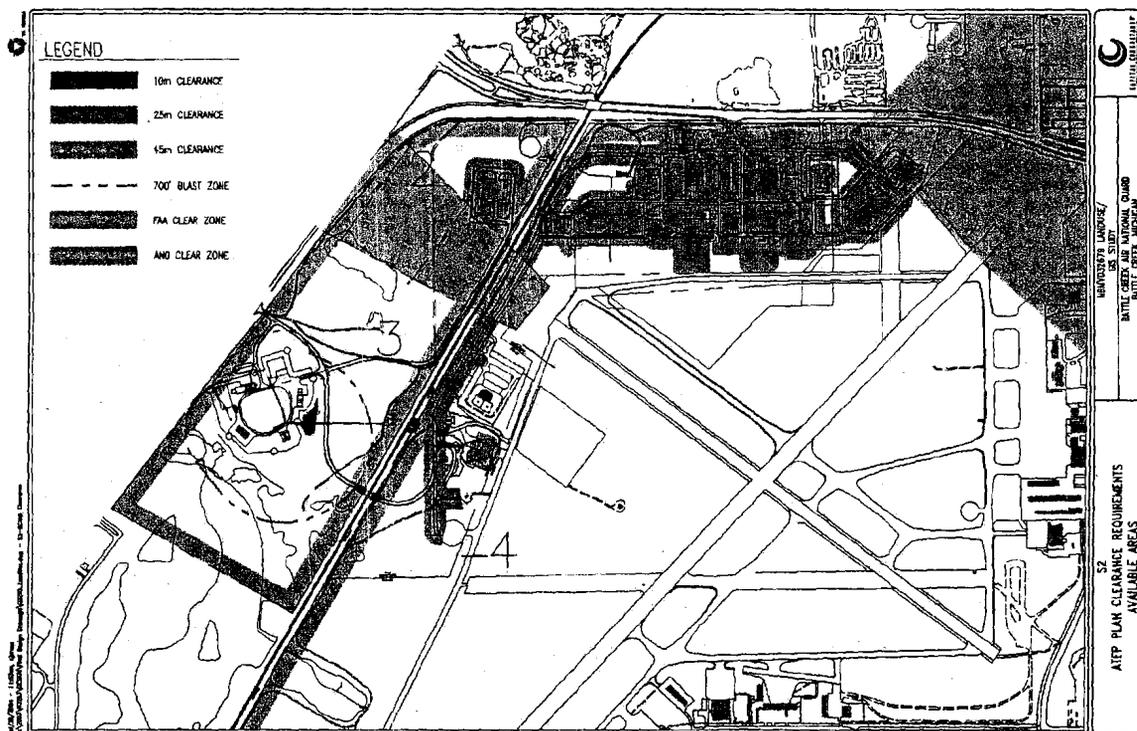


The existing Civil Engineering building site and adjacent storage buildings are slated for replacement. The new Civil Engineering Complex will be located away from the existing site and will open up an area adjacent to the existing aircraft parking ramp. This site would be ideal for new facilities requiring access to the airfield (Area 1). This also has the potential for the existing aircraft parking apron to be expanded if required to support a new mission. Possible other areas for future construction include northwest of the new Vehicle Maintenance complex (Area 2), northwest of the new railroad overpass (Area 3), and south of the existing run-up pad (Area 4). Area 5 is immediately adjacent to the south side of runway 13's clearance zone. Area 6 is immediately north of the existing storm detention basin on the west parcel.



## Development Restrictions – Sheet S2

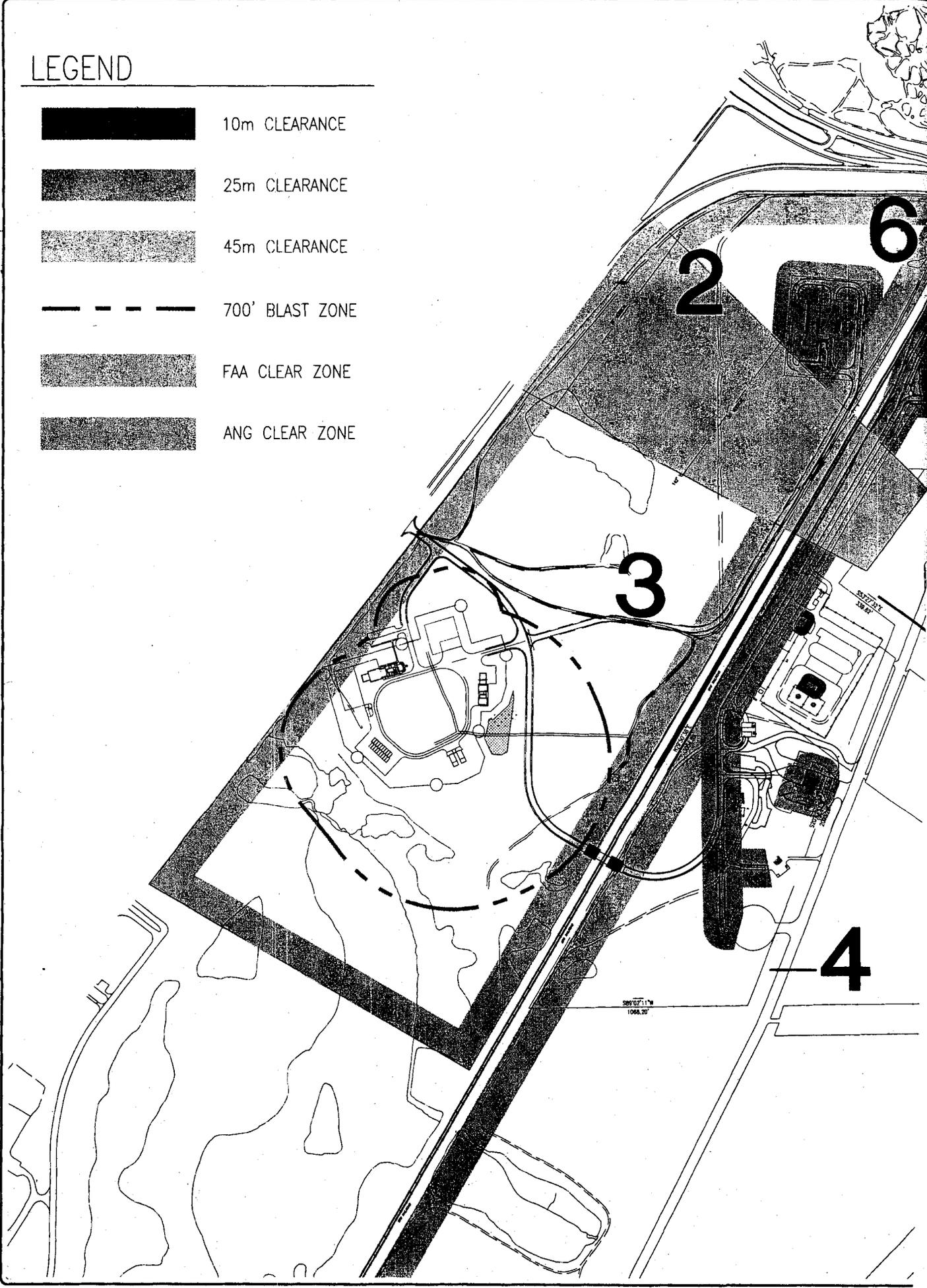
Current requirements for AT/FP have resulted in several setback requirements to minimize the occurrence and impact of attacks on base. These requirements are dictated in UFC 4-010-01, dated 8 Oct 2003. In summary, clear zones are required of 45 meters (149 feet) from the uncontrolled perimeter fence around the base, including the railroad tracks; 25 meters (82 feet) from buildings with more than 10 occupants, parking areas and roadways; and 10 meters (33 feet) from all other buildings. These setback requirements are summarized on sheet S2. In addition, the required FAA vertical clearances are shown for runway 13/31, and the ANG Clearance Zone 1 is shown for runway 5/23. Explosive quantity-distance zones for the munitions complex have also been included on this plan.





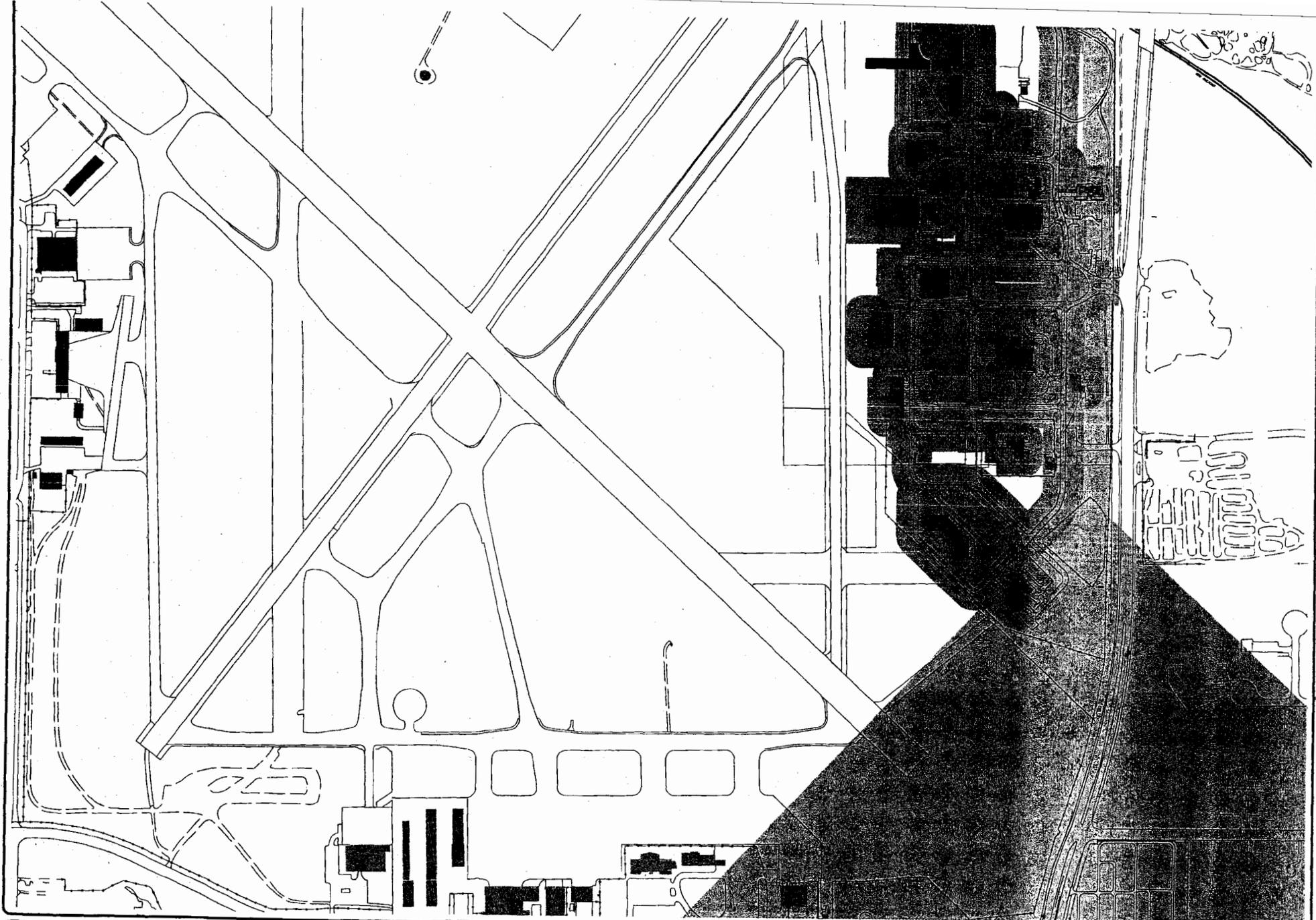
# LEGEND

-  10m CLEARANCE
-  25m CLEARANCE
-  45m CLEARANCE
-  700' BLAST ZONE
-  FAA CLEAR ZONE
-  ANG CLEAR ZONE



Jun/06/2005 -- 3:38pm, jgilroy  
S:\2003\03293\DESIGN\Final Design Drawings\03293\_LandUse.dwg -- S2-BCANG Clearance

589 07' 11" W  
1086.20'

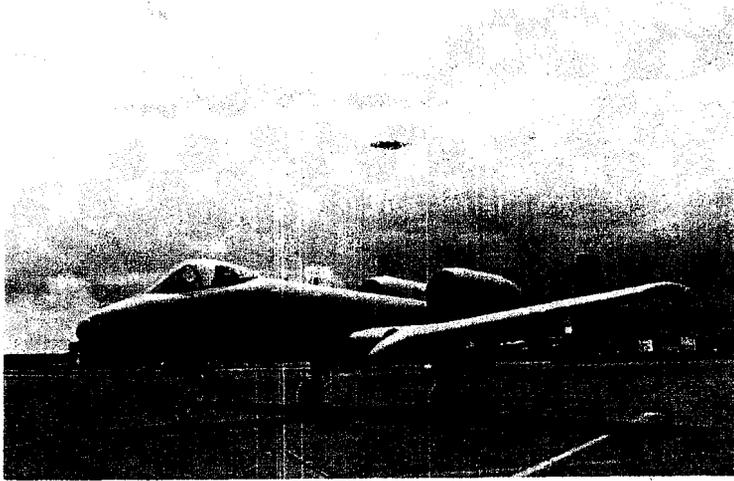


S2  
ATFP PLAN CLEARANCE REQUIREMENTS  
AVAILABLE AREAS

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GIS STUDY  
BATTLE CREEK AIR NATIONAL GUARD  
BATTLE CREEK, MICHIGAN

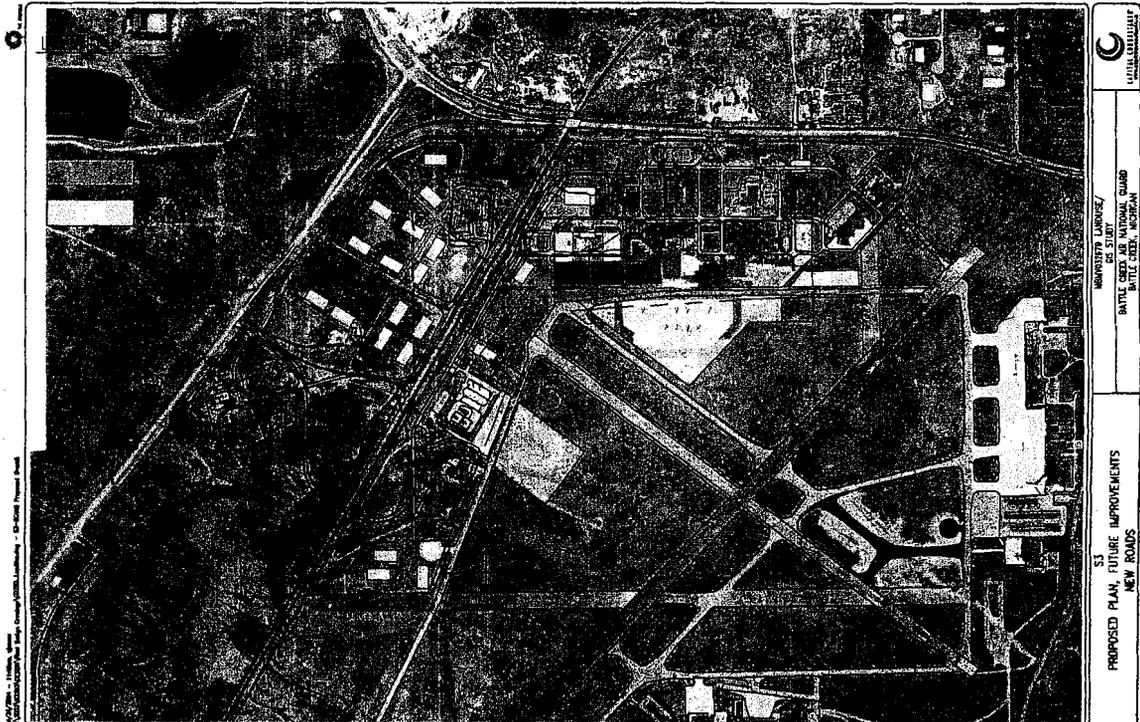


## Future Mission – Available Areas



The existing base affords several excellent areas for future development containing approximately 69 acres of land suitable for several diverse uses (Sheet S3). Future planning takes

into account the continued operation of the existing squadron of A-10's, with the potential addition of future missions. These future missions may replace the current mission, augment it, or perform a completely separate function. Future missions could be located in new additional hangars, and will require additional support facilities.





Jun/06/2005 - 3:41pm, jgilroy  
S:\2003\03293\DESIGN\Final Design Drawings\03293\_LandUse.dwg - S3-BCANG Proposed Overall





S3

PROPOSED PLAN, FUTURE IMPROVEMENTS  
NEW ROADS

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# LEGEND

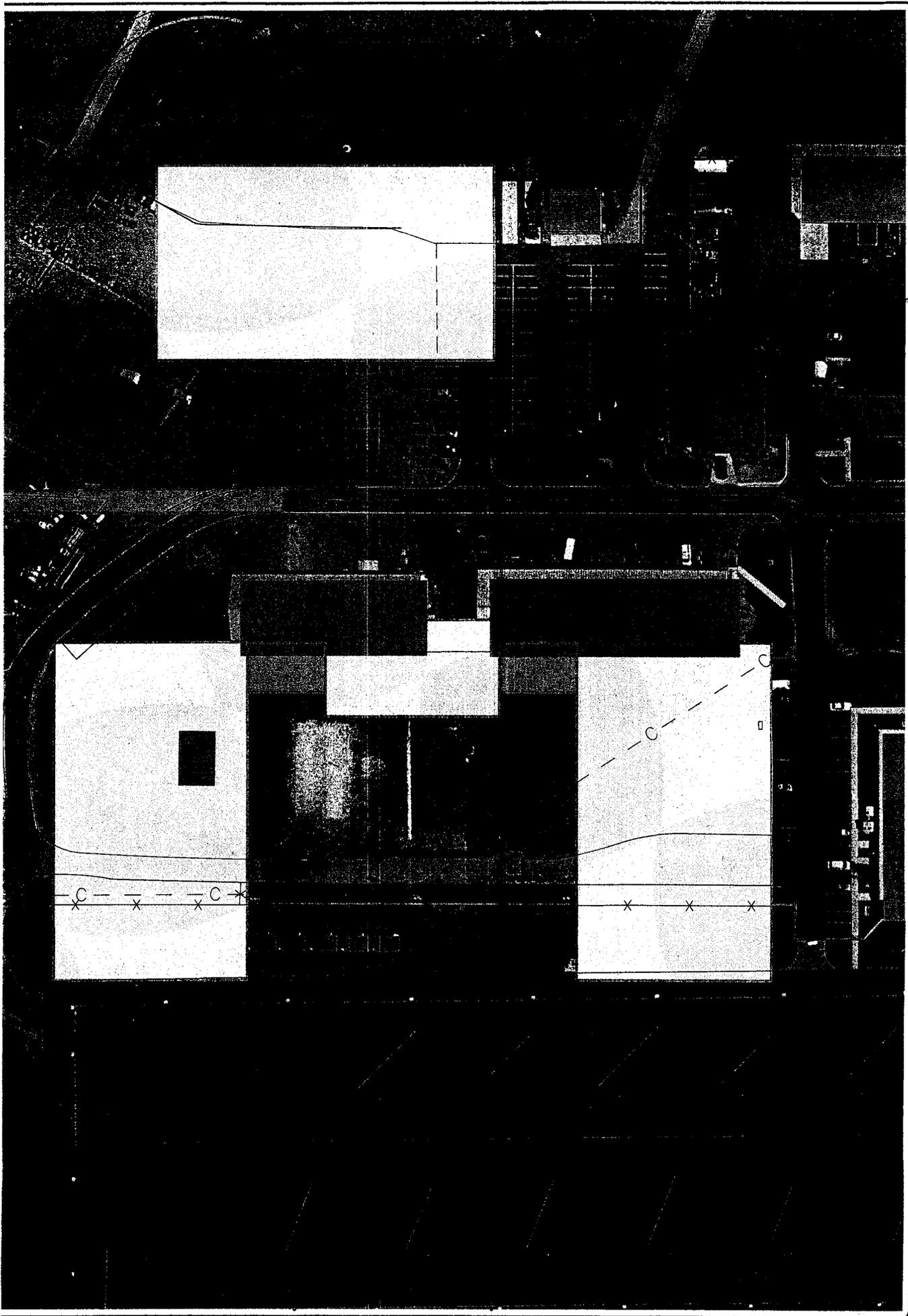
- PROPOSED BUILDINGS AND ROADS
- - - - - 700' BLAST ZONE
- - - - - 1200' BLASTZONE
- ▒ PROPOSED ROADS
- PROPOSED BUILDINGS

# AREA KEYPLAN

SCALE: NO SCALE

Jun/06/2005 - 3:43pm, jg/roy  
S:\2003\03293\DESIGN\Final Design Drawings\03293\_LandUse.dwg - S4-BCANG Area 1





S4

AREA 1 ENLARGED PLAN

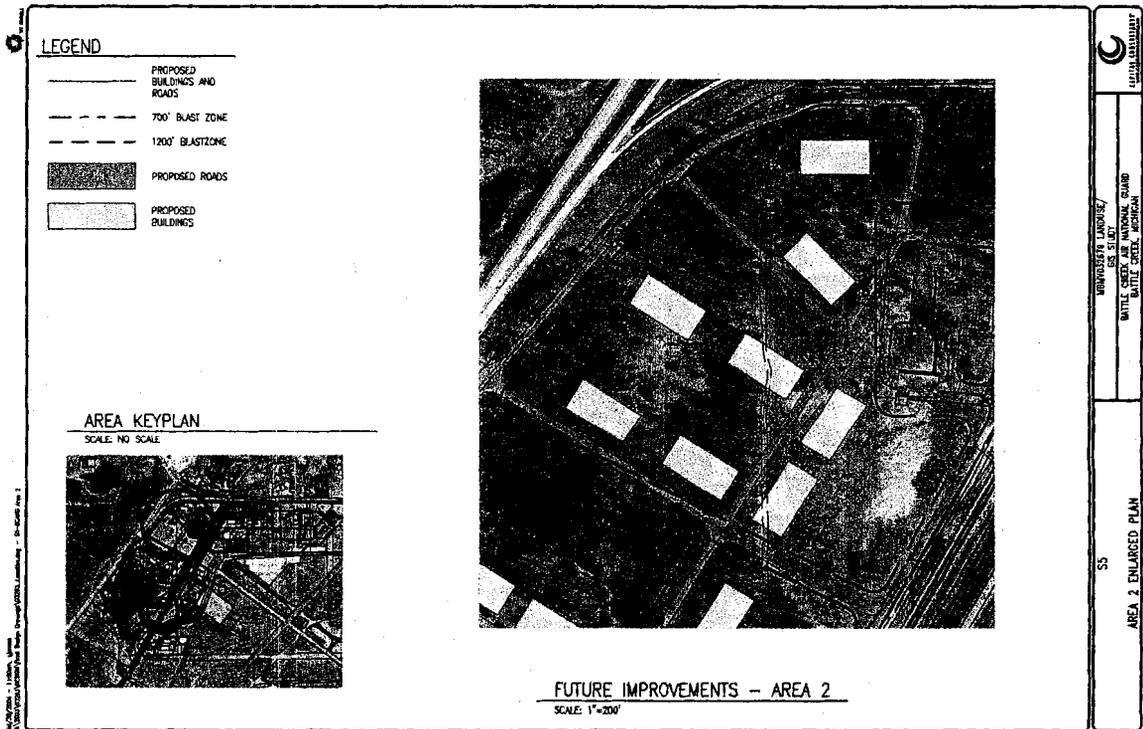
MBMV032679 LANDUSE/  
GIS STUDY

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BATTLE CREEK, MICHIGAN

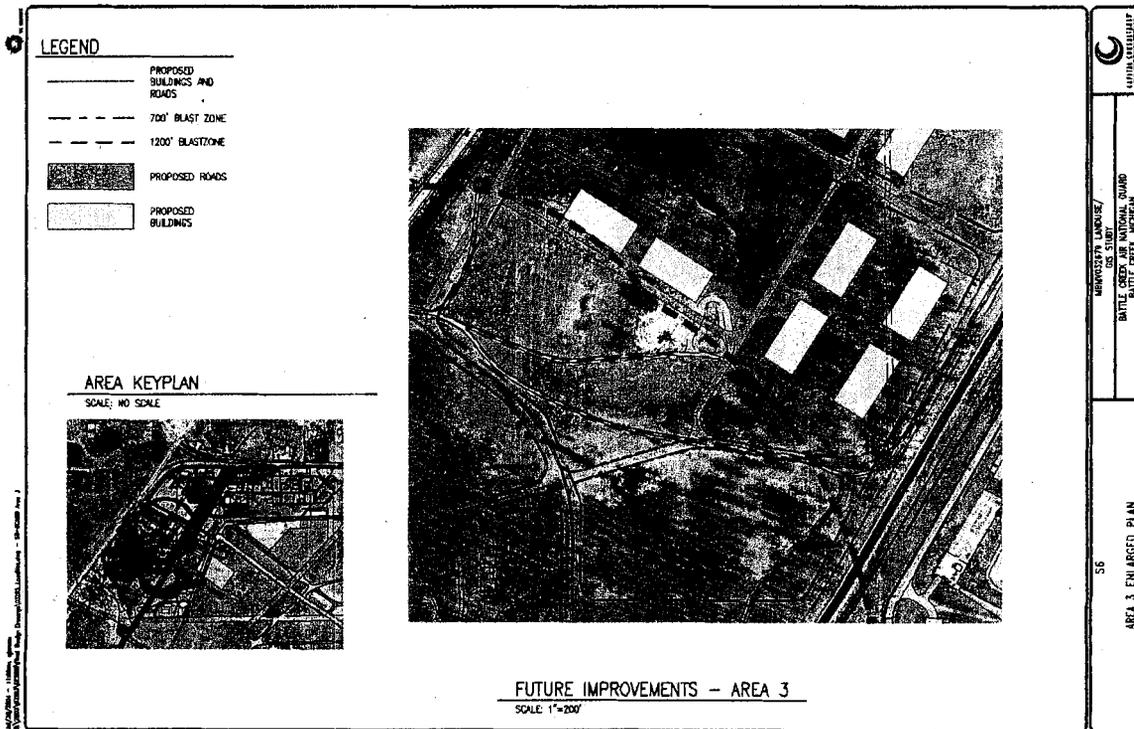


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**Area 2:** Area 2 is located on the west property, has rolling terrain and contains approximately 25 acres of area (Sheet S5); it is the desired location for the replacement for the Civil Engineering facilities. In addition, the area immediately to the south of Area 2, within the FAA clear zone, could be developed provided any structure falls under the 1:20 vertical clearance requirement, as runway 13/31 is not an active ANG runway. Area 2 is ideally suited for support functions or other missions not related to the flightline. The area is large enough to hold the future Civil Engineering Complex and other functions. This area is currently served with gas, water and electric from the adjacent Vehicle Maintenance complex. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Avenue. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.

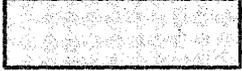


**Area 3:** Area 3 is on the west property, north of the bridge abutment, and contains approximately 12 acres of area (Sheet S6). It consists of lightly rolling terrain. This area is suited for the same types of functions as Area 2. This area is not currently served with gas, water or electric. These utilities could be extended from either the Vehicle Maintenance or Munitions Complex, or directly from Martin Luther King Avenue. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Avenue. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.





# LEGEND

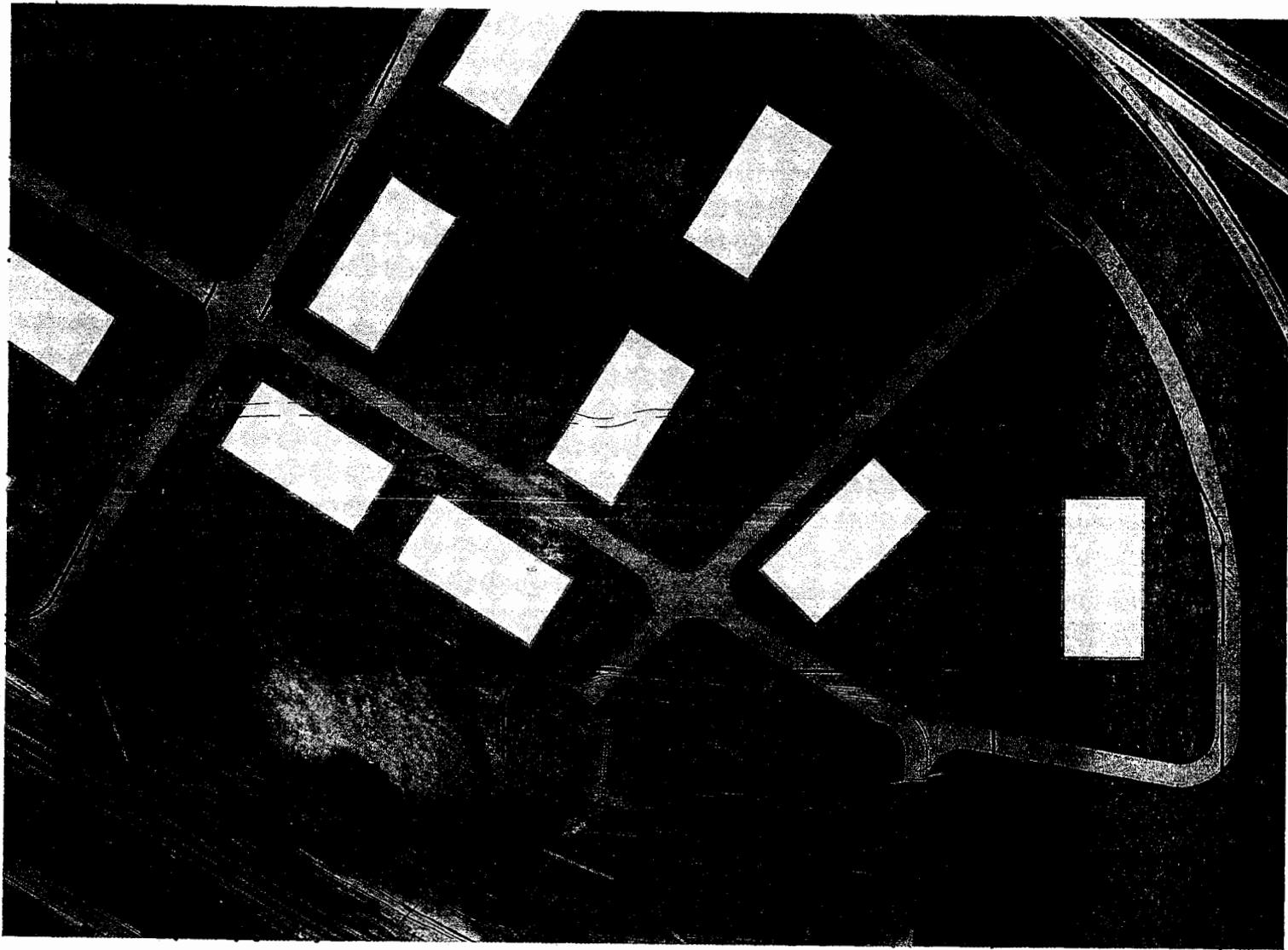
-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

# AREA KEYPLAN

SCALE: NO SCALE



1" = 200'  
AREA IMPROVEMENTS - AREA 2



S5

AREA 2 ENLARGED PLAN

MBMV032679 LANDUSE/  
GIS STUDY

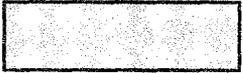
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# LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

# AREA KEYPLAN

SCALE: NO SCALE



IMPROVEMENTS - AREA 3



S6

AREA 3 ENLARGED PLAN

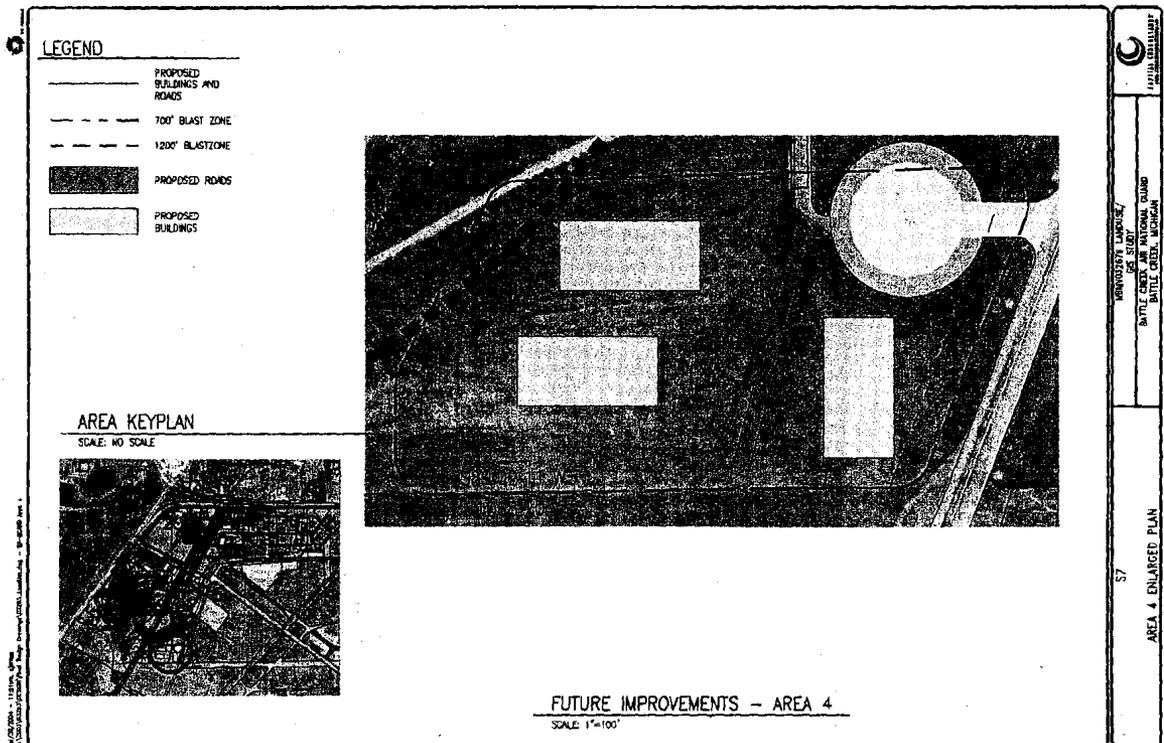
MBMV032679 LANDUSE/  
GIS STUDY

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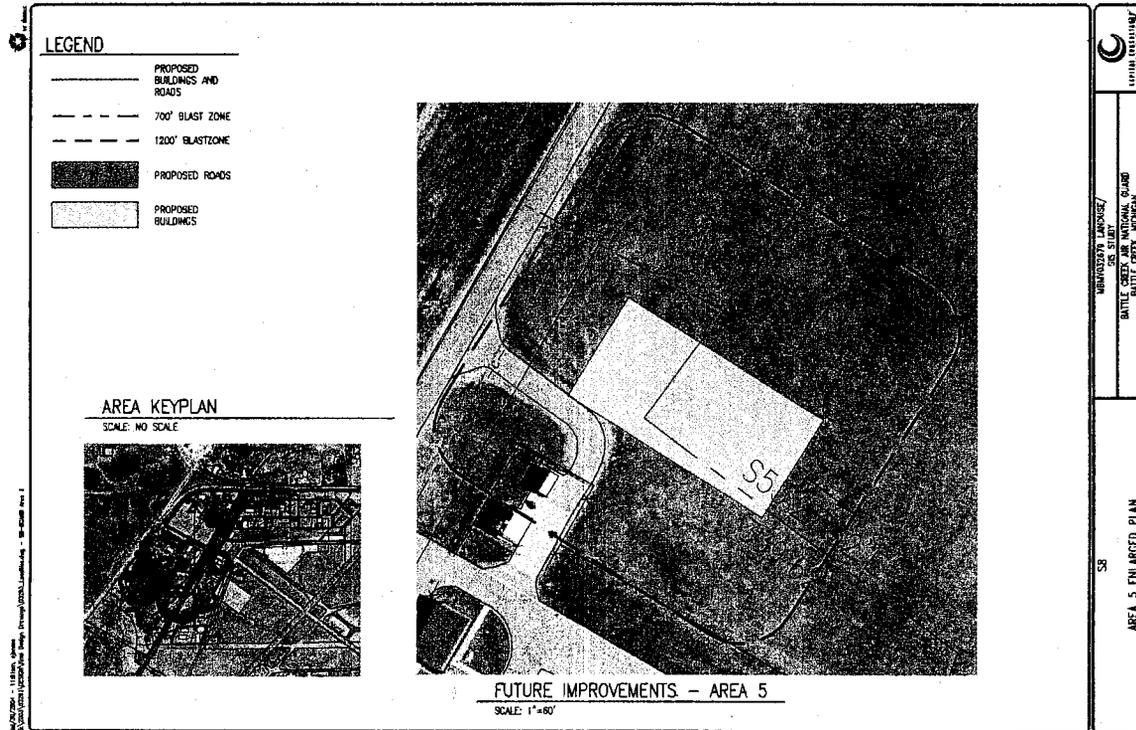


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**Area 4:** Area 4 is south of the existing power check pad, and contains 8 acres of area (Sheet S7). Due to the noise generated by the pad and its location on an isolated part of the base, it would only be suitable for storage facilities not requiring a high degree of security. Utilities would need to be extended from the Fire Crash/Rescue building; this would involve upgrade of the existing sanitary force main.



**Area 5:** Area 5 is the area immediately adjacent to the approach area for runway 13, and contains 3 acres of area (Sheet S8). Due to the proximity of the approach area, it would only be suitable for storage facilities. Utilities could be extended from the fuel depot.



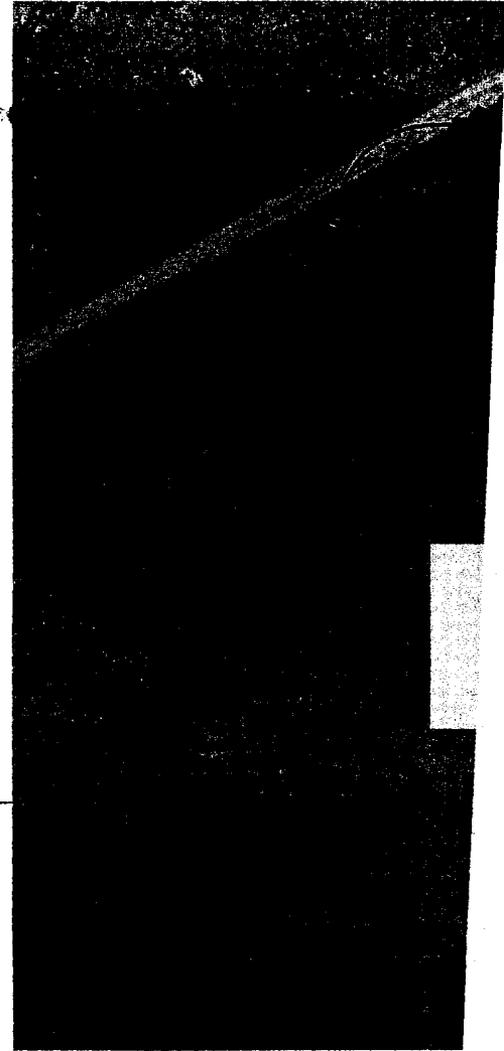


# LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

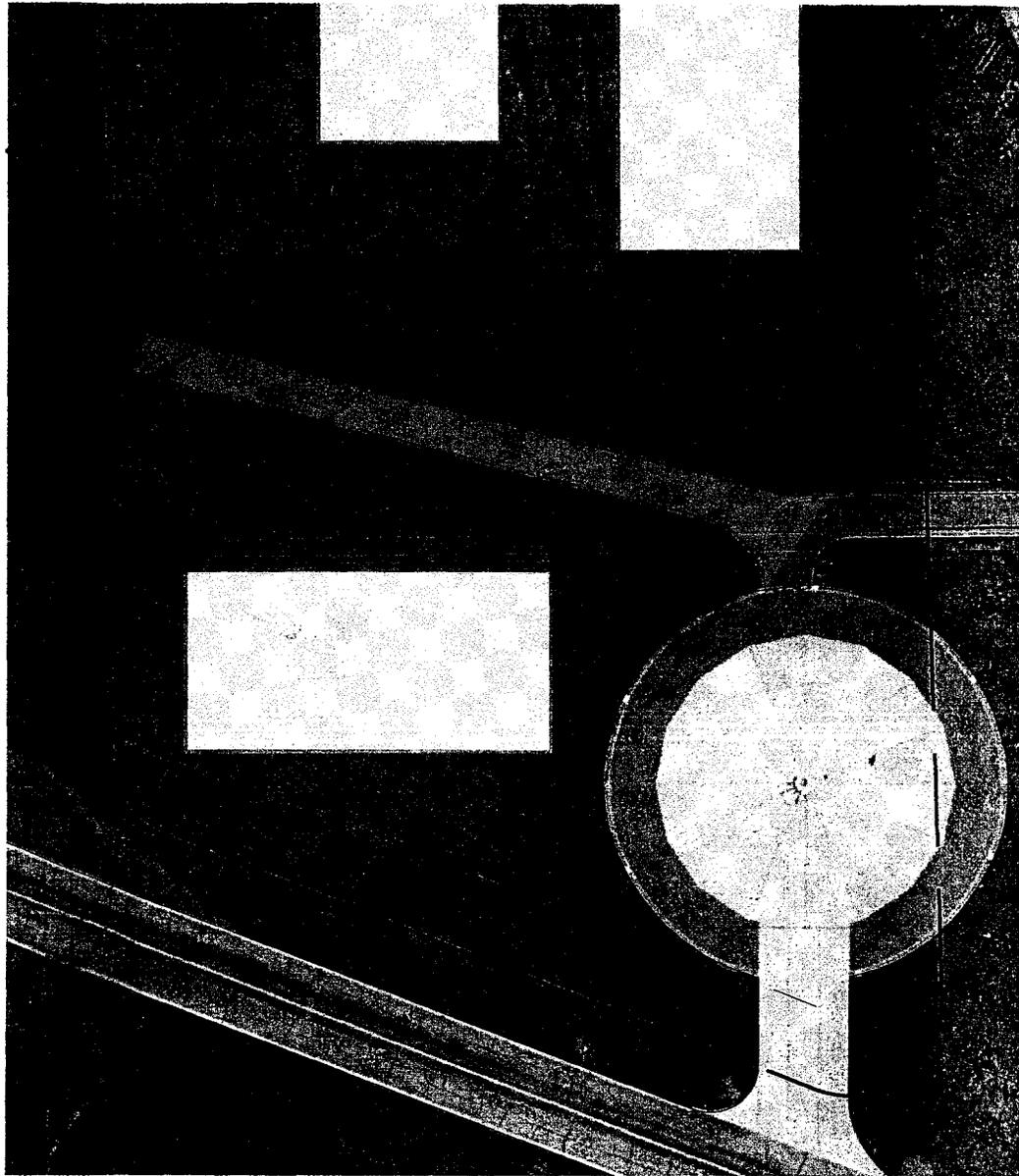
# AREA KEYPLAN

SCALE: NO SCALE



100'

E IMPROVEMENTS - AREA 4



S7

AREA 4 ENLARGED PLAN

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GIS STUDY

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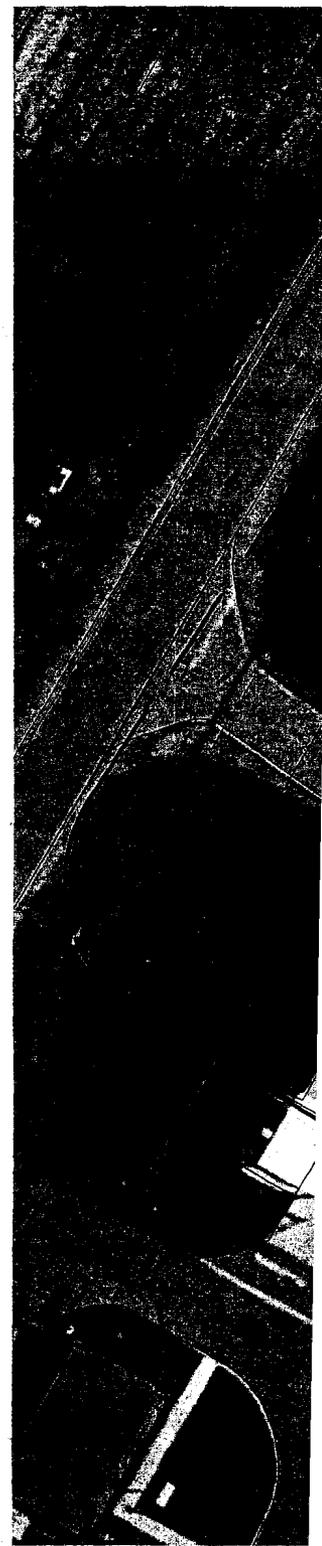


# LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

# AREA KEYPLAN

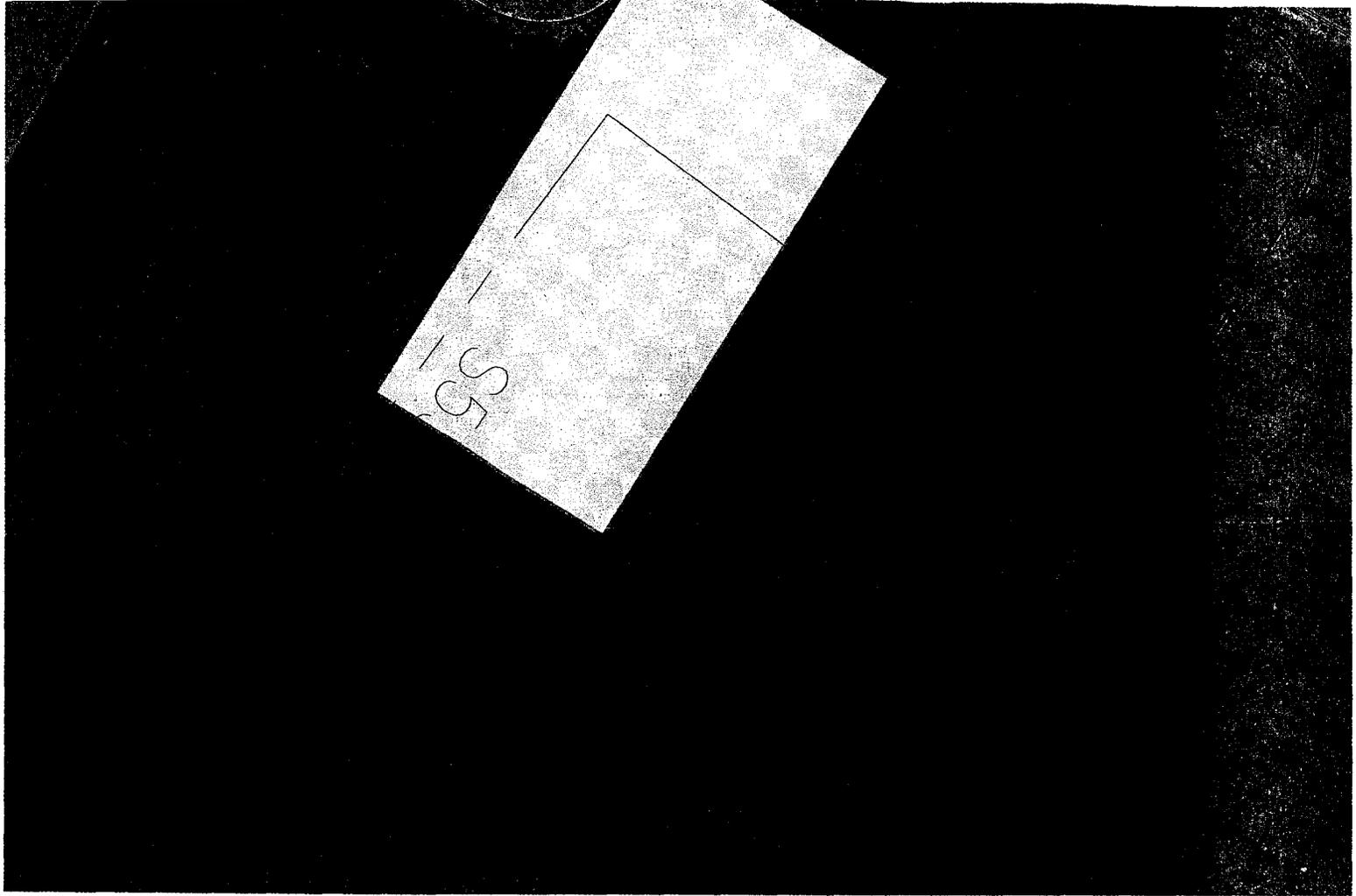
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S:\2003\03293\DESIGN\Final Design Drawings\03293\_LandUse.dwg - S8-BCANG Area 5

FUT  
SCALE:

MOVEMENTS - AREA 5



S8

AREA 5 ENLARGED PLAN

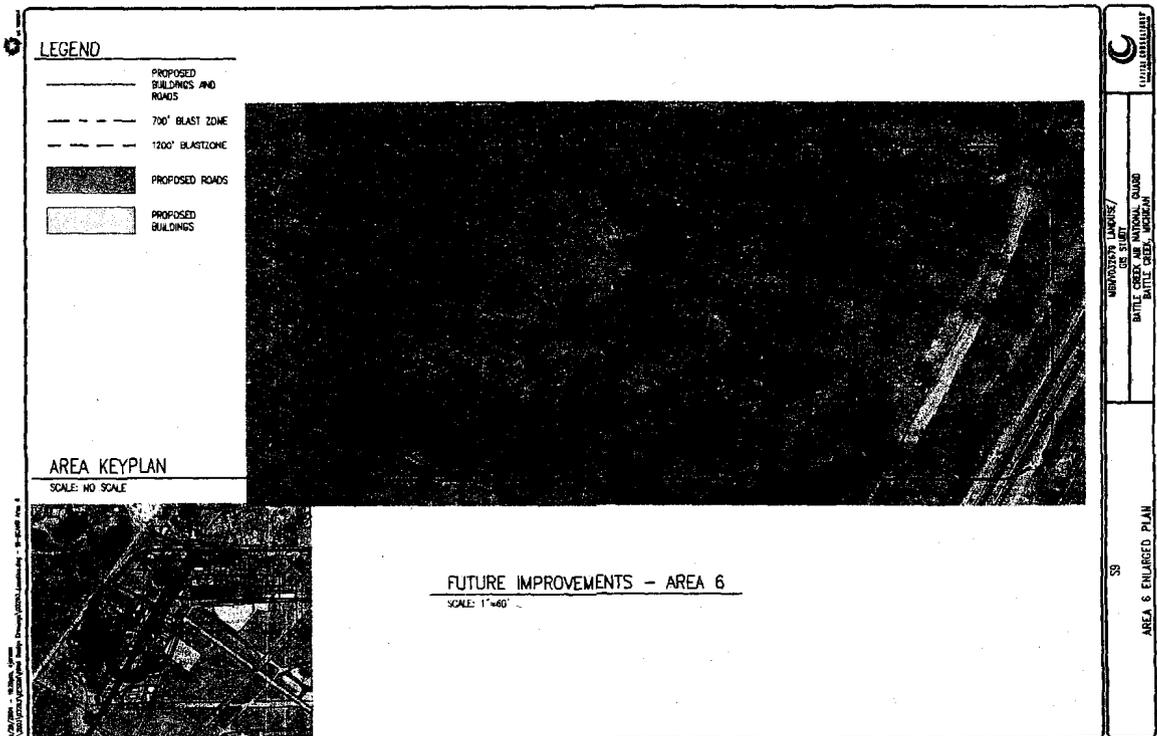
MBMV032679 LANDUSE/  
GIS STUDY

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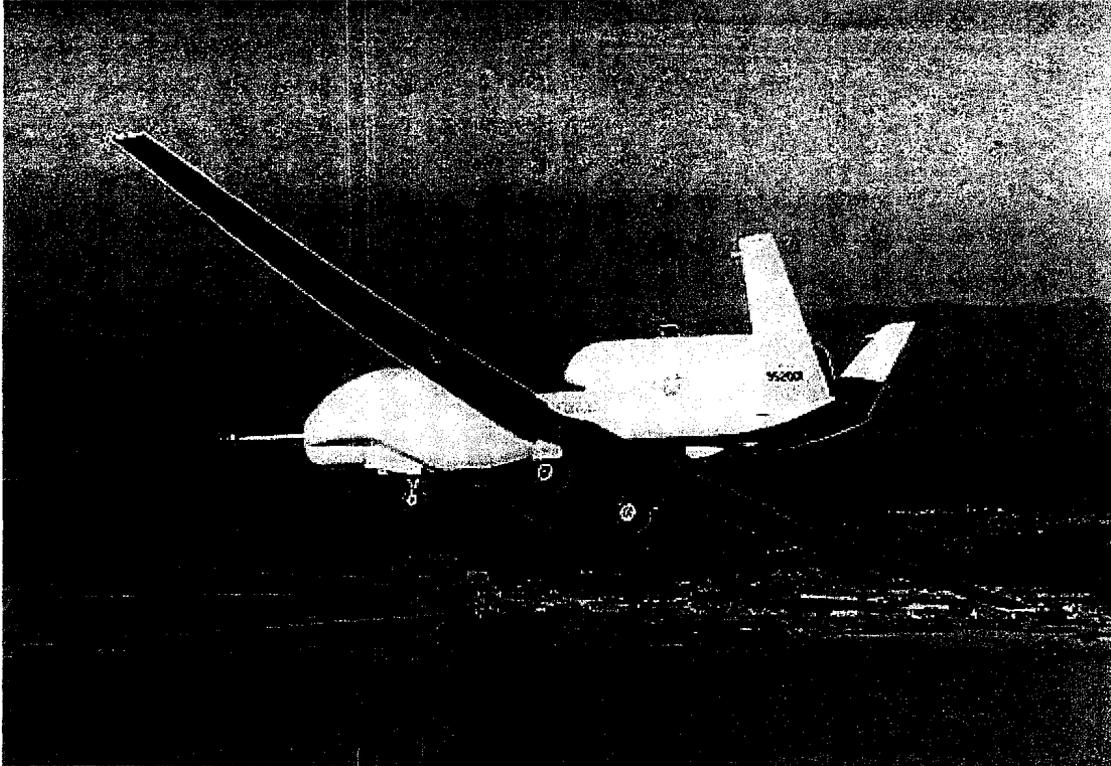
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**Area 6:** Area 6 is the area immediately to the north of the existing detention pond on the west parcel, and consists of 4 acres (Sheet S9). The area lends itself to support functions or new missions not requiring immediate access to the flightline or the rest of the base. Development of this area would require some extensive earthwork to prepare the site. This area is currently served with gas, water and electric from the adjacent Vehicle Maintenance complex. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Drive. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.



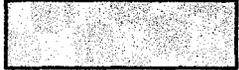
**Ground Transportation:** Additional service drives would connect the available areas. Notional drives are shown on the area sheets. These roads would be customized to meet the requirements of actual land uses. Extending Mustang Avenue to the new Thunderbolt extension to the east and to the existing Scorpion Road to the west would create a direct east-west corridor across the main base to facilitate traffic circulation and would prepare the road for a potential grade crossing of the railroad tracks. This would

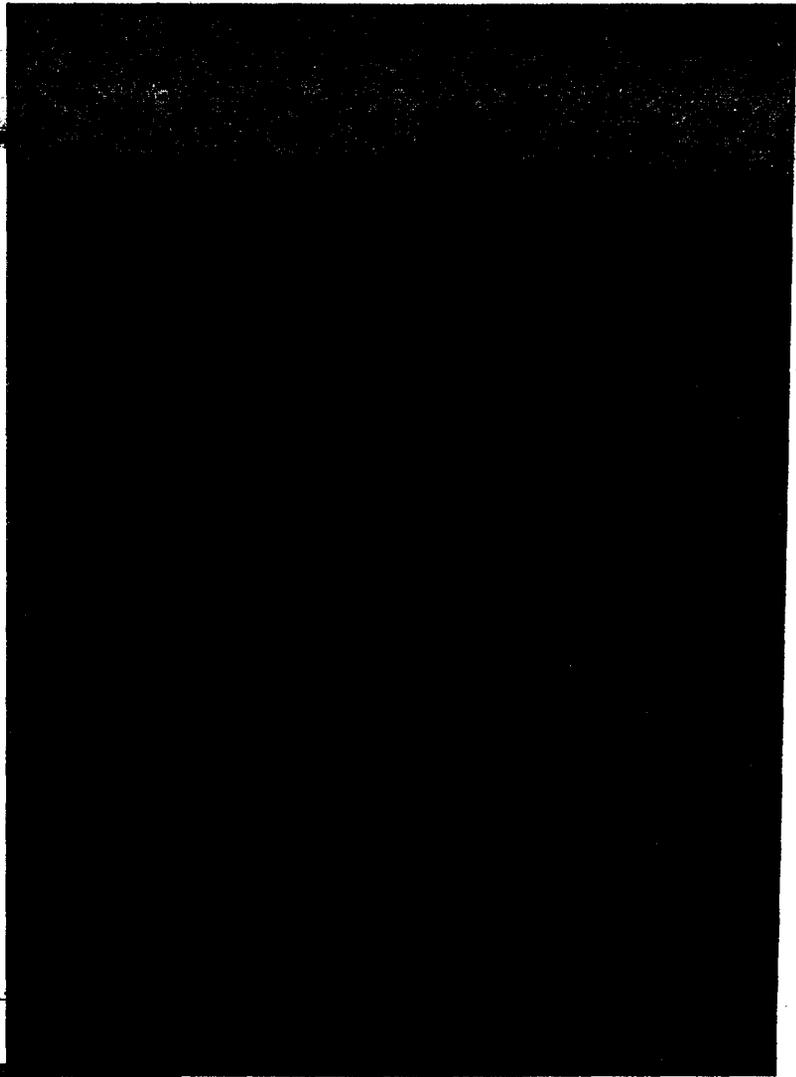
facilitate improvement of the west base, and would allow Mustang Avenue to become the main east to west route through the base facilities.





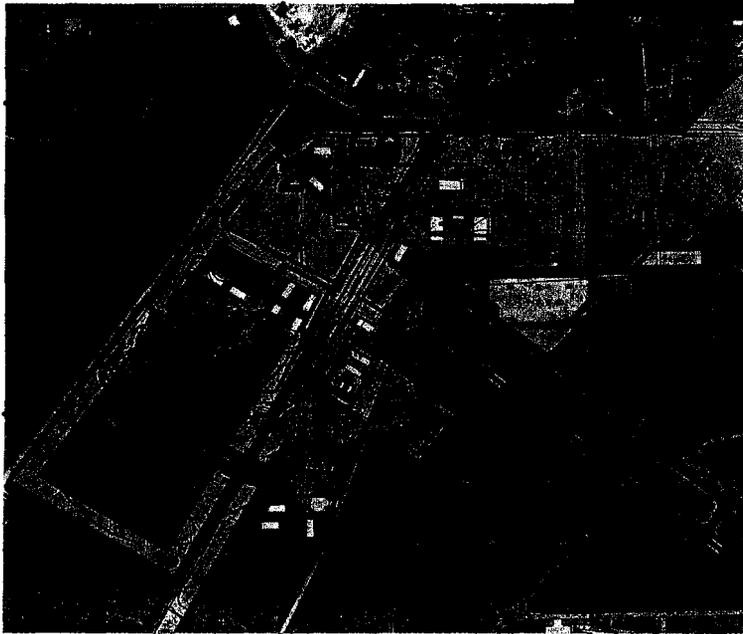
# LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS



# AREA KEYPLAN

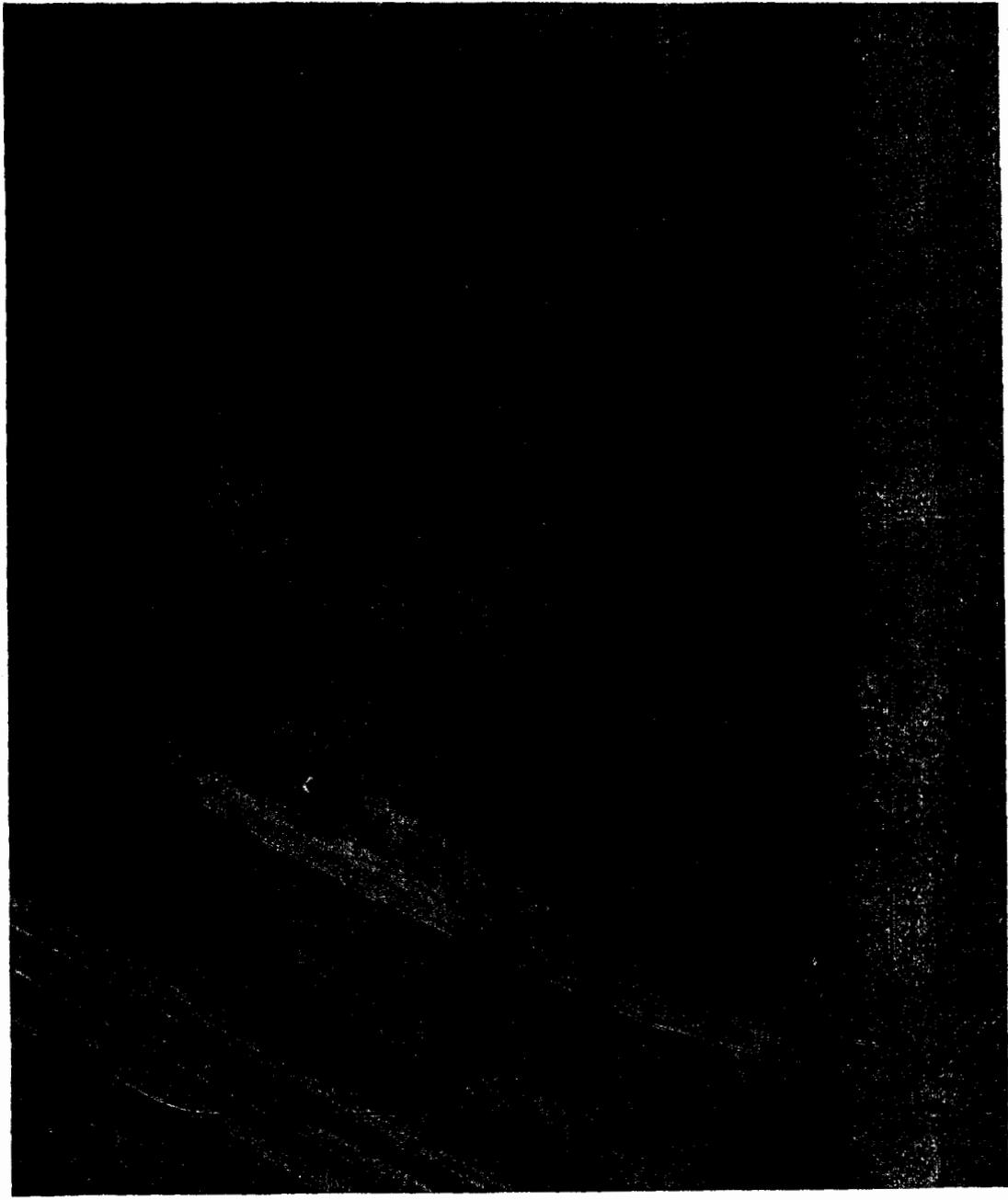
SCALE: NO SCALE



# FUTURE IMI

SCALE: 1"=60'

MENTS - AREA 6



S9

AREA 6 ENLARGED PLAN

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GIS STUDY

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