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BRAC Commission
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Received

The Honorable Anthony J. Principi, Chairman
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
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Dear Commissioner Principi,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion. [7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money. [9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, <u>should GMARS be closed</u> and should the forecast attrition come to pass, <u>it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*</u>. Such loss in trained personnel would <u>destroy the 440AW as an effective unit</u>. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the <u>disruption</u> of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential (Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333	
Tot Reservists/FTMil HC Ratio		8.0210
Reservist Projected Attrition From Disruption	**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES		**11,496**
Recruiting Cost/HC	$7,050	
Replacement Recruiting Costs (mil $)		**$81.0**
Replacement Training Costs (k$)		
Pilots	3.08%	$1,000
Navigators	1.39%	$361
Ground Officers	8.40%	$96
Enlisted People	87.12%	$48
Replacement Training Costs (mil $)		**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)		**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are three significant assumption-connected issues specific to the GMARS COBRA run related to the computation of the costs of the proposed BRAC action. These are building space requirements at Pope AFB, '1- Time Other' costs and '1-Time Other' savings.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB. Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take at least $23.6 million in extra military construction costs to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '1-Time Other' Costs of $12.6 mil, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

BRAC Commission

Col Heinz F. Poellet
2123 E. Montana Av
Oak Creek WI 53154-2433
AUG 19 2005
17 August 2005

General James T. Hill, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear General Hill,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion. [7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money. [9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, should GMARS be closed and should the forecast attrition come to pass, it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*. Such loss in trained personnel would destroy the 440AW as an effective unit. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the disruption of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333	
Tot Reservists/FTMil HC Ratio		8.0210
Reservist Projected Attrition From Disruption	**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES		**11,496**
Recruiting Cost/HC	$7,050	
Replacement Recruiting Costs (mil $)		**$81.0**
Replacement Training Costs (k$)		
Pilots	3.08%	$1,000
Navigators	1.39%	$361
Ground Officers	8.40%	$96
Enlisted People	87.12%	$48
Replacement Training Costs (mil $)		**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)		**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are <u>three</u> significant <u>assumption-connected issues specific to the GMARS COBRA run</u> related to the computation of the costs of the proposed BRAC action. These are <u>building space requirements at Pope AFB</u>, '<u>1- Time Other' costs</u> and '<u>1-Time Other' savings</u>.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

<u>Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB.</u> Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take <u>at least $23.6 million in extra military construction costs</u> to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '<u>1-Time Other' Costs of $12.6 mil</u>, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

Adjusting '05 BRAC COBRA Model GMARS Closing Cost to Budgeted Cost

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

Col Heinz F. Poellet
2123 E. Montana Av
Oak Creek WI 53154-2433
17 August 2005

BRAC Commission
AUG 19 2005
Received

General Lloyd W. Newton, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear General Newton,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion.[7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money.[9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, should GMARS be closed and should the forecast attrition come to pass, it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*. Such loss in trained personnel would destroy the 440AW as an effective unit. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the disruption of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333		
Tot Reservists/FTMil HC Ratio		8.0210	
Reservist Projected Attrition From Disruption		**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES			**11,496**
Recruiting Cost/HC		$7,050	
Replacement Recruiting Costs (mil $)			**$81.0**
Replacement Training Costs (k$)			
Pilots	3.08%	$1,000	
Navigators	1.39%	$361	
Ground Officers	8.40%	$96	
Enlisted People	87.12%	$48	
Replacement Training Costs (mil $)			**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)			**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are <u>three</u> significant <u>assumption-connected issues specific to the GMARS COBRA run</u> related to the computation of the costs of the proposed BRAC action. These are <u>building space requirements at Pope AFB</u>, '<u>1- Time Other' costs</u> and '<u>1-Time Other' savings</u>.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

<u>Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB.</u> Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take <u>at least $23.6 million in extra military construction costs</u> to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '<u>1-Time Other' Costs of $12.6 mil</u>, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

Col Heinz F. Poellet
2123 E. Montana Av
Oak Creek WI 53154-2433
17 August 2005

BRAC Commission
AUG 19 2005
Received

The Honorable James H. Bilbray, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear Commissioner Bilbray,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion.[7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money.[9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, <u>should GMARS be closed</u> and should the forecast attrition come to pass, <u>it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*</u>. Such loss in trained personnel would <u>destroy the 440AW as an effective unit</u>. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the <u>disruption</u> of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. For the units losing their aircraft or parts of their unit, the disruption issues are compounded. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, anxiety about losing your slot due to being located at a 'naked air base', of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333		
Tot Reservists/FTMil HC Ratio		8.0210	
Reservist Projected Attrition From Disruption		**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES			**11,496**
Recruiting Cost/HC		$7,050	
Replacement Recruiting Costs (mil $)			**$81.0**
Replacement Training Costs (k$)			
Pilots	3.08%	$1,000	
Navigators	1.39%	$361	
Ground Officers	8.40%	$96	
Enlisted People	87.12%	$48	
Replacement Training Costs (mil $)			**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)			**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are <u>three</u> significant <u>assumption-connected issues specific to the GMARS COBRA run</u> related to the computation of the costs of the proposed BRAC action. These are <u>building space requirements at Pope AFB</u>, <u>'1- Time Other' costs</u> and <u>'1-Time Other' savings</u>.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

<u>Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB.</u> Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take <u>at least $23.6 million in extra military construction costs</u> to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely <u>'1-Time Other' Costs of $12.6 mil</u>, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

BRAC Commission
AUG 19 2005
Received

Col Heinz F. Poellet
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17 August 2005

The Honorable James V. Hansen, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear Commissioner Hansen,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion.[7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money.[9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD.* Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, should GMARS be closed and should the forecast attrition come to pass, it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*. Such loss in trained personnel would destroy the 440AW as an effective unit. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the disruption of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333	
Tot Reservists/FTMil HC Ratio		8.0210
Reservist Projected Attrition From Disruption	**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES		**11,496**
Recruiting Cost/HC		$7,050
Replacement Recruiting Costs (mil $)		**$81.0**
Replacement Training Costs (k$)		
Pilots	3.08%	$1,000
Navigators	1.39%	$361
Ground Officers	8.40%	$96
Enlisted People	87.12%	$48
Replacement Training Costs (mil $)		**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)		**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are three significant assumption-connected issues specific to the GMARS COBRA run related to the computation of the costs of the proposed BRAC action. These are building space requirements at Pope AFB, '1- Time Other' costs and '1-Time Other' savings.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB. Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take at least $23.6 million in extra military construction costs to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '1-Time Other' Costs of $12.6 mil, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

Adjusting '05 BRAC COBRA Model GMARS Closing Cost to Budgeted Cost

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

BRAC Commission

AUG 19 2005
Received

Col Heinz F. Poellet
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17 August 2005

Admiral Harold W. Gehman Jr., Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear Admiral Gehman,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion.[7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money.[9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-*participating reservist could be recalled to active duty during their initial enlistment.* Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, should GMARS be closed and should the forecast attrition come to pass, it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*. Such loss in trained personnel would destroy the 440AW as an effective unit. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the disruption of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333	
Tot Reservists/FTMil HC Ratio		8.0210
Reservist Projected Attrition From Disruption	**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES		**11,496**
Recruiting Cost/HC		$7,050
Replacement Recruiting Costs (mil $)		**$81.0**
Replacement Training Costs (k$)		
Pilots	3.08%	$1,000
Navigators	1.39%	$361
Ground Officers	8.40%	$96
Enlisted People	87.12%	$48
Replacement Training Costs (mil $)		**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)		**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are three significant assumption-connected issues specific to the GMARS COBRA run related to the computation of the costs of the proposed BRAC action. These are building space requirements at Pope AFB, '1- Time Other' costs and '1-Time Other' savings.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB. Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take at least $23.6 million in extra military construction costs to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '1-Time Other' Costs of $12.6 mil, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

BRAC Commission

AUG 19 2005

Received

Col Heinz F. Poellet
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Oak Creek WI 53154-2433
17 August 2005

The Honorable Philip Coyle, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear Commissioner Coyle,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion.[7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money.[9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, <u>should GMARS be closed</u> and should the forecast attrition come to pass, <u>it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*</u>. Such loss in trained personnel would <u>destroy the 440AW as an effective unit</u>. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the <u>disruption</u> of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems. [7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any interest at all in the people affected (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333		
Tot Reservists/FTMil HC Ratio		8.0210	
Reservist Projected Attrition From Disruption		**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES			**11,496**
Recruiting Cost/HC		$7,050	
Replacement Recruiting Costs (mil $)			**$81.0**
Replacement Training Costs (k$)			
Pilots	3.08%	$1,000	
Navigators	1.39%	$361	
Ground Officers	8.40%	$96	
Enlisted People	87.12%	$48	
Replacement Training Costs (mil $)			**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)			**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are <u>three</u> significant <u>assumption-connected issues specific to the GMARS COBRA run</u> related to the computation of the costs of the proposed BRAC action. These are <u>building space requirements at Pope AFB</u>, '<u>1- Time Other' costs</u> and '<u>1-Time Other' savings</u>.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

<u>Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB.</u> Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take <u>at least $23.6 million in extra military construction costs</u> to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '<u>1-Time Other' Costs of $12.6 mil</u>, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

Adjusting '05 BRAC COBRA Model GMARS Closing Cost to Budgeted Cost

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

Adjusting '05 BRAC COBRA Model GMARS Output to Budgeted Cost Savings + NPV

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											

BRAC Commission
AUG 19 2005
Received

Col Heinz F. Poellet
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Oak Creek WI 53154-2433
17 August 2005

General Sue E. Turner, Member
2005 Defense Base Closure And Realignment Commission
2521 South Clark St., Suite 600
Arlington, VA 22202-3909

Dear General Turner,

As a follow-up to my appearance before your group, I'd like to forward an analysis done by Lt Col Al Manteuffel, a retired member of the 440th Airlift Wing at General Mitchell Air Reserve Station (GMARS). Lt Col Manteuffel sent this same information directly to Commissioner Skinner as a result of his request during his visit to Milwaukee on 16 June 2005.

As you know, I and the rest of the members of the C130 Coalition believe that units of the Air Reserve Components (ARC)[1] offer the most cost effective method of covering the Fort Bragg NC training requirements, and that this alone is sufficient reason for removing General Mitchell ARS and the other bases from the 2005 BRAC closure/realignment list. The enclosed material offers strong additional reasons for this action in the areas of personnel and financial impacts.

In reviewing the publicly available records provided to The Commission, based on his military and my civilian education, training and experience,[2] Lt Col Manteuffel concluded that the Air Force's evaluation of the people issues entailed by and the financial justifications for GMARS closure are highly problematic. It is possible to demonstrate that closing GMARS will, in fact, cost the US Government between $186 and $205 million (depending on future rates of inflation) rather than the $38 million claimed, that in terms of actual budget dollars, the Government will *never* break even and that this closure has a negative lifetime NPV of over $100 million budget dollars versus the positive NPV claimed of over $50 million 'COBRA dollars'. [3]

At the same time, closing GMARS, and 44 similar moves against Air Reserve Component (ARC) units, risks destroying them as effective military forces.[4] The very limited experience of prior BRAC rounds on ARC units illustrates the risks of BRAC-induced unit disruption to their manning.[5] The basic mistake is that Pentagon planners evidently assumed that the people of the 440th could be transferred nearly 900 miles away from their families and jobs. They apparently failed to understand that our reservists have a home, that it is a place in the Midwest and *not* the military and that they can quit the reserves at any time.[6]

Looking at all adversely affected units, it is possible that as many as 11,500 trained reservists and air guard people could be lost to the Air Force in this BRAC round. Recruiting and training their replacements could cost the Government as much as $1 billion. [7]

Besides making the errors in thinking that aircraft can be concentrated in one location without degrading airspace quality and making ramp space nearly unusable and of treating traditional reservists as though they were of no account, it appears likely that the Pentagon may have 'gamed' the DoD evaluation model (COBRA) to project cost savings from closing GMARS that can never be realized.[8]

While Lt Col Manteuffel has only 'run the numbers' on GMARS, if these are typical of the rest of the 12 Reserve and Guard Bases on the closure list, the US taxpayers could be looking at a combined budgeted cost of closure of over $2.4 billion and budget NPV's of ($1.3) billion. This is serious money. [9]

The probable result of the closure of GMARS along with the rest of the proposed 2005 BRAC actions against the ARC could easily be a financial and personnel disaster, which The Commission would serve the country well in averting.

The reason for this and all previous BRAC rounds is the idea that, because the Cold War is over, military installations can be closed without harm to our national defense and this well help the budget. That rational has been stood on its head in this BRAC round due to the Air Force's heavy focus on realigning the ARC and closing its relatively small bases[10]. Despite all the charts, models and metrics, it is likely that the result will be more budget cost and less trained people.

Therefore, I urge you and your fellow commissioners to reject the closure of General Mitchell ARS, and the rest of the C130 Coalition bases if not the ENTIRE list of Air Reserve/Guard Closures/Realignments. The ARC are not where the money is.

Regards,

Heinz F. Poellet, Col USAFR(Ret)

5 Attachments:
1. Narrative Evaluating 05 BRAC ARC Personnel Risks
2. Model Estimating Quantitative ARC Effects of '05 BRAC
3. Narrative Evaluating Financial Risks from GMARS Closing
4. Model Estimating Budget Impacts of GMARS Closing
5. Model Estimating Budget Savings & NPV of GMARS Closing

NOTES:
General: References are to official 2005 BRAC Commission documents unless otherwise noted and are identified by The Commission's Document Control Number (DCN). References to 'GAO' are to the Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]. References to 'The Pentagon' or 'The Air Force' are to Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR].

1. The Air Force Reserve and The Air National Guard together comprise the Air Reserve Components.

2. Lt Col Allan D. Manteuffel's personal qualifications to undertake these analyses include 28 years of military experience (graduate of Air War College), an MBA in Finance from the University of Chicago (1975), a CPA Certificate from the State of Illinois (1976) plus nearly 27 years of experience (1975 – 2002) with a Fortune 50 firm (Motorola) including over 10 years as a Financial Comptroller and 14 years as a Director of Strategic Planning in various international and global business units.

3. Please see Appendices 3 – 5 for details of these computations.

4. It is estimated by the officers of the 440th that 80% of the 1398 unit members, particularly the 'straight reservists' (part-time only volunteers) will leave the Air Force Reserve should GMARS be closed [DCN 5872]. Please see Appendices 1 & 2 for a more detailed explanation for the rational behind this assessment and an estimation of the system-wide effects.

5. Of the only four ARC closures in ALL prior BRAC rounds, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. Although it is only about 75 Interstate Highway road miles between O'Hare and GMARS, and the 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to vacancies or waiting lists, it was our experience that nearly two-thirds of the members of the 928th had terminated their service by 1997. Most of the attrition was immediate.

6. The reason that the ARC's are a financial bargain, providing significant military capacity at little cost to the government, is that their peoples' civilian employers (and their spouses') and their home communities are supporting them and their families *and not DoD*. Rebuilding these ties at a remote location is costly in every way, if it can be done. Please see Appendix 1 for a fuller explanation

7. Please see Appendix 2 for an explanation of these figures.

8. Only the two most glaring examples will be cited here. The first is claiming $4 million per year in ongoing savings from transferring 287 reservists to a mystery base (Base X) with no reduction in overall AF headcount. The sort of thing is a particular GAO heartburn [GAOBR p.4]. The second involves assuming that nearly 1400 reservists can be transferred to heavily populated base (Pope AFB) without there needing to be any military construction or creating any of the operating costs that the COBRA model derives from space and headcount [DCN 289]. Please see Appendix 3 for a fuller explanation.

9. These budget number (not COBRA) figures are derived by applying the GMARS particular results to all 13 DoD recommended BRAC closures of ARC bases, i.e. GMARS times 13. Please see Appendix 2 for a list of these installations and Appendices 4 and 5 for the derivation of the GMARS numerical estimates.

10. Seven out of 10 Air Force Closure Recommendations are against ARC bases and 37 out of 62 Air Force Realignment Recommendations are against ARC bases, 14 of which will be left without any aircraft [AFBR p. iii-iv]. So, although unit affiliated ARC people number about 38% of the total force, they are programmed for 2/3's of the turmoil. We are on the wrong side of the 80:20 rule in doing this. Just 10% of the BRAC recommendations produce 80% of the projected 20 year net present value savings [GAOBR p. 17]. None of these is an ARC installation.

AIR FORCE 2005 RESERVE COMPONENT OPERATING UNIT LEVEL AND SYSTEM-WIDE RISKS TO ARC PERSONNEL FORCE STRUCTURE RESULTING FROM 2005 BRAC ACTIONS

Because the BRAC Process is focused on installations, during the analysis and decision-making it is easy to lose sight of its effects on the operating units located at these installations, and more particularly on the people affected.[1] Regards the Air Reserve Components (ARC), this is a serious mistake that could cost DoD the loss of nearly 11,500 trained reservists who could cost over $ 1 billion to replace. This is over 6% of the total 'drilling unit program' ARC and nearly 2% of the 'Total Force'.[2]

It may be possible for Air Force Headquarters people to be correct in assuming that their active duty counterparts in the field operating units will move wherever sent as a result of BRAC closures and realignments with no appreciable personnel attrition losses due to mass relocations. But this is most decidedly NOT a valid assumption to make about reserve component units. The Air Force would have done better to have viewed its reservists in the same light that a successful private sector business must regard loyal employees. By failing to do so, they have exposed themselves to major force structure risks in time of war.

The issues involved have three heads; Dislocation, Disruption and Disrespect.

In the military as in business, most major mistakes are, in retrospect, simple ones. One simple but major mistake made in the 2005 Air Force BRAC Round is the assumption that because reservists, when activated, perform like active duty people, they can be reassigned from their current base like active duty people. And in this BRAC round, the Air Force has done A LOT of reassigning of reservists. Seven of the 10 closures and 37 of the 62 realignments are to ARC bases, or 65.3% of adverse actions [AFBR pp. iii-iv]. So, although the unit affiliated Air Reserve Components (ARC) number about 38% of the total force[2], they are programmed for two-thirds of the turmoil in the 2005 BRAC. It is in the vast and unprecedented scope of these reassignments and in their interconnectedness that the major systemic risks to the Air Force's force structure arise.

Reservists cannot be casually reassigned because the military is not their home, unlike the case with active duty people. Reservists are, necessarily, tightly coupled to their local communities and, prior to activation, they can quit at any time. The reason that the ARC are a financial bargain, providing significant military capacity at little cost to the government, is that their members' civilian employers, their spouses' civilian employers and their home communities are supporting them and their families *and not DoD*. Patriotic as they are, they simply cannot afford to put their ties to home at risk 'for the convenience of the government ', period.

Reservists can, as a practical matter, quit at any time because the structure of our laws and institutions governing a volunteer military and because the vast majority of them have prior service. As one point of clarification, we are talking here about actively participating, 'drilling reservists' and not members of the inactive or standby reserves.[3] While the latter, can, in theory, be recalled to active duty, this has never been done since WWII because it requires a special Congressional call-up authority under law. And they are likely to be bad troops.

All a drilling reservist has to do to be put into the inactive reserve is stop coming to their monthly drills. If they are concerned with the niceties of military protocol, they can formally request reassignment to the inactive reserve before they stop showing up. As a reserve unit commander, such reassignment was my only available recourse against someone who stopped actively participating, a press gang being nowhere to be found. And it was in my best interest to reassign any such a no-longer-willing volunteer because otherwise I could not replace them with an actual willing volunteer and so maintain my unit's readiness status.

As a personnel officer on active duty at the time, I know that during Vietnam DoD tried with only mixed success to maintain the legal precedent that a non-participating reservist could be recalled to active duty *during their initial enlistment*. Even this was difficult except for egregious cases. And never was it even attempted to involuntarily recall a non-participating reservist once past their first enlistment, quite possibly for (probably valid) political reasons.

The Air Force indicates that 70% of the total Air Force Reserve (and Guard) consists of individuals with prior military service [DCN 5783].[4] This is a good thing because the ARC serves to keep a large pool of trained and experienced military manpower ready and available to the country in times of war. But the other side of the coin is that their volunteer spirit must be maintained by their leaders. Avoiding dislocation, disruption and disrespect is a good start.

The situation of the 440AW is indicative of the potential for personnel force structure damage due to their unit's dislocation from their homes. It is not mere hyperbole that its leaders estimate that 80% of the 44 full-time military members and 1354 'traditional reservists' (part-time only volunteers) in the 440AW will leave the Air Force Reserve should GMARS be closed [DCN 5872]. (The 44 full-time military people are to be PCS'd at government expense. Their slots can surely be transferred, the incumbents only possibly.)

The rationale for this estimate is straightforward, namely that unit members are not compensated by the government for travel to and from their monthly weekend drills and cannot afford either the time away from work or the cost to commute to Pope AFB NC where the unit is to be transferred without its aircraft. The Air Force estimates the round trip distance to Pope AFB from GMARS as 1764 miles [DCN 289 p. 25]. At the treasury mileage rate, it would cost a member an extra $427 just to drive there and back (in addition to what they

spend now to get to GMARS). At Pope's per diem rate of $102/day [DCN 289 p. 26] it would cost them $408, assuming that they could get there and back in one day each way, for a total of $835 per drill. This is more per drill than I made as a Major with over 16 year's service. Not to mention the fact that the two vacation days needed per month to travel were more than I got for a whole year from my civilian job. Since hardly any of us were in the reserves just for the money, we might do this once or twice out of patriotism. However, happening on any kind of sustained, recurring basis, this is clearly pushing anyone's patriotism entirely too far.

Additional evidence for this estimate of 80% rapid attrition can be taken from prior BRAC rounds. Of the *only four ARC closures in ALL prior BRAC rounds*, the 928th Tactical Airlift Group, previously located at Chicago's O'Hare IAP has the distinction of having been closed twice, once in the 1993 round and once again in the 1995 round [DCN 2414]. They flew the same aircraft as the 440th and had the same mission and unit structure so no conversion or retaining would have been necessary. It is only about 75 Interstate Highway road miles between O'Hare and GMARS. The 440th had waivers to pick up any member of the 928th who wished to continue to serve without regard to unit vacancies or waiting lists. Yet our experience was that about two-thirds of the members of the 928th had terminated their service by 1997, two years after closure. But most of the attrition was immediately following the 928th's flag being taken down.

Such personnel losses would have been catastrophic for any unit attempting to continue its mission in another location. This loss was caused by less than *one-tenth* the increase in commuting distance that would be involved in the closure of GMARS and the transfer of the 440AW to Pope. Additional, far more current data on expected personnel attrition is available from the 911th Airlift Wing, which indicates that over 90% attrition is possible in affected units.[5]

Therefore, should GMARS be closed and should the forecast attrition come to pass, it is likely to occasion a *loss to the total force of approximately 1260 trained military members from this one BRAC action alone*. Such loss in trained personnel would destroy the 440AW as an effective unit. It would take 5 – 10 years to rebuild it, *assuming* that sufficient recruits could be found in a region of the country with about 8% of the population base that supports the 440th.[6]

And, as indicated by the numbers of ARC closings and realignments, the 440th is far from alone. There are 12 other ARC units in similar situations. All are listed in Appendix 2, p. 1.

Many other ARC wings are at lesser risk due to the disruption of the 2005 BRAC. The risk exists even for the lucky few ARC units who are gaining aircraft or missions. Their pleasure is mixed because there usually needs to be retraining of unit members (due to different aircraft/versions/missions). Anyone who doubts

this should ask active duty Air Force officers if they have any unit conversion horror stories that they could share.

The unit conversion situation is worse for the ARC units involved because the people needing the retraining may well have trouble getting the multiple weeks off work needed in order to attend a lengthy technical school. Or the unit's recruiters must search for prior service people with the necessary skills now living in the area or recruit new people from the local area who can go to tech school after basic training, etc. Unlike their active duty counterparts, ARC commanders cannot simply ask the Air Force Military Personnel Center at Randolph AFB (AFMPC - if they remain capable) to send them trained replacements from the next tech school graduating class.

The unit conversion risk is exacerbated in this BRAC round due to the proposed consolidation of personnel systems.[7] This particular enhanced conversion risk applies to active duty and reserve units alike.

For the reserve units undergoing conversion, there are also unit specific recruiting issues. This is because ARC recruiting is done at the unit level by unit assigned recruiters working against actual or projected unit vacancies. On active duty, on the other hand, recruiters are filing a national pool with qualified recruits and AFMPC sorts out later who goes where to do what. Even recruiting replacements is at risk due to the 2005 BRAC recommendation to combine active duty and reserve recruiters.

Unit recruiters for converting units would obviously look first at the trained people at other ARC bases which are losing those aircraft picked up by the gaining unit, since they are potentially available to fill conversion required personnel slots. However, whatever the previous incumbent's wishes to continue serving, they cannot move units without finding a new civilian job (and one for their spouse) in the new location. Not to mention relocating at their own expense. Or they can commute at a financial loss. Or they can quit. In principal they can be replaced. But, most of the ARC bases gaining aircraft in this BRAC round are located in under-populated, poorly industrialized parts of the country that are well outside of reasonable drill-weekend commuting distance from the losing units (~100 miles).

While there are clear disruption risks in the gaining ARC units, our focus must be on the losing units. <u>For the units losing their aircraft</u> or parts of their unit, <u>the disruption issues are compounded</u>. There is the disruption having your friends and comrades transferred to a base that they cannot commute to and, more importantly, <u>anxiety about losing your slot due to being located at a 'naked air base'</u>, of which there will be *14* by my count. Being also civilian workers, most ARC members have either seen 'right sizing' up close and personal (or they know people who have). In private industry, one of the first clues that the headsman is coming down your hallway soon is the reduction/loss of your business unit's mission/customers. Units on 'naked air bases' will have a hard

time retaining existing members or recruiting new ones. Perversely, the members who are happy to sit around, doing nothing while hoping to run out the clock for retirement are not the ones we want, particularly during wartime.

Then there is the issue of disrespect. Those who have managed civilian employees know that a perception of disrespect by employees *who have alternatives* (and 90+% of reservists do, that's what makes them valuable) is very dangerous to your long-term success. In addition to the perception of being singled out in this BRAC round, it is easily foreseeable that execution issues will likely introduce additional, unintended, evidence of disrespect. That is, in prior BRAC rounds the actions (for both ARC and active duty) were few and loosely coupled to each other. In this round the actions are many, disproportionately focused on the ARC, AND many of them are tightly coupled (e.g. Base A gives its aircraft to Base B. Base B gives its aircraft to Base C, who retires theirs). Given the inevitability of military friction, especially during wartime where the enemy has something to say about our future actions, this sort of overall plan is an invitation to personnel turmoil where the individual unit members will be hard pressed to appreciate the rational causing it. They can tell themselves that it's all for the good of the country that their unit is greatly disrupted so that squadrons elsewhere can be 'robusted up to optimum size' and suck it up. Or they can quit the reserves.

As a measure of the turmoil to be expected, by inspection it appears that only 20 of the 41 AFRC major operating units and 20 of the 91 Air Guard major operating units will be unaffected by the 2005 BRAC. That is, 70% of ARC units are affected in some way by the 2005 BRAC. Of the 92 units affected, 44 are affected adversely, fully one-third of *all* 132 major ARC operating units.

In an effort to quantify the dangers listed above, I have reviewed all of the 72 proposed Air Force 2005 BRAC adverse actions for probable effects on the ARC units involved using the factors of dislocation and disruption. I have ignored conversion issues in gaining ARC units (which are real but harder to estimate) in order to avoid 'double counting' the potential personnel attrition impacts.

Besides the 440th, there are another 12 ARC wings I estimate to be in danger of being effectively destroyed by being dislocated from their members homes.[8] These include 8 AFRC wings out of 41 major operating units and 5 Air Guard wings out of 91 major operating units.

Another 25 wings are estimated to be in danger of significant damage due to partial displacement and the disruption of the 2005 BRAC.[8] All but one of these are Air Guard wings.

By applying our two data points of forecast attrition (90% from the Pittsburg survey and 66% from the O'Hare history) and reasonable assumptions concerning the degree of disruption occasioned by BRAC to each unit in

question, it is possible to forecast a loss to the ARC of nearly **11,500 trained members** due to the 2005 BRAC.[9]

At the Air Force's cost per head for recruiting a reservist of $7,050 it will cost the government approximately $81 million to simply *locate* replacements (assuming that it can be done in the Pentagon favored remote areas).

It is estimated that to train these replacements to merely entry skill level will cost the government $984 million for an **estimated DoD budget impact of over $1 billion**, none of which was figured into the 2005 BRAC calculations.

It is not overstatement to say that this is a major train wreck in the making.

END NOTES:

1. It is striking how LITTLE of the voluminous commission files portray any *interest at all in the people affected* (either active duty or reserves), the lives disrupted by this exercise, etc. Less than 5% by page volume, I'd estimate. At the end of the day, it is people that make the military, not bases or aircraft. In any of the quantitative metrics and models, traditional reservists are given ZERO weight.

2. FY04 year-end military strength for the Air National Guard is 106,715 military members. For the Air Force Reserve Command it is 75,322, making a total for the 'drilling' Air Reserve Components (ARC) of 182,037. The ARC also includes 36,489 in the Individual Ready Reserve who are not affiliated with any reserve training unit, for a total Ready Reserve of 218,526. Air Force Active Duty Military number 376,616, for a Total Force figure of 592,142. Source: 2005 USAF Almanac (May 2005 issue of Air Force Magazine) pub. Air Force Association, Arlington VA, p.60.

3. At the end of FY04 there were 17,335 members of the Air Force Standby Reserve. These are people who have disaffiliated from the Ready Reserve or have been discharged from active duty and have not affiliated with any branch of the Ready Reserve. Source: Ibid, p.60. This third tier is considered to be at the lowest level of readiness.

4. By way of comparison, of the 298,314 enlisted members of the active duty Air Force, roughly no more than 54% or 160,826 (computed strictly by rank) are prior service. Source: Ibid, p.61.

5. The only other actual data point that I know of concerning losses from ARC BRAC actions against ARC bases or units is a survey taken by the 911AW at

Pittsburg where a full half of unit members were sampled in May 2005. 94% indicated that they would leave the reserves if the proposed BRAC actions were carried out [DCN 4271]. The rate for the full time people was 78% with 97% for the traditional reservists, invalidating any assumption that the full-time ARC military or civilians can be transferred without heavy losses. This makes the GMARS Commander's estimate of 80% conservative. As additional validation, the commander of the 939th ARW at Portland separately estimates 75% attrition for his unit [DCN 3713].

6. The Fayetteville NC MSA is about 300k in total population. Throw in Raleigh-Durham and you have 1 million. The population of the region the 440th recruits from is over 12 million.

7. In a masterpiece of timing, in addition to simultaneously merging recruiting, the Air Reserve Personnel Center (ARPC) located in Denver CO is being relocated and merged with the active duty Air Force Military Personnel Center (AFMPC) located at Lackland AFB TX as part of the 2005 BRAC. This particular BRAC action greatly compounds the risks of ARC personnel disruption and turmoil. Should the closing of ARPC and its transfer from Denver to San Antonio cause interruptions in ARC pay or promotions, the personnel attrition forecast due to disruption can easily be doubled from over 1200 to the loss of 2500 traditional reservists. This particular risk is not included in the quantitative forecast in Appendix 2 because it is a multiplicative factor of unknown probability. However, it is sobering to recall the chaos that the Army Reserve Components suffered resulting from such a move in the early 1990's. Then they were merely combining two reserve personnel centers into one and not combining the reserve and active duty personnel systems such as the Air Force intends. This particular BRAC move represents a significant risk to the Active Duty Air Force's personnel retention as well, particularly for units undergoing conversion from one type of aircraft/mission to another.

8. Please see Appendix 2 for the list of unit names.

9. Please see Appendix 2 for all computation detail.

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DESTROYED (13)									
102nd Fighter Wing	Otis ANGB	MA	CLOSE: Acft to Jacksonville & Atlantic City; Fire to Barnes; Comm Remains; Rest of People Excess ???	140	66%	62	916		544
107th Air Refueling Wing	Niagara Falls ARS	NY	CLOSE; Acft to Bangor; People Excess ???	681	100%	115	654		589
110th Fighter Wing	W.K. Kellogg Apt AGS	MI	CLOSE: Acft to Selfridge; People Excess ??? ARMY CLOSES SELFRIDGE	143	100%	68	1000		900
111th Fighter Wing	NAS Willow Grove	PA	CLOSE: Acft to Boise, Martin, Selfridge & Retire; People Excess ???	1047	100%	274	1023		921
179TH Airlift Wing	Mansfield-Lahm Apt AGS	OH	CLOSE: Acft to Maxwell & Little Rock; APS to Louisville; Fire to Toledo; Rest of People Excess ???	300	100%	63		505	455
304 Air Rescue Squadron	Portland IAP AGS	OR	Realign: People to McChord	135	66%	38		305	181
440th Airlift Wing	General Mitchell ARS	WI	CLOSE: Acft to Dobbins & Little Rock; People to Pope	886	100%	44	1398		1258
911th Airlift Wing	Pittsburgh IAP ARS	PA	CLOSE: Acft to Pope; Hosp to Youngstown; Rest to Offutt	920	100%	44	1305		1175
913th Airlift Wing	NAS Willow Grove	PA	CLOSE: Acft Retired; People to Eglin	1047	100%	225	1329		1196
914th Airlift Wing	Niagara Falls ARS	NY	CLOSE: Acft to Little Rock; People to Langley, Schreiver & Lackland	545	100%	117	1160		1044
926th Fighter Wing	NAS New Orleans	LA	Realign: Acft to Whiteman & Barksdale; People to Nellis & Buckley	1300	100%	60		481	433
927th Air Refueling Wing	Selfridge ANGB	MI	Realign: Acft to ANG Selfridge, People to McDill ARMY CLOSES SELFRIDGE	1175	100%	228	1161		1045
939th Air Refueling Wing	Portland IAP AGS	OR	Realign: Acft to Tinker, Forbes &TBD; O&M to Tinker; Rest to Vandenberg	905	100%	74		594	534
				Tot Reservists/FTMil HC Ratio			8.0210		
				Reservist Projected Attrition From Displacement			**90%**		**10,274**

NOTES:
A. Sources; AFBR pp. 16-41 & pp. 107-190; DoD Website Closure List, Appendix C; Various Commission Documents.
B. Project Losses = Assessed Extent of People Damage X Known/Estimated Total Reservists X Projected Attrition Factor

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
ARC UNITS DAMAGED (25)									
103rd Fighter Wing	Bradley IAP	CT	Realign: Acft to Barnes & Retire; People Remain @ Naked Base	N/A	25%	23		184	30
109th Airlift Wing	Schenectady Cnty Apt AGS	NY	Realign: Loose 1/2 Acft; Rest Remain	N/A	20%	10		80	11
117th Air Refueling Wing	Birmingham IAP AGS	AL	Realign: Acft to Bangor, McGhee-Tyson & Phoenix; Fire to Dannelly; Rest Remain @ Naked Base	N/A	25%	66		529	87
118th Airlift Wing	Nashville IAP AGS	TN	Realign: Acft to Peoria & Louisville; Fire & APS to Memphis; Hosp to Carswell; Rest Remain @ Naked Base	215	50%	N/A		261	86
119th Fighter Wing	Hector AGS	ND	Realign: Acft to Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
122nd Fighter Wing	Capital Apt AGS	IL	Realign: Acft to Ft Wayne; Fire to Truax WI; Rest Remain @ Naked Base	N/A	25%	52		417	69
124th Wing	Boise Air Terminal	ID	Realign: C130's to Cheyenne, A10's Stay;	974	50%	22		176	58
127th Wing	Selfridge ANGB	MI	Army Closes Base; AF Converts Where ???	N/A	50%	N/A		261	86
130 Airlift Wing	Yeager Apt AGS	WV	Realign: Acft to Pope; Fire & APS to E WV; Rest ???	320	50%	27		217	71
131st Fighter Wing	Lambert-St Louis IAP	MO	Realign: Acft to Nellis & Atlantic City; Fire to Scott; Rest Remain @ Naked Base	N/A	25%	34		273	45
137th Airlift Wing	Will Rodgers IAP AGS	OK	Realign: Acft to Carswell & Rosecrans MO; APS to Carswell; Hosp & Fire to Rosecrans; Rest Remain	200	30%	19		152	30
142nd Fighter Wing	Portland Apt AGS	OR	Realign: Acft to Atlantic City; People Remain	N/A	20%	N/A		440	58
147th Fighter Wing	Ellington Field AGS	TX	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
148th Fighter Wing	Duluth Apt AGS	MN	Realign: Acft Retire; People Remain @ Naked Base	N/A	25%	N/A		261	43
152nd Airlift Wing	Reno-Tahoe Apt AGS	NV	Realign: Acft to Little Rock; APS to Channel Is; Fire to Fresno; Rest Remain @ Naked Base	500	50%	23		184	61
163rd Air Refueling Wing	March ARB	CA	Realign: Acft to AFRC March, Pease, McGhee-Tyson & McConnell; People Remain in Place	N/A	20%	71		569	75
166th Airlift Wing	New Castle AGS	DE	Realign: Acft to Charlotte & Savannah; Hosp to McGuire; APS & Fire to Dover; Rest Remain @ Naked Base	75	30%	47		377	75
175th Airlift Wing	Martin State AGS	MD	Realign: Acft to Channel Is & Quonset; APS to Andrews; Convert to A10	45	30%	17		136	27

AIR RESERVE COMPONENTS 2005 BRAC UNIT DAMAGE ESTIMATE

Unit Name	Current Location	State	Air Force BRAC Decision & Personnel Impacts	1-Way Mileage	People Damage Extent	BRAC Full-Time Mil HC	FT + PT Known Reservists	Est. Total Reservists	Projected Losses
178th Fighter Wing	Springfield-Beckley AGS	OH	Realign: Acft to Des Moines, Buckley & Lackland; Fire to Rickenbacker; Rest Remain @ Naked Base	N/A	25%	19		152	25
181st Fighter Wing	Hulman AGS	IN	Realign: Acft to Ft Wayne & Retire; People Remain @ Naked Base	200	25%	12		96	16
184 Air Refueling Wing	McConnell AFB	KS	Realign: Acft to Forbes; O&M to Forbes; Rest Remain	145	50%	27		217	71
186th Air Refueling Wing	Key Field AGS	MS	Realign: Acft to Mitchell, McGhee-Tyson, Bangor & TBA; Fire to Jackson; Rest Remain @ Naked Base	N/A	25%	33		265	44
188th Fighter Wing	Fort Smith AGS	AK	Realign: Acft to Fresno + Retire, Fire to Tulsa; Remain @ Naked Base	N/A	25%	19		152	25
192nd Fighter Wing	Richmond AGS	VA	Realign: Acft to Des Moines, Homestead & TBA; People to Langley	60	25%	25		201	33
940th Air Refueling Wing	Beal AFB	CA	Realign: Acft to Selfridge & McGhee-Tyson; People Remain in Place	N/A	20%	8		64	8

NOTES:
A. 6 of the 44 Adverse ARC BRAC Actions are Judged to be of Relatively Low Disruptive Potential
(Cross Base/Cross Town with Same Aircraft, etc.)

B. Training & Recruiting Costs are from the 911AW Study [DCN 4271]

Ave BRAC Mil HC/ Guard Base	32.5333		
Tot Reservists/FTMil HC Ratio		8.0210	
Reservist Projected Attrition From Disruption		**66%**	**1,222**
TOTAL POTENTIAL PERSONNEL LOSSES			**11,496**
Recruiting Cost/HC		$7,050	
Replacement Recruiting Costs (mil $)			**$81.0**
Replacement Training Costs (k$)			
Pilots	3.08%	$1,000	
Navigators	1.39%	$361	
Ground Officers	8.40%	$96	
Enlisted People	87.12%	$48	
Replacement Training Costs (mil $)			**$985.7**
TOTAL PERSONNEL REPLACEMENT COSTS (mil $)			**$1,066.7**

GMARS SPECIFIC Recruiting & Training People Replacement Costs (mil$)

Recruiting	$8.9
Training	$107.9
TOTAL	$116.7

ADJUSTMENTS TO COBRA FINANCIAL ASSUMPTIONS NEEDED TO EVALUTE THE BUDGET DOLLAR IMPACT OF CLOSING GENERAL MITCHELL AIR RESERVE STATION (GMARS).

The Air Force is on record that the DoD's COBRA (Cost of Base Realignment Actions) Model is NOT designed to produce cost or savings budget estimates [AFBR p. 49]. And the GAO concurs in this [GAOBR p. 242].[1] It is none-the-less true that all concerned in the BRAC process *act* as if this were the case, for example, in DoD and Air Force press releases, etc. This situation could be especially misleading to those with private sector financial experience who might assume that these are forecasts of actual budget impact numbers. The following analysis is undertaken in order to bridge the gap between COBRA and the standard private sector financial practice that you are no doubt familiar with from your firm's securities law practice.

Given the above Air Force and GAO stipulation, it is clear that to estimate the likely actual budget impacts of the closing of General Mitchell Air Reserve Station (GMARS), adjustments must be made to the COBRA numbers in the commission's files. These necessary adjustments are of two kinds, namely systematic and those particular to GMARS. The systematic ones will be based on the GAO BRAC Report (GAOBR) and the particular ones will be based upon examination of the GMARS COBRA Run [DCN 289]. The rationale for and the resulting necessary financial adjustments to COBRA numbers are detailed below and the numerical results may be seen in Appendices 4 and 5.

Once these necessary adjustments are made, we find that using standard industry capital budgeting methods, the likely total net budget cost that should be forecast to close GMARS is actually about $186 million versus the COBRA model output of $38 million. The recurring budgeted cost savings are likely to be $4.7 million per year. On a budget cost basis, the Government *never* breaks even on the closure. The net present value of closing GMARS at the 25 year treasury rate is likely to be negative $100.5 million versus the COBRA model output of plus $50.2 million.

This is a dramatic switch. Why ?

To begin with, for all capital budgeting project models, a great deal depends on the accuracy of the inputs, the variance between the forecast and actual timing of the events modeled, and, most importantly, the assumptions used in structuring both. The 05 BRAC COBRA inputs are all certified and it is well for an outsider to be humble regards forecasting future events and their timing. However, in private industry financial practice it is usually mistaken assumptions that are the major source of serious error. So, it is the assumptions used to feed COBRA that must be the primary focus of any financial evaluation.

Obviously two main topics for adjustment are costs and savings. Given the long time frames involved (6 years for the initial action and 20 years for cost recovery), the proper cash flow inflation and discount rates are also a factor.

Given the extensive work done by experts on COBRA over the years, including *ex post facto* revalidation, and the high specificity of its required inputs it is reasonable to have confidence that its outputs *regarding costs* are close to what actual budget effects would be, ignoring inflation, if the planning assumptions are correct. Certainly they are highly likely to be 'order-of-magnitude' accurate taking a few systematic adjustments into account. GAO seems to hold something close to this view [GAOBR pp. 237 - 243].

GAO's desired systematic adjustments to COBRA numbers regarding costs entail primarily adding significant amounts for environmental restoration, local assistance transition costs for affected communities 'out-boarded' to other agencies of government and adjustment to actual of civilian personnel pay rates [GAOBR pp. 242-243].

The biggest assumption based systematic cost adjustment they wish concerns environmental restoration. Based on the actual experience of previous rounds, the average BRAC recommendation accepted entailed $31 million each in environmental cleanup costs[2] versus COBRA assumptions of essentially $0.0. These costs are significant and must be included in any estimate of actual DoD budget effects from closing a base. The GMRS Cobra model run forecasts an extremely modest total of $436k for environmental costs, and these are occasioned by construction elsewhere than GMARS. GMARS has done significant environmental remediation in the recent past, but other federal, state and local Milwaukee agencies will have NO incentive to spare DoD in this, their last bite from the apple. Half the national average cost would seem an appropriate recognition of this DoD future budget liability.

The local community transition costs that could be out-boarded to other governmental agencies are, obviously, dependent on local conditions and vary accordingly. On average, they have historically been $5 million per BRAC action.[4] These costs are significant and should be recognized and included. The GMARS COBRA run forecasts $0.0 for these costs. GMARS is a small base and Milwaukee is a robust community, but one with resourceful public officials. Again, half the national average would seem an appropriate recognition of this US Government future budget liability.

The maximum wage rate differential between the three actual bases involved is only 1.5% with a maximum net annual budget effect of $0.3mil/year.[3] This is well within the range of precision of the other estimates involved and so can be ignored as a systematic adjustment to the GMARS analysis. This amount will be picked up as a recurring saving.

One additional systematic adjustment needs to be made to bring COBRA cost output into line with standard commercial capital budgeting practice, namely concerning 'depreciation', which is called 'recapitalization' in the COBRA model.[5] As you well know, standard private sector capital budgeting analysis is done on a 'cash-to-cash' basis, excluding depreciation and other non-cash charges. So recapitalization must be excluded on both cost and savings sides of the ledger. For GMARS, this amounts to $1.1mil/year of 'recurring savings' in the COBRA model that won't actually be realized by DoD from closing the base in Milwaukee.

Moving on to the savings side of the capital budgeting ledger, there is one huge systematic issue with COBRA. That is it assumes that major, sustained cost reductions can be made without actually cutting payroll headcount. This is simply not credible to anyone with private business experience. Yet, via COBRA DoD, and by extension the Air Force, assumes that BRAC will generate substantial savings while not actually reducing their end strength. GAO strongly condemns this assumption. In their words, *"Without recognition that these are not dollar savings that can be readily applied elsewhere, this could create a false sense of savings available for other purposes."* [GAOBR p. 4]

Therefore, since the Air Force proposes to *increase* its overall payroll headcount (by 2 slots) as a result of closing GMARS [DCN 289 p.3], NONE of the purported savings shown by COBRA that are headcount driven in the model can be taken at face value.

This means that alternative methods must be used to estimate budgeted cost savings. Adjusting the previous year's actual financial results using experience and reasonable inferences is usually the method of choice in private industry. Based on standard industry practice, the absolute maximum ongoing *budget* savings available from closing GMARS is forecast to be no more than about $4.7 million/year.[6] This figure captures *all* of the ongoing operating cost differential issues in FY04 budget dollars, including removal of the (non-cash) recapitalization charge.

As a practical matter, because the aircraft and personnel relocations are scheduled for FY2009, these budgeted cost savings will not start until the following year, FY2010, at the soonest. 2009 will be a year of turmoil and until then it will be business as usual at Milwaukee (as much as possible).

The final GAO systematic issue with converting COBRA output to budget estimates is in capturing future savings from cash payments for the sale or actual final disposition of the real property involved. Real savings will be realized IF the government real property is promptly sold. However, the appearance of installations multiple times on BRAC lists after many years (e.g. Fort Sheridan IL, first listed for closure in the 1988 BRAC round, is making yet another appearance after 17 years, this time on the 2005 BRAC realignment list) puts this matter in some doubt.

Disposition cannot be made until all environmental remediation is complete and all and sundry lawsuits settled. In the meanwhile the real property is a wasting asset that must be maintained at government expense, to avoid additional liability from trespasser injury, if for no other reason. It is significant that the Army, which is the COBRA lead agency, decided to eliminate this category of savings from the COBRA model for the 2005 BRAC round [GAOBR p. 243]. Based on the Fort Sheridan example, I suspect that they did this because historically the net proceeds are (at best) a push, given the legal/political uncertainties, ongoing actual budget costs following 'closure' and the long time frames involved.

So no cash savings from sale or other disposition of the real property from GMARS will be picked up as an adjustment. The supplies and equipment located at GMARS will be transferred in 2009 and not sold. COBRA assumes that 121 tons will be shipped to Pope, 172 tons to Little Rock and 208 tons to Dobbins (pp. 25-26). There can't be enough left for much of a garage sale in Milwaukee after that. So no adjustment need be made for such budget cash savings upon disposition of supplies and equipment either.

To move from the general to the specific, there are three significant assumption-connected issues specific to the GMARS COBRA run related to the computation of the costs of the proposed BRAC action. These are building space requirements at Pope AFB, '1- Time Other' costs and '1-Time Other' savings.

The issue concerning building space at Pope AFB is simply stated. The GMRS COBRA run has been set to assume that 44 full time military and 1354 traditional reservists which had occupied 420k ft^2 at GMARS can be relocated there without *any* increase in building space whatsoever on Pope AFB [DCN 289 p.3]. It is passing strange that the model can assume that the *airplanes* all by themselves need space at Dobbins (10.6k ft^2) and Little Rock (22.3k ft^2) but that *the people* don't need any. This cannot be due to actual slack capacity at Pope because it has the *least* facility square footage per headcount (330.6 ft^2/full-time headcount) of any of the four bases modeled [DCN 289 pp. 26-27].[7]

Obviously, significant military construction will be necessary to house the relocated 440AW (or its replacements, assuming they can be recruited) on Pope AFB. Using the COBRA computed milcon cost/ft^2 from Dobbins AFB, it can be estimated that it will take at least $23.6 million in extra military construction costs to house the 440AW full-time people at Pope AFB.[8] This work will probably take two years to complete.

Moving on to the next issue, namely '1-Time Other' Costs of $12.6 mil, we see on page 34 that $11.1mil of this is the estimated retraining costs for slots transferred without incumbents, which are estimated to number 361 at Pope, 127 at Little Rock and apparently 0 at Dobbins. The remaining amount is mostly for IT goodies at Little Rock. As may be seen in Appendices 1 and 2, this is a very

serious underestimation of the budget effect of the likely attrition resulting from this BRAC action. Besides, the net budget training cost per head is 2X too low at Pope and 4X too low at Little Rock. The military budget cost number from necessary recruitment and retraining alone is likely to exceed $100mil under the present scenario, 10X the Pentagon forecast contained in the COBRA model. So, to start with, it will be necessary to remove the model's '1-Time Other' costs for retraining.

How to model the budget effect of the costs for retraining due to the expected near total attrition at the 440th is a conundrum. Although the relocation of the 440AW to Pope is slated to take place in FY2009, attrition will begin as soon as closure is announced as final, that is, in FY2006. At that point retirement eligible people finishing their enlistments will drop out of the unit (or take two year extensions) and others will seek slots in other units and other services in the Chicago-Milwaukee-Green Bay area. While it would make no sense to train replacements at Milwaukee who don't plan to move, to transfer vacated slots to Pope piecemeal for recruitment and retraining there before FY2009 would ruin operating unit readiness at Milwaukee without necessarily doing much for Pope. The only thing that we are pretty sure that won't happen is a mass relocation in FY2009 of the traditional reservists.

Assuming that this nightmare transition can be managed somehow, it will be necessary to time phase the replacement training budget costs over the entire six-year period. Since the full-time military slots are few and only a portion of the civilian slots are due to be transferred and there will be plenty of notice, there is no need to rework the model's relocation costs. The FY2009 full-time incumbents due to be transferred can safely be presumed to be ready to relocate.

The only 'good news' in all of this is that, despite the assumptions contained in the model, the retraining costs per head are the same whether active duty, full-time or traditional reservists. And only trained civilians will be (should be ?) relocated. So no involved calculations of the budget effects due to shifting personnel mix need be made. A reasonable assumption under the circumstances would be to rate the years FY2010-FY2011 double in cost (20% each) than that for the years FY2006-FY2008 (10% each), with the remaining 30% in FY2009, the transition year.

In a sobering sidebar note, it should be evident from the above discussion that the reconstituted 440AW would likely not be again fully ready to deploy until the FY2015 time frame, at the soonest. This forecast is made by allowing only a very accelerated six years for the FY2009 new accessions at Pope to reach their 7 Levels as fully qualified NCO's. Ongoing retraining costs for normal attrition past FY2011 are captured in the historically based estimated net savings annual number.

'1-Time Other' Savings of $4.0mil/year are purported to come from an apparent transfer of traditional reservists into the twilight zone. It is annotated as *"recurring drill savings of 287 individuals (@$14K each) to Base X"* (p. 34). This is the first instance in the model of any account being taken of the traditional reservist but it has no correspondence to anything else anywhere else. Base X is a mystery installation of dubious purpose in this and other Air Force COBRA runs. Yet we know that total Air Force end strength is not changing. Accordingly, this item has all the appearances of a 'plug number' inserted to arrive at a predetermined total ending value. This example illustrates how well founded are GAO's reservations about forecasted future BRAC savings from COBRA model personnel reductions. The historically based budget cost savings estimation procedure employed above obviates this gambit.

There is also one significant item of excluded recurring cost that must be picked up, namely cost avoidance of $1.13mil per year of depot level maintenance that is now being done at GMARS [DCN 5779]. Because the model inputs indicate that the majority of the civilian employees are not expected to relocate, these savings will be lost. While it is possible that this capability could be rebuilt at any of the receiving bases, it will take significant time. This item must be charged against the future savings because the added costs will have to be picked up elsewhere in the Air Force. Using FY 2015 as the date estimate for a fully reconstituted 440AW, this charge should begin in FY2009, the year of disruption, and end in FY2015, the earliest year reconstitution can be forecast.

Finally, there is the matter of the appropriate discount rate to use for future cash flows and the question of whether to forecast inflation. Commercial practice is to use an inflation factor in order to estimate future year budget impact of projected cash flows. This is also true for the government, so it will be done here as an adjustment

Controversy over the appropriate discount rate is a regular feature of corporate financial life. Suffice it to say that the situation is simpler for the government (for once). Its effective cost of capital is clearly the US Treasury borrowing rate. The only question is which one to use. It is sound financial practice that the duration of your capital project funding should match your project's expected life. Accordingly, since COBRA is predicated on a 20 net year savings lifetime, I would advocate using the 25-year Treasury yield of 4.576% instead of the model rate of 2.8%, which looks to be right about the 90 day treasury rate during 1QFY05.

The financial calculations needed to adjust the GMARS COBRA model run cost to estimated budgeted costs may be seen in Appendix 4. The net savings recalculations needed to adjust COBRA to estimated budgeted savings and the calculation of Net Present Value may be seen in Appendix 5

END NOTES:
Sources used in this appendix, unless otherwise noted, are: Volume V, Parts 1 and 2 of the Department of Defense Report to the Defense Base Closure and Realignment Commission, Department of Department of the Air Force Analysis and Recommendations BRAC 2005, dated May 2005, abbreviated as [AFBR]; Government Accounting Office's Report to Congressional Committees entitled MILITARY BASES, Analysis of DOD's 2005 Selection Process and Recommendations for Base Closures and Realignment, dated July 2005, Report Number GAO-05-785, abbreviated as [GAOBR]; and 2005 Defense Base Closure and Realignment Commission Document Number 289, General Mitchell Air Reserve Station, WI: COBRA Run USAF, abbreviated as [DCN 289]. Page numbers given are page sequence numbers in the GMARS package.

1. Both sources state that the justification for using COBRA is the necessity to have a uniform basis of evaluating the financial costs and benefits of alternative courses of action during the BRAC process. This justification is self-evidently true for anyone with experience and training in financial analysis. GAO supports the use of COBRA when done for its originally intended, limited purpose of merely comparing the financial effects of closure or realignment action scenarios [GAOBR p. 243].

2. $12 bil. in total BRAC connected environmental costs [GAOBR p. 46] divided across 387 total BRAC actions [GAOBR p. 18].

3. The Civilian Locality Pay Factor for GMARS is 1.126, Pope is 1.109, Little Rock is 1.109 and Dobbins is 1.126 [DCN 289, Screen 4], for a max differential of 1.5%. And there are only 302 civilian workers involved, of whom 188 are forecast to have their jobs converted to military slots at Dobbins, Pope and Little Rock. So at the model's standard civilian pay rate of $ 59,959.18/year, the maximum net effect is $ 271.6k/year if none of the slots are converted.

4. $1.9 billion in BRAC connected local community transition assistance costs to other governmental agencies through the end of FY04 divided across 387 total BRAC actions [GAOBR p. 243].

5. To its credit DoD takes into account the fact that capital must be replaced over time and, probably to preclude the BRAC analysis from being tilted towards replacing people with buildings to the detriment of the force structure, they include an annual Recapitalization Charge which is computed as a percentage of the Plant Replacement Value of each DoD installation. Presumably this is to take account of the future costs of keeping new BRAC construction current in future years within the planning period. However, the replacement cost recovery period used is 121 years. This is clearly too long for actual budget forecasting of

real property renewal by a factor of about 4X. This makes the recapitalization charge about ¼ of what it should be if it were really for the purpose of recovering the costs of capital equipment over its useful lifetime, as is the case with depreciation; Hence its exclusion.

6. Per DCN 3053, the actual current yearly budget costs to operate GMARS as of 9/30/04 are (k$):

	FY04 Actual		Potential Closure Savings
Military Payroll	$33, 138		
Civilian Payroll	$19,040		$ 287.0
Other Civ	$ 110		
Total Payroll	$52,288	76%	
Materials, Equip & Supplies	$ 9,774	14%	$ 977.4
MilCon, Services & Svc Contracts	$ 6,963	10%	$ 3,481.5
TOTAL COST	$69,025	100%	$ 4,746

Without reducing payroll headcount, any significant reduction to the Total Payroll Cost line is not addressable at the Air Force (or any other) level. So any such 'phantom savings' cannot be attributed to the closing of GMARS. We are already on the wrong side of the 80:20 rule regards cost cutting at this point. The wage rate differential between Milwaukee and Little Rock/Pope is worth all of $287k/year, maximum.

The people and the airplanes drive the $9.8 million in supplies and equipment costs. Since neither the number of people or airplanes is going down, it is highly questionable that much can be saved from this cost line. Let's assume that the bigger, 16 plane squadrons really *are* more efficient and can achieve, say 10%, per year of potential cost saving through increased efficiency. This is about best-in-class improvement for private industry without a total process redesign that must include changing technology AND substantial capital investment (neither of which is anywhere accounted for in the COBRA model's stated assumptions – not a flaw).

That leaves the $7.0 million of site and building related costs. Clearly, not all of this amount can be saved by moving to another base, even one with currently empty buildings (assuming that this to be the case at Pope, Little Rock and Dobbins – and we know it isn't). But some could be saved via not needing more gates and guards, etc. Being extremely generous, let's say ½, or $3.5million/year.

That makes the total ongoing net budget savings available from closing GMARS about $4.7 million/year, MAX. And we know that Little Rock and Dobbins plan to add buildings (and Pope should have), so this figure is conservative on the high side.

7. The real answer, of course, is that It only *appears* to be the case in the COBRA run that GMARS has half the building space efficiency of Pope (330.6 ft^2/full-time headcount). GMRS has 420k ft^2 over 337 full-time employees, or 1213.9 ft^2/full-time headcount. But this is because COBRA counts reservists as nothing. When the 1354 traditional reservists are included, GMARS actually has an occupancy density of 248.4ft^2/headcount. On this basis, GMARS is 25% *more* space efficient than Pope. At 1016.0 ft^2/full-time headcount, Dobbins, which is also an ARC base, is very comparable to GMARS in space utilization efficiency. So it should be the benchmark for the space utilization standard at Pope. Because Dobbins (reasonably) plans to build a "Reserve Component Training Facility" (p. 27) it is also the appropriate cost standard.

8. The GMARS COBRA run (p.3) shows that Dobbins (our faculties planning benchmark) forecasts a need to build 10.6k ft2 to house 37 new full-time headcount. This is 286.5ft^2/full-time head. Since Pope is adding 121 new full-time headcount, they will need to construct at least 34.7k ft^2 of incremental space using the Dobbins rate. Little Rock (reasonably) forecasts building a nearly 50:50 mix of hangars (2), shops (3) plus 7 other people-related buildings (p. 36). Pope is adding only people, not aircraft so the Little Rock cost data point of $228.85/$ft^2$ (p.14) is irrelevant. Dobbins forecasts (p. 17) that it will spend $7,201k in milcon, info tech and environmental costs to build 10,600 ft^2, or $679.34/$ft^2$. At this rate, it should cost Pope $ 23,573k to add the very minimal incremental space needed to actually house at least the full-time headcount they are gaining from GMARS.

Adjusting '05 BRAC COBRA Model GMARS Closing Cost to Budgeted Cost

GENERAL MITCHELL ARS BUDGET IMPACT CLOSING COSTS
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	TOTAL
COBRA MODEL ONE-TIME COSTS	$2,658	$12,311	$3,228	$20,198	$0	$0	$38,395
ADJUSTMENTS:							
1. Environmental Clean-Up @ GMARS			$3,875	$3,875	$3,875	$3,875	$15,500
2. MKE Community Transition Assistance			$625	$625	$625	$625	$2,500
3. Required Military Construction @ Pope			$7,858	$15,715			$23,573
4. Remove Model Retraining Assumptions			($2,105)	($8,955)			($11,060)
5. 440 Fcst Attrition Retaining Requirements	$11,675	$11,675	$11,675	$35,024	$23,349	$23,349	$116,746
EST CURR YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,333	$23,986	$25,155	$66,482	$27,849	$27,849	**$185,654**
Forecast Inflation Rate	2.60%						
EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS	$14,705	$25,249	$27,169	$73,671	$31,663	$32,486	**$204,942**

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746
ADJUSTMENTS:										
1. Loss of Depot Level Repair Capability				($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	($1,130)	
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$3,616	$3,616	$3,616	$3,616	$3,616	$3,616	$4,746
Forecast Inflation Rate	2.60%									
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,869	$4,996	$5,126	$4,007	$4,111	$4,218	$4,328	$4,440	$4,556	$6,135
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)	($14,705)	($25,249)	($27,169)	($73,671)	($31,663)	($32,486)				
EQUALS:										
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	($9,836)	($20,253)	($22,043)	($69,664)	($27,552)	($28,268)	$4,328	$4,440	$4,556	$6,135
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($9,836)	($30,089)	($52,132)	($121,795)	($149,347)	($177,615)	($173,287)	($168,847)	($164,291)	($158,156)
Discount Rate (25 Year Treasury Yield)	4.58%									
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($18,519)	($19,274)	($58,248)	($22,029)	($21,612)	$3,164	$3,104	$3,046	$3,922
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($9,405)	($27,925)	($47,199)	($105,446)	($127,475)	($149,087)	($145,923)	($142,819)	($139,773)	($135,852)
20 YEAR NPV	**($100,487)**									

GENERAL MITCHELL ARS BUDGET COST NET ONGOING SAVINGS, CASH FLOW & NPV
($ 000's)

Line Item	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
HISTORICAL MODEL COST SAVINGS (Appendix 3, Note 6)	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$94,920
ADJUSTMENTS:											
1. Loss of Depot Level Repair Capability											($6,780)
EST CURR YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$4,746	$88,140
Forecast Inflation Rate											
EST FUTURE YEAR BRAC GENERATED BUDGET SAVINGS FROM CLOSING GEN MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	$117,628
LESS: EST FUTURE YEAR BRAC GENERATED BUDGET COSTS OF CLOSING GENERAL MITCHELL ARS (From Appendix 4)											
EQUALS:											
ESTIMATED FUTURE YEAR BRAC GENERATED NET BUDGET (COSTS)/SAVINGS FROM CLOSING GENERAL MITCHELL ARS	$6,294	$6,458	$6,626	$6,798	$6,975	$7,156	$7,342	$7,533	$7,729	$7,930	($87,314)
CUMULATIVE FUTURE YR NET BUDGET EFFECT FROM CLOSING GEN MITCHELL ARS	($151,862)	($145,404)	($138,778)	($131,980)	($125,005)	($117,849)	($110,507)	($102,973)	($95,244)	($87,314)	
Discount Rate (25 Year Treasury Yield)											
PRESENT VALUE BY YEAR OF ESTIMATED NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	$3,848	$3,775	$3,704	$3,634	$3,565	$3,498	$3,432	$3,367	$3,303	$3,241	($100,487)
BUDGETED COST NET PRESENT VALUE: CUMULATIVE SUM OF PRESENT VALUES OF NET FUTURE YEAR BUDGET (COSTS)/ SAVINGS FROM CLOSING GEN MITCHELL ARS	($132,004)	($128,229)	($124,525)	($120,892)	($117,327)	($113,829)	($110,398)	($107,031)	($103,728)	($100,487)	
20 YEAR NPV											