



MISSISSIPPI DEFENSE DIVERSIFICATION INITIATIVE



Turning Lemons into Lemonade

A CASE STUDY

THE CLOSURE OF KELLY AIR FORCE BASE

Written by Dr. Ed Bee, CEcD -President, Tamerica Management Company

**PROMOTING INNOVATION,
DIVERSIFICATION AND COOPERATION IN
THE MISSISSIPPI DEFENSE COMMUNITY**



THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

MSDEFENSE.NET

AA/EOE/ADA/UC 78138 3.18

Acknowledgements

The lead researcher expresses appreciation to the following individuals who contributed to this report.

The University of Southern Mississippi College of Business

Dr. Chad Miller, Associate Professor

The University of Southern Mississippi Trent Lott National Center

Heather N. Brown, Research Analyst

Jade Sumrall, Student Worker

Port San Antonio

Roland Mower, CEcD, President

Paco Felici, Vice President of Communications

This study was prepared under contract with the, National Security Technology Acceleration Support and Economic Diversification Efforts for the State of Mississippi, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the National Security Technology Acceleration Support and Economic Diversification Efforts for the State of Mississippi and does not necessarily reflect the views of the Office of Economic Adjustment.

Table of Contents

Port San Antonio Case Study	3
Overview of San Antonio Regional Economy	4
Community Development Infrastructure and Strategy	6
Overview of Air Force Logistics Centers	7
Contrast between Military Industrial Firms and Market Economy Firms	9
Kelly Air Force Base Assets and Liabilities	11
State Economic Development Support in Texas	13
Strategic Options for Economic Development Leaders in San Antonio	14

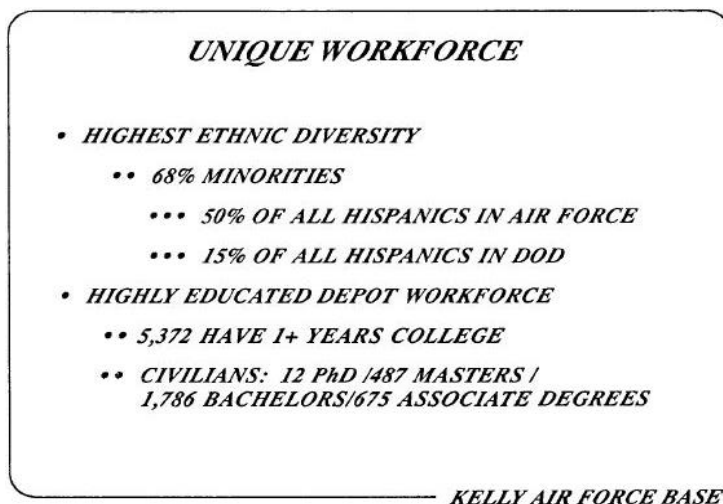
Port San Antonio Case Study

The morning of Wednesday, May 10, 1995, started like most other mornings for Joe Krier, the president of the San Antonio Chamber of Commerce. Joe got out of bed and ate breakfast at the diner near his Riverwalk office. The morning in the office consisted of staff briefings and meetings. He was looking forward to his June vacation. The daily routine at the office had been interrupted frequently by reporters asking for comments on the latest rumor surfacing from Washington about the Base Realignment and Closure Commission (BRAC). Kelly Air Force Base, the largest employer in San Antonio, had escaped closure in the earlier 1993 round of BRAC, thanks to decisive actions by community leaders. President Bill Clinton had formed another commission in November 1994, and appointed Alan Dixon as chair. Commissioners were now holding hearings on base closures. The Air Force had issued its list of recommended closures in February. Kelly Air Force Base and the other Air Force Logistics Centers (AFLC) were not on the list. That hadn't stopped the speculation about San Antonio since Brooks Air Force Base was on the Pentagon list.

The schedule for Wednesday changed abruptly in mid-afternoon. Kay Bailey Hutchinson, Texas Senator, was on the line. Krier interrupted his meeting to take the call. Senator Hutchinson was in the process of calling Krier, Mayor Thornton, and key supporters in San Antonio. She had just talked to Governor George Bush about the meeting of the BRAC Commission in Fort Worth. Commissioners had just voted to add Kelly Air Force Base in San Antonio and McClellan Air Force Base in Sacramento to the closure list. The BRAC commissioners rejected the Pentagon's argument about the need to maintain five Air Logistics Centers. With the fall of the Soviet Union and the dissolution of the Eastern Bloc in 1989, the Commissioners believed the Air Force had excessive, expensive maintenance capacity to support its dwindling fleet of bombers and fighters. Even the optimist, Hutchinson ended by the call by saying, "They've given us lemons. We're going to have to make lemonade."

Since the list of bases identified by the BRAC commission could not be modified by Congress or the President, Krier and San Antonio were facing a nightmare. Kelly Air Force Base was the largest employer in San Antonio, home to more than 12,000 workers. It was the largest employer in South Texas. It was the birthplace of military aviation, the flying field where Billy Mitchell, Carl Spatz, and Charles Lindberg had learned to fly during the First World War. It was the linchpin of the Hispanic middle class in San Antonio. Over half of the Air Force's civilian Hispanic workforce was employed at Kelly.

Figure 1: Kelly Air Force Base Workforce Characteristics in 1995



Generations of Hispanic families had enjoyed a middle-class lifestyle doing rewarding work in aerospace at Kelly. The base had become an institution in San Antonio culture because so many minority workers had moved from poverty to the middle class at Kelly.

Krier wondered where to begin. The closure list from BRAC would be finalized in two weeks. After that, unless Congress rejected the entire list, closure was a certainty. The first option was to fight the closure by appealing to key members of the Commission to reconsider their vote. The second option was to accept closure as inevitable, then develop a transition strategy for converting military assets to civilian use, the way dozens of other communities had done during the previous rounds of BRAC. The final option was to buy time by asking the Texas delegation to prevail on President Clinton to postpone the closing for the full six years allowed under the BRAC law. Delay would move the closure into the term of a new Congress and President. Perhaps a new administration and Congress would reverse the decision.

A decision of this importance shouldn't be made in a vacuum. Krier needed a game plan. He needed to gather the facts to inform his decision.

Overview of San Antonio Regional Economy

In 1995, the economy of the San Antonio metro area was dominated by defense spending and tourism. The Riverwalk and Alamo are national tourist attractions that bring more than 10 million overnight visitors to the area every year. Tourism spending with spinoff jobs generated 77,700 jobs and a gross domestic product of \$5.1 billion (see Table 1) (Butler and Stefl 2015) in 1995.

Table 1: Impacts of Tourism Spending in San Antonio in 1995

Economic Impact	Employment
\$5.1 billion	77,700

Besides Kelly Air Force Base, San Antonio is home to Brooks, Lackland, and Randolph Air Force Bases and Fort Sam Houston. The bases account for most of the 78,000 federal government jobs in the region. With multiplier effects, defense spending generates upwards of 250,000 of the 850,000 jobs in the San Antonio economy. Together tourism and the military account for 325,000 jobs, about 40 percent of the total economic activity in the region.

About 13,000 civilian employees work at Kelly. The total effect of closing Kelly is about 40,000 jobs in the San Antonio economy. About 1 in 20 jobs or 5 percent of regional economic activity disappears if the Department of Defense closes Kelly Air Force Base.

The economy has other business ties to the military not dependent on DoD spending. USAA Insurance Company, founded to provide insurance to military families, is headquartered in the city and employees upwards of 13,000 workers in San Antonio. The San Antonio economy as a whole has 249,174 direct, indirect and induced jobs tied to defense spending (see Table 2).

Table 2: Impacts of Defense Spending in San Antonio in 1995

Federal Civilian Workers (BEA Metro Series)	38,344
Federal Military Workers (BEA Metro Series)	39,767
Total Direct Employment (BEA Metro Series)	78,111
Multiplier (EMSI)	3.19
Total Direct, Indirect and Induced Jobs	249,174

Source: Table CA-25 for San Antonio Metro, Bureau of Economic Analysis. n.d.

Not all the major employers in the region have military or tourism ties (see Table 3). HEB Food Stores, the largest grocery chain in South Texas, is headquartered in the city and employs almost 10,000 workers. HB Zachry, a global contractor, is headquartered in San Antonio and employs nearly 8,000 workers. Southwestern Bell Telephone, the regulated landline carrier in five southwestern states including Texas, has its corporate headquarters in the city and employs nearly 11,000 workers. It moved its corporate headquarters from St. Louis in 1992 (Wolff 2008). Oil and gas are a big component of the regional economy, with over 7,000 workers. About half of the oil and gas workers are office workers at the headquarters of Diamond Shamrock and Valero, two of the largest refiners on the Gulf Coast.

Table 3: Economic Base of San Antonio Metro by Sector in 1995

Sector	Jobs	Location Quotient	Percentage of Jobs
Farm employment	14,478	1.45	2%
Agricultural services, forestry and fishing	6,681	0.76	1%
Mining	7,599	2.01	1%
Construction	50,090	1.15	6%
Manufacturing	53,913	0.52	6%
Transportation and public utilities	35,502	0.85	4%
Wholesale trade	32,229	0.77	4%
Retail trade	152,905	1.08	18%
Finance, insurance, and real estate	68,849	1.02	8%
Services	250,313	0.95	30%
Government	174,597	1.43	21%
Federal, civilian	38,344	2.19	5%
Military	39,767	2.94	5%
State and local	96,486	1.06	11%
State government	15,333	0.57	2%
Local government	81,153	1.26	10%
TOTAL EMPLOYMENT	847,156	1.00	100%

Source: Table CA-25 for San Antonio Metro, Bureau of Economic Analysis

Community Development Infrastructure and Strategy

San Antonio has a strong infrastructure of regional and local economic development organizations. It has well-funded development organizations with seasoned professional developers on staff. The San Antonio Chamber of Commerce is one of those organizations. The Chamber has been in existence for over 100 years. Its board of more than 100 members has strong national and local business and political ties. The Chamber has an active Military Affairs Council that is an important bridge between the business and military communities in San Antonio. Joe Krier, the president of the Chamber, was the key leader that the community enlisted to lead the defense of Kelly in 1993. Tullos Wells, the chairman of the Board, is the corporate counsel for the San Antonio Spurs.

The Chamber relationship with Kelly Air Force Base goes back to the establishment of the base. The San Antonio Chamber of Commerce acquired the options and leases on the land that would become Kelly Field in 1917 (Hussey et al. 2001). The Chamber had successfully defended Kelly against closure during the 1993 round of BRAC.

Another organization with strong influence is the San Antonio Hispanic Chamber of Commerce. Because more than two-thirds of the employees at Kelly are Hispanic, the closure of Kelly is an important issue for members of this chamber.

Economic development resources are dispersed among other economic development groups in San Antonio. The San Antonio Economic Development Foundation (SAEDF) is the region's traditional economic development organization tasked with recruitment of companies and industries. It is a public/private partnership with more than 200 private sector investors and major financial support by the City of San Antonio and Bexar County. The 15 members of the Executive Committee are the who's-who of business and government leadership in San Antonio. Mario Gonzales, SAEDF president, was a widely respected professional in economic development that had worked in other economic development organizations before being recruited to lead the SAEDF in 1988. The board of the SAEDF is influential in business and politics and a strong resource for defending Kelly.

San Antonio Power & Light, the electric utility company in San Antonio, is city-owned and operated. The power company has an economic development function that has staff and budget to support community development initiatives. The power company is unregulated and therefore can use its financial surplus to support economic development initiatives, such as a strategy to save or convert Kelly to civilian use.

Finally, the City of San Antonio has an economic development department within City Hall, under the direction of the city manager and the mayor. The City Council and Mayor are among the most influential leaders in the community. With more than one million residents, the City of San Antonio is a major financial and political resource for addressing the Kelly issue. The home rule charter granted by the legislature gives the city the central role in government in

San Antonio. Bexar County, under the 1885 constitution, has powers of government that are limited to maintain streets and bridges, and for assessing the value of real property for taxation.

Overview of Air Force Logistics Centers

Airplanes are complex machines. Air Force models have millions of parts (Aerosphere Nd) and the malfunction of any single part can result in the death of crew members. Maintenance and repair, consequently, are core functions in the Air Force. The Air Force has had a serious attitude about maintenance since the beginning of military flight. The old Air Corps adage from World War II provides the context: Question: "Which nut on the airplane is the most important"? Answer: "The one that's loose"! In fiscal year 1994, a fourth of Air Force personnel are assigned to the Air Force Materiel Command, the command that performs aircraft maintenance.

The best way to ensure safety of air crews is to isolate parts before they fail. Rigorous inspection and testing is the formula that ensures aircraft parts don't fail during flight operations. The need for maintenance is determined by the number of flight hours that an aircraft has logged (FAA 2008). Maintenance checks run from routine to full-overhaul. They are designated by letters. Routine maintenance checks, termed 'A' checks, are performed every 400-600 flight hours at home bases. More complex 'B' checks are performed in hangars at home bases every 6-8 months.

Every 20-24 months, aircraft go to a maintenance depot for a 'C' check. The 'C' check takes the aircraft out of operation for two (2) weeks and requires about 6,000 hours of technician labor to complete. Nearly every part is inspected and tested to ensure it is not nearing failure.

Each Air Force aircraft undergoes a 'D' check or heavy maintenance visit every six (6) years. These checks can only be done by one of only five Air Force Logistics Centers. The aircraft is disassembled completely, and every part is inspected and overhauled before being reassembled by technicians. The 'D' check process takes up to 50,000 technician hours and requires the aircraft to be out of operation for 2-3 months. The testing, inspection, and overhaul requires a large workforce of highly skilled technicians and machinists. In civilian aircraft, technicians must hold an FAA Aircraft and Powerplant (A&P) license, that requires two (2) years of post-secondary education plus passage of an FAA exam. Technicians typically earn over \$100,000 per year in salary.

The Air Force has rigorous training requirements for the technicians that work at Air Force Logistics centers, but it does not require FAA licenses. Air Force technicians cannot therefore move into civilian maintenance without additional training and licensure. Machinists and the skilled metalworking trades that overhaul parts at air depots can, however, be employed directly in civilian aircraft but these technicians cannot disassemble or reassemble aircraft. The majority of the technicians at Air Force Logistics Centers are involved in inspection and overhaul tasks rather than assembly and disassembly (see Figure 2).


KELLY AFB POPULATION		
DEPOT MAINTENANCE	AIRCRAFT	1920
	NONAIRCRAFT	4791
	TOTAL	6711
WEAPON SYSTEM / COMMODITY MGMT	— — — — —	2796
BASE SUPPORT	— — — — —	3207
		
	ALC TOTAL	12,714
DEF DISTRIBUTION DEPOT (DLA)	— — — — —	1230
DEF INFORMATION SERVICES ORG	— — — — —	210
OTHER TENANTS/ORGANIZATIONS	— — — — —	6669
RESERVISTS (PART-TIME)	— — — — —	4443
	KELLY TOTAL	25,266
KELLY AIR FORCE BASE		

Figure 2: Kelly Air Force Base Workforce in 1995

The fleet of Air Force aircraft was so large during the Cold War - 9400 aircraft in 1986 - that it required five Air Force Logistics Centers to perform 'C' and 'D' checks (Air Force 1995). These centers employed more than 80,000 civilian workers in FY 1994 (Air Force 1995). The workload was so massive that logistics centers (also called Air Depots) specialized in particular airframes and engines to increase efficiency. Air Force Logistics Centers still operate this way in 1995.

Tinker Air Force Base in Oklahoma City is the largest of the Air Depots. Tinker has more than 18,000 civilian workers. They specialize in overhaul of the KC-135 tanker and B-1 bombers. Tinker also overhauls aircraft engines. Ogden Air Force Base in Utah specializes in fighter aircraft. Warner-Robbins Air Force Base in Georgia performs heavy maintenance on F-15 fighters, and C-130 cargo aircraft manufactured nearby in Marietta, Georgia. McClellan Air Force Base in Sacramento, California maintains the F-111 and F-117 stealth fighters and the A-10 'Warthog' attack aircraft (Los Angeles Times, 1993). Kelly Air Force Base in San Antonio is the oldest aircraft depot. It has more than 12,000 civilian workers involved in maintenance of B-52 bombers, C-5 and C141 cargo planes and T-38 trainers.

The fleet of military aircraft serviced by the Air Force Logistics Centers dropped by 50 percent between 1989 and 1995 (Air Force 1995). The maintenance workload did not require five massive depots in 1995. Air Force planners had anticipated the drop after the collapse of the Soviet Union in 1989. The Secretary of the Air Force had recommended the closure of McClellan Air Force Base in the 1993 round of BRAC but Secretary of Defense Les Aspin had removed it from the list after lobbying by California's congressional delegation. The Air staff formed a Base Closure Executive Group (BCEG) in 1993 to study the operations of the five centers (Kelly 2001). The recommendation of the BCEG was forwarded to the Secretary of the Air Force for the 1995 round of BRAC.

The Air Force historically had preferred to build organic capacity to maintain aircraft rather than outsource the activity to contractors. The Air Force had experimented with outsourcing depot maintenance of B-52's to Boeing in 1987. Boeing had built a new maintenance base at the former Chennault Air Force Base in Lake Charles, Louisiana, to handle the workload. The contract was not renewed by the Air Force due to late deliveries and performance problems. The lesson for both Boeing and the Air Force was that heavy maintenance of aircraft was not a skill that could be quickly mastered by neophyte mechanics. The outsourcing of B-52 maintenance had impaired the readiness of the B-52 fleet while failing to lower maintenance costs. The experiment by the Air Force with privatization of maintenance had been a failure. The end of the Cold War had reduced military procurement for aircraft. Major defense contractors like McDonnell Douglas-Boeing and Grumman-Northrup were merging in order to survive. Aerospace companies were now lobbying vigorously for the Air Force to outsource more of its depot maintenance to private companies, a reversal of its stated policy. They were making a strong argument in political circles that the nation would lose its capability to design and build military aircraft if it didn't raise the contract workload and lower the organic workload.

Contrast between Military Industrial Firms and Market Economy Firms

The assets at Kelly Air Force Base are highly specialized. The industrial assets are designed for precision machining of parts for turbine engines. The hangar and aircraft overhaul facility is the largest of its kind in the United States. Its highest and best use is for aircraft maintenance and overhaul. The best place to look for alternative users is within the aerospace and aircraft maintenance industries. Secondary users could consist of companies that need capacity for precision machining of low volume parts and assemblies. The low volume of throughput in an aerospace operation is not conducive to the high-volume requirements of auto suppliers and consumer durables, however.

The aerospace cluster in the United States consists of about 1000 companies (see Table 4). The industry is divided between companies that design and assemble airframes (SIC 3721), those that make component parts (SIC 3724), and those that manufacture engines (SIC 3728). Total sales in the industry were \$100 billion in 1992. Search and Detection equipment for navigation and communications (SIC 381) includes another 600 companies.

Table 4: Private Sector Prospects for Kelly Industrial Assets

SIC	Name	Companies		Employees (000)		Shipments (\$ millions)	
		1992	1987	1992	1987	1992	1987
332	Iron and Steel Foundries	1048	1083	122.1	129.8	11860.2	10627.7
346	Metal Forgings and Stampings	3663	3751	233.7	255.3	30621.3	28409.8
348	Ordinance and Accessories, N.E.C.	390	334	62.2	87.7	6855.0	7643.6
349	Miscellaneous Fabricated Metal Products	6648	6908	262.9	261.6	30666.5	24339.8
351	Engines and Turbines	311	289	82.6	86.9	17549.3	14570.4
353	Construction and Related Machinery	3022	3140	176.2	188.3	27193.4	24622.3
354	Metalworking Machinery	11092	11002	254.9	267.7	26473.5	22003.5
356	General Industrial Machinery	3589	3434	244.0	240.4	31442.8	24120.5
358	Refrigeration and Service Machinery	2066	1873	178.7	190.4	27544.1	23234.9
359	Industrial Machinery, N.E.C.	23281	22096	303.7	291.9	25442.7	19921.4
3721	Aircraft	152	137	264.6	268.2	62940.1	39092.7
3724	Aircraft Engines and Engine Parts	340	372	120.4	139.6	22407.5	20262.1
3728	Aircraft Parts and Equipment, N.E.C.	1027	925	163.1	188.2	19510.6	17949.3
376	Guided Missiles, Space Vehicles, Parts	92	97	145.9	213.6	26508.4	26285.1
3761	Guided Missiles and Space Vehicles	24	19	97.7	166.7	19423.1	21565.8
381	Search and Navigation Equipment	630	918	253	369.4	35039.2	36266.8

Source: *Census of Manufactures 1992, Industry Statistics, Table 1-1b*

Sales in the electronics end of aerospace are \$35 billion. Most of the airframe companies have subsidiaries that perform 'C' and 'D' check maintenance and overhaul on civilian planes. Major names in air frames include Boeing, McDonnell Douglas, Northrup, Grumman, and Lockheed. Major names in engines are Pratt and Whitney, General Electric, SNECMA and Rolls Royce. Major airlines tend to perform 'C' and 'D' checks in their own maintenance bases. American airlines, for instance, has a major base in Tulsa, Oklahoma, Northwest airlines in Minneapolis, United airlines in San Francisco, and Continental airlines in Houston.

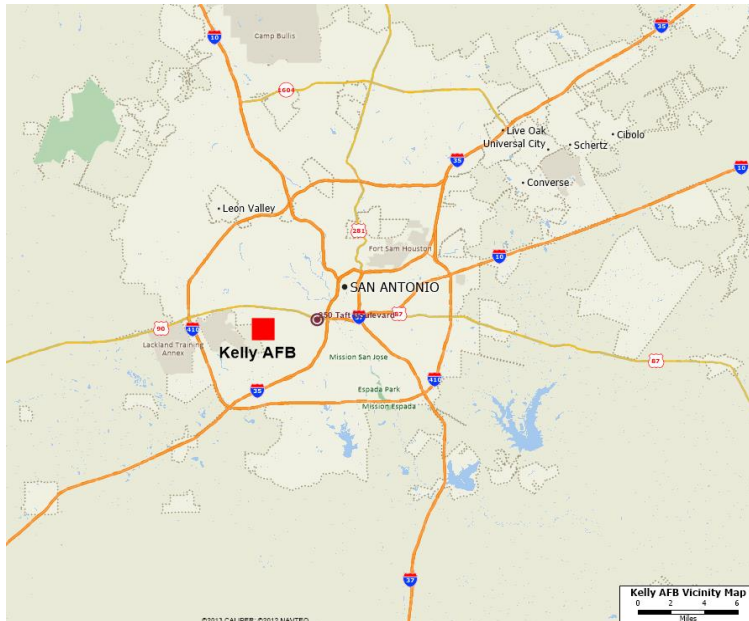
The equipment and machinery industries use many of the same skills as aircraft overhaul. The universe of companies in these industries is much larger than the total of aerospace companies (see Table 4) but the size of their operations and their space requirements are much smaller than those of the airframe and engine companies. The more than 5 million square feet of manufacturing space at Kelly would have to be subdivided to accommodate the needs of non-aerospace companies.

If the Air Force overhaul workload is privatized, suppliers to Kelly Air Force Base are potential users of the space. Companies in aerospace often specialize in either military markets or in commercial markets. Military customers typically prioritize performance and delivery over cost (Pentagon 1992) while commercial customers prioritize cost over performance. The accounting documentation and mil specs used for military customers add costs to contracts that civilian customers refuse to pay. Military contracts typically have a larger engineering and design component than commercial contracts. Because of these differences, companies rarely mix defense and civilian work within the same facility. Large companies like Boeing and McDonnell Douglas have separate divisions for military and civilian work. Smaller companies like Lockheed and Northrup specialize in defense and missile work and do not build civilian airplanes. A

transition plan for the Kelly assets has to determine whether the community should approach military contractors, civilian contractors or non-aerospace companies.

Kelly Air Force Base Assets and Liabilities

Kelly Air Force Base consists of 4,000 acres of land and nearly 600 buildings encompassing over 16 million square feet of space (Kelly 1995). The base also has 429 family housing units. The air field will accommodate any aircraft in the civilian or military fleet. Its 377 acres of ramp space will hanger hundreds of aircraft at a time. The base has excellent access to the rail and road network (see Maps 1-3).



Map 1: Kelly Air Force Base Vicinity Map

Kelly is largely a Military Industrial Facility (MIF). Its buildings contain nearly 5 million square feet of factory space with more than 500 pieces of industrial equipment, including more than 50 CNC machining centers. The Jet Engine Overhaul Complex rebuilds half of the engines used in the Air Force.

Testing facilities include science and engineering labs and a computerized industrial

tomographic analyzer. Details about the industrial assets in the Kelly MIF are shown in the talking papers attached to this case (Kelly 1995).



Map 2: Kelly AFB in January 1995



Map 3: Kelly Air Force Base in 1995

Kelly Air Force Base has a direct labor cost that is below the average for the Air Force and below all of the maintenance depots operated by the Navy (see Figure 3).

Figure 3: Depot to Depot Comparison

The BCEG, however, found that labor costs at Kelly were higher than labor costs at the other logistics centers. While wage rates were lower in San Antonio, the cost per standard labor hour had jumped in San Antonio from \$47.20 in FY92 to \$60.92 in FY94 (Hussey et al., 2001).

In FY94 Kelly had the highest standard labor costs of all five (5) Air Force depots. Customers receiving C-5s also complained of quality and performance problems. The adversarial, even hostile, labor-management relations in San Antonio between the union and Air Force is a challenging problem that is related to the high costs. Hispanic male workers had filed a class action lawsuit in 1984 claiming that Anglos and females were given preference in promotion at Kelly. The suit was not yet resolved in 1995. Kelly had received less military construction money than logistics centers in Oklahoma, Utah and California, over the last decade (New Express 2015).

DEPOT TO DEPOT COMPARISON (Direct Labor + Overhead)				
"IN DOLLARS"				
1988	1989	1990	1991	1992
41.64 SA	43.44 SA	43.41 SA	46.01 SA	50.10 SA
42.13 NOR	45.67 AF	47.39 AF	49.66 AF	52.66 AF
44.24 AF	50.54 NIS	48.75 NOR	53.02 NOR	55.88 JAX
50.14 NIS	54.09 NOR	51.95 PEN	58.08 JAX	56.98 CHE
52.50 PEN	55.98 PEN	56.25 JAX	59.95 CHE	58.13 NOR
52.68 CHE	57.28 CHE	57.17 NIS	60.84 PEN	63.39 PEN
52.80 ALA	60.48 ALA	62.47 CHE	61.26 NIS	63.48 ALA
54.10 JAX	74.60 JAX	68.51 ALA	64.19 ALA	69.30 NIS
NA 49.67	58.26	57.49	59.75	61.19
△ 5.43	12.59	10.10	10.11	8.53
SA-San Antonio AF-Air Force Average NOR-Norfolk NIS-North Island CHE-Cherry Point ALA-Alameda JAX-Jacksonville NA-Navy Average SOURCE: DOD 7220.29-M & 7220.29-H DATA				
KELLY AIR FORCE BASE				

The final challenge for Kelly was something that neither the Air Force nor workers could address directly. San Antonio sat on top of the Edwards Aquifer, the underground reservoir of fresh water that supported virtually all industrial, agricultural, and residential water demand in South Texas (Hussey et. al, 2001). The Sierra Club filed suit in 1993 against the federal government claiming that pumping limits were needed on the aquifer to avoid the extinction of endangered species in the Comal and San Marcos springs fed by the aquifer. The Sierra Club sent a new plea to the federal court in 1994 to declare a water emergency in San Antonio. When the federal judge declined the request, the Sierra Club forwarded a copy of the plea to the BRAC commission. The water situation became acute when city residents rejected the city's 2050 Water Plan in August 1994. Without drastic action, Kelly faced the perception, if not the reality, that the base would not have adequate water resources to meet its needs.

State Economic Development Support in Texas

The State of Texas has a limited role in economic development. Governor George Bush's Office of Economic Development is the organization that works with communities on local and regional economic development projects. The state lacks statewide incentives for development projects. Tax abatement agreements in Texas are local agreements. The state allows counties and cities to levy a sales tax for economic development, but San Antonio, Houston, and Dallas are exempt from the statute. Development incentives to address Kelly Air Force Base must be levied at the county or city-level.

BRAC Process 1995

The Base Closure and Realignment Commission was formed in 1988 to reduce political interference in the decisions to close military bases (Global Security Nd). The military base infrastructure was developed largely during World War II and not downsized afterwards. The Department of Defense is supporting billions in real estate assets that are no longer needed for national defense. Congress passed PH 100-526 in October 1988, to address the need to downsize the real estate assets of the Department of Defense. The new law established a bipartisan commission that would make recommendations to Congress and the Secretary of Defense on closures and major realignments of military bases. The statute required that Congress would have to accept or reject the closure list in its entirety. The law was modified in 1990, to require the Department of Defense to draw up the initial list of bases for consideration by the Commission. The law also provided that the commission would develop lists for realignment and closure in 1991, 1993 and 1995.

The BRAC Commission is nominated by the President and confirmed by the Senate. They review the list of bases submitted by the Pentagon and make their own recommendations to the President. The President reviews the recommendations and sends them back to the Commission for further work or forwards the list in on to Congress. The recommendations go into effect unless rejected by Congress.

The three prior rounds of BRAC closed 70 bases and realigned military missions in 43 more. The Air Force had closed 17 bases as a result of earlier BRAC rounds but had not downsized its aircraft overhaul depots. The Air Force had not recommended any of its Air Logistics Centers for closure in 1993. The BRAC Commission added three of the Air Logistics Centers, including Kelly, to the list in 1993 but eliminated them from the final list sent to the President. The Air Force had not included any Air Logistics Centers to the 1995 list. When the DOD list was issued on February 28, 1995, Brooks AFB in San Antonio was slated for closure, but Kelly was not (Hussey et al. 2001). The water situation in San Antonio was a decisive factor in the decision to close Brooks.

The Air Force had not listed any one of the AFLCs on the closure list in 1995. The decision was to reduce force in all of the AFLCs rather than to close any of the five. The large up-front costs of closure were the reason cited by the Air Force for its decision.

Under pressure from Chairman Dixon of the BRAC Commission, the Air Force released the ratings of the five AFLCs completed by the Air Staff's Base Closure Executive Group in 1994. Kelly Air Force Base in San Antonio and McClellan Air Force Base in Sacramento were rated the lowest among the five AFLCs that the BCEG had examined.

After base visits and further examination by BRAC staff, the Commission voted on the morning of June 22nd to close McClellan AFB in Sacramento and to close the San Antonio Air Logistics Center at Kelly Air Force Base. The portion of the base west of the runway would be transferred to adjacent Lackland Air Force Base. The Kelly decision would eliminate 13,000 jobs at Kelly Air Force Base.

The BRAC statute requires that bases on the closure list be offered first to other federal agencies. If none of the federal agencies opt to accept title, the assets are conveyed for free to state or local political jurisdictions. In the case of Kelly Air Force Base, the local jurisdiction receiving title is the City of San Antonio.

Strategic Options for Economic Development Leaders in San Antonio

Krier and the Chamber were the leaders in organizing the community to defend Kelly against closure in 1993. The Military Affairs Committee at the Chamber, under Krier's leadership, had marshalled the resources of the Air Logistics Center, the city, and business community that convinced the BRAC Commission to remove Kelly from the closure list. Major General Curtis, commander of the San Antonio Air Logistics Center, had been instrumental in making the business case for keeping Kelly open. Curtis had announced he would retire in late 1995. His successor had not been announced by the Air Force and Krier could not be certain of whether the new commander would have the close working relationship with the Chamber and City that had been present under Curtis' leadership.

The situation was complicated by the limited time available to remove Kelly from the closure list. The final list was due on President Clinton's desk on July 1st, a mere 8 days from today. The Commission was not scheduled to meet before mid-July. A vote to change the recommended list would take a special meeting of the Commission which could only be called by Chairman Dixon, the Commissioner who had insisted that Kelly and McClellan be added to the list.

The Texas delegation could prevail on President Clinton to give San Antonio the full six years to prepare for closure. While closure was the purview of the Commission, the date of closure was the decision of the Commander in Chief. Since the San Antonio Delegation included 2 Democrats, San Antonio could expect to find an emissary who could get an audience with the President. Henry B. Gonzales, one of the San Antonio Democrats, was one of the most senior Democrats in the House. The advantage of delay is that San Antonio has a longer time to prepare for the transition to civilian use. The disadvantage is that McClellan in California, if it closes before Kelly, might attract the prime commercial customers for aircraft overhaul and maintenance facilities, leaving few prospects to lease the Kelly plant.

Civilian use of the assets is complicated by the downsizing of the market for military aircraft. Large defense contractors are lobbying Congress and the Pentagon for a change in Air Force policy on the share of maintenance performed organically. The military divisions of these firms want to transition their empty manufacturing space and employees into contract maintenance.

The biggest complication, however, is the local and state politics involved with a transition to civilian use. Leaders in San Antonio must decide who will own the assets transferred from DoD. The massive size of the Kelly assets ensures that every political force in the community will want to be involved in the transition. The resources for a successful transition require that leaders in business and government, across a number of jurisdictions, will need to reach a consensus on the vision for the transition.

A transition also needs to investigate the business needs of civilian users. The City of San Antonio cannot sell or lease real estate except by public auction. Companies in civilian aerospace will not become customers for San Antonio facilities if real estate title is transferred via public bidding. The community needs a development organization that can sell or lease real estate to private companies without the complications involved in city ownership.

The political complications involve more than the legal entity which will receive the assets. Transition requires financial resources for infrastructure and building investments that the Air Force has not made in the last decade. The water situation with the Edwards Aquifer will also trouble negotiations with private companies as it has troubled the BRAC Commission and Air Force.

The viability of the transition involves both a human resource component as well as a real estate component. The workforce at the depot is another prime consideration for the transition. Nearly 2000 of the Kelly workers perform aircraft overhaul for the Air Force. Despite their expertise in wide-body maintenance, they cannot work on civilian aircraft without acquiring

A&P licenses issued by the FAA. The A&P license requires that workers acquire hundreds of hours of classroom instruction in FAA approved training courses.

Krier is faced with the need to develop a transition strategy to help his community avoid the biggest economic downturn in its history. His prior experience gives him the best background for anticipating problems, but neither Krier nor the San Antonio Chamber can act alone. Krier needs an organization that brings all of the key players together to reach a consensus on the game plan for moving forward. The organization needs the legal authority to act on behalf of the entire community and state. The game plan needs to look carefully at the options available for moving the military assets and personnel into private sector jobs, while maintaining the salary levels prevailing at Kelly. The trained workforce at Kelly will not be satisfied with entry level jobs paying the minimum wage when they had enjoyed a middle-class lifestyle that provided full benefits and salaries well above the prevailing wage in south Texas. The challenges are daunting but Krier understands that the entire transition effort could fail if he does not bring his expertise to the table.

References

Air Force. 1995. Air Force Statistical Digest, 1995 edition. Published by Deputy Assistant Secretary, Cost and Economics, June 30, 1995. Retrieved Aug. 7, 2017 at <https://media.defense.gov/2011/Apr/19/2001330022/-1/-1/0/AFD-110419-010.pdf>

Aerosphere. Nd. "Aerosphere website", http://www.aerosphere.com/html/747_d-inspection.html, accessed August 7, 2017.

Butler, Richard and Mary Stefl. 2015. The Economic Impact of San Antonio's Hospitality Industry. San Antonio: San Antonio Area Tourism Council.

FAA. 2008. "Inspection Fundamentals", Chapter 8 in AFS-600. Washington, D.C.: Federal Aviation Administration.

Global Security. Nd. "Base Realignment and Closure. Global Security.org, retrieved August 8, 2017 from <http://www.globalsecurity.org/military/facility/brac.htm>

Hussey, Ann, Robert Browning II, Ross Day, Michael Obert, Elizabeth Manning and Patricia Parrish. 2001. 'Kelly Air Force Base: eight-Five Years of Service, 1916-2001. San Antonio. Office of History, San Antonio Air Logistics Center.

Kelly. 1995. Kelly Air Force Base: World Class Depot. Briefing to Defense Base Closure and Realignment Commission. DCN 1478.

Los Angeles Times. 1993. "2 California Bases May Return to Closure List." March 23, 1993. Retrieved online at http://articles.latimes.com/1993-03-23/news/mn-14183_1_california-bases on August 7, 2016.

Pentagon. 1992. *The Pentagon and the Cities*. Thousand Oaks, CA: Sage Publishing. Chapters 1-3 (Development Theory and the Military Industrial Firm; The Pentagon and the Gunbelt, Defense Spending and the New England Economy in Retrospect).

San Antonio. 2015. "Kelly's Closure shook the City", San Antonio News Express. August 10, 2015. Retrieved Aug. 7, 2015.

Wolff, Nelson. 2008. Transforming San Antonio. San Antonio: Trinity University Press.