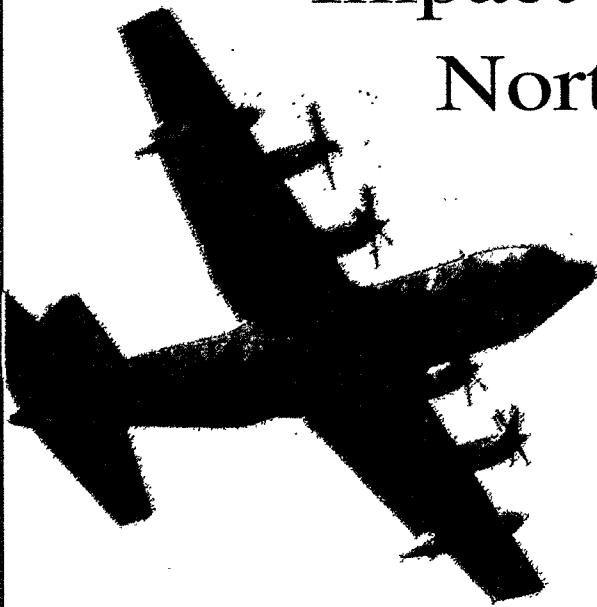


More Than Economics:

The Military's Broad Impact on Eastern North Carolina

by Renée Elder



Executive Summary

In its approach to the U.S. Department of Defense Base Realignment and Closure process, with thousands of military and civilian jobs on the line, North Carolina attempted to brand itself as "the most military friendly state in the nation." And, of the state's three regions, the East is by far the friendliest. Home to six major military bases and several smaller installations, the East plays host to some 116,000 uniformed troops and more than 21,000 civilian workers, pumping billions of dollars into the economy of the state's poorest region. Indeed, approximately one-eighth of the nation's troop strength is stationed in Eastern North Carolina (116,000 soldiers in Eastern North Carolina out of 780,000 total troops).

The military presence provides a great deal of pride in the region's role in defending freedom, and the nation's defense is vital to every citizen. But the heavy military presence also produces broad impacts. What are some of these impacts, and how do they affect Eastern North Carolina's military towns and counties? The Center examined 12 areas of impact: economic impact; defense contracts; impact on ports; impact on sales taxes and property taxes; impact on taxpayer-financed services and on growth and housing; impact on the public schools; impact of military spouses and retirees on the local work force; rates of crime, domestic violence, and child abuse; race relations and the military; presence of drinking establishments, pawn shops, and tattoo parlors; environmental impact; and air space restrictions.

1. Economic Impact: A study by economists at East Carolina University completed in 2004 estimates that the military generates \$18.1 billion in economic impact each year, some \$13 billion of which stays in Eastern North Carolina. These numbers include a multiplier effect that increases the actual dollars, but with \$3.9 billion in actual base payrolls bankrolling 137,000 jobs, it's evident that the military has a major impact. However, spin-off development produces a disproportionate share of lower-paying retail trade jobs in counties with large military installations such as Onslow, home of Marine Base Camp Lejeune. In addition, major overseas deployments historically have produced a drop in sales tax revenue as military dependents slow their spending and even relocate to join relatives living out of state until the deployment ends. In the 1991 Persian Gulf War, this was thought to contribute to a major recession in North Carolina and a state government revenue shortfall of \$1.2 billion. Thus, while military jobs are less affected by the ups and downs of the traditional economy, they have cycles of their own caused by deployment patterns and changes in troop strength. The phenomenon was present but less pronounced in the last few months of 2002 before the war in Iraq, but sales tax revenues have since bounced back to pre-deployment levels.

2. State's Share of Defense Contracts: *North Carolina has not been favored with its fair share of Department of Defense contracts for home state businesses. North Carolina ranks fourth among states in military presence but 23rd in the amount of defense contracts the state receives. Of more than \$200 billion in Department of Defense procurement in 2004, less than 1 percent came to North Carolina.*

A report by Angelou Economics for the Military Business Center at Cumberland Technical Community College shows a 50 percent increase in military contracts awarded to businesses in the state between 2001 and 2004, but during the same period the amount of contracts awarded nationally rose by 68 percent to \$230 billion. States that did significantly better than North Carolina included California, Virginia, Texas, Connecticut, and Maryland. California, Virginia, and Texas have more military personnel stationed in their states than does North Carolina. Additionally, North Carolina did not win the majority of the contracts for local base work. Of the \$2.4 billion in contracts awarded by the state's military bases, only \$460 million went to North Carolina firms.

3. Impact on Ports: *Business at North Carolina's two ports at Wilmington and Morehead City was up 24.5 percent in fiscal year 2004, partially due to increased use by the military. Since the beginning of Operation Iraqi Freedom, the port at Morehead City has shipped 22,000 short tons (44 million pounds) of cargo for the military on 53 vessels, producing \$562,000 in revenue. Some 175,000 short tons have been shipped from the state port at Wilmington on 22 vessels, producing some \$3 million in revenue. State officials say the deepening of the Wilmington port in 2005 is expected to generate still more shipping by the military. These state ports, along with the Military Ocean Terminal at Sunny Point, are three of only 15 strategic military ports in the country.*

4. Impact on Sales Taxes and Property Taxes: *While the oft-heard complaint is that heavy military presence drives up property taxes for property owners due to the vast amounts of tax-exempt land and facilities, the numbers do not bear out that allegation. Military counties in the region carry moderate to low per capita property tax burdens compared to others in the region and state. Onslow County's per capita property taxes are lowest in the 41-county region. Sales tax revenue in Onslow, while it dropped off at the beginning of Operation Iraqi Freedom, recovered nicely and now rivals per capita sales tax revenue generated in nearby non-military counties. Cumberland County's per capita property tax rate also is lower than the 41-county eastern region average, despite the fact that 42,240 acres of federal property are off the tax rolls at an estimated value of \$126.7 million, according to a 2001 estimate. During that same year, on-base commissary sales of \$4.1 million were not subjected to the state and local sales tax.*

5. Impact on Taxpayer-Financed Services and on Growth and Housing: *Population growth and housing availability are a problem for some local governments, in that*

the lower-cost housing built for military families often doesn't pay the cost of providing services. Harnett County, near Fort Bragg, is one place where the problem has surfaced. The county's population grew 10 percent between 2000 and 2003, more than twice the state average, as military families flooded into the area in search of cheaper housing. The heavy growth is expected to continue, putting huge demands on school systems, recreational facilities, and water and sewer systems. The county has yet to see substantial commercial development to go with the residential growth and help pay the cost of serving these new residents. To the northeast, Coast Guard Air Station Elizabeth City and related command units may help drive up housing prices as employees relocate from places like Alaska and California where real estate is much more expensive.

6. Impact on Public Schools: *The public schools are one area where local officials say the military does not pay the full cost of educating its dependents. With 52,000 students and 16,000 federally connected students, the Cumberland County Public Schools were to receive \$5.8 million in federal Impact Aid dollars in 2005. That's less than 2 percent of the school system's \$362 million operating budget. However, federal officials say the raw numbers overstate the case. Many military personnel live off base, own property, and pay taxes that help cover the cost of their children's education. In addition, not all federally connected children are military dependents. Only 12,394 students have parents in the military in uniformed service.*

7. Impact of Military Spouses and Retirees on the Local Work Force: *Local economic development officials say thousands of retirees leave the military every year, and they tend to settle around their most recent assignment. Officers typically retire at 46 and enlisted personnel on average retire at age 42. These military retirees are considered a boon because they have an income stream and are less likely to have children who place demands on schools and recreational facilities. If they return to work, they often have desirable job skills that economic developers can tout when they attempt to sell a new industry on a particular area. Additionally, more than half of Marines stationed at places like Cherry Point in Craven County are married, and spouses of military personnel often are educated and bring job skills of their own. A negative for those who want to work is that there is a shortage of high-quality jobs around many military bases, with a preponderance of retail and lower-paying service sector jobs. Economic developers in places like Jacksonville, N.C., where retail trade produces a fifth of all jobs, are working hard to change that picture. In addition, the 2005 N.C. General Assembly passed legislation requiring state occupational boards to streamline licensing requirements for military spouses who wish to practice a trade or profession that requires a license (teachers or health care workers are excluded from this provision). The law also provides in-state tuition at North Carolina's public universities and community colleges for military personnel and their dependents.*

8. Rates of Crime, Domestic Violence, and Child Abuse: Officials in military towns say they are victims of a long-standing stereotype that no longer holds—that of high crime rates, red light districts, and public drunkenness. State crime statistics support the contention that crime rates are no higher, and in some cases lower, than in counties with similar demographics statewide. Examining the data, high crime rates seem to be more of a factor of urbanization than of presence of a military installation. Two areas where crime rates were found to be elevated in military counties were in domestic violence and in child abuse fatalities. The U.S. Army Surgeon General found a clustering of five domestic violence homicides in a 43-day period in 2002 to be statistically significant. A study by Marcia Herman-Giddens of the University of North Carolina School of Public Health found child abuse homicides to be elevated around Camp Lejeune Marine Base and Fort Bragg Army Base. While questioning some of the research methods in the Herman-Giddens study, Fort Bragg officials say they have implemented a number of programs to ease the stress of military deployments on soldiers and their families.

9. Race Relations and the Military: The city of Jacksonville, home of Camp Lejeune, is hailed as the least segregated city with a population above 25,000 in the nation. Fort Bragg integrated its base schools well before the federal government required it in Brown versus Board of Education. There have been racially motivated hate crimes in military communities, including the December 1995 slayings on the streets of Fayetteville of two African-Americans by three white Army privates based at Fort Bragg who subscribed to neo-Nazi beliefs. However, North Carolina's military counties have suffered little by way of hate crimes in recent years. Of 77 hate crimes registered in North Carolina in 2003, none were in military counties. Two of 62 such crimes occurred in military counties in 2002.

10. Presence of Drinking Establishments, Pawn Shops, and Tattoo Parlors: Does a heavy military presence encourage such retail trade as bars, pawn shops, and tattoo parlors? According to the Center's research, the picture is mixed. One measure is the average number of residents per drinking establishments. The lower the number of residents per drinking establishment, the higher the number of drinking establishments on a per capita basis. This is a means of adjusting for differences in population size among the counties. With 741 residents per drinking establishment, the data showed slightly fewer residents per bar for military counties versus non-military counties. That compares to 764 residents per drinking establishment for the 41 eastern counties and 1,019 for the state as a whole. In addition, some less populated military counties had relatively high numbers of pawn shops compared to counties without a military base, and Onslow County, home of Camp Lejeune and New River Air Station, had a greater concentration of tattoo artists per capita than any county in the state. However, most military counties did not have a disproportionate number of tattoo parlors or pawn shops when population size was taken into account.

11. Environmental Impact: Military installations face a range of environmental issues, chief among them being potential soil and water contamination and noise from low-flying aircraft. Water quality has been a concern at some military bases, including Camp Lejeune, where volatile organic compounds were found in several drinking water wells, according to the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency of the U.S. Department of Health and Human Services. The contamination was linked to leaking underground storage tanks, chemical spills, and drum disposal, as well as solvents from a dry cleaning operation on base.

Several studies done by the ATSDR have suggested a potential link between volatile organic compound contamination and birth defects among families living on the base. In 2001, the Pentagon was fined \$312,000 and required to spend almost \$1 million to clean up two drinking water contaminants, lead and trihalomethanes, found in the drinking water supplied to Fort Bragg. Unexploded ammunition or weapons at bombing ranges is also a cause for concern. However, the military has begun to address environmental issues more aggressively in recent years, strengthening its record on such issues as protecting water quality, wastewater treatment, and protecting wildlife.

A further environmental concern is noise pollution. The Eastern Carolina Joint Use Land Study produced in November 2002 by government officials in the area surrounding Craven and Carteret counties urged that cooperative planning eliminate development in strategic areas near the bases to reduce land use conflicts. Such conflicts are at the heart of a Navy proposal to purchase or condemn for purchase more than 30,000 acres of land in Washington and Beaufort counties for an Outlying Landing Field for Super Hornet jets. The proposal has set up a row between the Navy and concerned citizens who want to preserve their rural solitude. Meanwhile, the Navy is attempting to escape the complaints of urban residents in urban Virginia Beach where the Super Hornets are based at Oceana Naval Air Station.

12. Air Space Restrictions: Further concerns revolve around expanding military airspace that has prevented the popular Outer Banks from being served by commercial airlines. The military's special-use airspace with varying levels of flight restrictions all but surrounds the Dare County airport. Airport officials say only a limited amount of unrestricted air space to the west of the airport is available for approach, and they worry that even that could be compromised if the Marine Corps receives permission for two new special-use zones it has requested from the Federal Aviation Administration. Tourism is the driving force of the Dare County economy, and local officials worry that ever-tightening military air space restrictions will discourage not only commercial flights but also amateur pilots who are intimidated by the prospects of flying through restricted, permission-only areas. Military officials counter that the airport authority exaggerates the impact of military training routes. Much of this airspace is available when not scheduled for use by the military. And, military officials say air traffic

controllers on military bases have added a safety element by making their services available to civilian use.

Thus, the military presence brings a bounty of economic impact in jobs and spin-off development. It brings a willing work force and produces a number of retirees who apparently like calling North Carolina home. The tax-exempt status of military property does not seem overly onerous, though it does take some high-quality real estate along the coast out of potential development. But the military brings a variety of impacts beyond economics. There is broad impact on the East, its way of life, and its future. The costs include noise, air space restrictions, and the opportunity cost of giving up for military use such resources as the pristine land along the Onslow County coast and potential residential or commercial property in Cumberland County. For example, in 2001, the Cumberland County tax office assigned a value of \$126.7 million to the military's 42,240 acres within the county. In addition, there is the commercial mix that comes with serving a large military population—heavy on lower-paying retail trade. Thus, the heavy military presence, though laden with benefits, comes at a price.

Derryl Garner grew up on a small tobacco farm in Eastern North Carolina. For decades, his family struggled to make a living off the land, growing crops in the summer and timbering in the winter. As a young man in 1941, Garner's future appeared to hold only more of the same. But his prospects changed that year, when the U.S. Marine Corps began clearing 8,000 acres of swamps, farms, and timberland near Garner's home to begin building Cherry Point Air Station.

That, he says, has made all the difference for him and for his region of North Carolina. After a four-year apprentice-training program, Garner pursued a career as an aeronautical design engineer. He retired from Cherry Point in 1992 after more than 40 years of service and now presides as mayor of Newport, his Carteret County hometown. Today, approximately 9,000 Marines and sailors are stationed at Cherry Point (See Table 1, p. 71). Another 5,771 civilians also are on its payroll, earning average salaries of \$50,000 a year.

Meanwhile, in Washington County, Jerry and Myra Beasley are fighting the prospect of a forced sale of their farm to the military. The couple's 850-acre farm is included in the 30,000 acres the Navy wants to acquire for its outlying landing field (OLF) to train pilots in takeoffs and landing. The project would require the Beasleys and dozens of others to give up their land, yet it would bring only a handful

of jobs to the county because the jets it will serve are based 90 miles to the south as the crow flies at Cherry Point or at Oceana, Virginia.

The project will bring lots of noise, which the Beasleys believe will disrupt the environment and discourage private development in what already is one of the poorest counties in the state. "Washington County is struggling now to meet its expenses," Jerry Beasley says. Some in Washington County say they are hopeful that the OLF, if it comes, signals that the Navy will one day open a bigger facility and bring more jobs to the community. But Beasley's not interested: "I don't want my child growing up in a military town full of tattoo parlors and strip joints."

North Carolina has a long history of hospitality to the military. Its presence and economic impact has been seen by many as a blessing to the eastern region, which lags behind the rest of the state in income, education, and other important indicators. But for all the good it does, the military's large shadow also falls over communities in some not-so-positive ways.

As the U.S. Department of Defense embarked on another round of base realignment and closures, many citizens and government officials in North Carolina focused on ways to preserve the state's

Renée Elder is a free-lance writer and editor residing in Raleigh, N.C.

role as a home base to some of the largest and most powerful military installations in the world. “We shouldn’t look at the military economy as just something that belongs to Eastern North Carolina,” says Lt. Gov. Beverly Perdue, who is spearheading state government efforts to strengthen its military position and recruit even more Department of Defense investments. “This is a statewide economy that just happens to be located in the east. It’s just as important as the furniture industry and the textile industry. . . . We’re trying to define North Carolina as America’s military base, with huge land masses and ocean access. The whole country can benefit.”

The base realignment and closure process, known as BRAC, began in December 2003 with the publication of draft selection criteria for closing or consolidating military bases according to updated needs of military branches. Initial recommendations for closure or consolidation were made in the spring of 2005. U.S. Defense Department officials have indicated that due to efficiency and technology improvements, there is as much as 25 percent excess capacity at the country’s 425 military facilities.¹

The process caused fear and trembling across the state at the prospect of a major base closure, but the fears proved largely unfounded. The state will experience a net loss of 568 military positions out of nearly 116,000 and gain 420 civilian jobs (see Table 2, p. 72).² Pope Air Force Base would be converted to Army use, and two reserve facilities will be shuttered, but otherwise the state comes out largely unscathed under the process. The base closing commission, headed by Anthony J. Principi, a former U.S. Veterans Affairs Secretary, softened the initial proposals, opting to leave at least some Air Force jobs at Pope while still shifting the base to Army control, and leaving intact the Army research office at Research Triangle Park, which had been proposed for closure.³ The commission also endorsed a recommendation to shift the U.S. Army Forces Command (FORSCOM) and U.S. Army Reserve Command units to Fort Bragg and move a Special Forces unit elsewhere. The BRAC commission report was delivered to the President on Sept. 8, 2005, and became law in mid-November.

Table 1. Major Military Installations in Eastern North Carolina and Affiliated Jobs

Installation	Date Established	Location (County)	Military Positions	Civilian Jobs
1. Fort Bragg	1918	Cumberland, Hoke, Harnett, Moore	52,000	8,500
2. Pope Air Force Base	1919	Cumberland, Hoke, Harnett	6,543	774
3. Camp Lejeune and Air Station New River	1941	Onslow	43,100	4,800
4. Marine Corps Air Station Cherry Point	1954	Craven	8,987	5,771
5. Seymour Johnson Air Force Base	1942	Wayne	4,298	542
6. Coast Guard Support Center	1940	Pasquotank	900	575
7. Sunny Point Military Ocean Terminal	1955	Brunswick	12	230
Total Affiliated Jobs:			115,840	21,192

Source: N.C. Lieutenant Governor’s Office, www.ltgov.nc.us/BRACLinks.asp.

Realignment decisions ultimately were to be based on facilities' usefulness for future military operations and "factors such as potential costs and savings, community support, and environmental considerations," according to the U.S. Department of Defense.⁴

Smaller bases were considered somewhat more vulnerable than the larger installations, says Jim Davis, economic development director for Craven County. "Obviously, the Pentagon is not going anywhere or probably Fort Bragg, but there's not anybody exempt on the list," Davis says.

But with a net loss estimated at only 568 military positions, and 420 civilian jobs gained in the BRAC process, supporters of a strong military presence in North Carolina wound up savoring a victory. Retired Gen. Paul Dordal, who headed up BRAC efforts for Fort Bragg and Pope Air Force Base in Fayetteville, says moving FORSCOM from Fort MacPherson, Georgia, to Fort Bragg was particularly important. That move offsets much of the loss of

personnel from realignment of Pope Air Force Base, but the greater gain is the military contractors who may relocate to the area to deal with the military command. "The community leaders representing communities around Fort McPherson testified at the BRAC hearings that the economic impact of losing FORSCOM there would be over \$700 million annually," says Dordal. "We may not receive all of the same economic benefits with FORSCOM that they are losing. However, there should be a number of defense contractors that deal with FORSCOM on a regular basis who will want to move to stay close to FORSCOM. FORSCOM is a four-star headquarters that is in charge of training, equipping, and preparing the Army for combat, and the contractors will follow the headquarters to Fort Bragg."

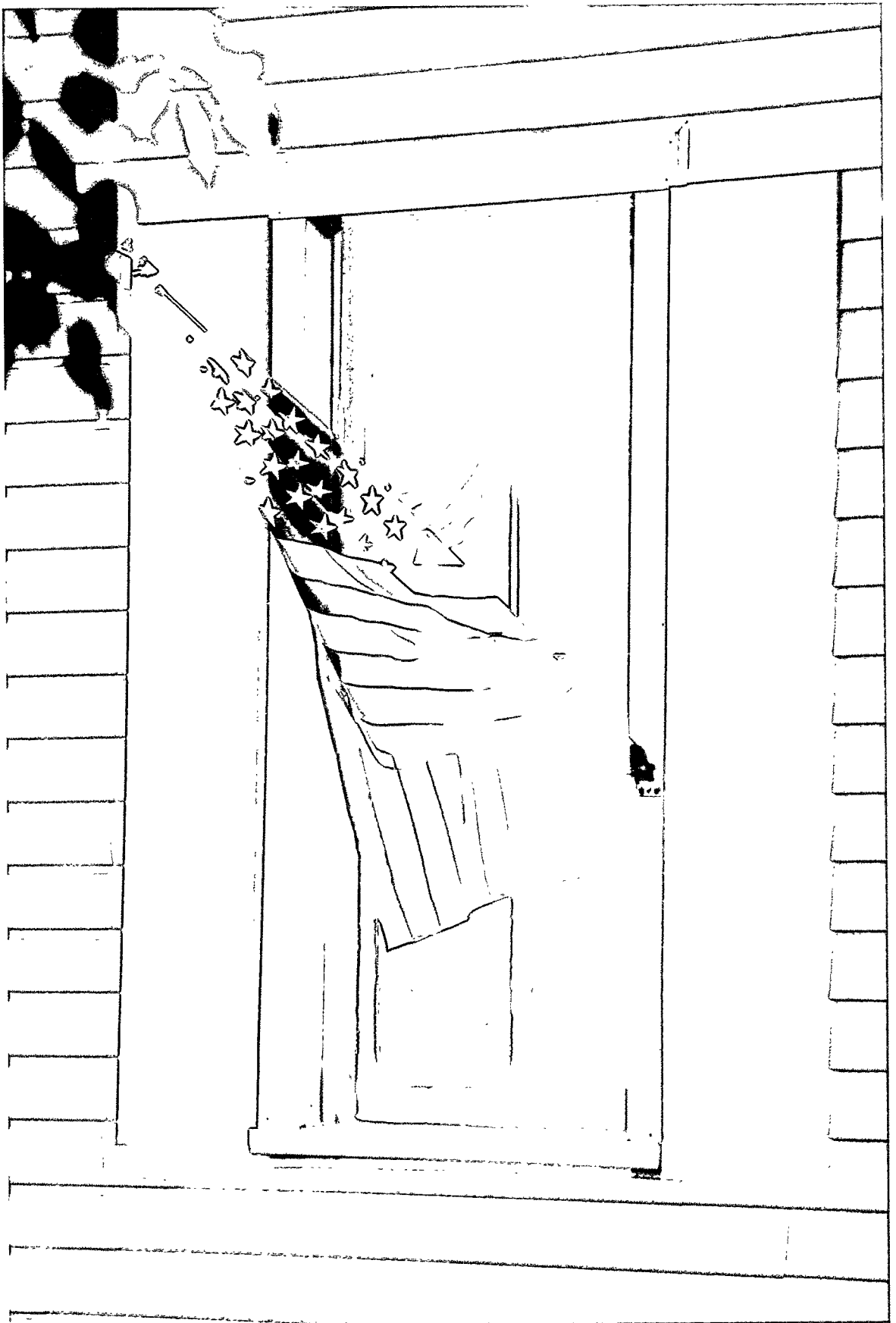
But the apparent victory in surviving BRAC was not universally applauded. "Lieutenant Governor Perdue did an excellent job of protecting our bases," says Cyrus B. King, Sr., a World War II veteran residing in Raleigh, N.C., and a long-time critic of

Table 2. Base Reduction and Closure Impact on Eastern North Carolina and North Carolina Statewide

Installation and County Location	Proposed Changes: Military Positions	Civilian Jobs
Fort Bragg <i>Cumberland, Hoke, Harnett, Moore</i>	4,078	247
Pope Air Force Base <i>Cumberland, Hoke, Harnett</i>	(4,821)	808
Camp Lejeune & Air Station New River <i>Onslow</i>	(182)	(1)
Marine Corps Air Station Cherry Point <i>Craven</i>	(48)	(656)
Seymour Johnson Air Force Base <i>Wayne</i>	345	17
Net Gain (Loss) at Military Bases:	(532)	415
Navy Reserve Center (<i>Buncombe</i>)	(7)	0
Niven U.S. Army Reserve Center (<i>Stanly</i>)	(34)	5
Army Research Office (<i>Durham</i>)	(1)	0
Charlotte/Douglas International Airport (<i>Mecklenburg</i>)	6	0
Total Gain (Loss) in N.C.:	(568)	420

Source: U.S. Department of Defense: Appendix C, BRAC 2005 Closure and Realignment Impacts by State at www.defenselink.mil/brac.

() Parentheses indicate job cuts



Karen Tam

North Carolina's dependence on the military. "My concern, and I have shared this with her, is that the struggle by our state as well as others has little to do with the needs of the military or the defense of the nation. Base protection has to do with jobs. Eastern North Carolina is overly dependent on military spending. We are 'base dependent.' And of course, every congressperson, every senator, every mayor, etc. strives to keep bases in their district, state, or region, regardless of need."

In examining the role of the military in North Carolina, it's clear that the military pumps billions into North Carolina's economy each year. But there also is evidence that there are some negative consequences, as well. For example, while a military base brings jobs, paychecks, and new residents, it may also require communities to spend money on new schools and recreational facilities, new roads, and other infrastructure while the community can't realize property tax income on land taken over by the federal government because of its tax-exempt status.

Jobs for civilians and military employees can help stabilize the economy and pour money into local businesses, small and large. Yet while retail stores, services and restaurants flourish, investment in industry or other important business sectors may lag behind. Since World War II, North Carolinians have largely acted on the presumption that cash infusions from civilian jobs and military payroll into local communities more than make up for any added costs—especially considering the relative scarcity of other economic activities in the eastern region.

State Sen. Tony Rand (D-Cumberland) acknowledges there are some challenges presented by military bases to the communities in which they are located. For example, he points out that federal impact aid, intended to offset local school costs for serving military families, doesn't always cover the true expense. During fiscal year 2005, for example,

the U.S. Education Department's impact aid program contributed \$5.8 million to the Cumberland County school system's budget of \$362 million, yet more than 16,000—or 32 percent—of the 52,000 students were federally connected, most of them through their parents' uniformed military service.⁵ That amounts to a federal contribution of only \$362.50 per student.

But the positive side of the balance sheet is much stronger, Rand believes. "As in bringing any big industry into your community, there's always a trade off," he says. "And not everything you hear about the negative side is true."

1. The Economic Impact of Military Bases in North Carolina

A study by economists at East Carolina University, completed in 2004, estimates that the military brings in \$18.1 billion to the state economy each year, some \$13 billion of which stays in Eastern North Carolina.⁶ That study estimates that Fort Bragg Army Base and Pope Air Force Base, both in Cumberland County, generate \$4.7 billion in economic activity for North Carolina each year. The study indicates that Cherry Point Marine Corps Air Station and the Naval Air Depot in Craven County create \$1.6 billion in income for the state; Camp Lejeune Marine Corps base and New River Air Station in Onslow County generate some \$5.2 billion; and Seymour Johnson Air Force Base in Wayne County brings in another \$900 million annually.

In addition, the Sunny Point Marine Terminal in Brunswick County and the National Guard and Reserve account for an estimated \$2.8 billion in payroll and other income, the ECU study says. Richard Brockett, associate director of ECU's Regional Development Institute and a primary author of the military impact study, says these figures are drawn from a computer model using actual military expenditures along with "multiplier" estimates of how those dollars travel throughout the community to create additional wealth. The multiplier is not one number but varies based on the type of expenditure as well as on the industries and economic sectors present in the community, Brockett says. The numbers include \$3.9 billion in actual base payrolls, plus operational and capital construction dollars and business contracts. These latter numbers are difficult to extract in order to determine actual dollars and remove the multipliers from the model used to create the total estimate of economic impact, says Brockett. He says multipliers used in the model ranged from less than two for payroll dollars in smaller markets

*Patriotism is easy to understand
in America; it means looking
out for yourself by looking
out for your country.*

—CALVIN COOLIDGE

30TH PRESIDENT OF THE UNITED STATES

to more than three for contract dollars. On average, Brockett estimates the multiplier at two statewide for payroll and retirement dollars. "Since these dollars make up a significant portion of the total dollars we looked at, it could be the prevailing multiplier that is referred to for discussion purposes."

The use of multipliers in estimating economic impact is a common practice. Bruce Gombar, director of economic development for Onslow County, home to Camp Lejeune, says estimates of how much a dollar invested in a local economy can circulate in the local economy can range as high as three to seven times. Because multipliers can be used to exaggerate economic impact and because applying multipliers to real spending is an inexact science at best, the N.C. Center for Public Policy Research recommended in a previous study of the North Carolina motion picture industry that use of a multiplier be disclosed and explained, that industry-specific multipliers be used, and that efforts to publicize economic impact also include estimates of real spending.⁷

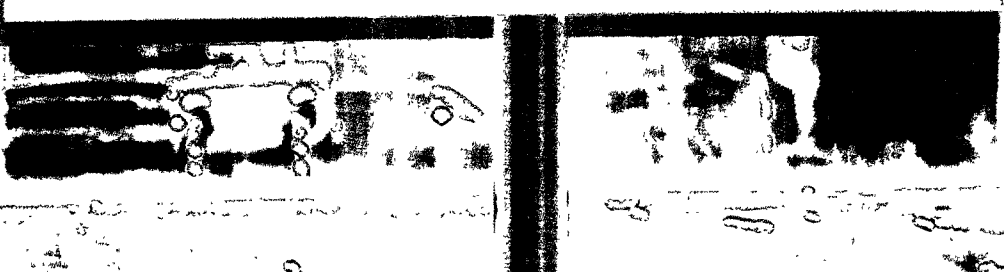
The Center also raised questions about multipliers in its study of the economic impact of professional sports as an economic development tool.⁸

John Connaughton, an economist at the University of North Carolina at Charlotte, had estimated the impact of the National Basketball Association's Charlotte Hornets, now in New Orleans, on the Charlotte-area economy, as well as the potential impact of a National Football League franchise. Connaughton said a rough rule is to figure \$2 in economic impact for every \$1 in actual spending. "You've got to be real careful about whether you're recycling dollars that already exist or bringing new dollars in," said Connaughton.⁹

Estimates of the economic impact of the military have varied wildly in recent years. In 1995, East Carolina University's Regional Development Institute estimated the impact at \$2 billion. The N.C. Advisory Committee on Military Affairs put the figure at \$5 billion. Now, ECU's Regional Development Institute estimates an \$18 billion economic impact, with 77 of North Carolina's 100 counties benefitting from at least one military contract.

The most recent \$18 billion impact estimate did not include money generated through the U.S. Coast Guard Support Center in Elizabeth City, or any income accrued by North Carolinians working

JET NOISE THE SOUND OF FREEDOM



Karen Tam

*I hear people talking bad
about the way they have to
live here in this country
Harping on the wars we fight
and griping about the way
things ought to be.
I don't mind them switching
sides and standing up for
things they believe in
But when they're running down
our country man they're walking
on the fighting side of me...*

on military bases or on military contracts in other states.

Neither does the study include figures from the cost side of the ledger in doing big business with the military. "Those impacts are not included," Brockett says.

"This particular request from the governor's office didn't ask us to look at the expenditures that had to be made to accommodate the population of the military."

So, how do the costs and benefits really stack up?

The economic benefits outlined in the ECU study accrue primarily to the region that needs them most, Eastern North Carolina, which has long struggled to catch up with the rest of the state economically. Even today, with military income flowing into the 41-county eastern region, this region lags behind on a number of important economic indicators. For example, per capita household income stands nearly 20 percent below that of the rest of the state, poverty rates by county average nearly 4 percent higher, and county unemployment rates consistently run, on average, slightly higher than the state as a whole.¹⁰ (See Tables 3 and 4. See also "Eastern North Carolina at Work: What Are the Region's Economic Engines?" pp. 8-10, for county-by-county jobless rates and other economic and social indicators for the region.)

ECU's Brockett traces some of the region's problems to its historic ties with agriculture, which places a higher value on hard work than on lengthy years of education.

"Because of the rural agricultural base, education was not a cause that was advanced early on," Brockett says. "Of course, time and history have changed that, but Eastern North Carolina was not in the right lane to begin with ... and economies tend to stay in the lane that they are in."

Along with tobacco and cotton, textile production and other manufacturing have been an important means of income for residents in the East. Many of those traditional industries are now in decline. The opening of Camp Bragg—now known as Fort Bragg—near Fayetteville in 1918 set the pattern for another kind of industry in the region. Today, the state's military presence is concentrated largely in the East and includes 115,840 military personnel, along with nearly 37,000 Reserve and National Guard forces.¹¹ Sen. John Kerr (D-Wayne), who represents the legislative district containing Seymour Johnson Air Force Base, says the military has taken on increased importance with the decline of tobacco, long the economic life-blood of the East. "Without the military, we'd have nothing," says Kerr. "Everybody would have to commute to Raleigh or Charlotte."

Major installations include:

- **Fort Bragg.** Fort Bragg is the world's largest airborne facility and one of the U.S. Army's largest military installations. Originally established in 1918 as Camp Bragg to provide a facility for field artillery practice in preparation for World War I, the base employs 52,000 military

*...They're walking on the
fighting side of me—
Running down a way of life our
fighting men have fought
and died to keep—
If you don't love it leave it, let
this song that I'm singing
be a warning—
When you're running down our
country hoss you're walking
on the fighting side of me.*

—MERLE HAGGARD

"THE FIGHTIN' SIDE OF ME"

Table 3. Comparing Selected Demographics of North Carolina, Eastern North Carolina, and Counties with Military Bases

	Median Household Income	Average % of Population at or Below Poverty	Average % of Population Unemployed	Average % Unaffordable Housing
All 100 N.C. Counties	\$39,184	12.3%	5.4%	18.6%
41 Eastern Counties	\$32,163	16.0	5.6	20.6
33 Eastern Counties, without Base Counties	\$31,903	17.2	5.7	20.5
8 Military Base Counties	\$34,718	14.5	5.0	21.3

Source: North Carolina Department of Commerce, Economic Development Information System at <http://cmedis.commerce.state.nc.us/countyprofiles/#>. Data are taken from the report for the second quarter of 2004. Unaffordable housing percentages from the U.S. Census Bureau, 2000. Military base counties are Brunswick, Craven, Cumberland, Harnett, Hoke, Onslow, Pasquotank, and Wayne.

and 8,500 civilian personnel. Fort Bragg's military housing area reaches into nine counties: Bladen, Cumberland, Harnett, Hoke, Lee, Moore, Robeson, Sampson, and Wake.

- **Pope Air Force Base.** Established in 1919 adjacent to Fort Bragg in Cumberland and Hoke counties, Pope is home to the 43rd Airlift Wing and 23rd Fighter Group and has 6,543 military personnel and 774 civilian workers on base. While Pope is the North Carolina military installation most affected by the federal government's 2005 Base Closure and Realignment recommendations, the number of personnel at the base would change little. Still, they would be wearing Army green rather than Air Force blue as the base would be converted to Army use. That's a significant change.
- **The U.S. Marine Corps Camp Lejeune.** Camp Lejeune was established in 1941 in Onslow County to provide an East Coast amphibious training facility in preparation for World War II. Adjacent to the base lies the Marine Corps' New River Air Station. Camp Lejeune and the air station are home to 43,100 Marines and sailors, including the II Marine Expeditionary Force, the 2d Marine Division, and the 2d Force Service Support Group. About 4,800 civilian employees work at these facilities. Three addi-

tional battalions made up of 3,800 Marines will be relocated to the base by December 2006.

- **Marine Corps Air Station Cherry Point.** Construction began on the facility that would become Cherry Point Air Station just before the Japanese attacked Pearl Harbor in 1941. Commissioned as Cunningham Field in 1942, Cherry Point's mission was to train units and individuals for service in the Pacific Theater. The air station also carried out anti-submarine missions along the East Coast. Renamed Cherry Point in 1954, this Craven County installation serves as home base to 8,987 military personnel and employs 5,771 civilians.
- **Seymour Johnson Air Force Base.** Established as a training facility for World War II, Seymour Johnson Air Force Base has 4,298 active duty military and 542 civilian employees. Decommissioned in 1946, the base was reactivated under pressure from community leaders in 1956. The base now is home to the 4th Fighter Wing, including two combat squadrons and two squadrons responsible for training all Air Force F-15E air crews.
- **Coast Guard Command Units at Elizabeth City.** Established in Pasquotank County in 1940 as a sea plane base, there are five command units

with 900 active duty members and 575 civilian employees associated with this Coast Guard installation today. The units are Support Center Elizabeth City, Air Station Elizabeth City, Aircraft Repair and Supply Center, Aviation Technical Training Center, and the National Strike Force Coordination Center. Unique among the state's major military installations, the Coast Guard facilities are affiliated with the U.S. Department of Homeland Security rather than the Department of Defense. Thus, they were not subject to the BRAC process.

- **Sunny Point Military Ocean Terminal.** Opened in 1955 in Brunswick County, Sunny Point Military Ocean Terminal is a key East Coast shipping point for the Department of Defense. Sunny Point personnel include about a dozen soldiers, some 230 civilians, and several U.S. Army Reserve Units.

The numbers outlined above total 115,840 military jobs and 21,192 civilian jobs at these seven facilities alone, and economic impact models put the number of jobs supported by the military much higher.¹² "It's a huge economic engine," Senator Rand says. "And, that huge disposable income makes for a robust consumer economy."

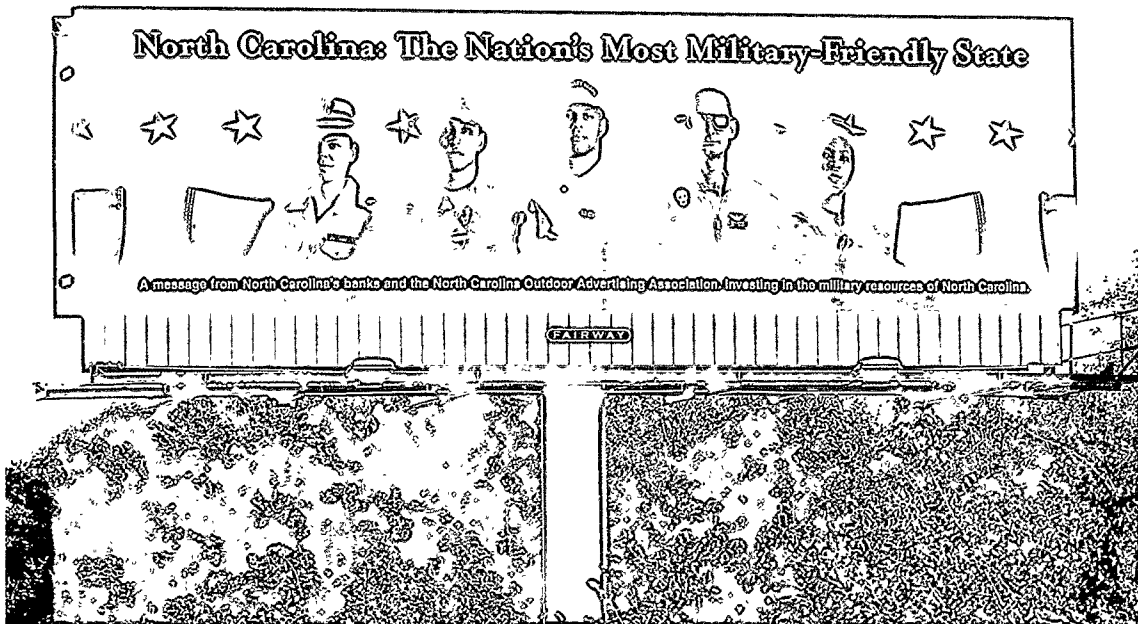
Indeed, when eight counties with major military installations are extracted from the eastern region as a whole and considered as a separate unit, the

Table 4. Population Growth, 2000 to 2004.

	% Population Growth
N.C. Statewide	6.1%
41 Eastern Counties	4.5
33 Eastern Counties, without Base Counties	3.9
8 Military Base Counties	6.8

Source: Population Division, U.S. Census Bureau, Table 1: Estimates of the Population for Counties of North Carolina: April 1, 2000 to July 1, 2004.

economic indicators show substantial improvement (see Table 3, p. 78). Median household income for the counties of Brunswick, Craven, Cumberland, Harnett, Hoke, Onslow, Pasquotank, and Wayne rises from \$32,163 for the East as a whole to \$34,718 annually for the military base counties, poverty rates fall from a county average of 16 percent for the East to a county average of 14.54 percent for the military



counties, and unemployment drops to 5.0 percent, below the East's unemployment rate of 5.6 percent. These numbers support the argument that the military has a beneficial impact on the region's economy, regardless of any multiplier effect.

2. State's Share of Defense Contracts

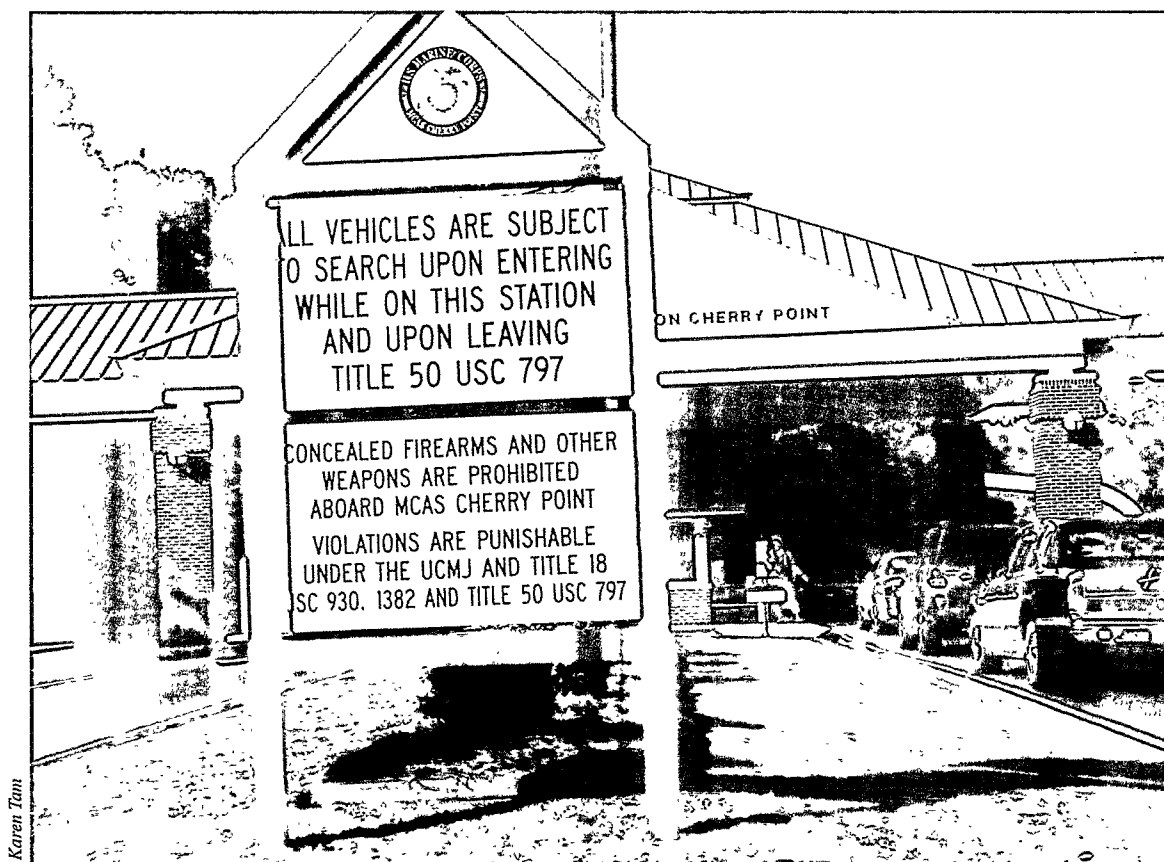
Attracting related industries is one way North Carolina communities try to maximize their military connections. Another way the state is seeking to make the most of its friendly military relationships is by obtaining U.S. Department of Defense contracts for home-state businesses. This can benefit military host communities, but its effects can be more broad-reaching. So far, North Carolina has not been favored with its fair share of Department of Defense contracts, says Scott Dorney, director of the new North Carolina Military Business Center. North Carolina ranks fourth among states in military presence, but drops to 23rd in amount of defense contracts the state receives, Dorney says. "Of over \$200 billion in DoD procurement last year, less than 1 percent came to North Carolina," Dorney says.

Dorney would like to see that figure greatly increased, and North Carolina is seeing improvement. A report from the Military Business Center shows a 50 percent increase in military contracts awarded to businesses in the state between 2001 and 2004, but during the same period the amount of contracts awarded nationally rose by 68 percent to \$230 billion. States that did significantly better than North Carolina included California, Virginia, Texas, Connecticut, and Maryland. California, Virginia, and Texas each have more military personnel stationed in their states than does North Carolina.¹³

North Carolina didn't even win the majority of the contracts for local base work. Of the \$2.4 billion in contracts awarded by the state's military bases, only \$460 million went to North Carolina firms.¹⁴ "They had \$230 million in cut-and-sew contracts that went out for new Army uniforms, and North Carolina didn't get any of it," Dorney says.

Dorney believes North Carolina businesses should put a sharp focus on military procurement and make it a priority to bring home a larger share of the pie.

"It's definitely realistic," Dorney says. "There are sectors in defense technologies and textiles



where we have high densities of businesses in North Carolina that can do that work ... but we don't compete for the business."

Existing businesses may be good candidates for such contracts, but the Military Business Center also is interested in bringing new companies into North Carolina to satisfy the military's demands. "We're looking at the needs of the military to try to find out what we can fill," says Jim Davis, Craven County economic development director. About a third of the business prospects looking at Craven County have some military connection, he adds.

Pasquotank County, home of the Elizabeth City U.S. Coast Guard base, will benefit from a \$20 million investment this year from St. Louis-based defense contractor TAMSCO. The city and county offered more than \$1 million in public grant money to run new sewer lines to the Elizabeth City Regional Airport, where the maker of high-tech electronic equipment is building a new aircraft maintenance hangar. TAMSCO has promised to bring 100 new jobs into northeastern North Carolina, with annual salaries ranging from \$37,000 to \$100,000.¹⁵

Angelou Economics, the consulting firm that worked with the North Carolina Military Business Center to identify future business opportunities with the military, in June 2005 released a "gap analysis" highlighting the difference in the number of military personnel in the state and its military sales.¹⁶ The analysis recommends a stronger marketing effort by the N.C. Department of Commerce to drum up more military business. This effort would include enhancing information resources for those who would do business with the military, identifying defense as a target industry for recruitment, creating an enterprise team that recruits defense-related industries, and tailoring incentives specifically to attract new defense companies.

Dorney says the goal of these efforts would be to increase the state's share of military procurement from just under 1 percent to 1.5 percent within five years, a goal he says is do-able based on efforts by other states such as Kentucky. "That would create 30,000 new jobs and \$150 million in state and local tax revenue," he says.

In addition to opportunities in military procurement, North Carolina has been the beneficiary of the military's university research budget, though little of this accrues to Eastern North Carolina. In fiscal year 2003, \$1.6 billion was budgeted for university research nationally, according to the U.S. Office of Management and Budget. The Army Research Office located at Research Triangle Park has been the hub for much of this research carried out at Triangle area

"Every gun that is made, every warship launched, every rocket fired, signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed.... This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children."

—DWIGHT D. EISENHOWER

EISENHOWER, BY STEPHEN E. AMBROSE

universities. The office was recommended for closing under the base realignment and closure process (BRAC), but the base closing commission decided against this recommendation, sparing one military job and 113 civilian jobs, and preserving the local link between area universities and the Department of Defense.

3. Impact on Ports

North Carolina's two ports, at Wilmington and Morehead City, are hoping to play an increasingly important role in the movement of military goods and troops, according to Susan Clizbe, communications manager for the North Carolina State Ports Authority.

Partially due to increased use by the military, business at the two ports was up 24.5 percent in fiscal year 2004 and promised to increase again by at least as much in 2005.

Since the beginning of Operation Iraqi Freedom, the port at Morehead City has shipped 22,000 short tons (44 million pounds) of cargo for the military on 53 vessels, producing \$562,000 in revenue. Some 175,000 short tons have been shipped from the state port at Wilmington on 22 vessels, producing some \$3 million in revenue. State officials say an improvement project at Wilmington, which deepened its shipping channel to 42 feet allowing for 15 percent greater cargo capacity, will enable the state to provide an even greater level of service to the military. The state port at Morehead City already had one of the deepest shipping channels on the East Coast, at 45 feet.

Besides the increased revenue, State Ports Authority CEO Tom Eagar believes the ports

serve a vital strategic role in keeping the military supplied. "When we handle cargo for our armed forces, the ports make an important contribution to North Carolina's status as the nation's most military friendly state," says Eagar. "Even more importantly, our state has three of only 15 strategic military ports in the country—Morehead City, Wilmington, and the Military Ocean Terminal at Sunny Point."

4. The Military's Impact of Bases on Sales Taxes and Property Taxes

The military's economic impact becomes evident during a drive through any of the military towns in Eastern North Carolina. Furniture stores, car lots, tanning salons, self-storage facilities, and fast-food restaurants line the highways and cluster around base entrances. Store owners say sales fall off during periods of big military deployments such as Kuwait, Afghanistan, and Iraq, but bounce back quickly when the service men and women return home ready to spend their hard-earned pay.

During the first Gulf War fought by the U.S. against Iraq in Kuwait in 1991, for example, more than a third of military families left Jacksonville and Onslow County. That number has been cut in half for the recent conflict, with local officials crediting community efforts such as Project CARE, a support system developed for military spouses to encourage them to stay in town while their husband or wife is deployed and help keep the local economy

alive. Onslow's Project CARE (Community Action Readiness Effort) offers families help with a wide range of services, from auto repair to interpreter services to discounts at local stores. "We started Project CARE through the Chamber of Commerce to show support for the military in community," says Onslow County Manager Alvin Barrett. "During the most recent events in Iraq and Afghanistan, we haven't seen that big a dip. More folks have been staying once they see the support from the community."

Sales tax revenues for the city of Jacksonville dipped from \$8.74 million in 2001 to \$7.85 million in 2002 as troops deployed in anticipation of the start of the Iraq war in March 2003. The deployment of U.S. troops began in December 2002, and Marines from Camp Lejeune were dispatched to the Gulf region in January 2003. However, it is not clear when military families became aware of the pending mobilization. Sales tax revenues in Jacksonville rose to \$8.71 million in 2003 and in 2004 reached \$11 million.

Havelock, population 22,000, saw declines in sales of real estate, automobiles, and furniture in the six months before the war with Iraq started in March 2003.¹⁷ Sales tax revenues slipped from \$844,764 in 2001 to \$801,570 in 2002. Sales tax revenue in 2004 was \$1.09 million. Similarly, the city of Fayetteville experienced a drop in sales tax revenues in 2002—down from \$16.1 million in 2001 to \$15.3 million in 2002. Sales rebounded in 2003, with revenues climbing to \$16.9 million, and revenues reached \$20.7 million in 2004.

While deployments can be a challenge for owners and operators of small businesses, wage and hour workers also find that military driven economies tend to offer a disproportionate number of retail, restaurant, and other lower-paying jobs. "In those particular areas—in the Cumberlands, Cravens, and Onslows of Eastern North Carolina—the economic barometer is affected by the growth or contraction of the military," Brockett says. "There isn't, in some of those cases, a great deal of economic diversity to withstand what might happen if the military bases packed up and moved out."

But that's not too different from any community where a single industry dominates, he adds.

In 2004 in Onslow County, home of Camp Lejeune, retail trades made up a full fifth of all jobs, or 20.6 percent.¹⁸ Those jobs paid an average of \$18,876 annually, just above the federal poverty level of \$18,750 for a family of four. "Like any large business entity in an area, the more dependent they are on it, the more it's going to reverberate throughout the entire economy, whether it's retail,

*I looked at him in uniform,
so young, so tall, so proud.
With hair cut short and eyes alert,
he'd stand out in the crowd.
I thought how many men like him
had fallen through the years?
How many died on foreign soil?
How many mothers' tears?
How many pilots' planes shot down?
How many died at sea?
How many foxholes were soldiers
graves?
No, freedom is not free.*

—MAJ. KELLY STRONG
"FREEDOM IS NOT FREE"

COMMISSARY

CLOSED
MONDAYS

SUN 1000-1800
WED - FRI 1000 - 1900
TUES 0900-1900
SAT 0900-1800



Karen Tam

real estate, or job opportunities,” Brockett says. Statewide figures show retail employment averaging 11.6 percent of jobs, with weekly retail wages averaging \$21,736, according to N.C. Department of Commerce figures. The highest paying jobs in the state—with an average annual salary of \$63,596—fall into the category of “management of companies and enterprises” and make up 1.7 percent of all employment in North Carolina. Onslow County only reported 247 management positions in 2004, totaling 0.6 percent of all employment, with average paychecks of \$659 per week, or \$34,268 annually.

Gombar, Onslow County’s economic development director, says having a military base in his community is a “tremendous asset.” Rising pay for soldiers, along with the tendency by many to live off base and purchase homes, fuels the local civilian economy, Gombar says. “Today, the vast majority of our Marines have automobiles, so they have more mobility and are not as tied to the base as they used to be,” he says.

Per capita property tax data from the North Carolina Department of State Treasurer show that residents of counties with a major military presence do not carry an outsized burden relative to non-military counties in the East. Indeed, Onslow County’s annual per capita property tax burden of \$254 is the lowest in the region. Wayne County, home of

Seymour Johnson Air Force Base, has seen a substantial per capita property tax increase, moving from \$217 per capita in 2000 to \$325 in 2004, but the county’s tax burden remains lower than that of the East as a whole. Cumberland’s per capita property tax burden reached \$409 in 2004, higher than the previous examples but still well below that of many counties in the East with no military presence. Thus, the vast acreage taken off the tax rolls by the military does not seem to have had an outsized impact on the property taxes of county residents.

That’s not to say the heavy military presence has no impact on revenues. Federal land is, of course, not taxed. In Hoke County, the approximate 80,000 acres owned by the federal government represents about a third of the county’s total acreage. Additionally, cars owned by soldiers who claim another state as their residence are not subject to local property taxes. Out-of-state residents also do not pay state income taxes.

5. Military Base Impact on Taxpayer-Financed Services

Because many military families live off base and contribute to the property tax base through home ownership or through their rental payments, it is difficult to gauge the total financial impact

on local governments that play host to a military community. "Today, 44 percent of all Marines are married, and 77 percent of those married folks live out in town [rather than on base]," says Gombar. Lejeune, home to about 43,000 Marines, has only about 4,400 quarters on site to serve married couples and families, Gombar says. "When the military comes into a community like this one, and new married couples come in, chances are they're going to be living out in town," Gombar says. "They're paying taxes like anybody would, and the local tax base goes up."

Along with educational services, military-related activities put additional demands on infrastructure and services such as highways, water and sewer, recreational facilities, and fire and police protection.

Rick Heicksen of the Fayetteville Metropolitan Planning Organization says the military contributes to projects that benefit both the community and base operations. For instance, the U.S. Department of the Army recently allocated \$12 million to help Cumberland County complete a \$16 million road project that will decrease the amount of through-traffic on the base, Heicksen says.

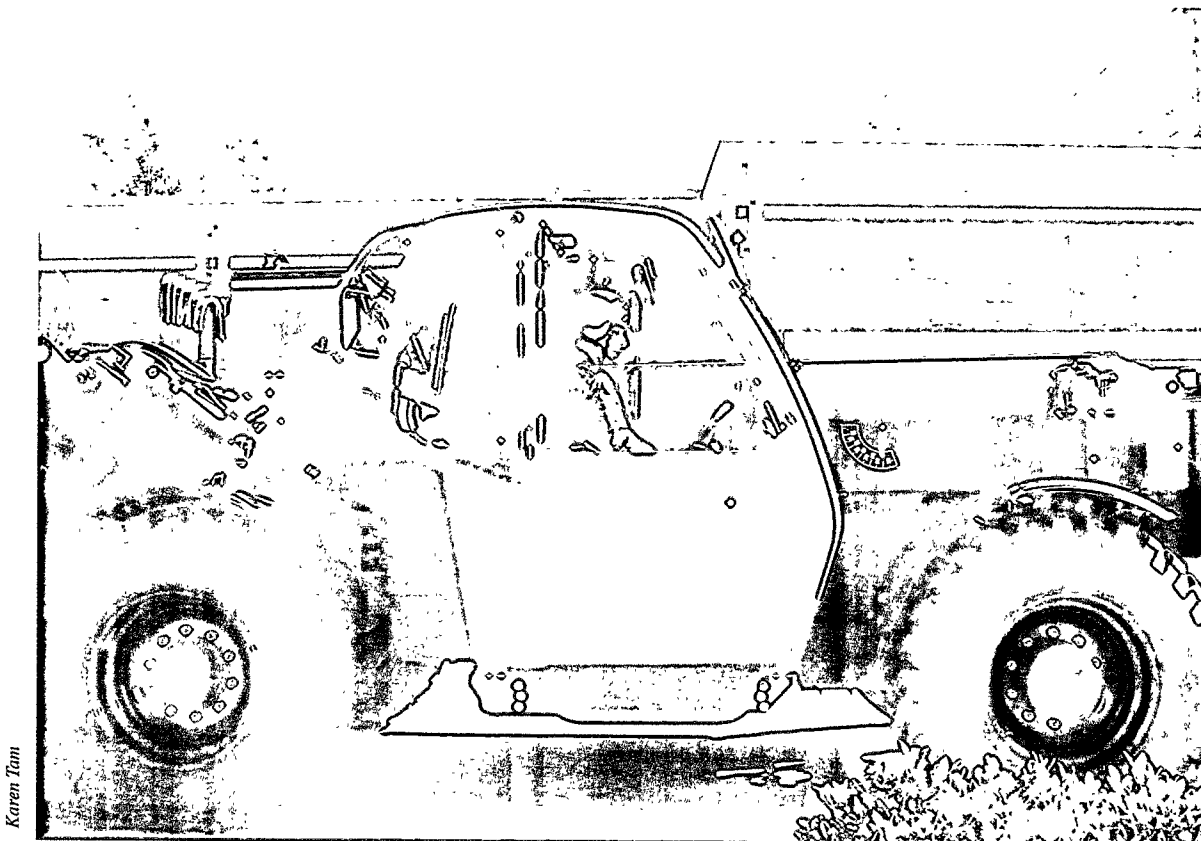
Federal land used for military bases, and thus not subject to property taxation by local govern-

ments, is a major issue for many local communities. Harnett County Commissioner Tim McNeil says some 25,000 acres of county land is locked away from taxation or other types of potential development by Fort Bragg. "We get no tax of any kind on that land," McNeil says. "We are a large county geographically, but poor because of our tax base."

In Onslow County, Camp Lejeune's 127,000 acres runs on either side of the New River, and includes 14 miles of beachfront property that is used for military training in amphibious operations. Nestled between Topsail Island and Emerald Isle, this part of the county would be bringing in large tax receipts for the county if it were available for development, county officials surmise. "I'm sure that some of the beach land would have developed and some of the riverfront," says Alvin Barrett, county manager for Onslow.

Rep. George Cleveland (R-Onslow) doesn't buy the argument that without the military, land could be put to higher use to the county's greater benefit. "That's an old argument that, if really looked at, would balance out with the military impact to the community," Cleveland says.

Lately, land outside the actual footprints of the bases has become an issue. The 2004 General



Karen Tum

Assembly authorized \$20 million in certificate of participation (COPS) bonds to help protect land surrounding bases from encroachment.¹⁹ That means state agencies such as the Clean Water Management Trust Fund can borrow to purchase land and use income generated by the fund's resources to pay back the bondholders. Rep. Rick Glazier (D-Cumberland) says cities and counties need to make sure that incompatible developments don't grow up next to the sensitive military installations. "It's an increasing concern—if we want to maintain our bases and their ability to grow, the land use immediately around it cannot withstand unlimited growth," he says. "Having compatible growth around the military will enable the bases to preserve their mission. It's a big issue that is working its way through county government as well as state government."

Examples of inappropriate development might include a residential subdivision adjacent to a paratrooper practice drop zone, he says. "A commercial piece or farm land would be preferable." Communities that have developed in ways that are incompatible with a base training mission may be in danger of losing favor with the military, Glazier adds. "If they lose the ability to perform their mission at that base, they might move on to another base."

One major vehicle for preserving land around military bases has been the Clean Water Management Trust Fund (CWMTF), established by the 1996 N.C. General Assembly to help local governments, state agencies, and conservation nonprofit groups finance projects to protect and restore water quality. According to a CWMTF fact sheet, the fund provides "a viable tool for protecting the state's military installations against encroachment from development where water quality protection can also be achieved. Recent projects include \$2.1 million in grants in 2003 to protect water quality on 3,000 acres adjacent to Camp Lejeune Marine Corps Base, and \$7.7 million expended in 2004 to help preserve 6,740 acres near Seymour Johnson Air Force base and Camp Lejeune. The fund approved \$12.3 million in 2005 to protect Seymour Johnson, Camp Lejeune, Cherry Point, and Fort Bragg.

In many instances, the U.S. Department of Defense provides matching funds to aid in these acquisitions. "Our goal is to protect water quality," says Bill Holman, executive director of the Clean Water Management Trust Fund. "We are always looking for partners and opportunities to leverage our funds with other public and private funds." Where water quality is not an issue, other trust funds may partner with the military to acquire land.

As of August 2005, Governor Mike Easley says more than 15,700 acres of land within five miles of military bases had been protected through these efforts. In addition to the Clean Water Management Trust Fund, funding for these initiatives has come from the state's Natural Heritage Trust Fund and Ecosystem Enhancement Trust Fund.

Impact on Growth and Housing

Harnett County contains about 25,000 acres of the 161,000 acres that comprise Fort Bragg, but so far the county has profited little from any commercial spin-off activities. Tim McNeil, county commissioner for an area in the western part of the county adjacent to Fort Bragg, says military families have been buying up homes and property in the county. Harnett County's population grew by 11.6 percent between 2000 and 2004, nearly twice the state average of 6.1 percent and well above average population growth for military counties of 6.8 percent.²⁰ Non-military Eastern counties experienced a more subdued 3.9 percent gain in population for the same period.

Fort Bragg families are finding lower-cost housing in Harnett County, where only 20 percent of housing is rated "unaffordable" by the state based on a 2000 median household income of \$35,105. That's similar to the 20.6 percent of housing rated unaffordable for the East as a whole and below the average rating of 21.3 percent unaffordable for the eight military counties, but slightly higher than the 18.6 percent North Carolina average. In Cumberland County, 25.6 percent of housing was rated unaffordable for residents with a 2000 median household income of \$37,466. "They're predicting that the two townships on our end of the county will grow by another 40 percent over the next four years," McNeil says.

The influx of families is putting huge demands on the water, sewer, recreation, and education systems, McNeil says. Yet he thinks a decision by Fort Bragg to build even more housing in Harnett County could help offset that burden by attracting stores, gas stations, and other commercial businesses nearby. "I think it is going to have a positive impact because those numbers will help us get commercial growth in western Harnett County that we otherwise wouldn't have gotten," he says.

To the northeast in Pasquotank County, the presence of the U.S. Coast Guard may be pricing some local residents out of the market, says Ebere Oriaku, chairman of the economics department at Elizabeth City State University. "Many Coast Guard employees relocate here from places like Alaska or

California and want to buy a home and are willing to pay a higher rate," Oriaku says. "This makes the cost of housing high. Even rental property and apartments are higher than they should be. To meet the rising costs, some people in this area are being forced to go to Virginia and start looking for higher paying employment. Some have been forced to move." The per capita income for Pasquotank County in 2000 was \$30,444 and the percent of unaffordable housing stood at 26.4 percent.²¹

Constance Brothers, chair of the Dare County Airport Authority in Manteo, N.C., and a native of Elizabeth City has a differing perspective on the Coast Guard's impact on the local housing market. "I cannot believe that the Coast Guard presence is driving up the cost of housing," says Brothers. "[T]here are only a few officers who make the big bucks compared to a lot of enlisted who don't."

Brothers adds that blue collar workers have been commuting to the shipyards of Virginia for decades because of superior pay and benefits and a scarcity of local jobs. This phenomenon is not related to housing costs or the Coast Guard presence, Brothers says. "By contrast, Elizabeth City has become an exurb for professionals from Virginia who come down for lower taxes and lower cost housing." This influx of Virginia "gentry" is the driver of recent increases in housing prices in Elizabeth City, Brothers says.

6. Military Base Impact on Public Schools

Local public schools in military counties often struggle to meet the demands of a largely transient population of students. The U.S. Department of Education offers funds to assist school systems serving students living on untaxed federal land, such as military bases. Today, school systems across the state spend an average of \$6,615 per student per year from all sources (excluding the federal child nutrition program), while impact fees may amount to only a few hundred dollars per student at best. "The government's commitment to fund impact aid has been severely limited over time," says state Rep. Rick Glazier (D-Cumberland), whose district includes Cumberland County and Fort Bragg. "Now it doesn't come close to making up the gap that's caused by so much of the property being untaxable, due to it being a federal enclave."

In Cumberland County, about 4,400 students in kindergarten through grade nine attend one of the federally run schools on base at Fort Bragg. Another 16,000 federally connected students attend

the Cumberland County school system, which enrolls a total of almost 52,000 students. During fiscal year 2005, the federal government's impact aid program contributed \$5.8 million to the Cumberland County school system's current expenditures budget of \$299 million. The federal government uses a formula that takes into account the student's family connection to the government, whether the family lives on base, and the proportion of federally connected students within a school system to determine the amount of impact aid the school district receives (see "Federal Impact Aid: How the Program Works," p. 88, for more). Rep. Glazier says the high percentage of young families stationed at the military base places a huge burden on the school system, yet the nontaxable federal land takes away from revenues needed to provide those services.

As a Cumberland County school board member in 2001, Glazier testified before the North Carolina General Assembly's Impact of Military Bases on Public Services and Taxes Study Committee. "The county tax office, assuming a value of \$3,000 per acre, assigns an additional value of \$126.7 million for the post's 42,240 acres within Cumberland County," Glazier told the panel. Glazier also told legislators his county was missing out on sales tax revenue for approximately \$4.1 million in untaxed commissary sales that year at the military base.

Meanwhile, the military population brings some extraordinary challenges for educators, including a large percentage of non-English speaking students, students from families on the lower end of the military pay scales, and transient families who "cause the system to have to work harder to keep up," Glazier says.

He says nearly half the student population qualifies for free and reduced-price lunches, and in at least one elementary school in Cumberland County, 60 percent of the students who started the school year did not remain for the full academic year.

"Because of the low-wealth nature of a substantial portion of our population, in combination with the high percentage of children whose parents are in active military service, issues of transiency likewise abound in our system," Glazier told the committee.

Cumberland County also is known for its excellent special education programs. That has drawn a large number of military families with learning issues, Rep. Glazier says. School officials say 1,175 of the 7,409 students in the system with special education needs are from military families. Of the \$5.8 million the school district receives in federal impact aid, more than \$500,000 is awarded to help cover



Karen Tam

On-base housing such as these homes at Marine Air Station Cherry Point is becoming less prevalent as more military personnel move off base.

the additional expenses of educating these children with special needs.

Other counties with nontaxable federal land also receive help from the federal government's impact fees. Statewide, that amount was \$12.8 million in fiscal year 2005, and six of the top 10 recipients have a major military presence (see Table 5, p. 90).²² Onslow County will receive \$2.27 million. Craven County, home of Cherry Point, gets \$2 million; Wayne County, home of Seymour Johnson Air Force Base, will receive about \$748,000; Hoke County, with about one-third of the county's total acreage part of Fort Bragg, will receive some \$220,000; and Harnett County, where 1,814 children from Fort Bragg attended public schools during the 2004–2005 school year, is slated to receive about \$122,000 from the federal government's impact aid program for 2005.²³ Pasquotank County, with its relatively smaller Coast Guard operation, receives \$29,000, and Brunswick County, home of the Sunny Point shipping terminal, receives no impact aid, reflecting its small staff of only 12 military positions.

In the 2003–2004 school year, per pupil expenditures from all sources for all counties with a major military presence, with the exception of Brunswick, were below the statewide average of \$6,615, according to the N.C. Department of Public

Instruction. Brunswick spent \$7,198, 36th among the 100 counties; Pasquotank spent \$6,595, ranking 70th; Craven County spent some \$6,467, ranking 77th; Cumberland approximately \$6,250, ranking 90th; Hoke County spent \$6,218 per student, ranking 94th; Wayne County spent some \$6,070 per student, ranking 101st; Onslow approximately \$6,056, ranking 102nd; and Harnett \$5,942, for a ranking of 111th. However, it is important to note that these per student expenditures are from all sources, including state, local, and federal governments. The federal government pays more impact aid when families live on military property and thus are not paying property taxes, and increasing percentages of military personnel are living in the community rather than on base.

7. Impact of Military Spouses and Retirees on the Local Work Force

Bruce Gombar, director of economic development for Onslow County, says Camp Lejeune's military families offer a significant contribution to the civilian work force, an asset he likes to use when recruiting new industry. Many of the military men and women who retire or leave the service when their

—continues

Table 5. The Top 10 School Districts Receiving Federal Impact Aid in North Carolina and Amounts Allocated to Them

N.C. School District	Federal Impact Aid Funding in FY 2005
1. <i>Cumberland County Board of Education</i>	\$5,803,740
2. <i>Onslow County Board of Education</i>	\$2,273,177
3. <i>Craven County Board of Education</i>	\$2,005,482
4. Swain County Board of Education	\$985,836
5. <i>Wayne County Public Schools</i>	\$748,265
6. Graham County Schools	\$274,873
7. <i>Hoke County Board of Education</i>	\$220,459
8. Jackson County Schools	\$136,666
9. <i>Harnett County Board of Education</i>	\$122,483
10. Asheville City Schools	\$52,270

* Military counties are indicated by italic type.

Source: United States Department of Education, Impact Aid Program. Recipient project payments by impact aid number for North Carolina in FY 2005.

tour of duty is up stay in Jacksonville or return to the area, says Gombar, who returned to Jacksonville as a retired Marine. He previously spent three years as chief of staff at Lejeune. "Every year, we have roughly 8,000 Marines and sailors who leave the service," he says. "These people are a proven commodity, highly trained people with a great work ethic. They understand the meaning of teamwork. Their skills and training are often cutting-edge. Retraining them into a civilian job requires much less work. Because of that, any employer would be proud to have them in their work force."

Attracting or keeping these residents is considered a coup by many economic developers because they tend to be older, with fewer children at home and create fewer demands on the city's schools, roads, recreational facilities, and other infrastructure.

"Military tend to retire in the last place they are assigned," says Hugh Overholt, a retired Army general, an attorney with the New Bern law firm of Ward and Smith, and a lobbyist for Allies for Cherry Point's Tomorrow, a group working to head off military reductions or closure. "We have a large veteran and retired community in and around our base."

At 13.4 percent, Craven County has a slightly larger proportion of retirement age residents than the statewide average of 12 percent. Some 17.2 percent of residents in neighboring Carteret County on the coast are 65 or older, according to the U.S. Bureau of the Census. Carteret also houses a substantial number of military personnel, both active duty and retired.

Mark Fagan, who heads the department of sociology and social work at Jacksonville State University in Alabama, has studied trends in military retirement. In 2003, Fagan says North Carolina ranked sixth among the states in military retirees receiving pay, with 74,459 retirees drawing \$106 million per month. "In 2003, there were 1.9 million military retirees in the United States," according to Fagan. "These military retirees have a guaranteed income and are younger than many other retirees. Officers typically retire at 46 and a typical enlisted serviceman or woman retires at 42. They will typically seek a new career."²⁴

With higher marriage rates in today's active duty population, military spouses also play an important role in the work force, says Craven County Economic

Development Director Jim Davis. Base officials say married Marines make up 56 percent of the active duty force stationed at Cherry Point, and that represents a strong worker base for civilian employers, says Davis. "The spouses can work and help increase the family income, and the industries coming in near the base can benefit from that," says Davis during a drive through Havelock Industrial Park.

Davis says he uses this in his pitch to companies he hopes to recruit into the area. "We'd like to see more businesses related to base activity," Davis says. "We are trying to attract industries into Havelock such as suppliers, manufacturers, and designers that are aviation-related. That's a strong effort for the city."

To help with the problem of underemployment or unemployment around military bases, the 2005 N.C. General Assembly passed legislation requiring state occupational boards to streamline licensing requirements for military spouses who wish to practice a trade or profession that requires a license (teachers or health care workers are excluded from this pro-

vision).²⁵ The law also provides in-state tuition at North Carolina's public universities and community colleges for military personnel and their dependents, and provides funding for military support groups in base communities.

8. Rates of Crime, Domestic Violence, and Child Abuse Around Military Bases

"There's often a stereotype associated with military towns," Gombar says. "Fayetteville experiences it. Jacksonville experiences it. To a certain extent, all military towns experience it. What people remember is the late '60s and early '70s when some of these towns became like the Wild West, with red light districts, lots of bars, and service men and women getting drunk and getting into fights. That reputation was often well deserved."

Roy Parker, retired editor of *The Fayetteville Observer* and the author of a history column in

—continues

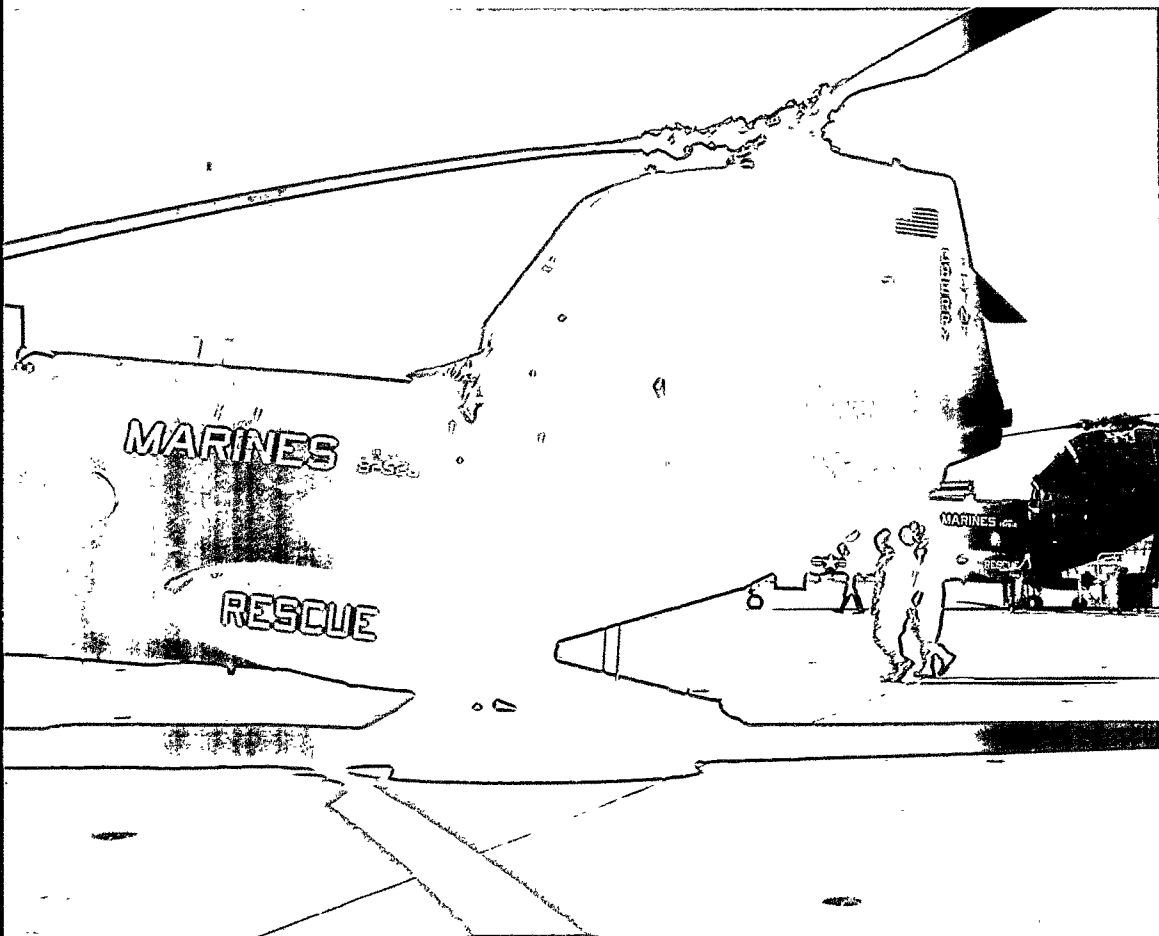


Table 6. N.C. Crime Rates Per 100,000 by County, 2004

County	Crime Rate per 100,000 Residents (rank)	County	Crime Rate per 100,000 Residents (rank)
Alamance	4,077.2 (33)	Graham	(Data unavailable)
Alexander	2,386.2 (80)	Granville	3,655.5 (43)
Alleghany*	184.2 (97)	Greene	3,219.0 (56)
Anson	5,188.2 (17)	Guilford	5,507.3 (15)
Ashe	2,052.2 (86)	Halifax	4,977.7 (19)
Avery	1,290.1 (91)	<i>Harnett*</i>	4,178.2 (31)
Beaufort	3,533.7 (48)	Haywood	3,034.6 (63)
Bertie	3,149.2 (57)	Henderson	3,117.7 (58)
Bladen	4,928.9 (20)	Hertford	5,058.8 (18)
<i>Brunswick*</i>	4,373.4 (30)	<i>Hoke*</i>	4,777.0 (24)
Buncombe	4,108.0 (32)	Hyde	891.6 (94)
Burke	2,659.3 (76)	Iredell	3,707.2 (41)
Cabarrus	3,386.5 (54)	Jackson	3,946.5 (35)
Caldwell	2,980.0 (66)	Johnston	3,548.5 (45)
Camden	1,211.1 (92)	Jones	2,130.8 (84)
Carteret	3,397.5 (53)	Lee	5,289.9 (15)
Caswell	1,930.9 (87)	Lenoir	6,517.0 (7)
Catawba	4,737.7 (25)	Lincoln*	2,920.5 (68)
Chatham	2,773.8 (72)	McDowell	2,648.6 (77)
Cherokee	3,096.6 (61)	Macon	2,170.4 (83)
Chowan	3,014.1 (65)	Madison	1,050.9 (93)
Clay	1,334.3 (90)	Martin	3,823.0 (38)
Cleveland	4,853.9 (23)	Mecklenburg	7,800.2 (2)
Columbus	6,323.7 (8)	Mitchell	(Data unavailable)
<i>Craven*</i>	4,408.7 (29)	Montgomery	3,398.9 (52)
<i>Cumberland*</i>	6,709.8 (6)	Moore	2,779.4 (71)
Currituck	3,272.2 (55)	Nash	5,570.7 (13)
Dare	4,944.8 (20)	New Hanover	6,942.8 (4)
Davidson	3,081.0 (62)	Northampton	3,780.7 (38)
Davie	2,804.8 (70)	<i>Onslow*</i>	859.0 (96)
Duplin	3,720.9 (40)	Orange	4,532.3 (27)
Durham	6,731.5 (5)	Pamlico	1,770.3 (89)
Edgecombe	5,489.5 (14)	<i>Pasquotank*</i>	4,594.9 (26)
Forsyth	5,975.2 (9)	Pender	2,307.2 (82)
Franklin	2,501.1 (79)	Perquimans	2,612.7 (78)
Gaston	5,609.9 (11)	Person	3,520.8 (49)
Gates	1,569.1 (95)	Pitt	5,770.1 (10)

—continues

Table 6, continued

County	Crime Rate per 100,000 Residents (rank)	County	Crime Rate per 100,000 Residents (rank)
Polk	2,105.8 (85)	Union	2,665.2 (75)
Randolph	3,812.6 (37)	Vance	8,398.3 (1)
Richmond	5,190.4 (16)	Wake	3,424.4 (51)
Robeson	6,994.7 (3)	Warren	2,752.6 (73)
Rockingham	4,464.7 (28)	Washington	(Data unavailable)
Rowan	3,707.0 (44)	Watauga	2,966.0 (67)
Rutherford	4,020.1 (34)	<i>Wayne*</i>	4,907.7 (22)
Sampson	3,516.4 (50)	Wilkes	2,862.4 (69)
Scotland	5,594.3 (12)	Wilson	3,559.8 (44)
Stanly	3,114.8 (60)	Yadkin	2,672.6 (74)
Stokes	3,028.3 (64)	Yancey	847.9 (96)
Surry	3,740.0 (39)		
Swain	3,521.1 (47)		
Transylvania	2,324.6 (81)		
Tyrrell	1,822.1 (88)		

Crime Rates	
8 Military Counties**	4,351.1
All 100 North Carolina Counties	4,573.9

Counties with military installations are indicated by italic type.

* Asterisk indicates data unavailable but county ranking based on previously released 2003 data.

** Mean crime rate for eight military counties.

Source: N.C. Department of Justice, Annual Summary Report of 2004 Uniform Crime Reporting Data

**Table 7. Rankings on Crime Rate Per
100,000 for Eight N.C. Military Counties**

Rank	County
6	Cumberland
22	Wayne
24	Hoke
26	Pasquotank
29	Craven
30	Brunswick
31	Harnett
96	Onslow

Source: Rankings based on N.C. Department of Justice, Annual Summary Report of 2004 Uniform Crime Reporting Data

Eastern North Carolina's largest daily newspaper, says the effort to clean the city's image is ongoing. In an interview with American RadioWorks broadcast on National Public Radio, Parker describes Fayetteville's main commercial thoroughfare, Bragg Boulevard, as "that seven-mile stretch of go-go joints and pawn shops and all that stuff." But Parker adds that Fayetteville has cleaned up its act substantially since he first moved to the city in the 1970s. "When I first got here, there were four outdoor movie theaters lined up and they showed sleaze night and day. But you know, it's changing—not overnight, but it's changing."

Gombar says part of that change is driven by the move to volunteer military service. Volunteers often have higher levels of education, are more likely to be married, and typically serve longer than did draftees. Despite having one of the largest populations of 18 to 26-year-olds of any city its size in the country, Gombar says the crime rate is relatively low. "But that's not the image people have of a military town," he says.

Rep. George Cleveland (R-Onslow), whose district includes Camp Lejeune and Air Station New

River, credits the improvement to "the quality of today's young men that enter the service." Sen. Kerr of Wayne County also speaks highly of the Air Force personnel stationed at Seymour Johnson Air Force Base in Goldsboro. "They're part of our community. They go to church. They participate in things. They're high-caliber people. They're good citizens," says Kerr. Kerr adds that the all-volunteer military means personnel are more engaged and motivated. "I think it's a different Army," says Kerr. "You've got your career soldiers. This Army is not a bunch of young thugs. It's a sophisticated Army."

Sen. Tony Rand of Fayetteville agrees. "The idea there's a lot of crime is a myth," he says. "When you consider the fact that we have a large number of people living here who have been trained in varying degrees of violence, they are overall well-behaved and amazingly good citizens."

Still, Chuck Fager, executive director of Quaker House, a nonprofit service agency that gives advice and counseling to soldiers who are having problems with military life, says the effort to clean up Fayetteville's image can only have so much success due to the profusion of night clubs, strip joints,



Karen Tam

pawn shops, and used car lots that goes with a large military presence. "They might try to spray paint it some, but it's still there," says Fager.

Crime statistics collected by the N.C. Department of Justice in 2004 show mixed results (see Tables 6 and 7, pp. 92–93).²⁶ As Fager puts it, "We don't live in fear. I've lived here four years, and I haven't been burglarized yet," he says. "Sometimes we're at the top of the state's crime statistics, and sometimes we're not."

The numbers bear out Fager's observation. Statewide, there are 4,574 crimes per 100,000 population, down by 2.9 percent in 2004 from 2003. However, crime actually increased by 0.3 percent in Fayetteville during the same time period. Cumberland County reported 6,710 crimes per 100,000 population, well above the crime rate for the state as a whole. By contrast, Brunswick, Craven, Harnett, and Onslow counties registered crime rates below the rate for the state as a whole. Onslow County, home of Camp Lejeune, registered only 859 crimes per 100,000. Indeed, Onslow's rate was among the state's lowest, according to the Department of Justice report. *However, crimes reported for Cumberland and Onslow counties did not include those handled on base by military police, which would have raised the numbers for those counties substantially.* At Camp Lejeune, for example, 1,343 crimes against persons were reported in 2003, including two murders, 30 rapes, 33 aggravated assaults, 186 simple assaults, and 203 burglaries or housebreakings. None of these reported crimes were included in the uniform crime reporting data maintained by the state, according to Captain Joseph Riley, operations officer at Camp Lejeune. In 2004, four of eight military counties (Cumberland, Hoke, Pasquotank, and Wayne) had crime rates higher than the statewide crime rate of 4,574 per 100,000.

Moreover, domestic violence and child abuse have been linked to the military in the past few years. Fager, the director of Quaker House, agrees that this is an area where military life does seem to contribute to a higher crime rate. "It's really military-wide," Fager says, not just in Cumberland County. In one 43-day period in the summer of 2002, four women married to active duty soldiers stationed at Fort Bragg were killed by their spouses. In two of the cases, the spouse subsequently committed suicide. During the same period, an active duty soldier was killed, and the victim's wife and step-daughter were charged in that crime.

While a follow-up report commissioned by the U.S. Army Surgeon General did not find domestic violence rates higher at Fort Bragg than in the gen-

eral population over the 12-month period surrounding these incidents, it determined the "clustering" of those five homicides to be statistically significant. Because three of the four soldiers accused of committing the acts of violence had recently returned from Afghanistan, the report included a series of recommendations to help families cope with deployment, as well as a method for screening soldiers for behavioral health issues, including any signs of domestic violence.²⁷

North Carolina still does not have a statewide system for tracking domestic violence cases, much less reporting military connections. However, Linda Priest, clerk of court for Cumberland County, estimates that about 20 percent of the county's approximately 1,500 domestic violence cases each year involve someone who is part of the military. "Our statistics were driven off the chart during the 2002–2003 fiscal year," she says, of the year when the military cluster occurred. "While statewide domestic violence went up 7 to 8 percent, it went up 34 percent in Cumberland County."

The Center for Public Policy Research studied family violence in North Carolina and reported 224 domestic-violence related deaths from 2002–2004, as tracked by the North Carolina Coalition Against Domestic Violence, a Durham, N.C., nonprofit.²⁸ Of those, 19 occurred in the eight military counties, with nine in Cumberland alone.

Child abuse and its potential links to the military were examined in a study released in 2004 by the North Carolina Child Advocacy Institute. The study looked at child abuse homicide incidents occurring between 1985 and 2000 in North Carolina and found that child abuse homicides among military families living in Onslow and Cumberland counties were significantly higher than the statewide average rate of 2.2 deaths per 100,000 children. Among military families residing in Cumberland County, the rate was 5 deaths per 100,000, and among military families from Onslow County, the rate was 4.9 per 100,000 residents.²⁹ "These long-term patterns are not a statistical fluke, nor a coincidence," the report concludes. "They suggest problems in and around North Carolina military families and military communities that predictably result in a consistently high number and rate of child abuse homicides."

Although the homicide rate for children in military households was elevated in Cumberland County, so was the homicide rate for children in non-military families. That rate, at 4.4 per 100,000 population, was twice the statewide rate of 2.2 per 100,000. In Onslow County, the rate for non-military families, at

3.2 per 100,000, also was higher than the state average, "again indicating problems broader than those stemming from the military installation itself." The child homicide rate for military families was found to be elevated in several other military counties, with Craven at 5.6, and Wayne at 3.2. However, the study authors note that rates based on less than 20 child homicide deaths are less reliable than those for 20 or more such deaths.³⁰

The study results could not be compared to military installations in other states because no comparable data exists, says Marcia Herman-Giddens, author of the study and an adjunct professor at the University of North Carolina at Chapel Hill's School of Public Health. She recommends a nationwide tracking system for child abuse incidents that could help identify clusters such as the one she found surrounding the two N.C. military bases. "It's difficult to get the data," Herman-Giddens says. "It just happened that someone like me got interested and did the intensive work."

Fager recalls the military's reaction to these data as defensive. "They were sputtering and spinning as fast as they could, but the numbers are what they are," he says. While Herman-Giddens says she was disappointed in the response to the report from military leadership, social service directors in Onslow and Cumberland counties responded by forming civilian task forces to look into the issue further. Col. Al Aycock, Garrison Commander at Fort Bragg, serves on Cumberland County's Child Homicide Identification and Prevention Task Force.

Tom McCollum, deputy public affairs officer for the 18th Airborne Corps at Fort Bragg, says the Army isn't ready to accept Herman-Giddens results as valid. "We have found fault in the institute's research numbers," he says. He said the Army has raised questions about the study's case tracking procedures and its definition of the crime—including whether parents should be held responsible for caregiver assaults and whether deaths that occurred after the parent left the military could be counted. "The headlines look extremely shocking," McCollum says. "But a lot of the programs they suggested be implemented, Fort Bragg's already doing it."

Herman-Giddens defends the study's methods in attributing child homicides to military families. "Our definition of a military child abuse homicide was one where the child had one or both parents in the military and the child was killed by a care giver—for example, a live-in boyfriend. In one or two cases, the perpetrator was a babysitter rather than a parent or parent figure. Some military personnel that I spoke

with would have liked us to count cases only if the active-duty parent was the perpetrator. We felt using that as a definition of a case was way too narrow. As for counting homicides committed after the active-duty parent had been discharged, there was only one case in the entire study in such a category, and that was because the homicide was committed only two or three days after a discharge."

Tom Hill is family services director at Fort Bragg. Hill cites a long list of programs that the Army has developed to deal with domestic issues such as family violence. "If there's anything we can do to save a life, we want to do it," Hill says.

Mental health issues, including suicide, are other areas of concern for many military families. "I think we can all agree that war fighting produces many hardships and dangers in combat. I also think we can agree a wide range of stressors accompany all our deployments," Bernard Rostker, undersecretary of Defense for personnel and readiness, told his audience at the 2000 Department of Defense Conference on Leaders and Operational Stress in Washington D.C. Rostker, pointed out that stress plays a role in a wide variety of human behavior, including substance abuse, alcoholism, and suicide.³¹ And, military officials say the age of instant global communications has in some ways made matters worse, flooding deployed personnel with information about home front problems they can do little or nothing about.³²

Despite the added stress of military deployment and wartime activities, suicide rates in counties adjacent to military installations in North Carolina appear similar to statewide patterns. In 2003, the State Center for Health Statistics recorded 949 deaths by suicide, a statewide rate of 11.3 per 100,000 population.³³ Of the eight military counties, Cumberland recorded 13.3 suicides per 100,000 population; Brunswick 12.2; Onslow 8.9; Craven 8.6; Harnett 8.2; Wayne 7.9; Hoke 2.7; and Pasquotank 2.7.

9. Race Relations and the Military

The military has tended to lead both the eastern region and the state as a whole in integration generally. Roy Parker, the former editor of the *Fayetteville Observer* and a columnist on military history, notes that base schools on Fort Bragg were integrated in 1951—fully three-years before the 1954 Supreme Court ruling in *Brown v. Board of Education* outlawed racial segregation in the public schools and more than a decade before that decision was fully implemented. Parker notes that a white principal at one base school, noting the poor facilities for black students at a separate school, simply

declared, "This won't work," and merged the two schools.

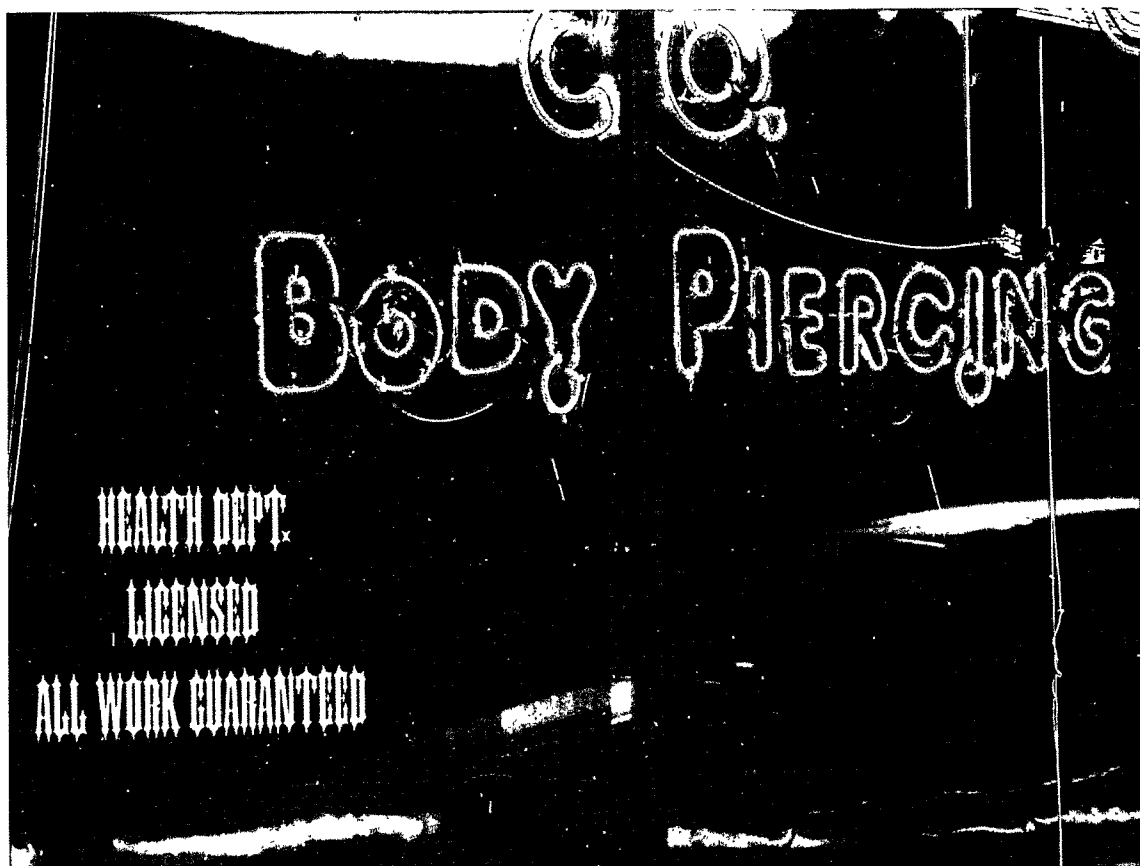
At the national level, African Americans have risen to the top levels of the military chain of command. Colin Powell, who served as Chairman of the Joint Chiefs of Staff, is the prime example. But the true test is within the neighborhoods back home. Here again, the military passes muster. Using a measure called a dissimilarity index that indicates how homogenous various neighborhoods are, with a score of 100 being completely segregated and 0 being completely integrated, Jacksonville, home of Marine Corps Camp Lejeune, ranks as the least segregated city in North Carolina with a population of more than 25,000, according to the U.S. Bureau of the Census.³⁴ Fayetteville ranks as fifth least segregated, and Goldsboro, home of Seymour Johnson Air Force Base, ninth. Indeed, Jacksonville stands out as a national leader in street level integration, ranking least segregated overall among 319 metropolitan areas.

In December 1995, the slayings on the streets of Fayetteville of two African-Americans sent shockwaves through the city that reached all the way to the Pentagon. That's because the perpetrators,

three Army privates based at Fort Bragg, revealed at trial that they had dabbled in neo-Nazi philosophy and that the murders were motivated by racial hatred. The murders provoked soul-searching within the city, the convening of friendship circles to talk about race, and an investigation by the military that ultimately determined the problem to be isolated in scope. Of 77 hate crimes recorded by the State Bureau of Investigation in North Carolina in 2003, none occurred in military communities.³⁵ Only two of 62 hate crimes occurred in military communities in 2002.³⁶

10. Presence of Drinking Establishments, Pawn Shops, and Tattoo Parlors

Another lifestyle issue concerns whether a heavy military presence creates a rough and tumble street environment dominated by adult entertainment, bars, pawn shops, and tattoo parlors. But are these kinds of businesses more prevalent in military communities than the rest of North Carolina? To answer this question, the Center examined the number of drinking establishments, pawn shops, and tattoo artists plying their wares across North Carolina.



Karen Tam

Very few North Carolina businesses indicate they provide "adult entertainment" as part of any licensing process. Thus, this information is hard to gather and was not included.

Easier to quantify is the number of drinking establishments in military communities and elsewhere. To account for differing population sizes, the Center calculated both the number of licensed drinking establishments and the number of residents in the county per drinking establishment. Fewer residents per bar or restaurant serving alcohol represents a higher concentration of drinking establishments. With 741 residents for every bar or restaurant serving alcohol, the data showed slightly fewer residents per bar for military counties versus non-military counties in the East (see Table 8). That figure compares to 764 residents per drinking establishment for the 41 eastern counties and 1,019 for the state as a whole.

With a few exceptions, military counties do not host high numbers of pawn shops on a per capita basis (see Table 9). Cumberland, the home of Fort Bragg, had 21 pawn shops, second only to much more populated Mecklenburg's 24. However, taking

population into account, Cumberland's total number of pawn shops ranked 16th in the state. The highest ranking military county on a per capita basis was Craven, ranking sixth with nine pawn shops serving a population of 93,454. Pasquotank, with its Coast Guard facilities under the U.S. Department of Homeland Security, ranked 10th per capita in pawn loan shops, with three shops and a population of 36,681. Wayne County was the next highest ranking military county in proliferation of pawn shops, ranking 15th in the state with eight shops and a population of 114,778. Onslow County, with five shops serving 159,817 residents, ranked 41st in the state on a per capita basis. Indeed, Onslow had fewer pawn shops than did similarly populated Pitt County, home of East Carolina University, which had seven pawn shops and ranked 27th.

The statewide distribution of tattoo artists tells us that this practice remains more Marine than mainstream, despite a proliferation of tattooed people and tattoo parlors across North Carolina. Onslow County had 59 registered tattoo artists, according to the N.C.

—continues on page 102

Table 8. Number of Drinking Establishments in Eastern North Carolina Counties with Military Bases

County	# of Drinking Establishments	Population	Average # of Residents Per Drinking Establishment
Brunswick	462	83,787	181
Craven	269	93,454	347
Cumberland	669	311,526	466
Harnett	51	100,271	1,966
Hoke	25	38,193	1,528
Onslow	369	159,817	433
Pasquotank	100	36,681	367
Wayne	179	114,778	641
			Average # of Residents Per Drinking Establishment
8 Military Counties			741
41 Eastern North Carolina Counties			764
All 100 North Carolina Counties			1,019

Source: N.C. ABC Commission. Drinking establishments are those establishments with permits for: malt beverages on premise, unfortified wine on premise, unfortified wine on premise, brown bagging at small restaurants, brown bagging at large restaurants, mixed beverages restaurant, mixed beverages private club, mixed beverages tourism ABC establishment, mixed beverages hotel, and brown bagging private club.

**Table 9. County Population, Number, and Per Capita Ranking
Among 100 N.C. Counties of Tattoo Artists, Pawn Shops, and
Drinking Establishments**

County	County Population	Tattoo Artists		Pawn Shops		Drinking Establishments	
		# of	(Ranking)*	# of	(Ranking)*	# of	(Ranking)*
Alamance	138,754	12	(24)	3	(51)	304	(39)
Alexander	35,165	0		0		5	(100)
Alleghany	10,912	0		0		29	(27)
Anson	25,384	0		0		9	(94)
Ashe	25,320	1	(43)	0		19	(79)
Avery	18,221	0		21	(1)	108	(4)
Beaufort	45,816	3	(32)	0		115	(29)
Bertie	19,748	0		4	(4)	27	(57)
Bladen	33,119	1	(48)	3	(8)	11	(95)
Brunswick	83,787	25	(2)	4	(28)	462	(6)
Buncombe	215,468	37	(8)	9	(34)	811	(11)
Burke	89,943	15	(10)	3	(38)	81	(73)
Cabarrus	146,852	2	(55)	7	(29)	257	(46)
Caldwell	78,606	3	(44)	5	(21)	73	(71)
Camden	7,852	0		0		10	(61)
Carteret	61,122	0		13	(3)	435	(3)
Caswell	23,965	0		0		26	(65)
Catawba	148,797	16	(18)	10	(17)	465	(15)
Chatham	54,645	1	(52)	0		54	(68)
Cherokee	25,694	2	(27)	0		11	(92)
Chowan	14,453	0		0		41	(23)
Clay	9,499	0		0		7	(80)
Cleveland	98,497	10	(21)	7	(14)	121	(62)
Columbus	54,917	3	(35)	5	(7)	33	(86)
Craven	93,454	8	(25)	9	(6)	269	(19)
Cumberland	311,526	51	(11)	21	(16)	669	(40)
Currituck	21,059	0		0		123	(5)
Dare	33,906	4	(16)	0		512	(1)
Davidson	153,897	5	(46)	0		112	(82)
Davie	37,871	0		0		31	(76)

* rankings are per capita

—continues

Table 9, continued

County	County Population	Tattoo Artists		Pawn Shops		Drinking Establishments	
		# of	(Ranking)*	# of	(Ranking)*	# of	(Ranking)*
Duplin	51,821	0		4	(13)	47	(72)
Durham	239,662	13	(36)	7	(44)	727	(16)
Edgecombe	53,777	0		0		63	(64)
Forsyth	321,852	17	(37)	8	(48)	920	(20)
Franklin	52,855	0		0		42	(77)
Gaston	192,650	0		5	(47)	246	(60)
Gates	10,882	0		0		6	(89)
Graham	8,137	0		0		3	(93)
Granville	53,346	0		0		39	(81)
Greene	20,262	0		0		28	(56)
Guilford	438,520	0		10	(50)	1,512	(14)
Halifax	56,947	3	(38)	3	(24)	81	(55)
Harnett	100,271	5	(39)	3	(43)	51	(90)
Haywood	56,418	2	(45)	0		161	(21)
Henderson	96,370	7	(29)	6	(23)	225	(33)
Hertford	23,794	0		0		58	(30)
Hoke	38,193	0		0		25	(84)
Hyde	5,792	0		0		44	(2)
Iredell	136,387	6	(42)	5	(36)	300	(38)
Jackson	35,627	7	(4)	0		100	(24)
Johnston	140,719	22	(12)	4	(46)	183	(59)
Jones	10,257	2	(5)	0		8	(78)
Lee	50,561	9	(7)	4	(12)	116	(35)
Lenoir	59,091	4	(31)	3	(25)	130	(37)
Lincoln	68,630	0		0		69	(67)
Macon	43,647	0		0		91	(41)
Madison	31,968	1	(47)	0		8	(96)
Martin	20,196	0		0		46	(36)
McDowell	24,930	0		0		24	(69)
Mecklenburg	769,843	120	(13)	24	(42)	2,965	(10)

* rankings are per capita

Table 9, continued

County	County Population	Tattoo Artists		Pawn Shops		Drinking Establishments	
		# of	(Ranking)*	# of	(Ranking)*	# of	(Ranking)*
Mitchell	16,052	0		0		4	(97)
Montgomery	27,680	0		5	(5)	14	(91)
Moore	79,900	0		4	(26)	378	(9)
Nash	90,546	4	(41)	3	(39)	212	(32)
New Hanover	172,780	31	(6)	8	(32)	928	(7)
Northampton	21,820	0		0		23	(66)
Onslow	159,817	59	(1)	5	(41)	369	(34)
Orange	123,196	1	(56)	0		446	(13)
Pamlico	13,071	0		7	(2)	38	(18)
Pasquotank	36,681	10	(3)	3	(10)	100	(26)
Pender	44,820	0		3	(19)	90	(43)
Perquimans	11,806	2	(9)	0		18	(53)
Person	37,594	0		3	(11)	72	(44)
Pitt	141,019	15	(20)	7	(27)	367	(28)
Polk	19,194	0		0		53	(25)
Randolph	137,385	3	(50)	4	(45)	31	(98)
Richmond	46,594	7	(14)	3	(20)	68	(54)
Robeson	127,253	10	(26)	6	(31)	79	(85)
Rockingham	92,893	6	(33)	3	(40)	123	(58)
Rowan	135,147	12	(23)	0		237	(45)
Rutherford	63,861	0		4	(22)	98	(51)
Sampson	63,597	1	(53)	3	(30)	36	(88)
Scotland	35,690	0		3	(9)	34	(70)
Stanly	59,533	7	(17)	4	(18)	42	(83)
Stokes	46,356	1	(51)	0		27	(87)
Surry	72,810	4	(34)	3	(35)	124	(47)
Swain	13,573	0		0		40	(17)
Transylvania	29,799	4	(15)	0		112	(12)
Tyrrell	4,246	0		0		10	(31)
Union	149,045	11	(28)	5	(37)	124	(74)

* rankings are per capita

—continues

Table 9, *continued*

County	County Population	Tattoo Artists		Pawn Shops		Drinking Establishments	
		# of	(Ranking)*	# of	(Ranking)*	# of	(Ranking)*
Vance	44,216	2	(40)	0		74	(48)
Wake	721,437	51	(30)	17	(49)	2,047	(22)
Warren	20,286	0		0		31	(52)
Washington	13,435	0		0		22	(49)
Watauga	43,170	4	(22)	0		226	(8)
Wayne	114,778	13	(19)	8	(15)	179	(50)
Wilkes	67,509	1	(54)	3	(33)	82	(63)
Wilson	76,312	2	(49)	0		154	(42)
Yadkin	37,524	0		0		6	(99)
Yancey	18,131	0		0		15	(75)

Sources: Data on the number of drinking establishments are from the N.C. ABC Commission website at www.ncabc.com. Pawn shops are from the Employment and Security Commission of North Carolina's Labor Market Information Division at www.ncesc.com. Tattoo artists are registered with the N.C. Department of Health and Human Services. Counties without tattoo artists are not included in the rankings of tattoo artists per capita. Pawn shops also are not included in number of pawn shops per capita.

* rankings are per capita

—continued from page 98

Department of Health and Human Services. That's the highest concentration of tattoo artists in the state after adjusting for population, and second only to Mecklenburg County in total tattoo artists. With five times the population, Mecklenburg had 120 tattoo artists, enough for a 13th place ranking on a per capita basis. The next highest ranking among the military counties goes to Pasquotank, home of the Coast Guard and third in the state with 10 tattoo artists serving a population of 36,681. Cumberland, meanwhile, has 51 registered tattoo artists, the third highest in total *number* in the state, but 11th after adjusting for population. Wayne County, home of Seymour Johnson Air Force Base, ranks 19th of 100 counties in tattoo artists per capita, and Craven County, home to Marine Air Station Cherry Point, ranks 25th.

11. Environmental Impact

Military installations face a range of environmental issues, chief among them potential soil and water contamination and noise from low-flying

aircraft. Water quality has been a concern at some military bases, including Camp Lejeune, where volatile organic compounds were found in several drinking water wells, according to the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency of the U.S. Department of Health and Human Services. The contamination was linked to leaking underground storage tanks, chemical spills, and drum disposal, as well as solvents from a dry cleaning operation on base.

Several studies done by the ATSDR have suggested a potential link between volatile organic compound contamination and birth defects among families living on the base. A new study started in the spring of 2005 will try to determine whether children exposed *in utero* from 1968 to 1985 had specific health effects, ATSDR officials say.

In 2001, the Pentagon was fined \$312,000 and required to spend almost \$1 million to clean up two drinking water contaminants, lead and trihalomethanes, found in the drinking water supplied to Fort Bragg.³⁷

Adam Shestak, of the environmental watchdog group Clean Water for North Carolina of Durham,

N.C., writes that the military “emits large amounts of pollution,” as can be seen in the media coverage of “water supply contamination which impacted thousands at Camp Lejeune. Two of North Carolina’s active military installations are on the ‘Superfund’ National Priorities List, and 35 of the over 150 Formerly Used Defense Sites (FUDS) throughout North Carolina have been identified as in need of environmental clean-up. Another 40 of these FUDS have not been located, prohibiting their evaluation for potential environmental hazards.”³⁸

But Bill Holman, executive director of the N.C. Clean Water Management Trust Fund, which has partnered with the military to acquire land to protect water supplies, says the military has done much to improve its performance in environmental stewardship in recent years. He mentions steps by both the Army and the Marine Corps to improve erosion and sedimentation control problems, improve wastewater treatment, and preserve habitat for wildlife and endangered species such as the red cockaded woodpecker. “I’d actually describe them as good environmental stewards,” says Holman. “That does reflect a change in the last 10 or 15 years. Both the Army and

the Marines have staff dedicated to managing their properties for both training and conservation.”

Sen. John Kerr (D-Wayne) says the Air Force also has been a good environmental steward. “They bring infrastructure for water and sewer. They’re saving wetlands. They clean up their mess.”

Unexploded ordnance (ammunition or weapons) at bombing ranges has been cause for concern in North Carolina. In a 1994 memo, Bill Flourney of the state Department of Environment and Natural Resources (DENR) concluded that contamination at numerous active and inactive target areas “has the potential to be a very big problem.”

Ranges exist at Fort Bragg, Camp Lejeune, Cherry Point, Seymour Johnson, and Pope Air Force Base for small arms, artillery, and missiles. Four active air-to-ground weapons training sites are established in the Pamlico and Albemarle sounds at Stumpy Point, Palmetto, Brant Island Shoals, and Piney Island. Three inactive target sites also exist in the sounds along the Outer Banks, according to maps on record at the DENR office. Bases that closed years ago, including Camp Butner in Granville County and Camp Davis at the Onslow County town



of Holly Ridge, are also considered potential sites for contamination by unexploded ordnance, DENR officials say.

Examination of similar ranges in Cape Cod, Massachusetts, showed soil and groundwater contamination by a variety of substances, including dioxin, lead, aluminum, diethylphthalate, hexachlorobenzene and many more, according to a March 2001 memo from N.C. Department of Justice attorney Bill Miller. "This provides an example of some of the chemicals that can be left behind by the explosion or burning of military munitions, flares, propellants etc.," Miller said of the Massachusetts findings. "In an aquatic environment such as North Carolina with water-based target areas on the coast, the residuals may be more dispersed by water transport. There may also be some reason for concern at North Carolina's land-based target ranges with regard to groundwater contamination from range activity at locations in the porous sandhills and along the coast."

Aircraft noise levels and potential accidents pose additional concerns. The Eastern Carolina Joint Land Use Study produced in November 2002 by local officials in Region P Council of Governments surrounding Craven and Carteret counties urged that cooperative planning eliminate development in strategic areas near the bases to reduce land use conflicts. "When people and communities are exposed to noise and accident potential, they often seek relief," the report states. "This often places pressure on the military base to modify operations and procedures, which could have a significant negative impact on the overall mission of the installation.... In this scenario, both parties lose." ³⁹

These concerns are key issues in the Navy's efforts to locate a landing field in Washington County (See "David and Goliath: The Fight To Site an

Outlying Landing Field in Washington and Beaufort Counties," pp. 106-108, for more on the Outlying Landing Field, or OLF, issue). The site is near the Pocosin Lakes National Wildlife Refuge, which is the winter home to hundreds of thousands of swans, snow geese, and other migratory birds. If the OLF is created, farming and other rural activities will be supplanted. The Navy seeks to acquire 30,000 acres for the operation and if the effort is successful, landowners unwilling to part with their land at market value will face condemnation proceedings. A driving concern for the Navy is reducing noise pollution along the heavily populated southeastern Virginia coast. That ultimately could become a concern in Eastern North Carolina, as the region's air space is crisscrossed by military training routes.

12. Air Space Restrictions Pinch Private and Commercial Flights

A large portion of Eastern North Carolina has air space restrictions that limit civilian aircraft access to routes and schedules designated by military air traffic control. Some military training routes allow military aircraft to fly at high speeds at altitudes of 100 feet or lower. Military-related air space restrictions prohibit or limit civilian access whenever training maneuvers are underway, which can be any day of the week, says George D. Speake Jr., former director of Dare County Regional Airport. "North Carolina is the prime pilot training area on the East Coast for the Navy, Air Force, and Marines," Speake says.

The military's special-use airspace with varying levels of flight restrictions all but surrounds the Dare County airport. Only an eight-mile-wide path of unrestricted air space to the west of the airport is available for approach. But even that could be compromised if the Marine Corps receives permission for two new special-use zones it has requested from the Federal Aviation Administration, Speake says. "We're located in a tourist area. In fact, tourism is really the only thing driving the economy here," he says. "But if the military keeps going, and they fill in all of our air space, the next thing you know civilians won't be able to get to this airport."

Civilian pilots who wish to fly through restricted areas must not only get clearance from FAA controllers but also from the Navy, whose air controllers go by the call sign "Giant Killer." Such requests may be and often are turned down. Even when the flight plan is approved, some pilots are wary of traveling through a potential military operation. "Special-use air space scares most pilots," Speake says.

*A glut of geese can play the devil
With national life on every level,...
This solemn thought I introduce:
The higher the level, the bigger the
goose*

—OGDEN NASH

"GOOSE POPULATION GAINS HIGH LEVEL"

HEADLINE (NEW YORK TIMES)

Dare County has not been permitted to install an INS, the most sophisticated type of navigation available to pilots, because of the military's involvement in the region, Speake says. This means that pilots have to use alternative navigational aids that make it harder to land in bad weather, thus dimming the airport's chances of ever bringing commercial air service to Roanoke Island and the Outer Banks. "What commercial airline is going to fly somewhere that they can't be guaranteed to land?" he asks.

Lt. Col. Gerald R. Reid, director of the Community Plans and Liaison Office at Marine Corps Air Station Cherry Point, says Speake exaggerates the restrictions placed on Dare County Airport due to military flight patterns. Military training routes are not the same as restricted airspace, and can be crossed or followed when not in use by the military. While there are five military training routes within 30 miles of Dare County Airport, the closest is 11 miles away. The closest that allows flights under 100 feet is 50 miles away. Civilian pilots may approach the airport from the west, south, and northeast—not just the west as Speake indicates. "When Dare County range is inactive, 360 degrees of sky is available," says Reid.

Reid adds that the special use zones it has requested from the FAA would not restrict any established approach procedures, airways, or routes. The closest special use area, if activated, would be more than 20 miles from the Dare County airport. Giant Killer controllers only restrict flight through special use airspace when airspace is used for hazardous military training activities. "This is required by FAA regulation (FAA Order 7110.65 series) to ensure safety of both civilian and military aircraft."

Reid says Air Station Cherry Point actually improved flight safety in the Dare County area when Cherry Point Approach Control extended its northern boundary in April 2004, "bringing much needed air traffic control service to an otherwise under-served area." Still, Reid acknowledges that the airport is pinched by a restricted area to the north controlled by the Air Force, and by lack of radar coverage. "Today, controllers have no choice but to use non-radar procedures, which result in greater time and distance spacing. This can translate to delays and higher fuel costs.... Radar coverage would permit smaller spacing between aircraft and between aircraft and airspace boundaries."

—continues

Military and civilian officials at Marine Air Station Cherry Point explain military training routes and their impact on civilian flight patterns.



Karen Tam



Reid says the N.C. Department of Transportation's Division of Aviation, the U.S. Marine Corps, and the U.S. Navy "are studying the potential of installing surveillance radar near the Dare County Airport that would enable greater air traffic services [and] improve air navigation and safety. This radar service will substantially reduce mid-air collision control over non-radar operations."

Closing

North Carolinians are justly proud of their role in defending freedom. Yet debates about patriotism tend to cloud any discussion of Eastern North Carolina's heavy dependence on the military. To get a clear vision of the impact of the military on the East, one must look beyond pure patriotism.

The heavy military presence in Eastern North Carolina brings with it pluses and minuses. On the plus side of the ledger is economic impact, with the military providing in excess of 100,000 jobs, plus defense contracting opportunities—though given the number of troops on its soil North Carolina does not get its fair share of these opportunities, government-funded university research, and increased business for the state's ports. A further plus is an educated

and well-trained work force comprised of military spouses and retirees, who leave the service earlier than in civilian life and are more likely to settle near bases to enjoy tax free shopping and health care on base.

"We are now scratching around to get money for such things as school construction...road building. There are all sorts of things to be done in this country...I see no reason why the sums which now are going into these sterile, negative mechanisms that we call war munitions shouldn't go into something positive."

—DWIGHT D. EISENHOWER

EISENHOWER, BY STEPHEN E. AMBROSE

Minuses include impact on local government tax revenues due to untaxed properties and facilities, fiscal strain for the public schools because the federal government pays less than the full cost of educating military dependents, pressures on the local housing market brought on by large numbers of military personnel seeking off-base housing, elevated levels of domestic violence and child abuse, conflicts over land use, increasing air space restrictions, and environmental concerns such as noise pollution and heavy metals contamination of soil and water.

The military is a major employer in Eastern North Carolina with a huge impact on the region's economy. Yet there may be a point when the heavy military presence begins to pinch. Before North Carolina reaches that point, the state may need to give more careful consideration to the pluses and minuses of being America's most military-friendly state. ☐

FOOTNOTES

¹ Dave Montgomery, "Panel Weighs Bases' Futures," Knight-Ridder Newspapers, as published in *The News & Observer*, Raleigh, N.C., May 4, 2005, p. 3A.

² BRAC 2005 Closure and Realignment Impacts by State, U.S. Department of Defense, May 2005, Appendix C, on the Internet at www.defenselinks.mil/brac.

³ Liz Sidoti, "Politics trumps a few of Rumsfeld's picks," Associated Press, *The News & Observer*, Raleigh, N.C., August 28, 2005, p. 4A.

⁴ *Federal Register*, Washington, D.C., Volume 69, Number 29, Feb. 12, 2004, pp. 648-652.

⁵ U.S. Department of Education, federal impact aid division report.

⁶ S. Richard Brockett, et al., *North Carolina Statewide Military Impact Study*, East Carolina University Regional Development Services and Regional Economic Models Inc., spring 2004, p. 2.

⁷ For a discussion of the use of multipliers in determining economic impact, see Mike McLaughlin, "More on Multipliers in Evaluating the Economic Impact of Movies," *North Carolina Insight*, Volume 14, No. 3, February 1993, pp. 7-12.

⁸ J. Barlow Herget and Mike McLaughlin, "Not Just Fun and Games Anymore: Pro Sports as an Economic Development Tool," *North Carolina Insight*, Vol. 14, No. 2, September 1992, pp. 2-25. See especially pp. 5-8.

⁹ *Ibid.* at p. 5.

¹⁰ Data on income and poverty are taken from the U.S. Bureau of the Census. Employment data are from the Employment Security Commission of North Carolina. Calculations comparing the 41-county eastern region to North Carolina as a whole on these indicators are by the Center staff.

¹¹ Angelou Economics, "Defense Industry Demand Analysis," North Carolina Military Business and Resource Center, Fayetteville, N.C., April 18, 2004, p. 3.

¹² North Carolina Statewide Military Impact Study, note 6 above, p. 4.

¹³ "Defense Industry Demand Analysis," note 11 above.

¹⁴ *Ibid.*

¹⁵ Bob Montgomery, "TAMSCO to invest \$20 M at airport," *The Daily Advance*, Elizabeth City, N.C., July 9, 2004, p. 1A.

¹⁶ "Public Event Rollout," *North Carolina Military Business & Resource Gap Analysis*, Angelou Economics for North Carolina Military Business and Resource Center, June 1, 2005, p. 1.

¹⁷ Zanetta Doyle, "Middle East War Affects Local Economies," *Economic Development Digest*, National Association of Development Organizations Research Foundation, Washington, D.C., Vol. 13, No. 6, May 2003, p. 3, on the Internet at <http://www.nado.org/pubs/may03.html>.

¹⁸ N.C. Department of Commerce, Economic Development Information System, "Onslow County Profile," on the Internet at <http://cmedis.commerce.state.nc.us/countyprofiles/profile.cfm>.

¹⁹ Session Law 2004-179 of the 2005 Session (House Bill 1264).

²⁰ U.S. Bureau of the Census, on the Internet at <http://quickfacts.census.gov/qfd/states/37/37085.html>

²¹ County Profiles, 2004, Rural Data Bank, North Carolina Rural Economic Development Center, Raleigh, N.C. On the Internet at <http://www.ncruralcenter.org/databank/profile.asp?county=Pasquotank>.

²² "Recipient Project Payments by Impact Aid Number," Fiscal Year 2005, U.S. Department of Education Impact Aid Program, June 7, 2005, p. 2.

²³ *Ibid.* at p. 1.

²⁴ Mark Fagan, "Retirement Development: A How-To Guide Book," Economic Development Administration, U.S. Department of Commerce, Washington, D.C., 2002.

²⁵ Session Law 2005-445 (Senate Bill 1117).

²⁶ *Crime in North Carolina, 2003*, Uniform Crime Reporting Data, Annual Summary Report, North Carolina Department of Justice, Raleigh, N.C., September 2004, pp. 3-5.

²⁷ Col. Dave Orman, "Fort Bragg Epidemiological Consultation Report," U.S. Army, October 18, 2002, p. 4.

²⁸ Renee Elder et al., "Safe at Home? Fighting Family Violence in North Carolina," *North Carolina Insight*, Volume 21, No. 4, March 2005, pp. 14-29.

²⁹ Marcia Herman-Giddens, "Reducing Collateral Damage on the Home Front," N.C. Child Advocacy Institute, Raleigh, N.C., September 2004, p. 1.

³⁰ *Ibid.* at p. 4.

³¹ Staff Sgt. Kathleen T. Rhem, "DoD Leaders Meet to Discuss Combating Stress," American Forces Information Service, Washington, D.C., July 19, 2000, p. 2.

³² Staff Sgt. Kathleen T. Rhem, "Good Connections Home a Double-Edged Sword," American Forces Information Service, Washington, D.C., July 19, 2000, p. 2.

³³ "N.C. Leading Causes of Death 2003: Suicide," State Center for Health Statistics, N.C. Department of Health and Human Services. On the Internet at www.schs.state.nc.us/SCHS/deaths/lcd/2003/suicide.html.

³⁴ William Frey and Dowell Myers, "North Carolina Segregation: Dissimilarity Indices," CensusScope, Social Science Data Analysis Network, Population Studies Center, University of Michigan, Ann Arbor, MI, based on the 2000 U.S. Census. On the Internet at http://www.censusscope.org/us/s37/rank_dissimilarity_white_black.html.

³⁵ "Agencies Reporting Hate Crime by Bias and Motivation—2003," *Crime in North Carolina—2003*, State Bureau of Investigation, Raleigh, N.C., p. 128.

³⁶ *Hate Crime Statistics, 2002*, State Bureau of Investigation, Raleigh, N.C., Table 13, p. 46.

³⁷ James Eli Shiffer, "Bragg Will Pay EPA Fine," *The News & Observer*, Raleigh, N.C., June 23, 2001, p. A3.

³⁸ Adam Shestak, "Environmental Effects of Military Activity in North Carolina," *Clean Currents*, newsletter of Clean Water for North Carolina, Durham, N.C., Summer 2005, p. 6.

³⁹ "Eastern Carolina Joint Use Land Study," Eastern Carolina Council, Region P Council of Governments, November 2002, p. 7.