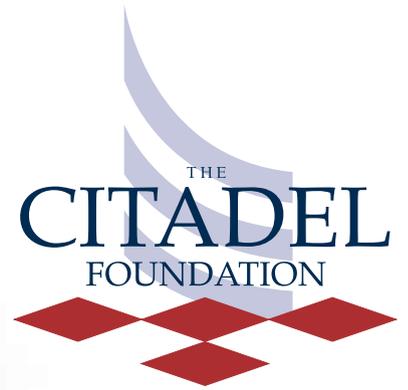


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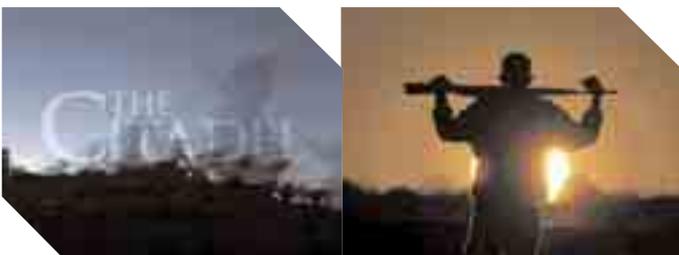
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By Maj. Gen. John S. Grinalds, U.S. Marine Corps (Retired)
PRESIDENT OF THE CITADEL

FROM THE PRESIDENT

THE CITADEL OF THE 21ST CENTURY

When members of the graduating class take the review during their final parade, their march across Summerall Field symbolizes a major transition. Such graduation ceremonies serve as a symbolic bridge between their cadet years and their future.

The Citadel builds this bridge by preparing graduates for a world that is becoming ever more complex, diverse and unpredictable. This issue of *The Citadel*—whose theme is The Citadel of the 21st century—presents ways the college is forging ahead while remaining faithful to the immutable values that have produced generations of successful alumni.

We call The Citadel a leadership laboratory, and much of that preparation for leadership takes place in the barracks as evidenced by the feature cadets have written about barracks life. The four pillars segment highlights the traditional components of a Citadel education—academic excellence, military training, physical fitness and character development—by presenting stories about a cadet who studied in South Africa, a Marine officer candidate, the wrestling team and one of our many service programs. The outreach of our College of Graduate and Professional Studies through the Senior Scholars Program provides an example of how The Citadel is building bridges into the community. A report on Auschwitz survivors who return to a European history class each year underscores the principle that we must acknowledge the past in order to improve the future. The article on the Cooper River bridge project, arguably the most spectacular bridge construction underway in this hemisphere, reflects the professional accomplishments of alumni who are literally building a bridge to the future for South Carolina's Lowcountry. And the profiles of donors feature other types of bridge builders who are strengthening our institution in countless ways.

I hope you enjoy *The Citadel* and will share it with others who want to know more about the college. In that way, you will be building a bridge to our future.

IN THE NEWS

MEDIA HIGHLIGHTS OF THE 2003-2004 ACADEMIC YEAR

New minors highlight leadership, African American studies

This fall, The Citadel began offering two new programs, a minor in leadership studies and a minor in African American studies. The leadership studies program is believed to be one of only two leadership studies degree programs at public institutions in South Carolina. The diverse 15-credit hour minor reinforces leadership development as a fundamental aspect of The Citadel experience, focusing on leadership issues in business, humanities and social sciences. Developed over the past year, the program follows the creation in 2003 of the Krause Initiative in Leadership, which was funded with a \$2 million gift from the Krause Foundation of Los Altos Hills, Calif. William L. Krause, the foundation's CEO, is a 1963 graduate.

The 15-hour minor in African American studies encourages an appreciation for the contributions of



Citadel and MUSC team up to offer dual degree

The School of Business Administration has collaborated with the Medical University of South Carolina's College of Pharmacy to offer pharmacy students the opportunity to work on both a doctor of pharmacy degree and a master's of business administration concurrently. Earning two degrees in four years will make graduates more marketable upon graduation.

people of African descent and emphasizes the importance of diversity. Through the interdisciplinary study of history, politics, English, sociology and culture, the program aims to highlight the significance of race, gender and ethnicity in American history.



Citadel education

Interest in a challenging, traditional military-style college education is at an all-time high. The Office of Admissions received a record-breaking 2,348 applications from high school seniors seeking admission in the fall. Last year, the college had received 2,113 applications, an 11 percent increase.

Since 2003, applications have increased 11 percent.

Governor challenges graduates to become leaders by following dreams

S.C. Gov. Mark Sanford gave the commencement address to the Corps of Cadet class of 2004. Challenging the graduates to be leaders in life, rather than followers, he emphasized education as the "key to your future success." Nearly 400 cadets and active-duty military personnel graduated May 8.



Cadets help raise thousands for Relay for Life

The College Relay for Life attracted several hundred people to Johnson Hagood Stadium April 23 and 24



and raised \$20,000 for the American Cancer Society's fundraising event.

This is the first year that The Citadel had a hand in organizing the event, which exceeded all expectations by drawing more than 30 teams of 10 to 15 people each. The event was co-sponsored by the College of Charleston.

The Citadel names new provost



A scholar and top administrator from the State University of New York system has been named the new provost. Brig. Gen. Donald A. Steven took over as provost and dean of the college July 1, succeeding Brig. Gen. Harry S. Carter who will join the School of Business Administration faculty. Steven's 30-year career in higher education includes significant achievements in scholarship, planning, admissions and fundraising. An award-winning composer whose works have been performed on four continents, Steven earned his Ph.D. and M.F.A. in composition from Princeton University.

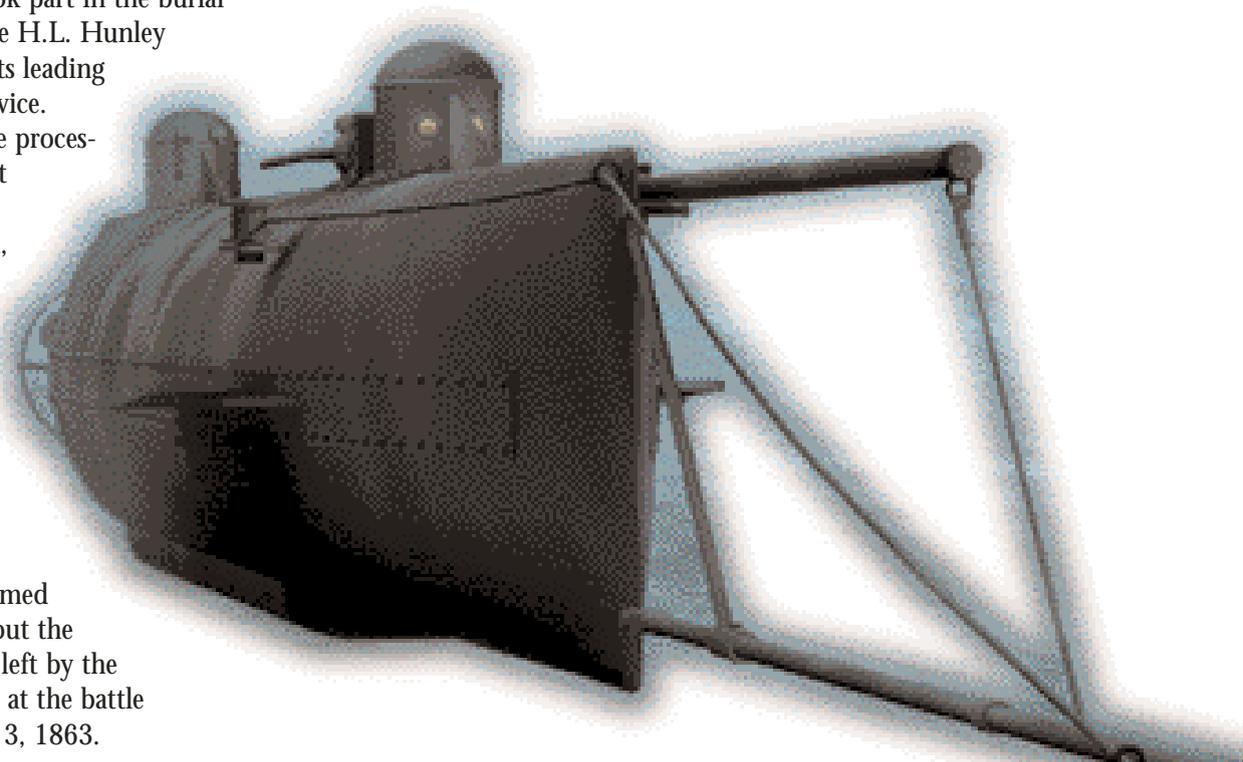
Cadets send care packages to troops in Middle East

Cadets hoped to make the holidays brighter for troops stationed in the Middle East. They sent more than 500 holiday care packages to adopted military units and troops, all of which had Citadel graduates serving among them. About 250 service men and women in each unit received individual care packages, and several unit-wide care packages were also delivered. The cadets' efforts were recognized with a Citadel spirit flag that flew in Iraq. The flag was presented to the college by Army Capt. Vince Patenaude of the 151st Signal Battalion. Patenaude is a 2001 graduate of the College of Graduate and Professional Studies.



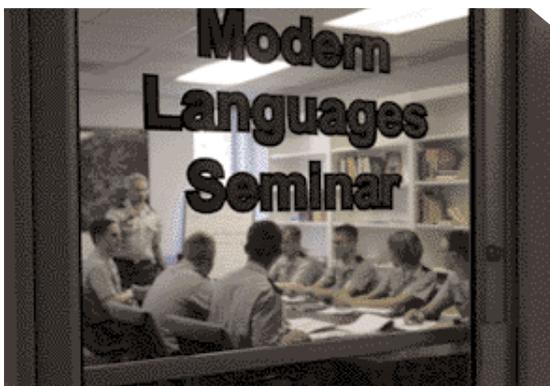
Cadets play vital role in Hunley funeral services

Cadets and faculty took part in the burial of the final crew of the H.L. Hunley and many of the events leading up to the April 17 service. Cadets marched in the procession from White Point Gardens to Magnolia Cemetery. In addition, 15 cadets took part in a joint community service project to build a casemate carriage for an original cannon at Fort Sumter. Dr. Thomas Kindel of the School of Business Administration performed several times throughout the week, playing a bugle left by the 5th Michigan Cavalry at the battle of Gettysburg on July 3, 1863.



Cadet named Fulbright Scholar

Cadet Jeffrey Cunningham of Loudonville, N.Y., was awarded a Fulbright Scholarship to study the influence of the Jewish philosopher Hermann Cohen at Marburg University in Germany. Cunningham is the fourth senior German major in three years to be named a Fulbright Scholar, and the seventh overall from The Citadel since 1992.



Court decision impacts mess hall prayer

A decision made by the U.S. 4th Circuit Court of Appeals in Richmond, Va., over the prayer before evening mess at Virginia Military Institute (VMI) had a ripple effect on



The Citadel. The court decided to let stand a three-judge panel's decision that VMI's cadet-led non-denominational prayer before evening mess was unconstitutional because attendance at the meal was mandatory. Because The Citadel falls under the jurisdiction of the

U.S. 4th Circuit, the decision is the law unless it is overturned by the U.S. Supreme Court. As a consequence, the Corps began to observe a moment of silence before meals in the mess hall allowing cadets to pray, meditate or simply be quiet. The court decision, however, has not deterred religious activity on campus. There are 16 different religious organizations on campus, including clubs of Protestant, Catholic, Jewish and Muslim faiths.

Greater Issues brings senator, CEO and USAF general

The Greater Issues Series aims to engage cadets' interest and knowledge in important topics of the day. Since it was established in 1954, the Greater Issues Series has brought presidents, heads of state, scholars, diplomats, journalists and distinguished business and military leaders to Charleston and The Citadel. The series is made possible by a grant from the Lane Foundation. The 2003-2004 year brought three distinguished speakers to the Corp of Cadets.

Dec. 9

S.C. Republican Senator Lindsey O. Graham served in the U.S. Air Force and S.C. Air Guard. An Operation Desert Shield/Desert Storm veteran who served as staff judge advocate at McEntire Air National Guard Base in Eastover, S.C., he continues to serve as a lieutenant colonel in the U.S. Air Force Reserves.

Feb. 12

Sallie L. Krawcheck, chairman and chief executive officer of Smith Barney, is a native of Charleston and graduate of Porter Gaud School. She oversees global management of one of the four key businesses of Citigroup, the parent company, with more than 500 offices worldwide and 23,000 employees.



March 18

U.S. Air Force Vice Chief of Staff Gen. T. Michael Moseley, who was in the Pentagon on Sept. 11, 2001, when it was attacked by terrorists, helped evacuate the building. Two months later at Prince Sultan Air Base in Saudi Arabia, he commanded all coalition air forces for 656 days as part of Operation Enduring Freedom and Operation Iraqi Freedom.

War on terror veterans honored at Homecoming

Alumni deployed in Operation Iraqi Freedom and Operation Enduring Freedom were honored homecoming weekend with a special parade and other festivities. A memorial service honored graduates who died during the war. Six alumni and one former cadet have been killed in the war on terror: 1st Lt. Therrel Shane Childers, '01, USMC; Capt. Benjamin Wilson Sammis, '96, USMC; Lt. Peter B. Ober, '98, USN; Lt. Col. Charles Henry Buehring, '85, USA; Capt. Christopher James Kenny, '93, USA; Capt. Daniel W. Eggers, '97, USA; and Marine Lance Cpl. Timothy Ryan Creager who left The Citadel after his sophomore year to enlist.

Stadium renovation

At the beginning of the 2003-2004 school year, a graduate who chose to remain anonymous gave The Citadel Foundation \$1.5 million with the major portion earmarked for the revitalization of Johnson Hagood Stadium. By spring the demolition of the 56-year-old facility was under way. The demolition of the west side stands was the initial phase of the \$15 million reconstruction project. The college ceased further work to renovate the existing Johnson Hagood Stadium in June to explore joint options with the public and private sectors that would allow a bowl game and other college and community sporting events to come to the city of Charleston. Meanwhile the college hired a local archeological firm to excavate graves that had been underneath the stands since the city built the stadium on land used as a cemetery in the late 19th century.



Stay informed with college news

To keep up with what's going on at The Citadel, check out the Public Affairs Web page at www.Citadel.edu/pao. The news release page has daily updates on news and college events.

The Four Pillars

CITADEL BUILDING BLOCKS

The Citadel's history of molding leaders dates back to the time the first cadets arrived in 1843. The challenge of an education built on the four pillars of learning—academic instruction, military training, physical readiness and character development—has produced generals, governors, CEOs, *New York Times* bestselling authors and college presidents.

The following four articles illustrate each of the pillars beginning with Cadet Robyn Gratic's description of an academic quest that took her to South Africa. A Citadel Scholar and a member of the honors program, Gratic is a senior English major. A feature on Rikki Felts, a 2004 graduate, highlights the impact of military training on a female cadet. Felts, who majored in criminal justice, is preparing for a career in the Marine Corps. J.D. Driscoll, a former wrestler and also a 2004 graduate, describes the sport of wrestling at The Citadel in an article on physical readiness. And Jeff Wright, a former intern with the Public Affairs Office and a 2003 graduate, describes how cadets, active-duty students and recent graduates are building character through their community service work with LeadAmerica, an educational organization that teaches high school and middle school students about leadership.

As these articles demonstrate, the four pillars remain the foundation of a Citadel education that is clearly producing leaders of the 21st century.





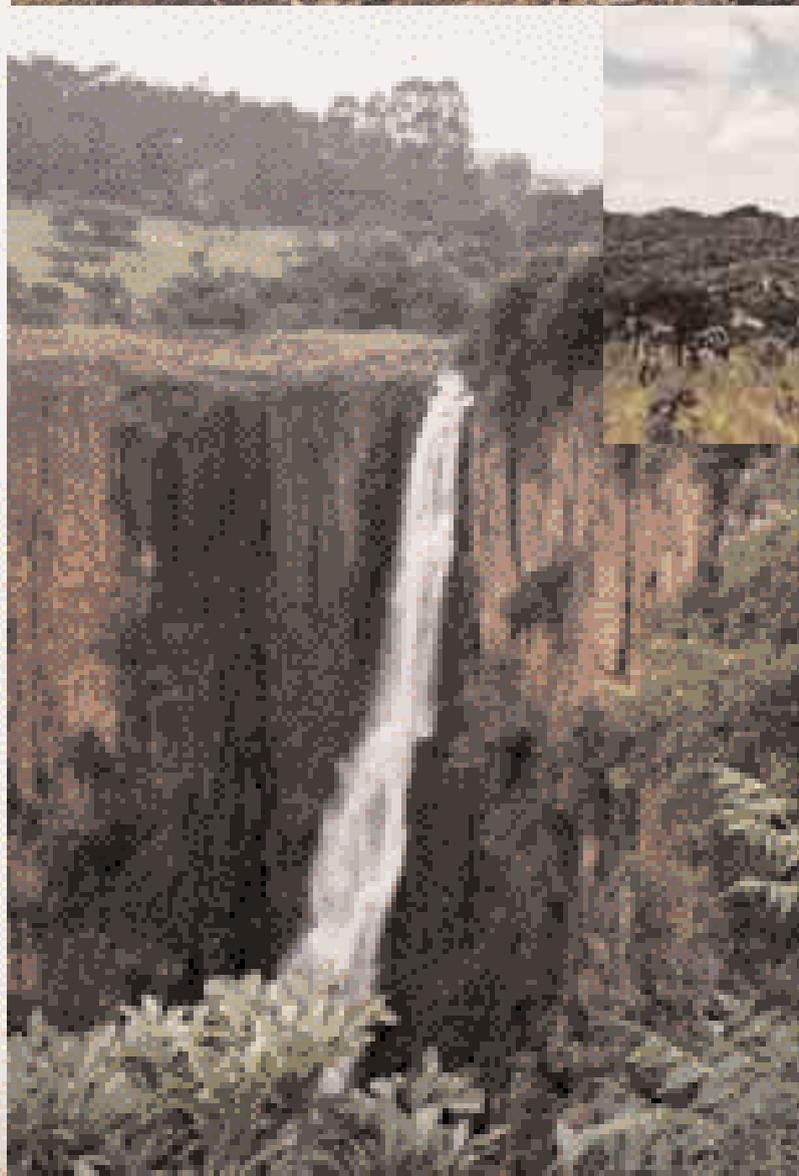
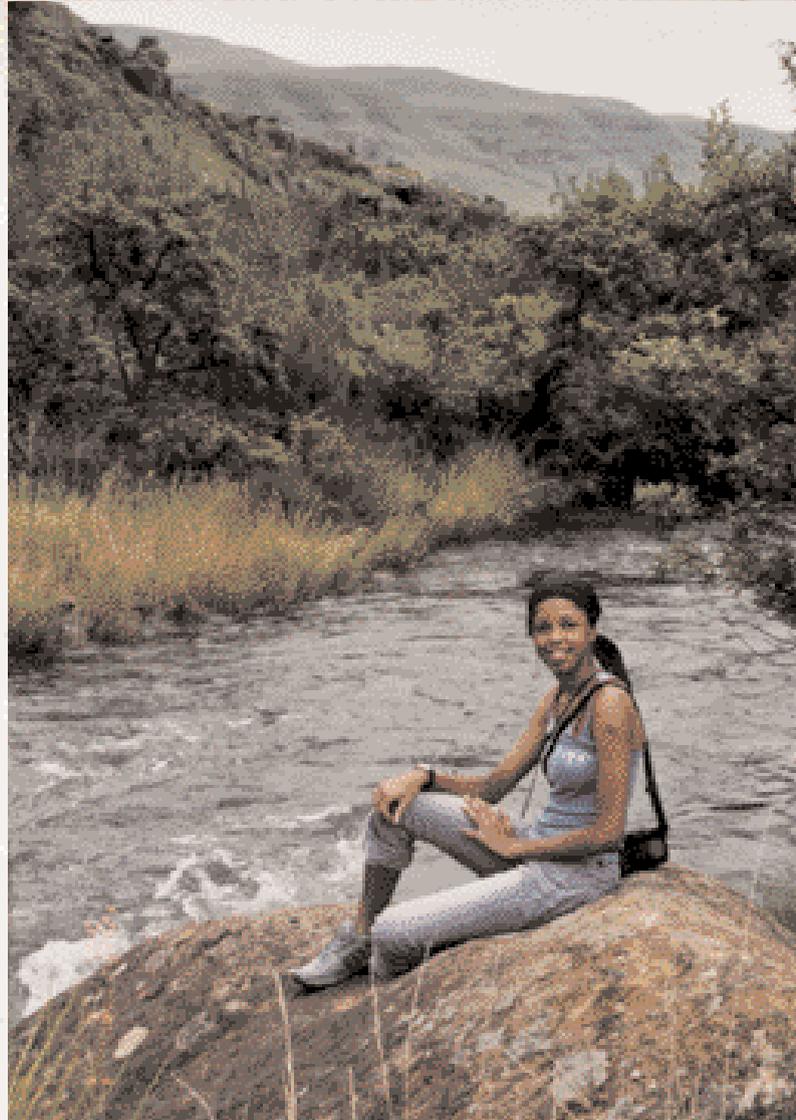
Academics

BY CADET ROBYN GRATIC



When I got on the plane in Atlanta to begin a semester study abroad in South Africa, it was a very foggy, dreary day. It symbolized what I was leaving behind to embark on my journey to a better, more enlightened me. Getting off a 15-hour flight to one of the most beautiful skies I've ever seen was the first sign of good things to come during my stay in South Africa. In the days after I arrived, the sky would continue to inspire me in many different ways. The first couple of weeks the sun welcomed me with strong, powerful rays that left me without a doubt that I was in Africa.

This is my first experience in another country, and I never imagined it would be just that, another culture, not American, not even close to being American. We're safe watching different cultures on television but moving to Africa for a semester is an awakening. America may be diverse, but it seems that everyone has something in common with someone else. As an American in Africa, even as an African-American in Africa, there is nothing similar about me and the next person except that we both live on the planet Earth. It seems shocking to interact with people who have no knowledge of your history, politics, beliefs or value systems. And I have no clue about theirs. But it is this lack of knowledge that brings us together in cultural exchange.



I am enrolled at the newly consolidated University of KwaZulu-Natal in Pietermaritzburg, which is a merger of two historically racially segregated universities to reflect South Africa's outlook for a better democracy and improved social relations among its citizens. Pietermaritzburg lies in eastern South Africa in the

such as access to books, financial aid and support services are still developing in South Africa, leaving students to handle most of these issues on their own.

It wasn't until I got here that I learned just how much America affects the world with our government actions, music and television, which portray social norms, fashion and violence. This year South Africa celebrates 10 years of democracy. Celebrations around the country depict how the people of South Africa have high hopes for their new democratic government as opposed to the oppressive policies under the apartheid government. I have taken for granted the liberties that democracy in America has placed in my life. Water and electricity are basic necessities we have access to in America, but in South Africa they are luxuries thousands of people do not have.

Hip-hop is a major influence on the youth of South Africa. Like young Americans, they idolize rappers and singers broadcasted on television. The negative side of gangsta rap and lifestyles are imitated by the youth in the form of gangs with American names, unnecessary tension between race groups and the demoralization of women in song lyrics. But along with this negative influence, hip-hop culture has also had an encouraging effect by showing young Africans that people of color can be successful too and offering them the hope they can one day be in a similar position.

The stress reliever for most South Africans is the hourly tea break. Even during class lectures, we have a tea and coffee break. That is hot tea, even when the average temperature outside is in the 80s or 90s. When I first arrived, every meeting, every class break, every function came with tea breaks, and I wondered what was so special about tea. As I learned more about the British influence on South Africa, it became clear that it had more than just a political influence on the culture of South Africa. As my courses have progressed, I find myself, too, drinking tea—five to 10 cups a day.

Everything here is green and tropical. We have zebras just down the road and monkeys that come on campus daily. Imagine attending school in one of those beautiful images you see on Public Broadcasting Service. That is my university in a valley surrounded by lush mountains, some buildings and small African huts and an incredibly clear, blue sky.

As I travel across South Africa on the Garden Route, I see Africa's sky at its best. It is as if an ancestral painter is sitting somewhere up high above the earth, constantly working on his brush stroke across the African sky. One moment he paints the clouds with the movement of the winds; five minutes later, the painting has evolved into another amazing work of art that is breathtaking and wondrous. The sky in Africa reflects my educational experience here—it is constantly changing just as I am constantly learning.

This year South Africa celebrates 10 years of democracy. Celebrations around the country depict how the people of South Africa have high hopes for their new democratic government as opposed to the oppressive policies under the apartheid government.

foothills of the Drakensberg Range, which is in the province of KwaZulu-Natal. The campus is very big and my classes are far apart. I've made good friends with some of the U.S. girls, and I've met some very nice African people. I'm learning so much about the history and people of South Africa from just talking with students.

The people in Africa are nice, but some are disappointed when they speak to me in their language

and I can't understand them. Most residents know at least three of the 11 official languages. In Pietermaritzburg, Zulu is predominantly spoken. Everyone assumes that everyone else knows it. I'm taking a Zulu class and communication has become easier for me since I learned to say, "I speak very little Zulu."

Of the 11 national languages many are characterized by elevating the tone of your voice, so for Americans, it seems as if everyone is shouting, especially if they are talking at 6 a.m. The sun rises at 5:30 every morning which causes everyone to get up and begin the day at least an hour before Americans.

Being immersed in the South African governing and education systems has given me a greater appreciation of what we have in America, particularly the academic system we have at The Citadel. Things guaranteed to us,



Military Training

BY JENNIFER WALLACE



When his daughter was born August 4, 1982, Ricky Felts was the first one to hold her, and as the first to have that privilege, the proud father insisted on naming her too—Rikki. Twenty-two years later it's appropriate that she's named after her father; after all she's following in his footsteps. By the time this magazine is published, the senior cadet will have graduated and will be embarking on a career in the Marine Corps.

Why does a young woman just beginning her career choose to go into the Marine Corps?

"The bearing and character of the Marine Corps is just something I wanted to be a part of," says Felts.

In high school, Felts was in Junior Reserve Officer Training Corps (JROTC). She applied to The Citadel because she wanted a challenge.

"I've always enjoyed the atmosphere and camaraderie of being with my ROTC buddies," she insists.

As a senior at the military college, Felts has served as the executive officer of Romeo Company.

"I loved it because I got to lead parades," she says bashfully.

With graduation just a few days away, she learns that she has completed the semester with a perfect 4.0.

"I was really stressed out about it. It's such a cool way to finish my last semester. When I do something, I like to learn from it, and if I'm not succeeding, I try that much harder."

Trying harder is likely what garnered Felts the respect and friendship of her classmates.





Semper Fidelis Society's annual Bulldog Challenge, an intense seven-mile endurance test that includes a Marine obstacle course, a stadium run, a firefighter's carry and team pushups. Felts and her team finished with a time of 1:47:14, and placed second in the all-female teams.

Col. Ralph Tice, '74, commanding officer of the department of Naval science and one of Felts' professors was impressed with her determination and leadership: "Cadet Felts provided a high level of leadership and motivation for her team. Midway through the competition as her team negotiated the obstacle course, Cadet Felts performed the rope climb portion. This is a very physically demanding event.

"It was especially noteworthy due to the fact that she, along with many others, had not been able to successfully climb to the top of this obstacle at the first of this year. Her persistence, hard work and can-do attitude enabled her to overcome this challenge, and on this day, her determination paid off big for her team."

In the Marine Corps Felts is interested in pursuing a career in logistics, but as a criminal justice major, she is also interested in eventually earning a law degree or going into the field of law enforcement.

Unlike the service academies, cadets at The Citadel are not required to serve in the armed forces. Traditionally, a third of the Corps—cadets like Felts—will go on to serve after graduation. ROTC classes, however, are a requirement of attending The Citadel. Cadets must pass one ROTC class every semester.

"When I do something, I like to learn from it, and if I'm not succeeding, I try that much harder."

"You bond because you sweat together and you bond for the simple fact that you're doing everything like the person next to you. You PT until you can't stand anymore. Knob year is tough."

Knob year wasn't the only obstacle Felts had to overcome.

"There are classmates that don't give me the time of day because I'm a female, but that's okay. I still love this school. Melanie De Santiago ['01] told me not to use that as a crutch—that just because something happens to you, you can't look at it like you were targeted because you are a female."

After graduation, Felts will complete 10 weeks of Officer Candidate School (OCS) and then receive her commission. In order to be prepared for the grueling physical regimen of OCS, Felts runs and works out three times a week with fellow Marine ROTC cadets. In fact, Felts teamed up with three cadets to take part in the

In her final semester, Felts took Tice's Naval Science 402 class, Leadership and Ethics.

"I wish every cadet in the Corps could take this class," says Felts. "It's an eye opener."

The different philosophies and case studies introduced by Tice are thought provoking and force cadets to consider ethical decision-making.

At The Citadel, though, cadets don't just study about leadership, they witness it first hand in the Corps. Adam Burch, '03, who served as a squad corporal Felts' freshman year, made a great impression on her.

"He never raised his voice," she remembers. "Not once. He didn't have to. He commanded that kind of authority, and you wanted to do what he asked you to. . . . That's how you should lead."

Leading by example—if Felts does it the way she does everything else, she'll be climbing the ranks.

Physical Readiness

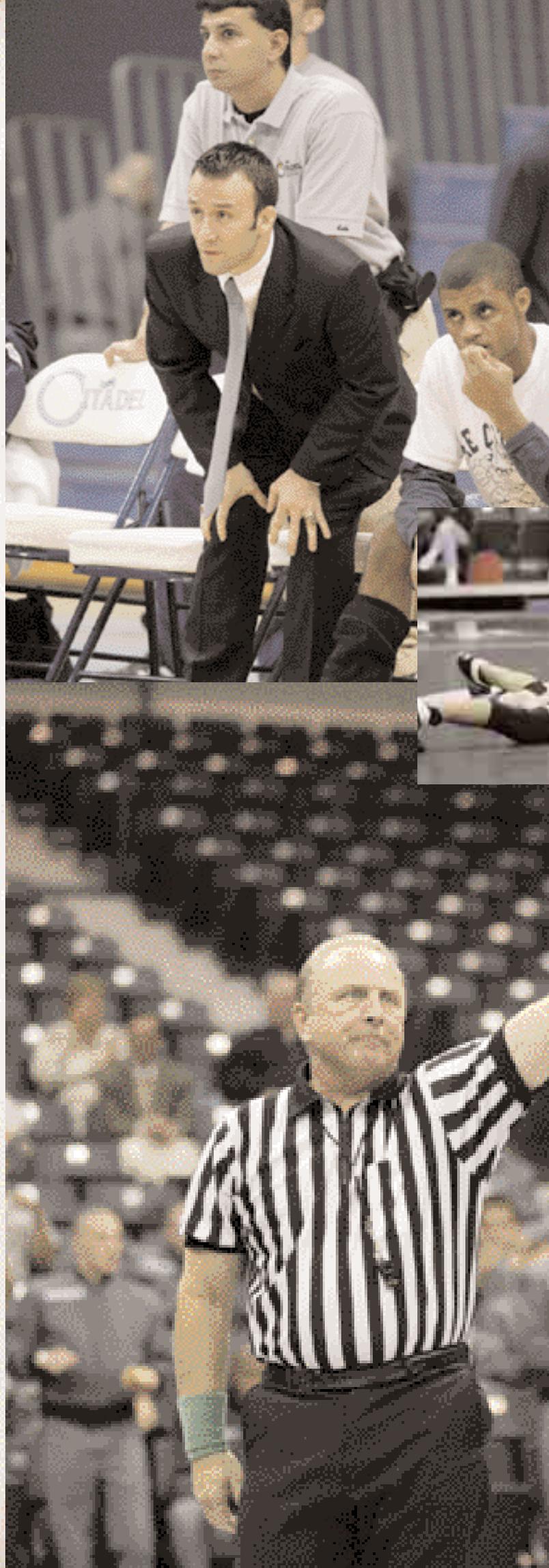
BY J.D. DRISCOLL, '04



Four years ago preparations began to rebuild Padgett-Thomas Barracks. At the same time, the wrestling team started renovations of their own. Today the tower of PT Barracks looms over campus just as it did in 1967, the last year that the wrestling team was breaking headlines to become Southern Conference champions. Many people know of the time and labor required to rebuild PT Barracks, but few are aware of the effort wrestlers made to go from a floundering team to conference champions in under four years.

The wrestling team is rapidly gaining respect from the Corps for their achievements on and off the mat, and understandably so—the same qualities that make a good wrestler make a good cadet. Wrestlers must have strong discipline, one of the cornerstones of being a cadet. Wrestling is not just a sport that is over when the last whistle of practice blows. It is a disciplined lifestyle in which they maintain everything from their weight to their grades, their mental edge to their physical condition. Cadet Keith Clifton of Colleyville, Texas, is just one of the wrestling team's successes on the mat and in the Corps.

Clifton, a two-time Southern Conference Champion at 174 and 184 pounds, was also the 2003-2004 Alpha Company commander, a seven-semester Dean's List recipient and a Gold Star recipient for three semesters. Despite graduating in May, he has one season of eligibility left and will continue to lead the bulldogs as a College of Graduate and Professional Studies student.



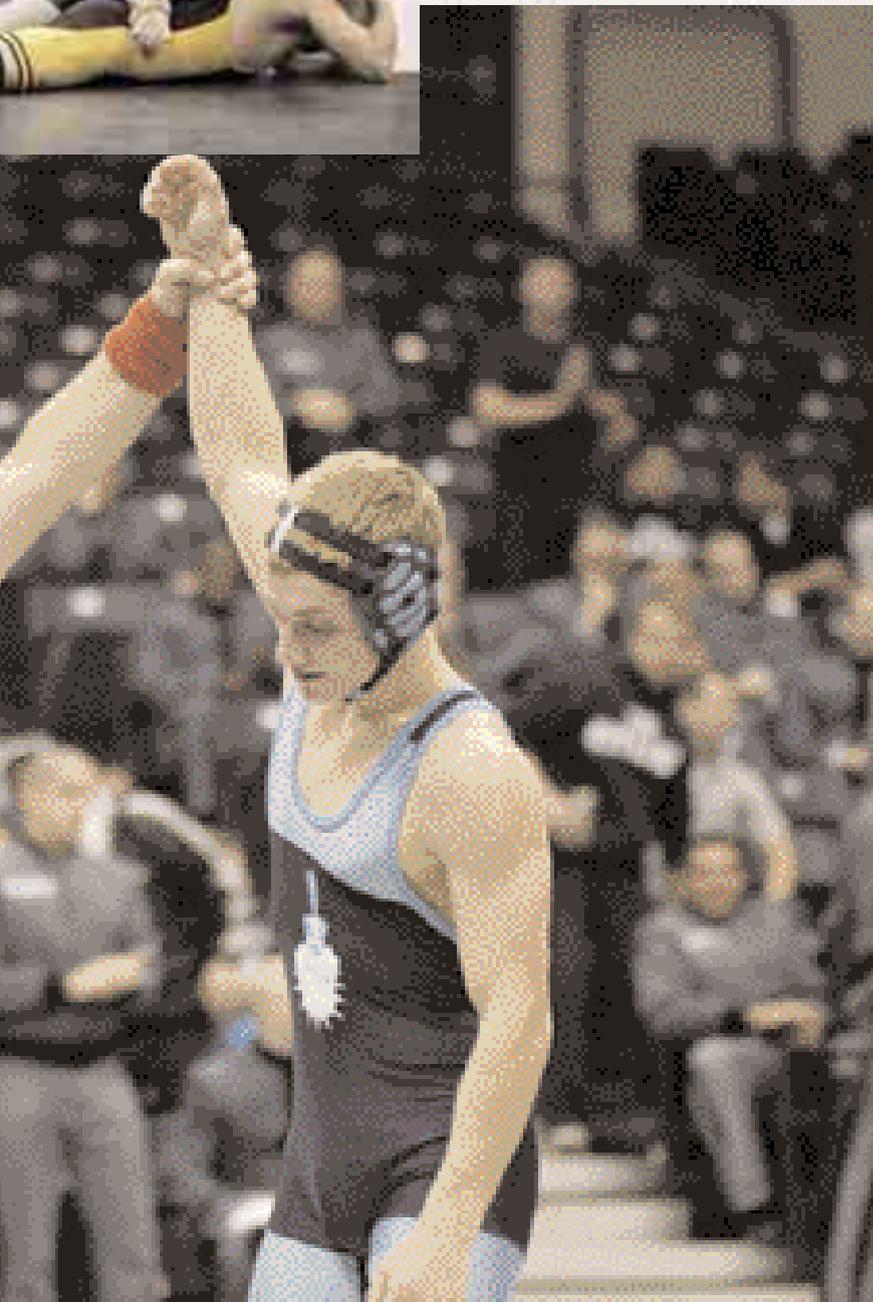
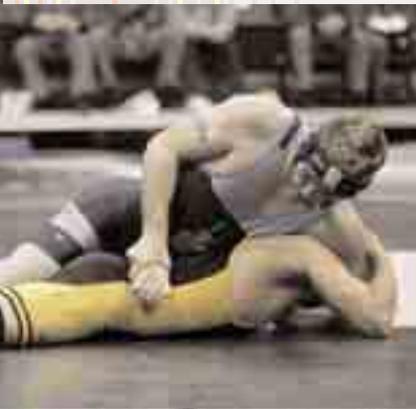
“Wrestlers must have strong discipline, one of the cornerstones of being a cadet.”

Discipline is what has allowed Clifton to balance academics, wrestling and the Corps.

“I like to work hard, and I enjoy wrestling,” said Clifton. “I think that the wrestling team gets more respect from the Corps because of the rigorous physical training required.”

A typical week for an in-season wrestler begins with a workout before sunrise Monday. The morning workouts vary depending upon the time of season and can be anything from timed sprints around the track on a cold January morning to grueling sessions in the weight room with the strength and conditioning coach. But the workouts don't

do justice to the actual practice every afternoon. Practice lasts up to three hours, not including the five-mile downtown loop they sometimes run before practice begins. A typical afternoon practice begins with



a light warm-up and stretching. The next part of practice is usually light drill where the wrestlers go through their repertoire of moves and techniques.

By this point in the practice they are already drenched in sweat and breathing hard, but they have not even begun the tough part yet when the wrestlers go 100 percent and have situational drills and real matches. During this phase it is not uncommon to see the coaches in the mix going over a particular area that may need improvement. This part of practice can last up to an hour and a half and is demanding, even for the spectators. After a quick water break the final stage is usually some type of cardio-endurance training. This may seem cruel, but is, in fact, crucial in preparation for the real matches when every bit of conditioning counts, especially in the final minutes of the match. The training may vary from timed sprints on a bike, timed reaction drills where the wrestlers follow their coach's commands or just a set of wind sprints to the opposite side of the room and back.

“The absolute worst part of practice is when we do seven-in-one sprints on the Airdyne bikes—I have thrown up every time,” said Clifton.

It is no surprise that after practice the room is silent and the mats are covered with sweat. Often a trail of puddles leads down the stairs to the locker room.

The team's success stems from their head coach's determination. Rob Hjerling has built the program into a Southern Conference powerhouse, constantly pushing his team to do its best. During his tenure as head coach, each season schedule has become harder than the last, and the team is challenged more each year. His tireless efforts are also evident in his expansive recruiting that ranges all over the country.

When asked about his secret to success Hjerling said, “Having short-term and long-term goals and the ability to make adjustments without compromising them is a key factor in the team's success.”

As he heads into his sixth season, Hjerling's goal is for his team members to reach their full potential, something that he feels that they have not done yet.

The Citadel wrestlers may have won the conference this year, but they have bigger plans for the future. They want to continue their Southern Conference domination and they want more individual conference champions, more All-Americans and more Academic All-Americans. These goals can only be fulfilled by discipline, hard work and determination. The wrestling team has demonstrated that it has all of these qualities for success and will only continue to aim high and strive for perfection.

“The sky is the limit. We are only losing one starter next season, we have five national qualifiers returning, and I think that we will be pretty good next year,” said Clifton.

Community Service

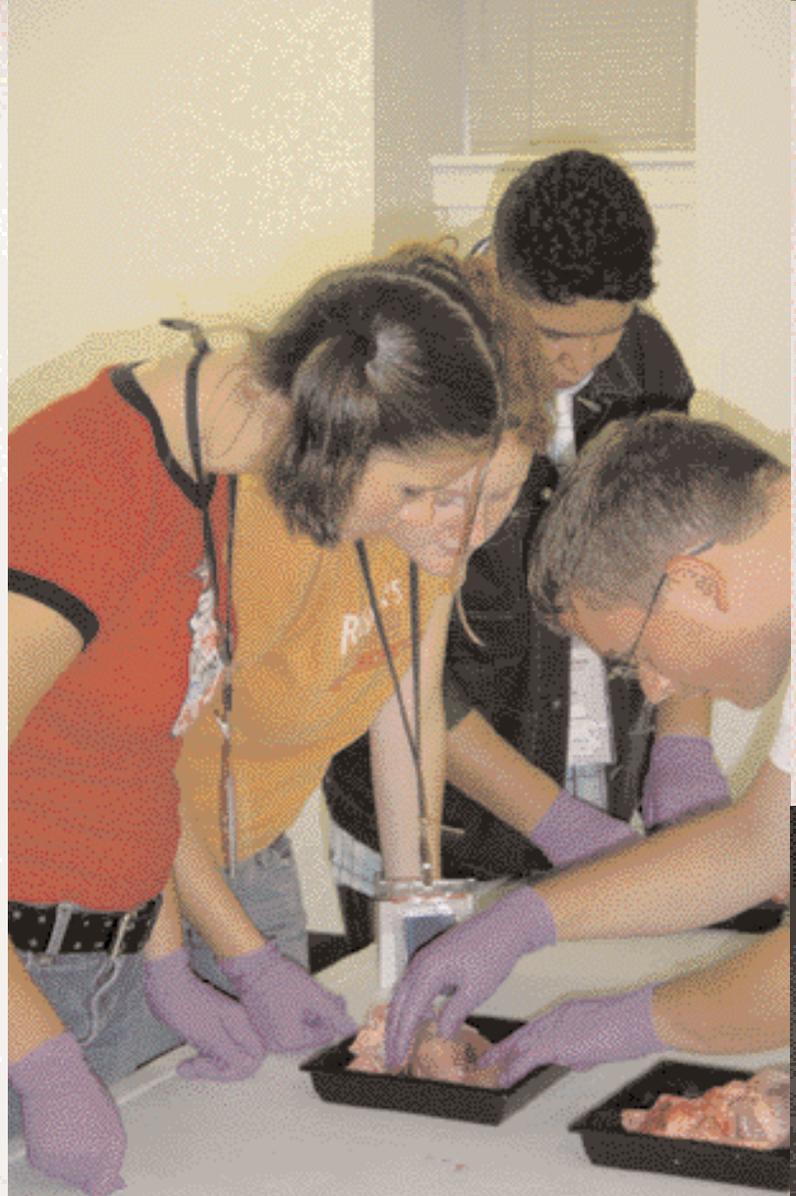
BY JEFF WRIGHT, '03



As an assistant program director for LeadAmerica, I was tasked in the spring with hiring a number of college students and recent college graduates to staff summer leadership conferences for middle and high school students. And knowing The Citadel's emphasis on community service, I turned to cadets, alumni and active-duty students not only to teach the students, but to fill leadership positions within the staff as well.

LeadAmerica sponsors the Congressional Student Leadership Conference and National Junior Leaders Conference. These conferences are designed to teach academically talented and motivated students the art of leadership specific to their area of academic interest. Experts from their fields speak with the groups, field trips and simulations immerse students in the academics, and the leadership curriculum instructs the students on the science of leadership. Team leaders are college students, recent college graduates or graduate students. Their primary duties are to encourage discussions and simulations and to assist in teaching. Supervising students is naturally part of the job, but every opportunity for interaction becomes a learning environment whether students are in the classroom or on a field trip.

Being a team leader is a challenge for most college students, and LeadAmerica strives to hire only the best and most qualified candidates. Team leaders usually arrive at



breakfast 15 minutes before the first students do and conduct all-in checks after they've gone to bed. That translates to long days of coaching, mentoring, leading, chaperoning and teaching. Accountability for the welfare and whereabouts of the students is critical. Having excellent administrative and small-group leadership skills is non-negotiable. The staff must be subject-matter proficient in the academic focus of each conference. Most importantly, however, they must be experienced and schooled in leadership and be willing to pass down their knowledge in both formal and informal settings.

Sounds like cadre, doesn't it?

With 13 Citadel representatives on the LeadAmerica staff, many of the more than 5,500 young leaders who attended LeadAmerica conferences this summer benefited from The Citadel way.

Students with a passion for medicine learned the traits and skills necessary for a career in the medical profession at the Medicine and Healthcare conference where John Zink, '03, served as a head team leader. Those interested in national security attended Defense and Intelligence where they were led by Officer Candidate Matt Dryden, an active-duty Citadel student. Joseph Rohe, '03, served as head team leader for that conference with Assistant Program Director Doug Miller, '03, overseeing site operations and logistics for many of



students develop a business plan at the Business and Entrepreneurship conferences in Chicago, Boston, and Washington, D.C. Cadets Travis Teate and Jhonna Casey with graduates Tin Ngyuen, '04, and Andrew Benko, '04, woke students at zero-dark-hundred to search for clues at the conference on Crime Scene Investigation/Forensic Science. Cadet Ryan Thompson had his hands full with logistics, meetings with senators and representatives and administrative duties.

I served as assistant program director for the Junior War College. Program Director Col. Floyd Duncan, professor of economics at the Virginia Military Institute and a retired infantry officer, drew upon his experience at the Army War College to lead a 10-day conference for high school students. I presented two lectures to the students: one about ethics as the basis for leadership and another about how daily choices affect honor.

Even our field trips were academically focused. When I took groups to visit the Lincoln Memorial, I'd first take them to the ground floor museum. They read Lincoln's exact words about the causes of the Civil War. Often discussing that issue among themselves, the students then climbed the marble stairs to see the sculpture of the man whose words they were debating. Far from a mere sight-seeing tour, these conferences inspired students to think about and learn from the places they visited.

Cadet life prepared all of us well for the summer's challenges, and LeadAmerica's call for Citadel-educated team leaders increases every year. Miller first came to



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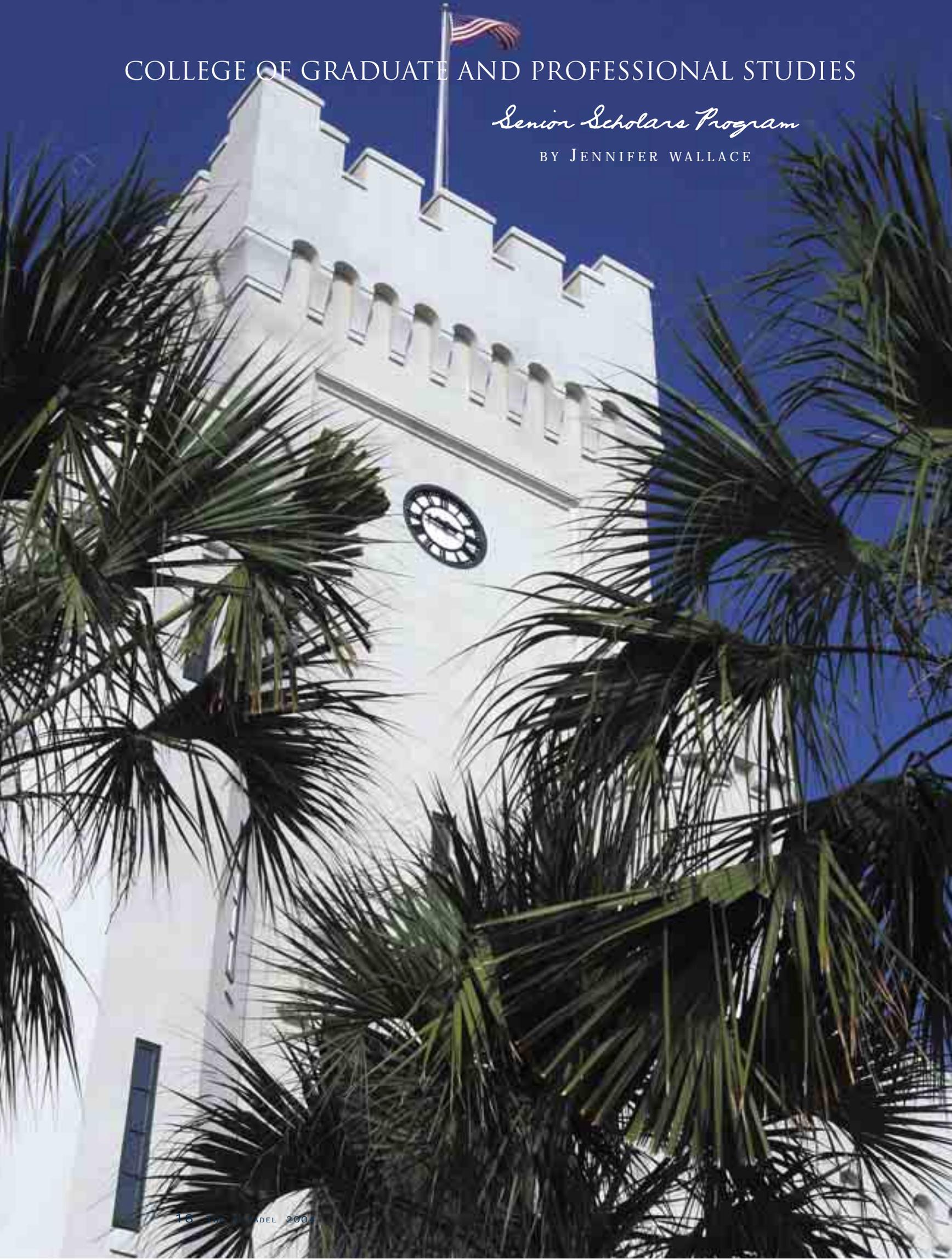


the Washington, D.C.-based conferences. If legislative careers interested students, Cadets Russ Kaufmann and Trevor Miller were their team leaders at the Congressional Forum, a conference at which cadets moderated debates while students simulated writing and enacting a bill into a law in their own mock congress. Suzanne Campbell, '04, and John Ingham, '04, helped

LeadAmerica in 2002 and was joined by Rohe and me shortly after our graduation.

"The Citadel's values and leadership perspective," said Chris M. Salamone, executive director of LeadAmerica, "are very consistent with LeadAmerica's, and we look forward to the continued involvement of Citadel cadets and alumni with our conferences."

At the end of summer many hundreds of students had been influenced by The Citadel staff at LeadAmerica. The lessons our cadre taught us we still carry, and we passed down the motivation, drive for excellence, and passion for uncompromising ethics and integrity that have so long been the hallmarks of a Citadel education.



COLLEGE OF GRADUATE AND PROFESSIONAL STUDIES

Senior Scholars Program

BY JENNIFER WALLACE

AT THE CLOSING EVENT IN THE SPRING 2004 SENIOR SCHOLARS PROGRAM SERIES, 150 SENIOR CITIZENS SIT AT TABLES IN THE CITADEL BEACH HOUSE GREAT ROOM ON THE ISLE OF PALMS. THE ROOM OVERLOOKS THE OCEAN, BUT THE GROUP FACES THE OTHER DIRECTION, LISTENING INTENTLY AS SHAWN HALIFAX, A GUEST LECTURER FROM CAW CAW INTERPRETIVE CENTER, TALKS ABOUT THE PRACTICE OF HOODOO, A FOLK MAGIC TRADITION THAT WAS FIRST PRACTICED IN CHARLESTON BY SLAVES WHO ORIGINATED FROM WEST AFRICA.



Senior Scholars, a College of Graduate and Professional Studies (CGPS) outreach program for senior academic enrichment, is the brainchild of Associate Dean Patricia Ezell who started the series with a handful of members in 1997.

"We created the program when we learned from senior adult focus groups that these senior adults are

interested in remaining intellectually, physically and socially alive," says Ezell. "They are well educated, well traveled and have led interesting, productive lives. They have something to share with The Citadel from their experiences, and The Citadel, through this program, has many resources to share with them."

Since its humble beginnings, Senior Scholars has grown to more than 150 members. The lectures range from Charleston history to world history, plantations of the Lowcountry to flora and fauna, and literature and film to computing. Open to those 55 and older, the cost is \$25 a term or \$75 a year.

Membership includes a Citadel student ID, which gives seniors library and computer lab privileges. They also get discounted athletic event tickets as well as invitations to fine arts events and parades.

The spring program was a blockbuster with lectures on China, the iconography of Elizabeth I, the medieval crusades, Southern

literature, the Charleston renaissance, South Carolina heritage and the late U.S. Sen. Strom Thurmond. For the grand finale, the last program was scheduled off campus at the beach house and added a little magic with the subject of Hoodoo and Voodoo.

Among those listening to Halifax at the beach house are the wife of a 1930 grad, a former business faculty member, a CGPS alumna, a 1950 alumnus, a mother of two sons who graduated in 1966 and 1970, the wife of a retired librarian, a Bulldogs fan and contributor to The Brigadier Foundation, and the mother-in-law of a professor. But there are many others in the group whose only affiliation with The Citadel is through Senior Scholars.

"I have recently retired, and it's great to go to lectures and learn something other than my job," says Kevan-Ann Spangler, who discovered the program from a neighbor walking by her house.

"It's an excellent bridge into the Charleston community for newcomers. I appreciate the broad learning opportunity and introduction to The Citadel," says Nelson Durand, who has been a member of the program for four years.

Robert Millard, who has been a member since he learned about Senior Scholars from a newspaper article, jokingly says, "There are too many old people!"

And Donald Coleman adds, "It's nice meeting people, including our 91-year-old classmates!"

In addition to the programs, there are two things that scholars agree bring them back: the cookies served at the lectures and Pat Ezell.

"My fondest memory will always be of Pat who has done such a marvelous job for us," says Miriam Kurbjun.

Betty Adams, who learned about the program from Ezell's husband, Hack, a professor at The Citadel since 1969, says, "We were in

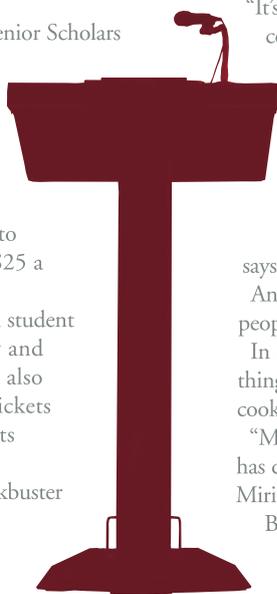
It's an excellent bridge into the Charleston community for newcomers. I appreciate the broad learning opportunity and introduction to The Citadel, says Nelson Durand who has been a member of the program for four years.

a group of very nice and friendly men and women, and we loved Pat Ezell. She organized everything so well, and she's such a lovely lady."

Ezell began her career with The Citadel in 1981 as a captain and assistant director of continuing education. In the ensuing years, she worked her way to the position of colonel and associate dean. CGPS flourished under her tenure with significant growth and expanded programs. In 1997, she was named Employee of the Year, and in 2004, she received the Palmetto Medal Award for her exceptional performance at The Citadel.

After the Hoodoo lecture ends, Mike McSherry, a charter member, stands to say a goodbye on behalf of the seniors to Ezell, who will retire soon. He presents her with a commissioned painting by Charleston artist Candace Trickey. The picture is of the tree in front of 16 Register Road where she and Hack lived on campus for 22 years.

"But I'm not really leaving you," Ezell insists as she joins McSherry. "Now, I'm going to become one of you!"



Living (and Reliving) *the* Past

Feeling the heat of a hot May afternoon, Cadets Jeremy Pressgrove and Jeffrey Holycross and I descended the steep steps of the Orthodox Synagogue on Rutledge Avenue.

As we got to the bottom, a lady rushed forward and said to the cadets, "You look so wonderful, so handsome in your uniforms! I really want my grandson to attend The Citadel." Looking at me, she asked, "Which is your son? You must be so proud."

I explained that neither cadet was my son, that I was a professor at The Citadel and both were students in a class I taught, Hitler and National Socialism. The two cadets wanted to walk that day with Holocaust survivors Pincus Kolender and Joe Engel in the March of the Living, an annual commemoration of the liberation of the German concentration camps.

by Brig. Gen. Michael Barrett, '68



HALT!
STÖJ!

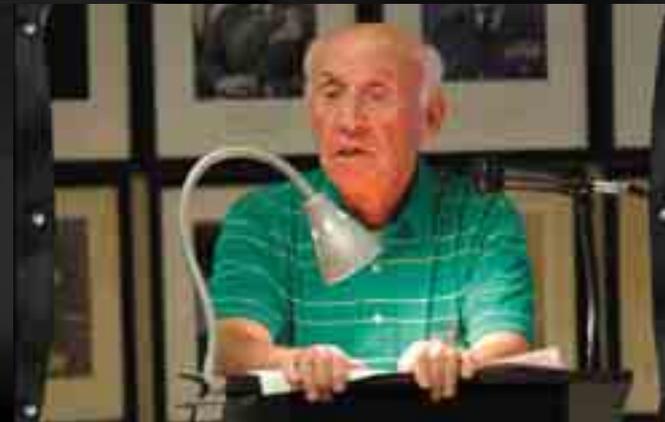
Earlier in the semester both gentlemen had come to campus and explained their experiences in the Holocaust and the Auschwitz death camp to the students in the Hitler course. The reaction of cadets to the two survivors' testimony is typically to examine the issues in greater depth—in this case, Holycross's and Pressgrove's desire to participate in the Holocaust memorial. Indeed, in student reviews, cadets repeatedly cite the evening with the Holocaust survivors as the highlight of the course.

In 1978, I began teaching the Hitler class. It is my academic field of specialization, and the topic fascinates me because it deals with the moral and political suicide of a nation that one could argue stood foremost in culture, education and freedom in Europe at the time of the 1933 Nazi takeover. Germany had a free press, which in fact Hitler understood and manipulated far better than any of his opponents. Its universities were the best in Europe, if not the world; its fledgling democracy was modeled after that of the United States and Switzerland, and it was the first major power to grant women the franchise. Hitler made very clear what he intended to do: put me in power, he said, and I'll set up in a legal manner an authoritarian state—and he did just that to thunderous acclaim. The political suicide of the German people—turning over their democracy to a man pledged to destroy it, is half the course; the other is coming to grips with the Holocaust. Like the political abdication to authoritarianism, the German nation was involved. Hitler did not kill a single Jew; he got others, lots of others, others who were ordinary people, to do it for him. Who the others were and how they could commit such inhuman actions constitute the second major objective of the course. Lurking in the background is the unspoken question whether other nations, perhaps even ours, could, under the right circumstances, perpetrate similar actions.

The hubris of Germany is fascinating in itself and, of course, generates student interest. In addition, the Nazi regime profoundly affected the world. One need but look at the names of graduates killed in combat listed on the front wall of Summerall Chapel to gauge the impact of that era on The Citadel. Consequently, this course has always drawn a huge enrollment. Following my first semester with the course, I thought about ways to improve it. I had just received a flyer about an oral history project of some sort, and I thought about applying oral history of a fashion to this class. A quick look in the phone book found the local synagogue, and a call to the rabbi inquiring if there were Holocaust survivors in the community resulted in a list with instructions to call the first name on it, Pincus Kolender. That was 25 years ago, and he and his fellow survivor, Joe Engel, have come and talked to students every year since then. It is

the main attraction of the class. Indeed, their presentation is open to The Citadel community and they have routinely filled the auditorium in Bond Hall.

Both men were teenagers in Poland when the Nazis invaded in 1939, and both went to Auschwitz in 1942. Their presentation to the class starts hesitantly, somewhat haltingly at first. The first few questions from the audience are equally awkward, even fumbling, and they initially elicit one-syllable answers, but as both the audience and the speakers warm to the occasion, the questions become nuanced and penetrating; the answers lengthy and detailed, and the horror simply mounts beyond comprehension. On and on,

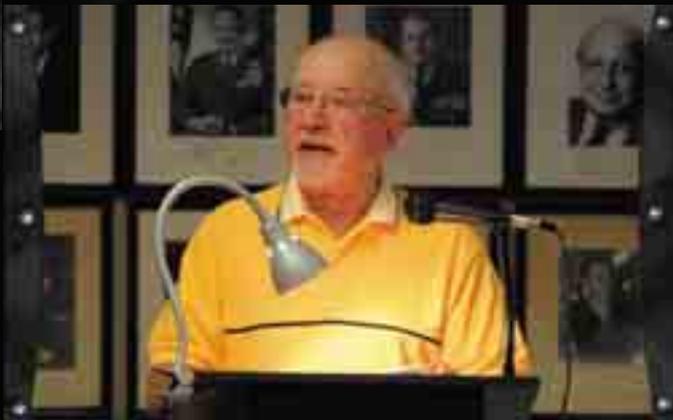


in relentless and excruciating detail, the Nazi brutality comes to life. Questions and answers, no holds barred. What was once dry data becomes a human tale of the most unspeakable suffering. Stalin, whose murders matched those of Hitler, understood the inability of the human mind to comprehend a million deliberate deaths, when he said, "A single death is a tragedy; a million deaths is a statistic." When Mr. Kolender tells how his mother was shot in front of him in a random execution aimed at instilling terror, students begin to comprehend both the tragedy of the Holocaust and the nature of the Nazi state and why our nation and their college sacrificed so much to destroy the Axis powers.

In addition to their own experiences, the two survivors invariably discuss local and world reaction to their plight during the Holocaust. As Hitler's persecution of the Jews mounted, few voices rose in protest; fewer still took action. Churches and nations remained silent and looked the other way. The students know these topics

well; we have gone over them in class. As one would expect, the Auschwitz survivors have pronounced views, thus lively discussions result. Regardless whether one believes that taking some action or speaking out could have halted or thwarted Hitler and the Holocaust, it becomes pretty clear that silence and inaction proved calamitous. The ultimate irony in this respect came to light only after Germany's defeat: we know now that in 1938, as the crisis over the Sudetenland peaked, Hitler's own generals clandestinely contacted the English government and offered to depose Hitler if the Allies would stand up to him. Fearful of war, England and France instead caved in to the *Führer*,* ending any chance of thwarting Hitler's ambitions except by war. Events in Bosnia and Rwanda have recently reaffirmed that inaction simply emboldens the perpetrators of genocide.

Besides chronicling their experiences, the appearance of Mr. Kolendar and Mr. Engel serves an additional purpose—to provide palpable refutation to the lie emanating in some circles that the



Holocaust never occurred. Yes, there are many who assert the Holocaust never happened. Such assertions range from a crude anti-Semitism that claims the Jews invented the Holocaust to gain sympathy to a slightly more sophisticated argument that insists that while large numbers of Jews and others perished, it was not a matter of policy. Instead, a decline in the admittedly miserable conditions of the concentration camps where the Nazis used enslaved labor culminated in the unintended deaths of millions. Additionally, some even pass the blame from Hitler to one or more of his henchmen: Himmler, Goebbels, Goering, etc. Finally, the immensity of the Holocaust is such that many question its scope. It is too awful, too

large to comprehend, therefore it must be exaggerated. After two hours listening to Mr. Kolender and Mr. Engel, there are only believers. The power of their testimony, their personal witness, cannot be overestimated.

In the course of the conversation on the steps of the synagogue, the same lady recalled that I had attended a ceremony honoring Mr. Kolender and Mr. Engel at the Jewish Community Center a few years ago.

"You had a cadet with you who also addressed the audience," she said. "As long as I live," she said, "I'll never forget what your cadet said. It was terribly moving." She turned to Cadets Pressgrove and Holycross and said, "That cadet said he had wondered about the Holocaust—if it really occurred as described as well as its scope—until he heard Kolender and Engel talk to his class at The Citadel one night, and he could not get it out of his head since then. He claimed it was the most eye-opening experience of his education. Their quiet but powerful testimony had electrified him."

Suddenly turning to me, she asked "What became of that cadet? Everyone afterwards commented on his eloquence and that what he said proved just how important it is for Kolender and Engel to give testimony to something so awful that one's first reaction is to refuse to believe it. Do you know what became of him?"

I did. That cadet, Mason Harlow, class of 1999, is an officer in the U.S. Marine Corps. Assigned to the 1st Marine Division at Camp Lejeune, N.C., he led a reconnaissance platoon in the liberation of Iraq from the tyranny and genocide of Saddam Hussein in March 2003. He is doing his part to ensure that there are no Holocausts in the 21st century—as Mr. Kolender and Mr. Engel do in their testimony—just as countless Citadel graduates have before him and just as Cadets Pressgrove and Holycross and others will in their own way through whatever avenues they choose to pursue after graduation.



*A reference to Hitler. *Führer* is the German word for leader.

Michael Barrett is a 1968 graduate. Following military service and graduate school, he began teaching history at The Citadel in 1976 where he continues to be a favorite among cadets and graduate students. He received his Ph.D. from the University of Massachusetts and studied in Germany in 1974 as a Fulbright Scholar. He is a retired brigadier general in the U.S. Army Reserve.





MARS

A RINGSIDE SEAT ON NASA'S MOST AMBITIOUS VOYAGE

Mars is relentlessly red—rust-hued rocks and dirt, ruddy hills, even the sky is pink. It is a monochrome world. In this regard, I suppose it is not unlike *The Citadel*, which—to outsiders at least—is monotonously gray. And like *El Cid*, Mars engenders a certain curiosity, maybe even fascination.

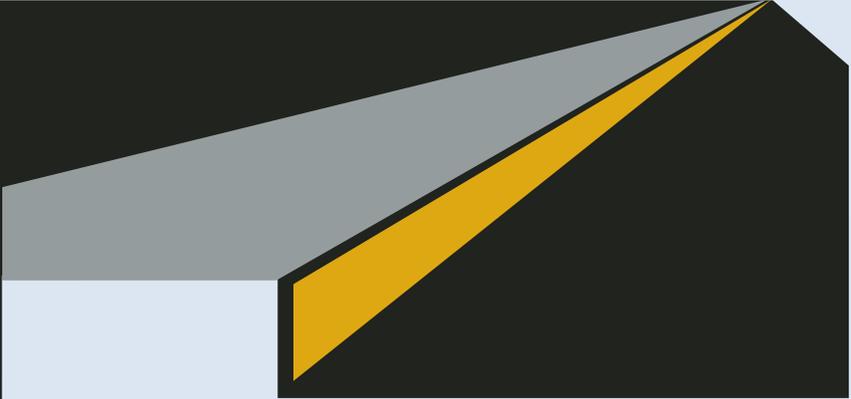
For four months during early 2004, I lived virtually on Mars. It was not my first trip. As a member of NASA's Mars Pathfinder science team, I had the opportunity to visit the

red planet in 1997, but this was different. This time I was a co-investigator for the Mars Exploration Rovers (MERs). The twin MERs are golf cart-sized monsters compared to the tiny Pathfinder rover. The MERs drove considerable distances, unlike the Pathfinder, which could only circumnavigate its lander. And the MERs bristled with scientific instruments designed to photograph, probe, scratch and sniff rocks and soil.

To garner public interest, NASA held a contest to name the rovers, which were eventually dubbed Spirit and Opportunity by a 10-year-old. The science team thought these names were uninspired (our choices were Lewis and Clark), so with a quiet sense of rebellion any cadet can appreciate, we continued to call them MER-A and MER-B, their monikers before launch.

The MER landings, spaced three weeks apart in January, garnered a lot of media and public attention, perhaps heightened by the earlier loss of a British Mars lander (most Mars spacecraft over the past several decades have been unsuccessful). Landing is a euphemism for what the MERs did. After entering the atmosphere at 12,000 mph, each lander decelerated using a complex sequence of maneuvers: first slowed by air friction, then by parachute deployment and finally by retrorockets. Cushioned by inflated airbags, it slammed into the ground, bounced high into the air and eventually rolled to a stop a quarter of a mile from touchdown. Television crews called the entry, descent and landing sequence (EDL in NASA-speak) “six minutes of hell,” a fairly apt description of its effect on my nervous system. Each landing sequence was executed flawlessly, despite a tense period of silence after touchdown before radio contact was re-established. Having ringside seats for the landings in mission ops was among my life’s defining moments.

The scientific goal of the MER missions was to study the role of water, specifically to determine if water was persistent enough to sustain life. The MER-A landing site was in Gusev Crater, a Connecticut-sized bowl excavated long ago by some massive meteor impact. Meandering across the terrain south of Gusev is a 500 mile-long trough once carved by flowing water. Called Ma’adim (the Hebrew name for Mars) Vallis, this gutter sliced through the crater rim. Any water carried by Ma’adim must have emptied into Gusev. Lakes commonly fill impact craters on the Earth, and it’s plausible that Gusev, too, was once filled with water. MER-B landed on a plain located near the planet’s



“The scientific goal of the MER missions was to study the role of water, specifically to determine if water was persistent enough to sustain life.”

HARRY (HAP) MCSWEEN, '67

NASA investigator for four ongoing spacecraft missions.

meridian, or line of zero longitude. An orbiting spacecraft found that Meridiani Planum is covered with sediments containing hematite, an iron oxide that forms when rocks interact with water.

The power for the rovers was electricity generated by solar panels. Consequently, we operated each rover only during Mars daylight. This often meant working through the night in the Jet Propulsion Laboratory in Pasadena, Calif. To make matters worse, the martian day (called a sol) is 40 minutes longer than a day on Earth, so each day’s shift began 40 minutes later than the previous day. Not surprisingly, this nightmarish schedule took its toll on the MER team. Returning home after one three-week stint in operations, I slept for 12 straight hours.

I had two jobs during MER operations. One job, shared by all members of the science team, was to examine and interpret the data sent back to Earth. My other responsibility was as a lead for strategic planning. Decisions about what each rover should do during the next sol had to be made quickly every day, leaving little time for reflection

about long-term strategies. NASA assigned a few of us to lead science discussions, plan drive scenarios and coordinate activities of the two rovers.

The Gusev site resembled other locations on which Mars spacecraft have landed. For the first few months MER-A won the drive-for-distance contest, sometimes clocking as much as 35 meters per sol (a third the length of a foot-



This extra rover was used to practice the landing exit.

ball field), while autonomously avoiding big rocks in its path. The geology of this site was interesting, but the only evidence for water discovered so far was altered material in tiny veins in the lava rocks scattered about the site.

The Meridiani site proved particularly fascinating as it contained the first outcrop (rock in place rather than loose rubble). The outcrop was visible only because Opportunity rolled to a stop inside a small crater. (This was such an unlikely hole-in-one that I'm contemplating taking up golf again.) The rover photographed the outcrop along its length, employing a procedure we called "drive-by shooting," a description our NASA handlers deemed politically incorrect. The delicately layered rock was formed by evaporation of water, precipitating various kinds of salts. None of us expected water to be confirmed in such a spectacular and unambiguous fashion. The outcrop contains tiny spheres like blueberries, also formed by water, and millions of them have been shed onto the surrounding soil.

As I write this, both rovers are still alive, and now engaged in death marches. They will succumb eventually to the martian winter, which provides less sunlight to recharge the batteries and overnight temperatures of several hundred degrees below zero that will likely harm the electronics. During their short lives, the rovers have found a place in the American consciousness. They are

the focus of almost daily updates on CNN, grist for innumerable cartoons and several Letterman monologues, and the subject of a charming John Updike poem in *The New Yorker*. During the first two months of operation, the MER website had more than eight billion hits! But is this visibility enough payoff? As a taxpayer, you might well ask what else you got for your \$820 million. Besides the scientific and engineering discoveries, which were remarkable (but that will frankly be lost on most citizens), I believe the long-lasting result will be this mission's effect on our children, who must supply the next generation of scientists and engineers. Spacecraft missions, especially exciting ones like MER, inspire by demon-

strating that technological innovation can be thrilling and scientific discovery can be fun. I hope that lesson will not be lost on the next generation.

HARRY (HAP) MCSWEEN is a professor and former head of the department of Earth and planetary sciences at the University of Tennessee. He graduated from The Citadel in 1967 with a degree in chemistry, then received graduate degrees in geology from the University of Georgia and Harvard University.

He also served as an Air Force pilot during the Vietnam era. McSween is the author of four popular science books and presently serves as a NASA investigator for four ongoing spacecraft missions. He lives with his family in Knoxville, Tenn., and can be reached at mcsween@utk.edu.



Mars is relentlessly red.

Hap McSween kneels near a model of the Mars rover.







lesesne inside *gate*



With its Spanish-Moorish architecture, red and white checkered quadrangles, and uniform-clad cadets, The Citadel is a photogenic institution. Photographer Russ Pace, a 19-year employee of the college, has shot more than 500 parades and is always looking for the right angle to tell The Citadel story.

The pictures in these pages mimic the four pillars of a Citadel education found on page 8: the football pictures represent physical readiness; the unique two-page spread of cadets marching at parade represent military training; the candlelight service, a community service project, represents development of character; and the pictures of cadets involved in scholarly pursuits represents academic instruction.

To see the complete collection of Citadel photography, including these pictures, go to the online college photo shop at <http://photo.Citadel.edu>.







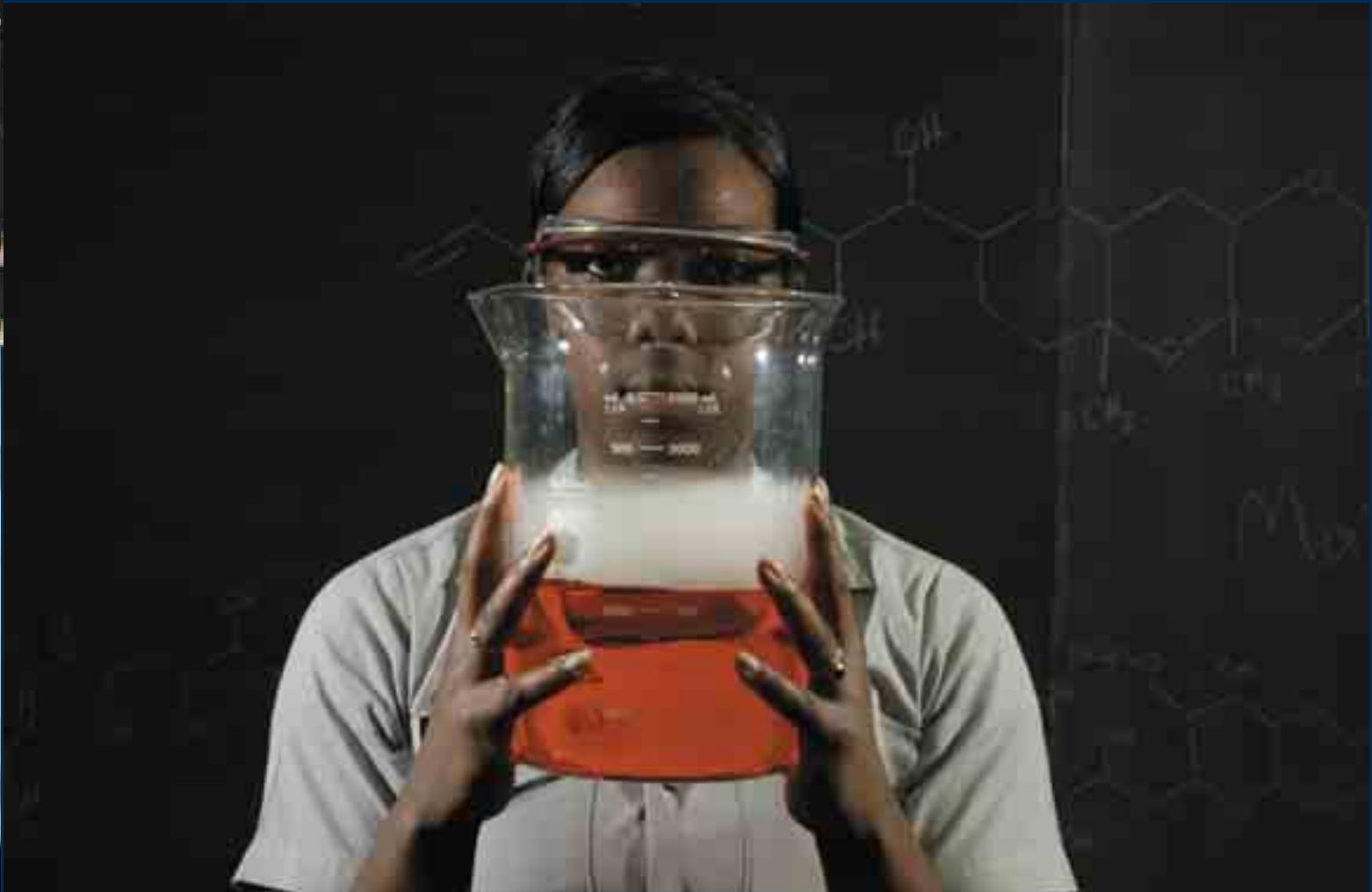


Pace earned the prestigious Council for Advancement and Support of Education Circle of Excellence silver award in the individual photography category for this picture of Summerrall Chapel.











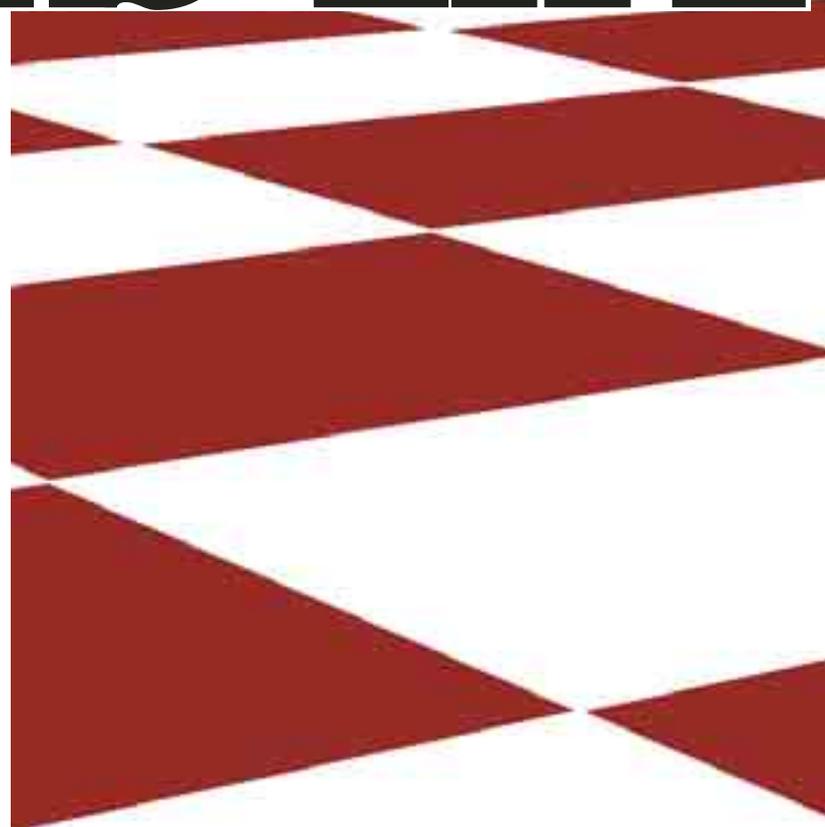
BARRACKS LIFE

Perspectives From Four Classes

Life behind the great white walls of The Citadel barracks fascinates most people unacquainted with the college. Citadel cadets are very much like other college students, studying to get good grades and enjoying the camaraderie of life with their classmates. At the same time, they have chosen a different path where discipline, physical readiness and leadership training are part of their education. Success at The Citadel is not measured only in terms of academics. Success at The Citadel is becoming a whole-person, educated in mind, body and spirit.

So what is barracks life like?

We asked one cadet from each class to tell us.





THE CITADEL 2004 39



The alarm rings at 0600, which means it's time to start another day as a knob. Sweep detail begins, so I need to get a move on. As knobs, we are in charge of keeping the barracks clean and emptying the trash. After a while, this becomes routine and something that can be accomplished in a short time. I head back up to my room to get ready for morning formation.

Before every meal, there is an accountability formation on the red and white quadrangle inside the barracks. My shoes and my brass need to be shined because I will be inspected. The horn sounds five minutes before 0700, giving us the signal to head downstairs. Several upperclassmen approach and examine every inch of my uniform. My appearance seems to be great, but there are many times I have forgotten to do something. The barracks erupts with yelling before a formation and is quite a spectacle. As my squad sergeant appears, he drops us to the pushup position, known to us as front leaning rest. After we pump out 20 pushups, another horn sounds and we form up in our respective areas on the quad. Reveille is played, and we march to mess.

Eating is one of the most difficult adjustments to make as a knob. Proper etiquette is strictly enforced, and big mistakes earn corrective punishments. I have to sit up straight on the front three inches of my chair and ensure that the upperclassmen are properly served. When the meal is over, I quickly get back to the barracks for another sweep detail. Time is always something I feel that I never have enough of. Class begins at 0800, so I need to clean my room for MRI (morning room inspection), grab my books and head out. Even while going to class, knobs have to maintain a strict military bearing.

"Knob, halt," a senior interrupts me on the way to class. "What's for lunch?"

Upperclassmen around campus constantly ask what the menu is for the day, and this is something that every knob is required to know.

"Sir, chicken sandwiches, chips and dip, sir!" I respond and carry on.

The purpose of coming to The Citadel is to get an education, and I always put my studies before anything else. In the academic buildings, the fourth-class system ends temporarily. Academics are taken seriously by everyone, and the buildings provide a comfortable environment to learn. They even provide a break from life as a knob.

Preparing for lunch involves the same routine as breakfast with inspection and formation. Again, I need to hustle to class after lunch. The period between afternoon classes and dinner provides a little time to study, PT (physical training) or just to relax a little bit. From after dinner until taps at 2300, I study and work on academic projects. I take this time very seriously, and I usually leave the barracks and study in an academic building to have a quieter environment.

Another aspect of life aside from the mental is the physical. PT is conducted at least twice a week and can be a struggle for someone unprepared. I thought that I was in good enough shape to do well, but the exercise still pushed me beyond my limits. After an entire week of class, inspections, drill, shining, PT and studying, we have a retreat parade to officially begin the weekend. The free



time we have on the weekends, known as general leave, is one of my favorite times, and it gives everyone a chance to catch up on sleep and to prepare for another week.

Life as a fourth-class cadet can be frustrating, but the system is designed to be a challenge. In the end, I find it to be totally worth the sacrifice. Never would I expect to excel in academics the way I have done here and also improve my physical bearing.

Upperclassmen around campus constantly ask what the menu is for the day, and this is something that every knob is required to know.





Life in the barracks is a constant roller coaster. The day begins when the bugle sounds for formation. Knobs fly down the spiral stairs to orders screamed by upper-class sergeants, and the sound of slamming doors echoes through the battalion. The day is a maze of breakfast, class, lunch, class, PT, dinner and ESP (evening study period). When the lights go out at 2300 hours, the dissonance seems to stop as quickly as it began, and first battalion becomes dark, still and quiet as its 500 occupants find a few hours of sleep before waking up and starting all over again.

Walking through the battalion sally port for the first time as a sophomore with relaxed shoulders and normal posture, I feel relief knowing that the days of walking 120 steps a minute with a rigid back are over. During meals in the loud mess hall, I no longer sit with a stiff back; instead, I enjoy the company and conversation of my classmates.

The life of a third-class cadet is rather uneventful during the first semester of classes. Junior and senior classes train knobs while the sophomore classes keep the company's four wooden rank boards updated with the names of rank holders, academic frontrunners and athletes.

In the second semester, sophomores undergo a dramatic change in responsibility.

Keeping a neat room and maintaining a proper appearance are also priorities. A proper uniform entails perfectly ironed shirt and pants, a regulation hair-cut and a clean shave. Shoes must have a mirror shine and brass buckles must be flawless. In the second semester, sophomores undergo a dramatic change in responsibility. As corporals in charge of the training and inspection of freshmen, a proper appearance is important to provide a good model for the wide-eyed, bracing knobs who are always expected to excel during formation.



Friendships expand through barracks life. Nightly talks with classmates while leaning against the cool railings of the battalion galleries build class unity. Close friends find comfort in sharing family problems and other confidences. I spend many Friday nights staying up late, dusting shelves and buffing floors for an SMI (Saturday morning inspection). As a sophomore I receive longer general leave on weekends and Wednesday afternoons. The Wednesday break usually finds me lying in the hot sun at Folly Beach, a relaxing few hours in a busy week's schedule.

The majority of school memories that will remain with a cadet occur behind the concrete walls of the battalions through the four years of a cadet's life. This life's experience is one that has made me the person I am, and I will remember it with fondness wherever I go in life.





Junior year is a defining time. The years previous to being an upperclassman are distinguished by receiving orders and carefully taking everything in. As a knob, you learn to operate by simply doing, not thinking. Stopping to think takes time, and life becomes easier when you learn to follow orders. Cadets are taught that leaders cannot lead until they learn how to follow. Sophomore year is also about following, but the veil of being a knob is lifted, and you can see the system for its advantages and its flaws. Learning from others' mistakes sets the tone for becoming a leader. The first two years are key to defining a cadet's role as he or she moves onto junior year and takes on leadership positions.

I've heard that junior year is the most difficult. As I near the end of it, I certainly hope this is true. Returning to Law Barracks after the summer, I was ambitious and hopeful about taking my position as a first sergeant. I knew that there were some areas that needed to be changed within the company, such as overall appearance and accountability, but I was not prepared for the challenge of leading my own classmates. The hardest thing was learning to make corrections when I knew something was wrong. As the year moved on, however, I slowly began to understand the requirements of the position.

No one can possibly know what life as a cadet is like until the barracks life is experienced.

Simply put, I am like a hall monitor, the person the cadets hide from. When they see me coming, they know they have done something wrong. My job is to uphold the standards. The position is not always fun, but I have grown personally and learned more about myself through the experience. I would live the year again if necessary, to learn what I know now.

My day begins early in the morning when I hear the soft swish of brooms in the galleries as the knobs perform their daily sweep detail. I lie there enjoying the moment and wait for my selected knob to wrestle with the door handle no one seems to know how to work and hear my trash can being whisked away to the dumpster, then returned seconds later. Eventually, the alarm clock goes off, telling me that yet another day has begun, and it is time to rise and shine—my shoes and brass, that is—and then take my post on the quad.

I smile, remembering how far I've come, as I watch the sergeants inspecting their knobs or dropping them for pushups, and then I find my corner of the quad when the horn calls everyone to their respective places. The knobs sound off and make a dull roar as they walk briskly to their places behind their sergeants before reveille. The lunch routine is much the same, only the knobs are guaranteed to be dropped for pushups, which means dirty hands and a mild workout before eating.

Night life in the barracks is where being a cadet becomes unique. I live with roughly 420 guys in third battalion, and we are all forced to experience our cadet careers without air conditioning. We spend the night on campus at least five days a week, and most of the time life becomes too hectic to escape on the weekends, so we just stay here. Part of my job as first sergeant is to ensure a quiet academic environment, and I have had to train myself to jump at the slightest disturbance in the barracks. The most challenging moments are when the World Series ends or the latest reality show concludes, and everyone pours out of the seniors' rooms to yell either contempt or excitement for the result. That is when the hall

monitor must come to the rescue of those diligently studying and remind people to quietly return to their rooms. It is not a job I particularly enjoy, but it is my duty, and I comply. At last the day ends with taps reminding everyone that yet another day as a cadet is over, and we are all one step closer to leaving the gates forever.

No one can possibly know what life as a cadet is like until the barracks life is experienced. Movies or novels may try to portray our unique lifestyle, but people on the outside will never know until they experience it for themselves why we feel passionately about The Citadel. Being a cadet is more than wearing a uniform and marching in parade. Being a cadet means the daily lifestyle and unique opportunity to live, work, sleep and experience The Citadel. When the iron gates are locked, the quad lights are shut off and peace resides over the campus, I stand outside my room gazing at the red and white checkers and know sadly that my time here is short. I have come to realize that despite all the difficulties that come with the position, it is an honor and privilege to be a cadet.





It is 0645, and the relentless din of my alarm echoes across the walls of room 1331. Both my roommates are already awake, finishing their early routine of showering and shaving. Much to my initial disdain, they have always been morning people. I live in one of the largest rooms on campus with the first battalion commander. He and I had become friends the previous year, and so when he offered a spot in his veritable palace, I jumped at the chance. Room 1331 is about the size of two full barracks rooms put together. Most people would still consider this to be small, but they have not lived as a cadet for nearly four years now. If there is one thing that this institution leaves you with, it is an appreciation for the little things—things that most people overlook and do not respect.

In room 1331, there exists an interesting blend of cadets. My roommates, Pat and Brett, are originally from Bravo and Delta companies respectively, but both now serve on first battalion staff. Pat is battalion commander and Brett is the executive officer, while I myself am just a simple Alpha Company boy, trying to do what I

...most of the world has not forged the kind of bond cadets have with one another.

There is something about roommates at The Citadel that transcends much of what we do here. I do not know where this bond originates, but I do know that if I need anything I could ask either of my roommates, and they would help me, regardless of the fact that we are from different companies and regardless of the fact that we have less than a week until graduation.

My clock just ticked over—0656—and the rollout horn is bellowing its long distinctive note. I quickly grab my cover and head to the door. Reminiscent of knob year, we all leave the room together. Old habits just die hard, I guess. Our room is located between Alpha and Bravo companies. I have always gone down Alpha stairs, so I peel off to the left and shuffle down them. Pat and Brett go right, down Bravo's. More old habits that die hard.

We get back to the room after breakfast mess and the result is predictable. Pat is playing his music and is just being loud in general, Brett is getting ready for the day, and I am sleepy. For me, as a senior, this is what barracks life is all about. This moment, right here, right now is what I will remember in the years to come. It is also the moment I will miss the most, not because of its significance or poignancy, but exactly because it is not these things. The very ordinariness of it all has a way of sneaking into your soul without you even realizing.

Sometimes you have to remind yourself that this military school life has become normal and realize that this is not the way that the rest of civilization lives. Most of the world does not do what we do every day, and to their detriment, most of the world has not forged the kind of bond cadets have with one another.

In the end, only time will tell if The Citadel experience has truly prepared me for the world that I am so close to entering. Countless alumni have assured me that it will and more, so I will put my anxiety aside, turn my eyes to the horizon, my heart to the heavens and eagerly anticipate what is to come.



can. Actually, this meeting of the companies is a very unusual occurrence. Most cadets are extraordinarily loyal to their companies, and rooming with other companies is uncommon and even discouraged. But here in staff-land, rules change a bit and allowances are made.

With cadets from three different companies living together, there has emerged an ultra-competitive, and therefore, ultra-critical environment. Any action by one member is subject to review by the remaining pair. The offense can be anything from an argument to just staring at someone awkwardly. But strangely enough, it is some of the most fun I have ever had. It is true, we tease, cajole and insult, but nothing is ever done out of hate or actual dislike. If I ever need to be serious or really talk, I know I can.

Charleston's most elaborate engineering feat—the new Cooper River bridge—is being built using some of the greatest engineering technology in the world, and seven Citadel graduates are integral to its construction.

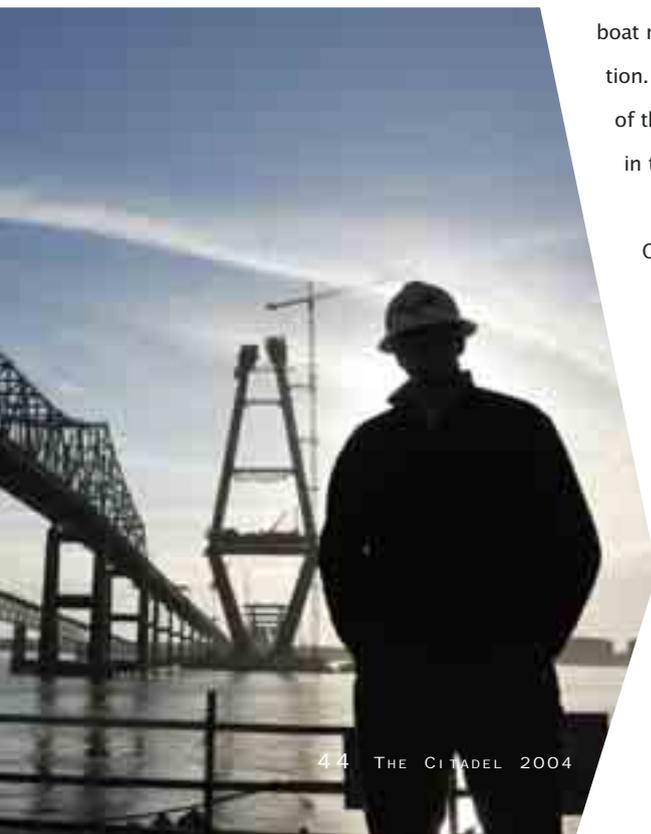


CITADEL GRADUATES

THE COOPER RIVER, MARCH

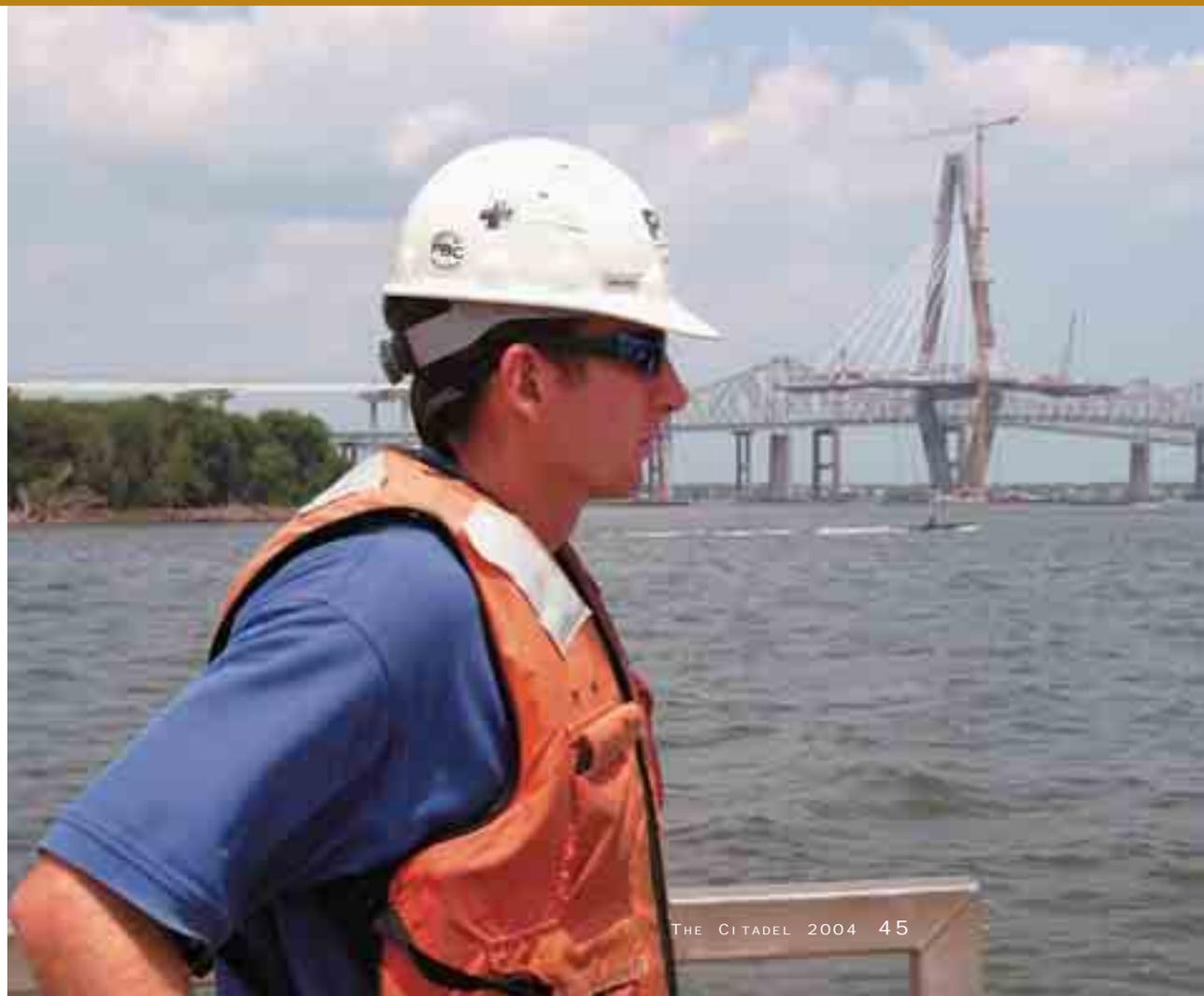
At 7 a.m., the sunrise casts dappled light across the Cooper River as it flows into Charleston harbor. The would-be tranquility is interrupted by a thump-thump rhythm that sounds from the stream of traffic crossing the two aging truss bridges that connect Charleston to Mount Pleasant. A tugboat maneuvers a massive container ship into place with steady determination. Nearby at the Maritime Center pier, an otter playfully bobs in and out of the water as Russ Touchberry, '01, jumps into a small skiff and heads off in the direction of the new Cooper River bridge construction site.

Construction of the new bridge has been the buzz of Charleston in recent years just as it was in the early part of the 20th century. In 1929, the completion of the Grace Memorial Bridge solved the time-honored problem of crossing the Cooper River from Charleston into Mount Pleasant. The bridge took 17 months to build and cost \$6 million. With 1,050 feet between supports, it was the fifth longest bridge in the world, and at 150 feet above the river, it was 15 feet higher than New York's Brooklyn Bridge. The toll to cross was 50 cents.



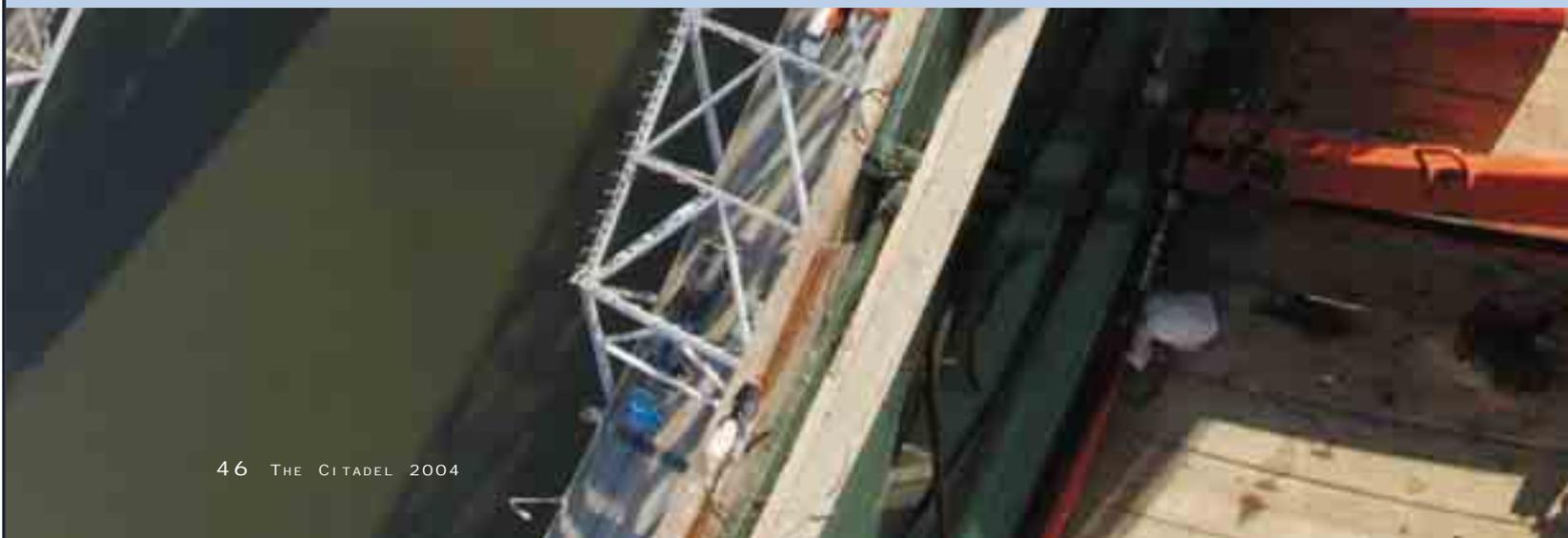


BUILD a bridge into the future.





"The Citadel teaches you to be prepared. It's a hands-on college. You're a real person, not just a number," says Touchberry.





In 1963, construction began on the Silas N. Pearman Bridge. The \$15 million project was completed in 1966. Northbound traffic crossed the new three-lane bridge while southbound traffic used the Grace. A reversible lane on the Silas Pearman allowed motorists to go southbound should the need arise.

At the age of 75, the Grace Bridge is one of the most dangerous bridges in the country, scoring only four on a scale of zero to 100 with 100 being the safest. The decaying condition of the two bridges in recent decades along with an increase in traffic flow made replacement a necessity and had state and local officials scrambling to solve construction problems. How much would a new bridge cost? Who would pay for it? What would it look like?

There is a Citadel imprint in the answer to these questions.

Touchberry, a quality assurance inspector for the South Carolina Department of Transportation (SCDOT), is one of seven graduates of The Citadel School of Engineering working on the new bridge project.

Touchberry credits The Citadel not only with his knowledge of engineering, but also with his success in the field, "The Citadel teaches you to be prepared. It's a hands-on college. You're a real person, not just a number."

The college's emphasis on learning time management is also important to Touchberry. "It's now second nature. You either get it or you don't. If you don't, you're not going to make it out there."

AN ENGINEERING MARVEL

The Arthur Ravenel Jr. Bridge, named after the legislator who championed its funding, will cost \$630 million to build. That includes preliminary engineering and testing and pays for the office overseeing construction, but it does not include razing the two older bridges.

At a price tag two times the state transportation department's annual construction budget, officials were creative in securing funding, including a \$325 million loan from the S.C.

Transportation Infrastructure Bank, a \$215 million grant from federal monies (the Transportation Infrastructure Finance and Innovation Act), and \$90 million from the State Ports Authority and local funds.

With a main span of 1,546 feet supported by 128 cables between two signature diamond-shaped towers, the 2.5 mile Ravenel Bridge will be the largest cable-stay span in North America. The state-of-the-art bridge will feature nine 12-foot lanes—four each for northbound and southbound traffic and one for bike and pedestrian traffic with benches and scenic lookout areas. Concrete-filled drilled shafts supporting the diamond towers disappear below the waterline 230 feet into the earth. A vertical clearance of 186 feet and a horizontal clearance of 1,000 feet—a significant increase from the current 155 foot vertical clearance and 500 foot horizontal clearance—will allow larger ships to pass through Charleston's port and allow more than one ship to pass at a time.

The project includes rock islands made of 650,000 tons of Newfoundland limestone at the base of the towers to protect the bridge from the impact of a shipping accident. A special design allows flexibility within the towers which enables them to withstand seismic activity, and cables have been designed to hold more than one million pounds. The bridge is being built to last 100 years and survive 190 mph hurricane-force winds, seismic activity exceeding 7.4 on the Richter scale, and even terrorist attacks. The 44-month long project is scheduled to be completed by summer 2005.

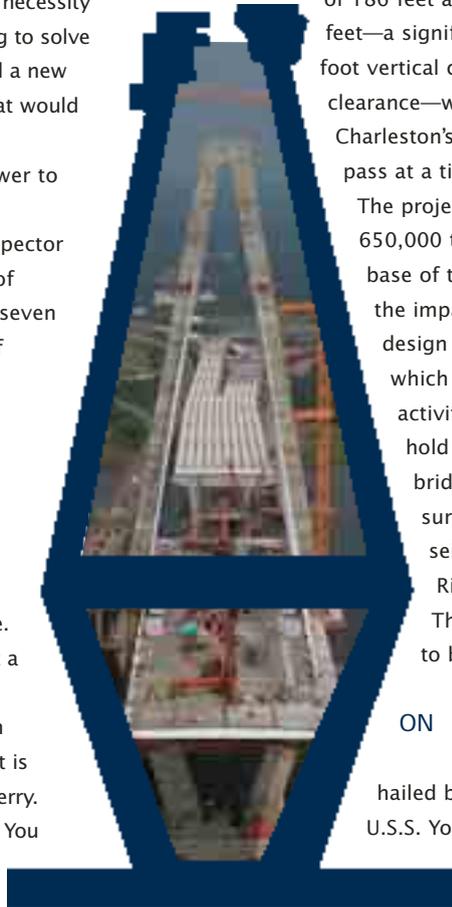
ON TOP OF THE LOWCOUNTRY

At the west tower site, Touchberry is hailed by a lone seagull. East of him, the U.S.S. Yorktown, the retired World War II aircraft carrier that thousands of tourists flock to each year, waits large and silent for the day's round of visitors

to arrive. Touchberry ties the skiff to the massive barge moored at the foot of the rock island and heads up to work. The site is strewn with equipment and leftover pieces of construction material—scrap metal, wood supports and welding tanks.

An orange steel mesh elevator with a 6,200-pound capacity takes Touchberry to the crossbeam. From there he takes a second, smaller elevator with a 4,200-pound capacity, that rests on the perimeter of the tower at an angle like an old Charleston piazza sagging from the weight of its years. Workers riding up are dressed in similar garb—steel-toe boots, hard hats, safety goggles, and worn pants and shirts. The ride is a little jarring and the motor makes a grinding noise as it ascends, but no one seems to notice.

Out of the elevator Touchberry climbs four ladders to the top platform where workers are tying steel rebar together to form a maze that will later become encased in concrete. The west tower is at 515 feet and will rise to



erson,

573 feet when it is completed. The legs are hollow and will hold service elevators that will be used to conduct safety inspections and perform maintenance.

In a corner a jumbled stack of coolers holds workers' lunches. A microwave oven is balanced on a plywood bench and a green portable toilet booth stands in another corner. A crane with a new load of rebar carefully rests the steel rods on the platform. The view of Charleston with its grand port and church steeples that dot skyline is staggering, and even The Citadel, nestled on the opposite side of the peninsula is visible.

Talking with workers, Touchberry checks on their progress.

"I am the eyes and ears for the project," he says. "My job is to verify that the contractor follows the plans and specifications while building the greatest bridge in the world."

The new bridge project is a consortium of some of the greatest engineering expertise in the world. Parsons Brinkerhoff Quade and Douglas, a firm out of New York, is the lead design firm. Freyssinet, a French company with offices worldwide, designed a cable system that will be able to survive hurricane-force winds. And Palmetto Bridge Constructors (PBC) is using supervisors from Argentina, England, Sweden and Canada, to name a few. PBC, which is responsible for the construction, is a joint venture between Flatiron Construction Corporation of Colorado and Virginia-based Tidewater Skanska, the managing partner.

MORE CITADEL INFLUENCE

From outside his modular office on Morrison Drive where he begins his day at 6:30 a.m., Tom Messervy has a view of the emerging Ravenel Bridge as it begins its climb over the Cooper River. The first honor graduate from the class of 2000 has been working for PBC for more than two years now. A Citadel Scholar, he was awarded a scholarship after graduation to Massachusetts Institute of Technology where he earned a master's degree in civil engineering with a specialization in construction engineering and management.

As a field engineer, Messervy is working on the Charleston high-level approach and the main span. The project, he says, is a design build project. "Although we know what it's going to look like, where the piers and the towers are going to be, there are some things—like drainage and electrical specs—that are being figured out along the way. It saves a lot of time to finish the design as you go."

Messervy is supervising the installation of the post-tensioning cables on the Charleston high-level approach. The post-tensioning system gives the pier caps topping the columns the capacity to hold the structural steel, road

deck and traffic. A typical cap has four sets of cables stressed to approximately 1.5 million pounds each. After being fitted, the cables are stressed with a jack. One of the jacks being used in this process weighs almost 6,000 pounds.

Working with Messervy as field engineers are Al Hughes, '99, who was the first Citadel graduate to sign on with PBC, and James Warmoth, '00, whom Messervy helped recruit.

"The size of the project is the most exciting aspect of the job," says Warmoth, who has a master's degree in structural engineering from Virginia Tech. "On other projects, there's a formula. Everything has been done before, but here everything is custom made—everything is unique to this project."

Messervy also helped recruit Joel Wells, '00. Wells, who earned a master's degree in international business from the University of South Carolina, is PBC's cost engineer. Field engineers report to him, and he tracks their work and puts together a labor cost report that helps with quantity reporting and scheduling production crews. Moses Gamez, '03, also with PBC, is a quality control inspector.

THE MAIN SPAN FIVE MONTHS LATER

David Kinard, '04, has joined the project for a short time as an intern with the transportation department. Temperatures in Charleston have soared into the 90s. Jeff Mosher, '02, a field inspector for HDR, a subcontractor for the transportation department, has been working on the interchange to the bridge from Charleston.

"My responsibility," Mosher says, "is to make sure that the DOT is getting what they paid for."

In the months since March, the DOT has been getting a lot for its money. A small slab of concrete at the very top of the west diamond tower signed by Touchberry and his co-workers signals its completion. The east tower, too, has been completed. The road decks on both towers are now reaching out toward one another and will soon form the main span. As the span increases, so do the cables holding it up.

On the west tower road deck, Messervy is helping workers move one of the two Derrick cranes, a stationary crane used



From left to right: Moses Gamez, Jeff Mosher, Russ Touchberry, Tom Messervy, Joel Wells and James Warmoth. Not pictured is Al Hughes.



The new bridge project is a consortium of some of the greatest engineering expertise in the world.





THE CITADEL FOUNDATION BUILDS A BRIDGE

The Citadel Foundation raises scholarship funds that enable The Citadel to attract top students and prepare them for a lifetime of leadership. Through money donated by alumni, parents and friends, the college is able to provide more than \$2 million in scholarships annually to more than 500 cadets. And through their gifts to The Citadel Foundation, donors are helping educate some of the brightest young engineering minds, who, like these young grads, are building a bridge into the future.

All of The Citadel engineers working on the Cooper River bridge project received some form of Citadel Foundation scholarship money. Tom Messervy was a Citadel Scholar, receiving a four-year scholarship for academic distinction, while Russ Touchberry received The Citadel Foundation's Leadership Scholarship and a Brigadier Foundation track scholarship.

Col. Dennis Fallon, dean of The Citadel School of Engineering, is not surprised by the role these graduates are playing in what will soon become a Charleston landmark.

"The faculty of the civil and environmental engineering department does an excellent job in providing Citadel graduates the groundwork to take on the professional responsibilities required to design and construct structures like the Cooper River bridge," Fallon says. "But this groundwork could not be provided if it were not for the support of The Citadel Foundation. The Citadel Foundation not only provides for scholarships to help these bright young people attend college, it also provides much of the funds to keep the department technologically abreast with the latest laboratory and computer equipment."

To find out how you can make an investment in the future of a young cadet, call The Citadel Foundation at 843.953.5297 or go to www.Citadel.edu/tcf. A Citadel Foundation investment—it yields a great return and helps build bridges to the future.





to lift girders, beams and concrete road panels from barges below. Enormous concrete panels are positioned side by side on the steel girders and are tied together with reinforced steel. Concrete is then poured over the steel ties to create a seam between the panels. As the span increases, Messervy and his workers move the Derrick crane forward.

Taking a break, Messervy points out the progress on the Charleston high-level approach.

"You can see the various levels of progress," he says. "The major stages of construction for the high-level approaches can be broken into substructure concrete work (foundations, columns and pier caps), structural steel installation and deck placement (stay-in-place forms, reinforcing steel and the concrete deck which is the actual road surface)."

The construction project is similar to a Citadel education. "At The Citadel you start from the bottom, and you build up," says Touchberry.

"The Citadel lays a foundation that makes learning new skills in the field that much easier. No school can prepare you for every problem in the field. The Citadel teaches you the method to solve problems and overcome challenges," adds Messervy.

Years from now after the Arthur Ravenel Jr. Bridge has become a Charleston icon and Touchberry and Messervy have built more bridges, young Citadel engineering cadets will look to the bridge for inspiration to continue the tradition of these graduates. A Citadel education, like this construction site, generates a very visible, well-respected product that will weather the storms of time and will have an impact on society for years to come.

"The Citadel lays a foundation that makes learning new skills in the field that much easier. No school can prepare you for every problem in the field. The Citadel teaches you the method to solve problems and overcome challenges," says Messervy.



Cable casings—white polyethylene pipes 223 to 807 feet long, 8 to 12 inches in diameter—rest on small trolleys fashioned out of halved one-foot lengths of sewer pipe with lawn mower wheels attached by threaded rods. The trolleys, an inspiration of one of the site foremen, are placed about every 15 feet and make maneuvering the unwieldy casings much easier. The pipes will be threaded with 37 to 91 steel strands one inch in diameter to form cables and will be anchored from the roadbed to the tower legs. The cables will vary in size depending on their distance from the towers.

THE *Society* OF 1842



We interviewed the newest members of the Society of 1842, donors who have given \$1 million or more, to get their thoughts about giving to The Citadel.

HERE ARE THE INSPIRING ACCOUNTS OF WHY THEY GAVE.

“I credit The Citadel for any of the successes that I have been fortunate enough to encounter in both my professional and personal life. Departing high school with a free spirit, the discipline I learned at The Citadel, and particularly the rigorous course of study in the civil engineering program, prepared me exceptionally well for the challenges I would face in graduate school at the University of Kentucky and throughout my engineering career. Perhaps most of all, I thank the faculty for putting up with me!



“I have always loved The Citadel and, though I have given to other schools, I would consider making a gift of any magnitude only to The Citadel. By contributing to the Excellence Fund in the School of Engineering, I hope to enhance the experience of future cadets studying civil engineering and to give back in some small way to The Citadel in gratitude for all that I received as a cadet.”

—Gustavous H. Bell III, '59

“Elisabeth and I are grateful to have been blessed with the resources to support The Citadel in this way. From my arrival on The Citadel campus in 1960 through today, the military lifestyle of disciplined leadership and the training I received as a cadet have had a profound impact on me, and later had a major impact on our son Lewis. The academic rigor and discipline, experienced within a leadership laboratory environment, coalesced to create a tremendous competitive advantage for me in my business career. The principles of discipline, honor, honesty and duty to others have since formed the basis of my business philosophy and become fundamental components of my life.



“Our gift to support the new stadium at The Citadel is not simply about football games. It is an investment in the future of the college's athletic programs and in the institution as a whole. There is no doubt that with the new stadium the football program will provide additional annual operating revenue for the athletic department and help secure the long-term success of the college. As a result, we will be far more effective in our efforts to educate the entire Corps of Cadets.”

—William B. Sansom, '64



“The Citadel and, in particular, the civil engineering department have played an integral role in the Davis family for more than half a century. I came away from The Citadel with an excellent foundation in the principles of engineering, which enabled me to co-found an environmental and engineering firm in 1954 that still has an active relationship with the college today. My sons Emmett, '79, and Stephen, '86, likewise studied civil engineering as cadets and have since joined me at Davis & Floyd.

“Imagine if I had known when venturing into business that we would celebrate the firm's 50th anniversary here on campus by completing the renovations at Padgett-Thomas Barracks!

“I am pleased to support the School of Engineering Excellence Fund and the excellent work that Dean Fallon is doing to advance the school. With such dedicated efforts and the support of alumni and friends, I am confident that the engineering program at The Citadel will remain among the top programs of its kind in the nation.”

—Mr. Emmett I. Davis, Jr., '50

“I have an abiding passion for and belief in many of the qualities I espoused through The Citadel experience. In particular, I believe that we should serve, we should lead and we should become effective participants in our respective communities.

“On the surface, my gift to the stadium project looks like a gift to support the future of athletics at The Citadel. While this is certainly one aspect, my underlying intention in making a multi-year commitment to the college is to provide a place that will bring alumni together and expand our base of support. The best place for this to happen is the stadium where we gather each year at homecoming to renew old acquaintances and form new friendships.

“The stadium is in a sense the living room of the college—the place where we entertain visitors as well as meet up with the old Citadel family, the place where we invite the newcomers to celebrate with friends. By supporting the stadium, I hope ultimately to introduce new friends to The Citadel family—individuals who, down the road, will help us fund other scholarships and campus needs to enhance every aspect of The Citadel experience.”

—Mr. W. Thomas McQueeney, '74



“Being involved in family, community and professional life in Chicago, a gift to The Citadel beyond my annual contribution was not on my radar screen. I listened politely to the pitch. But as I became reacquainted with the school's leadership and its dedication to pursuing The Citadel's core mission in the context of the 21st century amid the challenge of state funding cuts, I realized the worthiness of and the need to support the Campaign for The Citadel.



“A campus visit in October of 2003 was particularly persuasive. Recalling senior sleep-ins, I was shocked on my 6 a.m. run through campus to see hundreds of cadets out for physical training. But it was meeting with talented and dedicated faculty, hearing General Grinalds' clear vision for the college and talking to cadets that reconnected me to how unique The Citadel is. It was the situation every graduate wants—the institution, despite challenges, is better than the one I attended and is getting better every year.

“It was inspiring to see 27 years later professors of my era, Joe Kelley and Spike Metts, '65, and their continued dedication to The Citadel as well as the energy and diversity of the younger faculty. But it was chatting with James Rembert, '61, in his office that crystallized for me the life-long impact that superb and generous professors have on their students.

“I believe that advances in the life sciences and the biomedical revolution arising from the human genome project and stem cell research make science literacy essential in education. Toward this end, I was pleased to be able to contribute to The Citadel's science literacy with an endowed academic chair for dean of math and science. The purpose of this position will be the recruitment and retention of faculty, freeing faculty from administrative burdens, and facilitating faculty teaching and research. The dean will also conduct a seminar and tutorial program for students. It is my hope that this position will have a direct and immediate effect on the quality of science instruction and help all students at The Citadel to understand the changes that will touch all of their lives.”

—Dr. Bryan S. Traubert, '77

A Schiller Champion



On March 5, 2003, Dr. Harvey W. Schiller, '60, returned to his alma mater to give a second Greater Issues address and to participate in the dedication ceremony for the Schiller Science Initiative—a \$500,000 gift used to revamp chemistry department facilities, including the renovation of four freshman-level chemistry labs and the purchase of seven major research-grade instruments. The initiative also provided money to upgrade equipment and to establish a biochemistry laboratory.

The results of the initiative have been far-reaching. The college now attracts higher caliber students and offers research opportunities that include joint projects with the college and other agencies. And because of the Schiller Science Initiative, cadets like Sermpun Lhamlhak of Thailand are able to conduct potentially groundbreaking research that may one day aid in the treatment of cancer.



"Each of you has the opportunity to carry the torch. Each of you has the opportunity to make this country even greater than it is. Each of you has that opportunity to stand on the victory stand, and again in your own minds, in your hearts, in the visions of your families and the rest of the world, to watch your flag rise higher than all the others, to hear your anthem playing, and to declare that you're a champion. You bring honor to us all, not just by being here, but because you have carried along a strong tradition of excellence.

DR. HARVEY W. SCHILLER, '60
GREATER ISSUES ADDRESS TO THE CORPS OF CADETS, MARCH 31, 1992

Amid the arcane equipment and vials of mysterious liquid in Byrd Hall's third floor chemistry labs where Cadet Sermpun Lhamlhak sits quietly studying the results of his research, the atmosphere is reverent and far removed from the boisterous activity just across Jones Avenue in Stevens Barracks.

The first class cadet is working to separate and characterize two biotoxins produced by *Gambierdiscus toxicus*, an algae found

off the Gulf of Mexico, the Caribbean and other tropical marine environments. These biotoxins build up in fish and move through the food chain. Although not usually harmful to fish, the toxins can cause diarrhea, vomiting, numbness and tingling, muscle aches and low blood pressure in humans who eat contaminated fish.

The isolation of the toxins was actually begun by chemistry professor Capt. Kevin Crawford in 2000 in conjunction with the National Ocean Service Marine Biotoxins Program. Lhamlhak is the third cadet to continue the research.

"Developing a process to isolate the toxin is not as simple as you would think," said Crawford. "The toxin is not a stable molecule, and it decomposes over time. The identification of a similar toxin

found in the Pacific has given us a guide to go by."

The *Gambierdiscus toxicus* is grown in the lab at the National Ocean Service. The first step in purifying the toxins was to dissolve the toxins away from solids, using methanol. Next, molecules were separated based on size. Currently, Lhamlhak, 24, is trying to group the molecules according to their charge. Because the Pacific strain has a negative charge, he and Crawford know the *Gambierdiscus* will have one too. In the final step, Lhamlhak will use the high performance liquid chromatograph (HPLC) to separate the compounds. The HPLC is one instrument purchased through the Schiller Science Initiative.

What is the purpose of purifying the toxins? After they are purified, they can be studied to see how they act in the human body so that health care personnel are better able to treat people who consume fish contaminated with the toxins. Also, because of the way the toxins work, killing off cells, they can be studied as a potential anti-cancer drug.

"Without Dr. Schiller's gift to the chemistry department, we wouldn't be able to continue this research," Crawford said. "We're grateful to him for his generosity."

Lhamlhak is also thankful. The 24-year-old native of Bangkok is at The Citadel on a military scholarship from the Thai government. After completing his chemistry degree at The Citadel, he hopes to attend graduate school in the United States. Afterward, he will return to Thailand to serve as an officer in the army.

"This is a wonderful opportunity," he said. "I feel very fortunate to be able to work on such an important research project."

It is an opportunity to carry the tradition of excellence Schiller envisioned and to become a champion whose work will make a difference.





Anonymous \$10 million supports faculty excellence

In May 2002, The Citadel Foundation received from an anonymous donor a pledge of \$10 million—the largest single cash gift in the history of the college. Originally scheduled for payment in five annual installments of \$2 million, the gift was instead paid in full by the donor in 2003, expanding the foundation's holdings while expediting the long-term impact of this extraordinary contribution.

The gift established and endowed two new funds that are dramatically enhancing the college's ability to attract the finest faculty members and students most firmly committed to the college's mission. Of the total contribution, \$7.5 million has been allocated to create The Citadel Faculty Excellence Fund, which provides vital resources to support the ongoing education, research and retention of faculty members. The balance, \$2.5 million, goes to The Citadel Leadership Scholars Fund, an endowed scholarship fund that offers tuition assistance to cadets who demonstrate principled leadership and a profound commitment to The Citadel's core values and vision.

The Faculty Excellence Fund was established to enhance the effectiveness of faculty members in teaching, enable professors to investigate innovative approaches to teaching and learning, and promote academic scholarship through research and publication. The income from this endowed fund enables the college to recognize and retain outstanding faculty by augmenting their salaries, encouraging academic endeavors and supporting ongoing professional and intellectual development.

With enhanced faculty support, The Citadel is far better equipped to attract the brightest professors and retain those who best provide the individualized, small-class approach that is the hallmark of a Citadel education. To compete with leading institutions in an increasingly competitive academic market, it is essential for the college to have resources available to recruit the most talented professors and promote their continued success.

Ensuring faculty excellence is a vital component but still just a part of the equation for long-term success. Hand in hand with faculty excellence is a distinguished Cadet Corps. The Citadel Leadership Scholars program is a scholarship fund dedicated specifically to identifying and recruiting those students who best embody the character traits of a successful cadet. True to its mission, The Citadel awards these scholarships to applicants who have demonstrated the qualities of leadership, academic achievement, self-discipline and service—qualities that will enable them to excel in The Citadel's unique military environment.

Each year, many excellent candidates choose not to attend The Citadel because the college is unable to provide adequate financial aid or a student receives a more generous award package from another school. By offering several partial scholarships to outstanding prospective students, the Leadership Scholars program enables the college to enroll the most qualified students from an increasingly competitive pool of applicants. Each Citadel Leadership Scholarship requires an endowment of \$100,000 to generate sufficient

Additional gifts to The Citadel Leadership Scholarship Fund and The Citadel Faculty Excellence Fund may be made to support the excellence of The Citadel through a gift to The Citadel Foundation. For more information, contact the Foundation at 803-792-2222. Your gift at any level will help the college fulfill its vision.



million gift and Leadership scholars

income for a partial scholarship award. The generous gift of the anonymous donor will enable the college to recruit 25 new Leadership Scholars with each freshman class.

Cadets who are named Leadership Scholars receive their scholarship award on a year-to-year basis. The Faculty Scholarship Committee administers the scholarship program, allocating funds to cadets based on the committee's recommendations and the fund criteria. Students honored with the Leadership Scholar award are eligible to renew the funding for each ensuing year that they comply with the selection criteria.

In 2003-2004, the college awarded scholarships to 130 Citadel Leadership Scholars, including the regimental and third battalion commanders. The 50 recipients from the class of 2007 had an average high school grade point ratio of 3.55 with combined SAT scores averaging 1257. Among the upper class cadets, Citadel Leadership Scholars boasted an average grade point ratio of 3.27, in contrast to the overall 2.59 earned by the Corps as a whole.

According to one recipient, this scholarship award offers an opportunity to receive a quality education in a disciplined environment that cultivates leadership as well as learning. Cadet Olivia Livingston, a senior biology major from

Prosperity, S.C., said, "Receiving The Citadel Leadership Scholarship has been a great financial relief to my family and me. I am pleased to know that there are rewards for earning good grades. . . . The Citadel is more than an ordinary college; it offers more than just a degree. Along with academics, The Citadel teaches values and leadership skills. Thanks to the scholarship opportunities I was fortunate to receive here,

The gift established and endowed two new funds that are dramatically enhancing the college's ability to attract the finest faculty members and students most firmly committed to the college's mission.

I plan to pursue my master's degree in education and ultimately become a teacher."

The Citadel Foundation joins Livingston in extending heartfelt gratitude to the anonymous donor and all those who contribute to The Citadel Leadership Scholars fund and the Faculty Excellence Fund. This gift with its dramatic institutional impact campus-wide will have a profound and enduring influence upon the quality of education available to cadets for generations to come.

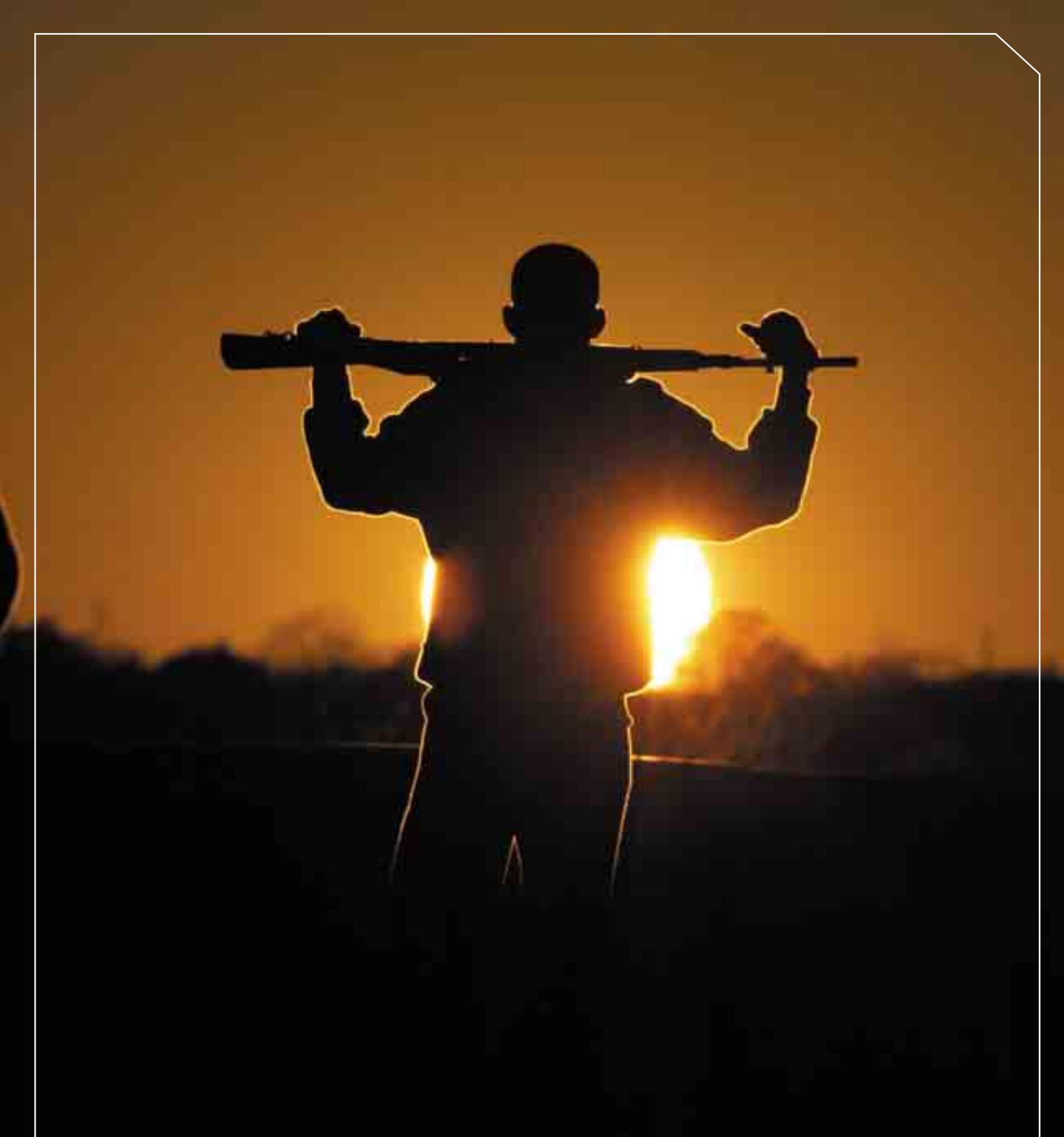
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