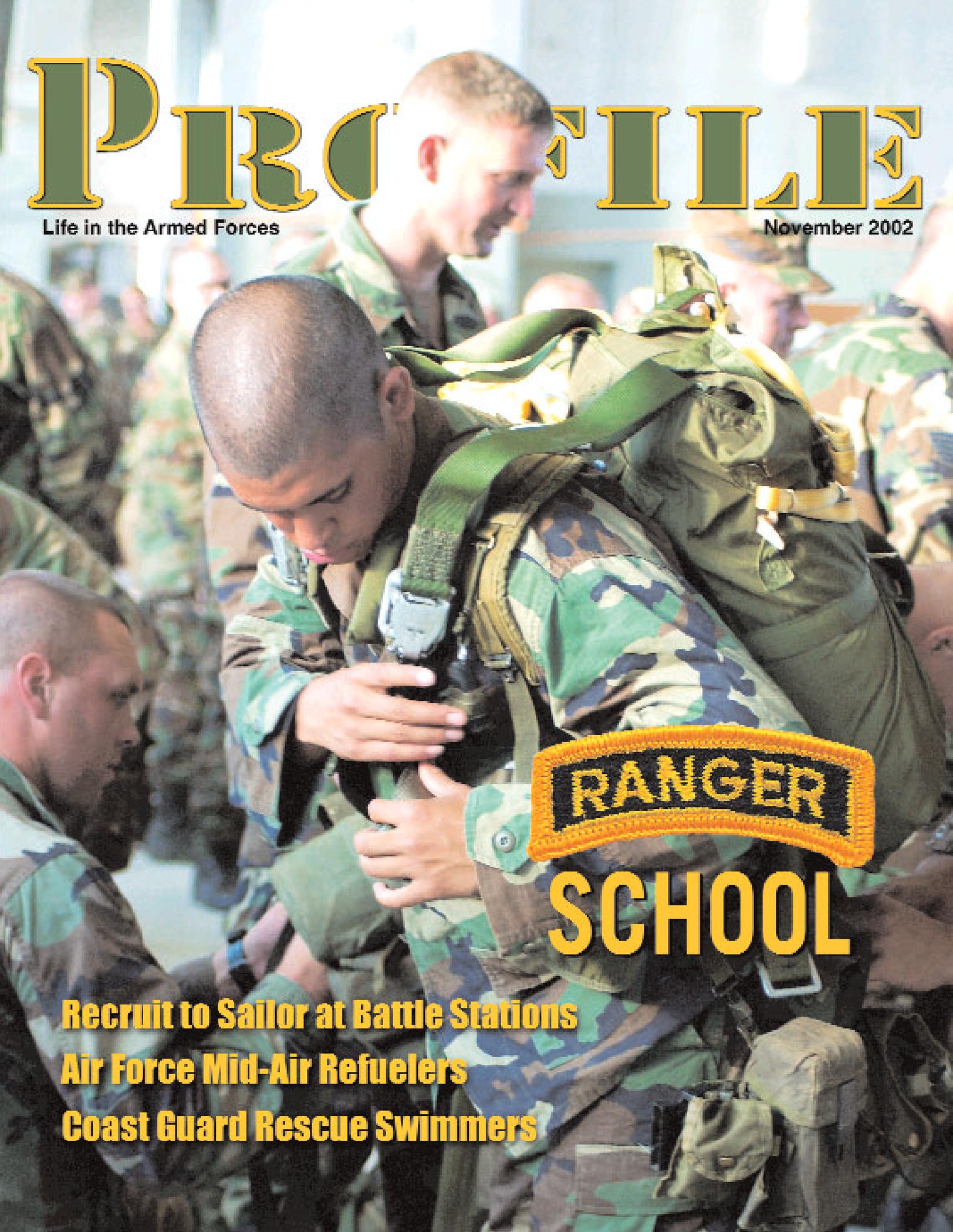


# PROFILE

Life in the Armed Forces

November 2002



RANGER

SCHOOL

**Recruit to Sailor at Battle Stations**

**Air Force Mid-Air Refuelers**

**Coast Guard Rescue Swimmers**

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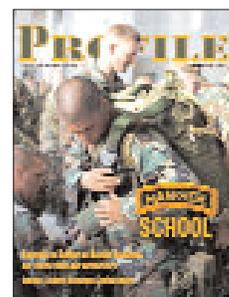
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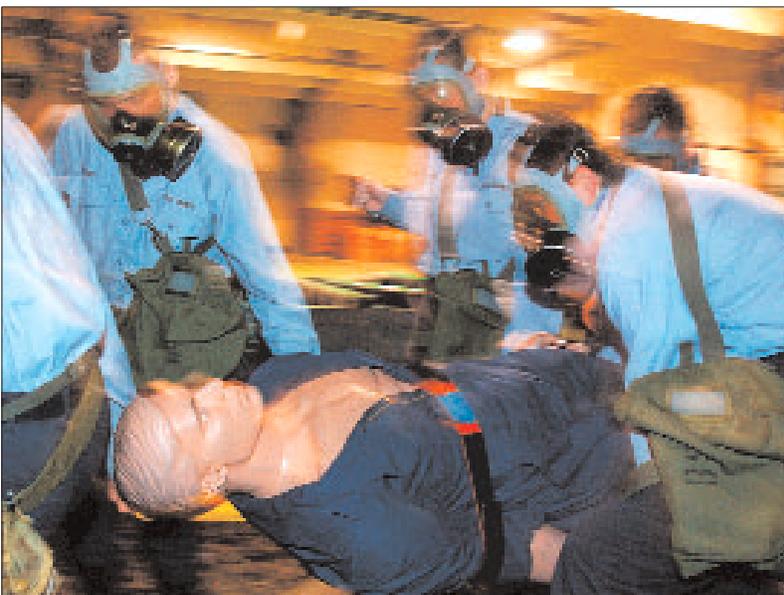
### **6** *Ranger School*

In order to wear the coveted Ranger Tab, soldiers must prove they have the endurance, confidence and skill to graduate the Army's top leadership course.

## ON THE COVER

To ensure their parachute gear is in proper working order, Ranger students check each other over before making a jump. (Photo by Sgt. Chad Swaim)





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At Battle Stations, Navy recruits enter and after 12 arduous and exhausting hours are transformed into the Navy's newest sailors.

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Whether treading water with 10-pound bricks or learning rescue techniques, prospective rescue swimmers at the US Coast Guard Aviation Technical Training Center push themselves to be the best.





## 'FATS' Good For 'System'

Continuing its quest for better training equipment and making students more "fleet-ready," the U.S. Navy Service School Command recently added the Fire Arms Training System to its arsenal.

FATS is a computer-generated target range which can be set for almost any scenario imaginable.

"We teach students to relax when handling weapons," said Petty Officer 1st Class Fred Roth. "Our weapons have almost the same recoil as the real ones in the fleet, and we can also generate about any scenario we want from firing at moving targets, to stationary snipers, to shoot and don't shoot scenarios."

Handling the recoil and getting used to handling a weapon are two of the most familiar problems encountered by the gunner's mates who teach here. "Many students are terrified of weapons. Many have never handled a 9 mm pistol or a shotgun before boot camp," Roth said.

Gunner's mates are tasked with training the fleet in force protection, small arms and anti-terrorist training.

"Our job, even more so since 9/11, has become more important," said assistant director of the Naval Gunnery School Lt. j.g. Pete Weir. "With our FATS training we have

adjusted our school schedule so each student can spend at least two days working on the FATS.

"The idea is to give them as much hands on training as possible prior to sending our sailors out to the fleet. The better we have them trained here the less time a busy chief petty officer and LPO in the fleet has to spend training them on the basics. So we save everyone time and money," he said.

Currently FATS consists of 9 mm pistols and the Remington Mossberg shotguns. Ordered and scheduled for delivery soon are 12 Remington 780-model shotguns and 12 M-16's. "The Remington Mossberg and the 780 are slightly different but similar enough to use in the same training structure," said Roth.

*Story courtesy of U.S. Naval Training Center Great Lakes Public Affairs.*

## Tuition Assistance Increases

For the second year in a row, Air Force Reserve Command is boosting the amount of help offered through its Tuition Assistance Program for undergraduate work.

Starting Oct. 1, the Reserve will increase a student's maximum assistance per semester from \$187.50 to \$250 for undergraduate work,

reimbursing reservists for 100 percent of the tuition cost up to \$4,500 annually for education programs offered by Defense Activity for Non-Traditional Education Support.

Last year AFRC raised the maximum annual aid for reservists from \$2,500 to \$3,500 and expanded tuition assistance for the DANTES distant learning program to include master's degrees.

For the master's degree program, the Reserve reimburses reservists up to 75 percent of the tuition costs. Participants may get up to \$187.50 per semester hour or a maximum of \$3,500 annually to complete their degrees.

*Story courtesy of Air Force Reserve Command News Service*

## Sailors Take Advantage of TSP

More than 87,940 active and reserve sailors are taking advantage of tax benefits and the chance to provide for their futures by contributing to the Thrift Saving Plan.

During the second TSP enrollment period, more than 1,200 E-1s signed up, leading the way for new enrollees, during boot camp.

TSP is designed to be a convenient way to provide service members with the opportunity to invest in a variety of investment vehicles that can augment future income.

Working much like the civilian 401(K) savings plan, pre-tax dollars are invested to provide a long-term savings program with immediate tax advantages for military members. The account is transferable to other tax deferred programs and is not tied to the military retirement system.

*Story courtesy of Chief of Naval Personnel Public Affairs*

## Marines Bridge Gap

In an effort to dissolve the

language barriers between the Republic of Korea and Combined Marine Forces Command, four Hongul-speaking U.S. Marines were augmented to assist the CMFC staffs in communicating with their R.O.K. counterparts.

Sergeant Sung Kim, Cpl. Daniel Hong, and Lance Cpls. Charles Yi and Nadin Kaade have been tapped for their certified fluency in the Korean language.

Some of the translators' journeys toward their participation in UFL-02 began even before they could call themselves Marines.

"My drill instructor asked the platoon, 'Who speaks another language?'" recalled Kaade, a separations clerk from MCB Camp Pendleton, Calif., Headquarters and Service Battalion. "Some of us raised our hands. After I told my DI that I spoke Korean, my DI said, 'Oh, Korean? You're taking the test tomorrow.'"

For Kim, an amphibious assault vehicle crewman from Camp Pendleton, Calif., he received word from a fellow devil dog that his ability to speak a desired foreign language could prove beneficial to the corps as well as himself.

"Someone told me that since I know how to speak Korean, I could make some extra money," said Kim. "I took a test, passed it, and now I'm here, translating Korean for the Marine Corps."

Kim, along with his fellow translators, took the Defense Language Proficiency Test, which measures the aptitude for foreign language learning by the typical native English speaker.

During this exercise, the four bilingual leathernecks proved to be valuable assets for the CMFC.

When communicating with the R.O.K. Marine troops, the translators found their Korean counterparts to be friendly,

intelligent and motivating young men, and they saw themselves connecting with the R.O.K. Marines on a certain level because of their similar backgrounds. However, their duties here have also provided them with an opportunity to view the differences in the way R.O.K. Marines and U.S. Marines operate.

"Their officers do the jobs that my NCOs and Staff NCOs do," said Hong. "Our Corps is more decentralized than theirs."

*Story courtesy of Marine Forces Pacific Public Affairs*

## CAG For a Day

Most days Airman Eric Clausen of Fighter Squadron 154 is responsible for aircraft 113, one of the F-14 Tomcats in the "Black Knight" inventory.

Recently he found out what it was like to be responsible for all the airplanes and people that make up Carrier Air Wing 5 aboard the aircraft carrier USS Kitty Hawk.

The "Black Knights" were selected for this opportunity as a result of their vigorous fundraising efforts during the Navy/Marine Corps Relief Society Fund Drive in April.

VF 154 raised more than \$18,000 of CVW5's \$53,000 -- more than any other squadron in the air wing. Clausen was chosen by his squadron to represent them as Air Wing Commander (CAG) for a day.

Clausen, a native of Heron Lake, Minn., has been in the Navy just less than a year and has only been a "Black Knight" since November.

His squadron chose him, however, because "he is a meticulous, hard working, and extremely reliable part of the Line Division," said Senior Chief Petty Officer Ledwin DeCell.

As CAG, Clausen learned what it feels like to be in Capt. Michael "Flex" Galpin's shoes.

After starting their day

with a hot cup of java, it was off to the first of several meetings. Sitting in the Air Wing Commander's chair, "CAG" Clausen heard the staff morning briefing, which covers all aspects of air wing intelligence, operations, maintenance, administration, and public affairs.

After listening to all the information presented Galpin turned to Clausen and said, "What you don't realize is that this all starts with you. If you can't turn our jets around the whole thing stops."

From there Galpin and Clausen headed up to Alpha Papa, the Strike Warfare Commanders watch station, which is the primary center for coordinating strike warfare assets. In Alpha Papa, Clausen was able to see the importance of monitoring operations at all levels and receiving real time information from the pilots and other operators.

The next stop was the office of Commander Carrier Group Five, Rear Adm. Steve Kunkle, to talk about the air wing's operations for the day.

Clausen was able to listen to all the information both Kunkle and Galpin received in a brief from Carrier Group 5 Assistant Operations Officer Cmdr. William Morales, on the day's flight operations.

Clausen was also able to see the "big picture" in the Tactical Flag Command Center that houses large real time images of the battle group. "It's really interesting, but busier than I expected," said Clausen.

To get an even better outlook on how flight opera-



## Army Names NCO and Soldier of the Year

A game show -- no. But that wasn't apparent when the first-ever Department of the Army Noncommissioned Officer and Soldier of the Year walked away with about \$10,000 in cash and prizes.

After a week of intense competition among the Army's major commands' top soldiers, Sgt. 1st Class Jeffery Stitzel, an infantryman with the Old Guard at Fort Myer, Va., and Spc. Justin Brown, a measurement and diagnostic equipment specialist from Baumholder, Germany, were awarded their elite titles Sept. 27 during an awards ceremony.

"There are 1.3 million soldiers in the Total Army, and in this room are the top 23," said Sgt. Maj. of the Army Jack Tilley at the awards ceremony.

Tilley's personal goal as the sergeant major of the Army was to implement the prestigious competition, and he vowed that it would only get better.

"We were the only service not awarding its soldiers at the highest level possible, and as a division command sergeant major I wondered why soldiers never went as far as their major-command level. I thought it was important that I recognize our outstanding soldiers."

Not only was Tilley seen at Fort A.P. Hill where the hands-on portions of the competition took place, he shared the stage with Secretary of the Army Thomas White and Army Chief Gen. Eric Shinseki in presenting awards.

All of the competitors are winners, Tilley said. And no one walked away from the event empty-handed.

To honor those who underwent the arduous task of making it to the Department of the Army level, the other candidates received up to \$3,000 in cash and prizes to include a new pair of boots, a set of ribbons and a \$250 savings bond.

tions are run, Galpin escorted Clausen to the Carrier Air Traffic Control Center, the heart of air operations.

There Clausen saw every aspect of an aircraft's recovery to the carrier, from initial entry into the pattern to arresting on the three wire.

Since his arrival in November, Clausen has spent many off-shift hours learning the ins and outs of servicing,

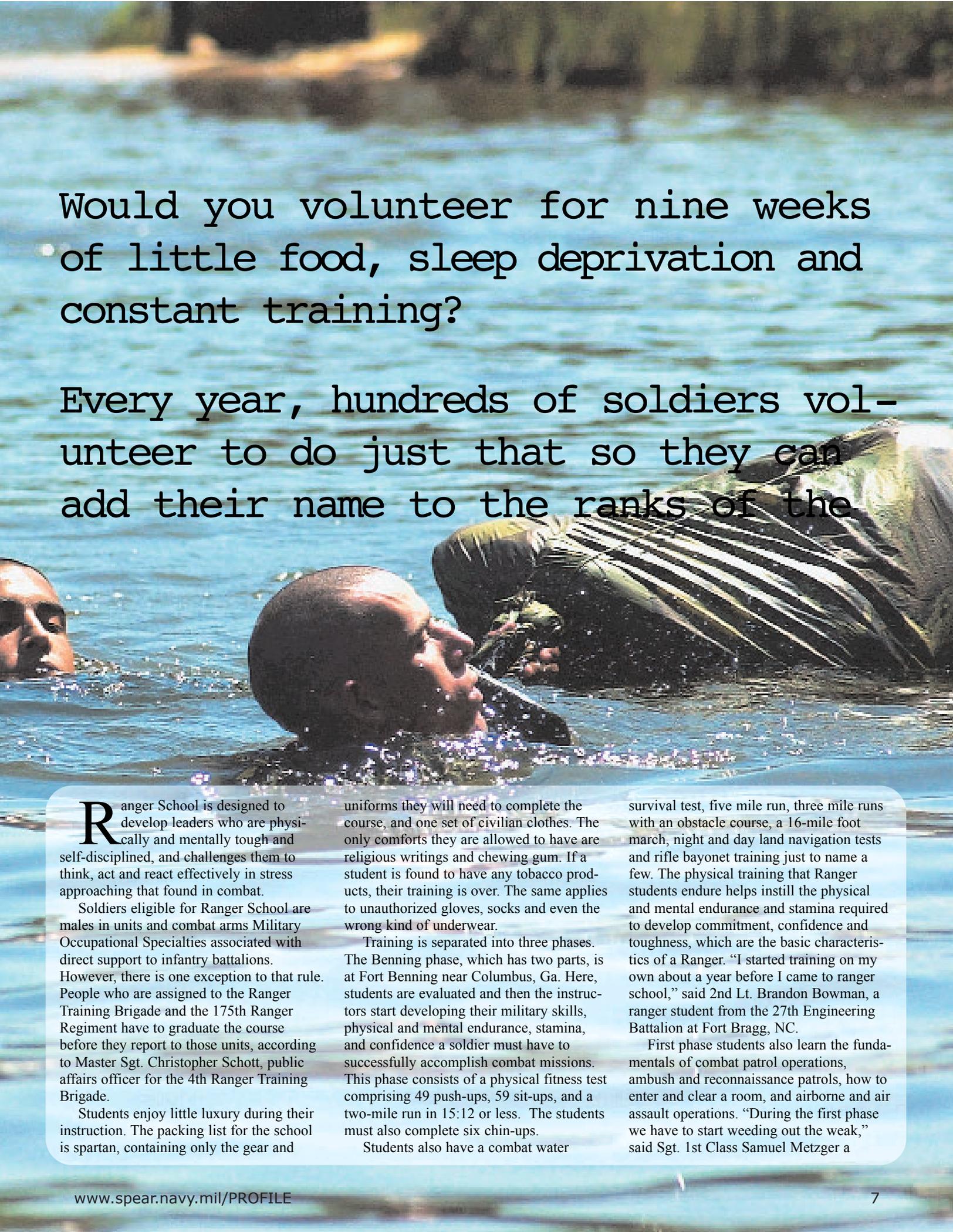
inspecting and preparing his Tomcat for flight. He also worked tirelessly to earn his Plane Captain qualification, often arriving two hours prior his shift to receive extra training or complete his personal qualification standards. All his hard work finally paid off on May 7, as he qualified as an F-14 Plane Captain.

*Story courtesy of Carrier Air Wing 5 Public Affairs.*



# SCHOOL

STORY BY SGT. CHAD SWAIM, USMC.



Would you volunteer for nine weeks of little food, sleep deprivation and constant training?

Every year, hundreds of soldiers volunteer to do just that so they can add their name to the ranks of the

**R**anger School is designed to develop leaders who are physically and mentally tough and self-disciplined, and challenges them to think, act and react effectively in stress approaching that found in combat.

Soldiers eligible for Ranger School are males in units and combat arms Military Occupational Specialties associated with direct support to infantry battalions.

However, there is one exception to that rule. People who are assigned to the Ranger Training Brigade and the 175th Ranger Regiment have to graduate the course before they report to those units, according to Master Sgt. Christopher Schott, public affairs officer for the 4th Ranger Training Brigade.

Students enjoy little luxury during their instruction. The packing list for the school is spartan, containing only the gear and

uniforms they will need to complete the course, and one set of civilian clothes. The only comforts they are allowed to have are religious writings and chewing gum. If a student is found to have any tobacco products, their training is over. The same applies to unauthorized gloves, socks and even the wrong kind of underwear.

Training is separated into three phases. The Benning phase, which has two parts, is at Fort Benning near Columbus, Ga. Here, students are evaluated and then the instructors start developing their military skills, physical and mental endurance, stamina, and confidence a soldier must have to successfully accomplish combat missions. This phase consists of a physical fitness test comprising 49 push-ups, 59 sit-ups, and a two-mile run in 15:12 or less. The students must also complete six chin-ups.

Students also have a combat water

survival test, five mile run, three mile runs with an obstacle course, a 16-mile foot march, night and day land navigation tests and rifle bayonet training just to name a few. The physical training that Ranger students endure helps instill the physical and mental endurance and stamina required to develop commitment, confidence and toughness, which are the basic characteristics of a Ranger. "I started training on my own about a year before I came to ranger school," said 2nd Lt. Brandon Bowman, a ranger student from the 27th Engineering Battalion at Fort Bragg, NC.

First phase students also learn the fundamentals of combat patrol operations, ambush and reconnaissance patrols, how to enter and clear a room, and airborne and air assault operations. "During the first phase we have to start weeding out the weak," said Sgt. 1st Class Samuel Metzger a

Ranger Instructor. "We have to get rid of the people who will buckle under the least amount of pressure because they will not be a good leader under the stress of combat." It is also designed to teach students to properly sustain themselves, their subordinates, and maintain their equipment under difficult field conditions.

By the ninth day of the Benning phase, the students are down to two meals a day. As the training progresses the amount of food the students are given decreases. Imagine, 20 hours a day of intense training with little or no food. "Your body can go a lot further than your mind thinks it can," said Staff Sgt. Juan Vargas, a Ranger student from 1st Battalion, 25th Infantry Division, Hawaii.

Camp William O. Darby is where students will spend the second part of the Benning phase. Emphasis here is on the instruction in and execution of combat patrol operations. Students receive instruction on boxing, execute the Darby Queen Obstacle Course and learn the fundamentals of patrolling and how to format orders and communications. The fundamentals of combat patrol operations include battle drills, ambush and reconnaissance patrols, entering and clearing a room of hostile enemies, airborne operations, and air assault operations. This phase uses the crawl technique during the field training exercise, which allows the students to practice the principles and techniques that enable the patrol to successfully conduct reconnaissance and ambush patrols.

(Above) A student in the mountain phase eases down the face of a cliff while learning to rappel at Camp Frank D Merrill. (Below) An instructor looks on as students experience their first river crossing. (Photos by Sgt. Mitch Frazier, USA)



Ranger students must then demonstrate their expertise through a series of instructor-cadre and student-led tactical patrols. As a result, the Ranger students gain tactical and technical proficiency and confidence in themselves. "I can't wait to get back to my unit and teach the men how to do infantry tactics the right way," said Bowman.

Now students move on to the next

portion, called the Mountain Phase, at Camp Frank D. Merrill, near Dahlonega, Ga. Now the students receive instruction on military mountaineering, as well as techniques for employing four to 40 men in continuous combat patrol operations in a mountainous environment.

Students continue to learn how to survive in the adverse conditions of the mountains. The rugged terrain, severe weather, hunger, mental and physical fatigue, and the emotional stress the students encounter afford them the opportunity to gauge their own capabilities and limitations. In addition to combat patrol operations, the students receive five days of training on military mountaineering.

During the first three days (called lower

## RANGER CREED

**R**ecognizing that I volunteered as a Ranger, fully knowing the hazards of my chosen profession, I will always endeavor to uphold the prestige, honor, and high esprit de corps of the Rangers.

**A**cknowledging the fact that a Ranger is a more elite soldier who arrives at the cutting edge of battle by land, sea, or air, I accept the fact that as a Ranger my country expects me to move further, faster, and fight harder than any other soldier.

**N**ever shall I fail my comrades I will always keep myself mentally alert, physically strong, and morally straight and I will shoulder more than my share of the task whatever it may be, one hundred percent and then some.

**G**allantly will I show the world that I am a specially selected and well trained soldier. My courtesy to superior officers, neatness of dress, and care of equipment shall set the example for others to follow.

**E**nergetically will I meet the enemies of my country. I shall defeat them on the field of battle for I am better trained and will fight with all my might. Surrender is not a Ranger word. I will never leave a fallen comrade to fall into the hands of the enemy and under no circumstances will I ever embarrass my country.

**R**eadily will I display the intestinal fortitude required to fight on to the Ranger objective and complete the mission, though I be the lone survivor.





(Above) To help prevent injury, student's warm up before hand-to-hand combat training by running around the exercise pit. (Below, Right) A Ranger student teeters precariously during water survival training while walking a ballance beam suspended high over the water. (Photos by Sgt Chad Swaim, USMC.)

mountaineering), they learn about knots, anchor points, rope management and the basic fundamentals of climbing and rappelling. Their mountaineering training culminates in a two-day exercise at Yonah Mountain. To continue in the course, each student must make all prescribed climbs including a 200-foot night rappel at Yonah Mountain.

In the rugged mountains students must also learn to sustain themselves. "That means finding their own food and water," said Metzger.

After the Mountain Phase, students move to the third (Florida) phase of Ranger training, conducted at Camp Rudder, near Eglin Air Force Base, Fla., This training

tests everything the Ranger students have learned. They must be capable of operating effectively under conditions of extreme mental and physical stress during practical exercises in jungle and swamp environments. Here, they'll receive additional training on such subjects as small boat warfare, moving from a ship to the shore during combat, and stream-crossing techniques.

After the last evaluation of the third phase of training, the students pack their gear one last time in preparation for a final parachute jump into Fort Benning. The next thing students have to face is a simple graduation ceremony in which they receive their Ranger Tab (patch) that will adorn their

uniforms showing all their accomplishments.

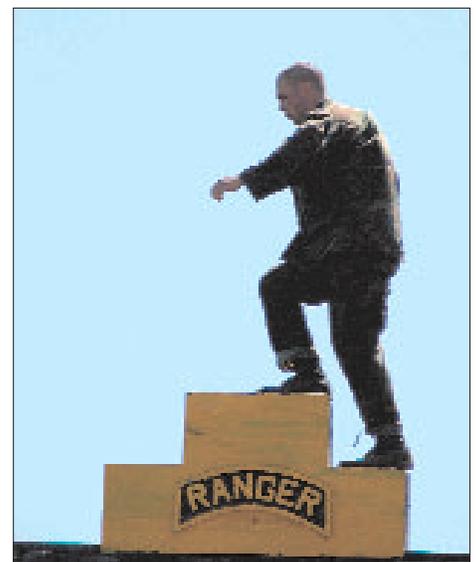
Many units send their young leaders to the course in hopes of receiving a well-trained soldier who can pass along everything he has learned to his fellow warriors. "If you are a combat leader in a combat arms unit you need to come to ranger school and attempt to graduate," said Staff Sgt. Bret Daigle a Ranger Instructor. "The training you receive is extremely valuable. You can bring that back to your unit and just pass it on throughout the Army."

Besides benefiting the Army, many soldiers want to attend Ranger School for the recognition and bragging rights that come along with membership in this distinctive group. "I want to be a part of an elite group," said Vargas. "Just hearing about the adventures that rangers I know have had, made me want to be involved too."

According to Schott, a person who is Ranger qualified would be at the top of the infantry level. He learns combat leadership skills in an environment you definitely won't find in normal training evolutions. "You're taking away food and sleep so it's a lot of pressure on the guy to perform as a leader," he said.

During the course, students prove they can overcome seemingly insurmountable mental and physical challenges. While under simulated combat conditions, they have demonstrated that they have acquired the professional skills and techniques necessary to earn the title U.S. Army Ranger.

"The fruits of this school are not apparent until you are done," said Metzger. "All of a sudden, the little stuff you worried about before you came here becomes easy."



For more information about the United States Army, call 1-800-USA-ARMY or visit [www.goarmy.com](http://www.goarmy.com)

# BATTLE STATIONS

STORY BY LT. CMDR. JOHN WALLACH, USN. PHOTOS BY PETTY OFFICER 1ST CLASS MICHAEL WORNER, USN





## Experience Required: Navy Aims to Make Battle Stations Even More Unforgettable

(Left) Seaman Recruit Amber Munoz gets help through the "Forrestal Escape Scuttle" Battle Stations event. This evolution was designed around the USS Forrestal fire of 1967. It teaches recruits to work as a team to get everyone to safety, passing each other through scuttles that would be so hot that you can't touch the hatch itself.

(Above) US Navy Recruit Barrato (middle) practices formation drills with other members of her division

(Above Right) US Navy basic firefighting instructor Petty Officer 1st Class Michael Murrell (center) advances his firefighting team into a fire. Firefighting is part of the curriculum of recruit training at Recruit Training Command, Great Lakes.

With the help of technology, simulation, and some of the entertainment industry's top creative minds, the Navy's Recruit Training Command is poised to make a quantum leap in the evolution of Battle Stations, the at-sea combat simulation and final part of the nine-week boot camp curriculum.

Assembled in an empty warehouse in 1997 with no small measure of plywood, sweat, makeshift plumbing and old-fashioned sailor ingenuity, Battle Stations has evolved gradually yet considerably from its humble beginnings. Nearing its fifth anniversary, the 12-hour exercise pushes recruits to their physical, mental and emotional limits, requiring them to draw on every aspect of their training to date.

Hundreds of thousands of today's fleet sailors have its 12 events -- and presumably its lessons -- indelibly etched into their memories. Indeed, few will ever forget the emotional completion ceremony, during which recruits trade their "RECRUIT" ball caps for those with "NAVY" emblazoned across their fronts, the symbolic transition from recruit to sailor.

Now, with the help of the world's leading experts in the entertainment industry, the Navy is working to make Battle Stations more realistic, more convincing, and even more unforgettable.

"Through the use of technology and simulation, we can take the scenarios we have in place today and create a more memorable experience, thereby increasing



Seaman Recruits Korinne Reese, 19, and Josh Sue, 19, plunge into the Combat Pool during the "Abandon Ship" scenario of Battle Stations.

**Nearing its fifth anniversary, the 12-hour exercise pushes recruits to their physical, mental and emotional limits, requiring them to draw on every aspect of their training to date.**

its teaching value," said Rear Adm. Ann Rondeau, Commander Naval Training Center Great Lakes. "Our objective is to make Battle Stations a more effective training evolution. If we achieve that goal, we send a better-trained sailor to the fleet -- our primary customer -- and that's what Great Lakes is all about."

With that overarching guidance, the Navy's training system development experts at the Naval Air Warfare Center Training Systems Division in Orlando, Fla., and i.d.e.a.s. (innovation, design, entertainment, art and storytelling) at Disney-MGM Studios, began work on the first phase of the project -- creative development of a Battle Stations story line.

"Our tasking was to create the Battle

Stations experience in the form of a story, incorporating the scenarios which are taught today," said Bob Allen, i.d.e.a.s. chief executive officer. "We are professional story tellers, and our aim is to have recruits so immersed in the Battle Stations story that it becomes real. Reality leads to what we call 'experiential learning' -- a very effective learning technique."

Under the i.d.e.a.s. Battle Stations concept, recruits are marched to a pier, where they are dwarfed by a ship's mast protruding through the roof of the Battle

Recruits carry a "dummy" through a maze that simulates rescuing a sailor in the Shaft Alley Rescue portion of Battle Stations.

Stations facility. Bird calls, tug whistles and other ambient noises of a busy port echo from speakers nearby.

"Part of the Battle Stations experience is establishing the setting and building the expectation," explained Marc Watson, a director with Universal Studios, who collaborated with i.d.e.a.s. on the initial phase of the project.

Once aboard the Battle Stations ship, recruits go below to the mess decks to receive briefings on the night's mission. The scenarios then begin to unfold in a continuous sequence along the story line. Routine operations come first. Gear is stowed, stores are loaded and, once complete, the order is passed to execute an emergency sortie -- 20 minutes to get the ship underway.

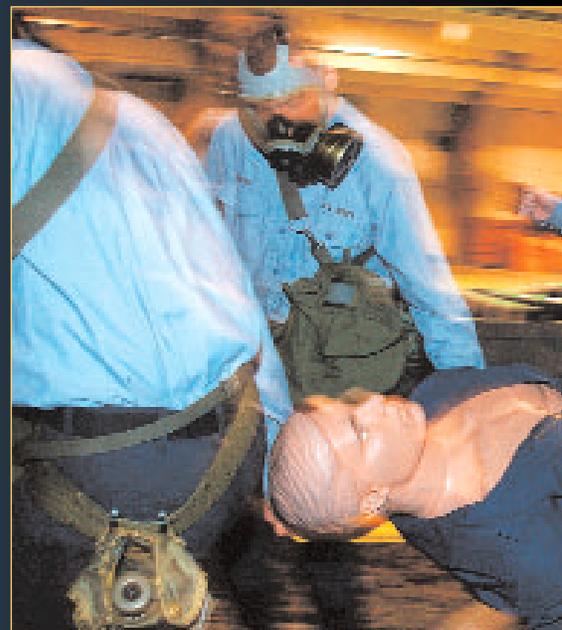
The aggression scenarios follow. General quarters is sounded. Recruits battle ship-board fires, repel terrorist boarders, move ammunition from a flooding magazine, and rescue injured shipmates from smoke-filled compartments.

But it is the exponential increase in realism that sets the new Battle Stations apart from the old. In the abandon ship scenario, for example, wave machines, salt water and night lighting will make the jump from the ship far more uninviting than the relative friendly environs of the combat pool used today.

"We have to maintain a 'suspension of disbelief' throughout the entire 12-hour evolution," said Allen. "It's imperative that we keep the stress level up as well."

The redesign for Battle Stations also has to be flexible to allow for modification or wholesale replacement of one or more scenarios in the future.

"The new Battle Stations must be 'refre-



shable,” said Rondeau. “We have a predictable customer in the Fleet, but not a predictive one. Ten years ago, anti-terrorism force protection was not as significant a part of our training curriculum as it is today. We need to anticipate what our training priorities will be 10 years from now, and build in the flexibility to adapt to them.”

In the end, while Battle Stations may change, the requirement for

Navy Recruit Noly Delacruz of Honolulu Hawaii steps out of a dark smoke filled space helping carry a “unconscious” shipmate to safety during the Investigate & Rescue portion of Battle Stations.



Recruits march through a tunnel at Recruit Training Command Great Lakes to their next Battle Stations event.

sailors trained to perform in the fleet will not—a fact not lost on the Recruit Training Command commanding officer.

“We will evaluate our Battle Stations return-on-investment, as we do the effectiveness of all of our training programs, based on feedback from the fleet,” said Capt. O. W. Wright. “When a sailor uses what he or she learned in boot camp to

respond successfully to a crisis in the fleet, there is no better validation of our training.”

*For more information about the United States Navy, contact 1-800-USA-NAVY or visit [www.navyjobs.com](http://www.navyjobs.com)*



# COURAGE



US Navy Recruit Shannon Pielemeier of New Albany, Ind., prepares herself to receive her NAVY ballcap during the Battle Stations Completion Ceremony.

# THE *LONG ARM* OF MARINE ARTILLERY

*Story and photos by Lance Cpl. G. Lane Miley, USMC*

## “Stand by - FIRE!”

The command came over the speakers to the gun line from the fire direction center. The number-one man pulled the lanyard. Dust boiled up from the ground and the smell of gunpowder filled the air. The looming howitzer recoiled, sending its round down range.

The Marine Air Ground Task Force 2 desert warriors remained vigilant throughout FINEX, the final stage of Combined Arms Exercise 9-02, which occurred at Marine Corps Base TwentyNine Palms, Calif., in August 2002.

Master Sgt. Anthony E. Nicholas, field artillery chief, 3rd Battalion, 10th Marine Regiment, said CAX has been a great exer-

cise. He said it's the total package.

“As the all-weather, all-capable arm for the infantry, we can lay waste to anything in front of us, give the right logistical and ammunition support, keeping the pilots and infantrymen out of danger,” the Endicott, N.Y., Marine said about the artillerymen supporting FINEX.

“We are the extended arm for maneuver units,” Capt. Nelson I. Delgado, commanding officer, Alpha Battery, said. “We're an integral part of combined arms training - giving them

support to take out their objectives and providing markers for aircraft to follow as the uppercut for the maneuver.”

The Swansboro, N.C., battery

**“We can LAY WASTE to anything in front of us.”**

commander said being part of the planning process is imperative for artillery - to understand the sequence of the battle plan



Pfc. Greg R. Szuch utilizes the charts and darts method at the Kilo Battery fire direction center during FINEX.





Pfc. Robert M. Hill, 1st Battalion, 10th Marines, checks his howitzer's settings during FINEX.

and make sure everyone gets their needed support.

Pfc. Robert M. Hill confirmed that his first CAX has been a good learning experience. The Bowling Green, Ky., Alpha Battery artilleryman got to see larger powder charges than normal while in the Mojave Desert, which he said isn't as bad as he had heard.

Alpha Battery isn't the only unit to benefit from the training here, according to 1st Lt. Erik V. Orient, executive officer, Kilo Battery, 3/10. He said his Marines have come a long way, since recently returning from deployment with an infantry company. Orient explained that while at sea, the Marines didn't employ their artillery skills.

"CAX has been a good learning experience," said Orient. "It's been great for getting these Marines back in the artillery mindset."

As assault amphibian vehicles packed with infantry Marines sped past the heavy guns' position, battalion surveyors made their way to scout the howitzers' next location.

Sgt. Steven C. Howk, 3/10 survey chief, led his Marines to the site. They already marked the spot, but went to ensure the guns had safe passage to the next position.

Chief Warrant Officer Gary W. Schmidt, the survey, meteorology, radar and target acquisition officer for 3/10, said his Marines bring a lot to the battlefield.

"The guns require five elements of accurate predictive fire before they can send rounds down range: target location and size, firing unit location, weapon and ammunition information, meteorological information and computational procedures. My 'nomads of the battlefield' provide three of these," the Wilmington, N.C., Marine accredited.

Gun smoke filled the air from the crack of dawn to the hours of darkness as the artillerymen fired throughout FINEX using the information Schmidt's Marines provided, which was processed in the fire direction center and radioed to each gun on the firing line.

"There is a lot of physics and geometry involved to get the rounds on target," Capt.

Lance Cpl. Tracy C. Ellis of Lumberton, N.C., plugs his ears as Youngstown, Ohio, native Lance Cpl. Chris C. Kellogg pulls the howitzer's lanyard.



Lance Cpl. Alton Johnson, 1st Battalion, 10th Marine Regiment, secures the round's fuses before they are loaded and fired during FINEX.

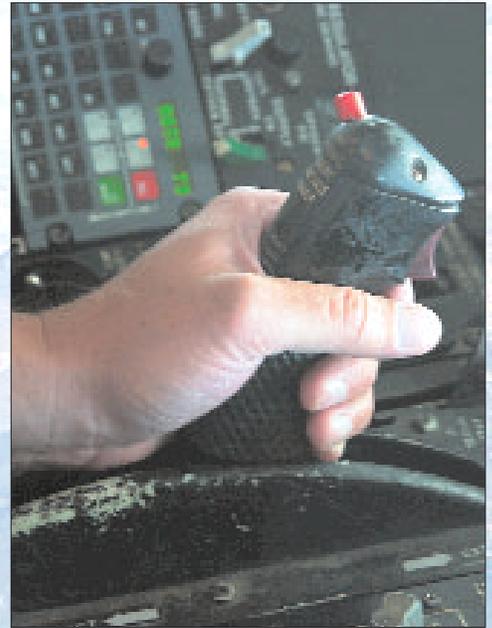
Erik B. Eldridge, commanding officer, Kilo Battery, said. "The Marines here in the FDC take target locations from the surveyors, who serve as forward observers. With that grid they use computers or the 'charts and darts' method to give the Marines on the line their needed settings for putting the rounds on target."

The Keystone, Iowa, commander compared the Marines in the FDC to professional jugglers because of the amount of information they keep up with and disseminate to the gun line. Eldridge said the battery has many moving parts, but internal communication has been exceptional.

Staff Sgt. John C. Eatmon, Headquarters Platoon, Kilo Battery, said without good communications the gun batteries can't fire. The Bailey, N.C., communications chief and platoon sergeant, praised his Marines for working so well as a team, getting the antennas set up in less than 12 minutes each time they moved, therefore helping the rest of the battery accomplish its mission with the clear transmissions.

At the end of the day, as CAX 9 came to a close, Eldridge commended his Marines for a job well done. He told them to take what they learned here and apply it during a follow on exercise, CAX 10.

*For more information about the United States Marine Corps, contact 1-800-MARINES or visit [www.marines.com](http://www.marines.com)*



# HIGH-SPEED SERVICE

Story By Sgt. Chad Swaim, USMC

Want a job pumping gas? How about pumping gas at 600 mph? Air Force boom operators do that and more at heights of up to 50,000 feet.

The main responsibility for Air Force personnel in the In-Flight Refueling Specialty (called boom operators or boomers) is to maneuver a 40-foot-long telescoping boom into the receiving port of another aircraft and give it all the fuel it needs. "It's kind of like a video game, you've got a joystick in your hand to fly the boom around with and most receiver aircraft have lead in lines right in front of the receptacles where you can

center the boom and fly right into the receptacle," said Staff Sgt. Jaime Hessler, a boom operator with the 54th Air Refueling Squadron, at Altus Air Force Base, Okla.

The boom operators have a significant role in Air Force missions. In-flight refueling helps save time by allowing aircraft the opportunity to refuel without having to land, refuel and take off again during their mission. This also prevents wear and tear on the receiving aircrafts landing gear; there-

fore the plane has longer service between maintenance periods. "It's kind of cool to see the fighter dudes pull up and really need the gas and know that you're part of the team, helping them do their jobs and they seem to be real appreciative of us being back there," said Hessler.

As you can imagine the training is a little more complex than what one would get down at the corner gas station. After water and ground survival training, airmen arrive at Altus Air Force Base. In 14 weeks future boomers will receive the training needed to start refueling from Air Force KC-135 and KC-10 tanker aircraft. "It's a fairly long course, there's a few weeks of academics where you're in a classroom setting," said Hessler.

The first phases of training begin in the classroom where students study about flight publications, flight management, flight authorization and aircrew training. The second phase begins with safety training

followed by aircraft equipment and goes on to how weight and balance affect an aircraft. The third phase covers communications, crew resource management, navigation and mission planning. The fourth and final classroom phase covers such subjects as airlift operations, cargo and passenger handling, hazardous materials handling, customs and border clearance, anti-hijacking and terrorism, different types of refueling, electric emissions from their aircraft during refueling and the aerodynamic effects of the boom. "Then you go through some simulator training with the flight safety folks. Following that you hit the flightline where you actually get to fly with an instructor," said Hessler. "You normally have eight flights and a check ride and then off to whatever unit you've been assigned." Boomers also have to prove themselves at their new command with 120 days of on-the-job-training before going solo according to Master Sgt John O'Connor from the 171st Air Refueling Wing of the Pennsylvania Air National Guard in Pittsburgh.

During in-flight refueling, the boomers transfer massive amounts of fuel to the receiving aircraft. In one minute, boom operators aboard the KC-135 can pump more fuel than the average passenger car will use in one year. In eight minutes, it pumps more fuel than a gas station pump would if it were pumping 24 hours a day, seven days a week for one year. "It's a lot of fun and it can be an adrenaline rush, but you really have to stay on your toes and think about what you're doing because you have a lot of responsibility in your hands," said Hessler.

Boom operators do a lot more than just refuel; the navigator position was recently eliminated because of technology upgrades to the aircraft which have resulted in giving the

boomers more responsibilities. "Now there are only two pilots and a boom operator, so we help the pilots out and back them up on everything that they're doing," said Hessler. "Nowadays you'll even hear us called boom-gaters. It's not just going back to do the air refueling anymore."

The boom operators also handle all of the passengers and cargo that may be along for the ride. On the KC-135 that could be up to 80 passengers or 83,000 pounds of cargo. "We're also considered loadmasters when we do carry cargo. We can be passenger handlers, responsible for passengers aboard the airplane," said Hessler

However, it's not all work and no play. Being assigned as an aircrew member aboard a refueler does have the fringe benefit of travel. "I've been all over the world and seen everywhere I've wanted to see," said Hessler.

"I've gotten so many opportunities to go places." During her time in the Air Force Hessler has been to Panama, Hawaii, Australia, Wake Island, Germany, Italy, Greece, Japan, Europe, France, England and the Netherlands. "When I came in I told the recruiter that I wanted to fly and I wanted a flying job. This is what I ended up getting



Master Sgt. John O'Connor operates the boom controls of a KC-135 while refueling a C-5 transport aircraft. (Photo by Sgt. Chad Swaim)

and I was very lucky," she added.

During her career, Hessler has refueled many aircraft, but her most memorable was refueling the Air Force Thunderbirds.

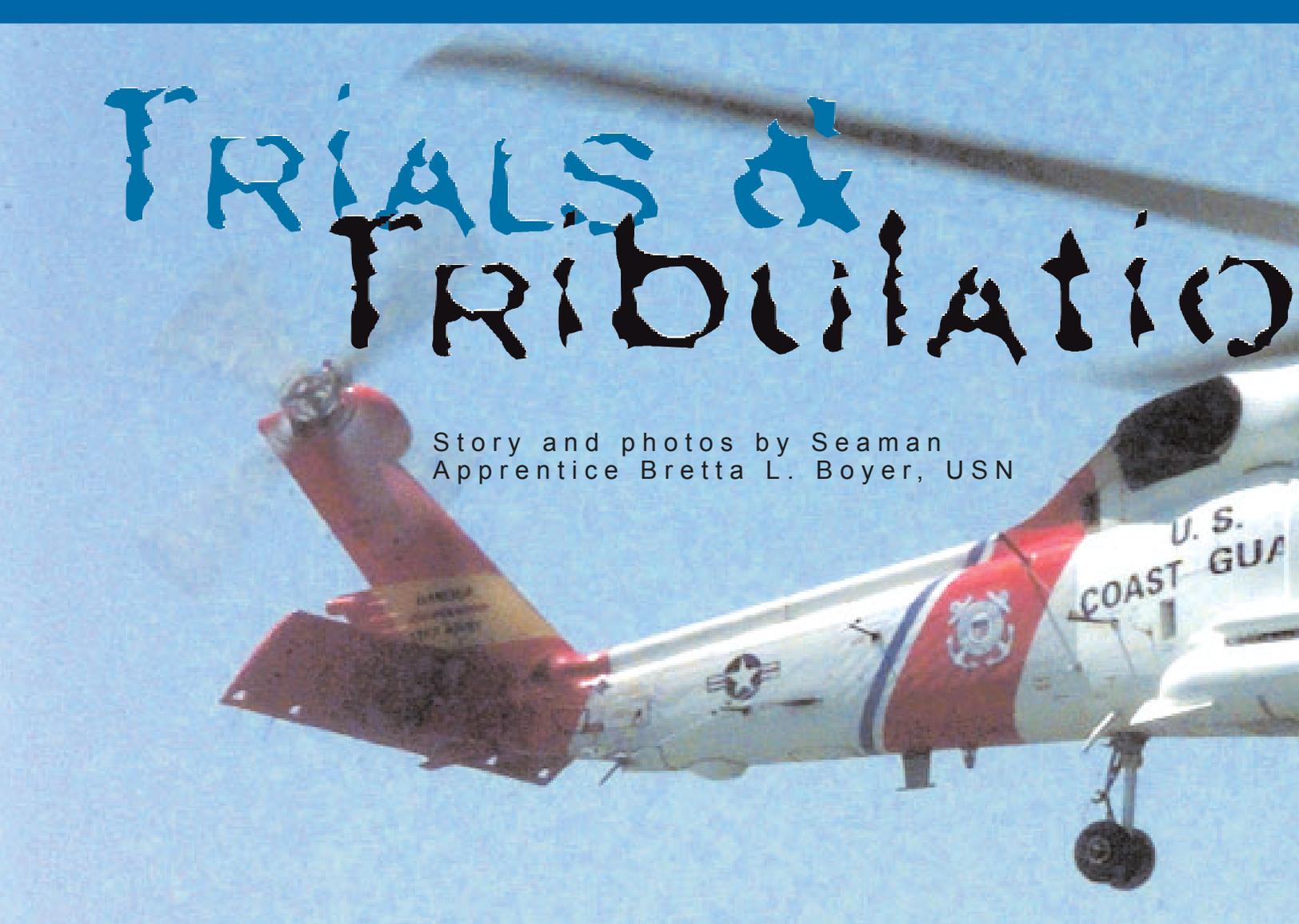
"They do some pretty fancy tricks for you and it's a lot of fun refueling them," said Hessler. "After we were all done they did their tight formation and then turned on their smokers and peeled off, so that was pretty cool. That was probably one of my favorite ones."

For more information about the United States Air Force, call 1-800-423-USAF or visit [www.airforce.com](http://www.airforce.com)



The boom from Master Sgt. O'Connor's tanker hooks up with a C-5 cargo transport plane. (Photo by Sgt Chad Swaim)

(Far Left) Staff Sgt Jaime Hessler flies her boom as if it were a small aircraft, or in her own words "like a video game." (Photo by Gwen Brewer)  
 (Left) A view of the joystick controller for the boom. (Photo by Sgt. Chad Swaim)  
 (Background photo from U.S. Air Force)



# TRIALS & Tribulation

Story and photos by Seaman  
Apprentice Bretta L. Boyer, USN

The call came at 2 p.m., July 8, 2002.

A Navy F-14 Tomcat, with two men on board, had gone down 25 miles off the shore of Virginia Beach, Va. En route to Air Station Elizabeth City, N.C., a Coast Guard helicopter rescue crew was returning from an earlier call.

Lt. Eric Bader, the pilot, responded by diverting the HH60-J, more commonly known as the J-Hawk, up the coast of the Atlantic.

"I was just hoping we could get out there quickly," said Petty Officer 3rd Class Shannon Brugh, the rescue swimmer on call that day. "When you hear about fellow service members it hits very close to home."

Twelve minutes later the crew was on scene.

Brugh, with the assistance of the flight mechanic, Petty Officer 2nd Class Jim Smith, safely retrieved the pilots out of the water. Once the pilots were safely aboard the J-Hawk the crew took them to Naval Medical Center Portsmouth where they were treated and released the same day.



NS

The crewmembers at Coast Guard Air Station Elizabeth City come to work everyday without knowing what it will bring. Heroic acts are not uncommon, but the daily routine for rescue swimmers is not quite as glamorous.

Before a Coast Guardsman can experience the ups and downs of rescue swimming they must first conquer boot camp. After completing eight weeks of basic training at Cape May, N.J., they move on to the fleet and work as undesignated seamen, performing a myriad of duties.

They will spend at least four months in

the fleet before they select their career designation and put their name on a list for a school. Aviation Survival Technician School, or A.S.T. School, only accepts eight students per class, which means a prospective airman can wait as long as a year and a half.

All enlisted aviation jobs, including aviation survival technicians (rescue swimmers), are taught at the Aviation Technical Training Center in Elizabeth City.

Four months before class, the airmen are sent to one of 27 air stations to begin working with rescue swimmers. Rescue

An aviation survival technician and a rescue swimmer are hoisted by an HH-60J helicopter from Air Station Elizabeth City during a search and rescue demonstration. (Photo by Petty Officer 2nd Class Jacquelyn Zettles)

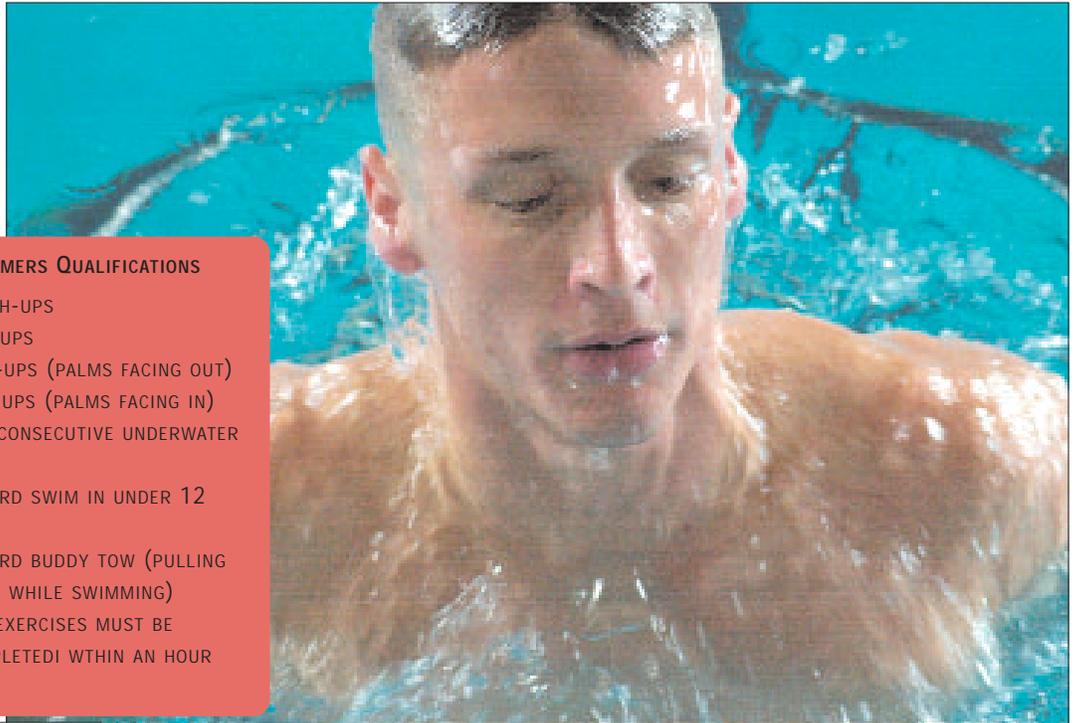
swimmers spend a lot of time training airmen to prepare them for the demands of A.S.T. School.

To meet those demands the rescue swimmers use each day to train the airmen at the pool or simply by doing sit-ups and push-ups in the office. Airmen ask, "Permission to pop tall," after doing sets of push-ups or sit-ups, so that they may resume their regular work.

On pool days the rescue swimmers push the trainees to exceed what they did before. They swim laps and tread water holding 10-pound bricks, among many other exercises.

**SWIMMERS QUALIFICATIONS**

- 50 PUSH-UPS
  - 60 SIT-UPS
  - 5 PULL-UPS (PALMS FACING OUT)
  - 5 CHIN-UPS (PALMS FACING IN)
  - 4 NON-CONSECUTIVE UNDERWATER LAPS
  - 500 YARD SWIM IN UNDER 12 MINUTES
  - 200 YARD BUDDY TOW (PULLING A PERSON WHILE SWIMMING)
- ALL EXERCISES MUST BE COMPLETED WITHIN AN HOUR



(Above) Petty Officer Third Class Shannon Brugh comes up for air after swimming an underwater lap with the Airmen. Brugh helps the airmen who come to Coast Guard Air Station Elizabeth City prepare for school.



The idea is to keep them in motion and to get their bodies conditioned for school, said Brugh.

(Left) Brugh and Airman Cody Poole demonstrate a rescue with a quick stop, a strap that wraps around the swimmer and the person being rescued. (Below) Airman Erin Banaan pulls herself up the rope climb during training at the pool. "I push myself harder because I want to look better than the guys out there," says Banaan.

Rescue swimmers change the routine each day, which allows the airmen to work different parts of their bodies for all-around training.

"We try to vary the workout, so it doesn't get boring," said Brugh.

Before they can attend school, each airmen has to be able to perform a series of exercises within an hour to test their physical capabilities as swimmers.

"You can't be a slug, you've got to be a performer," said Chief Petty Officer Brad Torrens, A.S.T. School section chief. "If you're not cutting it, you're gone."

Along with physical fitness training, the importance of knowing what is taught in the classroom is shown by the demands of the tests. Each test taken at the school is 100 percent pass or fail.

Each class goes through 17 weeks of grueling training, which are divided into three phases, each concentrating on specific aspects the students need to know as rescue swimmers.

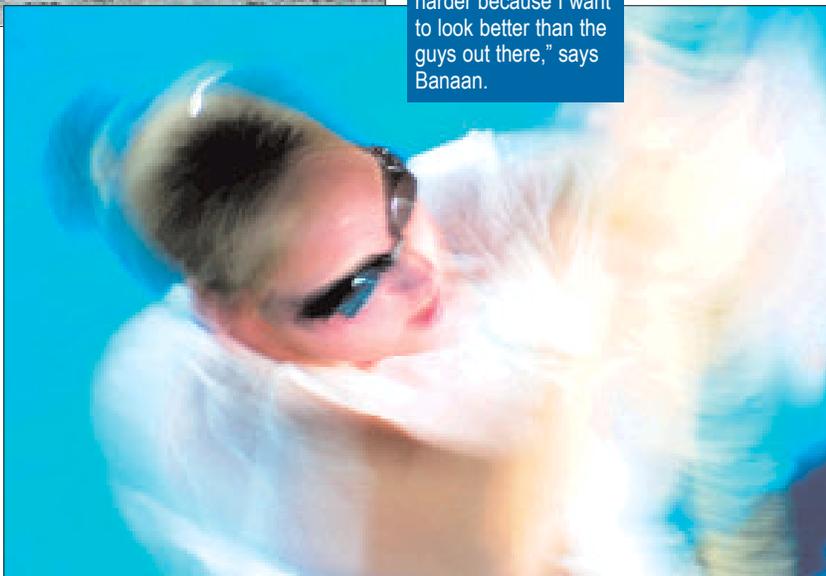
During phase one, which is four weeks, the students learn the basics of rescue equipment in the classroom and rescue approaches in the pool.

During the classroom portion of phase two the school concentrates on industrial sewing. This teaches the swimmer how to repair their equipment when necessary. During their time in the pool they learn how to properly secure people into the rescue devices.

Safety is paramount around here, said Torrens. All students are observed very closely while in school. Instructors are always watching

*'... you've got to be a performer.'*

**-Chief Petty Officer Brad Torrens**



—SEMPER PARATUS—

to make sure they are taking the proper precautions to ensure safe rescues. The importance of knowing both the rescue swimmer and the victim are safe once removed from the water until they're aboard the J-Hawk is a top priority.

Parachutes, oxygen systems and inflatables (rafts) are the final phases of instruction. The students spend seven weeks learning how to pack parachutes and handle rafts, along with other necessary skills. Instructors increase the level of intensity at the pool by presenting the students with multiple rescue situations.

"The hardest part of the school was the physical, mental and sometimes emotional stress," said Brugh. The object is to train the students to think while



(Right) Airman Jeff Lowe gives a thumbs up from the rescue basket during training. The hand signal lets the flight mechanic know that he is ready to be raised from the water. Rescue swimmers use the tower with its storm simulation to train the airmen.

An injury during or before school can have a profound effect on whether that student becomes a rescue swimmer, but ultimately, the determination of that student is the deciding factor.

A motorcycle accident in 1997 left Petty Officer Raul Aguilar with a titanium rod in his left femur. After the doctors told him he was clear to return to full duty, he went on to attend A.S.T. School as planned.

"I was dis-enrolled after eight weeks because of the rod in my leg," said Aguilar. "Last year, I was told that I could get a waiver to come back to school, so I got the waiver and put my name back on the list for school."

Aguilar has spent the last four and a half years in the Coast Guard as a hospital corpsman, and now he is able to pursue his original goal of being a rescue swimmer.

Each airman who makes it through A.S.T. School has worked hard to get there, said Torrens.

Like Aguilar, Airman Joshua Mitcheltree has wanted to be a rescue swimmer for a long time. Mitcheltree saw a special on television about the rescue swimmers, and after talking to his dad, he signed up at 17.

"I knew I wanted to be a rescue swimmer before I signed up," said Mitcheltree.

While Brugh and other swimmers like him are putting their lives



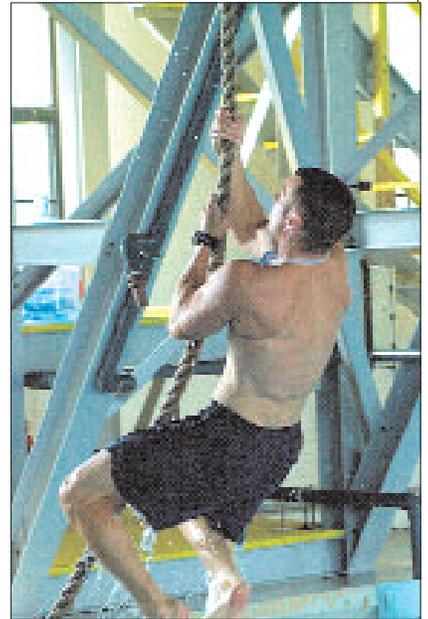
(Above) Petty Officer Third Class Joel Sayer motivates Airman Cody Poole during a training session at the pool. (Right) Petty Officer Third Class Raul Aguilar works on a sewing assignment during the second phase of training.

they're under stress, said Torrens. Due to the difficulty of the school, typically only two to four students graduate from A.S.T. School.

Airmen coming to the school know what to expect and understand they must give 110 percent to graduate. Stress, qualifications and injuries all play a part in whether a student makes it.

on the line for others, airmen are training hard to be next in line for a rescue.

It takes a lot of time and determination to get through training and school, but those who do earn the title of Aviation Survival Technician.



(Above) Sayer pulls himself out of the water and up a rope climb, one of many challenges airmen face during training.

ALWAYS READY

For more information about the United States Coast Guard, contact 1-800-NOW-USCG or visit [www.goastguard.com](http://www.goastguard.com)

# AROUND THE SERVICES



(Below) More than 500 sailors and Marines assemble on the flight deck of the USS Belleau Wood to commemorate the one-year anniversary of the September 11 terrorist attacks on the United States by spelling out the now famous quote from Mr. Todd Beamer, "Let's Roll." (Photo by Chief Petty Officer Steven L. Cooke)

(Above) An Amphibious Assault Vehicle attached to the 31st Marine Expeditionary Unit is launched from the well deck of the USS Juneau and makes its way to the beach during Blue-Green Workups. This semi-annual joint exercise between Navy amphibious ships and the 31st MEU help blend the Navy/Marine Corps team into one cohesive force for conducting amphibious operations in support of a wide range of contingencies. (Photo by Seaman J.J. Hewitt)



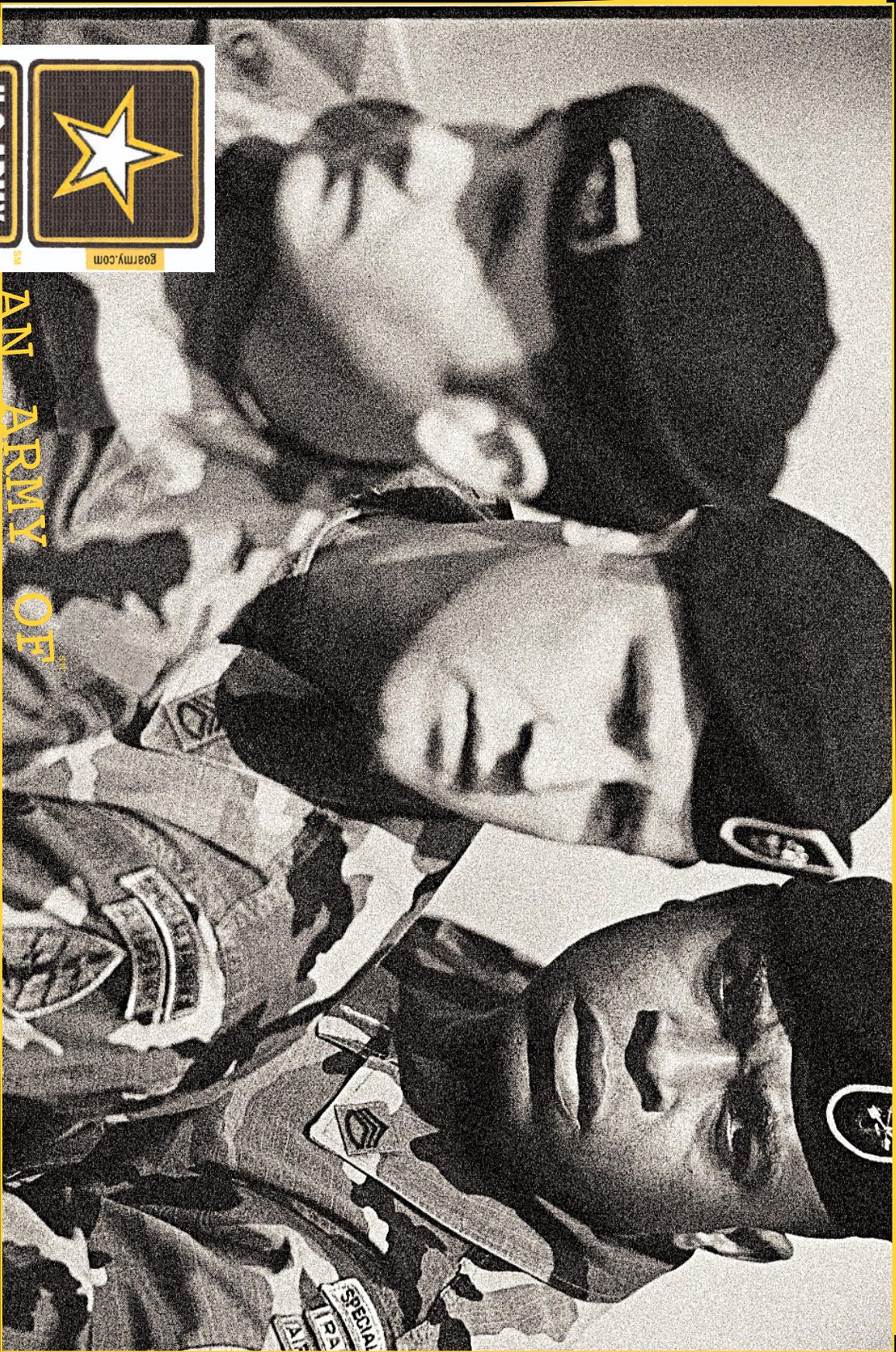


(Above) Soldiers of the 1st Battalion, 319th Airborne Field Artillery Regiment out of Fort Bragg, N.C., calibrate their howitzer artillery piece and wait for instructions to fire. These soldiers were taking part in the first artillery range exercise in Kandahar, Afghanistan. Artillerymen must qualify every six months in order to operate and fire the howitzer. (Photo by Sgt. Sean A. Terry)



(Right) Two members of the 52nd Fighter Wing, Spangdahlem, Germany, honor guard fold the American flag during the Sept. 11 Remembrance Ceremony. Base members and local German community leaders honored those who lost their lives during the attacks on the United States a year ago. (Photo by Staff Sgt. Kimberly Drake)

I AM A SPECIAL FORCES SOLDIER—THE BEST OF THE BEST. THIS IS MY TEAM. MY SPECIALTY IS WEAPONS. THE OTHER GUYS ARE EXPERTS IN MEDICINE, ENGINEERING AND COMMUNICATIONS.



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