Tandem Notes

Volume 9, Issue 2

– Phrog Phoru<mark>m</mark> -

Second Quarter, 2002

'Night Stalkers,' Chinooks don't quit

he highest praise an aircraft can receive often comes from the men and women who operate it each day.

"The Boeing Chinook is the best military helicopter in the world and gives us the capability we need, but as good as it is, the courage, professionalism and skill of our pilots and air crewmen achieved victory."

With those words, the commander of the 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne), introduced several Army aviators and crewmen who recently returned to their homes at Fort Campbell, Kentucky, after completing six months of combat in Afghanistan.

The soldiers met with national news and aerospace magazine reporters to discuss recently completed missions in the first-ever public briefing by one of the Army's most heroic—and most secret—units.

The men and women of the 160th, the "Night Stalkers," have compiled a remarkable record in just two decades of service. Created after the failed attempt to rescue

Americans held hostage in Iran in the late 1970s, the Night Stalkers' mission is to handle any assignment involving rotorcraft—which means just about everything—anywhere in the world, any time, at a moment's notice. To meet these demanding requirements, the unit has developed unique capabilities and flies specially configured helicopters, including the 2nd Battalion's MH-47E Special Operations Chinooks. Since its inception, the unit has handled vital missions in every major U.S. combat action—and many others that will never be publicized.

During the meeting with reporters, veteran aviators and air crewmen, who remain anonymous for security reasons, discussed their harrowing missions in Afghanistan. All of them agreed that among all U.S. and allied military helicopters, only the Chinook could fly over Afghanistan's high mountains and rugged terrain with the full loads of troops and equipment needed for combat assaults.

— 160th SOAR continued, Page 3



An MH-47E Special Operations Chinook from 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne) darts across a practice range at Fort Campbell, Ky., during a media demonstration.

Dear Chinook and Sea Knight User

he House of Representatives recently recommended in its fiscal year 2003 Defense Appropriations Bill an upgrade of the entire U.S. Army's CH-47D helicopter fleet to the new and improved F-model configuration.

Under its current plan, the Army will convert 300 of its 431 D-model helicopters to the improved F-model standard, while the remaining aircraft undergo a "D to D" recapitalization program that also will improve the engines, but not provide many of the other upgrades. In addition to more powerful engines, the F-model will feature a digital cockpit, reduced vibration and improved avionics. Upgrading the *entire* fleet to the same configuration will help promote interoperability, enhance operational performance and improve fleet readiness rates.

As we embrace the latest and greatest in a long line of Chinook programs, we also begin saying goodbye to the UH-46D Sea Knight, which is being phased out of service by the U.S. Navy. The Sea Knight, or "Phrog," has been the workhorse of the Navy for nearly 40 years, and it certainly will be remembered for its legendary logistic support.

We're always looking for customer-related news, "tales from the field" and photographs, so please submit them to: Jack Satterfield, Boeing Philadelphia, P.O. Box 16858, M/S P30-18, Philadelphia, PA 19142-0858. Ph: (610) 591-8399; Fax: (610) 591-2701, e-mail: john.r.satterfield@boeing.com; or Doug Holmes (same mailing address and FAX number), Ph: (610) 591-4901, e-mail: william.d.holmes@boeing.com. Keep the stories coming and God Bless America!

John Gilbride
Director, Aerospace Support
Boeing Philadelphia



"Mr. Potato Head," the latest addition to the U.S. Army Reserve's fleet of CH-47D helicopters, is its first new build Chinook and the last D-model the Army will receive.

USAR Chinook 'no small potatoes'

ifty years after Hasbro, Inc., invented "Mr. Potato Head," The Boeing Company in Philadelphia has delivered its own version of the popular tuber toy.

During a brief ceremony, the U.S Army Reserve (USAR) took delivery of its first ever newly manufactured CH-47D Chinook. The aircraft, affectionately called "Mr. Potato Head" for the unique process used to assemble it, also is the last CH-47D the Army

will receive, capping a delivery history that began two decades ago.

"As we close this chapter in the Chinook's production history, we open another equally impressive one," said Pat Shanahan, Boeing vice president/general manager, U.S. Army Programs.

"We soon will begin modernizing more than 300 CH-47Ds to even more capable CH-47Fs

and MH-47G Special Operations Chinooks for the Army, Army Reserve, National Guard and Special Operations Forces. The modernization program will extend the Chinook's service life another 30 years."

In an effort to reduce costs, the helicopter—manufactured under a USAR attrition procurement contract—is built mostly with government-furnished equipment, overhauled systems and spare parts from vari-

ous Army warehouses.

Because of its distinctive assembly process, an Army official dubbed it "Mr. Potato Head" in reference to the plastic toy's snapon features.

To commemorate the delivery, the Army asked Hasbro, Inc.—makers of GI Joe action figures—to create a logo for the aircraft.

The finished product, which features the lovable spud sporting a flight helmet, goggles, Army aviation wings,

scarf and combat boots, has become the official logo of the new Chinook.

"It's a privilege to accept the keys to this aircraft," said Maj. Gen. Craig Bambrough, deputy commanding general, U.S. Army Reserve Command, who accepted the aircraft on behalf of the customer. "Chinooks always show up;

always deliver. This aircraft is going to increase the fleet's readiness and its ability to support our local communities. We needed this aircraft."

The aircraft—tail number 98-2000—is scheduled to fly to the Army Reserve's Company A, 6/150th Aviation Regiment, based at Ft. Hood, Texas, where it will be used in a variety of logistic support missions. The U.S. Army Reserve operates more than 70 CH-47D Chinooks.

News and Notes

Columbia Helicopters has high-time helo

Boeing-Vertol 107-II, owned and operated by Columbia Helicopters, Inc., recently surpassed 57,250 flight hours—40 years after the aircraft rolled off a Boeing Philadelphia assembly line. The aircraft, which has flown 11 times longer than the recommended service life of a U.S. Army Chinook, is believed to be the world's "highest time" helicopter.

"This achievement is a result of Boeing craftsmanship and Columbia's dedicated and well-trained mechanics," says John Gilbride, director, Boeing Philadelphia Aerospace Support. "With continued maintenance, this aircraft will be in service for many more years."

The Oregon-based company, which operates 14 107-IIs, uses the aircraft for construction projects, logging operations, petroleum exploration and fire fighting.

U.S. Army accepts first F-model Chinook

he U.S. Army recently took delivery of its first CH-47F Chinook helicopter. The aircraft—an Engineering and Manufacturing Development prototype—was on display, May 12-15, at the 2002 Army Aviation Association of America (AAAA) Convention in Nashville, Tenn.

After the convention, the aircraft flew to Ft. Rucker, Ala., where it will be used for operational data collection. The U.S. Army plans to upgrade at least 300 of its 432 CH-47Ds to the F-model configuration, which will extend the Chinook's service life until at least 2033. With reduced vibration, improved avionics and more powerful engines, the CH-47F is expected to have greatly improved operational performance.

The delivery follows a decision by Undersecretary of Defense for Acquisition, Technology and Logistics Pete Aldridge to recertify the CH-47F program despite cost increases in its production phase that exceed thresholds of the Nunn-McCurdy law. The law requires the defense secretary to certify the health and necessity of programs that are 25 percent over budget. More than 300 U.S. Army Chinooks will be upgraded to the F-model configuration.

160th SOAR cont. from Page1

The MH-47Es, with long-range fuel tanks, an aerial refueling probe, multi-mode radar and forward-looking infrared (FLIR) sensors, provide the extra edge for these missions, flying nearly 150 miles per hour just a few feet off the ground at night and in bad weather.

In the first six months of the war against terrorism, Night Stalker Chinooks flew more than 200 combat missions involving about 2,000 flight hours.

Missions, flown as high as 16,000 feet (forcing crews to use oxygen systems), lasted up to 15 hours. More than 70 of these missions, flown in the war's first three months, involved infiltration or removal of special operations troops behind enemy lines, and the Chinooks maintained a 99 percent mission readiness rate.

One of these missions, during "Operation Anaconda" in northeast Afghanistan, proved the MH-47Es' combat mettle. Taliban and Al Qaeda forces zeroed in with machine guns and rocket-propelled grenades on Night Stalker Chinooks as they landed troops during the battle.

One Chinook took off and flew out of the trap to safety with wounded crew and badly damaged electrical and hydraulic systems. Unfortunately, enemy gunfire killed Navy SEAL Petty Officer Neil Roberts, who fell from the aircraft during its escape.

Attacks also damaged a second Chinook as it unloaded troops sent to rescue Roberts and brought down a third as it landed reinforcements, five of whom were killed in action. Both pilots and one gunner in the third aircraft were wounded, and the second gunner, Sgt. Philip J. Svitak, of Fremont, Nebraska, lost his life.

Later, Chinooks returned to pick up the American troops, who destroyed the enemy stronghold. Despite severe combat damage, all but one of the Chinooks involved are expected to return to flight.

As the discussion ended, a Night Stalker pilot summed up his colleagues' feelings about their MH-47Es, "We couldn't have done it without the Chinooks."

Later, the reporters learned first-hand about MH-47E capability during a demonstration flight that featured 150-mph maneuvers through Fort Campbell's woodlands—below treetop level.

For the 2nd Battalion, Boeing Chinooks clearly help to underscore the regimental motto, "Night Stalkers Don't Quit!"



A CH-46E Sea Knight approaches the island of Iwo Jima en route to its designated training mission.

From the Field: Phrogs conduct training ops

Story and photo courtesy 1st Lt. Andrew Kirkpatrick

everal CH-46 Sea Knights, or "Phrogs," of the Marine Medium Transport Helicopter Squadron 262 (HMM-262), the air element of the 31st Marine Expeditionary Unit (MEU), recently participated in several overseas training activities.

The squadron, also known as the "Flying Tigers," flew to the island of Iwo Jima, where it participated in the 57th anniversary of the taking of the island by Marines in World War II. Afterwards, they flew to Korea for "Operation Foal Eagle," a training exercise for the Republic of Korea Marines, and to Okinawa to earn their Special Operations Capable status.

From the Field: Chinook hoists helo from Mt. Hood

CH-47D Chinook from the Oregon Army National Guard, 168th Aviation Unit recently recovered a wrecked Air Force Reserve Pave Hawk HH-60G helicopter from snowy Mount Hood in Oregon, a week after it crashed during an unsuccessful rescue mission.

Within minutes, the The Chinook flew smoothly at a speed of close to 50 or 60 knots down the steep mountainside with the badly damaged fuselage attached by a 200-feet cable to a parking lot several thousand feet below the crash site. The Chinook later returned to pick up other debris, including rotor blade pieces that sheared off when the chopper crashed.

The Pave Hawk's weight after the crash was close to 17,000 pounds, well within the lifting capacity of a standard Chinook, which can slingload up to 25,000 pounds.

At one point, it was unclear how investigators would lift the Pave Hawk fuselage from the crash site. A Chinook soon became the final solution.





Helos honor Frank Piasecki, tandem rotor pioneer

historic aviation/rotorcraft event recently took place at the Hiller Aviation Museum Vertical Challenge in San Carlos, Calif., when four generations of tandem rotor helicopters (Piasecki, Vertol, Boeing Vertol and Boeing Helicopters) together took to the skies for the first time ever.

The event—a special tribute to Frank N. Piasecki, the father of the tandem rotor—capped off a year-long effort to complete the first-ever hover and flight.

The milestone began when Joe Pike lifted the completely restored, only flying HUP-1 to a hover. Classic Rotors (The Rare and Vintage Rotorcraft Museum) then thundered skyward in the only flying H-21B. Next, a Navy CH-46 Sea Knight from Naval Air Station North Island San Diego climbed into the sky, followed by the assent of a U.S. Army CH-47 Chinook from the Stockton, Calif., Air National Guard.



Four generations of tandem rotor helicopters conduct the first-ever simultaneous hover. Afterwards, the aircraft flew a brief traffic pattern. Photo by Scott Highton, The Smithsonian.

From the Field: 'Mustangs' deliver in 'Tradewinds' support exercise

Story and photo courtesy Capt. Kris J. Kirkland

s one of my last great challenges before changing command, I wanted to conduct a mission more demanding than even the Iceland deployment two years ago. The unit-Detachment 1, Company G, 140th Aviation Nevada Army National Guard, Reno-had been scheduled for a SOUTHCOM mission, but as it approached, the likelihood of supporting the exercise greatly diminished. Fortunately, our supporting battalion discovered the "Tradewinds" exercise, a month-long multinational interoperability support mission for the Caribbean Community nations. Sponsored by the U.S. Army, the mission is designed to train the local nations to react to disasters and local insurgency.

We opted to self-deploy since we had already conducted a C-5 move. We began preparations during the summer of 2001, including fuel stop coordination, country clearances, over water survival/rescue training and more. Originally, the plan called for four aircraft, but this became unrealistic after the events of Sept. 11. Our unit supported the 2002 Winter Olympic Games in Utah, so as a result, we deployed only three aircraft and approximately 62 soldiers. Equipment and personnel logistics remained a concern throughout the planning stages since the

number of each had to be limited in the event of a catastrophic failure. The exercise consisted of five phases: 1) Planning and Preparation, 2) Deployment, 3) Exercise Execution, 4) Re-deployment and 5) Recovery.

All three aircraft departed Reno, Nev., en route to the Caribbean. On the first day, one of the aircraft experienced low oil pressure indication on both engine transmissions, but it proved to be a minor problem. The course took us through central Nevada, over Las Vegas, across Hoover Dam and the Arizona desert. There were some minor delays that put us behind schedule so we spent the second night in Beaumont, Texas.

The next day took us across the Gulf Coast states and the Gulf of Mexico. The over water portion took us across the Bimini Islands, down the Turks and Caicos to Provodentiale Island for fuel then on to Puerto Rico and the Dominican Republic. Our final day was a two-hour flight to Antigua, where we prepared for the exercise. Each aircraft flew approximately 28 hours without a single problem and arrived one day early.

As we began preparations for the exercise, we were thrown into the fire. The Blackhawks from Honduras were delayed in Grenada, so we had to pick up MEDEVAC standby as well as the initial troop insertions and re-supply efforts. Over the next 18 days, we conducted innumerable missions, troop hauls, external load missions, re-supply,

photo recon and more. The exercise site was approximately 100 square miles that involved three separate islands, including Antigua, Barbuda and St. Kitts. Approximately 150 to 200 Caribbean and U.S. soldiers, along with equipment and supplies, were flown to each island for their modular training exercises. The sand began to take its toll, so we coordinated with the local airport fire department to give our "birds" a good wash down. Maintenance did a great job, and the aircraft continued to fly without any major problems.

The second personnel rotation arrived to complete the mission and bring the ships home. We successfully completed the mission, flew more than 75 hours and maintained a 100 percent operational readiness rate during the entire exercise.

The success of the "Tradewinds" exercise is attributable to everyone in the unit, especially the maintenance personnel, who kept the aircraft flying over a period of 27 days without a major problem or delay. We flew 250 accident-free flight hours in 27 days, carried approximately 80,000 pounds of external loads, 30,000 pounds of internal loads and 2,500 passengers without one down day.

As I go on to my next assignment, this and every experience I have had with this group of CH-47 maintainers, flyers and support personnel has been one of the most rewarding of my career. If you need it done, the MUSTANGS are the one!