



Chinook News



**Welcome to
Chinook News**
Jack Dougherty
Director, Chinook Programs

Welcome to the inaugural issue of the Chinook News. This is an exciting time for all of us at Boeing, for the suppliers we work with and for our customers

around the world. We have launched this new publication to keep you informed of activities — from production in Philadelphia to the global use of the Chinook.

Performance in every aspect of the CH/MH-47 programs is extraordinary. Lean manufacturing tools and processes are producing cost and schedule savings and improving quality, and we are building a closer, more open working relationship with our suppliers. Suppliers now visit the facility to observe the manufacturing operation, giving them a better perspective on our operation. This access fosters a better understanding of our production requirements. We see this as a way to improve suppliers' part and component delivery performance, which enhances our ability to build and maintain an efficient production operation.

Today, the Chinook is a reliable, affordable, high-performance rotorcraft with advanced technological features that improve its functionality and mission capability. It is more powerful and easier to service, has greater range and is more cost efficient to operate and uses advanced technology and has the capacity to integrate future systems.

The Chinook is combat proven aircraft, and its role is expanding. Domestic and international customers are demonstrating the versatility of the Chinook beyond defense service. Today, the Chinook is deployed in high-altitude, limited-visibility operations and in heavy-lift functions and long-haul logistics support roles. Customers use this rotorcraft in civil support functions and for search and rescue missions. Most recently, Chinooks were deployed in humanitarian service for victims of hurricanes and earthquakes and in tsunami relief efforts. Resourceful crews are discovering inventive ways to use the Chinook's versatility.

We invite you to share stories and pictures with us and our readers — to convey your knowledge and success — and quite possibly, assist in providing a solution to others.

Forthcoming issues will cover Chinook programs and focus on new activities, milestones and achievements such as the successful critical design review of our new-build CH-47F. We will tell you about advancements, new programs and technology — and of course — application stories.



Capability for the war on terror

The nation's call -to -arms and The Global War on Terrorism (GWOT) began with a combat air assault mission that only one helicopter platform in all of DOD could execute. Launching from an undisclosed location more than six hours flying time from the objective, Special Operations MH-47E Chinooks of the 160th Special Operations Aviation Regiment (Airborne) (SOAR-A) were the first U.S. helicopters to touch down on Afghan soil to deliver their special operations "customers" for a rendezvous with the Afghan Northern Alliance. En route, the Night Stalker pilots negotiated the rugged mountain terrain at 100 feet above the ground in zero visibility, flying under instrument flight conditions (Instrument Meteorological Conditions) with the aid of terrain following radar to negotiate obscured mountain passes and conducting three aerial refueling operations to arrive within 30 seconds of the designated time-on-target. Chinooks were there in the beginning of the war, they were there through the heaviest fighting in Afghanistan and they are there today with the only U.S. Army unit continuously deployed since 9/11.

En route the Night Stalker pilots negotiated the rugged mountain terrain at 100 feet above the ground in zero visibility

47D/E Service Life Extension Program (SLEP) with 14 more due in 2005.

The MH-47G is manufactured in two distinct phases beginning with induction to the SLEP line at the Boeing Philadelphia plant and culminating in a series of special operations configuration modifications applied at the Special Operations Forces Support Activity, Bluegrass Army Depot, KY. The MH-47G is the first operational Army helicopter with

the special operations-developed Common Avionics Architecture Suite (CAAS) and will be the first such configured aircraft to fly in combat. The MH-47G incorporates numerous features to improve

mission capabilities and enhance situational awareness and survivability.

The MH-47G includes many features derived directly from combat experience in GWOT such as the addition of a left aft gunner's window and the expansion of the left forward gunner's window to enhance the physical defense capabilities of the helicopter.

The Chinook team has been tremendously successful in building a critical SOA capability while keeping a wary eye on the bottom line, and we're closing fast on the Secretary of Defense target of 61 MH-47s in the field by summer of 2006.

Since that extraordinary first mission, the continuous employment and dramatically increased mission task load on the Army Special Operations Aviation MH-47 fleet have necessitated a complete restructuring of MH-47 development and acquisition plans. As a result of the new realities of a worldwide war against terrorists, the Secretary of Defense in 2002 directed that the Army increase its Chinook fleet by 24 MH-47s by the summer of 2006. To support the requirements for systems development, integration, contracting, testing and production, the Technology Applications Program Office (TAPO), a component of United States Special Operations Command (USSOCOM), has teamed with the CH-47F program manager, Boeing Helicopters and L3 Communications to produce the MH-47G.

To date "Boeing Philadelphia has delivered 11 MH-47Gs – model aircraft through the MH-

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Welcome to AAAA 2005



From Colonel William T. Crosby
US Army Project Manager for
Cargo Helicopters

I would like to extend a hearty welcome to everyone attending the 2005 Army Aviation Association of America's Annual

Convention at Disney's Coronado Springs Resort in Orlando, Florida.

This year the Convention's theme is "Transforming to Meet Warfighter Needs." The Office of the Project Manager for Cargo Helicopters, in partnership with Boeing-Integrated Defense Systems and our other Team Chinook members, is certainly making significant strides in transformation.

Today, we are integrating new technologies into the CH-47D fleet and making significant advances in the CH-47F upgrade program to meet the needs of the Warfighter. Over the past two years, we have devised better business practices (including out sourcing initiatives, advanced material development and improved manufacturing processes) to help drive down the procurement costs and improve overall weapon system capabilities. We are also the first Project Management Office to integrate all life cycle management elements under one roof through our Soldier- Focused Logistics (SFL) initiative. SFL implementation has paved the way for the new Life Cycle Management Command philosophy and provides one face to our Warfighters and Industry.

Full rate production for the new CH-47F begins this year. We will begin fielding the CH-47F in first quarter FY 07 with a First Unit Equipped completion date of May 2007. Fielding the rest of the Chinook units will quickly follow, culminating in a single configuration for the entire fleet. These units will not only benefit from new aircraft, but will also take advantage of an improved maintenance management system, the Cargo Platform Maintenance Environment and other logistics enhancements being developed and fielded to the current CH-47D fleet.

In the midst of transformation, Team Chinook stands ready to field and support the next generation of cargo helicopter products and processes, and we remain focused on providing our war fighters with the world's best heavy- lift helicopter — the CH-47 Chinook. I hope you have a safe and enjoyable time at the conference, and I look forward to seeing you there.

Tsunami Relief by Tom Marinucci

By any standard, the destruction caused by the December 2004 tsunami was catastrophic. As estimates of damage and lives lost grew, a military mobilization was mounting worldwide. It was clear that the military would be the primary resource to meet the challenges of a rescue and recovery effort of this magnitude.

Reconnaissance missions uncovered the scope of the damage, which extended to the remote interiors of countries. Inhabitants were stranded when roads were removed from the landscape or were blocked or damaged beyond use. People were without shelter, food or water. Medical needs ranged from caring for the injured to attending to the dead. Supply and material transport was a pivotal task. Among the many assets at the military's disposal were the capacity and capability of the CH-47 Chinook to transport material, medical supplies and equipment. The Chinook's triple-hook system would prove invaluable, stabilizing large external loads and managing multiple loads delivered to two or three destinations in one sortie.

The multinational effort included support from the United States, Japan, New Zealand, France, Germany, China, Australia, Malaysia, India, South Korea, Pakistan, Singapore and the United Kingdom. These countries contributed medical teams, field hospitals, engineers, fixed-wing aircraft and Chinook helicopters, among other critical assets. The Royal Thailand Army immediately dispatched three Chinooks and began transporting the injured.

The Japanese assembled the largest overseas military deployment since World War II, with member components operating from ships off Sumatra. Japan's Maritime Self-Defense Force flew three CH-47s off the deck of its largest transport ship, the 8,900-ton Kunisaki. Supported by nearly 1,000 personnel, the Japanese armada organized a continuous flow of materials and supplies to remote areas. Chinook flights were continuous. Beyond the essentials of water and food, Japan delivered scores of tents and other logistic materials, including trucks used in medical support operations. Japanese troops based on a ship off Sumatra's hard-hit western coast ferried food inland, treated the sick and sprayed insecticide to kill malaria-carrying mosquitoes. In one area, their Chinook flew along the coast, dropping sacks of rice and biscuits to survivors. Later, the same helicopter transported people, bringing teachers to the devastated coastal town of Meulaboh and returning to Banda Aceh with scores of exhausted troops assigned to mortuary service.

Singapore, the country closest to the disaster, sent troops and aid to hard-to-reach regions such as Meulaboh a week after the disaster struck. Among the assets dispatched immediately were eight Chinooks, three helicopter landing ships and a mobile air traffic control tower, along with 1,000 troops to Banda Aceh and Meulaboh.



▲ From the tail of an SAF Chinook, an aerial view of devastation in Phuket. The view was unchanged over thousands of miles.



◀ A Chinook lands on the flight deck of the USS Persistence. It ferried personnel and supplies and evacuated casualties.

Photographs by the Ministry of Defence, Singapore.

Two of the Chinooks were deployed to Thailand to assist in relief efforts.

Six Chinooks transported personnel and provisions such as food and clothing to the people and evacuated casualties — sorties were virtually nonstop. SAF helicopter landing ships anchored off the waters of Meulaboh functioned as platforms where Chinooks could land and refuel. Airspace was at a premium, and the mobile control tower directed safe travel for the air-lift operation. Chinooks were reaching areas that were otherwise isolated by the devastation. In addition to food, water and shelter, equipment was transported to clear debris from roadways. By mid-February, 24,504,651 pounds of supplies were delivered to the region. The cumulative tally of flights and hours show that Reconnaissance Assessment flew 67 missions, totaling 567 hours; fixed-wing aircraft flew 1,338 missions, totaling 4,635 hours; and helicopters flew 2,222 missions, totaling 4,876 hours.

The story of the worldwide relief efforts in response to this tragedy will continue to be told and no doubt studied, knowing that such devastation could happen again. Assets from all branches of the military and civil organizations deserve praise for their response to one of nature's greatest disasters. Members of a multinational force stepped to the forefront when duty called.

Egyptian air force Chinook upgrade nears completion

by Richard Meanor



▲ On display at the Dubai Air Show in December 2003, the Egyptian air force CH-47D displayed a variety of upgrades. Outfitted with two internal auxiliary fuel tanks, the aircraft flew from Kom Awshem, Egypt, to Dubai, United Arab Emirates, via Riyadh, Saudi Arabia.

The Egyptian air force (EAF) continues to build for the future by modernizing its Chinook fleet. The EAF originally purchased 15 CH-47C helicopters in the 1980s and is conducting a phased modernization of these aircraft to U.S. Army CH-47D standards. Twelve of these aircraft have been upgraded and another three are being remanufactured at the Boeing facility in Ridley Park, Pa., with deliveries beginning in July 2006. In addition, the EAF took delivery of four new International CH-47Ds from Boeing in 1999.

With 19 aircraft, the EAF operates the largest Chinook fleet in the Middle East. The 18 Squadron, which is based at Kom Awshem, Egypt, has more than 10 years' experience operating these aircraft in demanding environmental conditions such as excessive heat and dust. The aircraft are used for a variety of missions, including troop transport, internal and external cargo lift and support of other Egyptian military forces. Its modernization program demonstrates the commitment of the EAF to fielding and maintaining a service-ready force.

Historical helo flight milestone recognized

by Doug Holmes

Sixty years ago March 7, 1945, the XHRP-X "Dogship" helicopter conducted its first flight, ushering in a new era of military transport helicopter production. Developed at the P-V Engineering Forum by rotorcraft pioneers Frank Piasecki and Harold Venzi, the aircraft was the first American helicopter to feature the counterrotating tandem-rotor configuration used today on Boeing CH-47 Chinooks and CH-46 Sea Knights. The experimental helicopter led to the development of the HRP-1 and HRP-2, both of which saw extensive action in the U.S. Navy and U.S. Coast Guard. This early success launched the Piasecki Helicopter Corporation, later renamed the Vertol Aircraft Corporation, which Boeing acquired in 1960



▲ Piloted by rotorcraft pioneer Frank Piasecki, the XHRP-X takes to the skies for the first time on March 7, 1945 in suburban Philadelphia. During the flight, the aircraft flew without its fabric covering, prompting onlookers to affectionately call it a "Dogship," a name still used today to describe the revolutionary helicopter.

A special holiday delivery for the Vatican

by Col Erminio Pierangelini, Commander of 1st Regional Antares

Low on fuel, but high on spirit, the Antares Unit (Italian Army Aviation 1 Regiment) successfully completed a holiday mission in 2004 that will remain in their hearts forever. The mission OAI office assigned the crew of the CH-47C (number 831) was to extract from a remote wooded area in northern Italy an enormous evergreen. It was to be the Christmas tree that would adorn St. Peter's Square in Rome.

Based on reconnaissance photographs, the crew estimated the tree to be 32 meters high and to weigh 7,000 kilograms. It was near Pinzolo, Italy, more than 360 miles north of Rome. An aerial extraction was the only way to move the tree to a location where it could safely be placed on a truck for transport into Rome.

Military precision was necessary to complete the operation. Two teams were formed, one of pilots and the other of rigging specialists, to plan and execute the move. For several days they examined photographs, faxes, maps and graphs of the area. They determined that cargo weight was the major consideration to safely extract the tree from the surrounding woodland. The crew considered every detail necessary to safely secure, lift, transport and deliver the tree. They then reviewed the weather conditions and prepared the rigging.

After days of preparation, the extraction was set for 26 Nov. Under normal conditions, the team was accustomed to completing missions with 2,000 pounds of fuel remaining, but this operation began with only 1,700 pounds. This fuel load was based on an estimation of the weight of the tree and the lift needed to extract it.

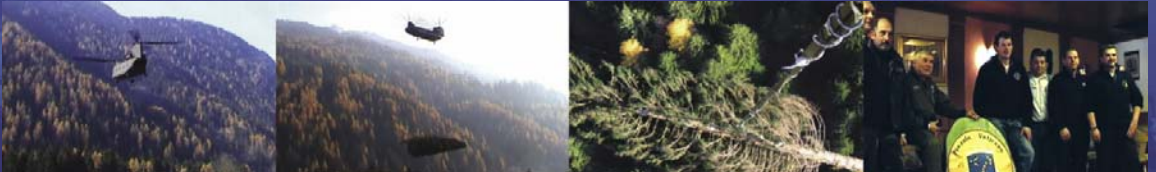
Although any mission can contend with equipment problems, this mission was special, and the crew's commitment would drive them to overcome any obstacle. Midday on 26 Nov., the Chinook lifted off. Reaching the site, the descent was slow and precise; the rotors were within three meters of the surrounding treetops. First Pilot Capitan Zefferino Di Prospero was guiding the Chinook into position over the tree when a crew member announced that the pulley did not work!

Determined to achieve their objective, the three-man crew began to move the 70-kilogram, 100-foot-long cord by hand. For nearly 20 minutes, while the pilot worked to maintain position, the crewmen struggled to rig the tree. Finally, the pilot received word from the crew: "Go, it's all yours." Torsion increased from 85 percent to 91 percent, and the tree began to rise from the forest. The cord was longer than any the crew had used before, but working together they

lifted the tree, and the Chinook moved forward with its cargo barely above the treetops.

Two trestles had been erected in the landing zone to cradle the enormous evergreen horizontally and enable a ground crew to load it onto a truck. As Prospero began his descent, the massive tree swung radically in the wind. For more than 20 minutes the ground crew fought to position the tree as the Chinook hovered. In the cockpit, a warning light indicated low fuel. Working together, the men in the air and the crew on the ground finally secured the tree on its cradle — the CH-47C Chinook had 700 pounds of fuel remaining.

The actual height of the tree was 35 meters, and it weighed nearly 8,700 kilograms. The crew embraced each other for their accomplishment. Mission complete — the Christmas tree was on its way to St. Peter's Square.



A coordinated team effort made the Antares mission successful. Planning and execution was accomplished with the dedication of many people including the following: 1st Pilot Capitan Zefferino Di Prospero, 1st Maresciallo Eugenio Coletta, Maresciallo Claudio "Stellina" Celestini, Maresciallo Paolo Rinaldi, and Majors Gianfranco Mecozzi and Giancarlo Martinengo, LTC. Roberto Coruso and Luigi Fiordalisi

The ground team responsible for rigging the tree included 1st Marshal Luciano Vincentini, 1st Marshal Giovanni Cionfi, 1st Maresciallo Casimo D'Attis and 1st Maresciallo Massimiliano Franchi. Coordinating by radio was performed by Ten. Col. Michele Tanzarella, head of the OAI office. Col Erminio Pierangelini, Commander of 1st Regional Antares. In addition, Adjutant Paolo Minoli and Adjutant Eugenio Coletta also participated in the mission.

160TH's Darkhorse Battalion celebrates 15th anniversary

Executive Summary

By: Capt Mark G. Kappelmann Commander Headquarters and Headquarters Company, 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne)

On May 16, 162005, 2nd Battalion, 160th Special Operations Aviation Regiment (Airborne) will celebrate the 15th anniversary of its activation. For the past 15 years, 2nd Battalion -- the Darkhorse Battalion -- has been the U.S. Army's only special operations aviation heavy assault helicopter battalion. In 1980, Company A, 159th Assault Support Helicopter Battalion became the dedicated CH-47C Chinook unit for special operations missions, as a member of Task Force 158. Army leadership determined that TF 158 was required to be a standing unit to meet future contingencies and it was redesignated Task Force 160.

Due to the increasing number of requirements and the growth of the 160th, the Army reorganized its special operations aviation unit and the Chinook unit became 2nd Bn, 160th SOAR on May 16, 1990. The battalion cut its teeth during operations Desert Shield, Desert Storm, Uphold Democracy, and Desert Thunder through its first decade in service to the nation.

1995 was a year that changed the face of the battalion with the fielding of the MH-47E. Since being fielded with the E Model, the battalion has logged in excess of 65,000 flight hours on that airframe. The MH-47E remains unmatched in performance, mission flexibility, and range; a distinction that still holds to this day.

The Darkhorse Battalion was one of the first units to react to the attacks of Sept. 11, 2001, the formidable terrain of Afghanistan and the surrounding countries made the MH-47E the only helicopter in the world capable of performing the mission. The battalion's Chinooks also supported combat operations in the Philippines and Operation Iraqi Freedom. Additionally, the battalion sent aircraft to Guantanamo Bay, Cuba, for Operation Silent Justice.

Other than a 45-day period in the fall of 2003, the Darkhorse Battalion has maintained a constant presence overseas in support of the Global War on Terrorism, flying more than 8,000 combat flight- hours during that time.

As we celebrate the 15th anniversary of 2nd Bn, 160th SOAR, we also look to the future of the unit. The battalion will continue to stand out not only because of the capabilities of the MH-47E/G, Chinook platforms, but because of the Soldiers and civilians that work as part of the Darkhorse team. Looking to the future and anticipating the opportunities ahead, we also take a moment to look back and remember the 22 members of 2nd Bn who made the ultimate sacrifice in defending this nation and freedom. We celebrate their lives and accomplishments and remember that they loved to fight, fought to win, and would rather die than quit.

Beware the Darkhorse.

Night Stalkers Don't Quit!





Against all odds, NG Chinook detachment shines

by Cpt. Todd Fitzpatrick, Platoon Leader 137

▲ “Beastmaster” on the flight line, armed and ready for their missions from Camp Anaconda, Company G, 185th AVN has transported over 43,000 troops since its deployment.

Driven by fierce determination, Company G, 185th Aviation Detachment of the Michigan National Guard, rose from the obscure ranks of reorganization to candidacy for the Outstanding Army Aviation Unit of the Year in slightly more than 12 months.

Formed in December 1992 as part of a reorganization of aviation assets, the creation of Company G, 185th Aviation, was a result of the CH-54A Skycrane retirement and the Army-wide cross-leveling of the CH-47D Chinook. From its inception, the Beastmasters of 185th performed admirably in a variety of missions, across a range of locations, with a host of customers, including NASA and Special Operations Command. With its history of performance, the 185th also was called on to train other unit aviators and flight engineers.

In October 2003, Company G was downsized from 16 to 14 aircraft to allow for additional states to field Chinook helicopters. The group then inherited a newly formed unit with personnel from several Michigan Army National Guard units, including 1-238th Aviation (ATTK), 2-147th Aviation (ASLT) and Detachment E-106th Aviation (AVIM).

The Michigan detachment, located 900 miles from its parent unit, had only 45 percent of the required CH-47 Military Occupational Specialty qualifications. The detachment had no aircraft, tools, or parts and very few vehicles. The 185th was listed as T-5 on the unit status report. To further complicate matters, the detachment was assigned to a new location at Selfridge Air National Guard Base in Mt. Clemens, Mich., where it shared an open bay T-hangar with base firefighters. Its full-time staff operated from this facility for 12 months while improving the unit’s readiness. Working with the State Aviation Office, the unit procured one-half of a Navy hangar in September 2003, within days of the arrival of its first CH-47D.

In October 2003, the unit was issued an Alert Notice for deployment in support of Operation Iraqi Freedom II and was set for activation on 3 Jan. 2004. From that moment, the command worked diligently to prepare the unit for deployment.

Arriving at the mobilization site in January, the unit faced numerous shortfalls in pilot and crewmember readiness. Only two pilots were fully mission qualified, and many were not current on the aircraft. During predeployment, eight aviators from Michigan were sent to the Texas Army Aviation Support Facility and the Eastern Army National Guard Aviation Training Site for refresher training.

Also during this period, the unit acquired and outfitted 14 airframes from other National Guard units across the country. At the mobilization site, the unit completed individual and collective training and prepared the required aircraft maintenance equipment and parts for transport to the theater.

Arriving in Kuwait, Company G was staffed at 85 percent, well below unit manning levels. Nevertheless, training continued, including theater-based training with an outgoing unit. Augmented by trained battalion and brigade staff personnel, by 15 April 2004 the G-185th was fully mission ready and had sufficient personnel to sustain its assignment to operational tempo.

During its deployment to Operation Iraqi Freedom, from April through the end of December 2004, Company G, 185th Aviation Beastmasters had to its credit many accomplishments, including a mission completion rate greater than 99 percent. It flew 5062.2 hours (625 hours per month) and carried 10,312,074 pounds of cargo.

The unit transported 43,107 troops and maintained an average operational readiness rate of 69 percent.* It also had 28 aircraft phases completed (an average phase completion time of 13 days for within-company phases).

The unit accomplished all this even though it did not exist 13 months before deployment — and did it without a single class A or class B accident. This unit is currently a candidate for the AAAA Outstanding Army Aviation Unit of the Year Award.

* This operational readiness rate is based on flying an average of 625 hours per month, 200 hours between phases, and a best case operational readiness of 71.4 percent with four aircraft in phase at any given time.



BRAVO NOVEMBER

In distant war zones around the world there is no sound more reassuring to British soldiers than the distinctive ‘wokka, wokka’ made by an approaching Chinook helicopter. Time and again, the RAF’s Chinooks have landed vital supplies in inaccessible locations, moved troops into battle, delivered urgent aid to desperate refugees and rescued wounded soldiers from hostile fire.

In almost 25 years of service with the RAF, the Chinook has been involved in every major operation undertaken by the British armed forces, often proving to be the key to success. By two strange quirks of fate, one Chinook has come to immortalise the rugged qualities of the Boeing helicopter. Chinook ZA718, or ‘Bravo November’ as it is known, spearheaded the landings in the Falklands in 1982 and 21 years later was the first British helicopter to land Royal Marines ashore in Iraq. In the process, two RAF pilots won the Distinguished Flying Cross (DFC) at its controls.

FALKLANDS HERO

It was on a cold February day in 1982 when Bravo November arrived at RAF Odiham in Hampshire from Boeing’s Philadelphia factory. Few of the RAF men of 18 (B) Squadron would have imagined that in barely three months time they would be flying the helicopter into the middle of a war halfway across the world.

By early May 1982, Chinook co-pilot Andy Lawless and 100 of his 18 (B) Squadron colleagues were aboard ships heading south with the British Task Force. They were to take part in the operation to retake the Falkland Islands, seized by Argentina the previous month. Four Chinooks were cocooned in plastic and loaded on the requisitioned container ship MV Atlantic Conveyor. Lawless and his squadron commander, Tony Stables, were part of a forward reconnaissance party embarked on the commando ship HMS Fearless that had sailed into San Carlos Water with the main invasion force on 21 May. They were subject to daily bombing raids by Argentine jets. “I did not like running commentaries of bombing raids by the Navy,” says Lawless. “On a ship you are not the master of your own destiny. You were powerless.”

On 25 May, the Atlantic Conveyor was due to sail into San Carlos to off-load its precious cargo of helicopters and other supplies. Tragically, the Argentine air force chose to launch an all-out attack on the British Task Force, firing two of the deadly Exocet sea-skimming anti-ship missiles. One struck the Atlantic Conveyor, setting her ablaze and forcing the crew, along with the 18 Squadron personnel, to dive into the sea to save themselves. Twelve men died and three of the Chinooks were consumed in the fire. By a stroke of luck, however, one, Bravo November, was airborne on an engineering test during the Argentine missile attack and managed to make it to safety on the carrier HMS Hermes.

A much-reduced 18 (B) Squadron contingent then landed on the Falklands to prepare and operate Bravo November. However, without tents, radios or any of the specialist equipment needed to keep a Chinook flying, 18 (B) Squadron ended up being taken in by a very hospitable Royal Navy helicopter squadron.

Bravo November was immediately put to good use moving huge loads of ammunition from the British bridgehead to frontline artillery batteries. Special Air Service (SAS) patrols had occupied positions on Mount Kent that overlooked the Argentine occupied capital of the Falklands, Port Stanley. The SAS men were coming under artillery fire and needed reinforcement quickly. Lawless was called to a briefing with the SAS commander, the famous Lieutenant Colonel Michael Rose, who wanted to make maximum use of the Chinook’s lifting power. It was an eye opener for Lawless, who had never worked with the SAS before. “Rose started asking if we could drop bombs off the rear ramp of the Chinook,” recalls Lawless. “Yes or no?” he asked. The briefing quickly moved from the ridiculous to the sensible.”

“We knew the SAS were outgunned,” recalls Lawless. “Our job was to land 105mm [howitzers] of 29 Regiment. Rose told me the landing site was flat and secure. The mission was to be flown all at night with night vision goggles. We had three 105mm guns inside and ammunition pallets under-slung.”

“Then the fog of war intervened,” he says. “The ground was not flat and covered in boulders. We could not find anywhere to land and we spent time manoeuvring to drop off the under-slung loads. We had to put them exactly where the gunners wanted because they could not roll the guns very far across the terrible terrain. I can distinctly remember troops moving under the rotor disc firing their guns — this was not part of the plan. There were incoming artillery rounds. Once we dropped off the guns we went straight back to San Carlos to bring in more guns and ammo.”

If that was not eventful enough, Lawless and his pilot, Dick Langworthy, soon found themselves flying into a snowstorm and then their night vision goggles began to fail. “Then we hit water,” says Lawless. “We were lucky because if we had hit solid ground we would have been dead. We hit at 100 knots. The bow wave came over the cockpit window as we settled and the engines partially flamed out.

I knew we had ditched but I was not sure if we had been hit. Dick said he thought we had been hit by ground fire. As the helicopter settled, the bow wave reduced. We had the collective still up and the engine wound up as we came out of the water like a cork out of a bottle. We were climbing.”

Bravo November held together and managed to get back to base. Its radio antenna had been ripped off, the autopilot had long failed, there were holes in the fuselage and the cockpit door was missing. Lawless recalled that the helicopter was gradually falling to bits and the lack of specialist lubricants meant its engine and gear box were always in danger of failing. “We used and abused it — peace time constraints went out the window.”

It did hold together for two more vital weeks as the British forces massed around Stanley for the finale of the war. With no roads into the mountains, the only way to the front was

“I was flying Bravo November on the first wave,” recalls Carr. It had been arranged that this famous Chinook would lead the British into Iraq.



by foot or helicopter. The Royal Marines and Paras marched through the South Atlantic winter but the vital guns of the Royal Artillery depended on Bravo November and smaller Royal Navy helicopters to keep them firing. During one flight, 81 Paratroopers were jammed into the back of the helicopter, almost double the normal load. On its return journeys from the front, Bravo November brought scores of casualties back to the improvised field hospital at Ajax Bay. By the time the Argentines surrendered, Bravo November had notched up 109 flying hours, carrying some 1,500 troops, 95 casualties, 550 POWs and 550 tons of cargo. Langworthy was awarded a DFC for his bravery at the controls of Bravo November. Sadly, almost a year later, he died of a heart attack after returning to the Falklands to lead the Chinook detachment supporting the British garrison on the islands. By chance this included Bravo November and, in a unique honour, the Air Force Board approved the placing of a plaque commemorating his DFC in the helicopter’s cockpit.

IRAQ STRIKE

After seeing service in Lebanon, Germany, Northern Ireland, Iraq, Kurdistan and under going trials work at the Boscombe Down test centre, Bravo November found itself back with 18 (B) Squadron in 2002 as it was preparing to send a detachment to the Middle East on board HMS Ark Royal in the build-up to the

Tim Ripley tells the remarkable story of the RAF's most famous helicopter and meets the men who flew it.
RAF Magazine January 2005



invasion of Iraq.

18 (B) Squadron was given the job of ferrying hundreds of Royal Marine commandos onto the Al Faw peninsula to seize strategic oil pumping facilities in the opening hours of the war. This was to pre-empt any attempt by the Iraqis to sabotage them and prevent crude oil being released into the northern Arabian Gulf in an act of environmental terrorism.

Squadron Leader Steve Carr was nominated to plan and lead the first wave of five Chinooks that were to land the commandos. "I was flying Bravo November on the first wave," recalls Carr. It had been arranged that this famous Chinook would lead the British into Iraq. Teams of US Navy Special Forces went in ahead of British troops on 20 March to secure landing points inside the oil facilities for the RAF Chinooks. "Visibility was down to 1000 to 1500 metres," says Carr. "It was very dark, there was low cloud and the air was full of dust thrown up by American tank columns and artillery fire. Our night vision goggles were not much use. We were flying at 100 feet or lower and then we went down to 50 to 70 feet when we entered Iraq. "Each aircraft had 42 Marines on board and their war bergens [rucksacks], each weighing around 60kgs! We had removed all the seats, so the troops were all stood up, holding on to ropes that we had strung across the cabin roof. Once we'd been cleared in to the landing site, the aircraft went in three waves, two pairs and a

singleton, each element about one minute apart. The Marines must have been pretty pumped up as they were out of my aircraft in 12 seconds. Within two minutes 215 Marines were on the ground." Carr and his colleagues returned to the assembly area in Kuwait to pick up support vehicles and under-sling for the flight to Al Faw. "On the second run we were in a fire fight, with tracer all over the place. Fortunately, all of it seemed to be out-going."

The Chinooks were not the only aircraft in the air over Al Faw and the 18 (B) Squadron pilots had to carefully co-ordinate their missions to prevent accidents. "You know it is for real when you are talking on the radio to two American AC-130s Spectre gun ships in orbit above you engaging some Iraqis who are firing at the Marines from entrenched positions," says Carr. "It was quite exciting. It was a busy piece of air space."

Over the next three weeks, 18 Squadron flew support missions for British troops operating around Basra, before returning home early in the summer. The squadron's contribution to the success of the Al Faw operation was recognised with Carr being awarded the DFC for his role in the operation. This was not the end of the involvement of 18 Squadron and Bravo November in the conflict in Iraq. Since the summer of 2003 the squadron and the famous helicopter have taken their turn to support the British garrison in Basra. On one occasion two of the Squadrons Chinooks flew to rescue a patrol from the Light Infantry that had been ambushed south of Al Amarah, lifting out three wounded troops. "We took small arms fire and mortar fire," comments an 18 Squadron pilot. "That sort of thing is now fairly routine."

Chinook Proves Valuable in Strategic Role

by Tom Marinucci

Innovation on the battlefield sometimes means inventing a new use for a traditional asset. Dedication to duty and devotion to their brothers-in-arms led the aircrew of the Royal Air Force 18th Squadron (Odiham) to shift their role from tactical asset to strategic advantage. The men of the 18th repeatedly found the HC2MK 2 Chinook to be a reliable workhorse. During the 2002 invasion of Iraq, the 18th rapidly responded to missions, using the Chinook's extensive carrying capacity to transport infantry, equipment and medical teams and their apparatus. The reliability of the Chinook established its reputation for trustworthiness among flight crews and troops alike.

Regardless of the harsh conditions — the crews flew in excessively hot temperatures, severe dust and wind — the Chinook executed each mission with flawlessly. It was common for crews to log nearly 250 flight-hours per month in flight-time, which they attributed to the ease of maintaining the Chinook. Teams named handling, maneuverability, and lift and load carrying among their favorite features of the Chinook; the fact that it often served as housing for them was an added benefit. Infantry troops particularly enjoyed the Chinook's ability to transport 50 to 54 people per sortie comfortably, even with full packs.

On one memorable mission, the Chinook would prove itself in a more strategic role. Lt. Brandon Noland and his crew received a mission call to insert an infantry team into a hot zone. Airborne in minutes, they began to transport reinforcements to ground troops engaged with hostile Iraqi forces in an urban area. Approaching the insertion point, Noland attempted to land near an abandoned Land Rover to provide cover for the soldiers as they disembarked the Chinook.

As Noland descended, the Chinook came under extensive small arms and mortar fire. Hostile action was escalating. Unable to safely

complete the insertion, Noland maneuvered the Chinook to a safer dropoff point. During the course of his maneuvers, Noland observed Iraqi troop deployment and their movement in the zone. Over the next six to seven hours, Noland's Chinook took on a new role — the crew of the HCMK2 became the eyes and ears of the battlefield.

Creating battlefield diversions, the Chinook crew performed dummy drops. Simulating troop deployment, they repeatedly drew attention from enemy forces. Moving into a more strategic role, Noland maneuvered the Chinook into various positions over critical battlefield areas and provided UK ground forces with detailed information on Iraqi troop positions.

The Chinook's tandem rotor configuration remains key the aircraft's versatility, making the helicopter impervious to all but the strongest crosswinds. Because its 60-foot-diameter rotors, each with three composite blades, overlap, the Chinook has a surprisingly small footprint. It can take off and land more steeply than conventional helicopters, allowing it to penetrate areas that are inaccessible to other rotorcraft. Tandem rotors also make the Chinook exceptionally maneuverable. Its ability to pivot around both fore and aft rotor hubs or its center of gravity gives pilots impressive control.

From their aerial vantage point, the crew established communications with medical teams, guiding the safe evacuation of the wounded. Able to pinpoint enemy locations, the crew's communications provided battlefield information that steered the deployment of armored vehicles throughout the action.

The crew credited the Chinook's agility for their battlefield success. Functioning in a strategic capacity, Noland's ability to maneuver throughout the combat area added yet another mission capability to the RAF arsenal of battlefield assets.

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Transforming for the Future Force

If you have a story of interest or article you'd like to submit to Chinook News, please e-mail Tom Marinucci at Thomas.G.Marinucci@Boeing.com