A PUBLICATION OF THE BUREAU OF MEDICINE AND SURGERY (BUMED) ● JAN-FEB 2007 ● VOLUME 2, ISSUE 1

The Grog Ration:

POLAR EXPLORATION ISSUE

Contents:

The Harrowing Tale of the Lady Franklin Expedition 1-6

Raising Kane: Notes on Elisha Kent Kane's Early Years 6-8

Tragedy at Lena Delta: Voyage of the *Jeannette* 8-11

Scuttlebutt: Maritime History Happenings 12

The Polar Physicians

Octave Pavy (1844-1884)

Arctic explorer, physician, naturalist, and adventurer, Dr. Octave Pavy could not be accused of a humdrum existence. In 1870, Pavy organized a Zouave corps composed of Civil War soldiers and sailors of French parentage to fight in the Franco-Prussian War.

The Harrowing Tale of the Lady Franklin Bay Expedition

By Leonard T. Guttridge

Few if any enterprises in the history of polar exploration tell a more bizarre story than the 1881-1884 Lady Franklin Bay Expedition. It was one element in a plan that involves a dozen nations and it marked the first direct participation by the United States in an international program.

Conceived by a prescient Austrian explorer named Karl Weyprecht, it would not be a race to see which country reached the North Pole first, but an effort to encircle it with scientific stations that would observe and record meteorological, auroral, botanic, tidal, magnetic and other phenomena: in brief seek out solutions to what the media of the day called the "Arctic Question." Thus was born the First International Polar Year.

Commanded by Lieutenant Adolphus Washington Greely, the American party numbered twenty-five, all but three being soldiers of the United States Army. A converted steam whaler took them to their appointed location, a coastal tip of remote northeastern Canada. Of the circumpolar chain of scientific outposts, Greely's was farthest north, closest to the Pole. It overlooked Lady Franklin Bay, named for the widow of the lost British explorer Sir John Franklin. The expedition reached full strength off Greenland when it was joined by two Eskimo hunters and a surgeon, Dr. Octave Pavy. All hands worked to build wooden living quarters and a makeshift observatory. With a nod to one of the few American political supporters of polar exploration, Greely christened his base Fort Conger. The time was August 1881.

Throughout an unforeseen development of appalling tragedy Greely's party dutifully recorded auroral displays, winds velocities, tidal changes, and more. Its accomplishments included a foray that beat the 300-year-old British "farthest north" record. And the men were encouraged by expectation of a relief ship to reach them after one year.

None arrived. Ice had forced it back to St. Johns, Newfoundland. A second relief vessel zig-zagged about the northern waters of Baffin Bay before the captain, facing an impenetrable ice fold, also turned for home. It hardly helped that his crew had been equipped with clothing made for the tropics. A third ship reached halfway to Lady Franklin Bay then sank with all its supplies and mail

Polar Physicians (Cont'd)

James Markham Ambler
(1848-1881)

See page 8 for more on Ambler.

Frederick A. Cook
(1865-1940)

Isaac Israel Hayes
(1832-1881)

Elisha Kent Kane
(1820-1857)

See page 6 for more on Kane.

John Rae
(1813-1893)

John Richardson
(1787-1865)

Edward Wilson
(1872-1912)

intended for the men at Fort Conger. Two years had passed when a deeply anxious Greely, supplies running low and his men increasingly demoralized, decided to leave Fort Conger and head south, by foot, dog-sled, and ice-capped water, hoping to meet a rescue ship. For water travel they had a steam launch with two whaleboats in tow. Too weakened by hunger and physical effort to haul the launch repeatedly over pack ice they soon abandoned it. Yet they pressed on in the whaleboats, carrying their scientific records and selected instruments including a boxed pendulum weighing 100 pounds.

After seven weeks of incredible hardship, over a distance totaling 500 miles since they were often helplessly adrift on ice floes, the party made land on Cape Sabine, Pim Island. Greely named their new base Camp Clay. Winter had begun. Beset by personal conflicts no less than the brutally frigid elements, above all by starvation, the expedition started to flounder. When in June 1884 a relief party finally reached what was left of Greely's command. It found ten dead men covered by a thin layer of icy gravel, eight others missing, and seven, including Greely, huddled and barely conscious beneath a collapsed tent.

The medical aspects of the Lady Franklin Bay Expedition are curious, sometimes harrowing. Its physician was born in New Orleans, had studied medicine in Paris, and fought in the Franco-Prussian War. But once in the United States he showed a principal interest in getting to the North Pole. He first got as far as Greenland. Indeed, if Octave Pavy's medical expertise isn't easy to evaluate, it is safe to presume that he knew more about life and conditions above the Arctic Circle than anyone else in the Lady Franklin Bay Expedition, except, of course, Greely's Eskimo hunters.

SS Proteus

Surgeon Pavy made no effort to conceal his sense of superiority over the soldiers. They had been recruited for the mission by the U.S. Army's Signal Corps and much of the expedition's misfortunes can be blamed on the War Department indifference, especially that displayed by Secretary of War Robert Todd Lincoln, son of the late president.

Greely and Pavy were chronically at loggerheads with each other. Once Greely even placed the physician under arrest, only to return him to duty when Pavy argued that thus situated he was no longer obliged to act as the party's doctor. The two men detested each other. On the descent from Fort Conger, while Greely slept in the steam launch, Pavy proposed to a whaleboat crew that he formally declare Greely insane and transfer command to Lieutenant Frederick Kislingbury, originally the expedition's second in command but such no longer since a clash with Greely immediately on arrival in Lady Franklin Bay.

Once settled in at Camp Clay, the doctor was accused by Greely and others of stealing Sergeant Joseph Elison's food. Elison was Pavy's most suffering patient, having lost use of hands and feet from frostbite. But enduring the darkness and

sub-zero temperatures of its second Arctic winter, the expedition had still to depend on Pavy for treatment. He was assisted by Private Henry Biederbick, who was designated "hospital steward."

On Pavy's advice, Greely ordered periods of outside exercise. This at least gave welcome if bone-chilling moments of relief from their cramped and smoke-filled hut of rock whose only ventilation above the iron stove hauled from Fort Conger was a hole in the upturned whaleboat that served as a roof. But Pavy's issuance of spirits of ammonia and brandy failed to save Sergeant William Cross who succumbed to what Pavy diagnosed as scurvy.

Cross was the first to die. Others followed as diet was reduced to tiny shrimp, black lichen and sealskin scraps boiled in water melted from ice. Greely became severely asthenic until unable to squirm out of his sleeping bag without help. On May 19, 1884, Pavy drafted a statement attesting to his value as the expedition's physician.

"We, the undersigned members of the Lady Franklin Bay Polar Expedition, desire to take this means of expressing our acknowledgement and professional skill displayed by Dr. Octave Pavy in discharge of his medical duty during the full length of the expedition. During the past winter his medical skill has contributed in preserving the lives of the party to the present day."

Fourteen signed. Certainly not the semi-conscious Greely who was outraged when sufficiently alert to learn about it. Greely was still in command when Private Charles Buck Henry was convicted by an improvised court-martial for stealing food he ordered the soldier's execution. "Decide the manner of his death by two balls and one blank cartridge."

Three of the stronger sergeants led Henry away, out of sight. The men in the hut heart two shots. The sergeants returned without Henry. Had Octave Pavy's own physical and mental strength permitted he might have intervened in the affairs. But he died that same evening, his death, Greely recorded, "hastened by narcotics. It would seem he fancied the ergot iron."

The hospital steward Biederbick had to take care of Sergeant Elison. On June 9 he wrote how he treated Elison's case in the belief that such detail "will be very interesting to the medical profession." He mixed salicyclic acid with lard to form an ointment for some of the affected parts. Then he cut off portions of Elison's feet that were rapidly sloughing. A bone saw was among other equipment in Dr. Pavy's instrument box, buried too deep in snow for retrieval. Biederbick severed the ligaments with a pair of scissors. He also removed two fingers from Elison's left hand.

Pressured by national concern over the fate of Greely's party, the U.S. government had bought two Scots-built steam whalers, *Thetis* and *Bear*. They cleared New York harbor in April and were off Cape Sabine by the end of June. The captains, Winfield Scott Schley and William H. Emory, went ashore and made their horrifying discovery.

Foul air in the stone hut had forced the expedition's remaining seven men to struggle out of it and build a tent. And when it collapsed on them they were too weak to lift the pole. When they found they were beneath sodden canvas, in their sleeping bags awaiting the end. Ensign Charles Harlow of the *Bear* photographed the tent, the burying ground, a ridge behind it, and the winter hut. Lieutenant Emory saw to the exhumation of the dead for transport home.

Six were missing. One of the Eskimos had drowned while fishing for seal. Five, including Dr. Pavy, who were carried to the ice fort when their comrades were too weak to drag the bodies up to the burial ridge, were presumed to have been washed out to sea. Men from the rescue ships gathered what relics and per-

sonal effects could be found and brought them on board. Wrapped in blankets and tagged for identification, the dead were taken by boat through a rising sea to the *Thetis* carefully stowed in one of the ship's dories, and covered with ice.

Some confusion occurred near midnight at the ice fort. Lieutenant John C. Colwell of the *Thetis* came upon human remains that Ensign Harlow, wrote later in his journal were "identified from a bullet hole as those of Private Henry." These were taken to the *Bear*. But Harlow also wrote that "the bones of Dr. Pavy were gathered in a bag and sent off to the *Bear*." Considering the grim business under way mistakes were perhaps inevitable. Harlow was more accurate when he noted that his captain intended to have caskets made "that are to be hermetically sealed, never again to be opened."

The ensign added that preparing the dead for transportation home was "a hideous task. I refrain from details thinking it best not to put in writing the horrible discoveries we made."

The crew of the *Thetis* shifted an oil tank from the engine room to the forecastle. A snow-melting tank on the *Bear* was swabbed clean. Salt water and alcohol were poured into each. The bodies were tightly swathed in cotton cloth, five carefully lowered into the *Thetis*'s tank, the others into the *Bear*'s.

While off Greenland during the voyage south, Surgeon Howard Ames of the *Bear* helped Surgeon Edward Green of the *Thetis* tranquilize a delirious Elison with morphine injections. Both his feet had gone, the ends of the tibia and fibula protruding and the stumps suppurating. His hands were partly fingerless. Green removed the remaining fingers with bone pliers. On the fourth of July the surgeons decided to amputate. They reasoned that "his blunted mind will prevent mental shock." They made doubly sure with ether and whisky. Dr. Ames sawed off the left footless limb, Dr. Green the right. Elison died three days later, ending an extraordinary personal saga of endurance. Weighing 78 pounds, the soldier was sewn in a blanket and placed in a tank with his comrades.

On both ships, lower deck scuttlebutt concerning the discoveries at Camp Clay was silenced by a gag rule issued from the quarterdeck. In the privacy of his cabin Commander Schley worked on his confidential report for the Secretary of the Navy. It would contain this: while preparing the dead for immersion in the tanks "it was found that six, those of Lieutenant Kislingbury, Sergeant Jewell and Ralston, Private Whisler and Ellis, had been cut and the flesh removed."

The arrival of the relief ships at St. John's set telegraph wires humming. Greely's immediate words to Secretary of the Navy William E. Chandler, were upbeat. "For the first time in three centuries England yields the honor of the farthest north." Schley's telegram to Chandler was of a darker shade. "I would urgently request that the bodies now on board be placed in metallic cases here for sale and better transportation. This seems to me imperative."

The ships were eight days at St. John's awaiting the caskets Schley ordered. The delay was brightened by dinner parties on both ships. Noted Ensign Harlow, "Society is making quite a demand on the officers. Every evening there is something going on." Celebration ended with the arrival of the caskets. Made of boiler iron painted black, lids secured by 52 large screw bolts, each weighed 200 pounds. Schley had a silver plate with the name and date of death of the soldier mounted on each.

The ships received an elaborate welcome at Portsmouth, New Hampshire. Chandler attended. He had telegraphed his cabinet colleague Robert Lincoln, "Trust you will be present." The Secretary of War declined.

Greely and his fellow survivors were still under the care of Dr. Christopher J. Cleborne of the Portsmouth Navy Yard and the Navy Surgeon General Francis M. Gunnell. Families of the dead awaiting the caskets did not include those of Privates Roderick Schneider nor Private Henry. Schneider's body would be shipped to relatives in Germany. Henry's remains were taken to Brooklyn for interment in the Cypress Hills soldier's plot.

The Queen's County, NY, health office and Brooklyn's sanitary department had given permission for Henry's body to be conveyed through crowded streets

Items collected during the Greely Relief Expedition and displayed in the Naval Museum of Hygiene, Washington, DC.

- **Sledge Box,** used in the Greely Relief Expedition.
- **Alaskan Indian Casket,** for holding the incinerated remains of the dead.

in the belief he had died of starvation. Now a different story circulated. The county coroner James Robinson wanted to hold an inquest. "The law makes it mandatory upon me to have the body exhumed for post-mortem examination." A woman in Nebraska claiming to be Henry's sister asked for an autopsy. By then the dam on appalling front page stories had burst. Led by *The New York Times* with a headline "Horrors of Cape Sabine," the press ran columns claiming to expose what the government was trying to cover up: a soldier's execution in the distant Arctic and, even worse, rampant cannibalism.

The relief squadron of 1884 off of Godhavn, Greenland.

Even before the caskets were delivered, the Secretary of War had telegraphed regional quartermasters that under no circumstances were they to be opened. "The sooner they are put into the ground the better." Schley and Emory dodged interviews. After a private conference with the secretaries of war and navy, Schley's report was published complete with reference to six bodies found cut but amended to continue "the fleshly parts removed no doubt to use as shrimp bait."

At their home in Rochester, NY, Fred Kislingbury's grieving family wished to be left alone. Urged by *The Rochester Post Express* editor seeking a scoop, the lieutenant's three brothers agreed to an exhumation. At the Mount Hope Cemetery two Rochester doctors, Charles A. Buckley and Frederick A. Mandeville, conducted a 45-minute examination of the casket's contents and in a sworn affidavit stated that skin and muscle had been cut away from the left shoulder to the lower ribs. "The pelvic bones were completely denuded." The work was apparently done by a practiced hand. This might have focused suspicion upon Dr. Pavy, but he had died before Kislingbury.

The news from Rochester prompted a disinterment in the Rockfield Cemetery, Delphi, Indiana where two doctors, after studying Private William Whisler's body, declined to make a report unless asked to by authorities. No such request was made and avid newspapers had to content their readers until testimony from local observers that all what remained of the soldier was little more than a skeleton.

The nightmarish press orgy might have been subdued by a court of inquiry or congressional hearings. None were held. Secretary Lincoln left explanations to a mortified Lieutenant Greely. "It is news, horrible to me...I can but repeat that if there was any cannibalism, and their now seems to be no doubt about it, the man-eating was done in secrecy...Every survivor has solemnly sworn that he was innocent of the dead. I cannot tell whether they told me the truth or not."

The closest to a formal airing on questions was the court-martial of General William Hazen, Chief Signal Officer, accused of slandering the Secretary of War by blaming him for the Lady Franklin Bay Expedition disaster. Hazen was convicted, his punishment a presidential reprimand.

In 1935, on his ninety-first birthday, General Adolphus Greely was awarded the Congressional Medal of Honor. Its citation emphasized his "long life of splendid service" but said nothing of polar achievement. He died in October of that year . General David L. Brainard also rests there. He lived to be 88. A sergeant at Cape Sabine he was the man Greely believed most loyal to him.

Greely had ordered Henry shot; Brainard commanded the firing squad. The expedition's two last survivors, they are buried in Arlington National Cemetery. Henry isn't but his Brooklyn funeral was no less honored. Thousands lined the streets to watch the military cortege pass and at Cypress Hills his final salute was three salvos of artillery. And the cemetery records have remained unchanged. On August 9, 1884, the soldier died of starvation.

Though culminating in tragedy and stained by scandal, America's contribution to the First International Polar Year was far from total failure. Valuable log books, charts, photographs, and instruments were

brought back by the survivors. Considering the astonishingly adverse circumstances that plagued the Lady Franklin Bay Expedition from its very inception, its achievements were remarkable. They are sure to be discussed at the 125th anniversary events planned for 2007-2008.

Karl Weprecht did not live to see the results of the First International Polar Year. If he had he would surely have agreed that in the circumpolar chain of scientific stations which he had so boldly shaped, the northernmost link had not altogether broken.

Leonard Guttridge is a noted author based in Alexandria, VA. His books include *The Commodores* (1969); *Icebound: The* Jeannette *Expedition's Quest for the North Pole* (1986); *Mutiny: A History of Naval Insurrection* (1992); *Ghosts of Cape Sabine: The Harrowing True Story of the Greely Expedition* (2000); and *My Country Right or Wrong: The Life of Stephen Decatur, the U.S. Navy's Most Illustrious Commander* (2006).

Raising Kane:

Notes on Elisha Kent Kane's Early Years

In 1849, a Russian radical stood before a firing squad waiting for winged Azrael to come. But fate had other plans for this upstart, diverting him from an untimely end. At the very moment of the call to fire, an imperial messenger arrived to announce that Czar Nicholas I had commuted the young man's sentence. This gift of "borrowed time" was exactly what the intellectual needed. For the next 32 years of renewed life, this man, also known by the name Fyodor Dostoevsky, served the world well, writing some of the most significant novels ever to be written, including *Crime and Punishment* and *The Brothers Karamazov*.

Early image of Elisha Kent Kane as a Navy surgeon.

Though living many miles away from Dostoevsky, Dr. Elisha Kent Kane was not far removed from the Russian author's personal story. In 1849, Kane was on the cusp of a journey that would bring him international superstardom. But it could be argued that this fateful expedition was done on borrowed time. In 1838, when he was just 18, Kane developed a life threatening case of endocarditis.* His prognosis was dim. Physicians reminded Kane, "Elisha, you may fall as suddenly as a musket-shot." With little hope for a future, Kane set his sickly life afire and, like a phoenix, took flight from the flames of certitude. His destination was the arctic, a geographic region which then, as now, held many mysteries and served as the stage for almost as many tragedies.

In 1850, Kane quested north as part of the Grinnell Expedition in search of the "lost" explorer, Sir John Franklin who had gone missing in his search for the Northwest Passage. Three years later, Dr. Kane headed his own expedition. Though this journey was equally as unsuccessful in its search for Sir Franklin, it was viewed as a grand achievement for science. Dr. Kane charted the coasts of Smith Sound (now known as the Kane Basin) in northern Canada and journeyed to 80 degrees 10 minutes, closer to the North Pole than any explorer had yet reached. Even after being stricken with scurvy and being forced to abandon his ship, Kane both ministered to the sick and led them to safety after an epic 83-day trek across the ice. It was a feat that stands in the annals of arctic achievement.

Dr. Kane spent his few remaining years writing of his adventures in the two-volume *Arctic Explorations.* They were published in 1856 from then on became an instant classic. A year later Kane was dead. His funeral procession traveled from New Orleans through Louisville, Columbus, Baltimore, and finally Philadelphia where his body lay in state at Independence Hall. Each stop attracted large cults of followers wishing to pay their final respects. Biographers and newspaperman rushed to tell of Kane's greatness in poetic tomes and inspirational articles. Dr. Kane's image was reproduced in form of collectible lithographs and tobacco cards. Even a march was written in his honor.

***

Elisha Kent Kane was born on 4 February 1820 in Philadelphia, PA. He was the first of seven children born to

*Endocarditis is also called bacterial endocarditis or infectious endocarditis. It is a rare but serious disease.

Judge John Kintzing Kane, a jurist and literary scholar, and Jane Duval Leiper.* Philadelphia at the time of Kane's birth was the second largest city in the country, recently losing the distinction of largest to New York. Notable citizens included the one-eyed financier, Stephen Girard, a penniless orphan from France who on his deathbed was the wealthiest man in the United States; William Strickland and John Haviland who fathered the rebirth of classical architecture in America; Rebecca Gratz, founder the Philadelphia Orphan Asylum, who purportedly served as the model for the character of "Rebecca" in Sir Walter Scott's *Ivanhoe*; and the Peale family, who painted some of the finest portraiture in the world.

Growing up, Kane was surrounded by the finest publishing firms, medical schools, museums, theaters, and architecture the country had to offer. And perhaps this proved a distraction for the young Kane who was said to have been a "restless" child of a resilient nature.

His schoolmasters found him to be a difficult and stubborn pupil. It was said that Kane sought to study only what interested him. Fortunately, his interests were vast. He liked chemistry, geography, geology, sketching, reading (his favorite books were *The Pilgrim's Progress* and *Robinson Crusoe*) and he was fascinated by animals, especially dogs and horses. One of his major dislikes was classical studies. And according to one source, his deficiency in the subject prevented his acceptance to Yale College.

Perhaps related to his unbending nature was a sense of duty and honor which Kane exhibited at a precocious age. A common story conveyed by his biographers has the 10-year-old Elisha returning home from school and encountering five neighborhood bullies shooting "putty-wads" from atop a two-story back-building onto young girls passing on the street below. Seeing this injustice, and without missing a step, the evidently agile Kane climbed up the rainspout and confronted the tormenters with fists of fury. Once they were sufficiently humbled, Kane dragged them each to the edge of the roof and ordered that they apologize to the young lasses for their misdeeds. Another story has the young Kane sitting in class with his younger brother Thomas. When Thomas Kane disrupted the class with some act of mischief, the schoolmaster called the boy to the front of class to be whipped. Elisha purportedly shouted to the master "Let him go! And take me instead. Thomas is such a little fellow." The teacher ended up satisfying his wrath by whipping them both.

***

In 1836, Kane entered the University of Virginia studying natural sciences and mathematics. It was a short-lived experience. Less than two years later he was struck by rheumatic fever. His health declined to such a state that his father traveled to Virginia and brought Kane home wrapped up in a bundle of blankets like some pitiful package. Kane would never graduate from the University of Virginia, and, remarkably, never obtain a bachelor's degree. For a time, Kane joined the legions of self-educated that included such 19th century luminaries as Abraham Lincoln and Matthew Fontaine Maury. But perhaps what Sir Walter Scott stated is true that "the best part of every man's education is that which he gives himself."

Persevering in his self-study, and in spite of his illness,

Elisha Kent Kane's Philadelphia

1820 — *American Journal of the Medical Sciences* is founded by Dr. Nathanial Chapman (1st President of the American Medical Association). The most popular medical periodical of the time, this journal was a forerunner of the American Medical Association journal.

1821 — Philadelphia College of Pharmacy is founded.

1823 — Surgeon Thomas Harris establishes the first Navy post-graduate medical school in the United States.

1825 — Dr. George McClellan, father of General McClellan, establishes Thomas Jefferson Medical College breaking the University of Pennsylvania's monopoly over medical education in the city.

1825 — Loud Brothers of Philadelphia develop the 7 1/2 octave piano (with a strain of 20 tons). This piano would become a favorite of Franz Liszt who used this instrument to further his reputation as the "Musical Mephistopheles."

1826 — John Haviland designs Eastern State Penitentiary. This prison, with its panoptical layout, becomes the architectural model for prisons throughout the world.

1831 — The wealthiest man in America, Stephen Girard, dies.

1832 — Cholera epidemic reaches the Quaker City. Carey and Lea, the nation's leading publisher of medical books, publishes the *Cholera Gazette.*

1833 — William Strickland's Naval Asylum is completed.

1837 — Edgar Allen Poe moves to Philadelphia hoping to find a job in publishing. Over the next six years in the city he would write *The Fall of the House of the Usher* and *The Red Masque*, among other literary classics.

*The Kane biographies say very little about Jane Duval Leiper other than "she was one of the most beautiful women in Philadelphia." Such a claim, however valid, does not pass the test of time.

he was determined to make his mark on the world. In October 1839, he applied and matriculated at the University of Pennsylvania Medical School. A year later he was a resident physician at Philadelphia Hospital, also known as "The Blockley." To his fellow physicians it was obvious that Kane was not the healthiest of persons. Due to his weakened heart, it was said that his sleep was difficult and uneasy. Kane was required to sleep sitting up in bed with his head and shoulders propped up on pillows. According to his roommate, Dr. William McPheeters, Kane never closed his eyes without feeling conscious that he would die in the night. With this in mind it is difficult for the logical mind to fathom why the perpetually infirm Kane would seek out a commission in the U.S. Navy upon graduation in 1842.

***

In Jean Luc Godard's film *Breathless*, a journalist (played by Jean Seberg) asks a famous film director (played by Jean-Pierre Melville) "what is your goal in life?" The Melville character curtly answers, "I wish to become immortal, then die." This one line could summarize Kane's life-motive the year he graduated from medical school. He knew his time on earth was limited and dying young, and being forgotten, held little appeal. Kane's mission was to seek immortality through adventure and its resulting glory. His vehicle to this precipice was the Navy. In 1843, Kane took the exam to become a surgeon in the U.S. Navy, and despite his ever present health issues, (or perhaps because of Judge John Kane's political influence) he was accepted for duty. In his remaining 14 years of life, while in the Navy, Kane journeyed to China, Mexico, throughout Europe, and, on two occasions, the arctic. ***ABS***

Life and Death on the Lena Delta:

The Voyage of the *Jeannette*

Jan Kenneth Herman

For many casual and serious students of exploration the names Kane, Greely, Nansen, Amundsen, Peary, and Byrd are forever linked with the Arctic. But how many remember George De Long, George Melville, James Ambler, and the voyage of the *Jeannette*?

Outside the Rotunda of BUMED Building Two rests a massive bronze tablet that once hung in the Naval Medical School library. It commemorates the tragic fate of Passed Assistant Surgeon James Markham Ambler and his fellow crewmen of the arctic steamer *Jeannette*. Their story, although but a footnote in history, is worth retelling. It reads like a classic novel with all the essential ingredients—discovery, adventure, sacrifice, heroism, and the struggle to survive against the odds. The story of the *Jeannette* began in the 1870's with a young naval officer's ambition to conquer one of the Earth's last frontiers—the North Pole—and ended along the frozen banks of Siberia's Lena River in 1883.

Birth of an Expedition

By the last quarter of the 19th century many nations, including the United States, had already tried and failed to reach the North Pole. Some explorers were forced to turn back when polar ice blocked the way. Others who believed the pole might be accessible by ship ventured too far and became entrapped in the ice, suffering frightful losses of life. Yet the quest continued.

LCDR George W. De Long made the next attempt. The Naval Academy graduate had served aboard several warships before getting his first arctic experience helping search for the missing exploring steamer *Polaris*. His determination to return to the Arctic translated into a correspondence and a friendship with James Gordon Bennett, owner of the *New York Herald*. Would Bennett be interested in funding an expedition if the Navy supplied the officers and men? The answer was an emphatic "yes." The controversial and somewhat eccentric publisher was one of the wealthiest and most powerful men of his time. When the news lagged, he created it. It was the *Herald* that sent Henry Stanley to Africa in search of the missing Dr. David Livingston.

Bennett wasted no time. He purchased the *Pandora*, a 142-foot barque-rigged steamer in England, renamed her the *Jeannette*, and brought her to San Francisco for refitting. Wielding power and influence, he engineered a bill through Congress that converted the ship into a U.S. Navy vessel. The act also authorized the Secretary of the Navy to detail line officers and crewmen to the *Jeannette*. LCDR De Long would head the expedition.

Refitting began at a San Francisco yard. Shipwrights buttressed portions of the *Jeannette*'s wooden hull inside the bow with solid Oregon pine. They sheathed the steam

with wrought iron and straps bolted to her outer planking. From the waterline to below the turn of the bilge, American elm planks were added which gave the hull a new thickness of over 19 inches. Workmen bolted massive wooden beams altwartship for lateral strength and installed new boilers. Felt insulation was applied to the insides of the wardroom and forecastle. By July 1879 the work was completed and 3 years' worth of coal and provisions were loaded aboard. Few doubted that the *Jeannette* was as ready for arctic cruising as any ship had ever been.

James Gordon Bennett

Bennett and the Secretary of the Navy exercised much care in picking the crew. LT Charles W. Chipp, second in command, was trusted officer and first-rate seaman. The navigator was LT John W. Danenhower. Chief Engineer George Melville, an experienced Civil War ironclad veteran, was in charge of the ship's engines and other machinery. Ice pilot William Dunbar, an ex-whaler, was said to have cut his teeth on the polar ice. Raymond Lee Newcomb, the expedition's naturalist and taxidermist, hoped to study and bring home specimens of arctic flora and fauna. Bennett himself appointed Jerome Collins, *New York Herald* staff weather reporter, as meteorologist.

The *Jeannette*'s physician was 31-year-old James Markham Ambler. Ambler had begun his career as a 16-year-old Virginia cavalryman fighting for the Confederacy. After the war he studied medicine at the University of Maryland and joined the Navy in 1874. While stationed at the naval hospital in Norfolk, the passed assistant surgeon received a telegram from De Long asking him to join the crew. For Ambler, the prospect of arctic adventure was irresistible.

On to the Pole

On 8 July 1879, festooned with signal pennants and with appropriate ceremony, the *Jeannette* weighed anchor, steamed through the Golden Gate, and set her course for the North Pole.

The ship put in at several Alaskan ports to take on sleds, dogs, other supplies, and two dog-drivers. After crossing the Bering Strait and stopping at Kolyuchin Bay on the Siberian coast, the *Jeannette* headed north toward Wrangel Island. De Long, like many of his contemporaries, hypothesized that Wrangel Land, as it was then called, was part of a continent that traversed the pole and became Greenland on the other side. If necessary, he would anchor the ship on Wrangel Land's south coast and continue the trek to the pole by dog sled.

Ice Prisoners

Just 2 months after leaving San Francisco, the *Jeannette* suddenly encountered heavy ice. De Long carefully threaded her through the floes but on 5 September 1879 all progress ceased. The following morning captain and crew awoke to find themselves stuck fast. "As far as the eye can range is ice, and not only does it look as if it had never broken up and become water, but it also looks as if it never would," wrote De Long in his journal. The expedition and its hopes were imprisoned for an indeterminate sentence. The men could only hope to survive a winter in their greenless, white, monochromatic world and wait for spring.

Monotony and isolation coexisted with challenge and discovery. During the day the men left the ship and hunted seal, walrus, and polar bear to augment their diet of canned chicken and turkey, a fare the crew described as looking like "a railroad accident." At dusk the brilliant ice glare often gave way to breathtaking auroral displays and skies drenched with stars. As ice pressured the hull, one could hear the snapping and crackling of bolts and timbers. Windless nights were ghostly quiet but for the barking of the dogs. And each succeeding day the ice pack drifted northwestward with its prisoners. They days grew shorter until the pale sun disappeared altogether and the temperature dropped to –45◦ .

On 19 January 1880 the *Jeannette*'s fragility became more evident. Skipper De Long described "aloud noise as if the cracking of the ship's frame from some great pressure." His worst fears were confirmed as icy water suddenly poured into the bilges. Only heroic efforts at the pumps kept rising water in check. For months crewmen manning hand pumps worked around the clock just to keep ahead of the water; steam pumps alone were not enough to keep the ship afloat.

Jeannette

The persistent leak and the heaving of the ice were indeed worrisome. "The noise was not calculated to calm one's mind," De Long wrote. "I know of no sound on shore that can be compared to it. A rumble, a shriek, a groan, and a crash of a falling house all might serve to

convey an idea of the noise which this motion of ice-floes is accompanied."

Through the long months of aimless drifting, Dr. Ambler continued to practice his profession with utmost skill. His vigorous brand of preventive medicine kept the crew healthy. The men received their daily ration of lime juice and scurvy was never a problem. Neither did the young surgeon let down on sanitation and hygiene. He saw that garbage details removed the ship's refuse and he periodically sampled the ship's below-deck atmosphere for toxic gases and excessive dampness.

The procurement of fresh water was the biggest concern. "Should we be so fortunate as to return without having the scurvy break out among us, I think it will be because we had pure water to drink… ," wrote Ambler. The ice pack and snowfall in no way insured a ready fresh water supply, being far too salty for drinking or cooking. The ship's distilling unit worked overtime to keep up with the demand.

Ambler's one chronic patient was LT Danenhower, who suffered a serious eye affliction, a symptom of undiagnosed syphilis. For many months the navigator was confined to his bunk in great pain.

Retreat

The first winter gave way to spring but the ship remained stuck in the ice, no closer to the North Pole than months before. A second winter came followed by another spring. The routine wore on De Long and the crew. "There can be no greater wear and tear on a man's mind and patience than life in this pack. The absolute monotony; the unchanging round of hours; the wakening to the same things and the same conditions that one saw just before losing one's self in sleep; the same faces; the same dogs; the same ice…" The *Jeannette*'s skipper faced the reality of inevitable defeat. "A ship having the North Pole for an objective point must get to the pole, otherwise her best efforts are a failure."

On 12 June 1881 the ice ended the stalemate. The *Jeannette* broke free and lay in open water between two floes. All cheered to the possibility of continuing the voyage. Suddenly the ice shifted, the channel narrowed, and the ship's once stout hull gave way like an egg shell in a vise. Water slowly rose in the hold and the men abandoned ship, taking with them two small open cutters, a whaleboat, and 60 day' provisions. One by one *Jeannette*'s spars toppled and she slipped beneath the ice with but her foremast still upright. At 77 degrees 15 minutes North and 155 degrees East, the crew was alone in the middle of the frozen East Siberian Sea.

What followed must be one of the most epic journeys in the history of arctic exploration. De Long and his 33-man crew began the long trek over the ice, dragging their boats and supplies with them. Their destination was the settlements thought to lie along the Lena River on Siberia's northern shores. Oak runners shod with whalebone and had been affixed to the boats. One cutter weighed 3,000 pounds; the second 2,300 pounds; the whaleboat weighed 2,500 pounds. The five sleds with their provisions weighed close to 6,600 pounds. Ambler harnassed two starving dogs to a sled upon which he lashed surgical instruments, medical stores, and records and then took his turn on the tow ropes. Fissures and massive blocks of ice were in the way. The boats were so heavy that the entire crew first had to drag one, then another. They walked many miles back and forth just to gain but a mile or two nearer their goal. And only De Long knew that even as they trudged southward the ice was moving even faster northward.

The weather worsened—sleet, rain, and fog alternated with blinding glare. The men were always wet and Ambler's sick list grew. On 29 July 1881, after 42 days of terrible trials, they landed on solid ground, raised the American flag, and named the uncharted island Bennett in honor of their benefactor. They rested several days and then continued their voyage south until they reached the New Siberian Island. There they hunted and rested, embarking from Semenovski Island on 12 September.

That night a terrible gale from the northeast separated the boats. LT Chipp's cuter foundered with the loss of all hands. The remaining two boats under the commands of De Long and Chief Engineer Melville became separated and the former's craft nearly swamped. The "gale increased, carried away our mast at the foot & we became a wreck, taking in water, wallowing in the trough of the sea the whole night…" wrote Ambler. Several days later the two boats came ashore miles apart on the Lena Delta.

Lost in the Delta

Melville's band, although exhausted and frostbitten, worked its way south for several days subsisting on tea. De Long's party fared poorly. Provisions ran low even

though Alexae, one of the Alaskan natives, managed to shoot a deer. Slowed by the sick, they made little progress following the Lena River southward. Frostbite and hypothermia continued to take their toll. Ambler was forced to amputate the severely frostbitten foot of one crewman, who succumbed shortly thereafter. De Long decided and his surgeon concurred that no man would be left to die alone. The pemmican ran out and each day another crewman either sickened, weakened, or died. On 9 October Ambler wrote:

Yesterday without food except alcohol, the Capt. Spoke of giving the men option to-day of making their way as best they could, that he could not keep up….I told him if he gave up I took command & that no one should leave him as long as I was alive. I then suggested that we send two men ahead to try to make the settlement, and that we make the best of our way with the rest of the party. This was done….

Two of the strongest, W.F. Nindemann and L.P. Noros, were sent ahead to find help, and De Long gave Ambler the option of going along but he refused, choosing instead to remain with the sick and ultimately to share their fate.

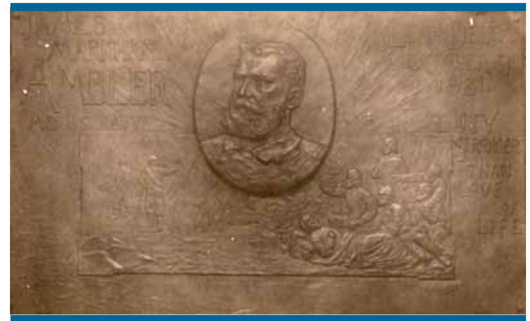
Three days later, out of food, the survivors drank grain alcohol fuel and ate short rations of glycerine. They sought shelter from the wind and snow in a hollow in the river bank. On the 18th, Alexae expired. Those who were strong enough grawed strips of leather from their boots. And one by one they lay down to die.

Epilogue

Chief Engineer George Melville and his party encountered three natives on 19 Sepetember who fed and sheltered them and then showed the way to a Russian settlement.

Seamen Nindemann and Noros were rescued by other natives several days after leaving De Long and the others. Bad weather and difficulty in communicating with their rescuers delayed their reunion with Melville, who set out to find the De Long party. Hampered by a lack of provisions and bitter cold weather, Melville reluctantly concluded that De Long and his companions had perished. He decided to wait until spring to search for their remains.

The following March, Melville searched much of the Lena Delta before finding what he was looking for. He constructed a crude tomb and buried his comrades, marking the site with a 22-foot-tall wooden cross.



Ambler Memorial Plaque which is on exhibit at the Bureau of Medicine and Surgery

It was not until the close of 1883 that another U.S. Navy party returned to Siberia and recovered the frozen bodies. George De Long and several other members of the crew were reinterred in New York City with full military honors. Dr. James Ambler came home to a quiet country churchyard in the rolling foothills of Virginia's Blue Ridge. Years later, Navy medical officers erected a bronze memorial in the simple, gothic, one room church where Ambler and his family once had worshipped. Its terse, poignant inscription duplicates the tablet that once held a place of honor at the Naval Museum of Hygiene. "His sense of duty was stronger than his love of life."

Jan Herman is the senior historian of the Navy Medical Department. He has written numerous articles, books, and monographs, including *Battle Station Sick Bay: Navy Medicine in World War II* (1997)and the up-coming *Frozen in Memory: Navy Medicine in the Korean War* (2007).

Scuttlebutt: Maritime Medical History Happenings

Society for the History of Navy Medicine (SHNM): Inaugural Meeting Schedule

The historical first official meeting of the SHNM will take place at 1800 on the evening of 3 May 2007 (first day of the American Association for the History of Medicine Conference) at "Le Mas des Oliviers" in Montreal, Canada. The tentative schedule of this meeting is as follows:

1800: **Dinner and Discussion**
1900: **Keynote Address by Jan K. Herman, Historian of the Navy Medical Department**
1930: **Paper Session/Question and Answer Session**
1.) French Navy, the Societé Royale and Tetanus Research in the 18th Century.
2.) Navy Medical Artifacts at the Armed Forces Institute of Pathology.
3.) Combat Fatigue from Civil War to Desert Storm.
4.) Psychiatric Care in the Early Navy.
2100: **Discussion**

Need Input for Society for the History of Navy Medicine Almanac

Dear Society Members,

To mark the historic first year of the Society's existence we are putting together a souvenir booklet that will contain a list of the creative exploits of our members in 2006. For this we need your input. Please e-mail: **ABSobocinski@us.med.navy.mil** a listing of your publications, lectures, and any academic or scholarly feat from a year of in which SHNM took its first step in the medical and military history arenas. Once published, this booklet will be shared with members only.

"Division Room" Looking for Artifacts

Command Master Chief Mark Busam of the 3d Marine Division is in the process of creating a "Division Room" at his headquarters in Okinawa, Japan. He would like to highlight to accomplishments of Marines and Sailors who served in the 3d Marine Division to display in this room. If you have, or know someone who has, articles that could be loaned or donated for this venture please e-mail: **mark.busam@usmc.mil**

In the next issue…

- Cary Grayson, Navy Physician in the Wilson White House
- Medical Women Pioneers and the U.S. Navy

If you have historical articles, photographs, trivia—pertaining to Navy medical history—that you would like to share please send an e-mail at: ABSobocinski@us.med.navy.mil

Disclaimer: Articles and information published in** The Grog Ration **do not necessarily reflect the official policy of the Bureau of Medicine and Surgery, Navy Medical Department, Department of the Navy, and Department of Defense.