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Shorelines

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Coast Guard welcomes three new ships into the fleet

Three of Coast Guard's newest ships, the *Cape Palmerston*, *Cape Naden*, and *Cape Dauphin* were each honoured by a special naming and dedication ceremony in communities where they will first be positioned.

The ceremonies represented the completion of a \$19.6 million contract under Canada's Economic Action Plan for the construction of five new Cape Class Search and Rescue Lifeboats. Under the contract, one vessel was delivered to Quebec, one to Ontario, and three of the vessels remained in B.C.

At Campbell River, *Canadian Coast Guard Ship Cape Palmerston* was officially dedicated on June 28th, against a backdrop of an occasional rain shower. While the traditional breaking of the champagne bottle took place at the Coast Harbourside Marina, the majority of the ceremony took place at Robert Ostler Park, protected under the roof of the First Nations Longhouse.

The sponsor of the vessel was BC Ferries Captain Lynne Hagan who has had longstanding linkages to the Campbell River waterfront. A resident of Quadra Island for the past 12 years, Lynn has been a Captain with BC Ferries for the past 32 years. First sailing as a Navigation Officer on all the routes and many vessels in Swartz Bay, Departure Bay, the Inside Passage, and the Discovery Passage, she has been a certified Captain for 10 years, and a Senior Master on the BC Ferry *MV Powell River Queen* since 2008.

Lynn is also a prominent member of the Local Emergency Response Team, and reports to the Local Ferry Advisory Committee. She is also a member of several Company Safety Committees, and leads two Teams devoted to Local Risk Assessment and Fleet wide Safety Improvements within BC Ferries.

Coast Guard's fleet of 47ft lifeboats are all named after significant capes in Canada. Renowned for its beaches, Cape Palmerston lies south of Cape Scott on the North West coast of Vancouver Island and is a favourite of north Island kayakers.



Sponsor BC Ferries Captain Lynne Hagan breaks the champagne bottle over the bow of CCGS *Cape Palmerston* at the ceremony at Campbell River, B.C.

The cape was named after Henry John Temple, 3rd Viscount Palmerston (1784-1865) who was one of Britain's leading statesmen of the mid 19th century. Serving twice as Prime Minister of the United Kingdom as well as both Foreign Secretary and Home Secretary, Lord Palmerston was known for his aggressive, imperialistic foreign policy that took advantage of British Naval Supremacy to settle controversies and disputes.

At Sidney, *Canadian Coast Guard Ship Cape Naden* was dedicated at a ceremony at

the Institute of Ocean Sciences. As the ship was tasked respond to a Search and Rescue incident just a few hours before the scheduled start time of the ceremony, some last minute flexibility and arrangements were required to delay the ceremony a few hours to allow the ship and crew to make it to the event.

Fisheries and Oceans Minister the Honourable Keith Ashfield was honoured to attend the ceremony which took place the morning of July 6th. Tseycum First Nations Chief Vern Jacks and...

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Elder Roberta Jimmy (coincidentally the sponsor of *CCGS Cape Kuper*), provided a ceremonial blessing of the new vessel before the traditional breaking of the champagne bottle by the sponsor Deborah Greenwood.

As the wife of Rear-Admiral Nigel S. Greenwood Commander Maritime Forces Pacific, Deborah is well accustomed to being out on the water. Deborah is a seasoned voyageur, having sailed Caribbean, Mediterranean and Northwest Pacific waters. She was delighted to be invited to sponsor a ship bearing the name of one of the original peoples of this coast. Deborah made specific comment that she hopes never to embarrass her ship with a request for its professional service.



The Honourable Keith Ashfield, Minister of Fisheries and Oceans, addresses the crowd at the naming and dedication of *CCGS Cape Naden* at Sidney, B.C.

The name of vessel comes from the cape located at the mouth of the Naden River on the north coast of Graham Island, Haida Gwaii, fronting Dixon Entrance. Naden is a Haida name adopted by the Raven crest members who lived at that location. This conspicuous headland is a beacon for returning fishermen, and a significant point of reference navigationally.


In Prince Rupert, *Canadian Coast Guard Ship Cape Dauphin* was dedicated at a ceremony at Canadian Coast Guard Base Seal Cove. Despite some earlier showers, the rain held off for the event. The crew from *CCGS Gordon Reid* was able to attend the ceremony as the ship was alongside at Seal Cove.

The sponsor of the new ship was Prince Rupert resident Miss Amy Dopson. In 2009, Amy formed the business of PAC 10 Tutoring which has flourished in the community. The business has won support from teachers, councilors, parents, students and other members of the community.

In 2009, Amy's accomplishments won her both the Aboriginal Business of the year and Rookie Business of the year at the Prince Rupert Chamber of Commerce Business Awards. In 2011, Amy also was recognized as Young Female Entrepreneur of the year at the B.C. Aboriginal Business Awards.

Cape Dauphin is located in Cape Breton, Nova Scotia, at the entrance to the Bras d'Or Lakes. A series of caves in this area give it the local name "Fairy Hole", but this area is also tied to Mi'kmaq legend and Glooscap.

The name *Cape Dauphin* was chosen by the cadets at the Coast Guard College in Sidney, Nova Scotia. It is fitting then, that Ms. Dopson be the vessel's sponsor. Her role as the sponsor will forever connect youth and education to the *Cape Dauphin*. Through this connection, Amy will also represent the cadets from the Coast Guard College.

As part of the Phase III contract, the *Cape Palmerston*, *Cape Naden* and *Cape Dauphin* join seven Phase II vessels, and three Phase I vessels, combining for a total of thirteen Cape Class SAR lifeboats operating in the Pacific Region. 



Following the breaking of the champagne bottle over the bow of *CCGS Cape Dauphin*, sponsor Amy Dopson (L) accompanies Coast Guard Assistant Commissioner Vija Poruku (R) for the walk back to the ceremony on the wharf.

Shorelines



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Coast Guard supports science outreach for kids throughout the Salish Sea

As a small flotilla of canoes filled with kids approach *Canadian Coast Guard Ship Vector*, a collective cheer rings out from the group. The seven-to-10 year olds from the Sea to Sky Outdoor School canoed the last couple of kilometres of their journey from Nanaimo to meet the ship anchored off Sechelt near YMCA Camp Elphinstone.

The kids were the first of many school groups to take part in the Salish Sea Expedition during 2010's Science and Technology week. The program is a partnership between Natural Resources Canada, Royal Roads University, the Canadian Coast Guard, Fisheries and Oceans Canada, Natural Sciences and Engineering Research Council of Canada, the National Research Council, Ocean Networks Canada and the Shaw Ocean Discovery Centre. The expedition works to educate students and others about the role of marine science and the marine environment in their communities.

"Many of the smaller communities around B.C. don't have easy access to science centres and museums, says Phil Hill, NRCAN Scientist and Lead Scientist for the expedition. "So the Salish Sea Expedition brings the science to the people," With the help of scientists, the Coast Guard crew and a whole range of people from participating organizations, CCGS *Vector* was decked out as a floating science centre. With stops at the Salish Sea coastal communities of Gibsons, Powell River, Campbell River, Ganges and finally Victoria, the five-day tour brought hands-on, interactive science to elementary and secondary students, and the general public. "The Expedition gave us a model for future science public outreach and was a huge success."

Scientists were positioned at stations around the ship, where visitors had the opportunity to learn about different streams of oceanic research and get hands-on access to samples, photos and graphics and see demonstrations of some of the equipment used onboard the *Vector*.



Dan Bate

A group of seven-to-10 year olds from the Sea to Sky Outdoor School are brought aboard the *Vector* on the first stop of the expedition at Sechelt.



Dan Anthony, Royal Roads University

Once their tour of the ship was completed, senior students from Gulf Islands Secondary School, Ganges, departed the *Vector* and the scientists and crew prepared for another group of students.


At one of the more popular science stations, Royal Roads professor, Dr. Audrey Dallimore showed off a core sample of 10,000-year-old mud taken from the sea floor off Tofino. Kids were enthusiastic about being able to touch a piece of geologic history.

"The more students can rub shoulders with scientists, the more they can actually see where this critically important information is gathered," said Ted Turner, Program Director for the Sea to Sky Outdoor School. "It's this kind of experience that could be a first step in kids considering science as a career."

A ship tour including the bridge was a highlight for many of the visiting students, who were inspired by commanding officer Captain Kent Reid and senior officers' presentation on the ship's navigational and propulsion equipment.

For Captain Kent Reid, the Salish Sea Expedition was a great few days. "It was hard work hosting close to 1200 people onboard the ship, but everyone from our engine room to our galley staff put in a phenomenal effort," said Captain Reid. "The tour gave us an opportunity to showcase some of the career opportunities available in the Coast Guard and the Department of Fisheries and Oceans."

Feedback forms show that the Captain and crew's efforts paid off. A majority of the kids who responded felt the strongest connection with the ship's crew. Of all the different people they met during the day, the role many could see themselves in was that of a Coast Guard crew member.

At the final stop of the tour in Victoria, many of the scientists had some time to reflect on the week. "The response has been gratifying," said Jane Whynn, Project Leader NRCAN Public Safety Geoscience Program. "Talking to the public, they're interested to learn more about the work that's going on in their backyard and they're thrilled to learn that the science going on there is relevant to issues that are of concern to ordinary Canadians." 



With CCGS *Sir Wilfrid Laurier* in the foreground, three arctic tugs get ready to make an attempt to pull the cruise ship *MV Clipper Adventure* off the ridge. It would take a fourth tug *MV Pisurayak Kootook* to finally shift the ship.

Coast Guard makes rescue in the high Arctic

For the 128 passengers of the cruise ship *MV Clipper Adventure*, the trip of a lifetime turned into more of an adventure than they bargained for when the ship ran aground on a shoal in the Coronation Gulf inside the Arctic Circle. Fortunately for the passengers and crew, the double bottom hull of the vessel held, the engines were undamaged, and there was no imminent danger of sinking, but the ship was stuck fast.

Soon after the grounding, Quebec based *Canadian Coast Guard Ship Amundsen* was dispatched from the Beaufort Sea. The science team aboard the *Amundsen* had a motor launch equipped with multi-beam sounding equipment, and the launch travelled ahead of the ship, using sonar data to pick out a safe route for the *Amundsen*. Two days after the *MV Clipper Adventure* grounded, stranded passengers and non-essential crew members were safely transferred to the *Amundsen* and transported to Kugluktuk, Nunavut for a flight back to Edmonton.

With the passengers safe, CCGS *Amundsen* returned to its science program. Pacific based *Canadian Coast Guard Ship Sir Wilfrid Laurier* arrived, having used the hydrographic data acquired by the *Amundsen*'s science team. As on-scene commander, the *Sir Wilfrid Laurier* supported CCG Environmental Response, Transport Canada, and the Transportation Safety Board. Transportation Safety Board inspectors investigated, and Transport Canada officially detained the ship while it reviewed the owners' salvage and transit plans.

Coast Guard efforts turned to recovery. With nearly 300 tonnes of fuel in the *Clipper Adventure*'s tanks, the potential release of fuel into the fragile Arctic environment was a significant concern.

The first few days of the recovery effort were calm and sunny, but as the days stretched on, increasing winds complicated the work. As the *Clipper Adventure* sat on the shoal, even minor wind and wave action made the ship rock significantly, adding to the damage to the ship's hull that had been caused by the force of the initial impact, and a total of 19 tanks on the ship were compromised.

To reduce the risk of a major spill, and to reduce the overall displacement of the vessel, the decision was made to remove the fuel from the ship. By fortunate coincidence, the NCTL tug *MV Nunakput* arrived with... a fuel barge to supply the *Sir Wilfrid Laurier*.

Even for the most experienced navigator, transiting in the Arctic, particularly in less travelled areas, can be a slow and cautious exercise. Many hydrographic charts of the area contain only limited information, are reissued infrequently, and include chart notes "Danger, Chart Contains Positional Errors. Use with extreme caution." Notices to Shipping are issued with chart corrections noting new information, but the responsibility to make those corrections lies with chart providers and ships crews.

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Port Epworth was explored by Captain John Franklin in 1820, and was temporary home to the RCMP Vessel St Roch which spent several winters in the area in the 1930's.

Once the ship was refuelled, the empty barge was used to remove the *Clipper Adventure's* 280 tonnes of fuel. In addition, everything of significant weight on the ship was removed, including engine parts, food and all but one of the ship's lifeboats.

The salvage plan included the use of heavy Arctic tugs to pull the ship off the

shoal. Initial attempts by the Northern Transportation Company Limited's (NCTL) *Alex Gordon* made it evident that a greater force would be required.

With the arrival of the tugs *MV Nunakput* and Crowley Marine Service's *Point Barrow*, the three tugboats made a second attempt to pull the ship off, but were unsuccessful. It was obvious a different approach would be needed.

Remaining non-essential crew from the ship were transferred to the *Sir Wilfrid Laurier*, and large inflatable bags known as roller bags or salvage bags were brought in and placed under the ship.

The bags, similar to those used to move barges and ships that were swept ashore in hurricane Katrina, were flown in by contractors and put in place by the use of specialized divers in an effort to help the teams recover the *MV Clipper Adventure*.

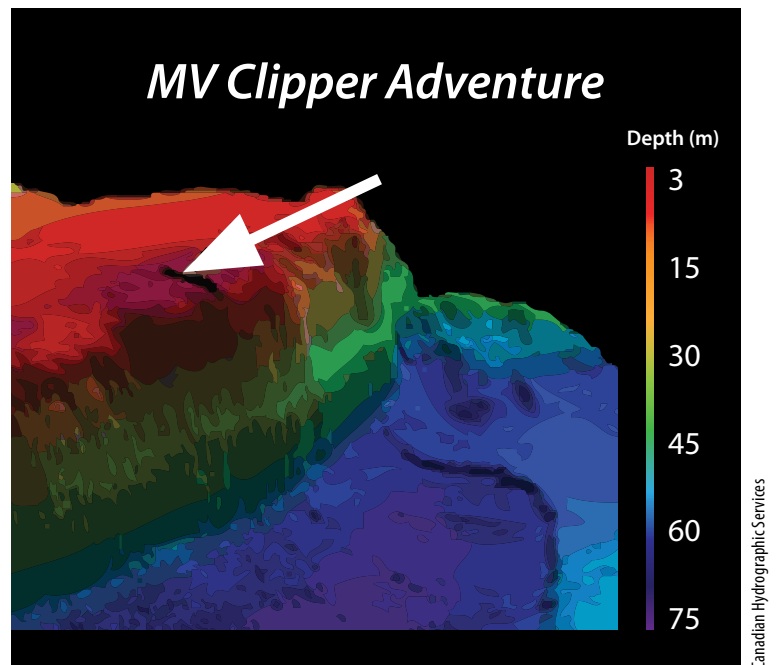
Additional hydrographic charting was done to move the ship to Port Epworth, Nunavut, a small protected bay approximately 25 nautical miles south of where the ship was aground. After dive surveys and Transport Canada inspections were completed, the vessel was towed to Cambridge Bay for temporary repairs and then on to Greenland for further repairs. The vessel eventually sailed under its own power Europe to complete repairs.

With the arrival of a fourth tugboat, the NCTL *MV Pisurayak Kootook*, a final attempt was made to pull the ship off the shoal. If the tugs were unable to shift the ship, it was possible it would remain there through the Arctic winter.

With some Newfoundland ingenuity from an *Alex Gordon* crew member, the ship was able to be moved sideways, and with the tug pulling and the *Clipper Adventure* under power, the ship was pulled off the shoal. A puff of black smoke rose into the air as the remaining crewmembers onboard put the ship full astern as it was pulled off. The entire

operation to remove the *Clipper Adventure* from the shoal took a total of 18 days.

With the hard work and cooperation of contractors, Coast Guard crews, the ship's owner/operator, Transport Canada and Transportation Safety Board inspectors, and the hydrographic survey teams aboard the *Amundsen* and the *Sir Wilfrid Laurier* a serious environmental incident was avoided and the pristine Arctic landscape remained undisturbed. 🚢



Data compiled from the Canadian Hydrographic Survey Teams shows the underwater ridge which the *Clipper Adventure* ran up on.



An overhead view from a Coast Guard helicopter from the *Sir Wilfrid Laurier* shows just how little water was under the keel of the ship moments before it grounded on the ridge.

Coast Guard crews effect a dramatic rescue in the Southern Straits Race

The Southern Strait Classic Regatta is an annual event held by West Vancouver Yacht Club which tests the seaworthiness of even the most experienced sailors and their yachts. During the 2010 yacht race however, the race not only proved the metal of the race participants, but also the Coast Guard crews who went out to rescue them.

As the 2010 Southern Strait Yacht race commenced on schedule from Dunderave Pier in West Vancouver race organizers made efforts to educate race participants on pending weather conditions. An Environment Canada Meteorologist made a presentation during the pre-race briefing.

Weather reports for the early April weather indicated strong but largely manageable winds from the South East. But contrary to weather reports which indicated less severe winds in the afternoon, the weather began to deteriorate further. Of the 65 race entrants, 15 didn't start the race, and within the first hour only 10% of the boats attempted to continue the race.

Among the remaining yachts that continued to stay in the race, the skipper of the yacht *Incisor* made the decision to remain out in the rough waters of Georgia Strait. As winds up awards of 55.5-60knots with six metre swells, the Marine Communications and Traffic Services Centre (MCTS) in Victoria and Joint Rescue Coordination Centre (JRCC) were flooded with calls from boaters in the area.

Where normally only a handful of cases are encountered, Coordinators at the JRCC would receive over 900 phone calls and conduct over 43 SAR Coordination cases during that 24 hr period. In addition, MCTS Victoria staff assisted the JRCC in handling the higher than normal call volume for their area during that same period.

The crew from Coast Guard Base Sea Island were already in the area responding to a distress call from the yacht *Radiance* which was demasted and dead in the water with its crew helpless off Entrance Island (near Nanaimo).

Ten miles away a breaking wave slammed into the stern of the 30ft custom yacht *Incisor* pitchpolling the yacht 360 degrees. Its crew of 6

didn't even have time to send out a distress call. A crewmember down below with the main hatch open had to swim out without weather gear or a life jacket as the vessel downflooded.

In the distance, the crew of the sailboat *Radiant Heat* saw the mast on a strange angle and proceeded over. Once it approached the crew of *Radiant Heat* sent out a mayday call on behalf of the *Incisor*.

For Coast Guard Captain Susan Pickrell, who piloted the hovercraft during the rescue of the *Incisor* crew, in what was the hovercraft's 3rd mission of the day, the storm presented some of the worst seas in the Strait of Georgia that she had seen in her 24 years of service.

While Coast Guard Hovercraft *Penac* is designed to be very maneuverable and capable for a high-speed response, the heavy swells were well beyond the worst conditions intended for the craft. To make matters worse, damage sustained to the heavy rubber skirt of the craft and made navigation a significant challenge.

Trailing a horsecollar lifering the *Radiant Heat* started her engines and attempted a pass close downwind of the *Incisor*. One crewmember swam for the ring, followed by another crewmember on a second pass.

With its engine temperature light lit, the *Radiant Heat* was not able to proceed up wind and was forced to watch the remaining four crewmembers still in the water doing their best to hang onto the submerged sailboat.

The nearby BC Ferry *Coastal Renaissance* was tasked to proceed downwind of the swamped vessel in case crew members were swept off the vessel. Two Coast Guard rescue divers took to the water with tethering lines to save the remaining four crewmembers that

were in the water awaiting rescue.

The divers commenced ferrying victims back and forth to the hovercraft to get them to safety, but just as Coast Guard diver Derek Thody approached the craft with a victim, a 15-foot wave picked up the hovercraft and shifted it on top of him and his survivor.

"Luckily I took enough air in before we were swept under," said Derek. "It was pitch black and I could feel the skirt against my head but I still had the victim in my arms." In an instant another massive wave lifted the hovercraft away. With a great deal of swimming Derek was able to get the victim to safety.

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Video taken from the sailboat *Astral Plane* during the race shows an unidentified racing sailboat tackling the heavy swell. Courtesy of Youtube: <http://youtu.be/13bo7-pUQ5w>



A screenshot from the same video shows the wind speed indicator of the sailboat *Astral Plane* register 55.5 knots. Courtesy of Youtube: <http://youtu.be/13bo7-pUQ5w>



CCG Station Sea Island

Before engineers could begin work on the *Penac*, the machine had to be shifted onto the helicopter pad at Nanoose Bay. With the help of the base fire truck, the craft was maneuvered into place.

"Rescue diving is very high risk and we train to a very high level of water confidence training, without air and in zero visibility," recalled Derek. "Our training is based on quick thinking and relying on our bodies."

In all the four remaining crewmembers from the *Incisor* were plucked from the water suffering from significant hypothermia. The four were transported by Hovercraft to the Canadian Forces Nanoose Military base, where a B.C. ambulance met the craft. Due to concerns about the overheated engine of the *Radiant Heat*, the RCMP escorted the vessel into Nanaimo where the two recovered survivors were rushed to Nanaimo General Hospital.

Unfortunately the damage sustained to the hovercraft from the significant conditions prevented the craft from returning back across Georgia Strait. To conduct emergency repairs was moved to the helicopter pad at the Canadian Forces Nanoose Base, where with the assistance of the Base Fire Engine, the craft maneuvered onto the pad.

The next morning the engineering crew from Sea Island made it to the Base

and began to assess the damage. Without their extraordinary determination and considerable effort to go into the field and work all the next day, the engineers had to rely on portable generators and borrowed lifting gear to make the needed repairs to the significant damage from the incident. In the end, the engineers ended up replacing 83 of the 120 fingers (flexible rubber skirt extensions) on the craft.

The dramatic rescue of the crew from the *Incisor* netted praise from several groups.

In a ceremony at the Institute of Ocean Sciences soon after the incident, the Coast Guard crew received recognition for their bravery and determination in the rescue by Maritime Forces Pacific Commander Rear Admiral Tyrone Pile. "Risking a life to save a life doesn't happen automatically, said RAdm Pile. "These folks stepped beyond the call of duty to make us very proud to be Canadians. They have made life safer for people in our province."

In a recent ceremony at Canadian Coast Guard Station Sea Island, Coast Guard Assistant Commissioner Vija Poruks presented a Canadian Coast Guard Distinction Awards to; Captain Susan Pickrell, 1st Officer Tom Moxey, Rescue Specialist David Schur, Leading Seaman/Diver Michael Hawley, Seaman/Diver Mike Lydiatt, Seaman/Diver Derek Thody, Seaman/Diver Travis Kramer were recognized for their excellence in Service Delivery.

The engineering crew of Mike Wright and Donald Ma were also presented with Canadian Coast Guard Distinction Awards for their exceptional performance in very different and challenging working conditions.

"During the course of this difficult mission, the crew demonstrated conspicuous courage and perseverance," said Assistant Commissioner Vija Poruks. "Today we recognize the extraordinary teamwork and commitment to excellence exemplified by the members of the Hovercraft Unit who responded to the *Incisor* incident."



Dan Bate

Following presentation of Canadian Coast Guard Distinction Awards, each of the crew members involved in the incident, Assistant Commissioner Vija Poruks, A/RD Fleet Joanne McNish, and Officer in Charge Brian Wootton pose for a photograph in front of CCGH *Penac*.

The crew was also recognized at the ninth Annual Richmond Chamber of Commerce 911 Awards which was recently held put on by the City of Richmond and the Richmond Chamber of Commerce.

Learning from the invaluable lessons of the previous year, organizers of 2011 Southern Strait Classic Regatta incorporated new training and changes to the race to enhance safety. 



Bob Ayres

Survivors with CasTrack tags in raft during Nanaimo SAREX, with Coast Guard Triage Officer (white vest) and Transport Officer (yellow vest).

Coast Guard Pacific develops a National Casualty Tracking system

In the inky black darkness of the pre-dawn light, a passenger ship with a large number of passengers requires immediate evacuation. A constant heavy rain and wind only serves to elevate a feeling of panic and stress on passengers as they exit the ship on lifeboats and inflatable life-rafts. While most survivors are uninjured, some will require special attention due to as-yet-undetermined injuries. A Mayday call goes out and several Coast Guard and other nearby vessels speed to the scene.

For Search and Rescue resources arriving on scene, multiple casualty incidents present a number of challenges to rescuers. Is the scene stable or unstable? How will rescuers communicate with officers from the stricken vessel? How many passengers and crew are on the stricken vessel? How many are injured and how severely? What, if any, assistance is required to complete the evacuation? Are all passengers and crew accounted for? In a confusing and potentially dangerous scene, responders must focus and work to gain control.

Following debriefs into the response to the sinking of the BC Ferry *Queen of the North*, which underscored the difficulties in counting and tracking large numbers of survivors, a prototype casualty tracking system, "CasTrack" was developed in Pacific Region. The objective was to develop a passenger accountability system, supported by a training curriculum, to improve the Coast Guard response to marine disasters.

Reviews of major Search and Rescue incidents and exercises show that casualty tracking and accountability is consistently problematic. Passenger manifests that should allow an accurate accounting of passengers are sometimes non-existent, missing, or inaccurate. This lack of reliable information adds to the difficulty in accounting for large numbers of survivors in a chaotic scene.

Casualty tracking is considered necessary anytime there are multiple survivors and the possibility for confusion exists. This can especially be the case with multiple responders and transporting units or when the numbers of persons involved is high. Difficulties in tracking and accounting for survivors have arisen in incidents with as few as eight persons.

Positive feedback to the CasTrack prototype led to a New Initiatives Fund (NIF) application to the National Search and Rescue Secretariat (NSS), and Coast Guard Pacific was provided a two-year grant to complete the project. The project included review and research into current and best practices at home and abroad, including electronic and paper-based systems, followed by further system development, testing and evaluation at minor and major exercises and finally the production of materials and deployment to all CCG regions.

A key component of the CasTrack system is tags printed on tear resistant, waterproof paper. The tags are contained in a plastic sleeve and attached to a lanyard for easy application. Tags contains basic instructions for self completion and are attached to every passenger and crew member at logical choke points such as when embarking or disembarking a vessel.

In addition to allowing easy counting and numbering of survivors, the bilingual tags also capture basic but important information including name, date of birth and contact info, medical considerations and triage category (severity of injury), and others in family group or party. This information is then collected by the designated Coast Guard Transport Officer to aid in the accountability process.

By developing a systematic approach to passenger accountability, Coast Guard responders may reduce precious time wasted in counting and recounting survivors at various stages during rescue and transport and avoid unnecessary or extended searches... due to difficulties in confirming numbers. In addition, the CCG may provide valuable information to partner agencies at an earlier stage of

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Dan Bate

CasTrack system tags are printed on tear resistant, waterproof paper. Each tag contains basic instructions for self completion and are attached to every passenger and crew member.


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the incident and minimize to those agencies the burden of survivors arriving ashore with minimal accounting.

A recent Search and Rescue exercise in Nanaimo proved how valuable and how relatively easy the system is to implement. In response to a mock explosion onboard the BC Ferry *Qunisam*, 100 survivors were evacuated from the ship by way of an inflatable life-raft system. Once disembarked, each evacuee was tagged as they filled up the life-raft. Though moved by various Coast Guard and Coast Guard Auxiliary assets, all evacuees were accounted for during all stages of transport to a shore based reception centre staffed by Emergency Health Services and community based agencies.

"Overall the Nanaimo SAR exercise and other exercises where the system has been used have demonstrated just how valuable the

CasTrack system is for casualty tracking and accountability," said Bob Ayres. "The tagging and numbering of survivors allowed for an easy and accurate count and for quick identification of those with higher priority needs, while the tracking sheets provided the Transport Officer and On Scene Coordinator with confidence that they had a grip on the transport status of all survivors at all times."

Since its introduction in 2010, CasTrack kits have been rolled out to every Coast Guard Ship and Station across Canada. As well as being used several times in exercise across the country, the first real test on incident was during the response by the *CCGS Sir Wilfrid Laurier* to the grounding of the cruise ship *MV Clipper Adventure* in the arctic in August 2010. CG officers reported that CasTrack worked very well in accounting for the *Clipper Adventure* crew members who were transferred to the *Sir Wilfrid Laurier* during the salvage operations. 



Pete Collins

Sister ships *CCGS Bartlett* (L) and former *CCGS Provo Wallis* (R) sit tied up at the Institute of Ocean Science on the day of a small decommissioning ceremony at Sidney, B.C.

Changes to Coast Guard's fleet

As any major fleet of ships will do, Coast Guard's Pacific based fleet just went through a major suite of changes. The fleet welcomed back *CCGS Bartlett* and *CCGS Tanu* after major mid-life refits and said goodbye to the *CCGS Provo Wallis*, *CCGS Tsekoa II*, *CCGS Point Race*, and *CCGS Point Henry*. New additions to the fleet include three new Coast Guard 47ft Motor lifeboats *CCGS Cape Palmerston*, *CCGS Cape Naden* and *CCGS Cape Dauphin*.

In 2007, *CCGS Bartlett*, one of Coast Guard's major assets, had been laid-up at DFO's Institute of Ocean Sciences in Sidney for long-term refit. Primarily used as a navigational aid tender, the ship was also frequently involved in Search and Rescue, fisheries enforcement and pollution control activities. But the *Bartlett's* future appeared to be question.

Considered a major workhorse of the Pacific fleet, the ship was beginning to show its age. Primarily used as a navigational aid tender, the ship was also frequently involved in Search and Rescue,

fisheries enforcement and pollution control activities before being tied up.

Started in the summer of 2009 and completed in spring of 2010, a major \$16.9 million midlife refit of the ship was completed at Allied Shipbuilders of North Vancouver. The funding made available through the economic action plan program made sure that the ship remains operational for another 10 years doing what the *Bartlett* does best on the West Coast.

Another of Coast Guard's major assets *CCGS Tanu* recently underwent a similar midlife refit at Allied Shipyards of North Vancouver. The \$5.9 million contract for a vessel life extension included upgrades to the two main engines to decrease emissions, and the installation of three new generators to modernize the electrical generating system, a new sewage treatment plant, new navigation and communication equipment, a new galley and a new hospital.

In addition, a new fast rescue craft (FRC) davit was installed to improve the vessel's search and rescue capability. A new 200 horse power electric bow thruster was also installed on the ship to improve the vessel's maneuverability.

Work on the ship began in October of 2010, and was completed in March 2011. Once the Vessel Life Extension of the *Tanu* was complete, the vessel returned to service modernized and fully operational. The repairs are expected to keep *CCGS Tanu* in service for years to come.

The *Tanu's* refit also benefitted Allied Shipbuilders, which completed the refit. "The *Tanu* project enabled us to retain our highly skilled work force, allowing us to continue the upgrades to our facility to improve our efficiency in both ship repair and ship construction and permitting us to retain our apprentices, who are the future of this company," said Chuck Ko, Vice President Of Operations for Allied Shipbuilders and the Project Manager for the *Tanu* project.

It was a different story for the *CCGS Provo Wallis*, sister ship to *CCGS Bartlett*, when at the end of December, the ship ended its long and historic service life with the Canadian Coast Guard.

Affectionately known as the Provo, the ship was an ice-strengthened medium navigational aids tender. Constructed in 1969, the ship started its Coast Guard service in the Maritimes Region.

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The 87 ft CCGS *Tsekoa II* was designed by Robert Allan Ltd. of Vancouver and constructed at Allied Shipbuilders Ltd. of North Vancouver in 1984

In 1990, the ship was modernized and had 20 feet added to the well deck. In 2007, the ship sailed through the Panama Canal, transferred to the Pacific region as a relief vessel to replace the *Bartlett* during its out-of-service period. The *Provo Wallis* quickly became a mainstay of the Pacific fleet, servicing fixed and floating aids as well as performing lighthouse re-supply, the ship was frequently multi-tasked. The ship regularly participated in Search and Rescue (SAR), Marine Security, Environmental Response, Fisheries Management and Conservation and Protection programs.

"It is not often that we witness the end of service for a large vessel," said Vija Poruks, Assistant Commissioner, Pacific Region. "I know the event was a historic one for many employees who were closely connected with this proud ship over her long service life."

In preparation for decommissioning, a full inventory and cataloguing of spares and other related work took place. Where possible, any equipment and components that could be used for CCGS *Bartlett* was removed and stored for future use.

In all, the contribution that the *Provo Wallis* made to the safety of mariners, members of the Canadian public, and to the Canadian Coast Guard organization was significant. The ship will be fondly remembered on both coasts of Canada.

The 87 foot CCGS *Tsekoa II* designed by Robert Allan Ltd. of Vancouver and constructed at Allied Shipbuilders Ltd. of North Vancouver in 1984, was also recently decommissioned.

The ship was formerly operated by Public Works Canada and used for the maintenance and upkeep of many government harbours. It was used primarily for harbour construction and maintenance and proved to be a reliable and stable vessel in the fleet. With the divesture of many government harbour facilities to local communities, the vessel was transferred to the Coast Guard.

The ship had the unique ability to attract the model boat building community. Model building kits and plans of this vessel can still be purchased online and have attracted model boat aficionados the world around.

The ship was sold under a gratuitous transfer to the University of Victoria; the yet-to-be-renamed ship will increase ocean research

capacity in the Strait of Georgia and off the west coast of Vancouver Island.

At the end of June 2011 the *Canadian Coast Guard Cutter Point Race* and *Canadian Coast Guard Cutter Point Henry* were decommissioned after 30 years of service in the Coast Guard. The *Point Race* and *Point Henry* were two of four sister ships built in Port Hawkesbury, Nova Scotia and delivered to B.C. by commercial ship in late 1981.

Originally commissioned as CG 125, and later renamed the *Point Race* in 1984, the vessel entered service in June 1982. The *Point Race* and her crews responded to over 5000 SAR incidents (including one birth aboard) since being commissioned for service from CCG Station Campbell River.

Originally commissioned CG 123 and later renamed the *Point Henry*, the cutter served Prince Rupert and the surrounding communities on British Columbia's North Coast. The "Hank" and its crews participated in over 3500 SAR incidents, including one very notable incident which involved the *F/V Larissa*, where crew member Les Palmer received the Cross of Valor, a highly prestigious award.

All four ships were fondly remembered by the crews and the communities they serviced. 



The 69 ft CCGC *Point Race* was a fixture on the Campbell River waterfront for many years and responded to over 5000 Search and Rescue incidents



CCGC *Point Henry* was involved in many significant incidents on the North Coast including the difficult rescue of 2 members of the fishing vessel *Larissa* that capsized in hurricane-force winds in a winter storm.



The 68 ft fishing vessel *Sanderling No. 1* sits tied up to the dock in slightly better weather.

Double Jeopardy for the crew of *Sanderling No. 1*

Unusual Search and Rescue cases happen from time to time on the west coast, but peril usually doesn't strike a vessel twice in as many days. In the case of the vessel *Sanderling No. 1*, however, the crew members of the 68-foot commercial fishing vessel experienced just that.

The first incident occurred on February 3, after the vessel was disabled due to mechanical difficulties south of Aristazabal Island, approximately 200 kilometres north of Vancouver Island. With three persons onboard and adrift six kilometres from shore in three to four metre seas, a hard grounding on the nearby shore seemed likely.

A pan-pan call (indicating no immediate danger to anyone's life or to the vessel itself) was issued by the vessel and relayed through Marine Communications and Traffic Services Prince Rupert. Hearing the call, the Joint Rescue Coordination Centre swung into action. *Canadian Coast Guard Ship Cape Farewell* and *CCGS Sir Wilfrid Laurier*, along with a Canadian Forces Buffalo and Cormorant aircraft, were tasked to respond to the disabled vessel.

With the *Sanderling No. 1*'s Emergency Position Indicating Radio Beacon (EPIRB) activated, the crew launched the life raft in preparation to abandon ship. However, with stormy seas raging, the crew lost control of the life raft, forcing the crew members to either remain onboard or jump into the freezing water.

Moments later, *CCGS Cape Farewell* from CCG Station Bella Bella arrived on scene. Despite the very challenging conditions, the *Cape Farewell* crew—Officer in Charge Rob Conley, Engineer Al Rosie, and Deck crew Paul Hollyoak and Arran Knaak—set to work hooking up a tow line on the disabled vessel, working to pull it away from the shoreline and out of danger.

Overhead, the crew of the Canadian Forces Cormorant had a bird's eye view of the dramatic scene below. The Captain of the helicopter reported that as each wave crested, the *Sanderling No. 1* surged almost completely out of the water before slamming down into the trough of the wave. The crew of the Motor Life Boat (MLB) had their hands full keeping the tow secure on the vessel and themselves out of danger. Finally after some tense moments, the MLB was able to tow the vessel to safety and back to Bella Bella.

Acting Regional Director Fleet, Joanne McNish, acknowledged the commendable effort in the rescue of the crew and vessel *Sanderling No. 1* in the challenging conditions. "Although CCG crews continuously work towards being able to effectively react in such situations, success is a direct tribute to the leadership, seamanship and teamwork onboard during the rescue."

In Bella Bella, the crew from the *Sanderling No. 1* focused their efforts on getting the vessel back to Vancouver Island to effect mechanical repairs. Just two days later on February 5 the vessel was again underway, departing Bella Bella under tow by a commercial tugboat. Rough weather continued throughout the day, but the crew of the tugboat was able to maintain control of the vessel.

Misfortune struck again 16 kilometres north of Port Hardy off Davey Rock in Gordon Channel when the towline parted, setting the *Sanderling No. 1* adrift. With heavy weather conditions, mechanical difficulties and shoals nearby, the vessel was again in imminent danger of grounding. As the vessel's life raft had been lost in the previous rescue, the crew's only choice would have been to swim for it.


In the early morning, the Joint Rescue Coordination Centre tasked CCG Station Port Hardy to swing into action. Battling heavy rain and 30-knot winds, *CCGS Cape Sutil* crew, Officer in Charge Bruce Campbell, Engineer Bruce Bournazel, deck crew Huw Davies and Adrian White, reached the drifting vessel within 45 minutes.

Once a tow line was hooked up, the *Sanderling No. 1* was again secure and under tow by a Coast Guard MLB. In night operations with rough seas and high winds, the *Cape Sutil* with the *Sanderling No. 1* under tow, took four hours to reach Port Hardy. With the vessel tied up at the Canadian Government wharf in Port Hardy, the crew of the vessel was again out of danger and back on dry land.

The rescues netted praise from the Department of National Defence Cormorant air crew who attended the first incident and from the marine insurance underwriter for the vessel.

The Pacific Coast Fisherman's Mutual Marine Insurance Company wrote to commend both Coast Guard crews on their work.

"We understand that in both cases, the competent and professional work of the Coast Guard crew members was instrumental in keeping the vessel off the beach, delivering it safely to Shearwater and Port Hardy respectfully, and most importantly seeing all crew brought safely ashore without injury," wrote Lee Varseveld in a letter to Coast Guard. "We write in acknowledgement and appreciate of the practical, hands on approach taken and the remarkable efforts of those crew members in extremely challenging conditions."

Overall, both incidents demonstrated an excellent effort from all involved, bringing three people to safety twice in two days. 

SHIPS OF THE CANADIAN COAST GUARD, PACIFIC REGION

CCGS Cape Palmerston

47ft. Multi-Task High Endurance Lifeboat



Victoria Shipyards

Call Sign:	CFN 5493	Official Number:	835203	Port of Registry:	Ottawa
Patrol Area:	Shore based lifeboat providing response to local inlets, inshore and nearshore waters from assigned CCG station. Total fuel range in optimum conditions at cruising speed: 200nm.			Survivor Capacity:	5 people
Certification:	Home Trade Class II, limited to 50 nm offshore.			Displacement:	21 tonnes
Built:	2011 - Victoria Shipyards, Victoria B.C.			Draft:	1.37 m (4.5ft)
Description:	High speed self-righting Motor Lifeboat (MLB), Home Trade Class II vessel with sea keeping ability to sea state 5.			Length:	14.36 m (47' 11" 7/8 ft)
Duties:	Search & Rescue, Fisheries Patrol and Enforcement, Pollution Response and other tasks as required by Fisheries and Oceans Canada and Canadian Coast Guard Programs.			Breadth:	4.7 m (14ft)
Crewing:	Staffed on an 8 hour day with 16 hours stand-by.			Propulsion:	2 x Caterpillar C12 geared diesel engines with two fixed-pitch, four blade propellers.
Crew:	Crew of 4			Horsepower:	677 kW (908 bhp)
				Max. Speed:	25 knots (46.3 kph / 28.8 mph)
				Cruising Speed:	22 knots (40.7 kph / 25.3 mph)
				Fuel Capacity:	1450 litres (318.96 imp gals.)
				Water Capacity:	22.7 litres (4.84 imp gals.)
				Electrical:	2 engine-driven 120V AC generators, 5kW each. 2 shaft-driven 24V DC generators, 280 Amp each.
				Towing Capability:	2 nylon braid. 150 tons displacement.
				Auxiliary Equipment:	1 Zodiac ERB380 with auto inflation and 15HP motor.