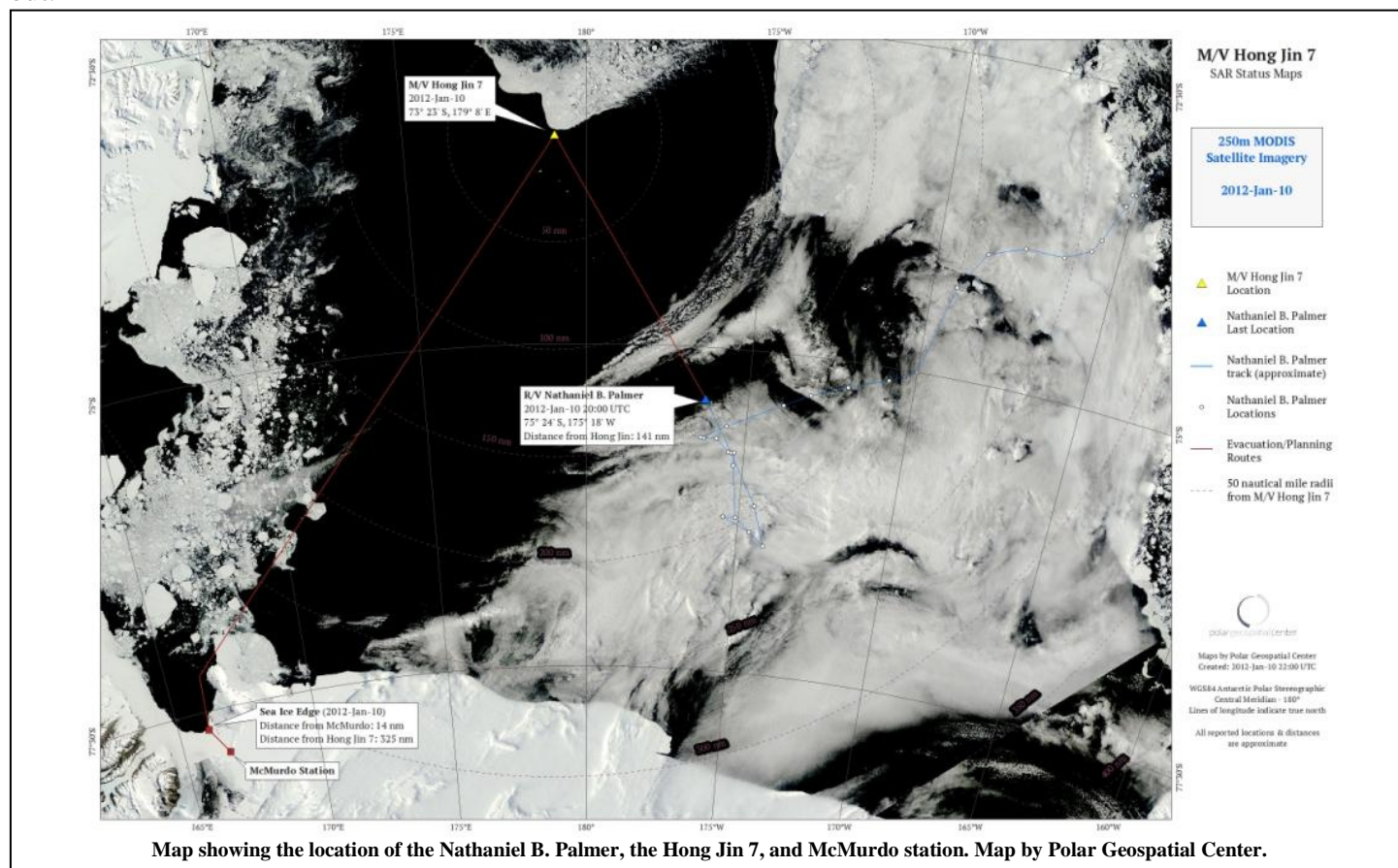


## Science one day, medical rescue the next day...

By Julian Race. The Ross Sea, January 14, 2012

What was supposed to be an ordinary science cruise to the Ross Sea turned into a rescue mission for the scientists and crew on the ice breaker research vessel *Nathaniel B. Palmer*. On January 10, 2012, the *Palmer* was conducting research in the Ross Sea, collecting data about nutrients and other ocean processes. At approximately 3:30AM, a distress call was received from a nearby fishing vessel. The vessel was reported to be on fire, and the situation was very serious. Captain Sebastian Paoni, Marine Projects Coordinator Al Hickey, and Chief Scientist Dennis McGillicuddy made the decision to halt science operations and make best possible speed to go help.

All of the science equipment was winched back onboard the ship, the laboratories were cleaned and secured, and the *Palmer* turned north and headed full-speed towards the last known location of the vessel in distress. Meanwhile, the Captain and his crew were in contact with the New Zealand Rescue Coordination Centre (RCC), the dedicated rescue operations command post for that area of Antarctica. The RCC was gathering all reports about the incident, and coordinating the response. The *Palmer* was not the only ship in the area, but was the nearest, most properly equipped vessel to handle serious injuries. At the time, the RCC reported that the *Palmer* was about 16 hours away from the scene, and there were also two other fishing vessels 30 miles away. The Korean research vessel *Araon* was also in the area and was reported to be about 24 hours out.



The reports from RCC were grim: the Korean fishing vessel *Jeong Woo 2* was on fire, and of the 40 crew, 3 were missing and many were injured. The fire was out of control, and had already destroyed one of the vessel's two lifeboats. Some of the crew had evacuated to the remaining lifeboat, but many were still stranded onboard the burning ship. The *Palmer* kept heading north, and all hands made ready for the upcoming rescue. The various scientists and support staff were assigned roles based on their skills and experience. Some would act as medics, others as rescue, recovery or general support. The ship was also preparing to take on up to 40 extra passengers. Every available space was made ready, as well as food and blankets for the victims.

About an hour away from the rescue, an all-hands meeting was called to discuss the rescue. The latest reports were better than expected, but still serious: the *Jeong Woo 3*, sister ship of the *Jeong Woo 2*, had arrived and evacuated all of the survivors from the burning wreck. Unfortunately, it was confirmed that three of the crew members had not survived the blaze, and an additional 7 were seriously injured and required immediate medical care. The *Jeong Woo 3* was not able to properly treat the injured, and the *Palmer*, with a fully-equipped and staffed hospital, was asked to take on the injured and transport them to McMurdo station for evacuation to New Zealand.

The *Palmer's* mission had shifted from rescue and recovery to medical transport. Arriving at 7:50PM on January 10, 2012, the *Palmer* came upon a shocking scene. The *Jeong Woo 2* was still burning fiercely, with yellow flames leaping out of the pilothouse and superstructure, while thick black smoke billowed into the sky. The burning ship was wedged into some pack ice, and a short way off stood the *Jeong Woo 3*. The *Palmer's* crew adapted their plans and quickly made ready to take on the injured victims.

To transport the patients from the Korean ship to the *Palmer*, two zodiacs were put into the water. Each zodiac was manned with a helmsman, ship's officer, medic, and deckhand. The zodiacs took turns ferrying the patients from the Korean ship back to the *Palmer*. The patients who could walk were helped up the side of the ship by way of the boarding ladder, while the serious cases were lifted, boat and all, up to the *Palmer's* helicopter pad, where a team waited to carry them directly to the ship's hospital.



The Jung Woo 2 burns in the background, as a rescue team from the Nathaniel B. Palmer transports patients from the waiting Jung Woo 3. Photo by Jonny Pierce



Two injured crewmen are lifted onto the Nathaniel B. Palmer to a waiting rescue team. Photo by Josh Eaton

After multiple trips back and forth, all of the injured fishermen were on the *Palmer* and ship's EMTs began treating them. The ship then turned south and began making way towards McMurdo station.

The transit to McMurdo went quickly, with the *Palmer* using all of its sophisticated sensors and systems to plot the fastest, safest route through the ice to McMurdo. The ship would break its way into the ice about 16 miles from the station, and a medical team would fly to the ship in helicopters to offload the patients.

32 hours after leaving the *Jeong Woo 3*, the

*Palmer* arrived at the McMurdo ice edge and began pushing her way into the ice. Being an icebreaker, the 2-3 foot thick sea ice was no problem. The *Palmer* stopped at a section of ice identified by an earlier reconnaissance flight as flat and stable enough to support the helicopters. Once the ship was secure, the crew carefully examined the ice around the ship, and marked off a safe landing zone using food coloring from the ship's galley.

The medical team from McMurdo arrived shortly after, and landed on the ice a few hundred feet away from the ship. The crew of the *Palmer* again went into action, performing the patient offload quickly and safely. The patients who could walk were gently escorted down the gangway, where a team was assembled on the ice, and rescue sleds that the medical team brought from McMurdo were used to transport the patients from the ship to the waiting helicopters. The seriously injured patients were carried from the hospital to the helo deck in a litter – a lightweight stretcher – and placed into a zodiac. One medic rode with the patient as the ship's crane lifted the



Crew from the Nathaniel B. Palmer test the ice near the ship. Photo by Julian Race



Rescuers from the Nathaniel B. Palmer move a patient from the ship to a rescue sled. Photo by Josh Eaton

boat over the side and lowered it down to the ice. Again, the ice team dragged the patients to the helicopter, where they were loaded on and sent on to McMurdo.

Once all of the patients and medical personnel were safely on their way to McMurdo, the *Palmer* secured for sea and started back towards the Ross Sea to continue the science mission where they left off. The scientists, support staff, and crew of the *Nathaniel B. Palmer* worked as a team to respond to this serious incident, and played a key role in the response to this maritime tragedy.

Pictures continue on following pages...





**The *Jeong Woo 2* burns in the ice off Antarctica. Photo by Johnny Pierce**



**Crew from the Nathaniel B. Palmer test the ice for safety. Photo by Julian Race**



The rescue team holds a safety meeting before offloading the patients. Photo by Julian Race



A rescue helicopter from McMurdo station lands on the ice. Photo by Josh Eaton





Injured fishermen are unloaded from the Nathaniel B. Palmer and brought to waiting rescue helicopters. Photo by Johnny Pierce



A team of rescuers from the Nathaniel B. Palmer pull a patient to a waiting helicopter. Photo by Julian Race



A team of rescuers from the Nathaniel B. Palmer pull a patient to a waiting helicopter. Photo by Josh Eaton



Part of the rescue team. Left to Right: Julian Race, Randy King, Amy Schaub, Tom Purcell. Photo by Josh Eaton





**Part of the team of rescuers from the Nathaniel B. Palmer. Photo by Josh Eaton**