



L'Astrolabe on her first missions

The French polar logistics vessel *L'Astrolabe* has her first summer in the southern hemisphere behind her. She has successfully undertaken several supply trips from Hobart in Tasmania to the French research station, Dumont D'Urville, in Antarctica. Now she is returning to Reunion Island for patrolling duties in the Indian Ocean during the winter months.

Stanislas Devorsine who is the vessel's acting ice pilot for the first voyages to the Antarctic, has tweeted (@StanDevorsine) regularly about their first summer season. The vessel has encountered rough seas, tough ice conditions, freezing temperatures and snowstorms, but also blue skies and beautiful scenery. He has praised the vessel's manoeuvrability in both open water and coastal ice.

At the start of the season, *L'Astrolabe* parked at the edge of the fast ice, about 50 kilometres north of Dumont D'Urville, and supplies were transported to the station by a convoy of snow vehicles and the helicopter that the vessel carries on-board.

The helicopter was also used to survey the route and to find an optimal path through the ice pack. By the end of the season, *L'Astrolabe* had managed to reach all the way to Dumont D'Urville through the ice.

The CEO of Chantiers Piriou (the shipyard responsible for the construction of *L'Astrolabe*) Pascal Piriou was onboard the polar logistics vessel during its last voyage for this austral summer in the beginning of February 2018. Mr Piriou had the chance to experience operations hands on and to gather valuable feedback on the vessel for both the shipyard and designers.

L'Astrolabe parked close to Dumont D'Urville.

Photograph: S. Devorsine

"More detailed information about the successful operation during the first voyages to Antarctica will be available at the Arctic Passion Seminar in March 2018," says project manager Anders Mård.

In addition to the basic design and testing of the vessel, Aker Arctic provided technical support to Chantiers Piriou throughout the construction period. Specialists visited the shipyard at regular intervals to ensure that technical aspects for the ice-going ship were taken into account. The vessel was finished on time within a tight two-year schedule.

L'Astrolabe was delivered in September 2017 to her owners and operators TAAF - the French Southern and Antarctic Lands, IPEV - the French Polar Institute and the French Navy.

USCGC *Polar Star* reaches McMurdo station

The Seattle-based, US Coast Guard cutter *Polar Star* forced its way through the Antarctic ice in January as part of its annual mission and cleared a path through frozen waters for supply ships headed to Antarctica's logistics hub, the McMurdo Station.

The summertime supply deliveries allow the station to stay operational year-round. The McMurdo station is home to the largest laboratory in Antarctica, the Albert P. Crary Science and Engineering Center. McMurdo also serves as a staging area for teams headed to the Earth's geographic south pole, where the Amundsen-Scott Pole Station is located, and other deep-field research camps.

USCGC *Polar Star*, commissioned in 1977, is the US Coast Guard's only functioning heavy polar icebreaker. However, according to Coast Guard

Commandant, Admiral Paul Zukunft, it is living on borrowed time. Her sister ship, USCGC *Polar Sea*, is currently being used for spare parts. (news.usni.org.)

Acquisition programme underway

The acquisition programme launched in 2016 to replace USCGC *Polar Star* with a new, modern, heavy polar icebreaker is well underway with industry studies being finalized and proposals for construction being prepared. The decision on where to construct the first vessel is expected in 2019, with delivery in 2023.



Photograph: Chief Petty Officer Rachel Polish/United States Coast Guard, 2017

In a recent seminar, Admiral Zukunft explained that the need for heavy icebreakers is growing, as other nations including Russia and China, routinely stake claims in the polar regions. The plan, as of now, is to build a total of six icebreaking vessels: three heavy and three medium icebreakers. However, budget constraints may alter this plan.