PRINCESS ELISABETH ANTARCTICA IS OPEN FOR BUSINESS!



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The International Polar Foundation team arrived last night at Princess Elisabeth Antarctica station to begin operations for the 2013-2014 four-month BELARE scientific research season, after being delayed by a week due to bad weather that hampered flight operations.

The ten person group, including six Belgians, and one each from France, Switzerland, Netherlands and Canada, arrived from Cape Town to Russia's Novo Air Base on board an Ilyushin Il-76 aircraft. Seven of the team took a Twin Otter aircraft to the zero emission Princess Elisabeth Antarctica at 2215 CET and the other three will arrive at the station soon.

> *"Princess Elisabeth Antarctica is open for business – we're busy clearing the extensive snow systems from around the station, and getting the systems up and running, in preparation for the international researchers who will arrive soon", said expedition leader Alain Hubert. "The International Polar Foundation is once again proud to support the work of polar scientists who make the journey to Antarctica to help us better understand the the Earth and and its mechanisms."*

During the 2013-2014 BELARE season, the wind and solar powered station, operated by International Polar Foundation on behalf of the Belgian state, will host scientists working in the fields of atmospheric science, glaciology, meteorology, geology, and, from several different countries, including large from Belgium, Germany, Switzerland and Japan. The first scientists arrive by aircraft on November 19th, including German glaciologist Dr Reinhard Drews who makes his second trip to Princess Elisabeth Antarctica as part of his InBev Baillet Latour Antarctic Fellowship. Drews was awarded for his work in investigating how the potential disintegration of Antarctic floating ice shelves could contribute to increased ice flow from inland glaciers, and a resulting rise in global sea levels.

Amongst ongoing construction/development projects at the station this season are maintenance of building and technical installations, improvement station facilities and major overhaul of the snow tractors and skidoos. The team also plan to improve the communication network for scientists working in the field while in Antarctica.

Princess Elisabeth Antarctica's design and construction seamlessly integrates passive building technologies, renewable wind and solar energy, water treatment facilities, continuously monitored power demand and a smart grid for maximising energy efficiency.

> *"After five seasons at Princess Elisabeth Antarctica, we are proud to remain at the vanguard of exploring new, durable ways of using and conservating energy and resource use to influence " said Hubert. "However, these methods and technologies should not remain in Antarctica – they should be an inspiration for how we use energy all over the world".*

Science projects taking place at Princess Elisabeth Antarctica during the BELARE 2013-2014 season:

- BE:WISE: Research on buttressing effects on ice shelves (ULB) – Dr Reinhard Drews and Lionel Favier will work on the Antarctic coast, funded by the InBev Baillet Latour Antarctic Fellowship.
- BELATMOS - Ozone, UV radiation and aerosols - Belgian Royal Meteorological Institute (RMI). Dr. Alexander Mangold will be installing new instruments and filtering devices. Funded by BELSPO.
- ICECON: Understanding ice dynamics – Dr Nicholas Bergeot from Université Libre de Bruxelles (ULB) will install GPS antennae to track ice movement. Funded by BELSPO.
- JARE-55: National Institute of Polar Research (NIPR) team from Japan will carry out absolute gravimeter readings, as well as a reconnaissance flight over the Belgica Mountains.
- GIANT-LISSA: Dr Denis Lombardi from Royal Observatory of Belgium will engage in setting up a seismometer transect across the western Sor Rondane mountains.
- AWS AIR, AWS GUN– Simon Steffen of Swiss Institute for Forests, Snow and Ice (WSL) of a new Automatic Weather Station at the Romnoes Blue Icefield, donated to the International Polar Foundation by the University of Colorado and WSL in Zurich. Two more AWS will be equipped with Argos antennae.
- LGGE – Alain Hubert , Nighat Amin and Simon Steffens to carry out snow density measurement –traverse of 180 km, measurement of 60 points, twenty cores to measure snow density.
- GEOMAG project: Site survey for installation of radome for the geomagnetic observatory. Jean Rasson from IRM Dourbes in Belgium carrying out survey in preparation for construction of geomagnetic observatory next season.
- ACME: Launch Radio sounding balloon to investigate the water vapour in the air column rising up to the troposphere. Partnership between International Polar Foundation, Swiss Institute for Forests, Snow and Ice and IRM.

Follow this season's expedition over on antarcticstation.org