

## TO EGRIP STEERING COMMITTEE MEMBERS, DANISH AND GREENLANDIC AUTHORITIES.

### Expedition Permit C-18-5 EGRIP – SITUATION REPORT (SITREP) no.13, Sunday 22 July 2018

This SITREP covers the period July 16 – July 22, 2018 (inclusive).

#### Movement of personnel:

- 18. July:** 28 JSEP PAX (DK/US/GL) and Anna Filipova (press-Bulgaria) from EGRIP to Kangerlussuaq (SFJ) by skier 109<sup>th</sup>.
- 18. July:** Kadir van Lohuizen (press-NL), Martijn Blekendaal (press-NL) and Pim Hawinkels (press-NL) from Ilulissat (JAV) to Kangerlussuaq (SFJ) by Air Greenland.
- 19. July:** Line Molzen (DK), Susanne Lilja Buchardt (DK), Sindhu Vudayagiri (IN/DK), Anne-Katrine Faber (DK/NO), Kasper Holst Lund (DK), Peter Ditlevsen (DK), Steen Riisgaard (DK-DV), Lis Riisgaard (DK-DV), Lars Hansen (DK-DV) and Lise Stentoft (DK-DV) from Copenhagen to Kangerlussuaq (SFJ) by Air Greenland.
- 19. July:** Thomas Bjørnholm (DK-DV) and Berith Bjørnholm (DK-DV) from Aasiaat (JEG) to Kangerlussuaq (SFJ) by Air Greenland.
- 20. July:** Sarah Berben (BE/NO), Chuanjin Li (CHN), Aleksii Podoliak (RU) and Daniel Ashurst (UK) from Copenhagen to Kangerlussuaq (SFJ) by Air Greenland.
- 20. July:** Line Molzen (DK), Susanne Lilja Buchardt (DK), Sindhu Vudayagiri (IN/DK), Kadir van Lohuizen (press-NL), Martijn Blekendaal (press-NL) and Pim Hawinkels (press-NL), Steen Riisgaard (DK-DV), Lis Riisgaard (DK-DV), Lars Hansen (DK-DV), Lise Stentoft (DK-DV), Thomas Bjørnholm (DK-DV) and Berith Bjørnholm (DK-DV) from Kangerlussuaq (SFJ) to EGRIP by skier 109<sup>th</sup>.
- 20. July:** Helle Kjær (DK), Anja Løkkegaard (DK), Siwan Davies (UK), Melanie Behrens (DE), Bo Vinther (DK), Sumito Matoba (J), Masashi Niwando (J), Rigen Shimada (J) and Jens Hesselbjerg Christensen (DK) from EGRIP to Kangerlussuaq (SFJ) by skier 109<sup>th</sup>.
- 20. July:** Anja Løkkegaard (DK) from Kangerlussuaq (SFJ) to Copenhagen by Air Greenland.
- 21. July:** Jens Christian Hillerup (DK), Doris Jakobsen Jensen (DK/GL-gov), Tine Pars (DK/GL-gov), Rosa Thorsen (DK/GL-gov) and Steen Lund (DK/GL-gov) from Nuuk (GOH) to Kangerlussuaq (SFJ) by Air Greenland.
- 21. July:** Sverrir Æ. Hilmarsson (IS), Atsushi Furusaki (J), Mikkel Schmidt (DK), Sergio Henrique Faria (BRA/J), Tomotaka Saruya (J), Tyler Jones (US), Jonathan Rheinländer (DK/NO), Aslak Grinsted (DK), Silje Smith-Johnsen (NO), Andreas Born (DE/NO), Khanghyun Lee (KOR), Anders Svensson (DK), Jan W. Thomsen (DK-DV), John Renner Hansen (DK-DV), Henrik C. Wegener (DK-DV), Tommy Ahlers (DK-gov), Rasmus Bebe (DK-gov), Lise Banke (DK-gov),

Jakob Sejr (DK-gov) and Frej Dichmann (DK-gov) from Copenhagen to Kangerlussuaq (SFJ) by Air Greenland.

- 21. July:** Helle Kjær (DK) and Siwan Davies (UK) from Kangerlussuaq (SFJ) to Copenhagen by Air Greenland.
- 22. July:** Jens Hesselbjerg Christensen (DK) and Melanie Behrens (DE) from Kangerlussuaq (SFJ) to Copenhagen by Air Greenland.
- 22. July:** Sumito Matoba (J), Masashi Niwando (J) and Rigen Shimada (J) leave the EGRIP project to join another Japanese project in Greenland.
- 22. July:** Sverrir Æ. Hilmarsson (IS), Peter Ditlevsen (DK), Daniel Ashurst (UK), Aleksii Podoliak (RU), Jens Christian Hillerup (DK), Kasper Holst Lund (DK), Mikkel Schmidt (DK), Sergio Henrique Faria (BRA/J), Chuanjin Li (CHN), Tomotaka Saruya (J), Tyler Jones (US), Jonathan Rheinländer (DK/NO), Aslak Grinsted (DK), Silje Smith-Johnsen (NO), Andreas Born (DE/NO), Khanghyun Lee (KOR), Anders Svensson (DK), Anne-Katrine Faber (DK/NO), Sarah Berben (B/NO), Jan W. Thomsen (DK-DV), John Renner Hansen (DK-DV), Henrik C. Wegener (DK-DV), Tommy Ahlers (DK-gov), Rasmus Bebe (DK-gov), Lise Banke (DK-gov), Jakob Sejr (DK-gov), Frej Dichmann (DK-gov), Doris Jakobsen Jensen (DK/GL-gov), Tine Pars (DK/GL-gov), Rosa Thorsen (DK/GL-gov) and Iben Koldtoft (DK) from Kangerlussuaq (SFJ) to EGRIP by skier 109<sup>th</sup>.
- 22. July:** Ernst-Jan Kuiper (NL/D), Abigail Thayer (US), Mari F. Jensen (NO), Jakob Schwander (CH), Remo Walther (CH), Lasse Eriksen (DK), Steffen Bo Hansen (DK), Vasileios Gkinis (GR/DK), Barbara Seth (D/CH), Jan Tell (D), Ikumi Oyabu (J), Chis Jacobs (UK), Pia Götz (D), Christine Hvidberg (DK), Lisa Griem (D/NO), Kadir van Lohuizen (press-NL), Martijn Blekendaal (press-NL), Pim Hawinkels (press-NL), Steen Riisgaard (DK-DV), Lis Riisgaard (DK-DV), Lars Hansen (DK-DV), Lise Stentoft (DK-DV), Thomas Bjørnholm (DK-DV), Berith Bjørnholm (DK-DV), Jan W. Thomsen (DK-DV), John Renner Hansen (DK-DV), Henrik C. Wegener (DK-DV), Tommy Ahlers (DK-gov), Rasmus Bebe (DK-gov), Lise Banke (DK-gov), Jakob Sejr (DK-gov), Frej Dichmann (DK-gov), Doris Jakobsen Jensen (DK/GL-gov), Tine Pars (DK/GL-gov), Rosa Thorsen (DK/GL-gov) and Iben Koldtoft (DK) from EGRIP to Kangerlussuaq (SFJ) by skier 109<sup>th</sup>.

**Movement of cargo:**

- 18. July:** SFJ to EastGRIP by 109th / 2790kg Cargo / 3570L fuel / 2 x AF pallets: snowmobile, Mogas, radar balloon and few spare parts. (no retro cargo)
- 18. July:** SFJ to EastGRIP by 109th / 7980L fuel (trainer)
- 20. July:** SFJ to EastGRIP by 109th / 1680kg Cargo / 8000L fuel / 1 x AF pallets: red sauna tent, GPS drone equipment, deadweights for drill and few spare parts + loose load of long poles for garage tent.
- 20. July:** EastGRIP to SFJ by 109th / 1090kg Cargo / 1 x AF pallet: Japanese field equipment and luggage.
- 22. July:** SFJ to EastGRIP by 109th / 3350kg Cargo / 3800L fuel / 1 x AF pallets: 12 drums drill fluid, snowmobile batteries and personal luggage.
- 22. July:** EastGRIP to SFJ by 109th / 2955kg Cargo / 2 x AF pallets: RADIX field equipment and luggage.

**EGRIP camp activities:**

Beginning of the week EGRIP camp hosted 28 JSEP students and teachers from GL/DK/US with among other things participated in ice core processing and analyzed their own data. Camp life was influenced by the high number of people and people had to eat in shifts. The skiway was groomed several times, and the 109<sup>th</sup> found it in good condition. Due to poor weather at Raven, the 109<sup>th</sup> made a training flight to EGRIP on the 18<sup>th</sup>. A few power cuts in camp was caused by too high energy consumption (>80kW) and this took out part of the IT net (ceilometer, IP telephones, bear radar). Prepared for three flights with building of retro cargo from Japanese equipment and RADIX equipment and crew changes incl. DV visits.

**Drilling:**

The drilling continues with NEEM electronics, which has speed up the drilling. Much filtering is still needed, so a night team is filtering the holes. Logging from 1432.82m to 1553.67m.

Detailed Drillers report 18/7 -> 23/7

Progress: 1466.25m – 1555.47m = 89.22m

Two new teams of drillers have arrived to camp and are being trained to use the system. Drilling is still going at a steady pace. The filter team is still in operation in between the drilling shifts, during night. A stable production of 7 ice cores is the daily goal, this is achieved with a pitch of ~1,8mm and a booster configuration. A hollow shaft was set up with the pump, and it was tested successfully. The pump however needed adjustment to fully recover the chips, and in order to keep up the daily production during these last weeks of drilling, it was changed back to a booster configuration. The pump is hereby tested and ready to be adjusted and used next season.

**Science:**

Processing from 1373.35m to 1452.55m.

Isotope laboratory from 1183.05m to 1298.55m.

Physical properties lab from 1361.25m to 1405.80m, brittle ice from 1097.80 to 1394.80m and volume sample from bag 2600.

At 1376 m depth processing of the glacial ice started. The ice is now full of milky bands related to the dust storms coming mainly in the spring. The annual layers are thus visible making life in the science trench enjoyable. Undulating and uneven layering is observed.

Water vapor sampling and measurements.

Japanese snow crystal and surface monitoring.

RADIX: After several tests with added pressure of the silicon oil and modified drill heads the drilling was terminated. In total 42 m has been drilled below the 73 m deep casing. (final depth 115 m). Work began on the borehole logger with a diameter of 15 mm at the RADIX site. The logger measures temperature, inclination, azimuth and has a laser measuring dust as well. Inclinations up to 10 deg were observed. Activities were terminated Thursday and camp was packed down and all equipment moved to EGRIP on Friday night.

**EGRIP Camp Population:**

62 until Wednesday 18<sup>th</sup>, then 33 from July 18 to July 20. From Friday 20<sup>th</sup> camp population was 36 and from Sunday the 22<sup>nd</sup> population is 32.

**EGRIP iridium numbers:**

Primary no.: +8816 7776 2837                      Iridium Open port, field leader  
Secondary no.: +8816 7776 2838                  Common phone, main dome  
Third no.: +8816 7776 2839                      Handheld satellite phone

EGRIP night time phone to field leader: +8816 234 93 166

**EGRIP direct phone:** +45 7734 7444 ext. 401

Link to webcam and weather station: <http://alice.egrip.camp/>

**Weather at EGRIP:**

Most days have been sunny with few clouds and a few times with light snowfall. One day with overcast the whole day. Temperatures were between -2 C and -26 C and the wind was between 2 and 16 knots most days. Wind from various directions in beginning of week and W/NW/N end of week.

**Kangerlussuaq activities:**

Making cargo, HAZMAT and PAX manifests for the 109th. Planning with the 109th to make a training mission to EGRIP. Handling the many PAX going in and out of KISS e.g. picking PAX up in the airport, getting room keys, getting rooms cleaned, helping the media teams and going on tours to the ice front for BBQ with DVs and government officials.

**Weather in Kangerlussuaq/SFJ:**

The two first days were sunny and dry with a little overcast a few times and with many mosquitoes around. Hereafter cloudy and foggy in the mornings while the week ended up with rain. Temperatures between 8 and 24 degrees.

**The EGRIP FOM office:**

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Kangerlussuaq FOM  
Jørgen Peder Steffensen & Iben Koldtoft

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