

NEEM - SITREP no. 10, Sunday 03. July 2011

This SITREP covers the period June 27 – July 03, 2011 (inclusive).

Movement of personnel:

June 27 Dorthe Dahl-Jensen (DK), Sverrir Æ. Hilmarsson (IS), Cyril Millet (F), Jacob Schwander (CH), Daiana Leuenberger (CH), Christine Hvidberg (DK), Bo Hvidberg (DK) from Copenhagen (CPH) to Kangerlussuaq (SFJ) by Air Greenland.

Scott Montross (B), Jay Johnson (US), Hans Christian Steen-Larsen (DK), Anaïs Orsi (US) from Schenectady to Kangerlussuaq (SFJ) by NYANG 109th.

June 28 Dorthe Dahl-Jensen (DK), Sverrir Æ. Hilmarsson (IS), Cyril Millet (F), Jacob Schwander (CH), Daiana Leuenberger (CH), Scott Montross (B), Jay Johnson (US), Hans Christian Steen-Larsen (DK), Anaïs Orsi (US), Frédéric Prié from Kangerlussuaq to NEEM by NYANG 109th.

Anders Svensson (DK), Bo Vinther (DK), Sune O. Rasmussen (DK), Darcy Mandeno (NZ), Martin Leonhardt (D), Andrew Moy (AUS), Catherine Ritz (F), Antje Fitzner (DK), Hubertus Fischer (CH), Vasilios Gkinis (DK), Tanja D. Fromm (D), Olivia Maselli (US), Yoshinori Iizuka (S), Sarah Harvey (US), Kerstin Schmidt (D), Erik Warming (DK), Li Chuanjin (CHN) from NEEM to Kangerlussuaq (SFJ) by NYANG 109th.

June 29 Lars Berg Larsen (DK), Li Chuanjin (CHN) from Kangerlussuaq (SFJ) to Copenhagen (CPH) by Air Greenland.

June 30 Anders Svensson (DK), Bo Vinther (DK), Sune O. Rasmussen (DK), Darcy Mandeno (NZ), Martin Leonhardt (D), Andrew Moy (AUS), Catherine Ritz (F), Antje Fitzner (DK), Hubertus Fischer (CH), Vasilios Gkinis (DK), Yoshinori Iizuka (S), Kerstin Schmidt (D) from Kangerlussuaq (SFJ) to Copenhagen (CPH) by Air Greenland.

Sarah Harvey (US), Olivia Maselli (US) from Kangerlussuaq (SFJ) to Schenectady by NYANG 109th.

July 1 Tanja D. Fromm (D) from Kangerlussuaq (SFJ) to Copenhagen (CPH) by Air Greenland.

Movement of cargo:

June 27 1530 kg Food, XXX kg cargo from Schenectady to Kangerlussuaq by NYANG 109th.

June 28 1530 kg Food, 1818 kg dome sledge parts from Kangerlussuaq to NEEM by NYANG 109th.

1964 kg US ice core boxes, 1327 kg DK ice core boxes, 636 kg scientific equipment from NEEM to Kangerlussuaq by NYANG 109th.

June 29 2877 kg food, 3432 kg dome sledge parts, and ca. 1000 kg drill liquid (2 drums coasol and 2 drums estisol) from Kangerlussuaq to NEEM by NYANG 109th.

2177 kg Scientific equipment (Viessmann), 2223 kg garbage and core troughs from NEEM to Kangerlussuaq by NYANG 109th.

Activities:

This week there has been two flight mission days to NEEM. The first C130 mission, Tuesday June 27th included a major exchange of personnel in camp, and the camp population has been reduced from from 23 to 16. The second, Wednesday 28th was in support of the visit of the director of NSF. A Norland Twin Otter flew the NSF visitors from Summit to NEEM in the morning and a C130 picked them up at lunch time. The CFA teamed finished processing the brittle zone ahead of schedule and expanded their program with measurements of five 12m firn cores. The NEEM SC has been informed on the program. The replicate drilling test was very successful and a camera has provided images of the bottom of the deep borehole in preparation for rock drilling. The atmosphere water vapour monitoring program and measurements of temperature in shallow boreholes started this week. The pistenbully has been maintained and three of the four skidoos are waiting for spareparts for motor repairs.

Skiway:

The skiway was prepared before the flights this week. The skiway has some long undulations that have been difficult to remove. Due to the cold and clear weather the skiway is in good condition, and it was groomed between the two flights in order to try to remove the undulations. After the flight period the skiway has been zig zag groomed to remove the undulations. The grooming will continue in preparation of the next flight period.

Drilling:

The NEEM shallow hole S2 was drilled to a final depth of 131.51 m. Friday the planned replicate drilling test was successfully conducted using standard O 126mm cutters which had been made aggressive on the outer edge. We deployed the drill in the 2011 S2 hole and started the deviation in a depth of 110m. The 3 - 4 degrees inclination of the hole provided a side force on the drill head of a little more than 20N. This proved sufficient to make the drill cut into the downwards side of the hole, in a way that just 8 runs was needed to create a new independent hole. The complete deviation occurred over a distance of 10m. We have prepared to bail the 100m liquid column from the S1 hole in preparation of the GLISN seismic program later in the season. The new deep borehole camera has been mounted in a pressure tube on the deep drill, and lowered down in the deep borehole to the bottom in 2537m depth to do images of the bottom of the hole. There were no ice cuttings close to the bottom of the hole and we achieved a very clear picture of the bottom of the deep borehole. Small video clips have been prepared. The deep drill surface electronics has been connected and the deep drill prepared for deep ice/rock drilling in the coming week.

Driller's depth final depth in the NEEM 2011 S1 hole: 411.83m

Driller's depth final depth in the NEEM 2011 S2 hole: 131.51m

Science:

The CFA lab has completed measuring the brittle ice. CFA team has drilled cores# 3-5 of the 12 m firn cores by the hand drill, and has measured cores# 3, 4 and 5. Temperature has been measured in the S1 bore hole. The water vapour tower has been placed and the Picarro instrument has been connected and calibrated. The PARCA weather station was elevated so the lower arms are 2.9 m above the snow surface Sunday afternoon. Coordinates of the station is 77 deg 26.468 min N and 51 deg 04.872 min W.

Weather at NEEM:

The weather this week has been relatively cold and clear. In general clear weather with sun and blue sky and windy.

Temperatures between -4 C (day) to -15 C (night) and wind speeds at 3-12 knots from S, SE and SW.

NEEM camp population: 16

NEEM iridium numbers:

Primary no.: +8816 777 04 766

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Mobile: +299 52 41 25

Kangerlussuaq/SFJ iridium number: +8816 214 42402

Kangerlussuaq Activities:

Preparing cargo and pallets and receiving PAX and cargo from the two flights to NEEM. Change of personnel in the FOM office. Preparing for DV visits, general cleaning and maintenance in Kangerlussuaq.

Weather in Kangerlussuaq/SFJ:

Very nice weather most of the time. Sunny almost all days, except a few showers in the weekend. Day temperatures between 18 C and 22 C. Mosquito level moderate.

*NEEM Field Operations office,
Christine Hvidberg and Bo Hvidberg*