

SITREP 12 (final one) - January 30, 2011
Gifford Wong, SCO Rep
Written at WAIS Divide

[Brought to you by the number **3330.03** and the letters **D-O-N-E!!**]

I. Passenger movements

A. SCO

1. H.Roop departed WSD on 29Jan with the LAST cold deck of the summer.
2. Scheduled to depart WSD on 31Jan: A.Buffen, T.Cox, J.Fegyveresi, TJ Fudge, V.Gkinis, D.Winski, G.Wong and K.Taylor.

B. NICL

1. Scheduled to depart WSD on 31Jan: B.Bencivengo.

C. IDDO

1. Scheduled to depart WSD on 31Jan: P.Cassidy, D.Ferris, J.Kyne, E.Morton, J.Robinson and K.Dahnert.
 - Scheduled to depart WSD on 02Feb: J.Goetz and J.Johnson.

II. Cargo Movements

- A. 1½ AFPs (Air Force Pallet) of I-477 ice core (6 skids) were sent to McMurdo via Skier 61 [Tail 490]. This represents the LAST of the ice for the 2010-11 summer season. This flight was originally scheduled for 29Jan.

1. The last eight sections of ice (2 ISC boxes) packed did NOT sit in a drying booth for 12 hours. This decision was based on the timing of the originally scheduled cold-deck flight.
2. There is a ~10cm "puck" carefully ensconced in a foam-filled Igloo® cooler in the basement of the Arch. This piece has been extensively documented (notes and pictures), and there are two StowAway data loggers monitoring temperature inside the cooler.

III. Camp Activities

- A. Current camp population as of 23Jan is 45: 24 RPSC (including 4 "PIG'lets"), 4 NANA, 8 I-477, 1 I-478, and 8 T-350.

B. Drilling Headlines ... Extra, extra, read all about it!

1. As of 11:10am* (NZ time) on 28 January 2011, ICDS passed the final drilled ice core of their drill season to the SCO core-handlers. It measured 2.755m long at the "4m-Receiving Station" (3.003m Driller's length). The WAIS Divide Ice Core project is **DONE** for the 2010-11 austral summer!
 - Everyone came out to the Arch to celebrate this momentous achievement! As during the whole of the season, we wholeheartedly acknowledge our debt to previous WSD crews and previous (deep) ice core projects. We thank you for this opportunity!

- Appropriate toasts with salubrious liquids were doled out to all that were present (I had my ubiquitous root beer!). Nearly all present (including me) appeased the W.Antarctic Ice Sheet with a small taste of Gammel Dansk. If you don't know ... ask someone. ☺
 - a. It was a virtual polar parking lot of Scandics, Alps and Tuckers outside the "Moose Chute" of the Arch.
- [*] At approximately 2110, or nearly 10 hours later, the ICDS drillers pushed the "Encore core" out of the barrel to waiting SCO core-handlers. This piece measured 0.123m at the "4m-Receiving Station".

IV. Drill Depth and Time

A. **3330.03m** ("Euro Mark" depth scale) as of 2115 on 28Jan.

V. Status of Drilling (# of runs, meters of ice drilled, core quality) [operationally from 1607 16Dec to 2130 28Jan]

A. 259 Runs [to run 1735]

B. 767.168m of ice drilled [to section 3335]

C. Core quality was excellent throughout the season. The core diameter was consistently between 121.6 to 121.7 mm. Run breaks have been good to fair (some spalling occurs near the dog marks).

D. Ice temperatures (as measured by the drill sonde) demonstrated a distinct warming trend. Temperatures warmed from approximately -27C to -11C. Post-drilling temperatures showed a fairly uniform 5C rise (brought on by coring itself).

1. Temperatures measured at the receiving "4m" station did not show as noticeable a rise, and we fear it might be a product of the long trip times more than an error in either measurement (drill v. handheld probe).

E. FED performance was monitored regularly (cleanings occurred when fluid extraction capacity diminishes).

F. Cloudy "bands" appeared in the core throughout this season. We received many runs with especially interesting cloudy bands ... dark or "splotchy" or "folded". These all await further interpretation by eyes more learned than ours.

G. Extra caution was exercised when logging ice core "chips" and "pieces". This was because "missing" chips and pieces, if not "topside" somewhere, can potentially act as foreign object debris (FOD) to the drill in the borehole.

VI. Other

A. Throughout the season, the SCO team continued to streamline and improve operations via daily meetings.

B. We observed a steady divergence between the Euro Marks' associated "absolute depths" and the Cut Marks' associated "absolute depths".

1. An approximate 50mm of "drift" occurred over the 767m drilled this season.

- C. Recent (cold-deck) LC-130s to WSD witnessed unusual encounters in the form of giant animals and fruit. To be specific, one gigantic banana, one endangered red panda, one fuzzy brown bear, one gorilla, two penguins, and one incredibly rare purple unicorn. Representatives from I-477 and the 109th photo-documented said encounters. One never knows what will turn up on the West Antarctic Ice Sheet!
- D. A hand planer was used to collect isotope samples from WDC06A ice. The sampling was begun at ~2907m "absolute depth", and continued through to ~3330m. We collected 909 samples for water isotope analysis (at ~4g of ice per sample).
- E. The Science Jamesway has been closed for the season. The Arch is all but buttoned-up for the long West Antarctic winter.
 - 1. All that lives on the "NICL" end of the Arch has been inventoried. The many storage areas/locations have been named after Star Wars characters.
- F. We celebrated the incredible achievements of surpassing the drilled depths at Dome Fuji, GISP2 and Dome C. Our jubilation is founded upon the stout shoulders of ALL who came before us! From planning to funding to building, there are SO many people who deserve to be recognized. On behalf (unofficially) of those of us at WAIS Divide Camp now, working for or alongside I-477, I would like to toast again all those persons involved with this project. From DC to Denver and Madison to McMurdo, from "year one" to "year now" ... we are "the deepest US ice core" (and 2nd-deepest in the world) because of your sweat, blood and smiles. Thank you.
 - 1. Previous W.Antarctic ice cores include Byrd 68 (2164m), Siple Dome (1004m) and Taylor Dome (554m).
 - 2. Dome C (EPICA) reached a depth of 3270.2m in 2004.
 - 3. 2010-11 Crew creed (taken from The Wolf by Rudyard Kipling)

"Now is the Law of the Jungle – as old and true as the sky;
 And the wolf that shall keep it may prosper, but the wolf that shall break it must die.
 As the creeper that girdles the tree-trunk, the Law runneth forward and back –
 For the strength of the pack is the wolf, and the strength of the wolf is the pack."

- G. WAIS Divide Ice Core WDC06A "Trivia":
 - 1. 1 Igloo® cooler will winter-over this season with the left-over "puck".
 - "Thanks" to M.Albert and K.Keegan for their generosity.
 - 2. 12 AFPs of ice core were shipped this season.
 - 3. 35 5000lb-rated cargo straps were used this season.
 - 4. 42 skids of ISC boxes (8 boxes per skid) were shipped this season.
 - 5. 144 temperature data loggers (Hobo and StowAway) were launched this season.
 - 6. 372 "D-buckles" were used to close ISC boxes this season.
 - An additional 4 were used for the winter-over "puck".

7. ~420 pencils (#2 and 6B) were sacrificed this season.
- H. The aforementioned unusual encounters between LC-130s and rare "animals" did not endanger any of the following: giant bananas, red pandas, fuzzy brown bears, giant penguins, gorillas, or purple unicorns.
- I. Thank you ... and goodnight!