

SITREP 6 - December 26, 2010
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Written at WAIS Divide

- I. Passenger movements
 - A. SCO
 - 1. n/a
 - B. NICL
 - 1. n/a (B.Bencivengo is presently @ McMurdo)
 - C. IDDO
 - 1. n/a
- II. Cargo Movements
 - A. Two AFPs (Air Force Pallets) of ice core were sent to McMurdo on 23Dec. 4 "skids' worth" of ice core for I-477 (~128 meters) and 12 ISC boxes (2 "skids' worth") for I-158.
 - B. All but 16 of I-477's ISC boxes are now at WSD. 3 $\frac{3}{4}$ AFP's worth of misdirected ISC boxes are also now at WSD. These will be retro'ed at the first opportunity. No one (MCM/RPSC) yet seems to know how they were put onto WSD-bound aircraft.
- III. Camp Activities
 - A. Current camp population as of 26Dec is 37: 15 RPSC, 4 NANA, 7 I-477, 1 I-478, 10 T-350.
 - B. I-157 departed WSD for their "Site 1" via KBA Basler on 23Dec. Before departure, we (S.Das, P.Roberts, G.Hargreaves and myself) discussed the storage and transport of their WSD-bound retro ice cores. See below for more information.
 - C. Drilling continues ... the fun continues!!
- IV. Drill Depth and Time
 - A. ~2672m and ~23.6kyr (per T.Neumann's calculation using standard Nye correction).
- V. Status of Drilling (# of runs, meters of ice drilled, core quality) [operationally from 19Dec to 24Dec]
 - A. 31 Runs (Run 1513; stopped on 24Dec for Christmas Dinner)
 - B. 93m of ice drilled (Section 2676, as of 24Dec)
 - C. Core quality remains excellent. Some helical surface features are visible, but core diameter has remained consistent (121.6 mm). Azimuth, as determined by drill, appears to be consistent ($\pm 5^\circ$ between runs). Run breaks have been good to fair (some spalling has occurred off the dog marks).
 - D. Point deformation in FED-to-4m-Tray system has ceased. We're not sure what all (or specifically) solved this particular issue, but the surface scoring stopped appearing and has been absent from recent runs. [We cleaned the FED, re-leveled the receiving station, and adjusted the tray lock-stops. We

also re-examined all of the 4m receiving trays and removed from service those which appeared "less than perfect".]

- E. Cloudy "bands" continue to appear in the core. Though none have been as distinct as the band in our 2nd core of the season, there have been runs with multiple bands (ie. 5 in one run).
- F. A few instances when the drill was down due to maintenance, and these will likely be addressed by the IDDO representative (DISC: K.Dahnert); suffice it to say that everything is going well now and we are drilling as I type up this SitRep! Those drillers are an amazing lot!

VI. Other

- A. The SCO team continues to streamline and improve operations via daily meetings that discuss safety and procedural challenges.
- B. Four skids of I-477 ice cores were created and loaded onto AFPs, along with 2 skids of I-158 ice cores, for shipment to McMurdo on 23Dec. 6 temperature loggers were placed on each AFP, 3 in the usual top/end/"pocket" positions and 3 underneath the ice core blanket mirroring the above positions. The loading configuration was modified for the one "half pallet" of ice cores. We configured that AFP with symmetrical "aisles", cargo strapping the two skids to the AFP to provide adequate lateral motion control, and then cargo netted the whole (skids & blankets). Camp staff (Hayden) approved our cargo packaging skills.
 - 1. As an aside, Science Cargo (SciCo – M.Davis) communicated (via P.Roberts) the very real challenge of dealing with mixed-group AFPs. ALL skids are group-specific, but the potential for mixed-group AFPs will continue to be a given. This, unfortunately, will be something we will have to deal with when we begin to receive ice cores from I-157 (Das). I will update you with any new observations.
- C. Shift work has run though an entire week. The early part of the week saw the typical difficulties in shifting one's sleep schedule, but that had all but disappeared by the second-half of this past week. Discussions (formal and informal) continue to occur to monitor the efficacy of 2 "twelves", and we will likely review this component of our operations until T.Fudge arrives in early 2011. I foresee 3 shifts/day being the way to go as of now.
 - 1. Roop, Hargreaves and myself have also discussed the time-management required of QA/QC, outreach and general core-handling oversight. We feel we've come up with an efficient way to provide each of the aforementioned personnel with adequate time for strong work.
- D. This first full week of drilling (1st day = 16Dec) provided a few "improvement" projects to tweak out our processing operations: replacement of Packing Station computer due to a faulty clock battery, refinement of Balluff calibration procedures including the labeling of one specific meter stick as THE calibration stick (our testing revealed that nearly every measuring device on our side of the Arch has a play of a few mm relative to another), and re-

- titling of certain logging station measurements so as to mitigate any user confusion.
- E. Receipt of secondary "safety" come-along for SCO gantry in Arch, per Thomas Olyjnik of RPSC Health and Safety). This lives in the warming Jamesway.
 - F. Buffen completed science on his "Nitric" snowpit, which included collecting "high resolution" snow samples from a 2m snowpit.
 - G. Crary IT support personnel ("Deke", RPSC) traveled out to WSD to assist with some very necessary computer-related issues (connectivity between logging stations and server, for example). Kudos will be appropriately submitted.
 - H. Box of ice core blankets (4) returned to WSD from MCM. These were used for the shipments of previous AFPs (ice cores).
 - I. Hargreaves (NICL) has processed the temperature logger plots, and will discuss with Camp Manager (P.Roberts) regarding any possible corrective action(s). I will keep you apprised of any progress made in this regard. We're still determining if any temperature spikes noted are more in-line with landing and the long travel period to MCM from Willy's Field than the actual aircraft transport.
 - J. A UT (B.Buchwald) arrived (23Dec) and will install additional access covers on the ducting above the blowers in the Arch so as to enable more thorough preventive maintenance. He will also work on the generator louvers to allow them to run nearer to their optimum temperature.
 - K. Regarding I-157's ice cores ... we have been given the three planned flights from their respective camp sites to WSD. Flights from WSD to MCM usually are between 2 and 4 days after each deep-fielt retrograde flight. We are confident that we have the capacity to accommodate the additional ice cores in the few days between their arrival and a cold-deck WSD departure.
 - 1. In discussing strategy for possible weather-delayed flights from the field to WSD (and the possible on-time WSD to MCM flight, I've reiterated our desire to have I-477 ice depart whenever possible (full AFPs when practical).
 - L. Christmas Eve dinner was Friday night ... appetizers (spreads, cheeses, fondue) followed by a fantastic dinner (lobster tail, filet mignon, garlic mustard greens, potato duchess and salad drizzled with balsamic vinaigrette) and dessert (chocolate tort with raspberry sauce & whipped cream). Saturday enjoyed a showing of A Christmas Story and an afternoon BBQ (steak, grilled salmon, potatoes with peppers and onions, and baked beans). No cores were harmed in the consumption of our scrumptious holiday feast, but some waistbands may be on the verge of snapping ... Cheers, from WSD!!