SITREP 1, December 15, 2014; Day 5 at WAIS Divide Donald Voigt, I-477, SCO Rep

- 1. Passenger Movements
  - A. Borehole Loggers, I-161 at WSD, Riverman, Muto and Holschuh, arrived 12/11; I-166, I-177, I-475 in McMurdo. Lia-Bun Lok(I-166) arrived WSD 12/14 from Union GI by Twin Otter.
  - B. T-350, in McMurdo
  - C. I-477, Voigt and Burkett at WSD, arrived 12/11
- 2. Cargo Movements
  - A. I-161 cargo to WSD. The I-475 Logging Winch at WSD.
  - B. No retro cargo from the Arch.
- 3. Camp Activities
  - A. Current Camp Population, 50; G-079, 4; G-099, 6; I-161, 3; I-166, 1; I-477, 2; T-500 (KBA), 6; ASC, 28
  - B. Camp is in good condition, no major drifting. The skiway is at full ACL (we arrived with 19.5 klbs).
  - C. The Basler is in town supporting the Gimble project (G-099) and the Twin Otter is supporting PoleNet (G-079) and other activities.
  - D. Five Carpenters from McMurdo have been working on the Arch (see below)
  - E. The Arch had been dug out by the time I arrived. The roof exit had to be excavated before it could be accessed. Snow from two winters made excavation of the ramps difficult as it was quite hard.
  - F. High temperature of the season reached yesterday, -13 C.
- 4. Borehole Logging, Status
  - A. I-161 has been drilling shot holes for their Seismic Experiment and are on schedule.
- 5. Arch Deconstruction, Status
  - A. The Carpenter Crew has been working since arriving on 12/11. The Arch is in rough shape. They worked on Sunday and I appreciate their efforts.
  - B. Both sides of the Arch interior are free of any drifted snow.
  - C. The drill side doors were pushed open by the weight of the snow but fortunately after being buried so there was no drifting. However the end-wall buckled slightly above the doors so that when the doors swing they contact the floor. The flooring had to be completely removed all the way back to the end of the trench. The end-wall has been supported. Work continues.

- D. The gantry rails seem to be in good shape, not canted or warped more than usual and I suspect the gantries will be able to move on the rails. T-350 will have a better read on this though.
- E. Doors on the processing-side were not as bad but the floor has been removed back to the swing of the doors.
- F. The floor on the drill side has buckled so badly it has become difficult to move about easily. The Carpenters will install a false floor over the existing floor the length of the trench. It was discussed whether the floor should be removed, however the safety rails attach to the floorjoists and it would be unacceptable to remove the rails. Some tower parts needed to be moved in order to work on the floor.
- G. The gantry on the processing-side has been removed and is being packaged for retro. That was a big job on this side and it is good to have it done.

## 6. Other

- A. After having a rough-weather start, and two years of accumulation to deal with, camp is in brilliant condition. A lot of work went into getting camp into shape. Thanks to the Camp Staff and Put-in crew.
- B. The PIG Traverse went to Byrd Surface Camp to pick up fuel and returned with 3 additional snowmobiles. Two of these are being made available for Science as soon as they are serviced.
- C. There have been some flight delays but it's too early to tell how this will affect the schedule.

SITREP 2, December 22, 2014; Day 12 at WAIS Divide Donald Voigt, I-477, SCO Rep

- 1. Passenger Movements
  - A. At WSD; I-477 (2), I-161 (3), 1-166 (1), I-177 (1), I-475 (1), T-350 (1)
  - B. In McMurdo; T-350 (3), I-166 (4), I-177 (2)
- 2. Cargo Movements
  - A. None significant.
- 3. Camp Activities
  - A. Current Camp Population, 45; G-079, 8; G-099, 6; I-161, 3; I-166, 1;
    I-172, 1; I-475, 1; I-477, 2; T-299, 1; T-350, 1; T-500 (KBA), 6; ASC, 15.
  - B. Camp is in good condition. The skiway is at full ACL.
  - C. The Basler is in town supporting the Gimble project (G-099) and the Twin Otter is supporting PoleNet (G-079) and other activities.
  - D. Five Carpenters from McMurdo finished working in the Arch and returned to McMurdo.
  - E. One Electrician from McMurdo came out to wire the Arch Jamesway and the Winch tent and returned.
  - F. Weather has been quite cold and windy but we have had no major drifting.
- 4. Borehole Logging, Status
  - A. The Carpenters set the logging winch in position and constructed the Polarhaven with direction from Gary who was still in McMurdo. This enabled Gary and Mike to finish assembly of the winch once they arrived.
  - B. Gary started logging temperature on Sunday, 12/21.
  - C. I-161 and I-177 successfully tested tools on the winch and are ready to start logging when Gary is finished.
  - D. I-161 finished drilling shot holes for their Seismic Experiment and are on schedule.
- 5. Arch Deconstruction, Status
  - A. The Carpenter Crew finished their work in the Arch and returned to McMurdo. Two Carpenters will be coming out with T-350 to assist with work in the Arch.
  - B. The Processing-Side gantry was removed by the Carpenter Crew.
  - C. I-477 prepared pallets for retro including Core Trays (two pallets, 95 trays), the AFP rollers, and the  $O_2$  monitor. There was some uncertainty as to how easy it would be to remove pallets from the

Arch with the floor pulled up but it seemed to go okay. the 953 just fits through the doors.

- D. Several items were requested for use at the SPICE Core project, these were located and sent via Guard Mail.
- 6. Other
  - A. Lia-Bun Bok, with I-166, has continued his radar work despite the rest of I-166 being in McMurdo.
  - B. Two snowmobiles retrieved from Byrd Surface Camp were put into service to be used by Science at WSD. This brings the science snowmobile pool to 4 machines. This should be adequate for the needs of the six events using them.
  - C. I have given two group tours of the Arch to a total of about 20 people.

SITREP 3, December 29, 2014; Day 19 at WAIS Divide Donald Voigt, I-477, SCO Repz

- 1. Passenger Movements
  - A. We have had no LC-130 flights since 12/19.
  - B. At WSD; I-477 (2), I-161 (3), 1-166 (1), I-172 (1), I-475 (1), T-350 (1)
  - C. In McMurdo; T-350 (3), I-166 (4), I-177 (2)
- 2. Cargo Movements
  - A. None.
- 3. Camp Activities
  - A. Current Camp Population, 35; G-079, 4; G-099, 3; I-161, 3; I-166, 1;
    I-172, 1; I-475, 1; I-477, 2; T-299, 1; T-350, 1; T-500 (KBA), 3; ASC, 15.
  - B. Camp is in good condition. The skiway is at full ACL.
  - C. The Basler was in town supporting the Gimble project (G-099) until 12/27 then returned to McMurdo with some of the project members.
  - D. The Twin Otter is supporting PoleNet (G-079) and other activities. The PoleNet traverse (4) left on 12/27 after delays due to a snowmobile breakdown.
  - E. Camp celebrated Christmas with dinner on 12/24. Staff had the 25th and 26th off, then worked Saturday and Sunday.
  - F. Camp's email system was down for several days due to the generator being shut down for the I-161 seismic experiment. When the generator was started again there was some difficulty rebooting the email system.
  - G. Fuel continues to be a concern and will be until an LC-130 arrives.
  - H. Weather; We have had very cold temperatures and moderate winds. Some drifting has begun but is not significant.
- 4. Borehole Logging, Status
  - A. Gary completed two logging runs. In his first run Gary determined the fluid level to be at a depth of 58.7 meters and the bottom depth to be  $3384.7 \pm 0.5$  meters. This will be refined based on data from Ryan's logging.
  - B. I-161 and I-172 successfully tested tools on the winch and are ready to start logging when Gary is finished.
  - C. I-161 finished loading shot holes for their Seismic Experiment
  - D. Ryan Bay (I-172) finished his part of the project's logging on 12/26 with two optical logs.

- E. I-161 had instrument difficulties in their first night in the borehole (12/25). After further testing and a modification of settings the second night was more successful. Shooting of the "A" line (along Ice flow) was completed on Saturday night. The data from the borehole is being analyzed to determine the course of the experiment.
- 5. Arch Deconstruction, Status
  - A. Two Carpenters will be coming out with T-350 to assist with work in the Arch.
  - B. Work continues to box up all the loose items left from ice core processing. Dismantling of the "buffer table should begin today.
  - C. Several items were requested for use at the SPICE Core project, these were located and sent via Guard Mail. The last, a replacement blower for the FED is still sitting at Comms while we wait for an LC-130.
- 6. Other
  - A. Lia-Bun Bok, with I-166, has continued his radar work despite the rest of I-166 being in McMurdo. His measurements at the WAIS Divide have begun and are ongoing.
  - B. I presented the Monday Evening Science Lecture to a full galley. The topic was "Physical Properties of Ice and the WAIS Divide Ice Core Project".

## SITREP 4, January 5, 2015; Day 26 at WAIS Divide Donald Voigt, I-477, SCO Rep

- 1. Passenger Movements
  - A. We had our first LC-130 flight since 12/19. D019 arrived on 1/4/15. The subsequent flight scheduled for 1/4 was canceled but was flown on Monday.
  - B. Out; Burkett, I-477; Bay, I-172; Bok, I-166.
  - C. In; 4 with I-166, 2 with I-172 and 1 with T-350. 2 with T-350 on Monday along with the Carpenters to support work in the Arch
- 2. Camp Activities
  - A. Current Camp Population, 45; G-079, 6; I-161, 3; I-166, 4; I-172, 2; I-475, 1; I-477, 1; T-299, 1; T-350, 4; T-500 (KBA), 3; ASC, 20.
  - B. Camp was in good condition before the storm that seems to never end. The skiway was at full ACL. Cleanup and grooming continues after the storm. The Arch doors were dug out today.
  - C. The Twin Otter is supporting PoleNet (G-079) and other activities.
  - D. Camp celebrated the New Year with dinner on 01/01. Staff had the 2nd and 3rd off, then worked Sunday.
  - E. Fuel was a concern until we received 2000 gallons from D-019 and another 1600 from D-020.
  - F. To save fuel the 225 kW generator had to be shut down. Power in the Arch was off but camp was powered by the 40 kW generator. The 225 kW generator was brought up again on Monday to support borehole logging and Arch deconstruction
  - G. Weather; Temperatures have warmed but that comes at the cost of coastal storms with sustained high winds and snow. Drifting has become significant. Our first break in the weather was on I/4, just in time to receive a Herc flight.
- 3. Borehole Logging, Status
  - A. Gary completed two logging runs. In his first run Gary determined the fluid level to be at a depth of 58.7 meters and the bottom depth to be  $3384.7 \pm 0.5$  meters. This will be refined based on data from Ryan's logging.
  - B. I-161 and I-172 successfully tested tools on the winch and are ready to start logging when Gary is finished.
  - C. I-161 finished loading shot holes for their Seismic Experiment and the second and third lines were shot during lulls in the winds. A shallow refraction line was shot on 1/4 and another set up on 1/5 but canceled due to high winds.

- D. Ryan Bay (I-172) finished his part of the project's logging on 12/26 with two optical logs. He reports his data to be of high quality from the analysis he can do in the field.
- E. The rest of I-172 and I-166 arrived on 1/4 and are ready to start borehole logging. I-166 tested their tool and started downhole on Monday.
- 4. Arch Deconstruction, Status
  - A. Two Carpenters arrived on 1/5 with two members of T-350 to assist with work in the Arch.
  - B. Work continues to box up all the loose items left from ice core processing. Dismantling of the "buffer table" is complete. Crating of the 4 meter core trays and longer parts from the MK table are next.
  - C. Work in the Arch was not possible for several days during the storm. Lack of lighting in the Arch and not being able to open the Processing Side doors made it too dark to work.
  - D. Several items were requested for use at the SPICE Core project, these were located and sent via Guard Mail. The last, a replacement blower for the FED is on its way to Pole.
- 5. Other
  - A. Lia-Bun Bok, with I-166, nearly completed his radar work. He departed for McMurdo and redeployment while Pettit will finish the work.
  - B. Kiya Riverman (I-161) presented the Monday Night Science Lecture which was well attended.

SITREP 5, January 12, 2015; Day 33 at WAIS Divide7 Donald Voigt, I-477, SCO Rep

- 1. Passenger Movements
  - A. In; N/A.
  - B. Out; I-161 (Riverman, Muto and Holschuh), Gary Clow (I-475), Joey Talghader (I-172) on D-021, 1/9
- 2. Camp Activities
  - A. Current Camp Population, 45; G-079, 6; I-166, 4; I-172, 1; I-477, 1; T-299, 1; T-350, 4; T-500 (KBA), 3; ASC, 25.
  - B. Camp is in good condition. The skiway is at full ACL.
  - C. The Twin Otter is supporting PoleNet (G-079) and other activities.
  - D. Weather; Finally some beautiful days. WAIS Divide had a record high for the day on 1/7, 25 F. The winds have moderated.
- 3. Borehole Logging, Status
  - A. Erin (I-166) completed one 42 hour logging run on 1/7, and started a second 12 hours later. The second, more focused, logging run ended at midnight on 1/10. I-166 is done with their borehole work.
  - B. The borehole became available to I-172 on Sunday 1/11. Mah is continuing work on the I-172 tool.
  - C. I-161 finished their seismic experiments on 1/7 and packed to leave, departing on 1/9.
  - D. Gary Clow had to leave on 1/9 in order to get home and back to work at the USGS. For Gary to get an extension was next to impossible working within the time constraints of the season. Jim Koehler (T-350) was trained with Gary and became the second borehole logging winch operator.
- 4. Arch Deconstruction, Status
  - A. Two Carpenters arrived on 1/5 with two members of T-350 to assist with work in the Arch.
  - B. Crates for the 4 meter core trays and the MK table have been built and are being packed. This should be completed by the time of this report.
  - C. Since T-350 arrived, work has proceeded at an impressive rate. The level wind and drilling winch are out of the trench as of 1/10. Other equipment has been boxed, some in crates produced by the carpenters.

- 5. Other
  - A. Ryan Wallace, our POC and the ASC Field Supervisor, came out to WSD on 1/9. He plans to spend a few days taking to camp staff and checking in with the science events.
  - B. I gave an Arch tour to 9 people on Sunday afternoon.

SITREP 6, January 19, 2015; at McMurdo Station Donald Voigt, I-477, SCO Rep

- 1. Passenger Movements
  - A. In; N/A.
  - B. Out; I-166 on D-023, 1/14; I-172 and I-477 on D-024, 1/15
- 2. Camp Activities
  - A. Camp is in the process of closing up. Scheduled LC-130 flights have been cut and all science is scheduled to pull out on 1/22, including T-350. Flight delays and weather have combined to reduce the number of flights on continent, and Pole is in need of fuel flights.
  - B. Camp was in good condition when I left. With the departure of D-024 ACL for the skiway was raised back to near-maximum. It had been lowered with the difficulties D-023 had during their departure. A second flight, D-025, made it to WSD and back later on 1/15.
  - C. The Twin Otter continues supporting PoleNet (G-079) and other activities (The WAS Recovery Team at Byrd Camp).
- 3. Borehole Logging, Status
  - A. The borehole became available to I-172 on Sunday 1/11. Mah continued work on the I-172 tool until our flight was turned on at 4PM on the 15th.
  - B. Towards the end of this week it became clear that borehole logging would have to be terminated due to deconstruction work in the Arch. The drill-tower base was being removed and this necessitated removal of floor sections. The guard rails around the drilling slot are supported by the floor joists and working around the slot became very hazardous. This work could not be delayed; no other work in the Arch could continue until this task was completed. In my opinion Mah (I-172) had ample opportunity to access the borehole and complete his work and no further delays were possible. The flight schedule forced the issue and it was clear that borehole logging had been completed.
  - C. I will compile the numbers for borehole logging but in terms of the events; I-475 (Clow) completed all of the temperature logging, I-161 (Riverman/Peters) completed all of the seismic work in the borehole, I-166 (Pettit) completed all of the logging to determine ice deformation and I-172 (Bay and Talghader) completed the optical logging portion of their project but were never able to fix all the problems with their second tool.

- 4. Arch Deconstruction, Status
  - A. T-350 continued to made excellent progress in removal of equipment from the IDDO side of the Arch. Jim Koehler was confident that they would be able to complete their work by the pull-out date of 22 January.
  - B. Two Carpenters from ASC continue to work with T-350 in the Arch.
  - C. I-477 completed the dismantling and pack up of the Processing side of the Arch.
- 5. Other.
  - A. I gave an Arch tour to 4 people on Wednesday afternoon.
  - B. I completed the process of assigning TCNs to cargo that had already arrived from WSD. Since I returned to McMurdo no further cargo has been returned. I suspect that the remaining three crates will winter at WSD. They contain (and are labeled) the MK Table, MK Motor and 4 Meter Trays. In addition, 12 Arctic Oven tents belonging to the SCO remained at camp and will be packed in 50 cube MW boxes for storage on the cargo lines.
  - C. I met with Lisa Clough, NSF Science Rep in McMurdo, to discuss the season and to see about planning an outbrief.
  - D. I met with Ryan Wallace, our POC, about items that needed to be taken care of in McMurdo before my departure.
  - E. Before leaving WSD I had a phone conversation with Matthew Kippenhan and Kaija Webster with regards to staging equipment at WSD for the maximum productivity next season. This includes leaving the yellow gantry on the Drill Side of the Arch in position so it could be used during the casing of the borehole next year. We decided that since the gantry would not be returned to McMurdo this season there was nothing to gain by taking it down while it could still be useful.
  - F. I caught the G.I. bug that swept through camp and lost two days while recovering. About 25% of camp was ill due to the bug.