

## Minutes of L-N/LBT Regular Teleconference

February 12, 2015; 16:30 – CEST (08:30 MST)

Attendees:

- MPIA: Martin Kuerster, Tom Herbst, Thomas Bertram, Ralph Hofferbert
- LBT-Tucson: Jonathon Kern, Christian Veillet, Al Conrad, Jim Wiese
- LBT-Summit: John Little, Jeff Urban, James Dougherty

(last updated 12feb2015)

### 1. People and material on the summit in 2015B.

#### a. Size of containers (e.g., 40 feet is not possible).

*The fact that 40' containers cannot be accommodated on site at LBT was re-iterated. The 20' size is OK. The 24' size is likely OK (TBC). John informed that a maximum of 3 such small containers can reside on the mountain at any given time, one inside as its contents are being unloaded, and two outside. The ramifications of these constraints on the installation plan and customs inspection were discussed, but without yet a clear resolution.*

**Action to John:** Confirm 24' containers are OK.

*[Since the meeting more information was exchanged in email; the thread is posted on the wiki at: <http://wiki.lbto.org/bin/view/Instrumentation/LnLNpaePage>]*

#### b. Phasing of container arrival, unpack, and removal.

*The need for a plan to deliver approximately 10 containers of material along with the "big box" containing the bench was discussed. Are LN components safe at base camp (e.g., given hot days)? The PEPSI experience indicates "yes" but many are skeptical. [After the meeting, Jonathon and Jim suggested using a cleaner rented space in Safford for the containers-in-waiting and/or air-conditioning units that can be purchased specifically for containers requiring cool temperatures.] More discussion is needed.*

**Action to MPIA:** Produce a plan for container arrival, unpack, and removal that meets the maximum-3-containers-on-site-plus-space-for-unpacked-contents-of-another one rule. This replaces the previous action that was less specific.

**Action to Al:** Request a CTM splinter meeting for this topic.

#### c. Time intervals and person counts for LN-T1 through LN-T6.

*We reviewed the table on track that summarizes dates and the per-trip person numbers. This table is now also posted as a screen grab on the wiki (with the understanding that it is preliminary and will change):*

<http://wiki.lbto.org/bin/view/Instrumentation/LnIplanPage>

*We discussed points that will require changes:*

- *We must work within the maximum-3-container constraint.*
- *All equipment must be delivered to, and unpacked on, the summit prior to I6.*
- *Gaps for interleaving ARGOS and LUCI-1 AO commissioning activities need to be inserted.*
- *Contingencies for weather should be added*
- *Increased durations due to some team members commuting from Safford may be required.*

- d. Possibility to provide shuttle service.

*This possibility is back on the table, but details (e.g., Discovery Center or private individual + 4WD rental or purchase) and the question of who pays are outstanding.*

- e. Possibility to guarantee a minimum number of rooms.

*More discussion is needed.*

2. Organization Note - two suggested changes

- a. List from Dave Ashby (see wiki link)
- b. Input from LBT software department (James Dougherty, summit IT responsible, via Doug Summers, SW dept. manager).

*The input provided for changes to the Org Note is sufficient, so that action is closed. The separate topic related to section 7 of the ICD was also discussed. The comments from Doug are on the wiki:*

<http://wiki.lbto.org/bin/view/Instrumentation/LnCompNetPage>

*These will be forwarded to Florian and discussed at the next teleconference.*

3. Confined Space Safety Issue

- a. Frank Demer response to Jeff's email.
- b. Decision to wait until after delivery before developing ingress/egress procedures.

*All agreed with the plan to work out the procedure after LN is installed on the telescope. After the meeting Jeff provided a link to the ladder training that will be required. It's on the twiki at:*

<http://wiki.lbto.org/bin/view/Instrumentation/LnCoverPage>

4. Consortium Meeting (19-20 March 2015 in Heidelberg)

*Dates are confirmed.*

5. Pathfinder

- a. LBT requests confirmation that the March run is officially cancelled.

*Cancellation of the March PF run is confirmed.*

- b. Plans for removal from the telescope.

*Pathfinder dismantling (II) will be approx. one week between PAE (early May) and LN dis-assembly at MPIA (late June). Discussions are underway with INAF-P that could change this however. The blue foot can go to base-camp, but the electronics cabinet and the GWS must remain on the summit. The cabinet can likely go on 3-lower, but the GWS will likely have to be stored somewhere in the high-bay.*

6. Action Item Review

- From 1.1 of 15jan2015 minutes:

**Action to Doug:** Review, and possibly extend, this list of PAE bullets to include items related to computers and networking. Provide this to Al.  
Complete.

**Action to Al:** Provide a marked-up version of the org note to Ralph that incorporates the input received from Dave and Doug.  
Complete.

- From 1.2 of 15jan2015 minutes  
**Action to James Howard:** Report status of laser scanner data received from R3 to be used for envelope metrology.  
Jonathon reported that a free application that is available from Faro for reading these files is not working properly. James is working with R3 to sort this out.
- From 1.3 of 15jan2015 minutes  
**Action to Ralph:** Provide a “phasing” of the arrival and removal of containers as they arrive and are unpacked that can be accommodated by the available space in the hi-bay.  
Replaced by new action given in 1b above.
- From 1.4 of 15jan2015 minutes  
**Action to Werner:** Provide to John Little both the weight and the envelope of the cooler. Include this information in a revision of the ICD.  
Complete.
- From 1.9 of 15jan2015 minutes  
**Action to MPIA:** Produce the above [ingress/egress] procedure to be reviewed before shipment.  
Deleted. We will do this after LN is installed.  
**New action to Jim W:** Check the STEP file sent by Harald on 12.feb.2015 and provide a detailed UIAP design for the LN team to review.  
[Since the meeting related information about the UIAP was exchanged in email; the thread is posted on the wiki at: <http://wiki.lbto.org/bin/view/Instrumentation/LnUiapPage>]  
[Since the meeting related information about the envelope was exchanged in email; the thread is posted on the wiki at: <http://wiki.lbto.org/bin/view/Instrumentation/LnCraningPage>]
- From 2 of 14jan2015 minutes  
**Action to James Howard:** Provide to Harald the radius of curvature (the “arc”) that will define how much space the LN installation team has to work with.  
Pending.

**Next Meeting:** Thursday 26.feb.2015.

## Appendix – Status of past action items

1. **Action to AC:** *Work with others at LBT to generate text for Org Note along the lines of that list sent in email.*  
Complete.
2. **Action to RH:** *Provide, if possible, the coordinates of these points in a machine-readable format.*  
Complete. R3 sent this on 12.dec.2014 to James and Dave.
3. **Action to AC:** *Correct the sketch on the Twiki (e.g., the circle labeled “LUCI upper” must be within the travel range of the crane).*  
Complete. Robert has provided this drawing (See 1.3 above)
4. **Action to AC:** *Confirm that tent removal (if required for a LUCI emergency) is possible.*  
Complete.
5. **Action to JH:** *Determine if power and hook-ups are in place for simultaneous use by LUCI and LINC-NIRVNA.*  
Complete.
6. **Action to TH:** *Learn if glycol is needed to run the LN compressor.*  
Complete. Yes, glycol is needed.
7. **Action to JL:** *Review the L-N plans for transporting the compressor and possibly conducting warm-up/cool-down on a moving telescope (includes checking if the compressor can be moved using the elevator).*  
Complete.
8. **Action to RH:** *Provide data sheet to JH.*  
Complete. It was in R3 email to Dave and James of December 12.
9. **Action to AC/TH:** *Coordinate a test this summer to measure the temperature reached inside the containers (and learn the level of temperature that the Thermodyne boxes can handle).*  
Pending.
10. **Action to AC:** *Ask JU to come to the next meeting (15.jan.2015) for ladder safety, confined space, and scaffold licensing discussion.*  
Complete.
11. **Action to JH:** *Set-up direct communication with R3 regarding bolt torques.*  
Pending.  
*[Since the meeting related information about the UIAP was exchanged in email; the thread is posted on the wiki at: <http://wiki.lbto.org/bin/view/Instrumentation/LnCraningPage>]*
12. **Action to RH:** *Provide details of commissioning visits, including persons-per-visit.*  
In progress. See 1c above.