

## Nightly call to LCH at beginning of Laser operations

**Time Frame:** 60 to 15 minutes prior to the start of nightly laser activities

**Summary:** This is a voice report from the laser operator to LCH or JSpOC to confirm that the scheduled laser activity for the night is still planned, to verify communication links, and to report status of the laser equipment and planned test.

**Contact Number:** (805) 605 6546 (Note from SOAR voip phone dial 001-805-605-6546)

### Template:

**Date/Time of Call (UTC):** *"Today is [provide date and time in UTC (not local time)]"*

**Classification:** *"This call is Unclassified".*

**Name/Rank of Caller/Organization:** *"My name is [Your name], I am a Telescope Operator at the SOAR Telescope.*

**Confirm Communications:** *"Communication is clear [or has some static, etc.]"*

**Laser System:** *"I am calling to report on the SAM at SOAR laser system"*

**Start Time (UTC):** *"Laser operations will start at [time of beginning of scheduled laser activity in UTC (not local time)]."*

**Stop Time (UTC):** *"Laser operations will stop at [time of end of scheduled laser activity in UTC (not local time)]."*

**Status of System:** *"Laser system status is [Green (on track), Yellow (mission at risk) or Red (likely cancel)]."*

**If Status is not green:** *"The reason is: [provide reason, e.g. bad weather, equipment problems, etc.]"*

## Nightly call to LCH at end of Laser operations

**Time Frame:** Within 15 minutes after completion of all nightly laser activities.

**Summary:** This is a voice report from the SSA to the LCH or JSpOC to confirm the completion of daily laser activities. If laser operation is cancelled for the night, for example because the night is abandoned due to bad weather or as technical failure, use this report to notify the LCH of the cancellation and provide an estimated date/time for the next operational window, if available.

**Contact Number:** (805) 605 6546 (Note from SOAR voip phone dial 001-805-605-6546)

### Template:

**Date/Time of Call (UTC):** *"Today is [provide date and time in UTC (not local time)]"*

**Classification:** *"This call is Unclassified".*

**Name/Rank of Caller/Organization:** *"My name is [Your name], I am a Telescope Operator at the SOAR Telescope."*

**Confirm Communications:** *"Communication is clear [or has some static, etc.]"*

**Laser System:** *"I am calling to report on the SAM at SOAR laser system"*

**Stop Time (UTC):** *"Laser operations stopped at [time of end of laser activity in UTC (not local time)]."*

**Assessment of Parameters:** *"Laser activity was within authorized parameters [or not]."*

**Assessment of Success:** *"Laser activity was successful [or not]". [If this is the last night of a laser activity period<sup>1</sup> also assess the entire period.]"*

**If Not:** *"the reason was [provide reason, e.g. bad weather, equipment problems, etc.]"*

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<sup>1</sup> For example the last night of a SAM engineering run, or the last night of a science block using SAM

## Call to LCH to report laser propagation outside of PAM

**Time Frame:** Within 15 minutes following the determination of inadvertent laser activity.

**Summary:** This is a voice report from the SSA to the LCH or JSpOC to provide initial notification that a laser has fired outside authorized predictive avoidance parameters (outside of time windows or specified azimuth / elevation corridor).

**Contact Number:** (805) 605 6546 (Note from SOAR voip phone dial 001-805-605-6546)

### Template:

**Date/Time of Call (UTC):** *"Today is [provide date and time in UTC (not local time)]"*

**Classification:** *"This call is Unclassified".*

**Name/Rank of Caller/Organization:** *"My name is [your name], I am a Telescope Operator at the SOAR Telescope."*

**Nature of Incident/Laser System:** *"I am calling to report an incident with the SAM at SOAR laser system. We inadvertently fired the laser outside of authorized laser parameters."*

**Laser System Location:** *"The SAM at SOAR laser latitude is: 30.2380 degrees South, its longitude is: 70.7337 degrees West, and its altitude is: 2.738 km".*

**Time of Incident (UTC):** *"The incident started at [provide time in UTC], and stopped at [provide time in UTC]"*.

**Output Power:** *"The laser average output power was [provide average power as reported by laser operator at the time of the incident; power will likely be close to 10W corresponding to an instantaneous peak power of [provide peak power as reported by laser operator at the time of the incident; peak power will likely be close to 29,400W] peak".*

**Laser Pointing Information:** *"The laser pointing was [provide azimuth at time of incident] relative to true North and the elevation was [provide elevation] in degrees above local horizon".*

### Laser Target: (Select the case which applies)

Either: *"The laser target was of type Fixed Azimuth and Elevation at Azimuth [give target azimuth] and Declination [give target Dec]"*.

Or: *"The laser target was of type Right Ascension and Declination at Right Ascension [give target RA in degrees as given in PAM file] and Declination [give target Dec in degrees as given in PAM file]"*.

Or: *"The laser target was Zenith".*

**P/A Open Windows:** *"The open window for that target was [provide applicable open window times in UTC]"*.

**Assessment of Incident:** *[Explain what happened if known at the time. If not known or unsure, just say so, Details will be provided in follow-up report].*