

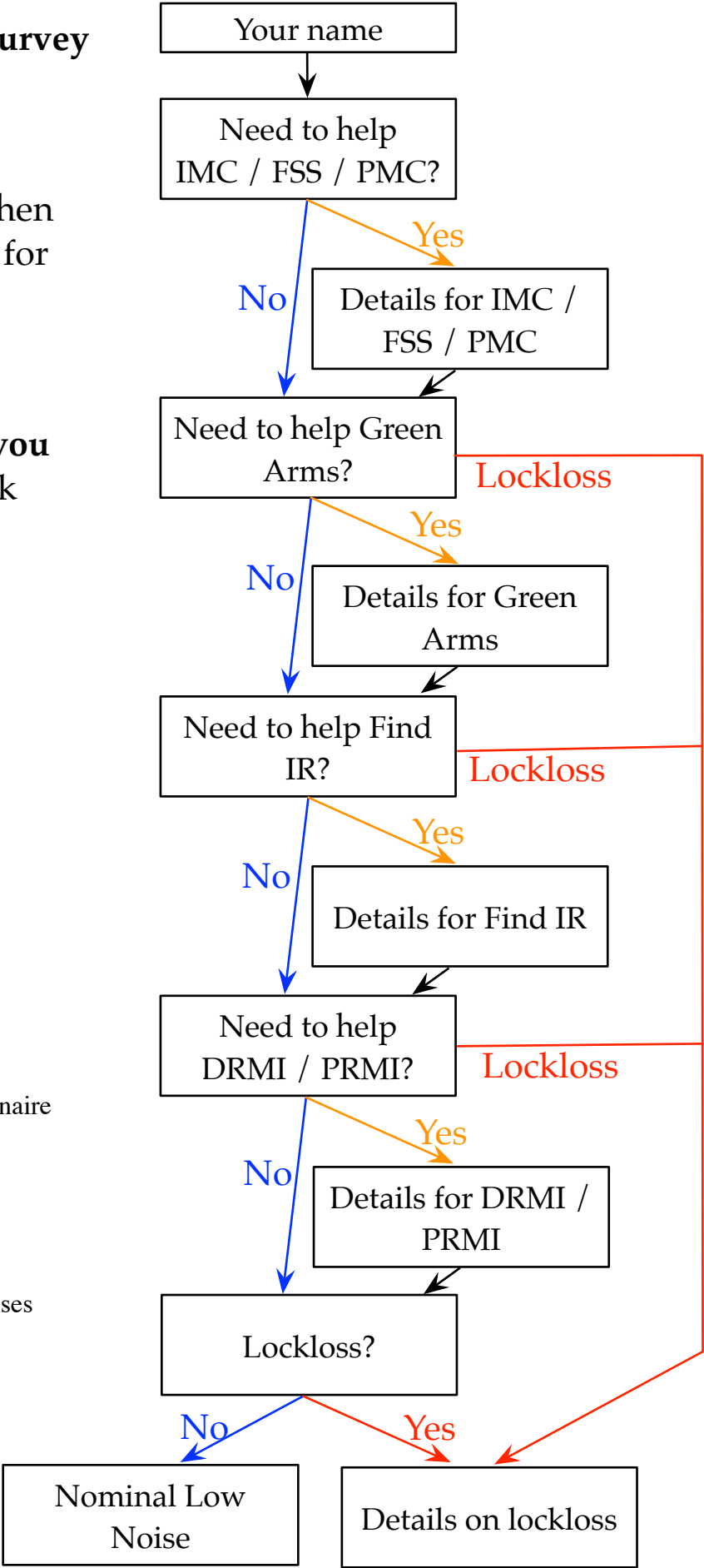
The structure of the lockloss survey

Please have the survey open when you begin shift, in preparation for any lock acquisitions

Please fill out the survey **as you acquire lock**, for every lock acquisition attempt

Survey:
<https://tinyurl.com/LHO-Lock-Acq-Questionnaire>

Results:
<https://tinyurl.com/LHO-Lock-Acq-Responses>



First section: Just intro text

Lock Acquisition manual intervention tracking

Thank you for helping us understand where the IFO struggles to lock itself! This form should give you options to select what interventions were needed at various states of lock acquisition.

Please have this open AS YOU LOCK for every lock acquisition.

The goal with this survey is to have one submission per locking attempt. The goal is also to gather information on manual interventions that is difficult to collect automatically; we hope to not waste time with questions that we can get info on from scripts.

You can skip any question, or go back to any question. Each question should also have a text entry; you are invited to put extra notes, but they are not required.

If you lose lock, every section should allow you to skip to the end of the form.

Suggestions on making the form more usable are welcome!!

NEXT

Second section: Dropdown menu with names

Who are you?

Your name

Choose ▼

Intervention needed? IMC / FSS / PMC

An answer of Yes will bring up more detailed questions about the intervention needed. An answer of No will take you directly to Locking Arms Green.

Did you need to intervene to get the IMC locked?

☒ No

☐ Yes

Details (you should only see these questions if you answer Yes)

Interventions for IMC / FSS / PMC

Details on what needed intervention to get the IMC, FSS, and PMC locked.

Did you need to 'poke' MC2 to get good IMC flashes?

☒ No

☐ Yes

Did you need to toggle the FSS autolocker?

☒ No

☐ Yes

Did you need to help the PMC at all?

☒ No

☐ Yes

Any other comments, or other things you had to do?

Your answer

Intervention needed? Locking Arms Green

An answer of Yes will bring up more detailed questions about the intervention needed. An answer of No will take you directly to FIND IR.

Did you need to intervene at Locking Arms Green?

- ☒ No
- ☐ Yes
- ☐ N/A, we lost lock (Skips to end of survey)

Details (you should only see these questions if you answer Yes)

Interventions at Locking Arms Green

Details on what optics needed attention for Locking Arms Green.

What optics did you need to move?

No need to list slider values here, just check appropriate box if you needed to move sliders.

- ☐ ETMX
- ☐ ETMY
- ☐ TMSX
- ☐ TMSY
- ☐ ITMX (really shouldn't be needed!)
- ☐ ITMY (really shouldn't be needed!)

Any other comments?

Your answer

Intervention needed? Find IR

An answer of Yes will bring up more detailed questions about the intervention needed. An answer of No will take you directly to DRMI.

Did you need to intervene at Find IR?

- ☒ No
- ☐ Yes
- ☐ N/A, we lost lock (Skips to end of survey)

Details (you should only see these questions if you answer Yes)

Interventions at Find IR

Details on what needed attention for Find IR

Did you need to move the COMM offset?

No need to note the amount, just if you needed to adjust it.

- ☒ No
- ☐ Yes
- ☐ Other: _____

Did you need to move the DIFF offset?

No need to note the amount, just if you needed to adjust it.

- ☒ No
- ☐ Yes
- ☐ Other: _____

Did you need to adjust the offset of the TR QPDs (for the NORM transmission channels)?

This should not be needed. But, if it is, we'd like to know.

- ☒ No
- ☐ Yes, TRX offset (shouldn't be needed)
- ☐ Yes, TRY offset (shouldn't be needed)

Any other comments?

Your answer _____

Intervention needed? DRMI locking

An answer of Yes will bring up more detailed questions about the intervention needed. An answer of No will take you directly to the next question.

Did you need to intervene during DRMI locking?

- ☒ No
- ☐ Yes
- ☐ N/A, we lost lock (Skips to end of survey)

Interventions with DRMI locking

Did you need to move any optics' sliders during any of the DRMI / PRMI attempts?

No need to list slider values here, just check appropriate box if you needed to move sliders.

- ☐ PRM
- ☐ BS
- ☐ SRM
- ☐ PR2 (shouldn't be needed)
- ☐ SR2 (shouldn't be needed)
- ☐ PR3 (really shouldn't be needed!)
- ☐ SR3 (really shouldn't be needed!)

Did you need to go to CHECK MICH FRINGES?

- ☒ No
- ☐ Yes

Did you request any guardian states?

Check No if Guardian did all of the state switching on its own. Check Yes if you asked guardian to wait in any PRMI or DRMI states.

- ☒ No
- ☐ Yes

Any other comments?

Your answer

Details (you should
only see these questions
if you answer Yes)

Locklosses at any other states?

All other states are grouped together, since they should not require manual intervention beyond beginning an initial alignment. Questions on initial alignment are in the next section.

Did you lose lock anywhere else before arriving at Nominal Low Noise?

☒ No

☐ Yes

Any other comments?

Your answer

If you did not have any lock losses, you should arrive at this final set of questions

Nominal Low Noise!

Hooray! If you've gotten here, that (should) mean that the IFO is locked!

Did acquisition happen automatically, all the way to Nominal Low Noise?

The guardian started in READY, you clicked Nominal Low Noise, and guardian did everything else.

☒ Yes

☐ No

Were there any SDF diffs?

Please include SDF diffs in your alog, as usual. No need to list them here.

☒ No

☐ Yes

Did you need to change the SEL_CONF seismic configuration during acquisition?

☒ No (Ex. To Earthquake, back to Windy, or turning sensor correction on or off)

☐ Yes

Did you pause at any states? (Shouldn't be needed)

You hopefully didn't need to hand-select any guardian state other than Nominal Low Noise, but if you did, we'd like to know.

☒ No

☐ Yes

Any other comments? If you needed to pause, please let us know where, here.

Your answer

If you lose lock during the acquisition attempt, you should see this final set of questions instead

(Ex. To Earthquake, back to Windy, or turning sensor correction on or off)

Lockloss

Oh no! It is unlocked! If the lockloss was for a known reason (human caused, bad environment, etc), please let us know. Also, please select which state it lost lock from.

Was there an obvious reason why we lost lock during acquisition?

- ☐ No
- ☐ Yes - I'm pretty sure it was human-caused, but I don't have specifics
- ☐ Yes - A person clicked a button
- ☐ Yes - People were walking in the LVEA
- ☐ Yes - People were walking in an end station VEA
- ☐ Yes - Vehicles were driving near an end station
- ☐ Yes - Vehicles were driving near the corner station
- ☐ Yes - There is lots of wind
- ☐ Yes - There is a lot of microseism
- ☐ Yes - Earthquake
- ☐ Yes - There is a lot of general ground motion
- ☐ Yes - It was deliberate (ex. Tuesday Maint.)
- ☐ Other: _____

Will you be starting an initial alignment?

- ☒ No
- ☐ Yes

What state did we lose lock from?

Choose ▼

Did you need to change the SEI_CONF seismic configuration during acquisition?

- ☒ No
- ☐ Yes

Did you pause at any states? (Shouldn't be needed)

You hopefully didn't need to hand-select any guardian state other than Nominal Low Noise, but if you did, we'd like to know.

- ☒ No
- ☐ Yes

Any other comments about this lock acquisition attempt? If you needed to pause, please tell us where, here

Your answer