

Inspection Checklists

1. Checklists to be performed by an EOIC

1.1 Daily EOIC Inspection Checklist

This checklist must be completed by a NLCTA EOIC every work day when running RF. Checklists may be stored on the clipboard until filed. Do NOT throw away.

Check cells as inspected

M	T	W	Th	F	Sa	Su	
							Complete the Logbook Sign-in in the current NLCTA Operations Log (this includes the BAS signature requirement and daily beam containment in beam operation mode).
							Operations Logbook describes operation NLCTA mode as “unattended and without beam”
							PPS panel enable is set to remote and panel enable key is locked in key safe
							Verify that all inspection checklists (EOIC, Laser Operator, & NLCTA) are completed and up to date.
							Klystrons: Verify that the yellow shielding lead (cap, etc.) is installed
							Klystrons: Roped off with yellow-magenta access control ropes (if in operation)
							Verify that the key for the S-band modulator is locked in the key safe (orange ribbon can be seen hanging out).
							Inspection of roof: Verify that three shielding enclosures are on the high power waveguide for every operational rf source.
							The roof access gate is closed

Notes:

	Date	Print Name	Signature
M			
T			
W			
Th			
F			
Sa			
Su			

1.2 Weekly EOIC Inspection Checklist

This checklist must be completed by a NLCTA EOIC once every week, independent of mode of machine operation. Checklists may be stored on the clipboard until filed. Do NOT throw away. Problems found are to be reviewed in the next day's operations meeting.

	Perform weekly Beam Containment checks if in beam operation mode.
	Verify that all required vacuum pumps are on and in protect or HV off mode.
	Examine latest radiation survey (Surveys should be current and appropriate for mode of operation)

<i>First week of the month only</i>	
	Verify that the BASs, EAs, and PPS Certifications are valid beyond the end of the month.

Are there any open items left from last week's inspection?

Comments/concerns

Name:

Signature:

Date:

Circle Day: M T W TH F SA SU

2. Checklists to be Performed by a Laser Operator

2.1 Daily Laser Operator Inspection Checklist

This checklist must be completed by a Qualified Laser Operator every work day. Checklists may be stored on the clipboard until filed. Do NOT throw away.

Report all problems found to the SLSO or EOIC.

Check cells as inspected

M	T	W	Th	F	Sa	Su	
							If the Experimental Hall is open, verify that there are ≥ 2 pair of laser goggles properly stored in the Exp. Hall entry way.
In the Laser Room							
							Flow for "Evolution" gauge reads > 1.5 gpm
							Flow for "Ti:Sa Rods" gauge read > 0.1 gpm
							Flow for "Empower" gauge reads > 1.5 gpm
							Ensure laser safety goggles are stored properly
							No water leaks in the laser cooling systems. Check the floor, optical tables, and LCW valves.
							Regen 1 Dry N2 flow meter reads 2 SCFH
							Tsunami/Millenia chiller reads 18.0°C
							Tacky mats have fresh sheets exposed

Notes:

	Date	Print Name	Signature
M			
T			
W			
Th			
F			
Sa			
Su			

2.2 Weekly Laser Operator Inspection Checklist

This checklist must be completed by a Qualified Laser Operator once every week. Checklists may be stored on the clipboard until filed. Do NOT throw away.

Report all problems found to the SLSO or EOIC.

Check cells as inspected

In the Laser Room	
	Desiccant in Evolution ECU chassis is still blue
	General housekeeping (aisles clear, floor dry, etc.)
	Trash in anteroom and laser room emptied

The first week the month only

	Check the fire extinguisher in the laser room. Verify that the annual maintenance date is within the past year and won't expire within the next month.
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The first week of June and December only

	Mop the floors
	Inspect clean room HEPA intake filters (5 total) and replace if needed
	Inspect CAMAC crate air filter (1) and replace if needed

First week of November only

	Remind the SLSO to perform LSS Interlock Check
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Comments/concerns

Name:

Signature:

Date:

Circle Day: M T W TH F SA SU

3. Routine Inspection Checklists

3.1 Daily Routine Inspection Checklist

This checklist must be completed every work day. Checklists may be stored on the clipboard until filed. Do NOT throw away.

Report all problems found to the EOIC.

Check cells as inspected

M	T	W	Th	F	Location	
					Near S-Band	Waveguide vacuum pump controllers (8900, 8901, and 8902 in rack B062-3813) all read <5 μ A
					Near S-Band	No water leaks under S-Band modulator, klystron, or manifold. Klystron collector flow meter reads >15 gpm.
					Near S-Band	S-Band Injector Klystron Modulator's oil pump is spinning
					Mezz	Medium Thermo chiller fluid level is topped off, temperature reads $24\pm 1^\circ\text{C}$, and there are no water leaks
					Mezz	Large Lytron chiller water level is topped off, temperature reads $24\pm 1^\circ\text{C}$, and there are no water leaks
					Mezz	Small Lytron chiller water level is topped off; temperature reads $20\pm 1^\circ\text{C}$, and there are no water leaks
					Mezz	No water leaks are present in or around rack B062-206
					Exp Hall	If the Experimental Hall is open, verify that there are no water leaks near girders 41, 42, or the spectrometer.

Notes:

	Date	Print Name	Signature
M			
T			
W			
Th			
F			

3.2 Weekly Routine Inspection Checklist

This checklist must be completed once every week. Checklists may be stored on the clipboard until filed. Do NOT throw away.

Report all problems found to the EOIC.

<i>Check cells as inspected</i>	Location	
	B128	Check LCW pressure history for past week (ASTS TA02 26 DATA NLC_LCWP) (NLCTA Index -> Tuning Panel)
	B128	Check LCW temperature stability for past week (ASTS TA02 10 DATA ACC0_1UP) (NLCTA Index -> Tuning Panel)
	Mod/kly	X-band Modulator oil secondary containment covers are in place if the tank has oil.
	Mod/kly	No signs of oil leaks around X-band modulators
	Mod/kly	Oil level in modulators acceptable. During normal operation (thyratron enclosure filled with oil) 1/8→3/8 is the indicated oil level. Action is required if the level is < 1/8. There are no limits when the cover is off. (1/8 tank = 6 gallons). Mark level: Modulator 0: E - + - 1/4 - + - 1/2 - + - 3/4 - + - F Modulator 1: E - + - 1/4 - + - 1/2 - + - 3/4 - + - F Modulator 2: E - + - 1/4 - + - 1/2 - + - 3/4 - + - F
	Mod/kly	No unusual S-Band Injector Klystron PLC error messages (PPS and "Mod Delta T" messages are expected)
	Mod/kly	No water leaks in the back of rack B062-39
	Mod/kly	Cable temperature regulators in B062-3901 read: Top: 33±1°C, Middle: 33.3±1°C
	Mod/kly	Gun temperature regulator in B062-3737 reads: 131±1°F
	B225	Oil level on roughing pump in B225 is OK
	Exp hall	If the Experimental Hall is open, verify that the chamber roughing pump oil level is at least 2 cm above the minimum allowable
	Exp hall	If the Experimental Hall is open, verify that the chamber roughing pump secondary containment does not have excessive oil leakage
	Exp hall	If the Experimental Hall is open, verify that the water level on the Experimental Hall Chiller OK
	Mezz	Cable temperature regulator B062-20034 reads 33.3±1°C
	Mezz	Humidifier on roof of the laser room is working properly: no lights are lit or just the yellow light is lit indicating max level

	ESB	General housekeeping (aisles clear, floor dry, etc..)
	ESB	Hazardous Waste Containers, list of containers is below. Is the container: damaged or leaking? Past due or due this week? Almost full? Housekeeping: secondary containment bins free of debris, all oil drums on containment pallets, etc.

<i>First week of the month only</i>		
	B128, ESA, ESB	Check fire extinguishers & GFCIs on maps, Section 4. Verify that the annual maintenance date is within the past year and won't expire within the next month. Verify that GFCIs have stickers that say, "GFCI Device: Test Before Use."
	Mod/kly	Oil level in X-band modulator secondary containment is less than 1/2" deep for all three stations
	B225	Verify that there is 1 bottle of blue dessicant in stock on bookshelf in rear of B225

<i>First week of March, June, September, and December only</i>		
	Mod/kly	Oil level in S-Band Injector Klystron pulse transformer tank is no more than 1" above or below the mark
	Mod/kly	Oil level in S-band Injector Klystron modulator secondary containment is less than 1/2" deep
	ESB	Replace HEPA pre-filters on tall clean room & moveable clean room.

<i>First week of March and September only</i>		
	Mezz	Replace CAMAC crate air filters

<i>First week of June and December only</i>		
	Exp hall	Inspect exhaust fan; clean if needed
	Mezz	Check if Nortec humidifier cartridge needs changing
	ESB	Vacuum dust from all racks and power supply fans.
	ESB	Inspect all CAMAC crate air filters. Replace if needed.

<i>First week of December only</i>		
	Mezz	Replace large Lytron water chiller filter

Hazardous Waste Containers

Type	Approx. Location	Past due or due this week?	Almost full?
Used Batteries	B128 shelf near double doors		
Waste Oil/Water Vacuum	Inside SE door		
Oily Solids (#1)	SE corner		
Oily Solids (#2)	Inside big door on the left		
Lead debris	Inside big door on the left		
Waste Oil/Water Vacuum	Inside big door on the left		
Waste Oil/Water Vacuum	In yellow rollaround barrel by BTR		
Oily/Solvent solid debris (#1)	Step can in tall clean room		
Oily/Solvent solid debris (#2)	Step can in tall clean room		
Oily/Solvent solid debris (#3)	B225 front room		
Universal Waste	B225 front room		

Comments/concerns

Name:

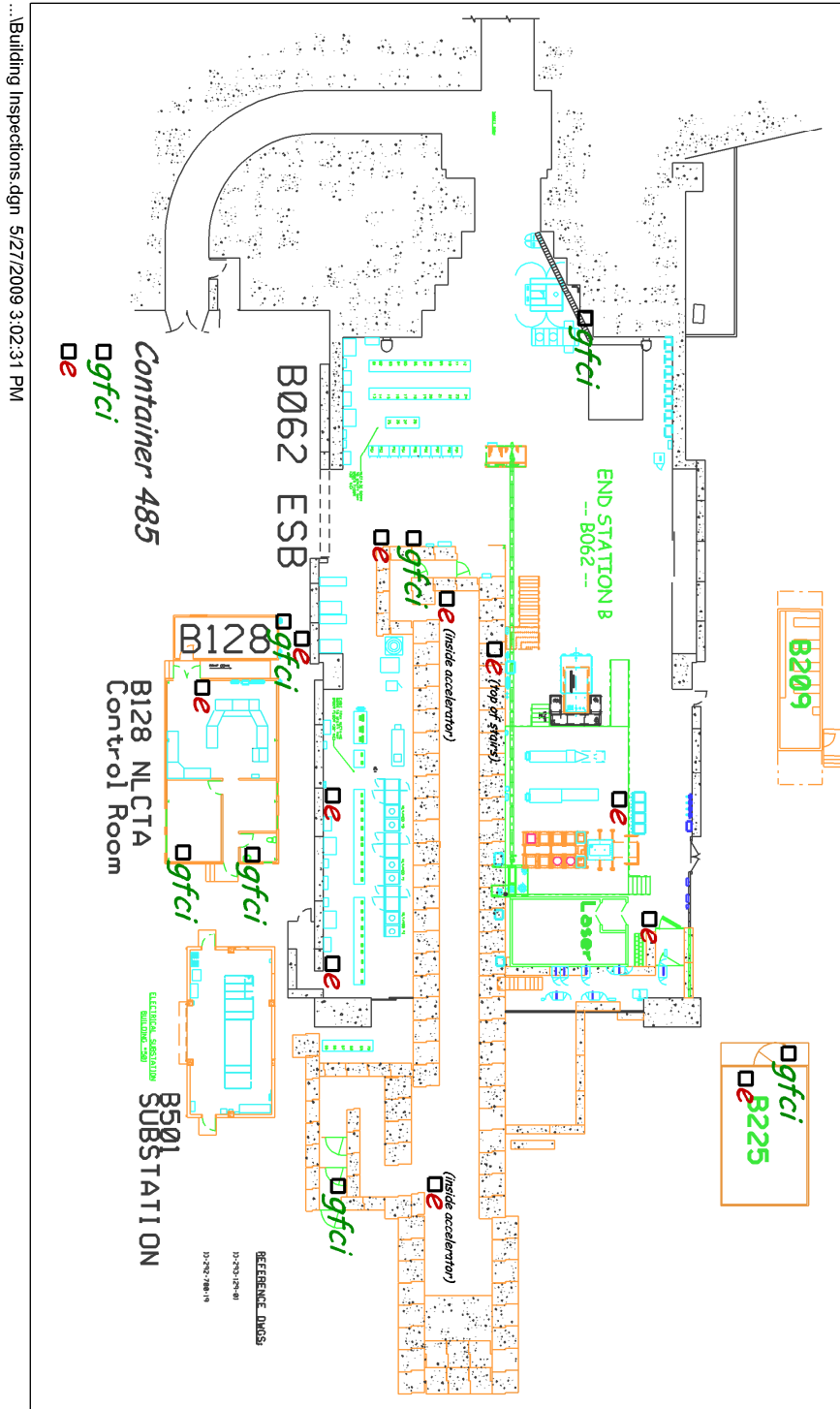
Signature:

Date:

Circle Day: M T W TH F SA SU

4. Fire Extinguisher & GFCI maps

4.1 ESB



Name:

Signature:

Date:

Circle Day: M T W TH F SA SU