

FDL (Field Deployment Lab) Policies and Procedures

Version 20090206

The purpose of the FDL is to provide short-term "loans" of geophysical and ancillary equipment in support of CERI earthquake response, teaching, and research, and as a research resource to the University. The purpose of these policies and procedures is to aid "borrowers" and assure the equipment is used and maintained appropriately and shared equitably.

Use of FDL equipment requires four steps:

1. Scheduling
2. Verification
3. Check-out
4. Check-in

FDL staff includes Chris McGoldrick and Mitch Withers. FDL staff do not necessarily know how to operate any given piece of equipment.

Repeated and or egregious violations of this policy will result in loss of FDL privileges and will be reported to the offender's next higher authority.

Any use of any equipment must be in the best interest of CERI and the University of Memphis. In no cases will it be used for personal reasons or for private reasons or for profit.

This policy excludes CERI vehicles. Vehicles are administered by the CERI vehicle policy. Equipment governed by this policy is listed in Appendix B. Other equipment not governed by this policy are subject to the control of the respective owner and/or custodian.

Maintenance is performed by FDL staff. Do not attempt to perform maintenance on malfunctioning equipment nor obtain assistance from third parties for maintenance. Inform FDL staff of the nature of the problem with as much detail as possible.

Scheduling

Operators must schedule equipment prior to checkout. A calendar is kept by FDL staff detailing who will be checking out what equipment for what time period. Contact FDL staff to schedule a deployment or check availability.

Maximum time period for which equipment may be checked out is 30 days. Rare exceptions require approval of the CERI Director.

In the case of conflicts, operators are expected to attempt to work out a compromise between themselves and inform FDL staff of any schedule changes. Previously scheduled projects however, take priority.

Equipment may be scheduled only for specific dates for which it will be in use. It may not be scheduled nor checked out for extended periods because an operator is unsure which specific days it will be used nor to keep it "in hand" for multiple deployments. Remember that others would like to use the equipment too.

During scheduling, priority will be given to the following ordered uses:

1. Earthquake Rapid Response
2. Teaching for enrolled classes taught by a CERI faculty member or associate
3. Funded research by a CERI faculty or associate
4. Unfunded research by a CERI faculty or associate
5. Teaching for enrolled classes taught by a University faculty
6. Funded research by a University faculty
7. Other uses approved by the CERI Director

In cases where departure or return outside normal University business hours is required, check-out and/or check-in must be scheduled one business day prior to or after departure or return respectively.

Verification

While the FDL staff will attempt to keep all equipment functional and complete within available resources, it is the responsibility of the PI and the operator to verify the operational status of equipment to be checked out. This may be accomplished within a reasonable time frame prior to check out provided FDL there are no schedule conflicts. Functional tests must be arranged and scheduled with FDL staff.

Check-out

Equipment must be checked out with the appropriate FDL staff using the approved checkout form (Appendix A) prior to leaving the FDL. The FDL staff will initial the form to verify proper check-out. The form requires two signatures prior to checkout and will be supplied when equipment is scheduled: the Operator and the PI. The two signers may or may not be the same person (e.g. a graduate student operating equipment under the direction of a faculty).

- The operator is responsible for proper use and safe handling of the equipment.
- The operator is responsible for ensuring that the equipment is complete, clean, and fully functional prior to deployment and during checkout.
- The operator is responsible for ensuring that the equipment is complete, clean, and fully functional after the deployment and during check-in.
- The operator is responsible for compliance with the FDL policies and procedures.
- The operator is responsible for immediately downloading any data from the equipment and clearing the storage area in the equipment.

- The PI is responsible for the actions of the operator and is financially responsible for the equipment. This could include complete equipment replacement costs in the case of negligence, mishandling, or improper use.
- The PI is responsible for proper use of the equipment
- The PI is responsible for proper training of the operator on the equipment.
- The PI is responsible for compliance with FDL policies and procedures by the Operator.
- The PI is responsible for any data produced during the deployment including proper and immediate download from the equipment and verifying the viability of the data.
- The PI is responsible for the safety of the field crew.

Check-out will occur on the scheduled date. Rare exceptions require prior approval with FDL staff and may only be accommodated if there are no schedule conflicts.

Check-in

Equipment must be checked in with FDL staff immediately following deployment. The check-in form must be signed by either the operator or PI as defined in the checkout procedure. The FDL staff will initial the form to indicate approved check-in.

During check-in the Operator is responsible for the clean, fully functional and complete return of the equipment to successfully complete the procedure.

Check-in will occur on the scheduled date. Rare exceptions require prior approval with FDL staff and may only be accommodated if there are no schedule conflicts.

All data must be downloaded and erased from deployed equipment prior to check-in.

Any problems or necessary repairs must be reported during check-in.

Earthquake Response

CERI is obligated to rapidly respond to earthquakes of interest to the center to collect ephemeral data.

All FDL equipment must be retrievable within 2 days for redeployment to the response area.

At least 3 portable broadband seismographs (CMG6TD) and 2 strongmotion units (6-component K2) must remain in the FDL in a deployable condition at all times. Exceptions must be approved by the CERI director.

Laptop computers

The FDL has 4 laptop computers with necessary software to interface with the equipment in the FDL. Each laptop has a designated and exclusive purpose:

1. Aftershock deployments
2. Enrolled University of Memphis classes
3. Sundry other field work (e.g. mag, grav, etc)
4. Bench

The laptop designated for a particular purpose will not be used for other purposes. If the laptop designated for field work is in use by another deployment, then the operator and PI are responsible for supplying a suitable laptop and software. At the discretion of the FDL staff, laptop's 1 and 4 may be used for either purpose 1 or 4 and laptops 2 and 3 may be used for either purpose 2 or 3.

Any data stored on the laptops must be downloaded and erased from the laptop prior to check-in.

System changes and downloads are prohibited without prior approval.

Appendix A: Check out/in Form

Request Section			
Date of Request:		Name of Requestor:	
Equipment Requested (be as specific as possible):		Purpose of Study	
Check-out time/day:		Signature of responsible field operator:	
Check-in time/day:		Signature of financially responsible party:	
Approved by:		Account number (departmental account numbers require signature of Chair or Director as financially responsible party):	
Date:			
Remarks:			
Check-out Section (Fdl staff initial & date):			
Date/time:		Checked -out to:	
Location and Schedule:		Field Contact Information:	
Instrument:	Serial #:	Functional test:	Remarks:
Ancillary Equipment (describe - use s/n where available): 1) 2) 3) 4) 5) 6) 7) 8)			
Check-in Section (Fdl staff initial & date):			
Remember to put batteries on charge, clean up instruments and peripherals, leave units in proper place			
Date/time:		Checked-in by:	
Instrument:	Serial #:	Functional test:	Remarks:
Ancillary Equipment (use same numbering as at check-out, and note condition/functionality at check-in): 1) 2) 3) 4) 5) 6) 7) 8)			

Appendix B: Equipment Inventory Governed by this Policy

1. MAGNETOMETER GEOMETRICS G-858 OR (MAGMAPPER)

S/N - 29227

GPS POD FOR MAGNETOMETER S/N – 0220145274

2. GURALP SEISMOMETER (CMG-6TD)

TOTAL OF 11 WITH THE FOLLOWING S/N:

T6323	T6239	T6077
T6242	T6240	T6237
T6299	T6238	T6223
T6032	T6193	

3. KINEMATRICS (K2) STRONG MOTION RECORDING SYSTEM (10)

1361	1365	1947
1362	1366	1948
1363	1367	
1364	1368	

4. LAPTOP COMPUTERS LATITUDE D260 (4)

23952786481	(FDL COMPUTER #1)
10829946673	(FDL COMPUTER #2)
30300055345	(FDL COMPUTER #3)
19355677489	(FDL COMPUTER #4)

5. RESISTIVITY METER (EARTH)

BRAND: STING R1 1P S/N: 75339

6. GEOMETRICS STRATAVIEW

S/N: 75339

7. TEXAS INSTRUMENTS WORDEN GRAVITY METER (2)

S/N: 1284
0267