

Forensic Lab Plan

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Initiation

Need

Lancaster Shariff's Station needs a new crime lab for computer forensics. They manage local cases and assist federal agents at times.

Diagnosis

Diagnosis of their needs is that the lab is used in federal and nonfederal cases. It needs to service crime investigations on a local level. Included in their needs is the ability to work on equipment, their own computers for assessment, cloning facilities, computers online and offline, evidence storage and processing. For this purpose, two areas are being proposed and evidence area staffed with security and supplied with equipment and an area for working with the evidence. This requires a two-room layout.

Resourcing

Organizing

The organization of the lab is for a staff of 5 investigators and a chief investigator. Upper management of the lab includes the laboratory director, technical manager and agents. The development team includes a consultant, contractor and subcontractor. The owner of the design project is the facilities project manager. This team will be in place during the initiation, resourcing and programming phases. This team will lead to a program design.

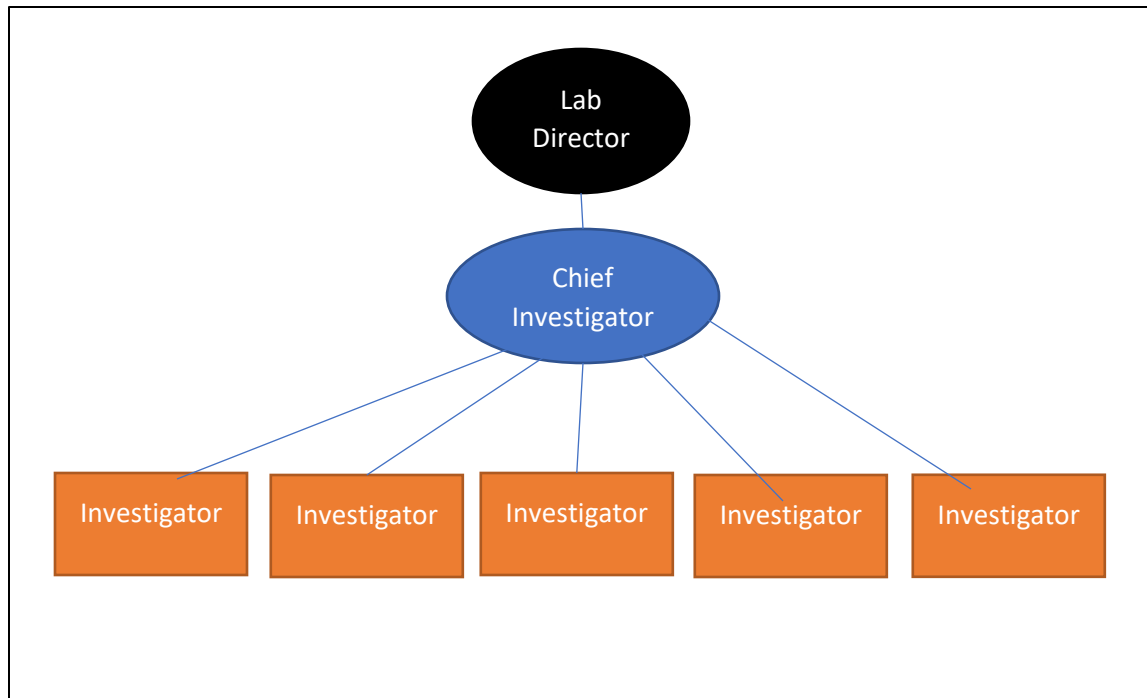
Funding

Funding is provided by the state and the FBI provided that the FBI is allowed to use the facility. Estimated budget for the lab is \$75,000 including construction and supplies. Upkeep on the lab is an estimated \$25,000 a year not including human resources.

Programming

Management Plan

The organization of the lab is to have 5 investigators reporting to a chief investigator that reports to a laboratory director as seen below.



Management Principles

Continuous improvement is emphasized in the lab. Outside of regular workstations there is a training station added to the facility plan that is to have internet connectivity used for communication and training. The chief investigators administration desk is inside this facility aiding horizontal communication with investigators. Clean processing is of utmost importance the evidence locker area is manned by one of the investigators, whom two workstations one in the evidence room and one in the lab. The evidence room is located by passing through the lab aiding in its control. Trained investigators staffed in the lab are too ensure through this placement that the chain of custody is preserved. This aids in managing control. The Chief investigator is put near the entry to the evidence locker along with a special investigator. Careful policies of management are in place where only authorized staff are allowed to use equipment and authorized staff must be used to obtain evidence from the lockers. All investigators are required to get certifications and are provided with additional funding to pursue continuing education. Proper horizontal management, control and continuing education are at the heart of management of this area.

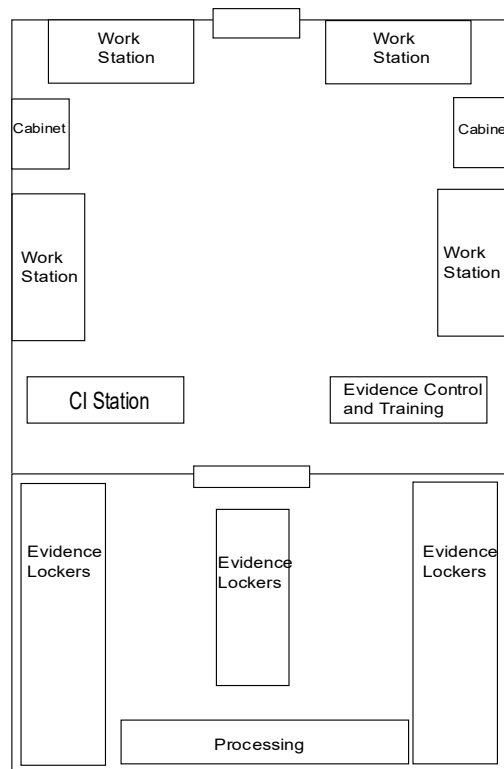
Training Policies

Continuing education is a requirement of lab staff. Before hire, education in forensics is required, including training in chain of custody and forensic procedure. After hire there are continuing education requirements. There is one computer in the lab with internet connectivity that is used for communication and training. Funding will be provided for continuing education and certifications will be required to stay on staff. There is a writing agreement to proper handling of evidence that trains in some of the forensics procedure used for the lab.

Program Design

Physical Security

There are to be two rooms of controlled access. One room with workstations and that room accesses and evidence room. Both rooms have walls completely to the top and are lockable. The evidence room in near a desk set up for processing that also has a training area so an investigator can train while monitoring evidence at the same time on the opposite end of the door is the Chief investigator. There are two workstations on either side of the entry door. There are extended workstations and storage racks on the walls with outdoors. The work equipment is not on a network to enhance security. Communication with the outside is done using the training computer. The computers at these workstations are to have the WiFi physically disabled. The walls are equipped with peg boards to hold specific cables and open shelves hold the forensic equipment. Keys for these areas are gotten by chit and these areas closed after hours in most cases. There are no windows in these facilities.



Equipment

There are six computers, cloning equipment, card readers and a laptop with connectivity for network investigation and proper cabling. The evidence locker is equipped with lockers, static free bags, and documents for control.

Audit Procedures

Chain of custody and usability of evidence is regularly audited with strict guidelines. Investigators upon conviction or exoneration fill out a questionnaire as to the usability of evidence. Regularly logs are reviewed to make sure that the chain of custody is appropriate and that the lab has control.

Benchmarking

According to the audits above bench marking is put at a 85% satisfaction rate of the questionnaire and proven appropriate use of evidence. Baselines will be made of satisfaction before construction and after. If measures of success are not reached then management changes will be made.

References

Hayes, D. (2015) A Practical Guide to Computer Forensic Investigation. Indianapolis, Indian: Pearson.

NIST. (2013) Forensic Science Laboratories: Handbook for Facility Planning, Design, Construction, and Relocation. Retrieve on 07/25/2019 from <https://nvlpubs.nist.gov/nistpubs/ir/2013/NIST.IR.7941.pdf>