

# Storage Space Plan for PREP Equipment, Legacy Tape Media and Networking Consumables

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## Introduction

This document describes the plan for relocating the PREP high energy physics (HEP) equipment, networking consumables and the legacy tape media currently in storage within the Feynman Computing Center (FCC). A key element of this plan is the agreed Memorandum of Understanding (MOU) between the Computing Division (CD) and the Particle Physics Division (PPD) to use most of the former electronics area of the KTeV counting room for storage of legacy tape media.

## Plan Summary

The overall plan is to move tape storage cabinets with tape media from the FCC 1<sup>st</sup> floor tape vault to the KTeV facility and to the FCC tape vault mezzanine. The KTeV facility will be used for storage of legacy 8mm tapes. The FCC tape vault mezzanine will be used for storage of DLT, LTO tapes and some additional cabinets of 8mm tapes. The FCC 1<sup>st</sup> floor tape vault would then be used for storage of HEP equipment from the PREP equipment pool. This entails moving HEP equipment from various storage areas on the 3<sup>rd</sup> floor of FCC to the 1<sup>st</sup> floor tape vault. The 3<sup>rd</sup> floor PREP mezzanine would then be used for storage of engineering parts and supplies, networking consumables and computing equipment. Professional movers will be used to execute the movement of tape cabinets, tape media, HEP and computing equipment, networking consumables and shelving units.

## Storage Space Outline

### ***KTeV Space Preparation***

- Space will need to be cleared of various equipment racks, cabinets, cables, etc... (PPD)
- Install modular wire fencing for physical security of tape media (CD)

- Disconnect, remove or cap off CO(2) Fire Suppression System (waived by PPD on August 21, 2007)
- Raised floor limits should be more than adequate to accommodate the tape storage cabinets. The CD Facility Operations Department (FOP) will provide FESS an analysis of loading the raised flooring with tape storage cabinets loaded with 8mm tapes.

### ***Tape Media***

- Move tape storage cabinets with tape media from the FCC 1<sup>st</sup> floor tape vault to the KTeV counting room area. KTeV is projected to accommodate a total of 89 tape storage cabinets.
- Environmental conditions are limited at KTeV. The facility has electric base board heating (no AC cooling). The environment at KTeV may reduce life expectancy of the tapes.
- Move a projected 54 tape storage cabinets with tape media from the FCC 1<sup>st</sup> floor tape vault to the east side of the FCC tape vault mezzanine.

### ***PREP HEP and Computing Equipment***

- Move PREP HEP equipment and shelving units from the upper and lower levels of the FCC 3<sup>rd</sup> floor PREP mezzanine area to the FCC 1<sup>st</sup> floor tape vault. The movement of HEP equipment in and out of the tape vault storage room will be through the south single entry door of the tape vault through the utility corridor. Consequently, the FCC1 computer room will not be impacted by the movement of HEP equipment moving in and out of the former tape vault area.
- Install modular wire fencing and electronic locks to the entry doors of the former tape vault area for physical security of PREP equipment. Access will remain open to the tape vault mezzanine through the northeast entry door of the former tape vault area.
- Move Reserve and Ready for Pickup computing equipment stock and shelving units from FCC387 to the lower level of the FCC 3<sup>rd</sup> floor PREP mezzanine area. Install modular wire fencing for physical security of Reserve and Ready for Pickup computing equipment.
- Move HEP equipment in Repair status from FCC301 to the lower level of the FCC 3<sup>rd</sup> floor PREP mezzanine area.
- Move HEP equipment from in Ready for Issue status from FCC301 to the FCC 1<sup>st</sup> floor tape vault.

### ***Networking Equipment and Consumables***

- Move Network equipment and consumables from FCC313 to the upper level of the FCC 3<sup>rd</sup> floor PREP mezzanine area. Large heavy Networking items will be stored on the lower level of the PREP mezzanine.

### PPD Resources

PPD will manage resources to remove equipment, racks, cabinets, etc... from the former electronics area of the KTeV counting room raised floor area as noted in the MOU.

### CD Resources

CD will contract professional movers to execute the moving of tapes, tape cabinets, networking consumables and shelving units. The CD Facility Operations Department (FOP) will oversee and manage this project. Department stakeholders (ESE, Site Networking and Equipment Logistics) will need to provide initial oversight of setup and placement of items in their respective storage areas.

Since storage space for HEP equipment awaiting repair and networking consumables will remain near the equipment repair and networking operations on FCC3, no additional impact is expected to these operations. Relative to the number of requests, the equipment logistics/tape handling operation will be slightly impacted by the increase travel distance to KTeV for retrieval of 8mm tapes.

### Projected Moving Schedule

<u>Storage Rooms</u>	<u>Items</u>	<u>Hours</u>
KTeV	Tapes	6.5
Tape Vault Mezzanine	Tapes	7
Tape Vault	HEP Equipment	16
PREP Mezzanine (lower)	HEP & Computing Equipment	10
PREP Mezzanine (upper)	Networking Consumables	8

Total Days: 6.8 days (~13-14 movers)

### Summary

In conclusion, this proposed plan for relocating the PREP high energy physics (HEP) equipment, networking consumables storage and the legacy tape media will provide enough available storage space for PREP HEP equipment. In addition, this space plan will create available space on the 3<sup>rd</sup> floor of FCC for conversion to suitable office areas.