

**FNAL [Geer]****Milestone**

Complete HVAC installation in MTA  
 Install 805 MHz RF capability in MTA  
 Relocate Lab G solenoid to MTA  
 Install 201 MHz RF capability in MTA  
 Test solid 4x4 grid structure at 805 MHz  
 Test curved Be windows in 805 MHz pillbox cavity  
 Study RF buncher, phase rotation and cooling channel performance for APS Neutrino Study  
 Complete design of cooled 805 MHz grid structure  
 Participate in APS Neutrino Study

<b><u>Date</u></b>	<b><u>Deliverable</u></b>
May-04	Inspection
May-04	Inspection
May-04	Inspection
Sep-04	Inspection
Sep-04	MC note prepared
Sep-04	MC note prepared
Jun-04	MC note prepared
Sep-04	MC note prepared
Jun-04	Write-up prepared

**ANL [Norem]****Milestone**

Initial tests with field ion microscope  
 Prepare proposal for RF surface studies (DOE, DARPA, NASA, or EPRI)  
 Prepare paper on MICE cavity surface treatment  
 Evaluate 805 MHz pillbox cavity performance with precurved Be windows  
 Test breakdown behavior of small samples in 805 MHz cavity  
 Calculate shielding requirements for MICE experiment  
 Review MICE rf backgrounds for rebaselined configuration

<b><u>Date</u></b>	<b><u>Deliverable</u></b>
Mar-04	MC report prepared
Mar-04	Proposal submitted
Sep-04	MC report prepared
Sep-04	MC report prepared
Sep-04	MC report prepared
Apr-04	MICE note prepared
Sep-04	MICE note prepared

**BNL [H. Kirk]****Milestone**

Complete engineering and cost estimate for targetry test solenoid power supply and cooling system  
 Develop proposal for targetry experiment at CERN  
 Complete fabrication of targetry magnet coils  
 Continue to measure properties of irradiated samples of candidate solid-target materials  
 Continue studies of dipole-quadrupole ring cooler performance  
 Complete APS Neutrino Study front-end simulations  
 Participate in FFAG workshop in Vancouver  
 Organize and participate in Emittance Exchange Workshop at BNL  
 Provide web support for MC

<b><u>Date</u></b>	<b><u>Deliverable</u></b>
Sep-04	Report to Technical Board
Jun-04	Proposal prepared
Sep-04	Inspection
Sep-04	Irradiation completed
Aug-04	NuFACT04 talk prepared
May-04	Write-up prepared
Apr-04	Talk presented
Sep-04	Talk presented
Sep-04	Inspection

**LBNL [Zisman]****Milestone**

Begin pillbox cavity tests with curved Be windows  
 Acquire and test SNS type coupler at Lab G (without magnetic field)  
 Complete 201-MHz tuner design and prepare drawings  
 Weld first 201-MHz cavity body at Jlab  
 Finalize specifications for 201-MHz Be foils  
 Complete engineering and oversee fabrication of 201-MHz RF cavity  
 Revise and update RF section of MICE proposal (incl. cost estimate)  
 Revise and update magnet section of MICE proposal (incl. cost estimate)  
 Complete design of coupling solenoid  
 Participate in APS Neutrino Study  
 Continue project management of MC R&D program

**Date    Deliverable**

Jun-04 Inspection  
 Sep-04 Inspection  
 Jun-04 Presentation  
 Mar-04 Inspection  
 Jun-04 MC note prepared  
 Sep-04 Cavity ready for testing  
 Mar-04 MC note prepared  
 Mar-04 Inspection  
 Sep-04 RFQ prepared  
 Jul-04 Write-up prepared  
 Sep-04 Inspection

**Princeton [McDonald]****Milestone**

Demonstrate 10 m/s Hg jet platform  
 Prepare proposal for targetry experiment at CERN  
 Provide Spokesperson for Targetry R&D program

**Date    Deliverable**

Sep-04 Inspection  
 Jun-04 Inspection  
 Sep-04 Conference papers

**UCLA [Cline]****Milestone**

Continue studies of dipole-based gas-filled cooling rings  
 Develop cascaded cooling ring scenario for Higgs Factory  
 Put realistic magnetic fringe fields into ring simulations  
 Begin design for test cooling ring  
 Continue study of SUSY Higgs Factory parameters  
 Continue testing and set-up of MICE fiber tracker

**Date    Deliverable**

Sep-04 MC note prepared  
 Aug-04 MC note prepared  
 Sep-04 Presentation  
 Aug-04 NuFACT04 paper prepared  
 Aug-04 Publication  
 Sep-04 Presentation

**U-Miss. [Summers]****Milestone**

Continue development of fast ramping muon synchrotron concept  
 Provide fabrication support for RF cavity development  
 Provide fabrication support for absorber window development

**Date    Deliverable**

Sep-04 Paper presented  
 Sep-04 Inspection  
 Sep-04 Inspection

**IIT [Kaplan]****Milestone**

Continue background rate measurements at MTA  
 Continue to develop MICE software  
 Prepare RF background summary  
 Recommission auxiliary DAQ system in MTA  
 Continue Geant simulations of beam line for MICE  
 Provide web support for MC and MICE

**Date    Deliverable**

Aug-04 NuFACT04 talk presented  
 Jun-04 Package released  
 Jun-04 MUTAC presentation  
 Jul-04 Inspection  
 Apr-04 MICE note prepared  
 Sep-04 Inspection

**UIUC [Errede]****Milestone**

Initial installation of absorber instrumentation in MTA  
 Complete quadrupole-based cooling channel analysis  
 Study muon behavior in absorber with MARS  
 Carry out MTA shielding studies with MARS

**Date    Deliverable**

Sep-04 Inspection  
 Jun-04 Submit publication  
 Mar-04 Report at MICE meeting  
 Jun-04 Inspection

**UCB [Wurtele]****Milestone**

Complete cooling model including transverse-longitudinal correlations

**Date    Deliverable**

Aug-04 NuFACT04 paper prepared

**Jlab [Bogacz]****Milestone**

Continue reoptimizing Study-II RLA for lower emittance beam from a cooling ring  
 Study phase rotation and cooling channel with stepped RF frequencies  
 Weld first 201-MHz cavity body  
 Provide fabrication support for prototype 201-MHz RF cavity  
 Participate in MC Technical Board and monitor RF cavity design activities

**Date    Deliverable**

Aug-04 NuFACT04 paper prepared  
 Sep-04 MC note prepared  
 Mar-04 Inspection  
 Sep-04 Cavity ready for testing  
 Sep-04 Inspection

**NOTES:**

Prior to distribution of FY04 funds, agreed-upon milestone dates and deliverables must be in place.