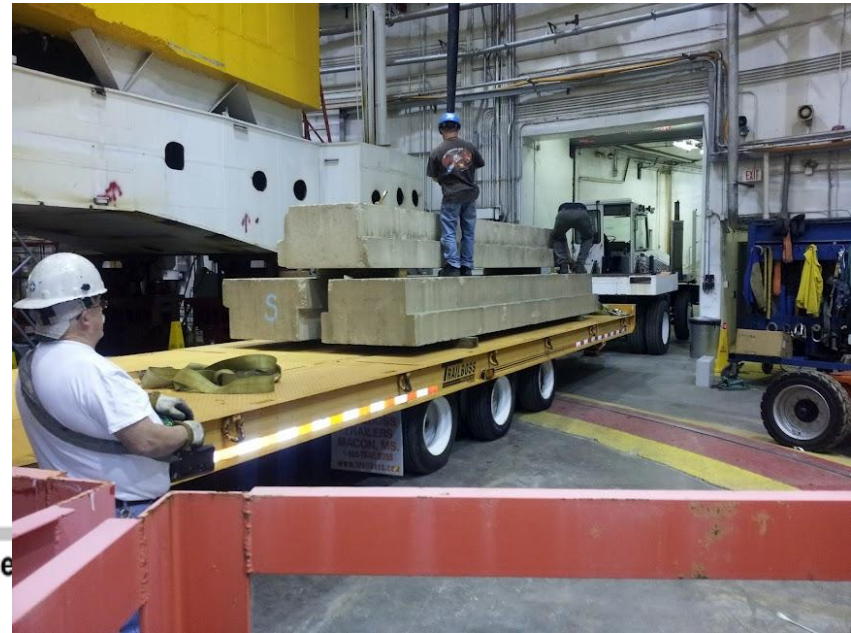


Long Shutdown → 12 GeV

- Remove Qweak Experiment
- Remove SOS Spectrometer
 - Previously stripped of detectors, electronics, cables, power, ...
- Install rails for SHMS
- Start assembly of SHMS carriage (Nov)
- Complete SHMS in 2014
- First beam in 2015
- Upgrades for 12 GeV compatibility underway for:
 - Compton Polarimeter
 - Moller Polarimeter



Dates

August 16, 2012 – Remove SOS Dipole

September 15, 2012 – HKS Floor gone, SOS doors gone

September – Cut up SOS shield house

October – Remove SOS structure

October – Yoke Steel Arrives

November – SHMS rail installation

December – Remove C can

February 2013 – Test SHMS power supplies

October 2013 – Install Dipole

February 2014 – Start detector installation

July 2014 – Start detector checkout

May 2015 – First beam

? Compton upgrade, Moller magnet repair

See hcf for details



Approved and CA 12 GeV Hall C Experiments

Number	Experiment	Grade	Appr. Days	Condit. Days	Equipment	
E12-06-101	Pion Form Factor	A	52			
E12-06-104	SIDIS R	A-	40			
E12-06-105	x>1	A-	32			
E12-06-121	He3 g ₂	A-	29		Polarized He3 target	
E12-07-105	(e,e'p) Exclusive Factoriza	A-	36			
E12-09-011	(e,e'K) Exclusive Factoriza	B+	40			
E12-09-017	SIDIS P _t	A-	32			
E12-09-002	Charge Symmetry Violation	A-	22			
E12-10-002	F2 @ large x	B+	13			
E12-10-003	d(e,e'p)	B+	21			
E12-10-008	EMC	A-	23			
E12-06-107	Color Transparency	B+	26			
E12-06-110	He3 A1n	A	36		Polarized He3 target	
E12-11-002	He4(e,e'pol(p))	B+	37		Polarimeter in HMS	
E12-11-009	Neutron Form Factor	B+	50		Neutron polarimeter	
C12-11-102	Exl and semi-exl π^0 prod	C2		69	π^0 detector	
E12-11-107	EMC d(e,e' backward p)	B+	40		LAD (Hall B TOF bars)	
			529	0		
Total	529 Days		6.0 Years	@	25 Weeks/year	
					Schedule 2 days / PAC day	

Early running planning process

Hall C User community discussions

Several Hall C User meetings

SHMS-HMS Users Group board meetings

Early running criteria/goals

1. Do mix of short experiments with modest requirements that provide calibration/performance information for subsequent experiments.
2. Do experiments of “young” spokespeople and contributors to upgrade.
3. Do A/A- experiments
4. Do some SIDIS early to support lab SIDIS effort
5. Utilize Hall C L/T capability
6. Utilize polarized beam (exercise Compton/Moller upgrades)

Draft early running plan – Year 1

2015: ~25 PAC days – Commissioning “Experiment”

9 days of E12-06-107 [search for color transparency \(B+\)](#)

A(e,e'p) only – “easy” coincidence measurement

E12-10-002 [F₂^{p,d} structure functions at large x \(B+\)](#)

Momentum scans help understand acceptance

2 days E12-10-108 [EMC Effect \(A-\)](#)

Integrate light nuclei with F₂ run,

Point target helps acceptance studies.

3 days of E12-10-003 [d\(e,e'p\) \(B+\)](#)

If time available

Push to lower cross sections

Draft early running plan – Years 2-3

2016: 80-90 PAC days

E12-09-017 (A-) P_t dependence of basic SIDIS cross sections

Push particle ID capabilities of SHMS

E12-09-002 (A-) Precise $\pi^+\pi^-$ ratios in SIDIS – CSV

Detector efficiencies

E12-09-011 (B+) L/T separated (e,e'K⁺) factorization test

Easiest L/T separation

92 PAC days total – collaborations forming joint run plan and prioritizing

2017:

E12-06-121 (A-) g_2^n measurements at fixed Q^2

First polarized ^3He target experiment in Hall C

Likely follow by E12-06-110 high x A_1^n

Summer shutdown work

- **Qweak maintenance**
 - Rebuild target pump, replace windows
 - Minor main detector and region II chamber work
 - Reduce beam current measurement noise
 - Exit window and dump maintenance
- **Disassemble HKS spectrometer and move to storage**
- **Large Moller Polarimeter quadrupole has unstable coil**
 - Partial beamline disassembly in progress to remove quad and repair or replace

