MICE shift during ISIS User Run 11th July 2011

Objectives:

1. Re-establish beamline operation
2. Take 7 hrs of data for EMR calibration at low rate (~1 trigger per spill)

Preconditions:

1. Permission from ISIS to run MICE target during User Run;
2. Permits to operate magnet power supplies Q1—Q3, D1, DS, D2, Q4-Q6, Q7-Q9 obtained;
3. MICE Hall searched and locked via PPS;
4. Permits to operate beam stop obtained. Webcam actively watching beam stop from MLCR. Beam stop lowered;
5. Neutron monitor signal remotely read out in MLCR;
6. Target stability check;
7. Target pulses remaining in current allotment: 15,000;

Known issues:

1. DS tempremental
2. BPMs requiring checking of HV values and channels
3. Need to verify ability to alter proton absorber thickness
4. Missing railing on South mezzanine
5. PPS inner and outer doors liable to drop search if not closed carefully

Plan:

11:00 – 22:00

Re-Establish target operation

Id	Task	Lead	Estimated duration
1	Turn on magnet power supplies	BLOC	30’
2	Put beam stop at highest point, remove mechanical stop.	MOM, S1	30’
3	Search and Secure hall using PPS	BLOC	10’
4	Ramp up magnets (Q1-Q9, D1, D2, DS)	BLOC, S2	20’
5	Enable detector HV (GVA1, TOF0, TOF1, CKOVa, CKOVb, FNAL BPMs, KL, EMR) – should already be done	S1	20’
5	Lower Beam Stop	BLOC	5’
6	Ready MICE target for actuation in ISIS beam Lower target frame Set target for 100 mV beam loss, then alter to achieve 1 trig per spill	BLOC	20’
7	Check beam alignment, rates, etc with OnMon	S2	15’
8	Take data for ~ 7 hrs	MOM, S1, S2	7 hrs
9	Stop target, raise frame	BLOC	10’
10	Raise beam stop	BLOC	5’
11	Ramp down magnets, enter hall, shut down power supplies, secure mechanical beam stop	All	20’

Initials:

- MOM: Adam Dobbs
- BLOC: Linda Coney
- S1: Alan Bross
- S2: Timothy Carlisle