



# Project Manager's Report

Colin Whyte

# Data-taking – done?

- ❑ **LH2 project** – complete
- ❑ **Trackers** – as before ‘under control’
- ❑ **Beam line** – no known problems
- ❑ **Detectors** – no issues
- ❑ **Controls** – all alarms are real
  - ❑ New functionality – MoM magnet GUI

## Magnets

- SSU CC5 poor performance
- Damaged/compromised disc valve in cold head?
- Reduced cooling power.
- Optimised operating pressure ~ 200psi
- Live with it – SSU tested and operational

# ISIS 2017/03 Plan

- all shifts full
  - excellent response from shifters.
  - Tight timetable.
- Aim generally 1M, 1M, 2M triggers at 3,4?,6,10mm emittance
- Hard to accelerate schedule without magnet ramps in the middle of the night.
- Some risk as we had never achieved extended run of daily magnet changes.
  - MoM excellent commitment to maintain timetable



## ISIS User Cycle 2017/02; detailed MICE run plan

Date	Day	Shift	Absorber	SSD(M2)	Shift blk
13-Nov-17	Monday	00:00			
14-Nov-17	Tuesday	00:00	LH2 empty	OFF	
ISIS Start 8am		08:00	LH2 empty	OFF	
		16:00	LH2 empty	OFF	
15-Nov-17	Wednesday	00:00	LH2 empty	OFF	
		08:00	LH2 empty	OFF	Ramp to 2017-02-3; 140 MeV/c data taking
		16:00	LH2 empty	OFF	Flip-mode, 2017-02-3; data taking
16-Nov-17	Thursday	00:00	LH2 empty	OFF	Flip-mode, 2017-02-3; data taking
		08:00	LH2 empty	OFF	Switch to 2017-02-4; 140 MeV/c data taking
		16:00	LH2 empty	OFF	Flip-mode, 2017-02-4; data taking
17-Nov-17	Friday	00:00	LH2 empty	OFF	Flip-mode, 2017-02-4; data taking
		08:00	LH2 empty	OFF	Switch to 2017-02-5; 140 MeV/c data taking.
		16:00	LH2 empty	ON	Soln-mode, 2017-02-5: data taking
18-Nov-17	Saturday	00:00	LH2 empty	ON	Soln-mode, 2017-02-5: data taking
		08:00	LH2 empty	OFF	Ramp magnets down
		16:00	LH2 empty	OFF	
19-Nov-17	Sunday	00:00	LH2 empty	OFF	Straight tracks
		08:00	LH2 empty	OFF	
		16:00	LH2 empty	OFF	
20-Nov-17	Monday	00:00	LH2 empty	OFF	Mains power cut + MICE water leak
		08:00	LH2 empty	OFF	
		16:00	LH2 empty	OFF	
21-Nov-17	Tuesday	00:00	LH2 empty	OFF	Straight tracks
		08:00	LH2 empty	OFF	
		16:00	LH2 empty	OFF	
22-Nov-17	Wednesday	00:00	LH2 empty	OFF	MICE water repair. Straight tracks/magnet test
		08:00	LH2 empty	OFF	
		16:00	LH2 empty	OFF	
23-Nov-17	Thursday	00:00	LH2 empty	OFF	Straight tracks/SSD M2 off.
		08:00	LH2 empty	OFF	
		16:00	LH2 empty	ON	
24-Nov-17	Friday	00:00	LH2 empty	ON	Soln-mode, 2017-02-6; data taking
		08:00	LH2 empty	OFF	Switch to 2017-02-1; 140 MeV/c data taking
		16:00	LH2 empty	???	Soln-mode, 2017-02-1; data taking
25-Nov-17	Saturday	00:00	LH2 empty	???	Soln-mode, 2017-02-1; data taking
		08:00	LH2 empty	???	Switch to 2017-02-2; 140 MeV/c data taking
		16:00	LH2 empty	???	Soln-mode, 2017-02-2; data taking
26-Nov-17	Sunday	00:00	LH2 empty	???	Soln-mode, 2017-02-2; data taking
		08:00	LH2 empty	???	Ramp magnets down

LH2 empty 2 settings

Shift blk 1

Shift blk 2

# Data Plan



		LiH empty	08:00	Empty	ON	Magnet change
			16:00	Empty	ON	Soln-mode, 2017-02-6; data taking
01-Dec-17	Friday		00:00	Empty	ON	Soln-mode, 2017-02-6; data taking
			08:00	Empty	ON	Magnet change
			16:00	Empty	OFF	Soln-mode, 2016/04 1.2; data taking
02-Dec-17	Saturday		00:00	Empty	OFF	Soln-mode, 2016/04 1.2; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	OFF	Soln-mode, 2016/04 2.3; data taking
03-Dec-17	Sunday		00:00	Empty	OFF	Soln-mode, 2016/04 2.3; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	OFF	Soln-mode, 2016/04 2.4; data taking
04-Dec-17	Monday		00:00	Empty	OFF	Soln-mode, 2016/04 2.4; data taking
			08:00	Empty	OFF	
			16:00	Empty	ON	
05-Dec-17	Tuesday		00:00	Empty	ON	
			08:00	Empty	ON	
		16:00	Empty	ON		
06-Dec-17	Wednesday	00:00	Empty	ON		
		08:00	Empty	OFF	Magnet change	
		16:00	Empty	OFF	Flip-mode, 2016-05-1; data taking	
07-Dec-17	Thursday	00:00	Empty	OFF	Flip-mode, 2016-05-1; data taking	
		08:00	Change	???	Magnet change	
		16:00		???	Flip-mode, 2017-02-8; data taking	
08-Dec-17	Friday	00:00		???	Flip-mode, 2017-02-8; data taking	
		08:00	???	???	Magnet change	
		16:00	???	???	Flip-mode, 2016-05-1; data taking	
09-Dec-17	Saturday	00:00	???	???	Flip-mode, 2016-05-1; data taking	
		08:00	Empty	???	Ramp magnets down	
		16:00	Empty	ON		
10-Dec-17	Sunday	00:00	Empty	ON		
		08:00	Empty	ON		
		16:00	Empty	ON		
11-Dec-17	Monday	00:00	Empty	ON		
		08:00	Empty	ON	Magnet ramp	

SSD Quench

Absorber  
change

# Data Plan



		LiH M2	16:00	Empty	ON	Flip-mode, 2017-02-7; data taking	
12-Dec-17	Tuesday		00:00	Empty	ON	Flip-mode, 2017-02-7; data taking	
			08:00	Empty	ON	Magnet change	
			16:00	Empty	ON	Flip-mode, 2017-02-8; data taking	
13-Dec-17	Wednesday		00:00	Empty	ON	Flip-mode, 2017-02-8; data taking	
			08:00	Change	???	Magnet change	
			16:00		???	Soln-mode, 2017-02-6; data taking	
14-Dec-17	Thursday		00:00		???	Soln-mode, 2017-02-6; data taking	
			08:00		???	Ramp magnets down	
		Absorber change	16:00	???			
15-Dec-17	Friday			00:00	???		
				08:00	LiH	???	
				16:00	LiH	ON	
16-Dec-17	Saturday		00:00	LiH	ON		
			08:00	LiH	ON	Magnet ramp	
		Wedge	16:00	LiH	ON	Soln-mode, 2017-02-6; data taking	
17-Dec-17	Sunday			00:00	LiH	ON	Soln-mode, 2017-02-6; data taking
				08:00	LiH	ON	Magnet change
				16:00		ON	Flip-mode, 2017-02-7; data taking
18-Dec-17	Monday			00:00		ON	Flip-mode, 2017-02-7; data taking
				08:00		ON	Magnet change
			16:00		ON	Flip-mode, 2017-02-8; data taking	
19-Dec-17	Tuesday		00:00		ON	Flip-mode, 2017-02-8; data taking	
			08:00		ON	Ramp down	
			16:00		???		
20-Dec-17	Wednesday		00:00		???		
ISIS off			08:00				

# Data Plan

# MICE de-commissioning

- Started collecting information on equipment to be returned to owners
- Position survey
- Magnet mapping
- MICE likely to lose R9 'soon' plan for orderly exit.
  - Storage in MICE Hall
  - FC move.

# Post Run Survey

- Magnet positions
  - Supercon
    - SSU
    - FC
    - SSD
  - Conventional
    - Quads 7,8,9
    - Quads 4,5,6 and D2 in DSA
    - Quads 1,2,3 and D1 in Sync
- Detectors
  - ToF
    - ToF 0 in DSA
    - ToF 1 & 2 in hall
  - KL
  - Cherenkov in DSA
  - EMR
- Trackers
  - 'Frames'
  - Hall probes

Key

Before SYNC closes/after it re-opens  
Before DSA closes/after it re-opens  
Anytime before end March  
Anytime, but limit Tracker exposure  
to fluorescent lamps to 1? hr



# Magnet map in PRY

- Magnet mapping group from CERN
  - In progress, equipment still exists.
  - Melissa has Hall probes
- Plan in development
  - Timetable will be a bit tight
  - Significant mechanical work
  - Dependent on run/no run decision point