



Project Manager's Report

Colin Whyte

H2 system

LH2 project complete

Was fully operational – satisfyingly boring.

- Slightly slower to fill than desired.
- Data-taking excellent
 - All Flip and solenoid mode data with LH2 full completed
 - M2 off & M2 on – no issues with M2 itself
 - SSD pressure rises with M2 on when main coil field above 2T. SSD magnet is stressed.
 - Two flip mode settings complete with LH2 empty
- unitl....
 - ISIS problems, early end to cycle.

Trackers

Hardware

Dave Adey – Melissa Uchida, Paul Kyberd, Chris Hunt on

- Increased number of dead channels.
- Temperature margin reduced.
- Extensive work required for manual re-calibration x2.
- Regulation set point on 1 cassette required after ISIS2017/02.
- Manual re-cal for only 1 cryostat. – in progress

Software

- Adam Dobbs moving on – replaced by
 - Paolo Francini, Durga Rajaram
 - Chris Hunt
- Software ‘features’ – solutions devised

Maintenance

- Air Conditioning – complete
 - Short visit next week
- Magnet AMI and MoM Gui
 - Currently in progress
- Cryo-compressor adsorbers – complete
 - Ongoing issue.
- Conventional magnet crate reset – done
- Tracker fibres - done

Superconducting magnets

SS magnet re commissioned 9th to 18th August
Magnet run-up for data-taking ran to plan.

- No problems during ISIS 2017/02
- Adsorber change 1st and 2nd November
 - SSU CC5 poor performance - next slide?

FC magnet – no current problems

Superconducting magnets

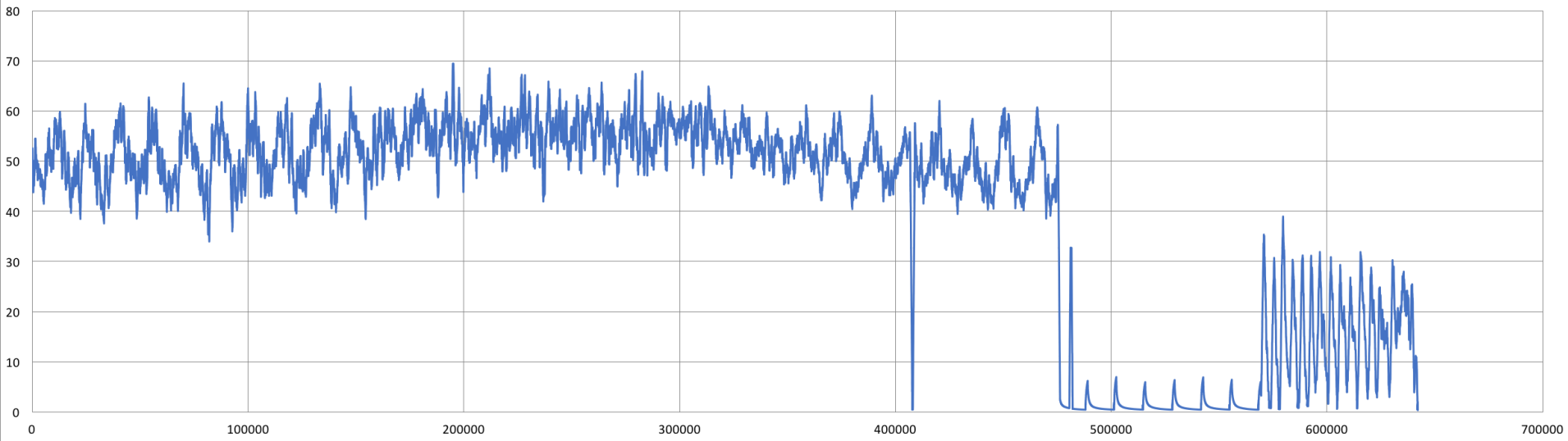
SSU CC5 poor performance

- Damaged/compromised disc valve in cold head?
- Reduced cooling power.

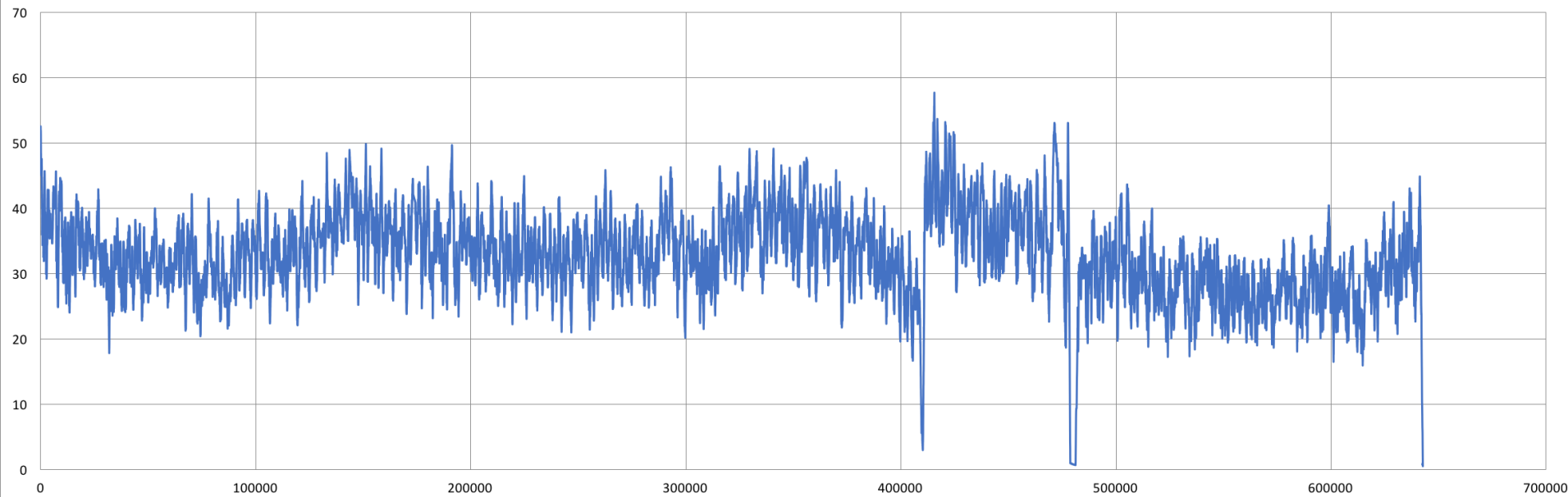
Options

1. Optimise operating pressure
2. Live with it – test SSU next week?
3. Change cold head – replacements available
 1. Taper seat.
 2. Cold socket, hot coldhead.

SSU



SSD



Data-taking

- 2/3^{rds} shifts full
 - excellent response from shifters.
- Please make sure MiceAdmin know about your accommodation requirements – early.
- Aim generally 1M, 1M, 2M triggers at 3,6,10mm emittance
- Hard to accelerate schedule without magnet ramps in the middle of the night.
- Some risk as we have never achieved extended run of daily magnet changes.

ISIS User Cycle 2017/02: detailed MICE run plan							Version 4	
Date	Day	Magnet Expert	Shift	Absorber	SSD/M2	Activity	Shift blk	Comment
30 Oct-13	Monday		08:00			D5 cooldown		
31 Oct-13	Tuesday		08:00			S5 magnet adsorber change. AC maintenance. Conventional magnet crate reset		
01 Nov-13	Wednesday		08:00			S5 magnet adsorber change. AC maintenance		
02 Nov-13	Thursday		08:00					
03 Nov-13	Friday		00:00			Review alarms, Magnets: MoM 'ramp to zero' GUI test		
04 Nov-13	Saturday		00:00					
05 Nov-13	Sunday		00:00					
06 Nov-13	Monday		00:00					
07 Nov-13	Tuesday		00:00					
08 Nov-13	Wednesday		00:00			AC maintenance		
09 Nov-13	Thursday		00:00			Expert led start		
10 Nov-13	Friday		00:00					
11 Nov-13	Saturday		00:00					
12 Nov-13	Sunday		00:00					
13 Nov-13	Monday		00:00			Expert led start-up		
14 Nov-13	Tuesday		00:00	LH2 empty	OFF			
15 Nov-13	Wednesday		00:00	LH2 empty	OFF	Ramp to 2017-02-3; LH2 M2/c; data taking		
16 Nov-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-3; data taking		
17 Nov-13	Friday		00:00	LH2 empty	OFF	Flip-mode, 2017-02-3; data taking		
18 Nov-13	Saturday		00:00	LH2 empty	OFF	Flip-mode, 2017-02-4; data taking		
19 Nov-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-4; data taking		
20 Nov-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-5; data taking		
21 Nov-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-5; data taking		
22 Nov-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-6; data taking		
23 Nov-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-6; data taking		
24 Nov-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-7; data taking		
25 Nov-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-7; data taking		
26 Nov-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-8; data taking		
27 Nov-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-8; data taking		
28 Nov-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-9; data taking		
29 Nov-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-9; data taking		
30 Nov-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-10; data taking		
01 Dec-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-10; data taking		
02 Dec-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-11; data taking		
03 Dec-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-11; data taking		
04 Dec-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-12; data taking		
05 Dec-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-12; data taking		
06 Dec-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-13; data taking		
07 Dec-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-13; data taking		
08 Dec-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-14; data taking		
09 Dec-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-14; data taking		
10 Dec-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-15; data taking		
11 Dec-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-15; data taking		
12 Dec-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-16; data taking		
13 Dec-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-16; data taking		
14 Dec-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-17; data taking		
15 Dec-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-17; data taking		
16 Dec-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-18; data taking		
17 Dec-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-18; data taking		
18 Dec-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-19; data taking		
19 Dec-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-19; data taking		
20 Dec-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-20; data taking		
21 Dec-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-20; data taking		
22 Dec-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-21; data taking		
23 Dec-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-21; data taking		
24 Dec-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-22; data taking		
25 Dec-13	Monday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-22; data taking		
26 Dec-13	Tuesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-23; data taking		
27 Dec-13	Wednesday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-23; data taking		
28 Dec-13	Thursday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-24; data taking		
29 Dec-13	Friday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-24; data taking		
30 Dec-13	Saturday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-25; data taking		
31 Dec-13	Sunday		00:00	LH2 empty	OFF	Soli-mode, 2017-02-25; data taking		

Data Plan

ISIS User Cycle 2017/02; detailed MICE run plan

Version 4

31-Oct-17

Date	Day	Magnet Expert	Shift	Absorber	SSD(M2)	Activity	Shift blk	Comment
30-Oct-17	Monday		08:00			DS cooldown		
31-Oct-17	Tuesday		08:00			SS magnet adsorber change. AC maintenance. Conventional magnet crate reset		
01-Nov-17	Wednesday		08:00			SS magnet adsorber change. AC maintenance		
02-Nov-17	Thursday		08:00					
03-Nov-17	Friday		00:00			Review alarms, Magnets: MoM 'ramp to zero' GUI test		
04-Nov-17	Saturday		00:00					
05-Nov-17	Sunday		00:00					
06-Nov-17	Monday		00:00					
07-Nov-17	Tuesday		00:00					
08-Nov-17	Wednesday		00:00			AC maintenance		
09-Nov-17	Thursday		00:00			Expert led start		
10-Nov-17	Friday		00:00					
11-Nov-17	Saturday		00:00					
12-Nov-17	Sunday		00:00					
13-Nov-17	Monday		00:00			Expert led start-up		
14-Nov-17	Tuesday		00:00	LH2 empty	OFF			
ISIS Start 8am		LH2 empty 2 settings	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			
15-Nov-17	Wednesday		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			
16-Nov-17	Thursday		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	OFF	Soln-mode, 2017-02-5: data taking			
17-Nov-17	Friday		00:00	LH2 empty	OFF	Soln-mode, 2017-02-5: data taking		
	08:00		LH2 empty	OFF	Switch to 2017-02-6; 140 MeV/c data taking			
	16:00		LH2 empty	OFF	Soln-mode, 2017-02-6; data taking			
18-Nov-17	Saturday		00:00	LH2 empty	OFF	Soln-mode, 2017-02-6; 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			
	08:00		LH2 empty	OFF	Switch to 2017-02-1; 140 MeV/c data taking			
	16:00		LH2 empty	OFF	Soln-mode, 2017-02-1; data taking			
21-Nov-17	Tuesday		00:00	LH2 empty	OFF	Soln-mode, 2017-02-1; data taking		
	08:00		LH2 empty	OFF	Switch to 2017-02-2; 140 MeV/c data taking			
	16:00		LH2 empty	???	Soln-mode, 2017-02-2; data taking			
22-Nov-17	Wednesday		00:00	LH2 empty	???	Soln-mode, 2017-02-2; data taking		
	08:00	LH2 empty	???	Ramp magnets down				
	16:00	LH2 empty	???					
23-Nov-17	Thursday	00:00		???				
	08:00			???				
	16:00			???				
24-Nov-17	Friday	00:00		???				
	08:00			OFF	Ramp magnets			

Absorber change

Shift blk 1

Shift blk 2

Data Plan

Data Plan

24-Nov-17	Friday	Absorber change	08:00	???	???	
			00:00	???	???	
			08:00	OFF	OFF	Ramp magnets
			16:00	Empty	OFF	Soln-mode, 2017-03-1; data taking
25-Nov-17	Saturday	LiH empty, 3 solenoid 2 flip.	00:00	Empty	OFF	Soln-mode, 2017-03-1; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	OFF	Soln-mode, 2017-03-2; data taking
26-Nov-17	Sunday	LiH empty, 3 solenoid 2 flip.	00:00	Empty	OFF	Soln-mode, 2017-03-2; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	OFF	Soln-mode, 2017-03-3; data taking
27-Nov-17	Monday	LiH empty, 3 solenoid 2 flip.	00:00	Empty	OFF	Soln-mode, 2017-03-3; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	OFF	Soln-mode, 2017-03-3; data taking
28-Nov-17	Tuesday	LiH empty, 3 solenoid 2 flip.	00:00	Empty	OFF	Flip-mode, 2017-03-3; data taking
			08:00	Empty	OFF	Magnet change
			16:00	Empty	ON	Flip-mode, 2017-03-4; data taking
29-Nov-17	Wednesday	LiH M2 empty	00:00	Empty	ON	Flip-mode, 2017-03-4; data taking
			08:00	Empty	ON	Magnet change
			16:00	Empty	ON	Flip-mode, 2017-03-4; data taking
30-Nov-17	Thursday	LiH M2 empty	00:00	Empty	ON	Flip-mode, 2017-03-4; data taking
			08:00	Empty	ON	Change magnets
			16:00	Empty	ON	Flip-mode, 2017-03-3; data taking
01-Dec-17	Friday	LiH M2 empty	00:00	Empty	ON	Flip-mode, 2017-03-3; data taking
			08:00	Empty	ON	Magnet change
			16:00	Empty	ON	Soln-mode, 2017-03-2; data taking
02-Dec-17	Saturday	LiH field off	00:00	Empty	ON	Soln-mode, 2017-03-2; data taking
			08:00	Empty	???	Ramp down
			16:00	Empty	???	LIH field off
03-Dec-17	Sunday	LiH field off	00:00	Empty	???	LIH field off
			08:00	Empty	???	LIH field off
			16:00	Empty	???	LIH field off
04-Dec-17	Monday	LiH M2 empty	00:00	Empty	???	LIH field off
			08:00	Empty	???	Ramp to soln-mode, 2017-03-2
			16:00	Empty	???	Soln-mode, 2017-03-2; data taking
05-Dec-17	Tuesday	Absorber change	00:00	Empty	???	Soln-mode, 2017-03-2; data taking
			08:00	???	???	Ramp down
			16:00	???	???	
06-Dec-17	Wednesday	Absorber change	00:00	???	???	
			08:00	???	???	
			16:00	???	???	
07-Dec-17	Thursday	LiH M2	00:00	???	???	
			08:00	LIH	ON	Magnet change
			16:00	LIH	ON	Flip-mode, 2017-03-3; data taking
08-Dec-17	Friday	LiH M2	00:00	LIH	ON	Flip-mode, 2017-03-3; data taking
			08:00	LIH	ON	Magnet change
			16:00	LIH	ON	Flip-mode, 2017-03-4; data taking
09-Dec-17	Saturday	LiH M2	00:00	LIH	ON	Flip-mode, 2017-03-4; data taking
			08:00	LIH	ON	Magnet change
			16:00	LIH	ON	Soln-mode, 2017-03-1; data taking
10-Dec-17	Sunday	LiH M2	00:00	LIH	ON	Soln-mode, 2017-03-1; data taking
			08:00	LIH	ON	Magnet change
			16:00	LIH	ON	Soln-mode, 2017-03-2; data taking
11-Dec-17	Monday	Absorber change	00:00	LIH	ON	Soln-mode, 2017-03-2; data taking
			08:00	LIH	ON	Ramp down
			16:00	???	???	
12-Dec-17	Tuesday	Absorber change	00:00	???	???	
			08:00	???	???	
			16:00	???	???	
13-Dec-17	Wednesday	Absorber change	00:00	???	???	
			08:00	???	???	
			16:00	???	???	
14-Dec-17	Thursday	Absorber change	00:00	???	???	
			08:00	???	???	
			16:00	???	???	
15-Dec-17	Friday	Wedge	00:00	Wedge	ON	
			08:00	Wedge	ON	Magnet change
			16:00	Wedge	ON	Soln-mode, 2017-03-1; data taking
16-Dec-17	Saturday	Wedge	00:00	Wedge	ON	Soln-mode, 2017-03-1; data taking
			08:00	Wedge	ON	Magnet change
			16:00	Wedge	ON	Soln-mode, 2017-03-2; data taking
17-Dec-17	Sunday	Wedge	00:00	Wedge	ON	Soln-mode, 2017-03-2; data taking
			08:00	Wedge	ON	Magnet change
			16:00	Wedge	ON	Flip-mode, 2017-03-3; data taking
18-Dec-17	Monday	Wedge	00:00	Wedge	ON	Flip-mode, 2017-03-3; data taking
			08:00	Wedge	ON	Magnet change
			16:00	Wedge	ON	Flip-mode, 2017-03-4; data taking
19-Dec-17	Tuesday	Contingency	00:00	???	???	Flip-mode, 2017-03-4; data taking
			08:00	???	???	
			16:00	???	???	
20-Dec-17	Wednesday	Contingency	00:00	???	???	
			16:00	???	???	
ISIS off			08:00			
			16:00			

Sf

Shift blk 3

Shift blk 4

Shift blk 5

Shift blk 6

Shift blk 7

MICE Equipment

US equipment

- RF to CERN.
 - Return unused amplifiers
 - Co-ax 'donated'

UK Equipment

- RF to ISIS. – Triodes.
- Spares to MICE Hall (temporary)
- Some equipment returned to Universities.