MICE Operations

THE UNIVERSITY OF WARVICK

- MOM Roster
- Ops Calendar
- ISIS Schedule
- Running plans to May 2015
- Baseline data-taking plan
- On-call and expert lists
- Shift model for 24/7 running
- Training

Steve Boyd

MOM Rota

THE UNIVERSITY OF WARWICK

7th January 20154th February 2015Chris Rogers4th February 20154th March 2015Pierrick Hanlet4th March 20151st April 2015Yordan Karadzho1st April 201529th April 2015Milorad Popovic29th April 201527th May 2015Paul Hodgson27th May 201524th June 2015Victoria Blackmor24th June 201519th August 2015Paul Hodgson
4th March 20151st April 2015Yordan Karadzho1st April 201529th April 2015Milorad Popovic29th April 201527th May 2015Paul Hodgson27th May 201524th June 2015Victoria Blackmor24th June 201522nd July 2015Ryan Bayes22nd July 201519th August 2015Paul Hodgson
1st April 201529th April 2015Milorad Popovic29th April 201527th May 2015Paul Hodgson27th May 201524th June 2015Victoria Blackmor24th June 201522nd July 2015Ryan Bayes22nd July 201519th August 2015Paul Hodgson
29th April 201527th May 2015Paul Hodgson27th May 201524th June 2015Victoria Blackmor24th June 201522nd July 2015Ryan Bayes22nd July 201519th August 2015Paul Hodgson
27th May 201524th June 2015Victoria Blackmor24th June 201522nd July 2015Ryan Bayes22nd July 201519th August 2015Paul Hodgson
24th June 201522nd July 2015Ryan Bayes22nd July 201519th August 2015Paul Hodgson
22nd July 2015 19th August 2015 Paul Hodgson
19th August 2015 16th September 2015 Ed Overton
16th September 2015 14th October 2015 Yordan Karadzho
14th October 2015 4th November 2015 Melissa Uchida
4th November 2015 2nd December 2015 Victoria Blackmor
2nd December 2015 30th December 2016
4th January 2016 3rd February 2016
3rd February 2016 2nd March 2016
2nd March 2016 30th March 2016
30th March 2016 27th April 2016 Melissa Uchida
27th April 2016 31st May 2016

Ops Calendar

THE UNIVERSITY OF WARWICK

iceops@gmail.co	om								
day 🚺 🕨 Marc			MICE » (Operation	S				
Sun	Mon		Tue	peration					
ISIS run-up	Mar 1	2	Our low	tivity leaves	New iceus Contt	Colondar Nava	Desuments	Mile	Cottings
			Overview A	ctivity Issues	New issue Gantt	Calendar News	Documents	Wiki	Settings
			Operation	s Wiki				2	Edit 🚖 Watch
	8	9	Critical Info	mation					
ISIS run-up	0	9	Critical Info	mation					
	15	16	 ēlog - la ēOperati 	ons calendar					
					10	20	21		
ISIS run-up				18	19	20	21		
ISIS run-up	ISIS beam permits	ISIS User Perio				20 Data Taking Period	21		
ISIS run-up			od 1				21		
ISIS run-up			od 1				21		
ISIS run-up			od 1				21		
ISIS User Period 1	ISIS beam permits	ISIS User Perio	24	eting 25	(8:00pm) [26	Data Taking Period			
ISIS run-up ISIS User Period 1 Data Taking Period	ISIS beam permits	ISIS User Perio	od 1 1:30pm HallMe	eting 25	(8:00pm) [26	Data Taking Period			
ISIS User Period 1	ISIS beam permits	ISIS User Perio	24	eting 25	(8:00pm) [26	Data Taking Period			
ISIS User Period 1	ISIS beam permits	ISIS User Perio	24	eting 25	(8:00pm) [26	Data Taking Period			
ISIS User Period 1 Data Taking Period	ISIS beam permits	ISIS User Perio	24	eting 25	(8:00pm) [26	Data Taking Period			
ISIS User Period 1 Data Taking Period ISIS User Period 1	ISIS beam permits	ISIS User Perio	24 24 1:30pm HallMe 1:30pm HallMe 31	eting 25 eting Apr 1	(8:00pm) [26 (8:00pm) [(8:00pm) [2	Data Taking Period 27 Data Taking Period 3			
ISIS User Period 1 Data Taking Period	ISIS beam permits	ISIS User Perio	24 1:30pm HallMe 24 1:30pm HallMe	eting 25 eting Apr 1	(8:00pm) [26 (8:00pm) [(8:00pm) [2	Data Taking Period 27 Data Taking Period			

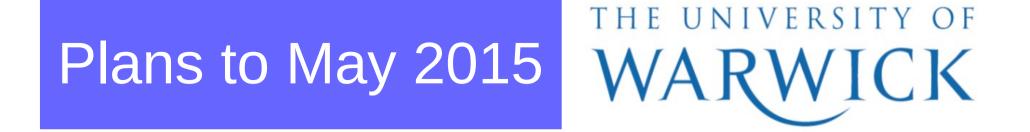
Google calendar : miceOps / MouseTrap

ISIS Schedule

THE UNIVERSITY OF WARWICK

User Period	Start Date	End date	Days
Cycle 2014/03	17/3/2015	1/5/2015	45
Cycle 2015/01a	2/6/2015	5/7/2015	36
RAL Open Week			
Cycle 2015/01b	14/7/2015	24/7/2015	10
Cycle 2015/02	8/9/2015	16/10/2015	39
Cycle 2015/03	3/11/2015	18/12/2015	45
Cycle 2015/04	16/2/2016	1/4/2016	45

Channel tests / Calibration runs



Week of March 1st : Mock data run 2 : Expert only run

March 8 : Inactivation run : 16 hours (nominally).

ISIS will be running at 700 MeV rather than 800 MeV and have decided that an activation run would not be useful. One will have to be done later (prob. in June)

Goal : BLOC training, time in the target and the TOF0/1 with beam .Prepare, and if there is time, do a TOF calibration. Test online reconstruction, data transfer etc with beam



Manpower : MOM, BLOC, SOC, Target expert, DAQ/Trigger expert, Controls expert and Online recon expert. 4 shifters.

Weekends starting March 21st :

Schedule regular beam runs on the weekends, interspersed with construction during the week.

Detectors accessible : TOF 0/1, CKOV, (TOF2, KL, EMR) (possibly)

Plans to May 2015



Runs will be nominally 16 hours / day, depending on data plans.

4 shifters / weekend will be required. We will use CHEESE. Shift credit will be given, even if shifts do not go ahead.

Hall will be closed around 3pm on the preceding Friday afternoon. This is a good opportunity to start a weekly PPS training slot for the weekend shifters and others.

To coordinate this we will start two weekly operations meetings. The first, on **Mondays**, will review previous weekend activities and plan required work during the week. The second, on **Friday**, will define the following weekend run goals and ensure that all systems are ready. Friday meetings will be in person. Meetings to start on **March 16th**

ISIS Schedule

THE UNIVERSITY OF WARWICK

User Period	Start Date	End date	Days
Cycle 2014/03	17/3/2015	1/5/2015	45
Cycle 2015/01a	2/6/2015	5/7/2015	36
RAL Open Week			
Cycle 2015/01b	14/7/2015	24/7/2015	10
Cycle 2015/02	8/9/2015	16/10/2015	39
Cycle 2015/03	3/11/2015	18/12/2015	45
Cycle 2015/04	16/2/2016	1/4/2016	45

Channel commissioning / Field-off running

ISIS Schedule

THE UNIVERSITY OF WARWICK

User Period	Start Date	End date	Days
Cycle 2014/03	17/3/2015	1/5/2015	45
Cycle 2015/01a	2/6/2015	5/7/2015	36
RAL Open Week			
Cycle 2015/01b	14/7/2015	24/7/2015	10
Cycle 2015/02	8/9/2015	16/10/2015	39
Cycle 2015/03	3/11/2015	18/12/2015	45
Cycle 2015/04	16/2/2016	1/4/2016	45

2015/02 – 04 : Physics data taking

Data-taking plan

THE UNIVERSITY OF WARWICK

- 3 scans and full physics grid
- empty, LH2 and LiH absorbers
- flip and solenoid mode
- double target rate and 4 V.ms beam loss

Run Type	Postive	Negative
Calibration & Monitoring	5 hours	5 hours
Scan 1	15 hours	0 hours
Scan 2	15 hours	0 hours
Scan 3	1 day	0 hours
Physics Grid	10 days	2.5 days
Contingency	3 days	0.5 days
Total	15 days	3 days

Basic run block :

We assume :

Baseline Run PlanTHE UNIVERSITY OFWARWICK

User Period	Run Type	Absorber	Focus coil Mode	Run-time (days)	Total (days)
2015-02	Commissioning			43	
2015-02	Physics	Empty	Solenoid	18	
	LH2 Fill			2	
	Physics	LH2	Solenoid	18	38
2015-03	Calib/Setup			7	
	Physics	Empty	Flip	18	
	LH2 Fill			2	
	Physics	LH2	Flip	18	45
2015-04	Calib/setup			7	
	Physics	LiH	Flip	18	
	Physics	LiH	Solenoid	18	43
					126

Assumes a 3 shift / 7 day operating mode

Shift model



In 24/7 running : two shift streams staggered by 2 hours

6 a	6 am – 2 pm 2		pm – 10 pm	10 pm – 6 am		
	8am – 4 pm	I	4 pm – 12	pm	12 pm – 8 p	m

Shifters will be required to sign up in blocks of N shifts

Shifts will be allocated to institutes according to the number of people associated with that institute

All MICE members must do at least half of their personal shift allocation

All institutional shift loads must be met in full

Shift Training



Training format is outlined on

miceMine:Operations:Training Shifters

Training will have to be provided between user runs

A training period coming up after the CM and PPS training will be offered weekly during March and between user runs

Need to think about training frequency and format for shifters/BLOCs. Use the upcoming commissioning period for shift training

On-call & Experts



The last time the expert list was overhauled was July, 2014

Need to revisit this : all those with positions of responsibility should look at the expert list on the Operations page on miceMine and tell me or the MOM if anything – personnel and/or contact details - needs to be changed.

Detector groups should now start putting in place expert roster and detector staffing plans. Experts should be on-site during the run periods (as in any other particle physics experiment). On-call expert access must be provided at all times during data-taking.

Documentation



I've already received some documentation for the spectrometer solenoids (thanks Pierrick) and the beamstop (thanks Henry)

Keep 'em coming.....





Data taking is approaching at an interesting speed

CHEESE has been rolled out and seems to work well. Shift allocation for March 8th and weekend runs will be opened soon.

Training format needs some thought going into commissioning

On-call / on-site expert plans now need to be defined

Documentation documentation documentation