MICE Operations

THE UNIVERSITY OF WARWICK

- ISIS Schedule
- MOM roster
- Running plans to May 2015
- On-call and expert lists
- Shift stats from CHEESE
- Shift model for 24/7 running
- Training

Steve Boyd

ISIS Schedule

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

Cycle 2015/01a and 01b : Channel commissioning
2015/02 – 04 : Physics data taking

MOM Rota

Date From	Date To	MOM
7th January 2015	4th February 2015	Chris Rogers
4th February 2015	4th March 2015	Pierrick Hanlet
4th March 2015	1st April 2015	Yordan Karadzhov
1st April 2015	29th April 2015	Milorad Popovic
29th April 2015	27th May 2015	Paul Hodgson
27th May 2015	24th June 2015	Victoria Blackmore
24th June 2015	22nd July 2015	Ryan Bayes
22nd July 2015	19th August 2015	Paul Hodgson
19th August 2015	16th September 2015	Ed Overton
16th September 2015	14th October 2015	Yordan Karadzhov
14th October 2015	4th November 2015	Melissa Uchida
4th November 2015	2nd December 2015	Victoria Blackmore
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

Google calendar : miceOps / MouseTrap

Plans to May 2015

THE UNIVERSITY OF WARWICK

▶ **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

Plans to May 2015

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.

Need to have a beamline/detector commissioning discussion to define data plan for weekend running.

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.

▶ 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 ideally be in person. Meetings to start on **March 16th**

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 put 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 Review

A request for documentation has been doing the rounds for a while. Thanks for those who have actively engaged : Henry, Vicky Bayliss, Mark Tucker, Lucien.

Step 1 : Collect documentation

Documentation status has been added to the operations wiki page on miceMine

Step 2 : Reformat and order

Documentation

- **Monitoring instructions** for shifters
- **Shift instructions** : what to do if something looks odd
- **Shift checklists** : short list of instructions to power on and shut down your system

- **Emergency instructions**
  - unplanned power outage
  - services cut off
  - personnel safety issue
  - Other idiosyncratic failure mode
- what shifters should expect and what they need to do

- **Full expert documentation**

Documentation Review

THE UNIVERSITY OF WARWICK

Documentation

- Beamstop
- Target
- Beamline Magnets
- Neutron Monitor
- Luminosity Monitor
- Decay Solenoid
- Diffuser
- Cerenkov Detector
- TOF Detectors
- KL Detector
- EMR Detector
- Trackers
- Spectrometer Solenoids
- Focus Coil
- Hydrogen System
- PPS System

MICE » Operations

Overview   Activity   Issues   Gantt   News   Documents   Wiki

Beamline Magnets

Information and Instructions for shifters

⊡ Beamline Instructions [2011]

⊡ Turning on the beamline magnets [2011]

⊡ Magnet Checklist [2011]

Information and Instructions for experts

⊡ Beamline Description [2011]

Full Manual

Other supporting documentation

Documentation Review

- I have gone through mice.iit/mico/manuals and micemine/documents and linked what I think is the relevant documents for each section and each system

- I may be wrong

- Each of the subsystem experts are asked to look at the documentation for their systems and

  - update documents which are out-of-date or ensure that they are correct and current

  - make and add documents which don't exist

- This documentation MUST be in place – ISIS requires it

THE UNIVERSITY OF WARWICK

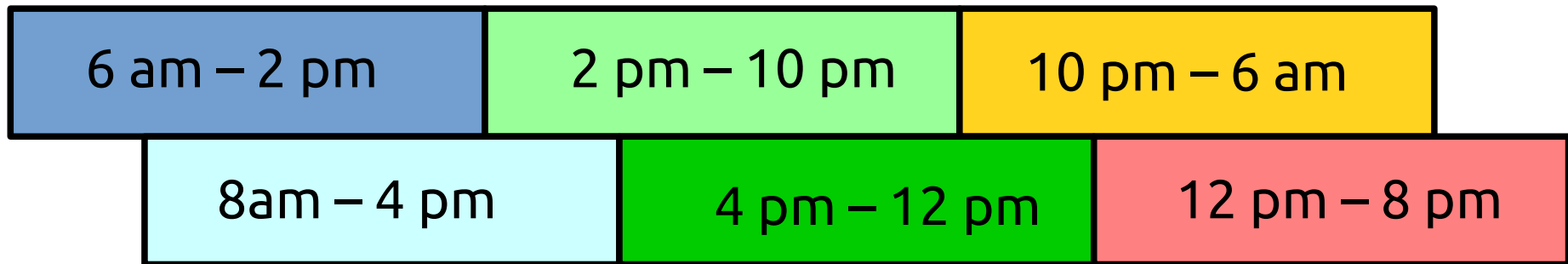| System	Shifter Documentation	Emergency Instructions	Expert Manual
Beamstop	Orange	Orange	Orange
Target	Orange	Red	Green
Beamline Magnets	Orange	Red	Orange
Luminosity Monitor	Orange	Red	Orange
Decay Solenoid	Green	Green	Green
Diffuser	Red	Red	Red
CKOV	Green	Green	Orange
TOF	Orange	Red	Red
KL	Red	Red	Orange
EMR	Red	Red	Red
Trackers	Red	Red	Red
Spectrometer Solenoids	Red	Red	Red
Focus Coil	Red	Red	Red
Hydrogen System	Red	Red	Red
PPS	Green	Green	Green

Legend:
- Green — Up-to-date
- Orange — Possibly out-of-date
- Red — I couldn't find anything suitable

Shift model

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

6 am – 2 pm	2 pm – 10 pm	10 pm – 6 am
8am – 4 pm	4 pm – 12 pm	12 pm – 8 pm

▶ Shifters will be required to sign up in blocks of 5 shifts

▶ Do we allow consecutive shifts? People get tired.

▶ 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

Shift stats

THE UNIVERSITY OF
WARWICK

Current CHEESE list : 65 shifters

ISIS User Run Period	Days	CR Shifts	Shift Blocks	Blocks/shifter
1	12	48	-	
2	54	324	65	1
3	38	228	46	0.7
4	45	270	54	0.8
1	45	270	54	0.8
MOM		365		
Total	194	1505	301	4.5

* Excludes MOM shifts
** Indicative only

Shift Training

THE UNIVERSITY OF WARWICK

▶ 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.

▶ Record of training status

Summary

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 framework may need some thought

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

Documentation documentation documentation