

# Method statement for operations of SC magnets at MICE

## Step IV

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### *Introduction*

This document describes the task list required to prepare the superconducting magnet training in MICE Step IV cooling channel, to successfully train these magnets and perform stable operations for data taking with magnets in several configurations. The required personnel to fulfil each task, the name of responsible signing off, the target and completion dates are provided together with the list of identified risks, which all are addressed in the attached risk assessment.

### *Preparation for magnet training*

Task	Description	Personnel	Responsible	List of risks identified	Target date	Date completed	Sign off completed
<b>Spectrometer Solenoids</b>							
1.	Confirm stable cryogenic operation of SSs	FNAL, IIT	A. Bross	Trip hazard and falling from heights use of tools, hazard of manipulating cryogenes, including filling magnets from dewars	16July		
2.	Verify all SSs instrumentation	FNAL, IIT, DL	A. Bross	Trip hazard and falling from heights, use of tools,	17 July		
3.	Verify electrical system for SSs	DL, FNAL, IIT	S. Griffiths	Hazard of shock during electrical tests	16 July		
4.	Commission QP system for SSs	FNAL, IIT, DL	S. Feher	Hazard of shock during electrical tests, Hazard of shock during magnet energizing,	19 July		

Focus Coil							
5.	Confirm stable cryogenic operation of FC	RAL, Oxford	S. Watson	Same as Task 1	20 July		
6.	Verify FC instrumentation	RAL, Oxford	S. Watson	Same as Task 2	21 July		
7.	Verify electrical system for FC	DL	S. Griffiths	Same as Task 3	22 July		
8.	Commission QP system for FC	DL	S. Griffiths	Same as Task 4	22 July		
Other							
9.	Commission ODH system	Crocon	A. Nichols	Trip hazard	16 July		
10.	Hall clearance from left over magnetic materials	RAL	A. Nichols	Trip hazard	19 July		

### *Magnet training*

Task	Description	Personnel	Responsible	List of risks identified	Target date	Date completed	Sign off completed
Spectrometer Solenoids							
11.	Perform SSU and SSD trainings to full spec, including stability test	FNAL, IIT, DL	A. Bross	Same as Task 1, 3 and exposure to high magnetic field	31 July ?		
Focus Coil							
12.	Bring FC to the full spec	RAL, DL, Oxford	J. Cobb/ S. Watson	Same as Task 11.	~23 July		
Combined training							
13.	Bring full Step IV Channel to training setting and few standard operational settings	FNAL, IIT, RAL, Oxford, DL	J. Pasternak	Same as Task 11 and Oxygen Deficiency Hazards	7 August ?		