Minutes
Charissa Group Meeting

Meeting held on: 17 June 2000
Meeting held at: Strasbourg

Present:	BRF(Chair), WNC, NMC, MF, VP, RPW
Distribution:	Those above plus RCL,DJM,WDMR,DLW,NAO all by e-mail/server

Minutes

The meeting was arranged at short notice, to take advantage of the overlap of staff at an experiment, and DLW was therefore unable to attend.

1. **Staffing changes:**

Bill Rae has formally retired (effective 1 April 2000) and hence the Oxford group, that he led, will no longer continue. The meeting noted the massive contribution that he made to the collaboration and regretted his departure, whilst wishing him well in the future. It was unanimously agreed to organise a dinner to mark Bill's retirement and to thank him for his efforts.

It was noted that BRF has accepted a new Chair at York and will be moving there, from Birmingham, effective from July 2000. He will also be away at TRIUMF on sabbatical from July through December 2000 (BRF had previously circulated an email to the collaboration, describing this additional interest in nuclear astrophysics).

Two PDRAs, both from Birmingham are leaving imminently: Marie-Paule Nicoli (end of September 2000) and Laurent Donadille (end of June 2000). Replacements have been appointed: Neil Curtis (from 23 October) and Soia Soić (from 1 September). In addition, a new PDRA appointment was envisaged at York: Barrie Greenhalgh (from 1 October).

This leaves Djelloul Mahboub as the only PDRA continuing in post, and the meeting agreed that this emphasised our dependence on his knowledge. In this context, the success of the current application to extend his work permit was vitally important to the continuity of the research.

The PDRA posts remaining to be filled are: Stafford (one), York (one additional post) and Birmingham (one additional post). Appropriate formalities had been initiated.

The students currently continuing are: BJ Greenhalgh and CE Harrison (York), PJ Leask, NI Ashwood and RJ Wooliscroft (Birmingham), CJ Bickerton (Staffordshire) and KL Jones (Surrey). Also, Charles Bremner is completing writing up (Oxford).

2. Strasbourg tasks and running plans:

The work identified at the previous meeting had been performed, so that the system at Strasbourg was now up an running for the June 2000 running period.

The next running period was anticipated for 20 September 2000*, after discussion with F. Haas. This would involve additional data on the ^{6,7}Li + ^{208}Pb systems to complete a series of measurements. The following running period was tentatively anticipated for December 2000 (MF).

**N.B. Subsequent to the meeting, the Vivitron belt broke, requiring a reassessment of the scheduling; a run in late August was suggested and RPW undertook to investigate this.*

On-site work was required, before the September running, and the tasks were identified:

In August/early September, install new vacuum interlocks, improve chamber and line alignment, new arm drives, various vacuum items. This to be coordinated with RCL and engineer from Daresbury, and F. Haas. $\boxed{\text{NMC}}$

Time stamping of events to be implemented, in consultation with DLW. $\boxed{\text{VP}}$

All malfunctioning NIM modules to be returned to Birmingham for repair. $\boxed{\text{MF,NMC}}$

Various other items require shipping back to the UK. MF outlined his preferred option, for all CAEN amplifiers presently at Strasbourg to remain, with their discriminators, and for the DAQ to remain. It was agreed to ship one of the two crates of MEGHA amplifiers, one of the 40-channel preamplifier boxes, the pulser module and various TAC units, together with the faulty electronics modules identified above. In addition, all except the two Silena ADC's required for September would be shipped. A list was required. $\boxed{\text{NMC}}$

These items for shipping would be boxed up at the end of the run, and shipping arranged in liaison with F. Haas. $\boxed{\text{WNC}}$

The purchases required to maintain the DAQ were identified, including a VME CAENet controller (which would allow the CAEN amplifiers to be controlled with MIDAS), and a Lecroy FERA driver. $\boxed{\text{BRF}}$

3. GANIL running plans:

There remain three approved proposals, using beams of ^{12}Be (GANIL), ^{24}Ne and ^{8}He (SPIRAL).

WNC reported that the revised plans for the ^{12}Be experiment would mean November 2000 running at earliest, or March 2001 as the next alternative. The experiment was almost certain to use SPEG with the large SPEG chamber, and would no longer employ gamma detection. New annular detectors from Micron had just arrived. The number of channels was unlikely to exceed 128, which could be instrumented with the CAEN amplifiers at GANIL. The GANIL VXI adc's would be used with the GANIL acquisition system.

Ribbon-Socapex cables would be required. At present there were six 16-way cables at Birmingham; two or three more were likely needed. $\boxed{\text{WNC/NMC}}$

New/updated NIM preamplifiers would be required. NMC reported that new chips for the preamps, with DC level adjust, were due to be delivered on 1 August. The order was for 1000 chips, with notionally 500 for Birmingham, 300 for Paisley and 200 spares. $\boxed{\text{NMC}}$

MF and WNC reported that the ^{8}He and the ^{24}Ne experiments required SPIRAL, which was unlikely to operate with either of these beams before March 2001.

The next PAC submissions were due in July 2000, and MF and WNC each envisaged proposals.

4. ANU October 2000 running period and 2001 running:

After discussion, it was agreed to plan a visit to ANU for October 2000 in order to perform the measurement of the 10^{+} state in ^{16}O for the thesis of CEH at York. The DAQ for this experiment would be MEGHA, but there would need to be a copy of the system presently operating at Strasbourg available, as a backup.

The personnel would include BRF (travelling from Vancouver) and VP from the present meeting. Owing to EXOGAM commitments on VP's time, the first half of October was not available. $\boxed{\text{BRF,VP}}$

It was planned that DJM (Mahboub) and NS (Soić) would also attend. $\boxed{\text{WNC,MF}}$

It was agreed to buy a new Lecroy 4301 FERA driver and to ship the full complement of Silena 4418/V adc's to ANU, except for 2 modules to be retained in Strasbourg for September 2000 running.

After October 2000, the next running period was anticipated for early January 2001. The experiments would be the ^{14}C (MF), $A = 6$ (DJM/WNC), Meghadon (NMC) and ^{10}Be (DLW) proposals. The Meghadon runs could perhaps be performed partly in parallel with the other running. Personnel for this running period would include MF, WNC and NMC.

5. Progress with MEGHA DAQ testing and other electronics tasks:

SSJ and RAH were assembling a replica system at Birmingham. This system would be used, to try and duplicate the symptoms observed at ANU when using the production PCB versions of the modules. It was anticipated that changes would be required in the production versions of the TAIL, FIACRE and FEED modules. $\boxed{\text{SSJ,RAH,MF}}$

Several components to complete the test system (processor, second F2VB) could be borrowed from DL. $\boxed{\text{VP,MF}}$

SSJ was presently working on several projects, which were prioritised as (1) the duplicate DAQ, (2) remaining Silena repairs, and (3) Meghadon amplifier modifications.

$\boxed{\text{SSJ}}$

6. Overview of running plans:

	Sep00	Oct00	Nov00	Dec00	Jan01	Feb01	March01
ANU running		$\surd$			$\surd$		
Strasbourg running	$\surd$*			$\surd$			
GANIL running			($\surd$)				($\surd$)

**N.B. See above; situation changed after the meeting, now August?*

7. Any other business:

(a) *Status of Silena CAMAC 4418/V ADCs:*

There were presently 14 modules running at Strasbourg, and repairs were in progress in Birmingham to a further 6, giving a projected full complement of 20 modules (160 channels). SSJ had been successful in affecting the testing and repairs so that, so far, no modules had needed to be sent back to Silena.

(b) *Purchases:*

In addition to the FERA drivers identified earlier, urgent purchases were reviewed in the context of the Oxford grant funds. Purchases were agreed for adaptors (BNC-Lemo) and DAQ components and an annular silicon detector.

$\boxed{\text{BRF}}$

(c) *LISE-2000 and ECLAN progress:*

MF reported that the tendering process for the LISE-2000 quadrupoles was completed on 13 June, and that the scheduled delivery date after tender selection was December 2000. For ECLAN, a meeting would be arranged, to include RCL and Daresbury engineer(s). $\boxed{\text{MF}}$

(d) *TIARA progress:*

WNC reported that the TIARA bid had been ranked as first below the funding line in the recent Physics Prioritisation Panel meeting, and as such would be automatically carried forward for consideration at the next prioritisation panel, according to normal EPSRC procedures.

(e) *North-West Initiative:*

BRF reported on a meeting he attended on 13 June concerning the development of a proposal for future facilities at Daresbury, in the wake of the decision to locate DIAMOND at RAL. Two funds had been set up to pursue these matters: by the Smith Committee, and also the North-West Science Fund. DL was working on plans for a fourth generation light source, and the opportunities arising form this (as related to nuclear physics) were also being assessed.

W.N. Catford, Secretary. June 18, 2000 (released July 19, 2000)