MEMORANDUM

To: The members of the Research Board
From: The PSC
Subject: Minutes of the eighth PSC meeting held on 19 and 20 September 1977


The PSC received the following papers:

- CERN-IHEP-INFN (Bologna, Milan)-JINR (Dubna, Helsinki, Warsaw) Status report on the 5th CERN-Serpukhov joint experiment (CERN/PSC/77-32/M15).

- Edinburgh-Rutherford-Westfield College collaboration Memorandum: Proposal PSC/77-23/P7, PSC/77-24/S7, "A measurement of A and R parameters in $\pi^+p \rightarrow K^+\Sigma^+$" (CERN/PSC/77-33/M16).

- Edinburgh-Rutherford-Westfield College collaboration Memorandum: Final setting up cycle of RMS at NIMROD (CERN/PSC/77-34/M17).

- CERN-Rome-Saclay-Vanderbilt collaboration Proposal: Strange dibaryon systems (CERN/PSC/77-36/P8; PSC/77-37/S8).

OPEN SESSION:

1. Introductory remarks by Prof. L. Van Hove. Prof. Van Hove mentioned that the June and September meetings of the Finance Committee and the Scientific Policy Committee had discussed the future budgets of the Organization. Although CERN had proposed a constant budget of 600 MSF at 1977
prices for 1979 and 1980, the Council had requested a study of the consequences on the scientific programme of a budget 20 MSF lower than this figure. Such a study had been carried out which showed that even quite severe reductions in the ISR, PS 25 GeV, SC and TH programmes would only yield a saving of 13 or 14 MSF. The conclusion was that such a small saving was out of proportion to the loss of physics potential and that if 20 MSF had to be found then at least half of the reduction should come from the SPS programme, despite the fact that this programme had been given top priority among CERN activities.

2. Status report on the tests of S142 presented by E. Klempt.

3. Proposal: Strange dibaryon systems by the CERN-Rome-Saclay-Vanderbilt collaboration (PSC/77-36/P8; PSC/77-37/S8) presented by E. Pauli.

CLOSED SESSION:

The PSC received a status report from the coordinator. The installation programme of the new beams $p_{17}$ and $k_{22}$ is completed and experiments S153, S157 and S154 have started setting up. The installation of the high intensity tests in $c_{11}$ is almost completed and it is envisaged that the tests of large pieces of apparatus by NA2 and NA3 will be concluded by the end of the year.

The PSC noted that the 2m BC had stopped operation after a very successful lifetime of 12½ years during which 40.5 M pictures were taken, and that experiment S155, using FE74, had completed its data collection in time for the preparations for the conversion required to feed the ICE project.

Discussion of new proposals:

The PSC discussed the proposal for a Search for Possible Strange Dibaryon Systems by the CERN-Rome-Saclay-Vanderbilt collaboration (PSC/77-36/P8), and expressed interest in the search at the proposed level of sensitivity. After discussion of the trigger and taking note of the written comments of the referee (B. Hyams), the PSC recommends the approval of this experiment with a time allocation of one test period and two periods for data collection. The experiment can be performed in a new $K^-$ beam derived from the south branch of SE62, which can be built after the 1977/78 PS shutdown.

The PSC returned to its postponed discussion of the proposal to measure A and R parameters in the reaction $\pi^+p \rightarrow \Sigma^+K^+$ by the Edinburgh-Rutherford-Westfield College collaboration.
The committee received reports from the referees (E. Lorenz and P. Bareyre) and supports the measurement of the A and R parameters to be used in conjunction with the data on the differential cross-sections and the \( \Sigma^+ \) polarization currently being collected at NIMROD. The PSC defers a recommendation for approval and time allocation subject to a satisfactory agreement on the sharing of the responsibilities between CERN and Rutherford Laboratory for the transfer of the experiment from NIMROD to the PS. The experiment could be performed in a new low momentum beam derived from the north branch of SE62, which could be constructed during the 1978/79 PS shutdown.

**Status Report:**

The PSC expressed interest in the results of the tests of S142 presented at the Open Session, and supports the collaboration's request to continue testing until May 1978.

**Papers Received:**

The PSC took note of the status report of the 5th CERN-Serpukhov Joint Experiment.

The PSC also took note of the memorandum from R. Klapisch (Chairman of the Workshop on the Role of CERN in European Intermediate Energy Physics) pointing out that on 30 September, the last day of the Workshop, the findings of the various groups would be presented by the convenors in an Open Session.

The next meeting of the PSC is provisionally scheduled for 22 November (probably Closed Session only) and will include an initial discussion of the interests emerging from the above Workshop and their possible impact on the future of the PS physics programme.