

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

Proposed Transfer of the National Hydrogen Bubble
Chamber from the D.S.I.R. to the Institute

Note by T. G. Pickavance

1. As will be remembered, the British National Hydrogen Bubble Chamber has been constructed by a combined team from several universities, financed by a grant from the D.S.I.R. to Imperial College. It was built primarily for use with Nimrod, but is to be used for an initial period at C.E.R.N. The project has hitherto been financed by the D.S.I.R. and it has been understood that the chamber would be transferred to Institute ownership when delivered back to the Rutherford Laboratory. The Institute would then be responsible for installing and operating it including the provision of the operating and development team.
2. The situation is somewhat changed now that the time table is becoming clearer. The date for shipping the chamber to C.E.R.N. is about the end of 1962, and Nimrod is expected to be coming into operation about a year later. The date on which the chamber will be brought back to the Rutherford Laboratory is not yet decided, but factors affecting a decision will be the rate of accumulation of experimental data at C.E.R.N., progress on C.E.R.N.'s 2 metre bubble chamber, and the development of the Nimrod research programme. Those essentially concerned in the decision are the British physicists using the chamber, the N.I.R.N.S., and C.E.R.N., and it is desirable to arrange things so that the decision can be taken on scientific grounds with a minimum number of parties administratively involved. C.E.R.N. will wish to negotiate an agreed operating period in Geneva, and it seems best for the negotiations to take place between C.E.R.N. and the N.I.R.N.S. It appears most likely that the chamber will remain in Geneva during at least a part of 1964.

The D.S.I.R. have therefore proposed that the chamber should be handed over to the Institute in Geneva on 1st January, 1964 and that the Institute should accept full financial and administrative responsibility for it from that date. If this were done, the Institute would become responsible for the cost of the following:-

- (a) Salaries, foreign service allowances, insurance, travel etc. of the National Hydrogen Bubble Chamber team of about 22 people from 1.1.64 (rough estimate £70,000 per annum).
- (b) Spare parts, modifications (except those specifically for C.E.R.N. experiments) and repairs to the chamber, from 1.1.64.
- (c) Dismantling the chamber and associated plant, packing and transport home (rough estimate £20,000).

(a) and (b) would in a sense not be an unexpected liability, because until recently the estimated date of return of the chamber to the Rutherford Laboratory was January, 1964. Certain expenses in Geneva, e.g. for liquified gases and electricity, will be paid by C.E.R.N.

It is perhaps not quite clear that the Institute ought to bear (c) and it is suggested that this point should be further examined by N.I.R.N.S. and D.S.I.R. staff.

3. If the proposal to make the transfer on 1.1.64 is accepted, it is suggested that the present members of the project should be offered posts on the N.I.R.N.S. staff to operate the chamber at C.E.R.N. and to return to the Rutherford Laboratory with it (though not necessarily all to stay on that particular job indefinitely).

There may be advantages for individuals and the Institute in transferring staff to the N.I.R.N.S. before 1.1.64, provided that some satisfactory financial arrangement can be made with D.S.I.R.