

5. A BRIEF VISIT TO ROYAL NAVY PHYSIOLOGICAL LABORATORIES

During a four day stay in London late last year, I managed to travel down to Portsmouth for a quick tour of the RNPL. Geoff and Marge Bayliss kindly overcame the red tape and expedited the visit. Because of the short stay in UK I was unable to see Geoff, who was in the midst of preparing for what was to be a successful attempt at the MRCP exams.

The trip by rail takes 1f(3,4) hours and in spite of the inclement weather one could appreciate the pleasant countryside on the way down. On arrival at Portsmouth Harbour I had a short ferry trip across to Gosport and then a 3 mile taxi trip to Alverstoke where the laboratories are situated.

Mr John Towse, a physiologist, was my guide and I firstly toured the laboratories and then the nearby naval facilities.

Dr John Bevan was working on a thermostatically controlled diving suit and he explained to me the difficulties encountered in attempting to maintain an overall satisfactory temperature as there were nine variations at particular points of the body. The equipment didn't seem too cumbersome and no doubt the finished product will be of much interest.

I then visited the department where the preparations were being made for March 1972 1500 foot FCC dives. The organisation for this is quite complicated and involves a tremendous number of scientists and technicians plus preliminary animal (goat) dives checking all the monitoring equipment.

Other areas visited included an extremely comprehensive computer laboratory which is invaluable in processing experimental data, the respiratory laboratory where experiments on gas analysis in various situation could proceed and also a project to determine means to warm the inspired gases for deep diving.

Mr Towse and Dr Peter Bennett expounded on their attempts to measure the tremor associated with the high pressure Nervous Syndrome and to further elucidate this interesting problem.

Overall there seems to be no shortage of equipment or manpower, there being over 40 scientists plus numerous technical staff. The pressure chamber is capable of simulating 2250 feet and one wonders how soon this depth will be reached at the experimental unit.

The Royal Naval section was also quite impressive as at the time of my visit a 6f(1,2) day saturation dive to 133 metres was in progress under full TV monitoring. They have several chambers and excellent facilities for compressed air production and storage.

Terry Horgan