

and influence in the matter. We feel that Mr Taylor will be useful to us as he is an extraordinarily fine type with much experience and knowledge in the entire experimental field of aeronautics, in addition to his specialty of de-icing.

The Experimental Flight has been organized and is now in operation with Wing Commander Tommy Loudon as officer in charge, and Wing Commander Halliday commanding officer of the entire establishment, including test flight, experimental flight, shops, etc. We are pleased with the organization and at the present time active work is being done on the testing of the Sperry bomb sight, on experiments in night vision which [Professor E. Godfrey] Burr of McGill has developed, and on various other projects originating in Parkin's and Banting's laboratories.

The most interesting and significant developments recently have to do with the co-operative arrangements which we have been able to make with our American friends. Sir Henry Tizard's mission which came to this country for the purpose of exchanging technical and scientific information having a war bearing with the us has had far-reaching results.

In the us there has been set up a National Defense Research Committee headed by Dr Vannevar Bush, formerly of MIT, which has initial funds amounting to ten million dollars at its disposal. The main committee is a strong one consisting of such men as President J.B. Conant of Harvard, President K.T. Compton of MIT, Dr R.C. Tolman of the University of California, Dr F.B. Jewett, chairman, Bell Laboratories, and Rear Admiral H.G. Bowen and Brigadier-General G.V. Strong, representatives of the us Navy and Army.

We have worked out an effective system for co-operation and all of the research work going on in the industrial laboratories such as those of RCA, Bell, General Electric, Westinghouse, Sperry, etc., as well as in the Navy and Army research stations, is open to representatives nominated by us, and in turn all our laboratories are open to comparable officers in the us nominated by the proper official there.

During the last few weeks we have been sending a steady stream of research men to visit laboratories in the us and in the same way we have received visits from many United States service officers and scientists. At the present time we can give to the Americans a great deal of valuable advice arising out of our year's experience of war and they thoroughly appreciate what we can do. On the other hand, they are organizing most vigorously and inside of a year we will be able to get a great deal from them.

As I told you in my last letter, the War Technical and Scientific De-

velopment Committee has already granted \$370,000 for our special radio work and we will shortly have a staff of about eighty in [J.T.] Henderson's lab. The Americans are busy on similar work and the facilities of the large industrial research laboratories will be of great value to all of us. In fact we have already made arrangements whereby certain special equipment which we needed and could not have hoped to obtain for perhaps six to nine months in the normal way, will be available to us within the next six weeks at absolutely no cost to ourselves.

I have been to Washington several times to confer with Dr Bush and members of his committees there. As you well know there is a most extraordinary pro-British sentiment in such quarters. Scientifically and technically they are at war as much as we are - and one has to remind oneself continually that they are still a neutral country. Sir Frederick Banting and Colonel Gorssline, director general of Medical Services, accompanied me the last time I went down and they were able to make valuable contacts in the medical and aviation-medicine research groups. As a result of their visit, a delegation of the most prominent us scientists and service medical officers interested in aviation medicine flew to Toronto last week-end for the purpose of inspecting the work going on there and they were much impressed with what Banting and his group have done.

The work of the council is expanding day by day and new problems are flowing in continually. I have brought together in informal association Dr D.C. Rose and his group, Mr R.H. Field, Dr Archibald from [George] Laurence's laboratory, and Mr Klein from Parkin's laboratory to serve as special investigators and designers for problems suggested by Lt-Col Morrison. At the present time they are all actively working on such things as chronographs, gun sights, predictors, etc.

Parkin's laboratory is now engaged on the design of Anson wings in moulded plywood. The wind tunnel at the new annex has been held up temporarily due to the delay in obtaining the structural-steel tunnel. When we called for tenders we did not get a single bid from any firm and we had to negotiate through the Department of Munitions and Supply to have the Dominion Bridge Company instructed to take the work on. The industrial facilities of Canada are being pretty well taxed at the present time and we will soon reach the point when priorities and government instructions will have to be given for most material which has to be made in industries concerned with war work.

The work in chemistry and chemical warfare has developed rapidly and the visit of Mr Davies, superintendent of Porton, has been fruitful. I