GOVERNMENT COMMUNICATIONS HEADQUARTERS,

NER 7500 ExT

Your Reference

X/569/1934 G.C.H.Q. REFERENCE.

Room No. 20806 114, LIME GROVE,

EASTCOTE,

RUISLIP, MIDDX.

Declassified by ASD - 2024 National security and/or personal information removed

18th January, 1952.

Dear Mr. Thompson,

I am glad indeed to add my own word to the letter which D.D. has Your idea of sending one or two engineers here, seems first rate and calculated to help both you and us to a very great extent; and your man (or men) are assured of a warm welcome here.

In using the word 'engineer' we refer to the sort of man who has begun by taking an honours course in physics or electrical engineering, has graduated with a first or good second class degree, and has developed a keen interest in circuit design. We would hope that he has already had some experience of research and development in relevant fields. Knowledge or interest in electronic computing machines, digital or analogue, other applications of high speed pulse techniques and all forms of data recording and handling (magnetic, electrostatic, ultrasonic) are examples of high relevance.

As to the part of our development programme on which we would use your engineer(s) I have very much in mind the importance of the Hagelin problem to you. As you know we use Colossus to give a variety of aids on Hagelin and it is our intention to develop a much improved Colossus. It would be much faster, more versatile and a very general cryptanalytic computer. Its field of application would be much wider than that of our present machine and you could feel assured that it would tackle many problems which have not yet even been thought of. We do not forget, either, that you have a keen interest in code and subtractor problems and we should hope to display our techniques for dealing with these also. Indeed we intend that much of the engineering put into the new Colossus shall be applicable to subtractor problems. There is no need at this stage to discuss the secondary problems of supporting staff, construction and maintenance, programming and operating staff and procedures. There will undoubtedly be much to say on all these and we shall be glad to help.

When I discussed this with my chief engineer (Mr. S. D. Harper) he spontaneously remarked that D. Overheu who is just completing two years training at the Post Office Research Station would be the right man for this Overheu is one of a party sent to this country by the Rocket Range authorities and worked for Harper for about twelve months at Dollis Hill. I know how hard it is to get a good man out of another organisation, but any good man is worth knowing of and there is a ready made introduction at this end. I mention his name for you to do what you think best.

With all best wishes,

Yours sincerely,

1/18

Jeny Magan

D.S.B. Melbourne.

