C/- Government Communications Headquarters. Oakley, Declassified by ASD - 2024 National security and/or personal Priors Road, information removed. Cheltenham, Glos. Ref No: MIO/127/55 27th July 1955 e Director, fence Signals Branch, BOURNE For the Director I enclose three plan-drawings of the suggested COLOROB layout. I got these from the Australians in X Division, with X23°s permission, I gather that John Strath took copies home with him, but I thought that you might like copies for yourself. I am trying to persuade Tony to write you about the problems of COLOROB. I think (as he and the other Australians do) that the plugboard business has got to be faced up to quickly. The time taken to switch from one programme to another is so fantastic in relation to the time taken to run an individual programme through the machine, that it seems that a plugboard should be incorporated into the DSB machine (GCHQ's machine was designed without a plugboard because they will not need to do as much switching as we will). The big snag is, of course, that the incorporation of a plugboard at this stage will necessarily mean re-design to some extent, plus a probable delay in delivery and almost certainly, a higher cost. I feel therefore that

we should lay the situation bare. There is to be a meeting herelin GCHQ very soon - but I think that it would you be invaluable for you to have the background from Tony, who after all knows what he wants to do on the machine.

MLO

A = 5 1 1/8 These should permit his to

get on with some more detailed

planning for the accommodation

of Cacarao. Would like to

have a session on This soon.