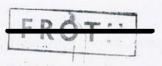
go on using their existing

\*MTC/53/1 Appendix B, Annexure 3, paragraph 12.

machines. The firm of Hagelin has recently launched a new version of their

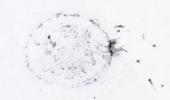
machine which if really well used is likely to be unbreakable.

This of course presupposes that the



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

- 2 -



acquire a Colorob, they may expect to effect some improvements on the present service of But they must not hope for too much too quickly.

- (a) I gather from MIO here that the time-lag in production is a source of dissatisfaction to Australian Customers. So far as I can make out there are three causes of this long delay:
- (i) No start can be made on any until either a depth is given or a long message sent. Here we can do nothing but wait, often for a month or so out of three months' life of a machine.
- (ii) When the favourable message or messages have been intercepted they must be delivered to the cryptanalysts which may take several weeks. This is a quite separate problem involving such matters as cable scrutiny

(iii) It may take

to solve a new machine.

machines on

up as no good. The only remedy seems to be more and better linguists in the Crypt section.

Having a Colorob will make no difference to any of these causes of delay, but not having one would lead to considerable additional delay in setting messages.

- although given high priority to have just about all the they could possibly ask for. We think it likely that a good crypt mathematician taking a fresh look at the whole problem would see a new approach, since there seems to be enough data (in some cases at least) to make solution possible. We would go so far as to say seems to be getting poorish value for the gigantic machine effort expended, and it would not surprise us unduly if one Colorob really expertly used might not, in some respects, do better.
- (6) If DSB orders a Colorob now they should also set about recruiting at least one good Scientific Officer with a first-class Honours degree in mathematics, to be trained at GCHQ as a "programmer". This is additional to the training of a machine cryptanalyst<sup>XX</sup>, and I must warn you that we cannot undertake to provide a scientist with the right /experience

It does not look very likely would be able to contribute very much by way of "loaning to work as integrated members of DSB" (MTC/53/1, Appendix B, Annexure 3, paragraph 12).

I hear Tony Eastway has been selected for this; we shall of course be very glad to see him here again.





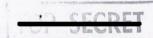
Tel.: CHELTENHAM 55321.

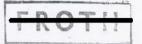
eclassified by ASD - 2024

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

## GOVERNMENT COMMUNICATIONS HEADQUARTERS, OAKLEY, CHELTENHAM, GLOS.

DGC/5143.





experience from GCHQ, as suggested in your letter; we have not nearly enough people of this kind to meet our own needs. This scientist should be in training here while the DSB Colorob is being built and should go with the machine to Australia.

(7) Finally we would like to say once again it is the cadre of expert machine staff that makes all the difference. It would be impossible to build up such a cadre without at least one rapid analytic machine but all the machinesin the world would be no good without trained bodies to run them.

Your ever Tolung Holm

P.S. The latert news of is outle salistating.

He has not yet been moved from bycombe horpital, I pake can't be moved for bycombe horpital, I pake can't be horber jaw.

moved till efter Christmas of they howen't yet been able to set the horber jaw.

Severn has just made him a prantifier of all is well with he of a mile little boy.

Severn has just made him a prantifier of all is well with heaven he is alide, in

the could do with a like of sheetly how. Thank heaven he is alide, in

J.O.H. Burrough, Esq., Senior United Kingdom Officer,

D.S.B.

PPS. Im a fair has his teller chits has been me some time to compile with reach for Xmas. But do tall Rolph, & his Florified & Reachy & all the 35B tolks hat I was writing hem a hapley Christian & real year.

