

## THE NEED FOR SPIDERS

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As a result of the experience gained during the last six months we have now agreed on the specification of a standard Spider which can be adapted to deal with the various problems with which we are faced. As our chances of future success depend on the Spider we must clearly decide how many machines we require and make the necessary arrangements for their production. In the past it has been possible to break Red traffic without the help of the Spider, and more recently it has been possible to reduce the number of wheel orders to be tried on the Spider. But the Germans have improved their discipline, and in future we must expect to have to use the Spider on all sixty wheel orders each day.

To do this we shall need two Spiders for each colour that we break regularly, and more Spiders to deal with the more difficult colours. The Naval problem requires more time and is perhaps more important because there are no landlines to take the most secret traffic. I believe that the Naval traffic could be broken day after day if about thirty-five Spiders were available. It appears then that, if we are to be on top of all the enigma traffic, we need between forty and fifty Spiders.

In view of the fact that such a complicated machine needs a periodic overhaul it would be wiser to aim at between fifty and sixty.

The present situation is deplorable. Our two Spiders are working continuously and do not get the constant attention that they need. They cannot even deal with the Red and Brown, so the Naval work is at a standstill. We can make no progress with the Green, which I believe could be broken, and there is no hope of trying Violet, which is almost certainly breakable, or the other colours, which are by no means hopeless. Two more Spiders are due in the middle of December and two more in March. Only a small section of the British Tabulating Co.'s Staff are working on these Spiders, and the company's works are booked up with other war work for a long time ahead.

It is clear that immediate steps must be taken to switch the entire Staff of Tab. on to Spider production, and that Tab. should be warned that fifty to sixty Spiders are urgently wanted. Whatever is done there seems little chance that production on this scale could produce results before the middle of next Summer, so I suggest that we should ask Tab. to rush through a limited number, say six or eight, by May and to complete the rest as soon as possible.