London
Sept 30th

Dear Edgar;

The following details are in amplification of my original regarding delay in reaching a final decision re radio aids.

We paid a visit to Berlin last week and had a good go over the Lorenz "blind" landing system and were very impressed with it for low ceiling approach work.

However I do not think the art has yet reached the stage where "hooded" landings are a regular possibility.

After thinking over the system we came to the conclusion that the scheme could be extended and employed as a navigation aid in a similar manner to the U.S.A. radio range outfit.

After a days hard thinking we went back to the Lorenz people and placed our problem before them.

They agreed that our conclusions were correct and in fact they had

placed a proposal before the Swedish government for an air route organization working on those lines.

The advantages were so great that we felt that the whole matter required very considerable & detailed consideration and have arranged for the Loran people to go into the matter in detail. Their engineers are not working on the job and are to give us the necessary information as soon as available.

Broadly speaking the advantages are:—

1 Freedom ~~from~~ from atmospheric interference.
2 Absence of multiple courses
3 Provision of blind or low ceiling landing aids.
4 ~~Floor~~ All advantages of U.S.A. radio range and none of its disadvantages.
5 Economy & flexibility — ~~the last~~ due to very simple & cheap aerial system employed.

The disadvantages ~~the~~ that are known are:—

1 Limited range — say approx. 100 miles
2 Greater attention necessary to shielding

of aircraft ignition & electrical gear.
Of these disadvantages the range is no more than could be obtained with the U.S.A. system and is sufficient for the majority of cases. Regarding the second this is simply a matter of maintenance and is neither costly nor impossible — neither is it impracticable. x

Regarding the advantages 1/ is a well known fact, 2/ is borne out by the installation at Zurich where no trouble is experienced and is due to the fact that ultra high frequencies are absorbed to a greater degree than lower frequencies and there is thus less reflection. The other advantages are just facts which examination of the system has disclosed.

We are still working on high frequency D/F for Darwin and hope to get this finalized in the next two weeks but it is very hard to obtain information in short time as your experience here must have proved x

I think that covers the present position & am hoping that an early decision can be reached as I am getting very fed up with the continual hunting for the truth.

Winter is closing in ~~sabo~~ rapidly & I long to get on my way back home.

Regards to Dave & Mc, Stan & Co.

Yours

P S Wiggins