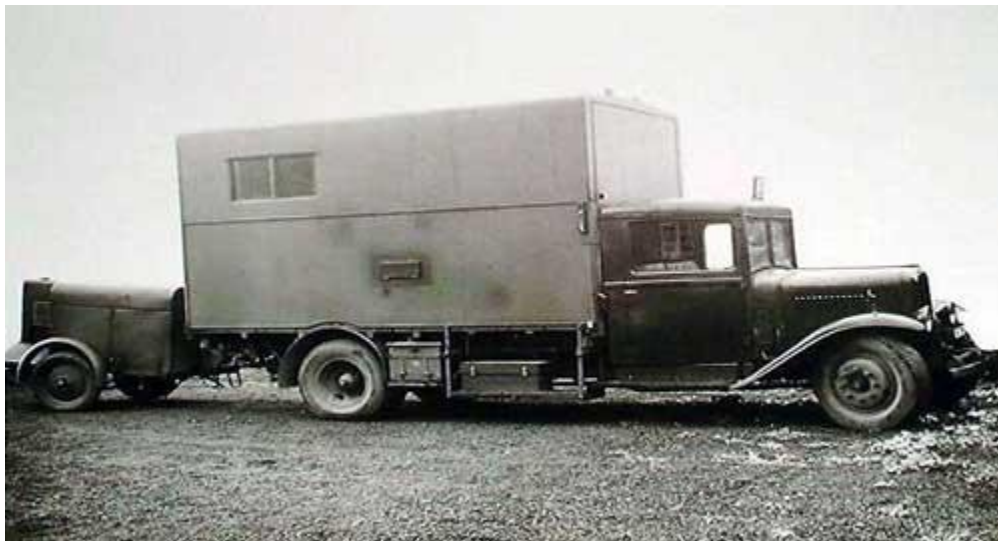


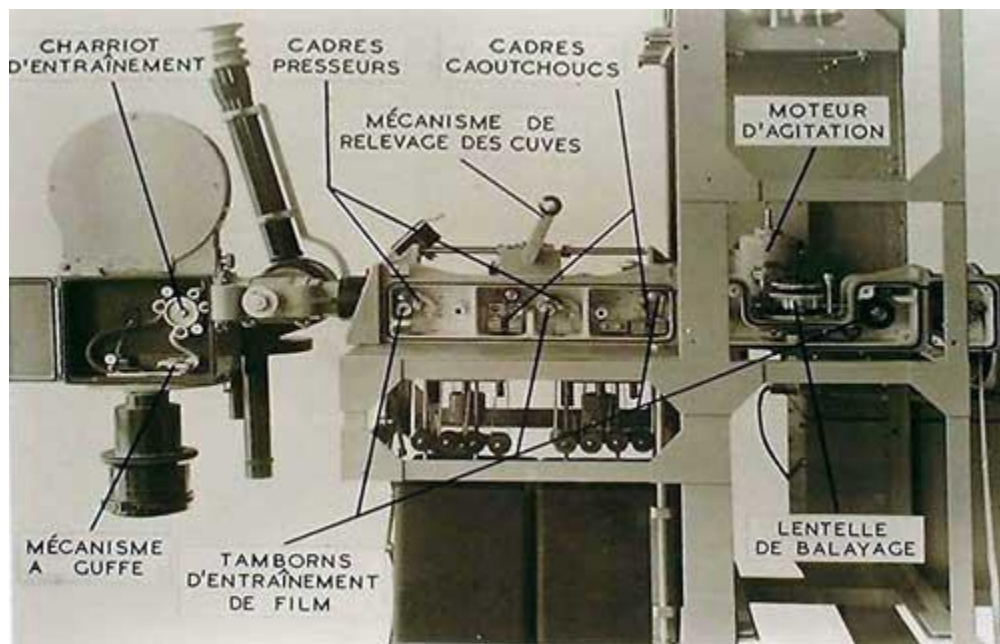
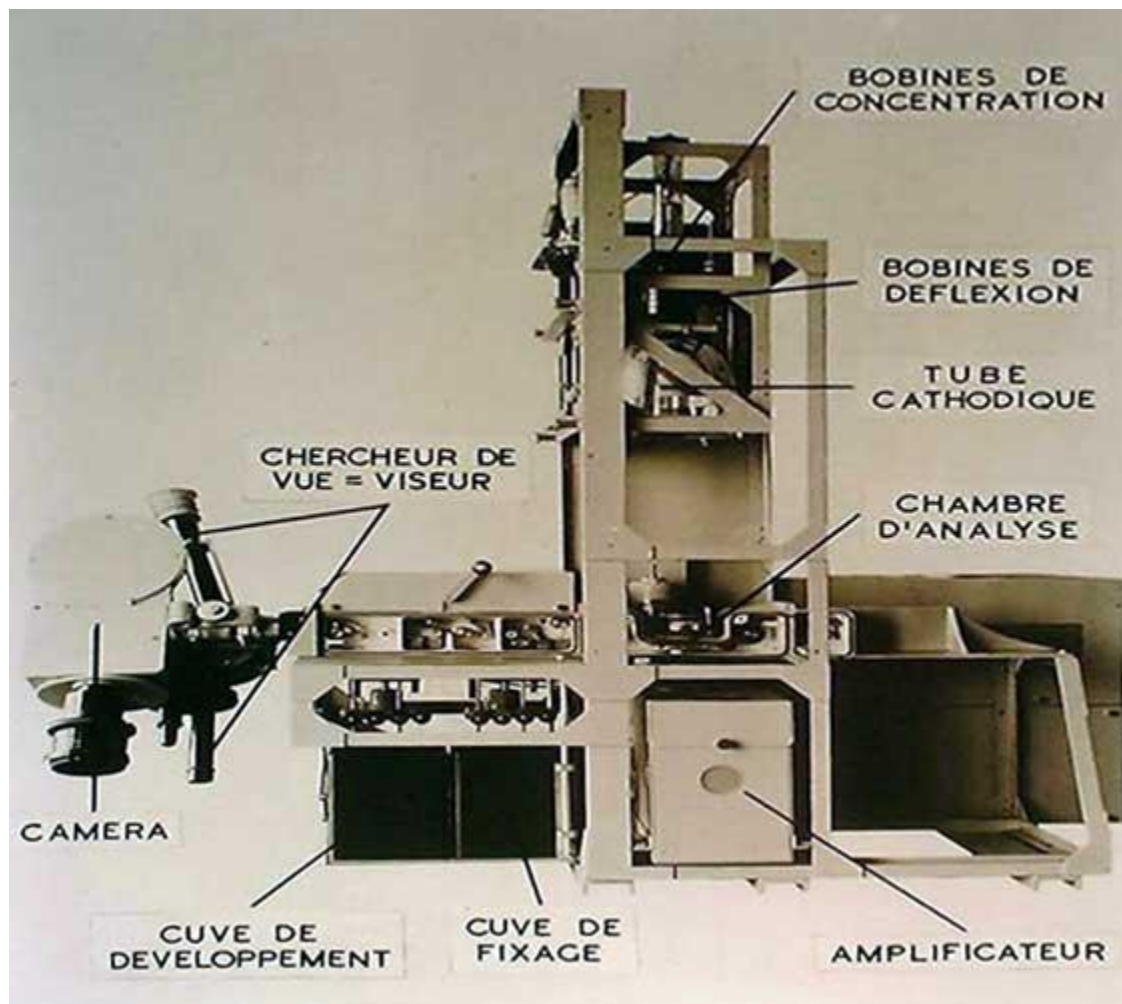
21st July 1939.

BAIRD TELEVISION LIMITED.AIRCRAFT TO GROUND TELEVISION EQUIPMENT.**1.0 GENERAL SUMMARY.**

This method of transmitting television pictures from an aircraft to the ground uses the intermediate film method by means of which a moving picture of the scenery below the aeroplane is taken on a 16 mm film, which is rapidly processed and transmitted by radio to a ground receiving station. The equipment consists of:

<u>In the aeroplane:</u>	Camera and processing unit,
(operated by 2 men)	Scanner and viewing monitor,
	Radio transmitter,
<u>In the van on the</u>	Radio receiver,
<u>ground:</u>	Monitor panel and viewer,
	Large picture reproducer,
	Recorder on film,
	Projector.
<u>Range:</u>	20-25 miles.
<u>Height of aeroplane:</u>	up to 10,000-15,000 feet
	depending on weather conditions.
<u>Weight in aeroplane:</u>	800 lbs at present, redesigning
	to 400 lbs complete for
	subsequent installations.





Performance: The equipment enables the ground unit to see exactly what is being seen from the aeroplane. In the recent acceptance tests, excellent air views of the river and its bridges, even the ripples on its surface, and barges; of railways and moving trains; roads, the white lines down the centre of by-pass roads and tennis courts, moving buses and cars, names on buildings and aeroplanes at rest on aerodromes, were reproduced clearly in spite of the bad weather at the time when the tests were being carried out.

The system adopted has many advantages over other possible systems. These advantages are described below.

Photograph (1) shows a bomber aeroplane which has been equipped with this apparatus. The other photographs showing the actual equipment in the aeroplane are described under separate paragraphs. On Figure (1) the transmitting aerial for the vision signals can be seen below the nose of the aeroplane.

The pictures are received and viewed in a motor van, the power supply being obtained from a trailer towed behind it. Photograph (7) shows the outside of the van.

BAIRD TELEVISION LIMITED.

DESCRIPTION OF AIRCRAFT TO GROUND  
TELEVISION EQUIPMENT

Supplied under contract to

French Air Ministry

\* July, 1939.





