

Bill

Del Mar Engineering Laboratories

TO: Neil Lamont
FROM: W. E. Thornton
SUBJECT: Scope Camera

NO.: M-568

DATE: 30 August 1956

I don't think I have gone over this scope camera business with you that I mentioned yesterday. It is a needed item, the plans for which I completed while at the University and passed on, I believe, to either D. J. or Max Weill. As you are probably aware, there is an acute need for a camera that has sufficient film capacity to operate during search phases, especially during target acquisition and also during attack phases. In addition, with the cramped cockpit space available, there is also a need to get the scope camera out of the cockpit. The scheme I have for accomplishing this involves a standard flight research model 3, 16mm camera that is capable of being pulsed. The critical part of this operation is during sweep. In order to conserve film, it will be necessary to reduce the total number of sweeps recorded. This could be reduced to the third or fourth sweep without any great loss of information. As far as you are concerned, the salient features of this installation are that it is a small (less than 1/2 cubic foot), self-contained recorder that will operate outside of the cockpit and will record all phases of radar operation. Its connections to the plane's radar and power supply will be held to a minimum. Its operation will be completely automatic. Film of course will be 16 mm compatible with present facilities of the Air Force for handling this film. The unique feature of this unit will be a minimum of modification to the fire control system, the camera being operated automatically from the sweep information supplied to the scope. This thing has a lot of technical detail which I won't bother to go into at the present moment and since I don't have time to draw them up in any detail at the moment, I can goggle with you later about these features. I think the important part is that it seems to be several ideas that might have proprietary rights of value.

Bill Thornton

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