

12 October 1967

MEMORANDUM FOR: Chief, Air Systems Division, OEL

25X1 SUBJECT : [ ] Ideas on Lightning Discharges

Attached herewith is [ ] letter, 21 September 1967, and booklet re lightning discharges. If you are interested perhaps one of your people could talk to [ ] about it during a routine visit at LAC. If you are not interested perhaps you may know of someone who is.

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[ ]  
Deputy for  
Research and Development  
Special Activities

25X1

Attachment:  
As Stated

Distribution:

- 1 - [ ]
- 1 - D/R&D/OSA
- 1 - D/R&D/OSA (Chrono)

25X1 [ ] D/R&D/OSA (12 Oct 67)

STAT To:

[Redacted]

Sept. 21, 1967

STAT

Gentlemen:

I described to [Redacted] some of the aspects of an idea concerning the influencing of lightning discharges to produce effects favorable to our purposes. In the main, the central idea is to provide artificial leaders to cause discharges to occur when and where we desire them. This can be done by inserting very long, thin wires (conductors) into electrically charged regions to aid and guide the discharging process. As I visualize the situation, the wires could be a few thousandths of an inch in diameter and one or more (say five) miles long. They could be dropped from aircraft or lofted by rockets for insertion into storms. Once into the desired region, they could be unrolled from a reel by means of a drogue.

This method is possible because the main discharge will occur through ionized air surrounding the wire. Because of the very high conductivity of well ionized air, even compared to metals, the Lightning Bug will serve only to start and direct the discharge and will not be important once it is under way. Therefore the only limitation on its diameter is the strength required. Even if it breaks in a few places it still should do its job.

This plan has several advantages:

- a) A relatively cheap barrage may be laid down.
- b) De-energizing a storm can result in much better weather conditions at a time when it is most to our advantage.
- c) There should be little or no evidence left of what caused the lightning storm.

I recommend careful consideration and some flight testing to determine the feasibility of this idea. I have prepared an application for patents to cover commercial aspects of weather moderation.

I wish you and our Armed Forces to have free use of this idea - if it proves practical, as I think it will.

Yours very truly,

[Handwritten signature and large redacted area]

STAT

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[Redacted]

Attach.