

~~CONFIDENTIAL~~
~~SECRET~~

10 JUN 1960 OC 9361

ENG-M60 495

Director of Logistics

Director of Communications

Please Refer To
Engineering Staff

Request for CFFF Task-Type Contract Negotiation

1. The Office of Communications is sponsoring the development of an automatic agent set, AS-3, and has requirements for the design and development of two AC power supplies for this equipment designated AP-3 and PS-10.

2. Proposals for these equipments, in accordance with Specification No. 60-A-1116-A, were requested from three contractors. One contractor did not elect to submit a proposal and of the two contractors who submitted proposals, [redacted] has been chosen. The [redacted] proposal has been reviewed by our Engineering Staff and is considered acceptable as amended by Attachment A. These amendments have been discussed with [redacted] and they are acceptable to the contractor. 50X1

3. Accordingly, it is requested that a contract be negotiated with [redacted] in accordance with their proposal, as amended by Attachment A, and Specification No. 60-A-1116-A. For warded for this purpose is Requisition No. MSB 60-625 indicating that the allotment to be charged for this purpose is 0179-0010-0000. Funds in the amount of \$10,430.00 have been encumbered for this program. The AP-3 and PS-10 equipments, and reports pertaining thereto, are UNCLASSIFIED; however, the association of the equipment and the contract with the Agency is classified SECRET. The project engineer for this program is [redacted]. 50X1

DOC 6 REV DATE 12 MAR 1960 BY 064540
ORIG COMP 033 OPI 56 TYPE 02
ORIG CLASS 5 PAGES 2 REV CLASS C
JUST 22 NEXT REV 2010 AUTH: MR 18-2

[redacted] 50X1

Attachments: (INCOMPLETE)

- 1. Attachment A
- 2. Contractor's letter and cost quotation dated 15 April 1960
- 3. Contractor's letter and cost quotation dated 16 May 1960
- 4. Specification No. 60-A-1116-A
- 5. Requisition No. MSB 60-625

Distribution:

- Orig. + 1 - Addressee w/attach.
- 1 - R+D Subject File w/attach. 1
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- 1 - MSB w/attach. 1
- 1 - OC-E Chrono w/attach. 1

Coordination:

[redacted] 50X1
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ATTACHMENT A

Amendment to



Proposal dated 16 May 1960

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This proposal should be changed to read:

We propose that the power supplies be built with two outputs, as follows:

Output A: +12 volts, 7 Amps max., unregulated. With no output load, the output voltage will be approximately +17 volts. When a 7 amp. load is drawn, the voltage will be approximately +12 volts. There will be no regulation against input line voltage changes. Ripple will be approximately 10% rms at full load when a 60 cps input voltage is used and about 1.5% rms at full load when a 400 cps input voltage is used.

Output B: +12 volts, 2 amps. max., regulated against line and load changes. For +10% input line voltage changes the output will change no more than +2%. For load changes of no load to full 2 amp. load, the output voltage will change no more than 3%. Ripple at full load will be about 1% rms.

This output arrangement is proposed because of the evident requirement for additional regulated current for sensitive circuit elements, such as tube filaments, which could possibly be damaged by higher voltage at the instant of connection. It should be emphasized that the unregulated output is at +17 volts only when there is no load at all on it. The instant the 7 ampere load is switched on, the voltage will drop to the 12 volt level. The second deviation Invar requests is the limiting of the maximum charging current for battery charging to 4 amperes instead of 8 amperes. This current is the maximum which the supply can deliver continuously. The higher currents obtainable in the other mode of operation are possible only because of the 50% duty cycle.

The proposed technical approach is very similar to that given in our letter proposal of 15 April 1960, except that the Zener diode is used to provide 2 amperes of regulated current instead of 1 ampere. We feel that this amount of regulated current can be delivered within the given package size for the AP-3. The proposed block diagram is the same as given in our previous proposal. We feel that this approach will satisfy all the requirements of the specification, with the deviations requested above.