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To:

CA/D. K. Slayton

Date: 12-15-71

☐ Action
☐ Reply
☐ Info

☐ Report

Deke:

I find this an interesting point of view from one of the medical community.

As you know, both Gilruth and myself have long thought this to be an important aspect of the Skylab medical experiments. I believe that all a men are a very important part of the statistics to be obtained. Further, nurses learn to draw blood in very short order by many easy-to-learn techniques.

I think the MR&OD and their PI's on this experiment will be very cognizant of the safety aspects of this task and will certainly consider Dr. Kerwin's inputs, but in the end are the responsible agents for the protocol to be used.

Chris Kraft

cc:

KA/Kleinknecht DA/Johnston

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CA

DEC 1 1971

MEMORANDUM

TO:

KA/Manager, Skylab Program

DA/Director of Medical Research and Operations

FROM:

CA/Director of Flight Crew Operations

SUBJECT: Inflight Bloodletting

The enclosed memorandum from Joe Kerwin is self-explanatory and outlines our Directorate's concerns on the above subject. If anyone disagrees with our recommendations, we should convene a meeting to discuss the subject.

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Donald K. Slayton

Enclosure

cc:

CB

CA/DKSlayton: sms:11/30/71:2281



REPLY TO ATTN OF: CB

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

MANNED SPACECRAFT CENTER HOUSTON, TEXAS 77058

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November 18, 1971CA-MOO

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MEMORANDUM

TO:

CA/Director of Flight Crew Operations

FROM:

CB/Joseph P. Kerwin

SUBJECT: Inflight Bloodletting

The Medical Research and Operations Directorate is getting pretty serious about this program, and are getting ready to let a contract for the blood drawing machinery plus the centrifuge, so we're going to need some guidance on how far we can go along with the program.

Our reservations, as I see them, include the following:

- a. Inflight safety:
- 1. The possibility that a not-too-experienced blood drawer can foul up his buddy's arm by repeated attempts, or induce infections by a mistake in sterile technique.
 - 2. The mechanical safety of a 3500-rpm centrifuge.
- b. Inflight time for the various procedures which is getting pretty scarce.
- c. Training time. This depends largely on the priority assigned to the job, because if it's made a mandatory objective we've got to train until we're sure we can get the blood, no matter how long it takes.

Therefore, assuming you decide to let us go ahead, I'd recommend the following:

- a. Require blood from only two crewmen, meaning only one crewman has to train.
- Require only three sticks per mission early, middle and late. That'll get 90 per cent plus of the doctor's objectives.
- c. Define the samples as a secondary objective, with the clear understanding that if the blood doesn't come on the first stick, we quit trying.

Joseph P. Kerwin

cc: CA/T. U. McElmurry

CB/JPKerwin:jlf:11/18/71:2411