

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM

Col W:

Dr. Floyd
agrees. He said
he doesn't have to
wear his NRO
hat to turn
them down. We
have lots for them
to do in present
budget, and we
can't expand that.

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WASHINGTON, D.C.

THE NRO STAFF

27 July 1967

MEMORANDUM FOR DR. ~~FLAX~~ *AHT*

SUBJECT: RAND and the NRO

PROBLEM:

How should RAND help the NRO?

BACKGROUND:

Bruno Augenstein joined RAND recently as Vice President for Research. He has expressed an interest in developing an organized capability at RAND to work in the NRO area of interest. He has made overtures to Lew Allen, at SAFSP, and to us, through Merton Davies.

There are several RAND people who have one or more BYEMAN clearances: Henry Rowen, Bruno Augenstein, Amrom Katz, Merton Davies, Charles Heffern, and Bob Perry. Rowen was cleared recently to (1) assist us in controlling periodic ventures by his uncleared staff into our province (he has been most cooperative) and (2) help him understand our use of his cleared people as consultants, from time to time. Amrom Katz and Merton Davies have both served as consultants to SAFSP, with more activity in 1961-1964 than recently. Charles Heffern is in residence with AFNIN for a year. Bob Perry is the NRO Historian. Bruno just joined RAND.

PRESENT STATUS:

Merton Davies plans to see you tomorrow to discuss a study proposal (see Attachment A), "Mapping the World with Overhead Photography". He is actually somewhat lukewarm to this proposal but has prepared it in response to Bruno Augenstein's direction. Davies will

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be able to give more detail, but not much more, than appears in the attachment.

ALTERNATIVES:

1. Approve an organized capability to assist the NRO at RAND.

a. Advantages.

(1) RAND is a good quick response source of skilled talent for military studies.

(2) Bruno Augenstein would manage any assignment with enthusiasm and keen personal interest.

(3) The BYEMAN security system would offer some protection against the usual RAND compulsion to publish frequently and widely.

b. Disadvantages.

(1) The leader of an NRO-oriented RAND activity will press for a steadily growing staff. New BYEMAN/TKH clearances will be required.

(2) We know from experience that the leader will also press for a BYEMAN/TKH storage vault.

(3) Having set up a black facility and a cleared payroll, RAND will become one more hungry mouth to feed.

(4) We actually have very few studies which we could conscientiously give to RAND.

(5) Other DOD organizations, like the Air Force and DDR&E, would be tempted to set up their own BYEMAN-type studies with RAND in order to "help" the NRO.

2. Advise RAND that we are very pleased with the present arrangement and want to continue it

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a. Advantages.

(1) The present arrangement - which gives us easy access to consultative services - is indeed excellent.

(2) The present arrangement controls and regulates RAND's activity in BYEMAN-type studies.

(3) The present arrangement is what SAFSP desires to retain.

b. Disadvantages.

(1) None as far as I can see.

RECOMMENDATION:

I recommend that you advise Merton Davies that the present Rowen-Augenstein-Katz-Davies -Heffern-Perry team and arrangement is optimal to our needs. You may wish to consider placing Bruno Augenstein on a study group-or giving him a personal consultative assignment in the near future. Over the long run, there should also be a role for him on the FIAB or the Land Panel.

Paul E. Worthman
PAUL E. WORTHMAN
Colonel, USAF

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Study Proposal--Draft

MAPPING THE WORLD WITH OVERHEAD PHOTOGRAPHY

This study will examine the technical problem of taking photographs from aircraft and satellites and the political problem of negotiating with foreign nations for the production of maps of their countries. Various methods of exploiting the photographs will be examined. The photographs might be given or sold to the country involved for use in producing their own maps, or there might be joint participation in the production of the maps, or the U.S. might produce the maps and sell the end product to the foreign country.

Less than one-half of the world is adequately mapped. The less-developed nations are the worst off due to poor transportation and communication. Photography and maps will be needed to plan and develop new transportation systems and will be useful in the search for and exploitation of natural resources. The photographs will also be used to update charts of regions which have already been mapped.

The technical portion of the study will discuss cameras, aircraft and satellite possibilities, various aircraft mission profiles, orbits and satellite operations, and costs associated with the collection of the photographs. There will be a study of various maps and cartographic products, their method of production, and resulting costs. Another section will deal with past bilateral mapping agreements and suggestions for potential future arrangements for the production of maps from overhead photography.