

October 23, 1965

MEMORANDUM FOR DR. HAROLD BROWN

SUBJECT: HOL Inspection Proposal

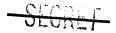
Attached for your coordination or comment is a response to Ambassador Thompson's memorandum of 6 October on the above subject which you addressed in your memorandum of 15 October to John McNaughton.

You will note that our proposed response casts doubt on the urgency, and even the need, for considering a pre-launch inspection proposal as a contingency to counter a possible Soviet propaganda attack in the UN, or elsewhere, on the MOL program. It also makes the generally held point within DoD that the national security implications must be more adequately treated in the paper before a determination can be made on the advisability of making an offer to the Soviets.

I would like to get John McNaughton's signature on a letter to Thompson today.

Alvin Friedman Deputy

Attachment as stated





## ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D. C. 20301

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23 Oct 65

INTERNATIONAL SICURITY AFFAIRS

The Honorable Llewellyn E. Thompson Acting Deputy Under Secretary of State The State Department Washington, D. C.

Dear Tommy:

We have been reviewing the State Department staff paper describing a possible mutual U. S. - Soviet pre-launch inspection program involving the MOL and perhaps other space vehicles that you forwarded with your memorandum of October 6, 1965.

In our judgment, the proposal may perhaps have merit in principle, but the State paper appears only to scratch the surface of the many issues and considerations that would have to be taken into account before any pre-launch inspection program could be proffered by the United States that goes beyond what we have already proposed to the ENDC. Moreover, and equally important, we question whether there exists at this time a pressing need to move urgently toward formulating a more specific pre-launch inspection proposal relating to the MOL. The risk appears small that the Soviets will use the MOL program to raise seriously the bombs-in-orbit issue in the United Nations -- the real contingency toward which the State paper is directed.

Taking this latter point first, because it bears directly on how high a priority we should attach to the launch inspection proposal, it would appear that recent events suggest that there is little likelihood of controvers, with the Soviets. As you know, the United Nations Outer Space Committee meeting completed its sessions in New York on October 8 without public airing of the MOL program by the Soviets. Nor has the program been raised in any significant way

HANDLE VIA TALENT-KEYHOLE CONTROL SYSTEM ONLY at other United Nations sessions. Finally, I understand that outer space is the last item on the General Assembly agenda, and that it will be well into December and perhaps even January before the subject is discussed.

We doubt that the Soviets will make a public issue of MOL apart from the UN forum. The fact is that Soviet public attacks on our space activities have been practically non-existent since 1963. Some of us suspect that these attacks stopped when U. S. and Soviet space programs began largely to parallel each other.

Passing to the merits of the proposal the State paper advances, it appears to us that the paper is deficient in its treatment of the possible types of pre-launch inspection of both manned and unmanned satellites, and the impact that various levels of inspection might have on U. S. national security interests. The paper treats quite fully the case for the proposal as a means of gaining a psychological or propaganda advantage for the U. S., particularly if the Soviets rejected an offer after they had challenged the MOL program in the UN forum. However, since our entire satellite observation program might become involved if the Soviets were to accept the offer, we should be more fully aware of the security ramifications of the prelaunch inspection proposal. As an example only - by no means conclusive - of the type of analysis which should be made, there is attached a very preliminary statement on the possible technical implications, and resulting intelligence and security implications, of implementing the proposal as stated in the State paper; i.e., . . . "to permit inspection adequate to demonstrate that there were no nuclear weapons aboard any manned (or, perhaps, 'any large' or even 'any') space launchings."

On balance, the inspection proposal would seem to be too high a card to play in any propaganda game the Soviets might initiate over the MOL without our first giving the matter further study.

I accordingly recommend that the proposal be spelled out in greater detail and that it be more fully analyzed in order to determine the advisability of making an offer to the Soviets in the UN context.

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I also recommend that we consider other, and less potentially sensitive, ways to cope with any Soviet propaganda attack on MOL. For example, if it develops that the Soviets are indeed worried about our space programs being pointed in the direction of a bomb-carrying capability (notwithstanding repeated assurances by the President and other high U. S. officials) it would seem appropriate to have frank discussions with them, on a technical level, concerning the inadvisability and relative high cost of doing bombing from space.

I should note here that Harold Brown has responded to the State paper with the view that "our primary concern in all these discussions is the preservation of our national security; and, in this case, I rate the value to national security of preserving our reconnaissance capability above that of public and official opinion in other countries." The Joint Chiefs of Staff have expressed similar concern that "the impact on our national security program is not adequately treated" in the proposal.

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PRELIMINARY TECHNICAL COMMENT ON STATE DEPARTMENT
PAPER ENTITLED "AN OFFER OF INSPECTION OF MOL"

The State Department paper rests in large measure on the following proposition:

"The U. S. could meet Soviet allegations that we are pursuing a weapons-in-space program by publicly offering, on a basis of reciprocity, to permit inspection adequate to demonstrate that there were no nuclear weapons aboard any manned (or perhaps, 'any large: or even 'any') space launchings."

Two portions of this proposition that bear upon one another are of particular concern. The first is "inspection adequate to demonstrate that there were no nuclear weapons aboard." The second is the suggestion that "any large" or "any" (meaning all) space launchings could be involved in the proposal.

l. The United States has on record with the ENDC a proposal for pre-launch inspection of space vehicles as part of our general proposal on the freeze of nuclear delivery vehicles. Specifically, the proposal before the ENDC states:

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"Observers would witness announced missile and space firings to ensure that the proper types and numbers of vehicles were being launched. It is our view that pre-launch inspection should consist of visual observation of the gross characteristics of the vehicles being launched."

This proposal appears to assume that observers could detect the presence or absence of a nuclear weapon merely by visual observation of the gross characteristics of the vehicle - an observation that could be made some hundreds of feet away from the vehicle. Unfortunately, this is not the case. Currently available or planned devices for the on-ground detection of nuclear weapons are useful only within a few feet or even inches of the suspected component itself. Accordingly, internal access to the components of a particular system might well be required. Even within these seemingly appropriate bounds, however, the presence or absence of a nuclear weapon could not be determined with a high degree of certainty. For example, a recorded emission from uranium or plutonium would not establish conclusively that a weapon (or peaceful power-supplying reactor) is present, although it would, of course, raise enough suspicion to require further inquiry.

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It is possible - and perhaps likely - that unrestricted physical access to individual components of the launching vehicle would become an element of any realistic program of pre-launch inspection. Only in this way could there be reasonable assurance that the cover or shielding of any component is not being used to evade the weapons-in-space ban. In this situation, again, the suspected components must be pulsed in such a manner that emissions from individual components may be recorded and measured. While the radiation that might accompany such activity is not particularly harmful to the human body, its level is sufficient to render the ancillary solid-state componentry in any system of this type completely inoperable. Consequently, it is highly unlikely that any such scheme would be accepted by either party to an inspection agreement.

2. The requirement, then, for unrestricted, internal access to a vehicle, makes the inspection scenario considerably more difficult and raises the second concern -- that associated with the portion of State's proposition which would provide an inspection "aboard any manned (or, perhaps, 'any large'; or even 'any') space launches."

In the manned category there is, of course, MOL. Uninhibited access to a MOL vehicle would reveal the detailed configuration of any military subsystem which might be on board, permitting a trained

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observer to deduce characteristics and capabilities in a comprehensive manner.

In the "large" unmanned category, unrestricted internal access would reveal completely the details of the system, subsystems, and components. In an Attack Alarm Satellite, for example, the IR sensing devices; in a Nuclear Detection Satellite -- the radiation sensing devices; in an Inspector Satellite -- the terminal sensing (optical or non-cooperative radar) devices; in an observation system -- the details of the optics.

In the "any" category -- internal access would again reveal highly significant payload details and would lead inevitably to a compromise of our space reconnaissance capability. Such revelations would enable the Soviets to develop countless devices for "spoofing" or taking counteraction against our systems, for camouflaging objectives, and for detecting U. S. activity in the space environment.

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