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FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
~~#1 report~~	~~further Thoughts on FOBS~~ S 2 pp. open 5·27·08 NLJ 07·171	~~undated~~	~~A~~
~~#2 memo~~	~~Spurgeon Keeny to W. Rostow~~ TS 2 pp. open 5·27·08 NLJ 07·171	~~11/15/67~~	A
~~#2a memo~~	~~Robert Ginsburgh to W. Rostow~~ TS 1 p. open 5·27·08 NLJ 07·171	~~11/8/67~~	A
~~#8~~	~~duplicate of #2a~~ open 5·27·08 NLJ 07·171		
~~#11b memo~~	Winfred E. Berg to E.C. Welsh S 3 pp. open 5·27·08 NLJ 07·171	~~10/17/67~~	A
~~#13b cable~~ ~~#14~~	~~duplicate of #13a and 13b~~ C 3 pp. open 2-22-05	~~10/28/67~~	~~A~~

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To Mr Rostow

From [illegible]

Further Thoughts on FOBS

1. Confidence. In the strategic business "high" confidence usually means better than 97%. On this basis 90% is not high. Furthermore, this is a prediction not a fact. In September, DOD was talking about only 80% confidence. The 13 detections of 18 night launches detected by 440L comes out to only 70%.

2. Operational Readiness. The February readiness date for the interim detection system is a new target date for initial operational capability. As of 1 November we were talking in terms of March. Experience on other weapon systems indicates that there is usually some time lag between an initial operational capability and a dependable capability. Nevertheless, this interim detection system should be fully operational by the summer of 1968 which is probably the earliest time that the Soviets would have an operational FOBS.

3. *Pindown Tactics.* A postulated Soviet tactic would involve launching a FOBS every two minutes for a period of perhaps 35 minutes. By that time, ICBMs would take over the pindown job for the balance of the 10 hours required for Soviet bombers to attack our pindowned missiles. FOBS would also be targeted against some SAC alert forces. Since SAC alert forces require 15 minutes warning and since effective warning times for FOBS would be between 11 and 16 minutes some proportion of the alert forces would be destroyed on the ground. Remaining SAC forces would be struck by ICBMs. SLBMs might also be subjected to pindown. But certainly some SLBMs, some aircraft and some MINUTEMEN (after riding out pindown and aircraft bombing) would be launched. Even though Soviet air and ABM defenses would cause further attrition (perhaps fairly high because of smaller numbers and ragged coordination) the USSR would, of course, not get off scot-free.

4. The Future. The period after mid-1970 is not currently at issue. If our developments work out as planned, we should have an improved detection capability and our missiles should be less vulnerable to pindown.

5. FOBS vs SLBMs vs ICBMs. The use of FOBS rather than SLBMs or ICBMs for pindown is a question of tactics rather than weapons capabilities. Initial use of FOBS would provide less warning and the warning would be more equivocal than ICBMs. FOBS would probably provide more warning time than SLBMs, but (1) sub deployments run the risk of detection days ahead of time and (2) unless the subs had already been pre-positioned, the time between a decision to pre-empt and the launching of an attack might involve several days -- or weeks.

6. Likelihood of Pre-emption. Nevertheless, I agree that under normal conditions, pre-emption out of the blue does not seem especially attractive for the Soviets. However, it does seem to me that FOBS could lower the threshold for a pre-emptive decision. Thus I think that the period between now and mid-1970 could be more dangerous for us because of FOBS.

7. The main point I wish to make, however, was that a Soviet decision to go the FOBS route was not militarily irrational. Had their FOBS development been somewhat faster and our detection development somewhat slower, the danger would have been greater and lasted for a longer time.

ROBERT N. GINSBURGH

MEMORANDUM

THE WHITE HOUSE

~~TOP SECRET~~

November 15, 1967

MEMORANDUM FOR MR. ROSTOW

Subject: Military Significance of Soviet FOBS

I have a number of comments on Bob Ginsburgh's recent memo (attached) concerning the possible military significance of the Soviet FOBS.

To begin with, I have a fundamental difference with his over-all appraisal since I do not agree with his statement that we will not have a high confidence FOBS detection capability until the end of 1969. Our forward-scatter radar system now has very good detection capability over the Soviet missile testing area and some capability in the area of SS-9 deployment. By February, 1968, we are scheduled to have completed the expansion of our present facilities into a fully operational interim system that will give good coverage of all potential FOBS launch sites. While it is difficult to associate numbers with such a system, DDR&E estimates this system will have 90% confidence against single launches and very high confidence against multiple launches. The system will be further augmented by mid-1969 with additional transmitters at the same sites in order to increase frequency diversity for higher reliability. (With regard to reliability, it is interesting to note that the present system has detected 105 out of 109 launches; and, even more significantly, when operated against SS-7 missiles (which would be similar to a FOBS), the system detected on a real time basis 18 out of 20 launches in daytime and 13 out of 18 at night. Moreover, it has been demonstrated that the system can communicate warning to SAC as fast or faster than the existing BMEWS system.)

In view of the above, I don't believe that the FOBS really contributes anything to the "pindown" tactic that could not be achieved with SLBMs or ICBMs. With regard to the pindown tactic itself, I do not believe that the Soviets would possibly conclude that it provided an acceptable concept on which to base a pre-emptive military attack. In the first place, an enemy could never have much confidence about the effectiveness of this tactic against a specific missile since the effects involved

are dependent upon minor details or defects in design. In the second place, since this tactic would require a nuclear detonation every minute or so over the United States, the pindown of US missiles for up to "ten hours," while awaiting the arrival of Soviet bombers, would involve the expenditure of a large portion of the Soviet ICBM force without any direct effect on the US or its military forces. In the meantime, all of SAC, not only alert forces, would be on the way to Soviet targets; POLARIS could conduct a counter force strike; and MINUTEMAN would be undamaged and in a position either to take its chances with the pindown or to wait out the pindown and follow-up aircraft attack.

Looking to the future, I would also note that the vulnerability of the MINUTEMAN force to a possible pindown attack will be reduced with the introduction of various modifications and in particular with the introduction of MINUTEMAN III which will be much less vulnerable during launch to nuclear bursts than MINUTEMAN I and II. In addition, beginning in mid-1970, the 949 infrared strategic surveillance satellite will independently provide high confidence, real time warning of Soviet and Chinese missile launches.

Spurgeon Keeny

Att.:
TS memo dtd 11/8

cc: RNGinsburgh

TOP SECRET

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8 November 1967

MEMORANDUM FOR MR. ROSTOW

SUBJECT: Military Significance of Soviet FOBS

1. In staff meeting the other day, the question was raised as to why the Soviets would be interested in a fractional orbital bomb system in view of what seemed to be its limited military significance.

2. There is one possible use which could make FOBS especially significant. For some time we have been concerned that in a nuclear exchange the Soviets might use tactics to "pin down" our ICBMs and prevent effective retaliation. We have speculated that the most effective way to initiate such an attack would involve the use of about 40 submarine-launched ballistic missiles from subs off our coast. These would initially pin down our ICMBs until the Soviet ICBMs with longer flight times would take over the job. Pindown would continue for about ten hours during which time Soviet bombers could strike our missile sites.

3. Between now and the end of 1969 (when we expect to have a high confidence FOBS detection capability), FOBS could be substituted for SLBMs in the pin down role. Such substitution would (1) decrease detection time, (2) avoid the possibility that submarine deployments might put us on alert, and (3) release SLBMs for other tasks.

ROBERT N. GINSBURGH

cc: Spurgeon Keeny

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SUBJECT FOBS

1. ON 3 NOVEMBER SECRETARY MCNAMARA ANNOUNCED THAT THE SOVIETS APPEAR TO BE DEVELOPING A FRACTIONAL ORBITAL BOMBARDMENT SYSTEM (FOBS). DEFENSE CABLE 1993 (BEING REPEATED TO ALL ADDRESSEES) QUOTES THE SECRETARY'S STATEMENT WHICH PROVIDED DETAILS OF THE

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SYSTEM. TRANSCRIPT OF SECRETARY MCNAMARA'S PRESS CONFERENCE WAS TRANSMITTED IN USIA WIRELESS FILE EUF 135 AND 138 AND EPF 110 AND 114 DATED 3 NOVEMBER 1967. SINCE THE ANNOUNCEMENT THERE HAS BEEN WIDESPREAD PUBLIC INTEREST IN THIS DEVELOPMENT. SOME OF THE MORE FREQUENT QUESTIONS THAT HAVE ARISEN ALONG WITH RELEVANT FACTS AND US VIEWS WHICH MAY BE DRAWN ON WHERE

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RESPONSE IS NECESSARY ARE LISTED BELOW:

A. DOES THE SOVIET FOBS VIOLATE THE SPACE TREATY ?

1. ARTICLE IV OF THE TREATY REQUIRES THAT "STATES PARTIES TO THE TREATY UNDERTAKE NOT TO PLACE IN ORBIT AROUND THE EARTH ANY OBJECTS CARRYING NUCLEAR WEAPONS OR ANY OTHER KINDS OF WEAPONS OF MASS DESTRUCTION, INSTALL SUCH WEAPONS ON CELESTRIAL BODIES OR STATION SUCH WEAPONS IN OUTER SPACE IN ANY OTHER MANNER." THE WORDING OF THIS ARTICLE MAKES IT CLEAR THAT THE TREATY IS CONCERNED WITH "THE CARRYING OF NUCLEAR WEAPONS"; THE TREATY DOES NOT PROHIBIT THE DEVELOPMENT OR EVEN TESTING OF SYSTEMS CAPABLE OF CARRYING NUCLEAR WEAPONS. THERE IS NO EVIDENCE OR REASON TO BELIEVE THAT NUCLEAR WEAPONS ARE ASSOCIATED WITH ANY OF THE SOVIET FOBS TESTS. MOREOVER THE FOBS IS A LAND-BASED SYSTEM WHICH ACTS ESSENTIALLY AS AN INTERCONTINENTAL MISSILE AND DOES NOT GO INTO A COMPLETE ORBIT AROUND THE EARTH BEFORE LANDING ON TARGET (HENCE THE NAME "FRACTIONAL ORBITAL BOMBARDMENT SYSTEM" FOBS). AN ORBITAL BOMBARDMENT SYSTEM ON THE OTHER HAND WOULD INVOLVE WEAPONS BASED ON DEPLOYED IN SPACE FOR LONGER

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PERIODS OF TIME.

2. BOTH THE LANGUAGE AND THE INTENT OF THE TREATY HAVE THE PURPOSE OF PREVENTING THE STATIONING OF MASS DESTRUCTION WEAPONS IN SPACE. THE DEVELOPMENT AND DEPLOYMENT OF ANY SPACE WEAPONS AT GROUND INSTALLATIONS ARE NOT RPT NOT PROHIBITED. WE DO NOT BELIEVE THAT THE SOVIETS WOULD TEST FOBS WITH A

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LIVE NUCLEAR WARHEAD. HOWEVER, EVEN IF THEY WERE TO DO SO, IT WOULD NOT BE A VIOLATION OF THE TREATY SINCE THE WARHEAD WOULD NOT COMPLETE AN ORBIT AROUND THE EARTH.

2. WE HAVE THEREFORE CONCLUDED THAT THE SOVIETS HAVE NOT VIOLATED THE TREATY.

B. WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF FOBS ?

1. FOBS TRAVEL AT ALTITUDES MUCH LOWER THAN THE HIGH PORTION OF ICBM TRAJECTORIES AND BECAUSE OF THEIR GREATER RANGE THEY COULD ATTACK TARGETS FROM DIFFERENT DIRECTIONS. A SOVIET FOBS FOR EXAMPLE COULD ATTACK THE US FROM THE SOUTH. THESE CHARACTERISTICS

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MIGHT ENABLE A FOBS TO AVOID SOME OF OUR RADARS SUCH AS THOSE OF THE BMEWS. THE US HOWEVER HAS RECENTLY DEPLOYED OVER-THE-HORIZON RADARS WHICH CAN DETECT FOBS LAUNCHES. SOME ARE ALREADY IN OPERATION. WARNING TIME OF A FOBS ATTACK FROM THES RADARS WOULD ACTUALLY BE GREATER THAN THE WARNING TIME OF AN ICBM ATTACK FROM THE BMEWS.

2. ON THE DEBIT SIDE, THE FOBS HAVE TWO SEVERE DRAWBACKS. THE ACCURACY OF ICBMS MODIFIED INTO A FOBS WOULD BE SIGNIFICANTLY LESS THAN ICBMS AND THEIR PAYLOAD WOULD BE CONSIDERABLY REDUCED. THUS THERE ARE PENALTIES IN BOTH PAYLOAD AND ACCURACY THAT EXACT A HIGH PRICE FOR USE OF THIS WEAPONS SYSTEM.

C. DOES THE US PLAN TO DEVELOP A FOBS ?

1. SOME YEARS AGO THE EXAMINED THE DESIRABILITY OF THE SYSTEM AND DECIDED THAT THE DISADVANTAGES WERE OVERRIDING. WE HAVE NO INTENTION OF REVISING THIS DECISION BUT WE WOULD IN NO WAY FEEL OURSELVES CONSTRAINED BY THE SPACE TREATY FROM SUCH DEVELOPMENT AND DEPLOYMENT IF WE CONCLUDED THAT IT WAS IN

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OUR INTEREST.

5. IN VIEW OF THE DRAWBACKS WHY ARE THE SOVIETS DEVELOPING THIS SYSTEM ?

6. THEY MAY OF COURSE COME TO THE SAME CONCLUSION THAT WE HAVE AND NEVER DEPLOY THESE WEAPONS.

7. SOME YEARS AGO THEY MAY HAVE CONSIDERED THAT THIS SYSTEM OFFERED A MEANS OF ATTACKING ELEMENTS OF THE US BOMBER FORCE BY SURPRISE BY AVOIDING THE US RADAR WARNING SYSTEM WHICH WOULD OTHERWISE ALERT THE BOMBERS ALLOWING THEM TO BECOME AIRBORNE AND SO REACH SAFETY. OUR NEW RADARS OBVIATE THIS POSSIBILITY. IF THEY DO DEPLOY IT, IT WILL SIMPLY BE A LESS EFFECTIVE USE OF THE RESOURCES EXPENDED THAN WOULD A COMPARABLE INVESTMENT IN THEIR ICBM FORCE. RUSK

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November 4, 1967

MEMORANDUM FOR THE HONORABLE WALT ROSTOW

Subject: FOBS

I have not yet seen the actual transcript of Secretary McNamara's press conference in which he is reported to have spoken at length regarding a Soviet fractional orbit bombardment system. However, from what I have read in the newspaper and on the AP ticker, I would have to register disagreement with the interpretation regarding the space treaty.

The Secretary is reported as having said, "This is a fractional orbit, not a full orbit, and therefore not a violation of that agreement."

Article 4 of the treaty says nothing about a "full orbit." Rather, it expresses a prohibition against placing weapons of mass destruction "in orbit around the earth . . . on celestial bodies . . . or in outer space in any other manner."

Obviously, if the Soviet system contains no warhead, putting the object into space is not a violation of the treaty. Just as obvious, however, if an object is put into space with a warhead of mass destruction, it is violating the treaty.

It is incorrect to conclude that a space object has not attained orbit until it has made a complete revolution of the earth. Once having been launched, a spacecraft is in orbit as soon as it attains an altitude and speed which would permit it to make a complete revolution of the earth. To bring down such an object before it has made a complete revolution does not amend in any regard a statement that it was an object in orbit around the earth.

E. C. Welsh

November 9, 1967

Dear Bill:

You asked about the applicability of the Outer Space Treaty to the Soviet Fractional Orbital Bombardment System (FOBS). My relay of your request was some how interpreted as a request for a speech on the subject. From the attached draft you can extract the essentials of our argument that no violation exists.

Dick Moose

Mr. William Miller
Suite 125
Old Senate Office Building
Washington, D. C.

NATIONAL SECURITY COUNCIL

Nov. 9, 1967

NOTE FOR MR. MOOSE

Dick--

As you requested, I have prepared the attached statement on FOBS for Senator Cooper.

I have included some introductory material on the significance of FOBS (first two paragraphs), which you may or may not want to send forward, before turning to the basic question of its position under the Outer Space Treaty.

Spurgeon Keeny

Att.

STATEMENT ON FOBS

I have been very troubled by the many alarmist statements in the last few days concerning the Soviet Fractional Orbit Bombardment System (FOBS). Certainly, any Soviet commitment to a major new strategic weapons system is a matter of importance and concern. I believe, however, that an objective review of the facts relating to this development leads to the conclusion that it will not constitute a major new factor in the strategic balance.

In developing the FOBS, the Soviets may have been attempting to achieve an element of surprise by underflying or circumventing our BMEWS radars. The FOBS, however, involves a major sacrifice in both the yield and the accuracy of delivery that can be obtained with a given missile booster as compared with its use as an ICBM. New developments in technology, however, have deprived the Soviets of the advantage of surprise that they might have hoped to achieve with this system. We are already operating new over-the-horizon radars which can give us more warning time against a full-scale attack with FOBS missiles than BMEWS would against an ICBM attack. Moreover, if the Soviets should attack from the south or put weapons in multiple orbits, these new radars (which detect at launch) would give us even greater warning of an impending attack. There is a real possibility, therefore, that rather than increase their military capabilities, the

Soviets have actually reduced their net capabilities by deploying FOBS rather than ICBMs. I believe it important for us to recognize that the fact that something is different does not make it good and the fact that something has been done by the Soviets does not dictate that we must follow their lead.

I am also concerned that the charge has been made that the Soviet FOBS program constitutes a direct violation of the Outer Space Treaty. While I wish to emphasize that I do not in any way condone or excuse this unnecessary action on the part of the Soviets that further escalates the nuclear arms race, I do think that we must recognize that their action does not constitute a violation of the Outer Space Treaty.

Article IV of the Outer Space Treaty states:

> "States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. ..."

The wording of this Article makes it absolutely clear that the Treaty is intended to prohibit the "carrying of nuclear weapons." The Treaty does not and was not intended to in any way prohibit the development or even the testing of systems capable of carrying nuclear weapons. I understand that there is no evidence of any kind or any reason to

believe that nuclear weapons were associated with any of the Soviet tests of the FOBS.

Beyond this fundamental consideration that excludes a violation of the Treaty, I believe it important to recognize that the intent of this Article was to outlaw military systems that would station nuclear weapons in orbit above the earth as a terror or blackmail threat during peacetime. To this end, the wording in the Article, "not to place in orbit around the earth," was chosen with the intent of covering a system that would circle the earth many times. The wording was not intended to cover ICBMs or systems such as the FOBS which presumably would only be used with nuclear weapons in time of war.

I believe that the Outer Space Treaty is an important international obligation to which most of the major countries of the world have solemnly committed themselves. This Treaty can serve a most important role in preventing the proliferation of nuclear weapons to the new environment of outer space. If we wish to develop the stature of this Treaty, we must be prepared to insist that its true obligations are honored. At the same time, we must be careful to avoid vague charges which cannot be substantiated that the Treaty has been violated. Such hasty actions can lead to counter charges that we are interested in employing the Treaty for a tactical, political

advantage when it so serves our purpose. This can only serve to degrade the Treaty in the eyes of the world.

# # #

11-9-67

NEWS CONFERENCE

of

SECRETARY OF DEFENSE

Robert S. McNamara

at

Pentagon

Friday, November 3, 1967

* * *

Mr. Goulding: Gentlemen, this is our normal Thursday backgrounder with a couple of exceptions: first, that we are holding it on Friday instead of Thursday, and second, we have a couple of announcements so the entire thing will be on the record.

Secretary McNamara: We do have two announcements that I want to make. Afterwards I'll be happy to take your questions. The first relates to what we call a Fractional Orbital Bombardment System, and in connection with this I want to discuss with you certain intelligence information we have collected on a series of space system flight tests being conducted by the Soviet Union. These relate to the possible development by the Soviets of something which, as I say, we call a Fractional Orbital Bombardment System, that I'll hereafter refer to as FOBS -- a rather inelegant term.

Let me distinguish the FOBS system from the traditional intercontinental ballistic missile. An ICBM, as you know, normally does not go into orbit, but rather follows a ballistic trajectory from launch point to impact point. On this trajectory it reaches a peak altitude of about 800 miles.

Now, unlike the ICBM and this ballistic trajectory, the vehicle launched in a FOBS mode is fired into a very low orbit about 100 miles above the earth. At a given point -- generally before the first orbit is complete -- a rocket engine is fired which slows down the payload and causes it to drop out of orbit. The payload then follows a re-entry path similar to the re-entry of a ballistic missile.

Even now it is impossible to be certain of what these Soviet tests represent. It is conceivable that the Soviet Union has been testing space vehicles for some re-entry program. But we suspect the Russians are pursuing the research and development of a FOBS. If this turns out to be true, it's conceivable that they could achieve an initial operational capability during the next year, 1968.

Some years ago we ourselves examined the desirability of the FOBS system, and there was agreement among civilian and military leaders that there was no need for our country to develop a FOBS system. While development of it could be initiated at any time for relatively rapid deployment, our analyses conclude that it would not improve our strategic offensive posture and consequently we have no intention of revising the decision made, some years ago.

Like other possible variations, the FOBS offers some characteristics which differ from traditional ICBMs. In our opinion, the disadvantages of the FOBS system are overriding.

Because of the low altitude of the FOBS' orbits, some of their trajectories would avoid detection by some early warning radars, including our BMEWS. Also, the impact point cannot be determined until ignition of the rocket engine that deboosts the payload out of orbit -- and that occurs roughly three minutes and some 500 miles from the target. And the flight path can be as much as 10 minutes shorter than that of an ICBM.

For these characteristics, severe penalties are paid in two critical areas -- accuracy and payload. The accuracy of the Soviet ICBM modified to a FOBS weapon would be significantly less, and the payload of the FOBS vehicle would be a fraction of the ICBM.

The FOBS weapon would not be accurate enough for a satisfactory attack upon United States Minutemen missiles, protected in their silos. Perhaps the Soviets might feel it could provide a surprise nuclear strike against U.S. soft land targets such as bomber bases.

However, several years ago, anticipating such Soviet capability, we initiated the deployment of equipment to deny that capability. For example, already we are beginning to use operationally over-the-horizon radars which possess a greater capability of detecting FOBS than do the BMEWS. These will give us more warning time against a full-scale attack using FOBS missiles than BMEWS does against a heavy ICBM launch.

As you know, our deterrent rests upon our ability to absorb any surprise attack and to retaliate with sufficient strength to destroy the attacking nation as a viable society. With three-minute warning, a 15-minute warning or no warning at all, we could still absorb a surprise attack and strike back with sufficient power to destroy the attacker. We have that capability today; and we'll continue to have it in the future.

Now in the second announcement, I want to tell you that we have approved the name SENTINEL for the Chinese-oriented anti-ballistic missile system. Moreover, Lieutenant General Alfred D. Starbird, USA, has been named as the Army's System Manager for the Sentinel System. General Starbird is currently serving as Director of the Defense Communications Agency as you know. He'll assume his new position on November 15.

The System when deployed will provide a defense against the Chinese ICBM force, (assuming they go ahead to deploy such a force), of the mid-1970's. As System Manager, General Starbird will be responsible for the Sentinel's development and deployment.

His organization will have three main elements. The first will be the System Office in this area. It will be an element of the Office, Chief of Staff of the Army. The second will be the Systems Command at Huntsville, Alabama. They will develop, procure, and install the Sentinel System and the third element will be an Evaluation Agency with headquarters at the White Sands Missile Range, responsible for the evaluation, review and testing of the system.

The Sentinel organization will be supported by existing Army agencies such as the Corps of Engineers, the Materiel Command, the Army Communications Command, the Continental Army Command, and the Air Defense Command.

The NIKE-X organization will continue separately from the Sentinel organization. NIKE-X will carry on research and development on systems, the objective of which would be to protect population centers against large-scale attacks. The NIKE-X program will also design equipment to be used for tests of the penetration capabilities of our offensive missiles. Lieutenant General Austin W. Betts, who as you know is Chief of Research and Development for the Army, will continue to be responsible for the NIKE-X program.

Now I will be happy to try to take your questions.

Question: Of the two possibilities you mentioned in the FOBS announcement, either the development of FOBS or a new re-entry program for space, to which do you give the greater weight at this stage?

Secretary McNamara: I think it more likely they are working on the Fractional Orbital Bombardment System than they are on new re-entry vehicles for space systems. It's too early to be absolutely sure, but the weight of evidence is in favor of the former.

Question: Would this stimulate our effort in Bambi type of concepts as interception by satellite?

Secretary McNamara: No, I think not.

Question: Why is that?

Secretary McNamara: We have other ways of obtaining warning and the problem of protecting the population by destruction of the warhead as we have said before cannot be met by technology available to us today, taking account of the almost certain reaction of the Soviets to any ballistic missile defense that we would put up.

Question: Mr. Secretary, is this the orbital bomb that the Russians themselves have referred to and if it is as bad as you say it is, sir, why on earth are they considering the thing? I don't men to be facetious . . .

Secretary McNamara: Let me first say I don't know what they were referring to when Khrushchev made the statement. I believe it was Khrushchev who made the statement about an orbital bomb. I don't know whether this was what he had in mind or not. He didn't tell us, but secondly, why are they doing it? I think the most logical explanation is that we have maintained a very large bomber force in contrast to their bomber force, intercontinental bomber force, and as you know, we have plans to continue to maintain such a force in the future. They have perhaps thought that this force was a problem to them and that they could reduce the effectiveness of the force by designing a weapon that would eliminate the warning that the force needs to survive. As you know, our bomber force is highly vulnerable to missile attack, and we have protected a percentage of the bomber force against missile attack by putting it on an alert status such that it could take off and advance into the atmosphere during the period of warning of the missile attack. That is the primary advantage of BMEWS.

What the FOBS does is circumvent BMEWS. So if you were a Soviet planner, possibly concerned about the bomber element of our force, this might be one action you would take to meet that threat.

We countered their action with a reaction which is our over-the-horizon radar to recapture the warning time necessary to preserve a portion of our bomber force.

Question: Mr. Secretary, some of us met this morning with Senator Jackson and he brought up this Fractional Orbital device problem, and he is not all as sanguine as you are about our ability to detect. In fact, he made that statement it would completely confound our defense and would come in by the back door. Do you have any comment on that?

Secretary McNamara: He hasn't said that to me so I don't want to try to read what was in his mind, but we do have as I say an over-the-horizon radar system which we have been working on for some time, which we are beginning to use operationally at the present time and which will be fully operational early next year. And which does provide warning of potential attacks of this kind. Whether he is aware of that or remembered it when he made the statement he did, I can't say. Perhaps he can raise the question again. Mr. Nitze is appearing in public session before his Committee on the subject of ABMs on Monday.

Question: What you have on your hands here -- I know what the headlines are going to be -- that they have a three-minute bomb. It's not going to make any difference about whether it's aimed at a soft target like our bombers, as far as the American public is going to be concerned, is possibly a terror weapon. Is this the kind of irresponsible act that perhaps the German scientists did on the V-2 when they were sending these things over London?

Secretary McNamara: I think any such headline, of course, would be a false statement of the characteristics of the weapon and a misleading indication to the American people of the character of that weapon. This is a less accurate, less efficient weapon than the intercontinental ballistic missile. It does have the characteristics of flying, if you call it that, at an altitude and in certain areas of space such that it perhaps would not be detected by our Ballistic Missile Early Warning System. In anticipating that possibility several years ago, we developed a supplementary warning system -- the over-the-horizon radar. I recall speaking of it publicly, I believe in 1964, so we've had it under development for a long period of time for exactly this purpose. It's becoming operational at the present time, it will be fully operational before their FOB system is in effect, and therefore the FOB system is just what we indicated -- a system in which the disadvantages far outweigh the advantages as far as the attacker is concerned.

Question: There are four parts to this. (a). does this make an attack from over the South Pole far more likely? (b). how long have we known about their development of the FOBS? (c) where are they testing it? (d) what do we think of it as our main defensive weapon against it -- the Thor-based system you referred to in '64, anti-satellite, or the NIKE-X?

Secretary McNamara: Taking the last one first, as we have said before, we don't believe that there is a defense today in their hands or ours against a large-scale intercontinental ballistic attack on population centers. That, of course, is why we decided against deployment of an anti-ballistic missile system designed to protect population centers against heavy missile attacks.

Secondly, it's only been in the past month or two that we've seen enough evidence of testing to lead us to believe that it's more likely than not that these space shots are associated with a FOB system in contrast to a possible re-entry development of the space system.

Thirdly, where are they testing from? I'd rather not discuss that. It exposes some of our intelligence gathering information.

Fourthly, does this make an attack from the south more likely than not? I think not because there are severe penalties, as I have indicated, they pay for a FOBS orbit. A FOBS orbit need not come from the south. It could come from the north. But in any case, where it's to come from the south, it would be far less efficient way of delivering their warhead than an intercontinental missile trajectory, and I think that if they were to use it, it would be a specialized form of attack against such soft targets as, such time-urgent soft targets, as bomber bases.

Question: Will you go into why you are announcing it at this point? Is it in some way an effort to convey something to the Russians?

Secretary McNamara: No. It's only been in the last month or two that we've seen enough tests, enough evidence of tests, to lead us to this conclusion, and it's only been in the matter of the past few days that we've finished classified briefings on the subject of Congressional Committees. It was quite appropriate, therefore, I think, that we announce it publicly at this time.

Question: Could you describe how far along they are, Mr. Secretary, in an advanced stage of experimentation?

Secretary McNamara: As I indicated to you, we think it could become operational, if they choose to deploy it, sometime in 1968.

Question: Is this tied in with the 7 Cosmos shots in the past week? Are they related?

Secretary McNamara: I don't think they are related.

Question: Are these connected with the mystery shots?

Secretary McNamara: Let me just take this. I'll come to you next.

Question: I was going to ask that, too. Also, what do you estimate the payload is of these things? In terms of megatons?

Secretary McNamara: I don't whether to give that out or not. I'd say one to three megatons.

Question: Are they multi-warheads, sir?

Secretary McNamara: No.

Question: Is our third stage, the new stage for the ..... sufficient to counteract this?

Secretary McNamara: The Chinese-oriented ABM system is designed to protect against a Chinese attack in the mid-70s and not a Soviet attack.

Question: We are developing a new third stage against the FOBS system?

Secretary McNamara: The Chinese-oriented ABM system is designed to effect against the Chinese and not against the Soviets. Yes?

Question: I asked earlier whether these recent space shots were described as so-called mystery shots that we were not discussing, were those so-called FOBS tests, there were about eight or nine?

Secretary McNamara: Let me ask Phil to check this. I'm not entirely sure that I know which shots you're talking about -- the mystery shots. Well let me ask Phil to ask the question. I don't think of these shots as mystery shots. I hope there aren't any mysteries.

Question: Talking about over-the-horizon radar and warning. What kind of warning will you be able to get if this takes only about a few minutes for the warhead to come down?

Secretary McNamara: We will have warning of the movement to us, toward us, of . . . . objects.

Question: How will we know if it is one of the FOBS?

Secretary McNamara: When we see the kind of the FOBS attack that would be designed against our model bases, we'll know it's that, it's a FOBS, and over-the-horizon radar.

Question: . . . . Do you have this over-the-horizon radar deployed all around the city too?

Secretary McNamara: The over-the-horizon radar warns of the incoming objects whether they be targets against cities or bombers. There's no particular reason for them to use a FOBS as opposed to an ICBM against the city. The only purpose of using FOBS instead of ICBM's would be to avoid the warning, reduce the warning time and this becomes important only in relation to time-urgent targets. Cities aren't going to move in the next ten minutes, we can't do anything to move them. The bombers can move and we can act to move them and its this characteristic of the target that leads to this choice of weapon to be used against it and we counter that charge as I say by a new type of warning that recaptures the warning time.

Question: But my question sir is do you have enough of this over the horizon radar to protect the countries residents --

Secretary McNamara: To warn of attacks on any part of the country and the answer is yes.

Question: Mr. McNamara, is it possible, though.....I want to get one thing straight on this thing, when you speak of an orbit. Is it possible for them to put this thing up in orbit and go around and around the earth several times before they fire this rocket off?

Secretary McNamara: The answer it is possible, but there is no advantage to it. As a matter of fact, there is a penalty to them for doing that. It exposes the weapon to destruction, it's a violation of an agreement they've entered into, it gives additional warning and for all of these reasons it's a very unlikely tactic.

Question: But if this thing is capable of orbit, how are you going to know when they put this thing up and it starts orbiting that they are not simply orbiting some sort of satellite and that they are actually orbiting a FOBS. Couldn't they orbit this thing, let it go around once, and then fire the damn thing off. And you only have 3 minutes warning.

Secretary McNamara: And of course it isn't one you are thinking about. One is of no value to them. We have roughly 40 SAC bomber bases. It would take a very substantial number of warheads targeted on those bases to destroy them and quite clearly they are not going to put that substantial number X into orbit.

Question: Mr. Secretary, you said they were destroyable? What would you destroy them with?

Secretary McNamara: We have systems that are capable of destroying them -- Satellites. We can put objects in orbit if that becomes desirable or necessary.

Question: Sir . . .

Secretary McNamara: Let me take someone else, yes.

Question: On the over-the-horizon radar, I understand this is one of the first developments in which we were actually using it as we were developing it. What I want to get clear is whether this is what you mean by saying it has become operational and also is it still confined to the test area -- whether it be Florida or wherever?

Secretary McNamara: No. The over-the-horizon radar has been in development for several years. In a test made, we have been actually using it to --

Question: Where is that?

Secretary McNamara: We don't disclose the sites of it.

Question: Is this airborne radar?

Secretary McNamara: No. Ground-based radar. A ground-based system. I'm not going to discuss any more than I have. It has been in development for a number of years. It's been in use as a test system for a number of years, measuring and obtaining flight information on Soviet launches for that period of time, and within the last 60 days -- am I right on that -- within the last 60 days we've put it in the operational status. I'ts not yet fully operational. It wont be fully operational until February of next year.

Question: Can I ask you a question of . . . . .

Secretary McNamara: I'll take this one.

Question: What kind of warning time does it give us on the FOBS?

Secretary McNamara: Roughly the same as the BMEWS. Slightly more, but roughly the same.

Question: Fifteen minutes?

Secretary McNamara: Roughly fifteen minutes.

Question: On the warhead itself, just to get it into perspective, you say that the payload of the FOBS would be a fraction of the ICBM and you put the actual as between one and three megaton. Isn't that about equivalent to Polaris or Minuteman?

Secretary McNamara: They have to use a very large launch vehicle, and the large launch vehicle would carry larger warhead on an intercontinental ballistic missile flight. But you degrade the capability in order to use it for this purpose, and you degrade it in two respects, One, as in reducing the payload, and the other, and far more important, degradation, is in reducing the accuracy.

Question: Well, actually the warheads would be equal to our own warheads?

Secretary McNamara: Yes, roughly so. The accuracy, of course, is far, far less than our warheads and therefore the destruction capability which is a function of accuracy and payload is far, far less.

Question: As a follow-up on that, would they be capable of using MIRV in these bombs to get really messed up, multiple warheads in the bombs? And why couldn't they increase the accuracy?

Secretary McNamara: They have a number of inaccurate objects, possibly.

Question: Can't they increase -- just like everything else is perfected, just increases accuracy where it would be.

Secretary McNamara: The length of the flight and the characteristic of the orbit -- they will never be able to get the accuracy in this kind of a system that they could get, applying the same technology to an intercontinental ballistic missile system. The object, therefore, is to reduce warning time. That's why you sacrifice payload, why you sacrifice accuracy, and our counter to that, as I say, is to develop a new warning system. I am correct in saying, Phil, Dan, and I announced this in 1964, am I not?

Mr. Goulding: It was before I was on board, sir.

Question: How do they get them in orbit? Doesn't that imply improved accuracy?

Secretary McNamara: No. Low orbit is one of the things that takes additional power.

Question: Isn't that a new re-entry vehicle?

Question: There are so many important questions asked about this today, won't you please give us a little more time and a few more questions?

Secretary McNamara: No. I have a terribly busy day. Let me just take this question here. I can't answer the question of yours about the new re-entry vehicle, but Phil, will you get the answer to that?

Question: Will your satellite observation station network at Hawaii and ....., will they be able to identify those objects?

Secretary McNamara: These objects are identified by the over-the-horizon radar system, the sites of which are classified, and I just don't want to get into a discussion that throws any light at all on where these sites are, or the character of the over-the-horizon system.

Question: Your whole presentation here seems to be based on the assumption that the Russians don't think much of our over-the-horizon radar. If this thing works, then it knocks the hell out of their reason for using it.

Secretary McNamara: It negates the advantage that they may have hoped to get from it. It's exactly the reason why we decided not to go ahead with it. On the other hand, they are faced with the bomber threat that is very substantial and they are quite clearly taking action to counter that bomber threat. There's no question but what if you are sitting in the Soviet shoes and you look at our bomber force as it has been, and as it is, and as it will be, it's a much larger bomber force than they have.

Question: We're not developing a new bomber?

Secretary McNamara: We have today how many bombers?

Voice: 600.

Secretary McNamara: 500 to 600? How many are we going to have tomorrow?

Question: We're phasing out the B-52s.

Secretary McNamara: Oh, no, we're going to have hundreds of bombers as far in the future as any of you can look. . . . If you are looking at this problem from a Soviet point of view, you are going to be concerned about it. Particularly you would have been concerned about it 4 or 5 years ago. I don't think there is any doubt but that is what is behind the Tallinn system. For our planning, we must assume the Tallinn system has an ABM capability. There's an uncertainty whether it does or doesn't. But its' very clear indeed that it is an advanced air defense system. It was designed to take account of the stated plans of the United States to maintain a large bomber force for a number of years. So it's very clear that our decision to maintain a bomber force has led to their reaction.

There's no argument about that. This is simply another illustration of the theme I tried to advance in San Francisco, that in strategic force planning, action leads to reaction. It's absolutely fundamental to each party that they maintain a deterrent, so long as technology and financial capability permits, and technology and financial capability both the Soviets and the U.S. make possible the reaction of one to the action of the other. So this is -- you are seeing it every day. You see it in our action, Our Posiedon is in part a reaction to their potential ABM force, we said so at the time we introduced the Posiedon into the research and development program two or three years ago; we said it again when we introduced it into the deployment schedule this past year.

You can continue to expect that, and this is the reason why this government so strongly believes that it is in our national interest to engage in discussions of this subject with the Soviets.

Question: Did we have an agreement with them -- I've forgotten the status of the agreements -- did we have an agreement with the Soviets that we wouldn't get into using weapons in space?

Secretary McNamara: No. They have agreed not to place warheads in full orbit. That is why this is a fractional orbit, not a full orbit, and therefore not a violation of that agreement.

Question: You said a moment ago, it could go around the earth.

Secretary McNamara: I said they could, but they haven't.

Question: Well now, maybe they will.

Secretary McNamara: Maybe they will violate and if they will we will observe it, but the point is that this Fractional Orbit Bombardment System is not a violation of that agreement.

Question: You are going to say this is not a violation of that agreement?

Secretary McNamara: Read the agreement and you will see why it isn't. I will be happy to give you a copy of the text.

Question: You say we have systems which are capable of destroying satellites of this nature. I take that to mean, the very limited installations we have out in the Pacific.

Secretary McNamara: Yes, that is right.

Question: This doesn't provide very much coverage, does it?

Secretary McNamara: I don't want to imply that we can defend population centers of this country against heavy Soviet attacks. We can't.

Question: Is your position now that we are still relying on deterrent as your basic defense against it?

Secretary McNamara: Yes, very, very, definitely so. We are still relying on the deterrent and that is what they are relying on. There is no other basis on which to rely at the present time and no technology, either ours nor theirs, would permit any other basis. One more question.

Question: We would like to have you characterize your concern, whether this means a new round in the arms race. . . .

Secretary McNamara: I'm not concerned for the reasons I have outlined to you.

Question: Should our European allies be concerned, Mr. Secretary, who don't have over-the-horizon radar?

Secretary McNamara: The European allies face different problems. They face the medium-range ballistic missiles and the intermediate-range ballistic missiles and they did not have and cannot obtain the period of warning that we have. Theirs is quite a different problem.

Thank you very much.

NATIONAL SECURITY COUNCIL

Nov. 9, 1967

NOTE FOR MR. ROSTOW

Walt--

I think you will be interested in the attached statement on FOBS which I prepared at Dick Moose's request for possible use by Senator Cooper.

Spurgeon Keeny

Att.

STATEMENT ON FOBS

I have been very troubled by the many alarmist statements in the last few days concerning the Soviet Fractional Orbit Bombardment System (FOBS). Certainly, any Soviet commitment to a major new strategic weapons system is a matter of importance and concern. I believe, however, that an objective review of the facts relating to this development leads to the conclusion that it will not constitute a major new factor in the strategic balance.

In developing the FOBS, the Soviets may have been attempting to achieve an element of surprise by underflying or circumventing our BMEWS radars. The FOBS, however, involves a major sacrifice in both the yield and the accuracy of delivery that can be obtained with a given missile booster as compared with its use as an ICBM. New developments in technology, however, have deprived the Soviets of the advantage of surprise that they might have hoped to achieve with this system. We are already operating new over-the-horizon radars which can give us more warning time against a full-scale attack with FOBS missiles than BMEWS would against an ICBM attack. Moreover, if the Soviets should attack from the south or put weapons in multiple orbits, these new radars (which detect at launch) would give us even greater warning of an impending attack. There is a real possibility, therefore, that rather than increase their military capabilities, the

Soviets ~~have~~ would actually reduced their net capabilities ~~by~~ if they decide to deploy~~ing~~ FOBS rather than ICBMs. I believe it important for us to recognize that the fact that something is different does not make it good and the fact that something has been done by the Soviets does not dictate that we must follow their lead.

I am also concerned that the charge has been made that the Soviet FOBS program constitutes a direct violation of the Outer Space Treaty. While I wish to emphasize that I do not in any way condone or excuse this unnecessary action on the part of the Soviets that further escalates the nuclear arms race, I do think that we must recognize that their action does not constitute a violation of the Outer Space Treaty.

Article IV of the Outer Space Treaty states:

> "States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. ..."

The wording of this Article makes it absolutely clear that the Treaty is intended to prohibit the "carrying of nuclear weapons." The Treaty does not and was not intended to in any way prohibit the development or even the testing of systems capable of carrying nuclear weapons. I understand that there is no evidence of any kind or any reason to

believe that nuclear weapons were associated with any of the Soviet tests of the FOBS.

Beyond this fundamental consideration that excludes a violation of the Treaty, I believe it important to recognize that the intent of this Article was to outlaw military systems that would station nuclear weapons in orbit above the earth as a terror or blackmail threat during peacetime. To this end, the wording in the Article, "not to place in orbit around the earth," was chosen with the intent of covering a system that would circle the earth many times. The wording was not intended to cover ICBMs or systems such as the FOBS which presumably would only be used with nuclear weapons in time of war.

I believe that the Outer Space Treaty is an important international obligation to which most of the major countries of the world have solemnly committed themselves. This Treaty can serve a most important role in preventing the proliferation of nuclear weapons to the new environment of outer space. If we wish to develop the stature of this Treaty, we must be prepared to insist that its true obligations are honored. At the same time, we must be careful to avoid vague charges which cannot be substantiated that the Treaty has been violated. Such hasty actions can lead to counter charges that we are interested in employing the Treaty for a tactical, political

advantage when it so serves our purpose. This can only serve to degrade the Treaty in the eyes of the world.

# # #

11-9-67

TOP SECRET

NATIONAL SECURITY COUNCIL
WASHINGTON, D.C. 20506

7

8 November 1967

MEMORANDUM FOR MR. ROSTOW

SUBJECT: Military Significance of Soviet FOBS

1. In staff meeting the other day, the question was raised as to why the Soviets would be interested in a fractional orbital bomb system in view of what seemed to be its limited military significance.

2. There is one possible use which could make FOBS especially significant. For some time we have been concerned that in a nuclear exchange the Soviets might use tactics to "pin down" our ICBMs and prevent effective retaliation. We have speculated that the most effective way to initiate such an attack would involve the use of about 40 submarine-launched ballistic missiles from subs off our coast. These would initially pin down our ICMBs until the Soviet ICBMs with longer flight times would take over the job. Pindown would continue for about ten hours during which time Soviet bombers could strike our missile sites.

3. Between now and the end of 1969 (when we expect to have a high confidence FOBS detection capability), FOBS could be substituted for SLBMs in the pin down role. Such substitution would (1) decrease detection time, (2) avoid the possibility that submarine deployments might put us on alert, and (3) release SLBMs for other tasks.

ROBERT N. GINSBURGH

cc: Spurgeon Keeny

TOP SECRET

NEWS RELEASE

OFFICE OF ASSISTANT SECRETARY OF DEFENSE (PUBLIC AFFAIRS)

WASHINGTON D.C. 20301

PLEASE NOTE DATE

9

FOR THE PRESS: November 3, 1967 No. 1060-67

OXford 5-3176 (Info)
OXford 7-3189 (Copies

Secretary of Defense Robert S. McNamara today made the following statement:

I would like today to discuss with you certain intelligence information we have collected on a series of space system flight tests being conducted by the Soviet Union. These relate to the possible development by the Soviet of something we have called a Fractional Orbital Bombardment System, or FOBS.

Let me distinguish such a system from the traditional intercontinental ballistic missile. An ICBM normally does not go into orbit, but rather follows a ballistic trajectory from launch point to impact point. On this trajectory it reaches a peak altitude of perhaps 800 miles.

Unlike the ICBM and its ballistic trajectory, the vehicle launched in a FOBS mode is fired into a very low orbit about 100 miles above the earth. At a given point -- generally before the first orbit is complete -- a rocket engine is fired which slows down the payload and causes it to drop out of orbit. The payload then follows a re-entry path similar to the re-entry of a ballistic missile.

Even now it is impossible to be certain of what these tests represent. It is conceivable that the Soviet Union has been testing space vehicles for some re-entry program. But we suspect that the Russians are pursuing the research and development of a FOBS. If this turns out to be true, it is conceivable that they could achieve an initial operational capability during 1968.

Some years ago we ourselves examined the desirability of the FOBS and there was agreement among civilian and military leaders that there was no need for the United States to develop such a system. While development of it could be initiated at any time for relatively rapid deployment, our analyses conclude that it would not improve our strategic offensive posture and consequently we have no intention of revising the decision made years ago.

Like other possible variations, the FOBS offers some characteristics which differ from traditional ICBMs. In our opinion, the disadvantages are overriding.

MORE

Because of the low altitude of their orbits, some trajectories of a FOBS would avoid detection by some early warning radars, including our BMEWS. Also, the impact point cannot be determined until ignition of the rocket engine that deboosts the payload out of orbit -- roughly three minutes and 500 miles from the target. And the flight time can be as much as 10 minutes shorter than an ICBM.

For these characteristics, severe penalties are paid in two critical areas -- accuracy and payload. The accuracy of the Soviet ICBM modified to a FOBS weapon would be significantly less and the payload of the FOBS vehicle would be a fraction of the ICBM.

The FOBS weapon would not be accurate enough for a satisfactory attack upon United States Minutemen missiles, protected in their silos. Perhaps the Soviets might feel it could provide a surprise nuclear strike against United States' soft land targets such as bomber bases.

However, several years ago, anticipating such a capability, we initiated the deployment of equipment to deny this capability. For example, already we are beginning to use operationally over-the-horizon radars which possess a greater capability of detecting FOBS than does BMEWS. These will give us more warning time against a full-scale attack using FOBS missiles than BMEWS gives against a heavy ICBM launch.

Our deterrent rests upon our ability to absorb any surprise nuclear attack and to retaliate with sufficient strength to destroy the attacking nation as a viable society. With three-minute warning, 15-minute warning or no warning at all, we could still absorb a surprise attack and strike back with sufficient power to destroy the attacker. We have that capability today; we will continue to have it in the future.

END

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

November 8, 1967

MEMORANDUM FOR MR. ROSTOW

Subject: FOBS and the Outer Space Treaty

I agree with Ed Welsh's basic point in the attached memo that the fundamental reason FOBS is not in violation of the Outer Space Treaty is that there is no evidence that it was carrying a nuclear warhead. I do not, however, agree with his additional technical point that a FOBS is in orbit within the meaning of the Treaty.

Incidentally, the confusion on this issue appears to have been created in part by the fact that McNamara was quoted (as reported by Ed Welsh) out of context. While McNamara's statement was still not very clear, what he actually said, in answer to a question as to whether this was a violation of the Outer Space Treaty, was:

> "No. They have agreed not to place warheads in full orbit. That is why this is a fractional orbit, not a full orbit, and therefore not a violation of that agreement."

Article IV of the Outer Space Treaty states:

> "States Parties to the Treaty undertake not to place in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. ..."

It is completely clear from the wording of the Article that it is meant to prohibit "carrying nuclear weapons." It does not in any way prohibit the development or even the testing of systems capable of carrying nuclear weapons. It is certainly implicit from the wording, "place in orbit around the earth," that the Article was meant to cover systems that would orbit the earth at least once and presumably many times. Considering the legislative history of the Treaty, the threat that it

sought to outlaw was clearly that of stationing of nuclear weapons in space as a terror or blackmail threat during peacetime. The Treaty specifically avoided dealing with the question of military delivery systems such as ICBMs which might go into space.

Ed Welsh makes an interesting technical point that a FOBS has in fact been placed in an orbit (as its name indicates). However, I believe that it is clear that it was not the meaning or intent of Article IV to cover this case. For Treaty purposes FOBS should be considered as an extension of the ICBM problem. At the same time, I think McNamara and his interpretors have confused the issue and possibly created a problem for us by making such a sharp distinction between a FOBS and a MOBS since the Soviet system is clearly capable of multiple orbits. A MOBS would also clearly not be in violation of the Treaty unless it contained a nuclear weapon. However, in making a major point of the distinction between FOBS and MOBS, we are at least suggesting that a MOBS would be a Treaty violation. I do not believe we have really thought through how we would deal with a future Soviet MOBS firing in the absence of any evidence that it contains a nuclear warhead. I would therefore recommend soft pedalling this point until we know where we are going.

I have discussed the problem with Len Meeker, Ray Garthoff, and Mort Halperin, and I believe all would agree with my interpretation of the Treaty. I have asked ISA and G/PM to prepare a cable of instructions to the field on this subject. I believe that the preparation and clearance of this cable will help clear up the policy issue on this question. Although I have not yet seen the transcript, I understand that Nitze's testimony on Monday before the Joint Committee has helped clear up the confusion on the relation of FOBS to the Outer Space Treaty.

Spurgeon Keeny

Attachment:
Returned - Welsh memo dtd 11/4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS AND SPACE COUNCIL
WASHINGTON 20502

SK
clear out
+ report back

EXECUTIVE SECRETARY

November 4, 1967

MEMORANDUM FOR THE HONORABLE WALT ROSTOW

Subject: FOBS

I have not yet seen the actual transcript of Secretary McNamara's press conference in which he is reported to have spoken at length regarding a Soviet fractional orbit bombardment system. However, from what I have read in the newspaper and on the AP ticker, I would have to register disagreement with the interpretation regarding the space treaty.

The Secretary is reported as having said, "This is a fractional orbit, not a full orbit, and therefore not a violation of that agreement."

Article 4 of the treaty says nothing about a "full orbit." Rather, it expresses a prohibition against placing weapons of mass destruction "in orbit around the earth . . . on celestial bodies . . . or in outer space in any other manner."

Obviously, if the Soviet system contains no warhead, putting the object into space is not a violation of the treaty. Just as obvious, however, if an object is put into space with a warhead of mass destruction, it is violating the treaty.

It is incorrect to conclude that a space object has not attained orbit until it has made a complete revolution of the earth. Once having been launched, a spacecraft is in orbit as soon as it attains an altitude and speed which would permit it to make a complete revolution of the earth. To bring down such an object before it has made a complete revolution does not amend in any regard a statement that it was an object in orbit around the earth.

E. C. Welsh

USSR

[redacted] ORBITAL BOMBARDMENT SYSTEM
(FRACTIONAL)

II

From the desk of

E. C. WELSH

11a

FS

BITAMLEY SMITH

- Chuck Johnson spoke to you about this article.
- Attached is an analysis by Berg of my stuff.

Ed Welsh

~~SECRET~~

October 17, 1967

MEMORANDUM FOR DR. E. C. WELSH

Subject: Soviet One-Orbit Space Operations

The October 16, 1967, TIMES article by Evert Clark, concerning the possible significance of the recent flurry of Soviet one-orbit space operations, may mislead the readers.

The orbits used in these tests have an apogee of about 115 n. miles, a perigee of 73 n. miles, an inclination of 49.6°, and a period of about 87.8 minutes. The launch is conducted from Tyuratam in a due east direction. The Recovery takes place just prior to completing one orbit at Kapustin Yar. The following discussion identifies a variety of possible test objectives for these operations.

Possibility I - (Fractional) Orbital Bombardment System
Such a system could approach every target on the surface of the earth from any direction. While the information available on these tests is not necessarily in conflict with this objective, the SL-11 launch vehicle, as modified for these tests, does not have the payload carrying capability to carry this payload in a weapon system. With a launch due east, this vehicle thrusts until fuel exhaustion. In order to strike targets in the United States, a launch to the north or south is needed. This reduces the earth rotation advantage inherent in an easterly launch. Therefore, an upgraded or new launch vehicle will be needed to make this system operational. Such a change requires a major launch vehicle-payload integration task.

Contrary Arguments -

1. In the absence of a northward viewing U. S. ABM system, no plausible void exists in the Soviet weapon spectrum which could be filled by a FOBS.

2. The need to substitute a new or modified launch vehicle for operational deployment raises a serious question of why the recent flurry of tests.

Possibility II - Low Altitude Ballistic Missile System
Such a system would use an orbital or near-orbital velocity, low 100 n. mile altitude trajectory and then de-orbit as the warhead approaches the target area from the usual minimum-distance trajectory direction. A weapon of this type could evade early detection by BMEWS and thereby reduce the warning time available to the U. S. to launch its counter strike. This would presumably increase the probability of destroying the U. S. missiles while still in their silos.

Contrary Arguments - The need to retro-thrust during the re-entry phase increases the complexity of the vehicle system and the operation, thereby degrading its accuracy, and increasing the probability of missing the target.

Possibility III - A Penetration-Aids Development or Other Warhead Re-entry Development Program
The United States has been conducting an extensive Penetration Aids and Warhead Re-entry Development Programs by launching re-entry test payloads into the highly instrumented Kwajalein complex. The Soviets have no long range test target complex with equivalent instrumentation. Therefore, in order to conduct tests of this type, it may be necessary to bring the test re-entry body all the way around the globe and conduct the actual experimental measurements near the highly instrumented Kapustin Yar launch complex.

Contrary Arguments - Intelligence sources, to my knowledge, have not detected signals which support this possibility. The low altitude of the final phase of the re-entry operation may preclude this detection.

Possibility IV - Earth Re-entry System Development for Lunar Operations
Because of the high northern latitude of the Soviet mainland and the primary lunar tracking and control station in Crimea, the Soviets have an exceedingly difficult problem in their prospective lunar return operation. Because of the particular moon-earth geometry, a ballistic re-entry to earth favors landing in the lower latitudes. A landing in the Soviet Union requires shooting for a very narrow re-entry window. If the window is "over-shot,"

a retro-fire can save the operation. If the window is "under-shot," the landing will fall short. The footprint of this probable landing area includes the Western Indian Ocean, the Arabian Sea, and the Soviet mainland to the north. Recent representations by the Soviets to the U. K. and Malagasy Republic indicate that they are concerned with the possibility of an emergency operation in this part of the Indian Ocean.

Contrary Arguments - The signals intercepted during these one-orbit operations indicate that the terminal phase uses instruments similar to or are the same as are being used during the warhead re-entry tests of the conventional ballistic missile systems.

Conclusion - In order for the Soviets to conduct lunar return operations within the constraints imposed on them by geography, the earth-moon geometry, their desire for land recovery in the Soviet mainland, and their restricted access to a global tracking system, I conclude that the most likely possibility is Possibility IV, the development of Earth Re-entry System for Lunar Operations.

Winfred E. Berg

11-e

NEW YORK TIMES - October 17, 1967

9 Soviet One-Orbit Shots Hint Testing for Warhead Re-Entry

By EVERT CLARK
Special to The New York Times

WASHINGTON, Oct. 16—The mystery of what the Soviet Union is trying to achieve with a series of one-orbit space shots has deepened since the first flight 13 months ago.

Most analysts here now believe the flights are exploring the techniques of bringing down a nuclear warhead from an orbiting platform.

Until recently there had been considerable disagreement about the purpose of the shots. But the analysts believe they have narrowed down the possible explanations.

Nine shots have been fired in the series since Sept. 17, 1966.

At first, Western experts thought the Soviet Union was attempting to disguise the fact of the flights as well as their purpose. Now, however, they believe the Soviet wants the United States to be aware of the flights, but they do not know why.

Ironically, the Soviet tests would not violate the space treaty put into effect in a White House ceremony last week, even if they are military tests of warhead re-entry techniques.

The treaty, signed by 84 nations, prohibits the stationing in orbit of weapons of mass destruction. But it does not prohibit the engineering tests necessary to learn how to station weapons in orbit and call them down at will on specific targets.

Nor does the treaty prohibit the explosion of conventional weapons in orbit. While the Russians have not done this in the series of nine single-orbit shots, they might eventually want to do so, to stimulate destruction patterns of a nuclear weapon, some observers here believe.

The treaty does not define "outer space." This task was left to later negotiations. But the treaty is clear on the point that an object is not considered to be in outer space unless it remains in orbit.

Thus the payloads sent aloft in the nine Soviet shots, which have been returned to earth before they completed one circuit of the earth, would not be subject to limitations of the treaty, even if they were live nuclear weapons.

There is no indication that live weapons, either nuclear or conventional, have been used in the Soviet tests. Experts here point out that it would not be necessary to use live weapons, since dummy warheads could test methods for sending weapons into almost complete orbits and guiding them down to precise targets.

The Soviet flights began with unannounced shots on Sept. 17 and Nov. 2, 1966. Both launching vehicles apparently exploded in orbit, accidentally or on command from the ground.

Since then there have been seven shots, the last on Sept. 22. The Soviet Union announced each of them, disguising them as Cosmos scientific satellites but using an announcement format different enough from that used for ordinary Cosmos satellites to convince Western experts that the difference was intended to call attention to the shots.

The experts here say they will not be certain of the purpose of this test series until some new flight characteristics are exhibited—perhaps a greater number of orbits before re-entry or the use of a larger launching vehicle.

12

BULLETIN''''

MCNAMARA

WASHINGTON, NOV. 3 (REUTERS)--DEFENSE SECRETARY ROBERT S. MCNAMARA TODAY SAID RUSSIA WAS DEVELOPING WHAT APPEARED TO BE A POWERFUL NEW SPACE BOMB, BUT HE DESCRIBED IT AS AN INACCURATE WEAPON EASILY DETECTED AND DESTROYED.

(MORE) IM/AG 4:12P

K
URGENT'''''

FIRST ADD WASHINGTON MCNAMARA X X X DESTROYED

(MAY BE BYLINED BY RALPH HARRIS)

HE TOLD A PRESS CONFERENCE THE WEAPON, WHICH SEEMED TO BE UNDER TESTS BY THE RUSSIANS, COULD BE FIRED INTO A VERY LOW ORBIT AND PERHAPS WOULD THREATEN THE U.S. STRATEGIC BOMBER FORCE.

(MORE) IM/AG 4:15P

SECOND ADD WASHINGTON MCNAMARA X X X FORCE.
BUT HE SAID HE WAS NOT CONCERNED ABOUT THE RUSSIAN TESTS, AND THE WEAPON--KNOWN HERE AS A FRACTIONAL ORBITAL BOMBARDMENT SYSTEM (FOBS)--WAS NOT THE SO-CALLED ORBITING TERROR BOMB WHICH FORMER RUSSIAN PREMIER NIKITA KHRUSCHEV SPOKE OF SEVERAL YEARS AGO.
(MORE) IM/AG 4:17VP

THE WHITE HOUSE
WASHINGTON

13

Mr Smith had this memo transmitted to The President w/h George Christian as an info addressee.

K. Rose

13a

THE SECRETARY OF DEFENSE
WASHINGTON

28 OCT 1967

MEMORANDUM FOR THE PRESIDENT

For some time we have observed Soviet tests consistent with the development of a Fractional Orbital Bombardment System (FOBS). The most recent tests seem to confirm intelligence evidence that the Soviet is moving in that direction.

The Committees of Congress have asked for briefings from the Defense Intelligence Agency; we have provided those briefings. We anticipated that there would be leaks to the press and some of those leaks are beginning to appear.

We think, therefore, that we should initiate a statement on the Soviet tests rather than waiting to have the information dragged from us. Attached is the statement we propose to release. I wanted you to have a copy before it is put out.

Robert S. McNamara

ATTACHMENT

13-b

DRAFT PRESS RELEASE

Soviet Fractional Orbital Bombardment System

In order to protect our intelligence-gathering methods, we have acted with great care over the last seven years in discussing information collected by the intelligence community. However, we have not hesitated to release intelligence data when we have thought that it was in the best interests of the nation to do so.

One example of this is the information on the Soviet Union strategic nuclear force. Through my annual posture statements to Congress, and at various other times, we have declassified information on the Soviet strategic force in order to help explain nuclear issues of major importance to our people and our allies.

Similarly, we have publicized unprecedented amounts of information on U.S. strategic forces. Of course this gives information of value to the potential enemy. But our deterrence rests not only on our capability to destroy any attacker but also on the enemy's knowledge that we have that capability and that we have the will to use it.

I would like today to discuss with you certain intelligence information which we have collected on a series of space system flight tests being conducted by the Soviet Union.

As you know, an intercontinental ballistic missile (ICBM) normally does not go into orbit but rather follows a ballistic trajectory from launch point to impact point. It reaches a peak altitude of perhaps 800 miles on this trajectory.

As long as two years ago, we observed that the Soviets had initiated tests involving a different type of trajectory of much lower altitude.

Information we now have causes us to accept the likelihood that in those lower altitude tests the Soviets were working on something we have called a Fractional Orbital Bombardment System (FOBS).

Unlike the ICBM which follows a ballistic trajectory, the vehicle launched in a Fractional Orbital Bombardment mode is fired into a very low orbit about 100 miles above the earth's atmosphere. At a given point -- generally before the first orbit is complete -- a rocket engine is fired which slows down the payload and causes it to drop out of orbit. The payload then follows a re-entry path similar to the re-entry of a ballistic missile.

Even now it is impossible to be certain of what these tests represent. It is conceivable that the Soviet Union has been testing space vehicles for some re-entry program. It is also possible that the Russians are conducting

tests of some sort of post-strike reconnaissance system. But we suspect that the Russians are pursuing the research and development of a FOBS. If this turns out to be true, it is conceivable that they could achieve an initial operational capability during 1968.

Some years ago we ourselves examined the desirability of the FOBS and there was agreement among civilian and military leaders that the system offered no advantages to the United States. While development of it could be initiated at any time for relatively rapid deployment, our analyses conclude it would not improve our strategic offensive posture and consequently we have no intention of revising the decision made years ago.

Like any other weapons system, the FOBS offers both advantages and disadvantages over traditional ICBMS. In our opinion, the disadvantages far outweigh the advantages.

The main advantage is that some trajectories of a FOBS would, because of the low altitude of their orbits, avoid detection by some early warning radars, including our BMEWS. A second is that the impact point cannot be determined until ignition of the rocket engine that deboosts the payload out of orbit -- roughly three minutes and 500 miles from the target. While the vehicle is in orbit, it may be difficult to determine whether it is a weapon or a satellite. Also, the flight time is as much as 10 minutes shorter than an ICBM.

For these possible advantages, severe penalties are paid in two critical areas -- accuracy and payload. The accuracy of the Soviet ICBM modified to a FOBS weapon would be significantly less and the payload of the FOBS vehicle would be a fraction of the ICBM.

The FOBS weapon would not be accurate enough for a satisfactory attack upon United States Minutemen missiles, protected in their silos. Perhaps the Soviets might feel it could provide a surprise nuclear strike against United States' soft land targets such as bomber bases.

However, several years ago, anticipating such a capability, we initiated the deployment of equipments to deny this capability. For example, we have Over-The-Horizon Radar, possessing a greater capability of detecting FOBS than does BMEWS, and giving us more warning time against a full-scale attack using FOBS missiles than BMEWS gives against a heavy ICBM launch.

Our "deterrent" rests upon our ability to absorb <u>any</u> surprise nuclear attack and to retaliate with sufficient strength to destroy the attacking nation as a viable society. With three-minute warning, 15-minute warning or no warning at all, we can still absorb a surprise attack and strike back with sufficient power to destroy the attacker. We have that capability today; we will continue to have it in the future.

~~CONFIDENTIAL~~

Received Washington CommCenter
2:26 P.M. Saturday 28 Oct 1967

Received LBJ Ranch CommCenter
= 4:03 P.M. Saturday 28 Oct 1967

Relayed to San Antonio CommCenter
4:50 P.M. Saturday 28 Oct 1967

OO WTE15 SA
DE WTE10 051
VZCZCEEA498
OO WTE10
DE WTE 2305

FROM SECRETARY MCNAMARA
TO THE PRESIDENT
INFO GEORGE CHRISTIAN
CITE CAP67899

~~C O N F I D E N T I A L~~

OCTOBER 28, 1967

MEMORANDUM FOR THE PRESIDENT

FOR SOME TIME WE HAVE OBSERVED SOVIET TEST CONSISTENT WITH THE DEVELOPMENT OF A FRACTIONAL ORBITAL BOMBARDMENT SYSTEM (FOBS). THE MOST RECENT TESTS SEEM TO CONFIRM INTELLIGENCE EVIDENCE THAT THE SOVIET IS MOVING IN THAT DIRECTION.

THE COMMITTEES OF CONGRESS HAVE ASKED FOR BRIEFINGS FROM THE DEFENSE INTELLIGENCE AGENCY; WE HAVE PROVIDED THOSE BRIEFINGS. WE ANTICIPATED THAT THER WOULD BE LEAKS TO THE PRESS AND SOME OF THOSE LEAKS ARE BEGINNING TO APPERAR.

WE THINK, THEREFORE, THAT WE SHOULD INITIATE A STATEMENT ON THE SOVIET TESTS RATHER THAN WAITING TO HAVE THE INFORMATION DRAGGED FROM US. ATTACHED IS THE STATEMENT WE PROPOSE TO RELEASE. I WANTED YOU TO HAVE A COPY BEFORE IT IS PUT OUT.

SIGNED: ROBERT S. MCNAMARA

DRAFT PRESS RELEASE

SOVIET FRACTIONAL ORBITAL BOMBARDMENT SYSTEM

IN ORDER TO PROTECT OUR INTELLIGENCE-GATHERING METHODS, WE HAVE ACTED WITH GREAT CARE OVER THE LAST SEVEN YEARS IN DISCUSSING INFORMATION COLLECTED BY THE INTELLIGENCE COMMUNITY. HOWEVER, WE HAVE NOT HESITATED TO RELEASE INELLIGNCE DATA WHEN WE HAVE THOUGHT THAT IT WAS IN THE BEST INTERESTS OF THE NATION TO DO SO.

ONE EXAPLE OF THIS IS THE INFORMATION ON THE SOVIET UNION STRATEGIC NUCLEAR FORCE. THROUGH MY ANNUAL POSTURE STATEMENTS TO CONGRESS, AND AT VARIOUS OTHER TIMES, WE HAV DECLASSIFIED INFORMATION ON THE SOVIET STRATEGIC FORCE IN ORDER TO HELP EXPLAIN NUCLEAR ISSUES OF MAJOR IMPORTANCE TO OUR PEOPLE AND OUR ALLIES.

SIMILARLY, WE HAVE PUBLICIZED UNPRECEDENTED AMOUNTS OF INFORMATION ON U.S. STRATEGIC FORCES. OF COURSE THIS GIVES INFORMATION OF VALUE TO THE POTENTIAL ENEMY. BUT OUR DETERRENCE RESTS NOT ONLY ON OUR CAPABILITY TO DESTROY ANY ATTACKER BUT ALSO ON THE ENEMY'S KNOWLEDGE THAT WE HAVE THAT CAPABILITY AND THAT WE HAVE H WILL TO USE IT.

I WOULD LIKE TODAY TO DISCUSS WITH YOU CERAIN INTELLIGENCE INFORMATION WHICH WE HAVE COLLECTED ON A SERIES OF SPACE SYSTEM FLIGHT TESTS BEING CONDUCTED BY THE SOVIET UNION.

AS YOU KNOW, AN INTERCONTINENTAL BALLISTIC MISSILE (ICBM) NORMALLY DOES NOT GO INTO ORBIT BUT RATHER FOLLOWS A BALLISTIC TRAJECTORY FROM LAUNCH POINT TO IMPACT POINT. IT REACHES A PEAK ALTITUDE OF PERHAPS 800 MILES ON THIS TRAJECTORY.

AS LONG AS TWO YEARS AGO, WE OBSERVED HAT THE SOVIETS HAD INITIATED TESTS INVOLVING A DIFFERENT TYPE OF TRAJECTORY OF MUCH LOWER ALTITUDE.

INFORMATION WE NOW HAVE CAUSES US TO ACCEPT THE LIKELIHOOD THA IN THOSE LOWER ALTITUDE TESS THE SOVIETS WERE WORKING ON SOMEHING WE HAVE CALLED A FRACTIONAL ORBITAL BOMBARDMENT SYSTEM (FOBS).

UNLIKE THE ICBM WHICH FOLLOWS A BALLISTIC TRAJECTORY, THE VEHICLE LAUNCHED IN A FRACTIONAL ORBITAL BOMBARDMENT MODE IS FIRED INTO A VERY LOW ORBIT ABOUT 100 MILES ABOVE THE EARTH'S ATMOSPHERE. AT A GIVEN POINT -- GENERALLY BEFORE THE FIRST ORBIT IS COMPLETE -- A ROCKET ENGINE IS FIRED WHICH SLOWS DOWN THE PAYLOAD AND CAUSES IT TO DROP OUT OF ORBIT. THE PAYLOAD THEN FOLLOWS A RE-ENTRY PATH SIMILAR TO THE RE-ENTRY OF A BALLISTIC MISSILE.

EVEN NOW IT IS IMPOSSIBLE TO BE CERTAIN OF WHAT THESE TESS REPRESENT. IT IS CONCEIVABLE THAT THE SOVIET UNION HAS BEEN TESTING SPACE VEHICLES FOR SOME RE-ENTRY PROGRAM. IT IS ALSO POSSIBLE THAT THE RUSSIANS ARE CONDUCTING TESTS OF SOME SORT OF POST-STRIKE RECONNAISSANCE SYSTEM. BUT WE SUSPECT THAT THE RUSSIANS ARE PURSUING THE RESEARCH AND DEVELOPMENT OF A FOBS. IF THIS TURNS OUT TO BE TRUE, IT IS CONCEIVABLE THAT THEY COULD ACHIEVE AN INITIAL OPERATIONAL CAPABILITY DURING 1968.

SOME YEARS AGO WE OURSELVES EXAMINED THE DESIRABILITY OF THE FOBS AND THERE WAS AGREEMENT AMONG CIVILIAN AND MILITARY LEADERS THAT THE SYSTEM OFFERED NO ADVANTAGES TO THE UNITED STATES. WHILE DEVELOPMNT OF IT COULD BE INITIATED AT ANY TIME FOR RELATIVELY RAPID DEPLOYMENT, OUR ANALYSES CONCLUDE IT WOULD NOT IMPROVE OUR STRATEGIC OFFENSIVE POSTURE AND CONSEQUENTLY WE HAVE NO INTENTION OF REVISISNG THE DECISION MADE YEARS AGO.

LIKE ANY OTHER WEAPONS SYSTEM, THE FOBS OFFERS BOTH ADVANTAGES AND DISADVANTAGES OVER TRADITIONAL ICBMS. IN OUR OPINION, THE DISADVANTAGES FAR OUTWEIGH THE ADVANTAGES.

THE MAIN ADVANTAGE IS THAT SOME TRAJECTORIES OF A FOBS WOULD, BECAUSE OF THE LOW ALTITUDE OF THEIR ORBITS, AVIOD DETECTION BY SOME EARLY WARNING RADARS, INCLUDING OUR BMEWS. A SECOND IS THAT THE IMPACT POINT CANNOT BE DETERMINED UNTIL IGNITION OF THE ROCKET ENGINE THAT DEBOOSTS THE PAYLOAD OUT OF ORBIT -- ROUGHLY THREE MINUTES AND 500 MILES FROM THE TARGET. WHILE THE VEHICLE IS IN ORBIT, IT MAY BE DIFFICULT TO DETERMINE WHETHER IT IS A WEAPON OR A SATELLITE. ALSO, THE FLIGHT TIME IS AS MUCH AS 10 MINUTES SHORTER THAN AN ICBM.

FOR THESE POSSIBLE ADVANTAGES, SEVERE PENALTIES ARE PAID IN TWO CRITICAL AREAS -- ACCURACY AND PAYLOAD. THE ACCURACY OF THE SOVIET ICBM MODIFIED TO A FOBS WEAPON WOULD BE SIGNIFICANTLY LESS AND THE PAYLOAD OF THE FOBS VEHICLE WOULD BE A FRACTION OF THE ICBM.

THE FOBS WEAPON WOULD NOT BE ACCURATE ENOUGH FOR A SATISFACTORY ATTACK UPON UNITED STATES MINUTEMEN MISSILES, PROTECTED IN THEIR SILOS. PERHAPS THE SOVIETS MIGHT FEEL IT COULD PROVIDE A SURPRISE NUCLEAR STRIKE AGAINST UNITED STATES' SOFT LAND TARGETS SUCH AS BOMBER BASES.

HOWEVER, SEVERAL YEARS AGO, ANTICIPATING SUCH A CAPABILITY, WE INITIATED THE DEPLOYMENT OF EQUIPMENTS TO DENY THIS CAPABILITY. FOR EXAMPLE, WE HAVE OVER-THE-HORIZON RADAR, POSSESSING A GREATER CAPABILITY OF DETECTING FOBS THAN DOES BMEWS, AND GIVING US MORE WARNING TIME AGAINST A FULL-SCALE ATTACK USING FOBS MISSILES THAN BMEWS GIVES AGAINST A HEAVY ICBM LAUNCH.

OUR "DETERRENT" RESTS UPON OUR ABILITY TO ABSORB ANY SURPRISE NUCLEAR ATTACK AND TO RETALIATE WITH SUFFICIENT STRENGTH TO DESTROY THE ATTACKING NATION AS A VIABLE SOCIETY. WITH THREE-MINUTE WARNING, 15-MINUTE WARNING OR NO WARNING AT ALL, WE CAN STILL ABSORB A SURPRISE ATTACK AND STRIKE BACK WITH SUFFICIENT POWER TO DESTROY THE ATTACKER. WE HAVE THAT CAPABILITY TODAY; WE WILL CONTINUE TO HAVE IT IN THE FUTURE.