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DEPARTMENT OF STATE

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R. W. Komer

**A National Approach to Arms Control**

Would appreciate your reactions to this brief think-piece on how we might stabilize the intercontinental deterrent balance at a high level via arms controls. It represents the fruit of at least my thinking during the last four months of the Coolidge course. As you will note it is directed not so much toward disarmament (i.e., reductions) as toward putting a lid on the "arms race" once we have achieved an optimum deterrent posture. Moreover, I think it might even be negotiable with the Soviets. Note in particular the potential payoffs from such a scheme on pages 9 and 12.

That I have ignored a whole series of other arms control gambits does not mean that I regard them as useless; it is just that I feel the attached measures (including test ban) are those best suited to the stability concept.

R. W. KOMER

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R. W. Komer  
December 10, 1959

OFFICE OF THE SECRETARY

MEMORANDUM FOR: Mr. Coolidge and Staff

SUBJECT: Stabilizing the Nuclear Deterrent Balance at a High Level

Although Mr. Coolidge's draft report highlights the potential desirability of attempting to stabilize the deterrent balance at a high level, we have not so far addressed ourselves directly to the ways in which arms controls might be used for this purpose. This paper is an attempt to fill that gap.

I strongly believe that the only sensible approach to serious arms controls over perhaps the next decade (and probably the only approach which we might sell to the Soviets as being of mutual advantage) is one which is not directed toward reduction of existing armaments but toward damping down the "race" for future armaments, once adequate deterrent capabilities exist on both sides. If a nuclear stalemate in fact exists and will probably continue to exist (though it is at present quite unstable), and if as a result neither the US or the USSR regards general nuclear war as an acceptable course except in extremis, then there are compulsions on both sides to stabilize this stalemate, to

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reduce the risks of accident and miscalculation which would upset it, and perhaps even to reduce the cost of maintaining it.

This concept does not call for substituting disarmament measures, however fully inspectable, for an adequate military posture. On the contrary it is based on our first achieving an adequate military posture and then attempting to prolong this acceptable situation via arms controls. Indeed, we are not going to convince the Soviets to accept the measures envisaged if we continue to lead from weakness; the only basis on which they might accept is if these correspond to the actual situation existing at the time.

#### I. WHAT IS AN ADEQUATE DETERRENT BALANCE?

The particular strategic posture which we would regard as adequate is a matter for the experts to determine. Since we have elected a "strike second" strategy, however, any adequate deterrent posture would probably have to be based largely on a relatively invulnerable strike force of second generation hardened or mobile missiles, sufficient to inflict unacceptable retaliatory damage on the USSR.<sup>1/</sup> Apparently Dr. Kistiakowsky believes

1. I am talking here only about general war deterrence. I do not believe it is feasible to achieve deterrent stability with respect to the whole spectrum of limited wars, because of the more limited stakes and infinitely greater number of variables involved.

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believes that our posture might be adequate once POLARIS and ATLAS are fully proven, and that at this point we could accept a ban on further long range missile tests. However, many of us fear that his timing may be premature, and that not until we have tested both POLARIS and MINUTEMAN will we have the degree of flexibility plus invulnerability which we need.

What I have in mind is that once we had achieved an adequate deterrent posture, we might agree to a series of measures which would inhibit if not prevent the further testing and production of what are likely to be the chief weapons of intercontinental warfare in the 1960's, ballistic missiles and their nuclear warheads. In other words we would try and put a ceiling on the race for intercontinental strategic advantage at this point.

## II. THE TIMING OF NEGOTIATIONS

In any case to acquire a relatively invulnerable retaliatory capability, and at the same time to negotiate controls to clamp on a ceiling at this point, would require several years. This gives us plenty of time to plan, and build, and negotiate before we sign on any dotted lines.

Hence, the above rationale is not one which calls for early comprehensive agreements on arms controls. In fact, we could not afford to implement it, at least in full, until we have unilaterally achieved a deterrent posture considered adequate by both us and the USSR, which may be some years from now. This is not to say, however, that we could not

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begin exploring the stability concept with the Soviets (preferably at the highest level) prior to that time. There is no compelling reason why during the buildup period we could not discuss with our allies and then the Soviets the broad concept of stabilizing intercontinental deterrence. Subsequently, if this proved promising, we could follow through with talks about how to do do. But not until we had achieved the posture we thought adequate would we be prepared actually to enter into agreements to stabilize at that level. It should not be beyond our ingenuity to protract any negotiations until this time.

On the other hand, there seems to be no compelling need to negotiate all of the measures needed to stabilize the intercontinental deterrent balance at the same time. We may shortly have a ban on nuclear testing. If by 1962-63 it seemed strategically advantageous to proceed to a cut-off of fissionable materials, the fact that we were not yet ready for <sup>not</sup> missile test bans and production cut-offs would necessarily be a bar. However, the important thing is not to let ourselves be inveigled into one or two particular measures without being sure that their implementation without the others contemplated would not be de-stabilizing rather than stabilizing in its net effects. One cannot avoid the suspicion that in our present piecemeal ad hoc approach to arms control negotiations we have failed to assess fully how each of them fits into any overall rationale.

III. SPECIFIC

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### III. SPECIFIC MEASURES TO STABILIZE THE INTERCONTINENTAL DETERRENT BALANCE

A. Ban on Nuclear Testing. This measure is already under discussion and may soon be agreed upon. Its effect is primarily to stabilize one aspect of the deterrent balance rather than being simply a first stage confidence-building ploy. However, if we had fully thought through the concept of stable deterrence before we began the test talks we might have concluded that further testing to provide improved nuclear warheads for second generation missiles systems was highly important to adequate deterrence.

B. Ban on Missile Testing. The rationale for this ban would be the same as that above, i.e., to put a damper on technological progress leading to the development of ever newer and more accurate missiles which might again de-stabilize the deterrent balance. Assuming that we already had relatively invulnerable mobile or hardened systems which packed an adequate punch, why continue the race for even better missile systems provided we could effectively prevent the Soviets from doing so?

A ban on long range missile testing could be effectively inspected according to Dr. Kistiakowsky's 1958 report. Indeed, it estimates that we could probably do so adequately by unilateral means alone. Several problems arise, however. One is that smaller missiles being tested can be confused with larger missiles; it would also be possible to produce larger missiles by clustering or staging smaller ones. Thus a question arises as

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to how far down the test ban should go. Should we, for example, ban all ballistic missile tests? (This might not be so bad from our standpoint). Second, we cannot stop the race for space. Continued testing and launching of space vehicles will be essential. We can limit the use of such vehicles for military testing by systems of joint firing and on-site inspection, but there is no question that military applications can be tested in a peaceful uses program, even though at considerable difficulty.

C. Cut-off of ICBM (and perhaps IRBM) Production. Therefore, we need a measure which would prevent the Soviets from utilizing any technological advances which they might have achieved through ostensibly peaceful programs. A way to do this would be via a subsequent ban on further production of ICBM's once each side had accumulated an adequate stockpile. There is a further reason for this cut-off; assuming that neither side had built up a sufficient missile force to give it strategic superiority, a cut-off would make subsequent achievement of such a posture extremely difficult.

Preliminary studies by CIA indicate that it would be very difficult to detect clandestine production of a few missiles a year. However, it should not be too difficult to detect production on a scale sufficient to upset the deterrent balance. Of course, allowance would have to be made for continued production of an agreed number of vehicles for peaceful

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uses, but this problem should not prove too great.

D. Cut-off of Fissionable Materials Production. If we want to stabilize the intercontinental deterrent balance it would help at some point to operate on warheads as well as delivery vehicles. We should be able to determine in advance at what time we will be in a reasonably good position with respect to fissionable materials on hand (always in comparison to where the Soviets will be at that time). Once we have enough to arm our intercontinental deterrent force, to allow some anti-missile defense (if feasible and desirable), and to provide a reasonable stockpile for limited war and ASW use, we might then be able to afford a materials cut-off, especially if this put us in a more advantageous position than the USSR.

Existing studies suggest that such a cut-off would be verifiable within acceptable limits of tolerance. Since each power would have hundreds of thousands of kilograms of fissionable materials by this time, diversion or clandestine production probably would not seriously upset the deterrent balance. Of course here to some peaceful uses production would have to be allowed.

E. Controls on Outer Space. A fifth part of the program, though one which we probably ought to negotiate immediately rather than later, would be to forestall the development of yet a new category of strategic weapons systems operating in outer space. This would inhibit another

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de-stabilizing technological advance. The technique would be to propose mutual inspection or joint programs in order to insure that no offensive weapons would be installed in satellites or space vehicles. Such a ban could probably be adequately monitored, perhaps by inspection at point of launch.

F. Measures to Reduce the Risk of Surprise Attack, Miscalculation, or Accident. Despite the fact that the existence on both sides of relatively invulnerable nuclear strike forces would by definition make nuclear war highly unlikely, we cannot exclude the de-stabilizing possibilities inherent in miscalculation, accident, or even war by desperation. To the extent that measures can be devised which will reduce such risks (e.g. by fuller information about each other's posture and state of readiness -- which is less dangerous if each side is relatively invulnerable, by techniques for quick communication in event of crisis, etc.), these will help to stabilize the deterrent balance. We need a much fuller examination of the relationship of such measures to deterrent stability than has been attempted to date.

#### IV. PITFALLS FROM STABILIZATION THROUGH ARMS CONTROLS

The above suggestions merely outline a series of mutually supporting techniques for putting a ceiling on intercontinental deterrent capabilities at as high (or as low) a level of mutual deterrence as the two sides are willing to agree upon. Each of these requires further intensive study

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before we can really determine whether it is: (a) strategically advantageous; (b) inspectable; and (c) negotiable. Indeed the concept of deterrent stability itself needs research in depth.

But the suggested measures do at least seem sufficiently promising to warrant their being recommended for intensive study as ways to stabilize the intercontinental deterrent balance, once we have reached an adequate deterrent posture ourselves. While they would only hold back, rather than prevent, continued change in military technology (and this is only two key areas), they would at least hamper the testing of new advances, and even if such testing were clandestinely conducted would create another obstacle through production bans.

These measures appear to be adequately verifiable within levels of tolerance which we could accept. Since they are based on an existing high level of mutual deterrent capabilities, it would require evasion on a quite substantial scale to upset this balance. Moreover, the inspection systems themselves are mutually reinforcing (e.g., the inspection of outer space devices will contribute to the detection of missile testing, and vice versa; inspection of missile production facilities could give insights into new vehicles being prepared for testing; inspection of materials production facilities might indicate diversion on a scale which would suggest new weapons requirements, etc.)

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It remains to discuss whether these measures, even if inspectable and negotiable, are in our national interest. Their most obvious advantage would be that, while each side would retain an adequate nuclear deterrent, the substitution of a controlled for an uncontrolled missile-nuclear environment would reduce the risks of a destructive nuclear war. Neither side would find it easy to achieve a sufficient strategic missile or nuclear advantage to de-stabilize the deterrent balance. To those who argue that this would deny us the threat of "massive retaliation" (sound as it was when we had nuclear superiority), I would reply that this is already being denied us in fact as the Soviets achieve strategic parity with ourselves.

Another strong reason for attempting to stabilize intercontinental deterrence is that at present a very high proportion of our military budget is going for this purpose, at the expense of other pressing military needs. Whether or not we have arms controls, the threat of limited war is far more immediate than that of general war. In the opinion of many we are far better prepared for general than for limited war, and the so-called "missile gap" is far less serious in its implications than that of our limited ability to meet the Communists on a less than all-out scale. So if we could somehow reduce the need for rapidly superseding each generation of strategic weapons with ever new (and usually more costly) generations, it would facilitate at least some re-allocation of resources to

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meeting, limited and cold war threats.

A third advantage of stabilization through arms controls is the offensive possibilities it offers for holding back Soviet nuclear strike capabilities to the level which we think we can afford. Few will deny that the Soviets are ahead of us in the race for space and probably also for the moment in the field of ICBM's. If there is even a 50-50 possibility that the Russians may continue to pull ahead of us (for budgetary reasons among others), is it not advantageous to us to devise measures which will hold them back to our level? On the other hand, while the Soviets are ahead of us in first generation soft ICBM's, we may draw ahead of them in second generation solid fueled missiles. If so, would it not be to our advantage to negotiate a ceiling on the missile race at a time when our position is likely to be optimum with respect to theirs?

Granted that if we put a ceiling on the nuclear weapons and ballistic missile race it will merely lead each side to develop other strategic capabilities such as CW-EW. Since each side would still retain a fully adequate nuclear retaliatory capability, however, it would do the attacker little good to use CW or BW if the defender could still retaliate with nuclear weapons. Alternatively, a ceiling on offensive delivery systems might lead to greater emphasis on active and passive defense.

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If one side were thus able to reduce the damage he would absorb to acceptable levels, it would be quite de-stabilizing in its effects. However, if both sides did so, deterrent stability would probably be enhanced rather than reduced. At any rate, it seems to me that we need not unduly fear either possibility.

Finally, there are great political and negotiating advantages in being able to put forth to our allies and then the Soviets, before the forum of world opinion, a clearly understandable and comprehensive program for dealing with the most awesome risks of all-out nuclear conflict, without at the same time compromising our own security posture. In default of such a program, are we not in danger of being dragged into negotiations without countermoves with which to cope with allied pressures and the skillful initiatives of the USSR?

In sum, I believe that there is a series of arms control measures which could enhance rather than detract from our military posture over the coming decade. They are at least sufficiently promising to merit intensive study. They are probably adequately inspectable. In time they might permit us to re-allocate resources to meet our pressing military or cold war needs. They might even prove acceptable to the Soviets if we lead from strength. At a minimum they provide a clear basis on which to take the political initiative, while resisting other pressures from the USSR and our allies. While they involve major risks, at least these are probably calculable and for this reason may prove more acceptable than the

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potentially quite unstable situation with which we will otherwise have to live.

I recommend that you include a brief statement of this program in your report.

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