



FROM THE ARCHIVE

The featured article for this issue's "From the Archive" section is Herman Kahn's article titled "Arms Control Through Defense." Kahn makes an argument that defenses need not be incompatible with arms control and can play a role in Type I, II, and Graduated Deterrence. The first refers to "the deterrence of a direct attack," the second to "using strategic threats to deter an enemy from engaging in very provocative acts, other than a direct attack on the United States itself," and the third to "acts that are deterred because the potential aggressor is afraid that the defender or others will then take limited actions, military or nonmilitary, that will make the aggression unprofitable."[†] Despite the contemporary, and still very much current, notions that defenses are destabilizing and anathema to arms control, Kahn convincingly demonstrated the moral, prudential, and national interest superiority of a posture that emphasizes defenses as an important enabler of limits on strategic offensive arms.

ARMS CONTROL THROUGH DEFENSE

Herman Kahn, Hudson Institute, April 1983

Preface

In a televised interview on March 23, 1983, President Reagan made the following announcement:

I am directing a comprehensive and intensive effort to define a long-term research and development program to begin to achieve our ultimate goal of eliminating the threat posed by strategic nuclear missiles. This could pave the way for arms control measures to eliminate the weapons themselves... Our only purpose—one all people share—is to search for ways to reduce the danger of nuclear war.

The President's coupling of the need for ballistic missile defense (BMD) with the need for negotiated reductions in U.S. and Soviet strategic offensive forces is very similar to an "alternate central war posture" conceptualized at the Hudson Institute in the early 1960s. Labeled "Arms Control Through Defense" (ACD), this posture was the subject of a number of papers written by several Hudson staff members during the following decade. I myself have felt for some twenty years that ACD may be the most desirable set of nuclear weapon policies and programs for the United States to adopt. On political, military, and especially moral grounds, ACD is superior to a range of "deterrence only" and (non-ACD) "war-fighting" postures.

To encourage an informed public discussion of the synergisms between strategic defense and arms control, I decided to reissue (with only minor editing) part of the report* written

[†] Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960), p. 126.

* Herman Kahn, *A Paradigm for the 1965-1975 Strategic Debate*, H1-202-FR (Harmon-on-Hudson, N.Y.: Hudson Institute,



by the Hudson staff in 1963, which explains the basic characteristics of the ACD central-war posture. The excerpt from the report is contained in the following pages.

I. Arms Control Through Defense (ACD): Overview

This posture could just as easily be called Defense Through Arms Control. That is to say, one can emphasize that arms control can be made to work because each side procures very adequate active and passive defenses and therefore is willing to trust control measures on strategic offensive forces, or one can emphasize that defense can be made to work because of the limitation on the strategic offensive forces (i.e., defense through arms control). ACD might easily be the most feasible and perhaps the most desirable form of serious arms limitation. As far as the United States and Soviet Union are concerned, if the other side has not cheated in offensive forces one does not really care about its capabilities in the civil defense and active defense fields. Neither national can hurt the other with strategic defenses. If, however, one side or the other cheats, then it is exactly at this point that these active and passive defense programs become essential; because they make the cheating less consequential.

Thus Arms Control Through Defense tries to make arms control more palatable by limiting the risks, and this is accomplished by increasing the defense capability, presumably on both sides. To give an example, one could imagine 100 missiles on a side and very elaborate active and passive defenses. Under this situation, the two countries would not worry much if one side or the other cheated because the threat from 200 missiles is not much greater than from 100 missiles, and, in fact, on paper the active and passive defenses might be able to degrade both attacks to "acceptable" limits. However, neither side can be so certain of its defenses that it is likely to risk provoking the other side. The Arms Control Through Defense has another great advantage in that it is not naked to third, fourth, and fifth powers. It could also have a capability to significantly increase its offensive forces if this becomes necessary.

Furthermore, ACD does not encourage any of the Nth powers to "cheat," or even compete, because even if these Nth powers get quite large offensive capabilities they cannot really challenge super-nations which possess elaborate active and passive defense systems. ACD acts, in other words, as a damper on the arms competition generally, and does so specifically because it emphasizes that the big and small powers are not equal. A nuclear world is not like the Wild West and it takes more than just a six-gun to be able to play the game. Their defensive capability in turn further reassures the great powers as to the safety and desirability of accepting limitations on their offensive forces.

So far as Type I Deterrence is concerned, the strategy is probably at least "workable" if not "adequate." If there is a countervalue retaliatory attack the active and passive defense systems, even if they work quite well, will not prevent a great deal of property from being

destroyed.¹ Many lives will also be lost and there will always be the possibility that the defenses will work badly: i.e., ACD has many of the advantages of Minimum Deterrence and Finite Deterrence without the disadvantages of forcing one's people to be stark hostages.

There is also some possibility that each side will have a fair amount of Type II Deterrence, just because thermonuclear war is indeed more feasible. In other words, some ACD postures are multistable—a situation, by and large, which many analysts, including the author, find preferable to the ordinary stable deterrent position.

An ACD policy can be a parity policy or not, depending upon the details. There may be lack of parity either by agreement, because one side is simply much more competent than the other side technically, operationally, or strategically, or because one side or the other puts more effort into uncontrolled parts of the posture. (There may only be limits on offensive forces, and each side may be encouraged to do what it wants to and can in the active and passive defense fields.) ACD may not only be feasible and desirable, it is also conceptually important because it indicates that the usual notions that active and passive defenses are always destabilizing and somehow bad from the arms control point of view are not necessarily correct—it would be rather strange if they were. Somehow the emphasizing of the use of one's own civilians as hostages does not really seem to be so obviously moral, prudential, and in the national interest as so many seem to think. It is true that in ancient times great kings and emperors did exchange members of their family as hostages, but the policy even then looked bad from both the human and national interest points of view. Also, ACD looks like a possible transitional strategy to an arms control world.

II. Arms Control Through Defense: Explication

A. Introductory Comments

This strategy tries to avoid some of the difficulties of arms control agreements to limit offensive capability by permitting or encouraging both sides to have highly effective active and passive defense. One purpose is to guarantee each side that if the other side cheats, it will not gain an overwhelming advantage. Another purpose is protection against Nth countries. A third is to get the country out of the business of offering its population as (involuntary?) hostages.

¹ If both the Soviet Union and the United States had an ability to protect every citizen and an assured recuperation capability, both nations would still possess adequate Type I Deterrence. Neither national would be willing, under almost any plausible circumstances, to risk losing the buildings and facilities in their great cities—so valuable in economic terms and so rich in historical, sentimental, and cultural value. And in practice neither nation could be certain that its protection and recuperation plans would work. Finally, one would judge that the above deterrent is only “adequate.” It is not “approaching absolute” or even “reliable.” Therefore both nations will have a good deal of Type II Deterrence as well (i.e., the situation is multistable).

B. National Goals

Arms control of some sort is essential. This form is relatively safe and may have a large number of adherents in both the Western and Eastern blocs. ACD may preserve the possibilities of war or an accelerated arms race as usable but unlikely instruments of policy. It also makes available most of the options on the escalation ladder but in somewhat safer form (i.e., it restores the possibility of having a war or escalation with non-bizarre tactics). It also seems to fit in with most other U.S. goals—except possibly some alliance requirements, which, however, are presumably limited in an environment in which ACD is acceptable.

C. Political-Military Analysis

1. Efficient Use of National Resources: Because of the large requirements for active and passive defense this strategy could be relatively expensive in dollars at least in the initial stages. However, it does not make any extraordinary requirements in leadership, intellect, organizing ability, etc., except that we stay competent about defense even in a détente atmosphere.

2. Escalation Adequacy: Because of the arms control agreement both sides can only make symmetrical threats against one another. Because of the limited number of weapons, the threats and warnings that can be exchanged must be limited and because of the active and passive defenses, the feat of an eruption is greatly lessened. (Depending on the issue involved and the degree of disarmament, the *probability* of eruption may or may not be lessened.) It is not likely that there will be anything like massive retaliation in this strategy, because the cities are so well protected, and there would be a certain reluctance to expend a large fraction of a limited force of missiles against BMD. Nuclear reprisals, if they occur at all, are likely to involve relatively innocuous targets or property in cities.

3. Assurance: This strategy provides a great deal of assurance since it promises to control the arms competition, is defensive, protects against all-out escalation, and may retain reasonable Type I and even Type II Deterrence.

4. Alliance Cohesion: Very probably the arms control agreement would involve some sort of political settlement with the Soviet Union. Excepting this, the strategy is compatible with a number of considerations in alliance cohesion. However, the weakened Type II Deterrent or the lessened sense of threat that the agreement is likely to bring may lead to disintegration of the alliance, or at least the weakening of ties, a consideration that may have advantages and disadvantages.

5. Stability to External Shocks: Except during the transition to this strategy, ACD is not particularly dependent on any particular configuration, military, political or otherwise, and since it has a high degree of technical safety, it is satisfactory in this respect. The reduction of force need not reduce stability—the difference between 200 and 400 missiles, for

instance, is not likely to lessen deterrence, particularly. When the offensive force comprises much less than 50-100 missiles, the balance of nonnuclear forces becomes important and stability will depend greatly on them. If there is a reduction of force to such small levels, there will be a period of instability in the transition during which other political-military factors will be critical. A miscalculation (or even a correct calculation) may show that war is advantageous to one side or the other if the transition period is not carefully arranged and if it is not sufficiently short to be substantially free of tensions.

6. Arms Competition Deceleration: Since there is always a possibility for a breakthrough in defense or offense which will give one side or the other extreme confidence in its capabilities, there is likely to be extensive research and development, unless this could also be controlled under the agreement. Since both sides are far from over-kill capability, an increase in the defensive capability or the penetration capability by a factor of 2, would double or halve the threats on one side or the other. Thus increased knowledge or technical ability may be worth a great deal if the offensive forces are not below the threshold at which defenses become clearly dominant and immune to reasonable changes in the threat. In any case, there is no longer a race in numbers. Such an agreement might also set a precedent in establishing active and passive defenses as an important element in nuclear strategy which would be followed by future nuclear powers.

7. Specific Arms Control Measures: This strategy is compatible with a very large number of measures short of total disarmament and even with total disarmament—since in a limiting case which may be of theoretical interest only defense will tend to atrophy after offense is eliminated.

8. Capability Against Unorthodox Opponents: The strategy in some forms includes this to a high degree since it attempts to preserve a war surviving capability against all kinds of attacks, making it less vulnerable to Nth country opponents, blackmail tactics, and the like.

9. Political Acceptability: Very high, since it doesn't require or make any special demands on any internal or external institutions if the understanding arrived at regarding Europe continues to be acceptable to those involved.

D. Central War Purposes

1. Type I Deterrence: This strategy accepts the possibility that there could be very little retaliation if the enemy's defense system were unexpectedly efficient. It assumes that reasonably assured severe damage to (and possibly destruction of) several cities (5 to 10 cities, say) plus the possibility of even greater destruction, should be adequate to achieve acceptable Type Deterrence. The expectation of damage can vary greatly depending on the type of restraints for offensive weapons. Assuming there is no change in the world political system, world-order will tend to be a product of multistability. The fear of war will not deter so much, but the total power realities will play a far greater part in political arrangements.

2. Improved War Outcome: This strategy imputes a high value to this purpose and for this reason has limited the number of nuclear forces on each side and included an adequate active and passive defense system.

3. Preventive War Potential: Under the arms control agreement outlined this capability is less needed, but may remain to some degree—particularly against Nth countries.

4. Type II Deterrence: As above, the necessity for this capability is decreased by the arms control agreement, but some capacity still remains (i.e., multistable deterrence).

5. Graduated Deterrence: Under certain circumstances this capability would be included but again need for maintaining this type of deterrence would be decreased by the political agreements.

6. Threatened Inadvertent Eruption: It can very much afford to do this because of its strong position in Improved War Outcome; but, at the same time it would not be as effective as with some other strategies because of the high defense capabilities.

7. Adaptability: This is one of the most important qualities of this strategy. Because the agreement has only reduced the number of missiles and made it symmetrical, retaining the war-fighting capability, the nation could adjust rapidly to changing conditions.

8. Technical Safety: Because the forces are relatively invulnerable to attack, neither side would be trigger-happy. The large amount of passive and active defense of both sides make each side competent to handle accidentally fired missiles.

E. Typical Capabilities

1. Offensive Weapons: As described, a limited force that could be protected by hardness, mobility or active defense.

2. Active and Passive Defenses: A very extensive network of civil, ballistic missile, and air defenses. These defenses should be effective enough to reduce dramatically the consequences (in terms of potential war damage) if the other side cheats on the arms control agreement. Spending for strategic defenses would approximate and then exceed expenditures devoted to offensive forces.

3. Intelligence: This would be supplied by national technical means or inspection under the arms control agreement.

4. Command and Control: About the same as in other war-fighting strategies. There might be more elaborate provisions for communication between the two opponents; indeed, provisions for such communication are likely to be part of the arms control agreement.

5. Operational Capabilities of Above: Same requirements as for any war-fighting systems.

6. Tactical and Strategic Skill: This strategy is compatible with a simple spasm-response doctrine or the most complicated of the controlled calculating responses.

G. Likely Tactics

Tactics may vary as in other war-fighting strategies.

H. Other Comments

One argument would be directed against what seems to be too sanguine an assumption that this type of strategy would alleviate Nth country problems. On the contrary this might seem an opportunity for smaller countries to gain superiority if the forces of the great nations decay too far.

In its more extreme forms ACD is an avant garde strategy which may find acceptance only under special circumstances, and then only in the wake of careful educational programs for the benefit of intellectuals. The economical and technical feasibility of ACD will vary with changes in R&D results. It may founder or succeed as a result of self-fulfilling prophecies that emphasize or de-emphasize defense R&D procurement.

Superficial Summary of the Characteristics of the Arms Control Through Defense Posture	
Variable	ACD "Rating"
Military Systems	Reasonable
Technical Feasibility	High
Dollar Cost	Medium to High
Immediate Effect on Arms Competition	Mostly Slowed Down
Long-run Effect on Arms Competition	Slowed Down
U.S. Image	Peaceful vis-à-vis S.U.
Domestic Political Feasibility	Relatively Feasible
Deterrence of Surprise Attack	Reasonably High
Stability Against "Reciprocal Fear of Surprise Attack"	High
Alliance Problems	Intermediate
Capability Against Unorthodox Opponents	Reasonable
Escalation Dominance	Reasonable
Aftereffects of Controlled War	Minimum Damage Likely
Aftereffects of Uncontrolled War	Minimum Damage