TACTICAL NUCLEAR DEFENSE– THE WEST GERMAN VIEW

by

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> We are out-manned, out-gunned, out-tanked, and out-planed by between 2 to 1 and 3 to 1. We can't hope to win a conventional war.
>
> An Officer at SHAPE[1]

> We could not afford to be dependent solely upon conventional forces [in Europe], because these might be inadequate to prevent defeat of our armies or loss of territory.
>
> President Richard Nixon[2]

> Many have yet to learn that in the event of a collision in Europe our peoples would be destroyed by tactical nuclear weapons every bit as efficiently as by strategic bombs, and that, furthermore, the fact of their existence scarcely reduces the risk of the outbreak of war at all.
>
> West German Finance Minister Helmut Schmidt[3]

INTRODUCTION

Now that American preoccupation with Vietnam is coming to an end, priority for US defense commitments will revert to NATO. Yet, the quotations above illustrate the dilemma confronting us today in our search for a credible defense policy for Western Europe. On one hand, we are outnumbered in every conventional warfare category that counts: tactical aircraft, tanks, artillery, and manpower. On the other hand, the one category of weaponry which could counter the Warsaw Pact's conventional superiority–tactical nuclear weapons–raises such a spectre of territorial destruction in the eyes of many West Europeans (and of many Americans as well), that these weapons are welcomed solely as an additional deterrent and, should that fail, only in the forlorn hope that their use will quickly escalate the conflict to a US-Soviet strategic exchange, thus sparing the Federal Republic of Germany further destruction.

In fact, the possibility of unacceptable collateral damage resulting from friendly employment of tactical nuclear weapons in defense of Western Europe is one of the underlying considerations influencing West European political opinion on tactical nuclear defense. Three additional major considerations also emerge as influential in determining such opinion. First, who makes the initial decision to employ tactical nuclear weapons, and how is this decision made? Second, how closely is the employment of strategic nuclear missiles by the United States coupled to hostilities between NATO and Warsaw Pact forces in Europe? And third, what are the chances that tactical nuclear weapons can be used selectively and in a controlled manner without escalating to theater-wide nuclear violence in Europe?

These four political considerations are particularly sensitive within the Federal

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THE POSSIBILITY OF UNACCEPTABLE COLLATERAL DAMAGE RESULTING FROM FRIENDLY EMPLOYMENT OF TACTICAL NUCLEAR WEAPONS IN DEFENSE OF WESTERN EUROPE IS ONE OF THE UNDERLYING CONSIDERATIONS INFLUENCING WEST EUROPEAN POLITICAL OPINION ON TACTICAL NUCLEAR DEFENSE.

Republic which, because of its geographical location, promises to be the principal battleground in any East-West conflict. If we are to rely on tactical nuclear weapons to counter the Warsaw Pact's conventional superiority, it behooves us to understand West German misgivings concerning their use. The purpose of this article, then, is to examine the Federal Republic's views on the four political considerations, with the aim of obtaining insights that will enable us to alleviate their misgivings where possible.

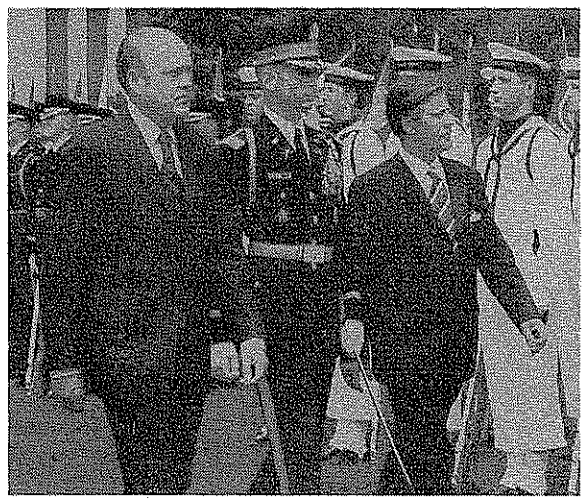
THE NUCLEAR TRIGGER

The logical consideration to be addressed first is that which occurs first—who makes the initial decision to employ tactical nuclear weapons assigned to NATO units in the event of a Warsaw Pact attack? In other words, whose finger is on NATO's tactical nuclear trigger?

If we consider the British nuclear-equipped bombers as more strategic than tactical, the current answer to that question is relatively clear. All of the approximately 7,000 tactical nuclear weapons in Western Europe[4] are currently under US control in the sense that they either are assigned to US tactical units or, if assigned to other NATO forces, are in the possession of US custodial units attached to such forces.[5] This, in effect, gives the United States the final say as to whether or not tactical nuclear weapons will be used by NATO.

It is precisely this unilateral discretion on the part of the United States that worries our European allies most. On the one hand, they worry that these weapons *won't* be released to NATO firing units when needed to counter a conventional attack. On the other hand, they equally fear that such weapons *will* be used by US units on their soil without prior consultation and concurrence. These fears led West German defense authority Helmut Schmidt to comment in 1962 that there were "weighty and positive political reasons why a country should wish its voice to be heard when the actual decision is being made to use nuclear weapons."[6] Elaborating on such reasons, he explained that if nuclear weapons are to be fired from the territory of a country, there will always be the risk of retaliation against that country even though it was not its own troops who actually fired the shot."[7] Schmidt appreciated the political unacceptability of West German control over such weapons, however, and advocated instead nuclear task forces separate from general ground forces and responsive only to a "Supreme Political Commander" through a separate and distinct chain of command. Rather than the Supreme Allied Commander Europe (SACEUR), this supreme political authority would be the Prime Minister of an envisioned United States of Europe.[8]

Other West German spokesmen also pressed for a greater voice in nuclear decisionmaking.



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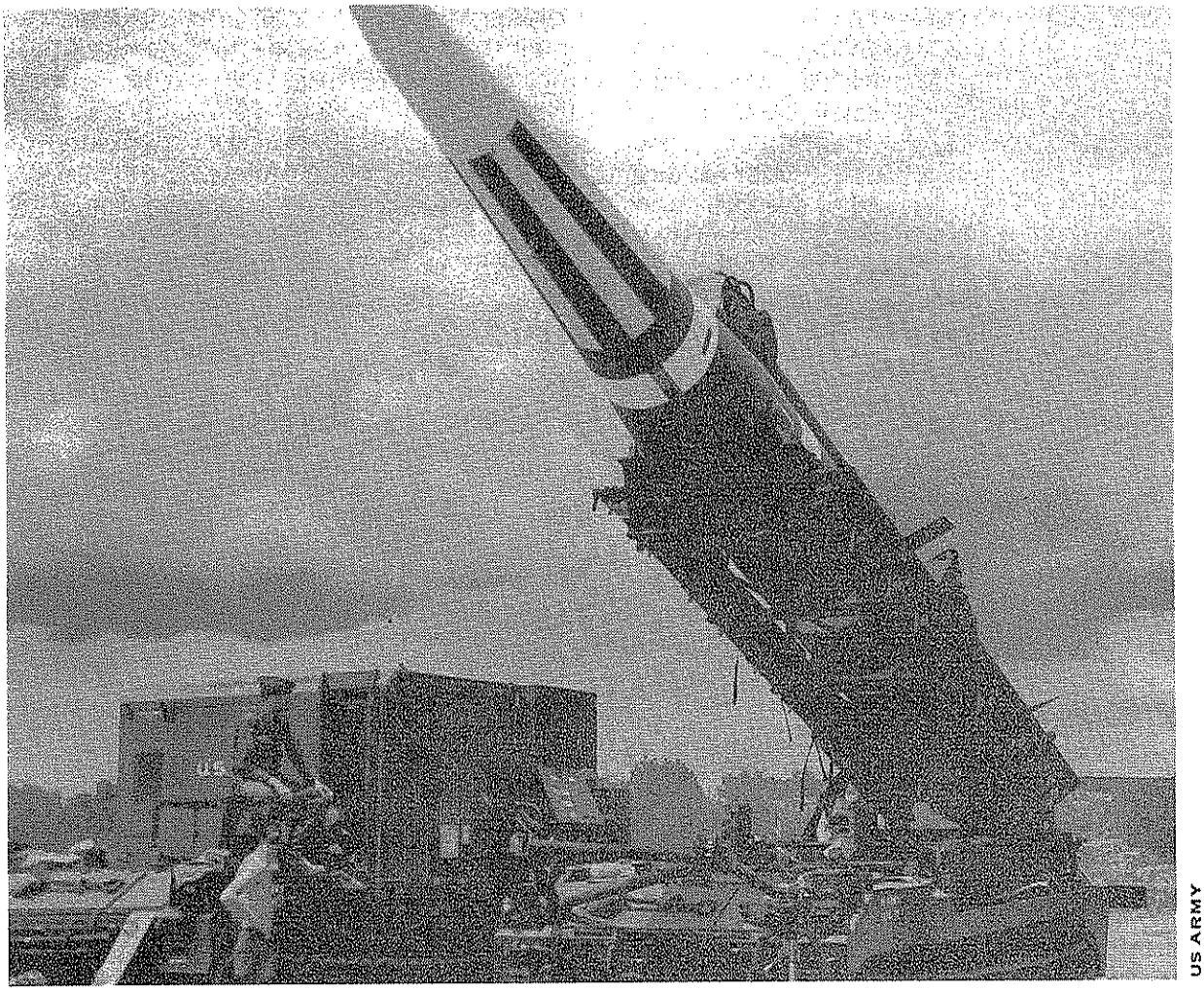
Finance Minister Helmut Schmidt troops the line with SECDEF Laird at the Pentagon in July, 1972.



West German Luftwaffe personnel training with the Pershing Missile System.

In 1964, Foreign Minister Gerhard Schröder, though not seeking German control over nuclear weapons, strongly advocated a multilateral nuclear force with a West German voice in its use.[9] In 1966, former West German Defense Minister Franz Josef Strauss favored a United States of Europe with its own nuclear weapons under supranational control in alliance with the United States. Europe's nuclear arms would consist of pooled British and French weapons with release initially vested in the British and French heads of government and eventually in the political head of the European federation.[10]

The formation of NATO's Nuclear Planning Group (NPG) in late 1966 provided an acceptable palliative to West German fears of an inadequate voice in the decision to pull the tactical nuclear trigger. Established as a permanent forum for consultation on the use of nuclear weapons, the NPG (composed of four permanent member nations, which include the United States, United Kingdom, Italy, and Federal Republic of Germany, and seven rotating member nations) soon formulated mutually agreeable guidelines for the initial defensive use of tactical nuclear weapons by NATO. With the formation of the NPG and the elevation of Willy Brandt to the positions of Vice Chancellor and Foreign Minister of the Federal Republic, demands

from highly placed West German officials for an increased voice in nuclear control diminished perceptibly. In fact, the Federal Republic's officially stated position in December 1966 was that she did "not aspire to national control over nor national ownership of nuclear weapons."[11] Now Federal Chancellor, Brandt has since reiterated this view, perhaps most characteristically in a speech in September 1968 at the Conference of Non-nuclear Nations in Geneva:

> The Federal Republic of Germany does not aim to achieve for itself any direct authority over atomic weapons and does not aim to possess them.... Atomic weapons are stored on the soil of the Federal Republic of Germany, as you all know; but it is not we who have control of them, and we have no ambition to control them.[12]

It is noteworthy, however, that Bonn delayed signing the Nuclear Non-Proliferation Treaty (barring ownership of nuclear weapons in times of peace) until written assurances were received from Washington that the treaty would not preclude possession of nuclear weapons by a European nuclear force, should a politically united Europe ever be formed.[13]

It appears that the existence of the NPG has gone far to allay West German apprehensions concerning the decisionmaking process for the initiation of tactical nuclear warfare. Although many French writers continue to advocate the need for national control over tactical nuclear weapons, West German support for this view is muted. Significantly, cabinet member Schmidt, whose 1962 writings reflected considerable concern over this problem,[14] in 1971 commented favorably on the NPG which allows the Federal Republic to "exercise influence" in this area.[15]

COUPLING VERSUS DECOUPLING

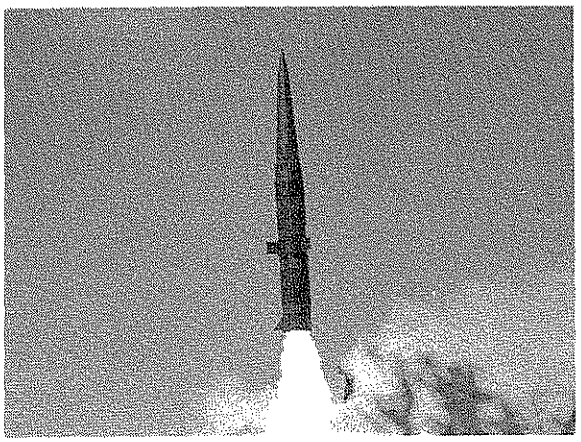
Given United States control over the tactical nuclear trigger, the next consideration uppermost in the West German mind is the extent to which US strategic nuclear retaliation is coupled to prior tactical hostilities in the forward defense area of NATO. Here we shall see that the Federal Republic's view is largely a mixture of resignation and wishful thinking.

Coupling might best be understood by reference to the now discarded NATO nuclear strategy of "massive retaliation." In this strategy, if Warsaw Pact forces crossed NATO's forward defense line in any strength at all, even if only conventional weapons were used, this attack would serve as a "tripwire," immediately unleashing a US strategic nuclear bombardment on the Soviet homeland. This strategy was the embodiment of complete coupling.

As the Soviet Union attained a capability to destroy the United States, however, we swung toward a strategy of "flexible response" in which a Warsaw Pact attack would be met by an equal or somewhat greater response to achieve a "pause" in hostilities, thus allowing negotiations to occur. If this failed, the defense would be escalated in a series of controlled steps with the aim in each instance of terminating hostilities and providing cause for reconsideration by Warsaw Pact forces. As a last resort, US strategic forces would be committed. In this strategy, US strategic weapons were still coupled to the forward defense of NATO but in a delayed manner, and only after lower levels of violence had clearly failed.

The United States was not successful in obtaining NATO endorsement of this strategy until 1967, and then only after France, distrustful of US resolve ever to commit strategic nuclear weapons, withdrew its military forces from NATO control and placed its faith in its own strategic nuclear deterrent.

As the US (and official NATO) strategy changed from one of massive retaliation to one of flexible response, the West German view of tactical nuclear weapons also changed. In the era of massive retaliation, the Federal Republic welcomed the introduction of tactical nuclear weapons into NATO's inventory, secure in the knowledge that this



US ARMY

Pershing.

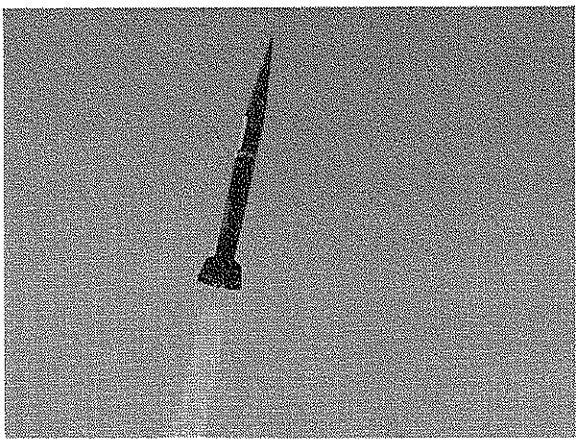
additional deterrent probably would never be used in view of the immediate US strategic bombardment of the Soviet Union if hostilities occurred. Even during the early and mid 1960's, when flexible response was becoming the watchword of the day, the Federal Republic's view of tactical nuclear weapons was mostly positive. Defense Minister Gerhard Schroder reasserted the importance of tactical nuclear systems to West Germany, indicating preference, however, for a "low nuclear threshold" in which early use of tactical nuclear weapons would cause a quick escalation to the strategic nuclear exchange.[16] In short, tactical nuclear weapons were good so long as they weren't used or, if used, so long as their use served to quickly involve US strategic nuclear forces in the conflict.

Today the West German view is different, though reconciled to the reality that flexible response is official NATO strategy. With the present perception by West Germans that decoupling of US strategic forces is inherent in flexible response, the Federal Republic no longer attempts to promote coupling by supporting the use of tactical nuclear weapons in the hope that a low nuclear threshold would quickly cause a strategic exchange. Instead, the Federal Republic's new policy is to promote coupling by *limiting* use of tactical nuclear defense so that the resultant defeat of NATO's outnumbered conventional forces, clearly inadequate to stop a massive Warsaw Pact attack, would immediately trigger the commitment of US strategic forces. As a consequence, West German official publications now tend either to play down tactical nuclear defense and emphasize instead strategic nuclear power, or to treat tactical nuclear weapons purely as a forward *deterrent* inseparably coupled to the strategic deterrent.

For example, the Federal Republic's 1971/1972 White Paper states that "the protection afforded by US *strategic* weapons and the presence of American forces are indispensable to the security of Western Europe" [emphasis supplied].[17] As an additional illustration, a 1972 West German Defense Ministry report states that:

> . . . the strategic nuclear potential of America is superimposed on the deterrent capabilities of the allied land, air and naval forces in Europe. Only this *inseparable connection* between tactical and strategic deterrence is capable of equating the conventional superiority of the Warsaw Pact.[18] [Emphasis supplied].

A telling example of the Federal Republic's policy of limiting US options for carrying out a tactical nuclear defense in Western Europe is her refusal in 1969 to allow holes for atomic demolition munitions to be pre-drilled on likely routes for Warsaw Pact armor attacks. This reversal of policy from the mid 1960's,



US ARMY

Sergeant.

when such munitions were welcomed (presumably as a means of lowering the nuclear threshold), is indicative of West German concern over our emphasis on tactical nuclear defense rather than deterrence.[19]

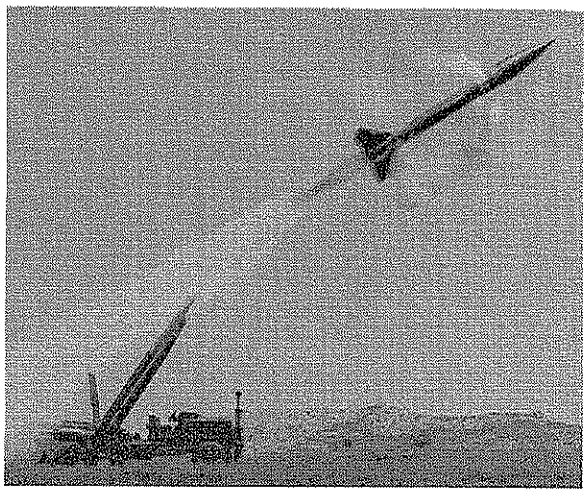
Even outright supporters of US tactical nuclear weapons such as retired four-star General Ulrich de Maiziere, formerly West Germany's highest ranking Bundeswehr officer, emphasize the deterrent rather than defensive aspects of these weapons.[20] And Helmut Schmidt, who early in the 1960's agreed with Henry Kissinger that massive retaliation was not credible in that no nation could be counted on to commit suicide in defense of a foreign country unless absolutely vital interests were at stake,[21] now qualified his support of flexible response with concern about a solely tactical nuclear *defense:*

> [Flexible response] is reasonable and credible. There is no alternative to it. A return to massive nuclear retaliation would be incredible, as would be a fallback on purely 'tactical' nuclear defense—the former being unimaginably cruel to the Americans, the latter to the Europeans.[22]

UNCONTROLLED ESCALATION

But what if tactical nuclear weapons *are* introduced into a conflict by US troops and a subsequent resort to strategic weapons does *not* occur? The most immediate West German fear is that the conflict will escalate without control to higher levels of nuclear violence within the theater, causing widespread destruction of the Federal Republic's territory.

Current US opinions are mixed as to whether or not detonation of the first tactical nuclear weapon will escalate quickly to all-out theater nuclear war. Those holding an escalatory view maintain that, once the quantum leap from conventional to nuclear war is taken, no strong psychological bars between the barely perceptible gradations of nuclear war will exist. Thus, once the first nuclear weapon—no matter how small—is detonated, opposing forces will respond at least in kind to avoid an unfavorable battlefield outcome, and other firebreaks between levels of nuclear war will be easily breached. On the other hand, those holding a non-escalatory view assert that escalation can be avoided if *clearly perceived* limitations are imposed on the use of tactical nuclear weapons at the outset. According to this view, NATO forces could employ such weapons without escalation to theater-wide nuclear war by limiting the geographical area of employment to the defended area, the delivery means to short-range weapon systems, the weapon yield to the low kiloton or subkiloton range, and the targets to barriers, bridges, avenues of approach, and penetrating troops. Enemy perception of these limitations is crucial, and some writers even maintain that exact conditions of tactical nuclear weapon use should be communicated to the enemy prior to



US ARMY

Honest John.

THERE IS A STRONG SENTIMENT AMONG WEST GERMANS THAT ESCALATION FROM LIMITED USE OF TACTICAL NUCLEAR WEAPONS TO ALL-OUT THEATER NUCLEAR WAR IS INEVITABLE.

hostilities to ensure this perception. However, official NATO and US analysts generally oppose this latter view and would instead exploit such uncertainty to increase deterrence.[23]

Although the American view of the likelihood of escalation may be mixed, the West German view is considerably more one-sided. There is a strong sentiment among West Germans that escalation from limited use of tactical nuclear weapons to all-out theater nuclear war is inevitable. Helmut Schmidt again provides the most representative comments:

> No one can prove that escalation would not take place. . . . Nobody can be sure that the process would not begin within a few hours of the dropping of the first tactical nuclear bomb. Everyone must assume that it could lead to thermonuclear bombardment within a few days.[24]

He holds out little hope for mutually acceptable firebreaks or for self-imposed limitations on the use of these weapons to prevent escalation:

> In our view, it is Utopian to hope for a mutually acceptable distinction between levels of nuclear violence that would be sustained throughout a war. . . . Where is the threshold between tactical and strategic employment if the selfsame IRBMs and fighter-bombers are used to strike tactical airfields in the Satellites, tactical airfields in the Soviet Union and strategic airfields in Soviet territory also?[25]

The only meaningful firebreak is that between nuclear and non-nuclear war, Schmidt maintains. "Every other distinction is artificial, and no one can depend on its lasting more than the first hour."[26] Other West German writers echo Schmidt's positions.

In reality, Schmidt's arguments can be used to support the need for clearly perceived limitations. Use of tube artillery, short-range missiles, and atomic demolition munitions to deliver nuclear warheads only against targets in defended areas of Allied territory would be perceived as limitations more clearly by the Soviet Union than would use of IRBMs and fighter-bombers against Warsaw Pact nations, as Schmidt seems to recognize by his emphasis on escalation of violence against the aggressor's own territory. But since such limitations require the weapons to be detonated on West German soil, Schmidt can be forgiven for not pressing this particular point.

We can see that the West German view is largely political and is a consequence of the Federal Republic's policy of treating tactical nuclear weapons as a deterrent only, and not as suitable weapons of defense. As discussed in the previous section, this policy supports the German goal of achieving a US strategic response to a Warsaw Pact conventional attack by limiting options for the use of tactical nuclear weapons. In light of the West German conviction that extensive use of tactical nuclear weapons entailed by the NATO strategy of flexible response would destroy West Germany, such a policy is understandable.

COLLATERAL DAMAGE

The fourth political consideration—that of collateral damage—is undoubtedly the basis of

US ARMY

8" Howitzer.

the West German view concerning the other three. Specifically, the Federal Republic's policy in each instance has been designed to reduce the perceived risk of large-scale collateral damage West German territory. By collateral damage, we mean the unwanted loss and destruction of civilian lives and property which occur concurrently with the desired effects on military targets when a weapon is detonated.

The import of collateral damage was forcefully, if unintentionally, demonstrated to the West German people shortly after the Federal Republic entered NATO in 1955 and during the SHAPE nuclear exercise, Carte Blanche. As a part of this exercise, some 335 nuclear detonations on West German soil were simulated, with estimated casualties exceeding five million people. The Bonn Government was hard pressed to withstand the ensuing political uproar.[27] Additional exercises involving simulated tactical nuclear detonations, as well as paper wargames with scenarios calling for extensive use of these weapons, bear out the widespread collateral destruction which can occur with use of today's tactical nuclear weapons.

Studies have shown clearly that the relatively high average yield of today's tactical nuclear stockpile is the main cause of unacceptable collateral damage, with weapon type and mode of employment being major secondary causes in some instances. As a result, US Congressman Craig Hosmer of the Joint Committee on Atomic Energy in a widely quoted 1968 statement criticized the Defense Department for delaying modernization of the US tactical nuclear stockpile, particularly from the standpoint of acquiring smaller yield weapons.[28] For nuclear weapons delivered by tube artillery or tactical missile systems, US doctrine generally results in a detonation point sufficiently high off the ground to avoid the creation of any significant fallout radiation. As a consequence, collateral damage is most frequently caused by heat and blast effects. These can be alleviated through the use of lower yield weapons simply by increasing the numbers to achieve the same desired effects. The major exception to the conscious restriction of fallout in US employment doctrine arises in the use of atomic demolition munitions (ADM's) to create craters for blocking major routes of armor advance. Until very recently, our planners envisioned mainly surface (or slightly below surface) detonation for ADM's, accepting the fallout contamination resulting from surface use in exchange for quick and convenient munition emplacement. Now, however, US forces recognize that the same size crater can be excavated by smaller munitions buried at greater depths and producing far less fallout contamination. Timely emplacement requires pre-drilled emplacement holes, however, and this the Federal Republic currently will not allow.

An excellent insight into West German thinking is offered by the Federal Republic's 1970 White Paper, which warns that "in Central Europe . . . a large-scale tactical nuclear war would have the same devastating effects as a strategic nuclear conflict."[29] In other words, what is "tactical" to us may be very "strategic" to the West Germans. This theme is repeatedly expressed by West German writers such as Adelbert Weinstein, who maintains that, whereas the nuclear giants might lose some of their troops to tactical nuclear detonations, "it is Europe which would be destroyed."[30]

It is again Helmut Schmidt, however, who is most explicit with the West German view:

> Even if the use of tactical nuclear weapons did not lead to extremes of escalation, . . . it would nevertheless lead to the most extensive devastation of Europe and to the most extensive loss of life amongst its peoples. Europe is the battleground for these weapons. Those who think that Europe can be defended by the massed use of such weapons will not defend Europe, but destroy it. . . . And the peoples of Europe would not care whether it was tactical nuclear weapons or strategic missiles that brought about their extermination.[31]

He concludes that a tactical nuclear defense against conventional aggression would lead to

the destruction of West Germany even if escalation did not transpire.

The Germans are not convinced that use of cleaner and lower yield tactical nuclear weapons is the answer to the collateral damage problem. First, we have not demonstrated to them that very low-yield tactical nuclear projectiles, missiles, and ADM's can be employed to do the job without causing unacceptable collateral damage. And second, knowledgeable West Germans feel that Soviet small-yield technology lags behind that of the United States with the result that Soviet tactical nuclear warheads used in retaliation might very well be large and dirty no matter how small and clean NATO warheads were. This factor once led Schmidt to postulate that NATO's use of clean weapons might be advantageous only if the West were "to offer its production secrets to the enemy."[32]

RECAPITULATION OF FEDERAL REPUBLIC'S VIEWS

We can summarize the West German political view of tactical nuclear defense as follows: *In order to prevent what is perceived as extensive potential damage and destruction, the Federal Republic seeks to use tactical nuclear weapons in a deterrent role only, limiting their warfighting role whenever possible.* This policy is most forcefully exemplified by West German refusal to allow pre-drilled holes for atomic demolition munitions. (The opinion of some that this action was taken primarily to avoid provocation is not credible. Drilling holes in West German soil for purely defensive weapons such as ADM's, which would be emplaced at some future time of crisis and whose cratering effects, if detonated, would be restricted to West German territory, can scarcely be considered provocative to East European nations, particularly when compared with the intermediate range Pershing nuclear missile systems manned by West German troops.) Emphasis on strategic nuclear weapons, reiteration that use of tactical nuclear weapons is simply a trigger for the employment of strategic power, and insistence on an escalatory view of tactical nuclear weapons are additional means by which the Federal Republic carries out this policy. West German views can also be effectively expressed in NATO channels through membership in NATO's Nuclear Planning Group. Figure 1 (page 56) illustrates these considerations in greater detail.

MEASURES FOR ENHANCING ACCEPTANCE OF TACTICAL NUCLEAR DEFENSE BY WEST GERMANY

How can we best influence the West German view on tactical nuclear weapon use? What courses of action can the United States undertake to alleviate West German fears that use of such weapons to defend the Federal Republic will simply hasten its destruction? We can begin with Helmut Schmidt's acknowledgement that "the conventional forces at the disposal of NATO in Western Europe . . . are inadequate for defending the NATO territories in Europe, either in Central Europe or in the Northern Sector, for any length of time."[33] Given this bedrock reality, the object then becomes to make the tactical nuclear warfighting role more palatable by countering the Federal Republic's perception that extensive collateral damage must result.

The first approach is thus to *limit the collateral damage potential of friendly tactical nuclear detonations.* This can be accomplished by developing a tactical nuclear stockpile whose average yield is substantially smaller than that in existence today. Studies have shown conclusively that, to produce a given effect on a military target, very small-yield weapons employed in multiples will do the job while causing significantly less collateral damage than would a single larger weapon. A necessary adjunct is accurate delivery means and target location; otherwise, larger yields would be required to compensate for errors in putting the nuclear round on the target.

It is often argued that cleaner weapons (those with a higher fusion-to-fission yield ratio) would also limit collateral damage by reducing the amount of fallout created. Significant fallout is created only if the

SUMMARY OF THE FEDERAL REPUBLIC OF GERMANY (FRG) VIEW OF TACTICAL NUCLEAR DEFENSE

POLITICAL CONSIDERATION	FRG CONCERN	PERCEIVED BASIS FOR CONCERN	CURRENT FRG POLICY
1. Trigger	Inadequate voice in control	Extensive collateral damage	Seek no direct control; Maintain influential voice in NPG
2. Coupling	Won't occur soon enough, if at all	Extensive collateral damage	Treat tactical nuclear weapons as deterrent only, and not in warfighting role; Limit US options for *use* of tactical nuclear weapons so that direct strategic coupling must occur
3. Escalation	Uncontrolled, on FRG soil	Extensive collateral damage	Treat tactical nuclear weapons as deterrent only, and not in warfighting role; Support escalatory view of use
4. Collateral Damage	Extensive	National destruction	All of the above

Figure 1

fireball touches the ground. Since current US doctrine calls for the routine detonation of tactical nuclear projectiles above this height, the importance of this consideration is minimized. In the case of ADM's, however, the fallout consideration is critical, and surface employment of these munitions requires consideration of the fallout pattern. Specifically ADM's should be buried well beneath the surface to obtain optimum cratering effects and, at the same time, far less fallout hazard. Here, it is ironic that one of the very measures employed by the Federal Republic to reduce tactical nuclear warfighting options—refusal to allow pre-drilled ADM holes—will actually result in a significantly *increased* collateral damage hazard if the ADM's are fired anyway, but on the surface.

The second approach is to *limit the collateral damage potential from enemy tactical nuclear detonations by limiting the risk of escalation.* The best prospect here is to adopt a priori limitations on our own use of tactical nuclear weapons—limitations which will be clearly perceived by the enemy as not posing a threat to their homeland or other strategic interests. For example, using nuclear delivery means such as short-range missile systems or tube artillery, which clearly are incapable of striking deep into Eastern Europe, is relatively less escalatory than employing tactical aircraft whose intended targets would initially be uncertain. Restricting planned strikes to the defended territory or to within a few kilometers on either side of the battle area should further lower the escalatory potential. Detonation of ADM's would perhaps be the least escalatory use of tactical nuclear weapons, since these could be detonated to create obstacles prior to the enemy's arrival. Once again, the key factor is that such self-imposed limitations be recognized as such by the enemy, thus reducing the likelihood that he will escalate his response in the mistaken belief that his vital interests are threatened. Here, it may be advantageous to communicate these limitations to the enemy at or prior to the onset of hostilities.

Fortunately, some of the above measures are already in the process of being

implemented, while others are being actively addressed in studies. In the final analysis, however, the success of these measures will depend upon our ability to convince the West Germans that such approaches provide at least a partial basis for a credible tactical nuclear warfighting option, one which will defend the Federal Republic without destroying it.

NOTES

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2. Richard Nixon, *U. S. Foreign Policy for the 1970's: The Emerging Structure of Peace: A Report to Congress* (Washington: GPO, 9 February 1972), p. 43.

3. Helmut Schmidt, *Defense or Retaliation* (New York: Praeger, 1962), p. 5.

4. North Atlantic Treaty Organization, *Allied Defence in the Seventies* (Brussels, January 1972), p. 22.

5. This situation will change sometime during the period surrounding 1975 when the French deploy their Pluton tactical nuclear missile system.

6. Schmidt, *Defense or Retaliation*, p. 80.

7. *Ibid.*, p. 105.

8. *Ibid.*, p. 193. Pending creation of such a United States of Europe, the supreme political authority would be the President of the United States.

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13. Wolfram Hanrieder, *The Stable Crisis: Two Decades of German Foreign Policy* (New York: Harper & Row, 1970), p. 32.

14. Schmidt, *Defense or Retaliation*, pp. 104-06; 188-93; 212-13.

15. Helmut Schmidt, *The Balance of Power* (London: William Kimber, 1971), p. 178.

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22. Helmut Schmidt, "Germany in the Era of Negotiations," *Foreign Affairs*, 49 (October 1970), 42.

23. Melvin Laird, *Statement of the Secretary of Defense before the Senate Armed Services Committee on the FY 1973 Defense Budget and FY 1973-1977 Program* (Washington: DOD, 1972), p. 62.

24. Schmidt, *Defense or Retaliation*, pp. 98-100.

25. *Ibid.*, p. 97.

26. *Ibid.*, p. 97-98.

27. Hanrieder, p. 9.

28. Craig Hosmer, "U.S. Stockpile of Tactical Nuclear Weapons," *Congressional Record*, 31 July 1968, pp. H7955-56.

29. German Federal Ministry of Defence, *White Paper 1970 on the Security of the Federal Republic of Germany and on the State of the German Federal Armed Forces* (Bonn, 20 May 1970), p. 27.

30. Adelbert Weinstein, "Wait—But Be Prepared," in *The Soviet Threat to Europe: An Analysis of Soviet Potentials and Intentions by Experts of Six Countries* (London: Foreign Affairs Publishing Co., 1969), p. 72.

31. Schmidt, *Defense or Retaliation*, pp. 100-03.

32. *Ibid.*, p. 100.

33. Schmidt, *The Balance of Power*, p. 197.