

AD-A238 836



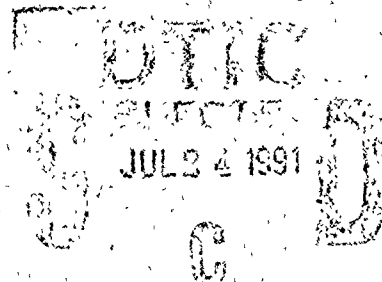
A RAND NOTE

**A Political-Military Game of Protracted
Conventional War in Europe**

John K. Setear

June 1990

RAND



91-05994



The research described in this report was sponsored by the Director of Net Assessment, Office of the Secretary of Defense (OSD), under RAND's National Defense Research Institute, an OSD-supported federally funded research and development center, Contract No. MDA903-85-C-0030.

The RAND Publication Series: The Report is the principal publication documenting and transmitting RAND's major research findings and final research results. The RAND Note reports other outputs of sponsored research for general distribution. Publications of The RAND Corporation do not necessarily reflect the opinions or policies of the sponsors of RAND research.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER N-2910-NA	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) A Political-Military Game of Protracted Conventional War in Europe		5. TYPE OF REPORT & PERIOD COVERED interim
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) John K. Setear		8. CONTRACT OR GRANT NUMBER(s) MDA903-85-C-0030
9. PERFORMING ORGANIZATION NAME AND ADDRESS RAND 1700 Main Street Santa Monica, CA 90401		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Director of Net Assessment Office of the Secretary of Defense Washington, DC 203001		12. REPORT DATE June 1990
		13. NUMBER OF PAGES 15
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for Public Release; Distribution Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) No Restrictions		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) War Games Warsaw Pact Countries Europe West Germany Conventional Warfare Scenarios NATO		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) See reverse side		

In 1987, a group of RAND researchers played a political-military game of protracted conventional war between the NATO and Warsaw Pact countries to take place in 1993. This Note discusses such issues as the prospect that strategic nuclear weapons would signal the strength of the U.S. commitment to NATO and re-establish extended deterrence despite obvious risks of escalation; whether ending a NATO-Warsaw Pact conflict would be difficult to achieve, particularly if either side occupies some part of the Federal Republic of Germany; whether attacking ballistic missile submarines would have any impact on the escalation level of the conflict; and whether waging protracted war in Central Europe is possible under some assumptions. While the results obtained here were clearly a reflection of the particular players and scenarios used, both teams were relatively cautious and conservative in exercising their options, and achieved insights that will be useful to those who conduct political-military games. (See also N-2828.)

A RAND NOTE

N-2910-NA

Accession For	
WTR GRAFI	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

A Political-Military Game of Protracted Conventional War in Europe

John K. Setear



June 1990

Prepared for the
Director of Net Assessment,
Office of the Secretary of Defense

A research publication from
The RAND Strategy Assessment Center

RAND

PREFACE

This Note, the second of a two-part set, recounts a political-military game of protracted European war played by RAND researchers. The game both generated insights useful in considering protracted war at the conceptual level (discussed in the first Note) and suggested some more generally applicable lessons (discussed here) often ignored in analyses of a NATO-Warsaw Pact conflict.

This work was sponsored by the Director of Net Assessment and was conducted by the RAND Strategy Assessment Center within RAND's National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense. Research and analysis for this Note were completed in early 1989.

Comment and inquiries are welcome; they should be directed to the author or to Dr. Paul K. Davis, Director of the RAND Strategy Assessment Center.

SUMMARY

In March 1987, a group of RAND researchers played an exploratory political-military game of protracted (conventional) conflict between NATO and the Warsaw Pact occurring in 1993. This Note reviews the game's structure and scenario as well as the actual play of the game. The game showed that it was possible to use political-military gaming to investigate protracted conflict. The game also raised a number of issues useful in thinking about protracted war between the superpowers as well as a number of more generally applicable issues. The former issues are discussed briefly here and at greater length in a companion piece.¹

The game involved several issues of general applicability that are usually ignored in discussions of war in Central Europe. The game highlighted the possibility that strategic nuclear weapons will be the most potent political signal of U.S. commitment to NATO regardless of the presence of theater nuclear weapons. Such weapons provide the clearest signal that extended deterrence persists despite the breakdown of conventional peacetime deterrence, though obviously the use (or threat of use) of such weapons carries with it a greater risk of escalation than if battlefield or theater nuclear weapons are used (or threatened to be used).

The game also raised the issue of war termination. Conditions for ending a NATO-Pact war may be difficult to achieve. Neither side is likely to be content if the other occupies a significant portion of the Federal Republic of Germany (FRG). NATO will face a difficult choice in deciding whether its planned counteroffensive should enter Pact territory, and whether its war aims should include the end of a significant Soviet presence in Eastern Europe.

The mere existence of warfare against ballistic-missile submarines (SSBNs) may not in itself be drastically escalatory. Although the loss of SSBNs may be disturbing, it is unlikely by itself to be sufficient cause to begin a nuclear war.

Finally, protracted war is not an absurd result in a war in Central Europe. The use of nuclear weapons may be unattractive, and a prolonged conventional phase is possible

¹John K. Setear, *Protracted Conflict in Central Europe: A Conceptual Analysis*, The RAND Corporation, N-2828-NA, November, 1989.

if NATO stops the Pact offensive short of the Rhine or if NATO continues the fight after the fall of the FRG.

The results obtained here were certainly a function of the particular players and scenario used, but those considering the possible dynamics of a nonstandard simulated war—including those designing the models of the national command level under development in the RAND Strategy Assessment System—should take these issues into account.

ACKNOWLEDGMENTS

William Jones provided invaluable assistance in the design and conduct of the game. Captain James Amerault, USN, supervised the overall effort and ensured that naval issues were not neglected by the landlubbers on the project. The game's players—Patrick Allen; Carl Builder; A. Ross Johnson; Robert Paulson; Major Charles Crawford, USAF; Major Charles Saunders, USA; and Jack Stockfisch—were thoughtful and conscientious participants. Melinda Baccus, Paul Davis, and Barry Wilson were capable observers of the game. William Schwabe provided a helpful review.

CONTENTS

PREFACE	iii
SUMMARY	v
ACKNOWLEDGMENTS	vii
FIGURES	xi
Section	
I. DESIGN OF THE GAME	1
II. SCENARIO	3
III. SUMMARY OF GAME PLAY	5
Move One	5
Resolution of First Move	7
Move Two	9
Resolution of Second Move	10
Move Three	10
IV. OBSERVATIONS	11
Military Observations	11
Procedural Observations	15

FIGURES

1. The forward line of troops (FLOT) at D+30 and actions
in the following month 6
2. The FLOT at D+60 and subsequent action 8
3. The FLOT at D+90 11

I. DESIGN OF THE GAME

As the centerpiece of a project designed to explore what changes and improvements in the RAND Strategy Assessment System (RSAS) might be necessary to support protracted-war scenarios,¹ a group of RAND researchers designed and conducted a free-form, political-military game of protracted conflict between NATO and the Warsaw Pact in 1993. The researchers decided that, for their purposes, conflict that lasted beyond 30 days was "protracted." They decided to use the RSAS's central-front CAMPAIGN model to simulate the first 30 days of combat and to begin human play at D+31. The chief difference between the default RSAS runs of CAMPAIGN and the runs used here was the slower pace of war in the latter. To preserve maximum flexibility for the players, the researchers refrained from including in the D+31 initial situation any nuclear weapons use, NATO counteroffensives, or significant anti-shipping or anti-SSBN warfare.

The two player teams represented entities of the United States and the Soviet Union. The "Blue" team of four players formulated part of its moves as if it were the top-level staff of the U.S. President, and part of its moves as if it were the top-level staff of NATO's European and Atlantic commands. The "Red" team of four players formulated one portion of each of its moves as if it were the top-level staff of the Politburo, and the other portion of each of its moves as if it were the top-level staff of the commanders of the Western and Atlantic Theaters of Military Operations (TVDs).² The members of a team jointly formulated their moves. The players were prohibited from sending team-to-team communications during the formulation of their moves but could make diplomatic initiatives a part of the moves themselves. The "Control," or referee, team of five members, in addition to resolving the moves of the player teams and writing each day's scenario, provided the players with lower-level staff analyses at the request of the player teams.

¹For a general discussion of the RAND Strategy Assessment System, see "Analytic War Gaming with the RAND Strategy Assessment System," The RAND Corporation, Research Brief 7801, September 1987.

²This "dual-hatting" aspect of the game was unusual (and not completely successful): A single team is generally asked only to play a single role in formulating its move.

The Control team prepared a written scenario at the beginning of each of the two days of play and presented it to the Red and Blue player teams. During the mornings, the player teams then each formulated a set of written instructions ("moves") concerning political and military initiatives to be taken over the next month of simulated time and presented those moves to the Control team. During the afternoons, the Control team compared the two sets of moves; manually adjudicated combat and determined the outcome of any political initiatives; and wrote up the resulting course of events for presentation to the players on the next morning.³

³For a general discussion of political-military gaming, see William M. Jones, *On Free-Form Gaming*, The RAND Corporation, N-2322-RC, August 1985; and William M. Jones, *On the Adapting of Political-Military Games for Various Purposes*, The RAND Corporation, N 2413-AF/A, March 1986. This particular game was unusual in the length of time simulated by a single move, as most games have moves that simulate a few hours or days rather than an entire month.

II. SCENARIO

Several days before play began, the Control team gave each member of the player teams several dozen pages of material discussing the situation that the teams would face at the beginning of play. Some information was given only to one team (e.g., a statement of Red's war objectives); some information was exactly the same for both teams (e.g., a general hypothesized history of events from 1988 to early 1993 that contributed to the existence of conflict); some information was generally similar but varied in particular details between the two teams (e.g., estimates of Red combat losses).

The "deep background" scenario discussed, in somewhat more detail than set forth here, the following hypothesized course of events between 1988 and 1992:

The liberality of a new regime in Hungary eventually provokes a Soviet invasion in late 1991; scattered armed resistance from some Hungarian army units is overcome within a month. Meanwhile, a new regime in the German Democratic Republic (GDR) edges away from the Soviet Union and towards reunification with a coalition government in the FRG led by the Social Democratic Party (SPD), increasing economic and cultural ties with the FRG and failing to give full political support to the Soviet Union in the aftermath of the Hungarian invasion. The Soviet Union's southern border remains unstable; the Iran-Iraq and Soviet-Afghanistan conflicts drag on, and civil unrest erupts in Pakistan that flares into low-level conflict over Baluchistan with Iran. The NATO alliance is badly divided as the SPD-led coalition and a newly elected Labour Party in Great Britain press hard for the removal of all American nuclear weapons from the Continent, and as Turkey and Greece go to war over Cyprus.

In addition to this general course of events, the deep background scenario set forth the following specific crisis leading to war:

A series of Warsaw Pact maneuvers in the GDR in the autumn of 1992 leads to clashes between Soviet troops and GDR workers. A group of armed West Germans are captured crossing into East Berlin. In November, a group of West German neo-Nazis crosses the IGB and kills a handful of Soviet troops, and the captured West Berliners are executed in retaliation. Soviet troops begin to patrol the IGB in December, and a number of border skirmishes occur between Soviet and West German troops against a backdrop of civil disturbances in the GDR. After a few days' mobilization,

several dozen Warsaw Pact divisions cross the IGB along its full length on New Year's Day of 1993 in what is described as a "punitive raid."

The "background" scenario discussed, in significantly more detail than set forth here, the following hypothesized course of events during the first 30 days of large-scale armed conflict between NATO and the Warsaw Pact:

Warsaw Pact deployments have been similar to those thought likely in the event of a full-scale European war, but the Warsaw Pact's ground forces have crossed only into the FRG and Pact aircraft have respected the airspace of all nations except Denmark, Belgium, the Netherlands, and the FRG. NATO air forces have struck into the GDR, Czechoslovakia, and Poland. After U.S. troops took significant casualties, the U.S. Congress declared war on the USSR, Poland, Czechoslovakia, and the GDR; Canada, the United Kingdom, Denmark, Belgium, the Netherlands, Luxembourg, and France have done likewise. The FLOT has moved westwards some 150 kilometers in NORTHAG and been virtually static at the IGB in CENTAG. (See Fig. 1.) Neither side has used chemical or nuclear weapons; no naval combat has occurred outside of the Baltic and the Atlantic. Casualties on the ground and at sea have been relatively low, though aircraft attrition has been greater than 50 percent and Soviet submarines have been successful at sinking unescorted Allied shipping with minimal losses to themselves. Large-scale movement and supply of forces has—especially in the face of harsh weather—proven much more difficult than predicted before the war. The Non-Soviet Warsaw Pact (NSWP) armies have performed below expectations; the Soviet army appears still to be suffering some after-effects of the Hungarian operations; and NATO's Follow-On Forces Attack doctrine has met with some success. NATO's ammunition supplies are dwindling, and Belgium is expressing doubts about its ability and desire to continue the fight.

The players were given free rein to modify the political and military goals and priorities ascribed to their governments in the initiating scenario, they were, for example, free to make peace proposals, conduct operations outside Central Europe, or authorize the release of chemical or nuclear weapons. The Control team requested only that the players focus on strategies rather than tactical details. Obviously, however, the initiating scenario, and the players' awareness that the purpose of the game was to study protracted war, may have affected some bias in the players' formulation of their moves.

III. SUMMARY OF GAME PLAY¹

MOVE ONE

The Blue team decided upon the restoration of the IGB as their principal war objective; a debate as to whether NATO should attempt to convert its relative success into the liberation of Eastern Europe was left to simmer.

The Blue team believed that it must somehow take the military initiative away from the Pact, and therefore considered the possibilities for a counteroffensive. They eventually decided upon a counteroffensive, in the relatively stable portion of the front, into the GDR to reach roughly the Leipzig-Dresden line. (See Fig. 1.) A direct assault against the Pact forces facing NORTHAG was considered unpromising, especially in light of staff assessments pessimistic about the success of such a venture.

An assault into Czechoslovakia with the express aim of liberating that nation was debated but considered unduly provocative. The barely dominant sentiment on the Blue team favored simply restoring the *status quo ante* rather than ending Soviet influence in some portion of East Europe. The *status quo* faction feared that occupying Czech territory now might lead to great political difficulties in simply "giving back" Czechoslovakia later. Despite later reports that Czech troops were defecting to the Americans in significant numbers and that the Czech political leadership was interested in exploring the possibility of switching sides, the Blue team's division on whether it was attempting restoration or liberation kept it from resolving this matter decisively, and the Blue team therefore ignored the implicit and explicit Czech entreaties for assistance.

Although the players considered counteroffensives with various arms of combat and in a variety of areas in Europe and around the world, the Blue team concluded that only the front lines on land in Central Europe presented an opportunity for NATO forces to mount a sustainable offensive with prospects both of success and of doing significant, immediate damage to Soviet interests.

Early in the game, the Blue team discussed the possibility of threatening a "demonstrative intercontinental strike" against the Soviet Union. The possibility of using

¹ The players submitted formal written moves for Moves One and Two. Move Three was limited to a brief, informal discussion. Each resolution of a move advanced the simulated time an entire month into the future.

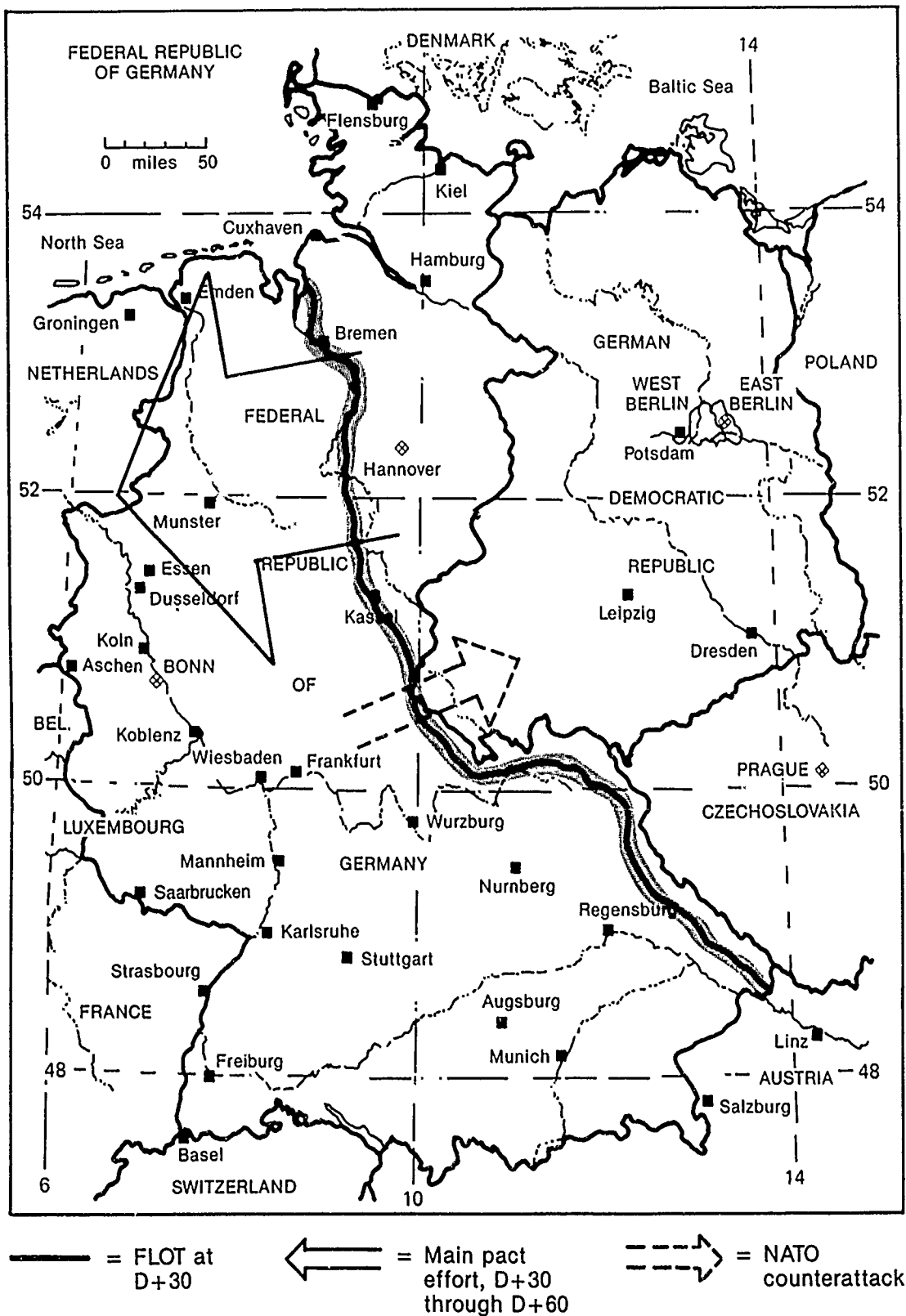


Fig. 1—The forward line of troops (FLOT) at D+30 and actions in the following month

strategic nuclear weapons was pressed by a member of the Blue team whose experience in previous central-front games had convinced him that incrementalist NATO strategies were unlikely to be successful. The conventional-counteroffensive option nonetheless prevailed on the first move, as the other Blue team members wanted to take a "wait-and-see" attitude with regards to a strategic nuclear strike.

The Red team renewed its NORTHAG-oriented offensive (see Fig. 1) and in general continued the policies and plans used in the first 30 days of conflict. The Red team believed the general correlation of forces to be in its favor. It was essentially unperturbed by the fact that its military forces had been unable to meet their timetable, and believed that achieving its goals a few months late was hardly a disastrous setback in light of the importance of the prize.

Both sides ordered significant portions of their air and ground forces outside Central Europe into that theater. The Red Team believed that Central Europe was the crux of the battle, and that a lack of success in any other theater could be quickly redressed once victory in the crucial sector has been achieved. The Blue team, as mentioned, could find no promising alternative uses for NATO's forces, especially in light of the importance of the Central European front.

RESOLUTION OF FIRST MOVE

The NATO counteroffensive met with some success, but the Soviet offensive against NORTHAG stalled on the Ems River after some initial advances. (See Fig. 2.) The arrival of a large number of former Category III Soviet divisions—both those originally earmarked for Central Europe and those reassigned from other theaters of operation—facing NORTHAG made it likely, according to staff assessments provided to both Red and Blue, that NATO's position would suffer further. Czechoslovakian defectors/deserters began to make contact with U.S. units advancing into the GDR, and absenteeism among workers in the non-Soviet Warsaw Pact (NSWP) countries continued to grow. A U.S. carrier in the Greenland-Iceland-United Kingdom (GIUK) gap was sunk, but Soviet SSNs transiting the GIUK gap were heavily attrited. The North Koreans began to mobilize.

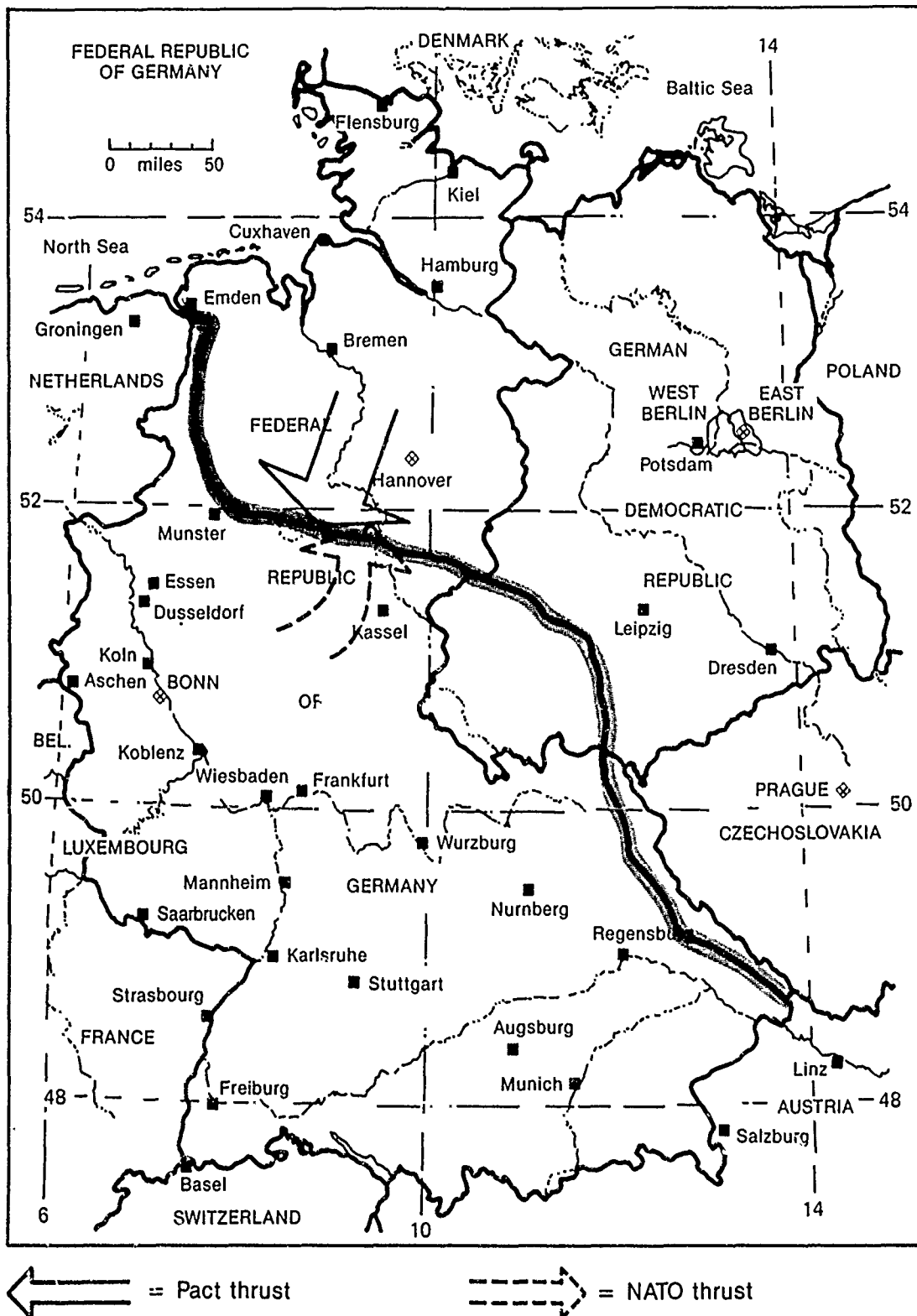


Fig. 2—The FLOT at D+60 and subsequent action

MOVE TWO

The lengthening flank of the two alliances, running roughly due east-west through Kassel, West Germany, proved tempting to both sides. Both the Blue and Red Soviet teams committed their reinforcements to planned offensives attempting to break through that flank, with the Red team hoping to encircle NATO's forces in the GDR and the Blue team hoping to encircle the Pact forces approaching the Ruhr Valley.

The Blue team also decided that, if its counteroffensive did not prove decisive, it would issue a private ultimatum threatening the use of nuclear weapons against four high-value military targets in the Soviet Union unless the Red team agreed to restore the IGB. The Blue team believed that its situation showed little chance of improvement over the next several months, and that the Pact was making slow but steady progress towards the Rhine. The Blue team quite consciously chose strategic systems as the delivery vehicles, and the Soviet Union itself as the target, to emphasize the gravity of the interests threatened by the Pact and to show that extended deterrence remained a reality despite NATO's reverses on the ground. The Blue team did not resolve the issue of whether it would actually execute the threatened attack.

In response to difficulties in the NSWP nations, the Red team diverted ten combat divisions to maintain order in NSWP nations. The Red team also ordered increased vigilance by KGB units in NSWP nations, particularly with respect to lines of communication. The Red Team was not particularly disturbed by the Czech defections, reasoning that the Czech contribution to the overall effort was relatively small.

At sea, U.S. attack submarines began attacks on Soviet ballistic-missile submarines in bastions as a show of U.S. resolve. When this possibility had initially arisen in the discussion, most members of the Blue team considered such a move highly escalatory. After an observer asked the Blue team members whether a Soviet sinking of some American SSBNs outside Norfolk's harbor would lead Blue to escalate to general nuclear war, the Blue team reconsidered its initial revulsion and decided that the risks of escalation were acceptable.

The Blue team moved two carriers into the North Sea to provide air support for NORTHAG, over which the NATO air forces had suffered heavy attrition.

In Asia, American and South Korean forces raised their alert levels. The United States offered military supplies to the People's Republic of China without attaching specific conditions to the acceptance of the supplies.

Both sides continued to send essentially all newly mobilized forces to Central Europe, though the Red team continued its policy of leaving in place all forces in the Far Eastern theater of operations.

RESOLUTION OF SECOND MOVE

The NATO and Pact offensives around Kassel collided, with the Soviets managing to push back the outnumbered NATO forces a few kilometers each day. The front along the Ems River remained essentially stable, as Pact forces originally assigned there were redeployed to fight in the Kassel offensive. The NATO offensive in the GDR ran out of steam on roughly its objective of the Dresden-Leipzig line. (See Fig. 3.)

With a stalled offensive in the GDR and the possibility of eventual encirclement of those and other forces in CENTAG, the Blue team issued its nuclear ultimatum to the Soviets.

At sea, Soviet SSNs suffered diminished attrition with the deployment of the U.S. carrier out of the GIUK gap.

In Asia, the People's Republic of China accepted the Blue team's offer of military supplies without offering any specific suggestions for further dealings.

MOVE THREE

The Red team decided to continue its offensive despite the Blue team's nuclear ultimatum. The Red team believed that, if it were to make public the Blue team's ultimatum, public opinion in the United States and elsewhere might prevent the Blue team from carrying out the threatened attack. The Red team also considered whether a nuclear strike against a U.S. carrier battle group might be the proper response if the Blue team actually carried out its nuclear threat, as such a strike would damage an important U.S. military target without causing immediate civilian casualties.

The Blue players again considered, but did not resolve, whether they would actually use nuclear weapons against the Soviet Union. All along, the Blue team leader had refrained from making clear whether he intended actually to carry out the threatened strike if the Red team refused to restore the IGB. The other team members apparently exhibited some deference in leaving the final decision on this matter to the team leader. All clearly believed, however, that the difference between threat of use and actual use was momentous.

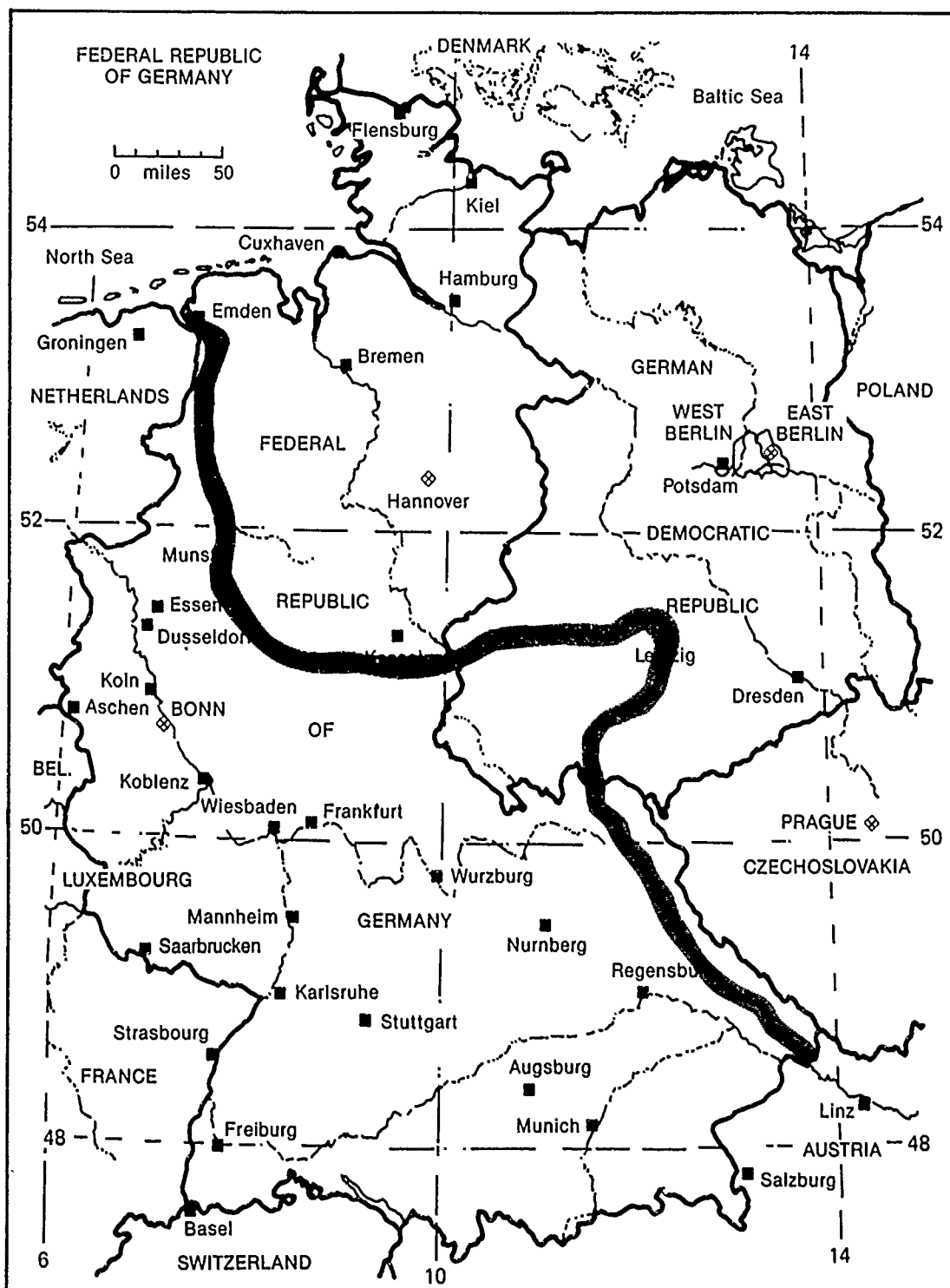


Fig. 3—The FLOT at D+90

IV. OBSERVATIONS

MILITARY OBSERVATIONS

One must always be extremely cautious about drawing substantive lessons from the play of a single game (or, indeed, from a series of games). The particular scenario and set of players may result not only in a unique game but in lessons that are uniquely applicable. And regardless of the efforts of the Control team, a game cannot mimic all the constraints of reality.

With that important caveat, we can discuss several points suggested by the play of this game.

The use, or threat of use, of U.S. strategic nuclear weapons may be the best way to re-establish extended deterrence whether or not the United States has theater nuclear weapons in Europe. This game, conducted before significant progress had been made on an INF agreement, assumed that the United States (and the Soviet Union) possessed a large number of intermediate-range nuclear missiles in Europe, as well as the full complement of aircraft and battlefield weapons. Nonetheless, the Blue team chose *strategic* weapons as the hypothesized delivery system for its threatened first use of nuclear weapons. The Blue team believed that NATO's poor prospects in conventional warfare, even in a war that lasted several months, necessitated dramatic action. The Blue team believed that this action should convince the Red team that the U.S. interest in Western Europe remained absolutely vital, and that threatening to use weapons fired from the United States would serve this goal more convincingly than the use of other systems. One must of course acknowledge that the use of strategic nuclear weapons carries with it some risk that the Soviet Union would retaliate with a strategic nuclear strike against the continental United States.

A war in Central Europe may be difficult to conclude while the Pact occupies some but not all of the FRG. In the absence of a decisive Soviet advance to the Rhine, neither the Blue nor the Red players were immediately interested in ending the war. The Blue team certainly did not desire a formal surrender, and did not feel compelled to do so. The Blue team believed that conceding any significant Soviet occupation of West German territory would be almost as damaging to the U.S. guarantee of Western Europe as the occupation by the Pact of the entire nation. (The Blue team inferentially believed

that occupation of the entire FRG by the Pact would lead NATO to collapse, while the situation that NATO faced during the game at least offered sufficient hope for NATO to prevent its collapse.) The Blue team therefore felt that it could not even agree to a cease-fire in place as long as Pact troops were across the IGB in force. The Red team was, given that its forces had made some progress, also not content to have the war cease with a partial occupation of the FRG. The Red team felt that failure to reach the Rhine after even 90 days of combat did not doom its cause (and did not require the use of nuclear weapons by the Pact).

Attacks against SSBNs may have little impact on the escalation level of the conflict. The Blue team initially considered conducting such attacks to be highly escalatory, but changed its mind after imagining its own reaction to the loss of some U.S. SSBNs and authorized such attacks. SSBN forces are relatively large, and their weapons are certainly potent even in small numbers. Escalation to nuclear use is a gigantic step. Attacks against an adversary's SSBNs may therefore carry a minimal probability of provoking escalatory moves by one's adversary—though decisionmakers should obviously be conscious of the risks of provoking a strategic nuclear strike by a cataclysmically irritable opponent—so long as some of an adversary's SSBNs remain unharmed.

War in Central Europe can become protracted under assumptions that many are unlikely to reject out of hand. The players did not find the initial scenario especially implausible, though unsurprisingly they did not consider it the most likely outcome of 30 days of combat in Central Europe. Given the scenario, the war persisted to the 100 day mark and might have continued on for some time more so long as the Control team did not describe a complete logistical collapse impending in NATO. The story told of the first 30 days of combat was therefore accepted without excessive protest by the players—though one should note that there was definite skepticism as to the ability of NATO to sustain its troops for this length of time—and led to 60 more days of combat without further expressions of disbelief by the players. This persistence was due in significant measure to the slower pace of combat that the Control team chose, but also due in part to the difficulty in achieving mutually acceptable terms for peace described above. Thus, although the sample of players is neither large nor designedly representative, one should note that protracted conflict did not seem absurd to the players so long as NATO's stocks of ammunition were not exhausted.

The mere fact that a war in Central Europe lasts more than 30 days does not appreciably improve NATO's prospects. Protracted conflict left the Blue team with many of the problems that plague NATO's forces in a short war. In light of the great number of Soviet divisions that continued to be, and to become, available, the Blue team perceived NATO's prospects as poor even though the western alliance had made a stronger-than-expected showing during the first 30 days of conflict. And despite the relatively slow progress of the Soviets, nuclear weapons continued to cast a long shadow over Europe; indeed the threatened use of strategic nuclear weapons was seen from a political perspective as the only hope for NATO to restore the IGB.

Before moving to the nuclear option, *the Blue team felt it imperative to attempt some conventional offensive action to regain the initiative from the Pact and to improve NATO's bargaining position, but it did not see any attractive prospects for a NATO offensive outside the central front.* The Blue team simply saw no opportunities on land to strike with sufficiently large, sustainable forces against the flanks of Central Europe, or against the Soviet Union itself (in either hemisphere). The Blue team welcomed U.S. naval successes, but it did not see naval or naval-air operations as offering the potential for offensive operations that would significantly distract the Soviets. These perceptions were shared by the Red team and also mirrored in the Red team's belief that there was no need for it to find new fish to fry given the importance of—and the Pact's military superiority in—Central Europe.

Finally, *the decisionmaking of both teams was relatively structured.* They assessed the situation, then considered overall objectives, and then moved to implementation. They attempted to be systematic in their discussion within each topic. Both teams were relatively conservative and cautious in their options, with the exception of the Blue nuclear ultimatum discussed above. (The Blue team leader strongly believed that such a move was rational, however, given his experience with unsuccessful incrementalist NATO strategies in central-front games that he had previously played.)¹

¹Paul K. Davis, Stephen C. Bankes, and James P. Kahan, *A New Methodology for Modeling National Command Level Decisionmaking in War Games and Simulations*, The RAND Corporation, R-3290-NA, July 1986.

PROCEDURAL OBSERVATIONS

The game also offered some insights for those who conduct political-military games. To game protracted war in a small number of distinct moves is relatively uncommon. Moving the clock ahead a month at a time proved quite possible, and the effort to game a protracted conflict in a reasonable number of moves can therefore be considered a success. Particular delicacy in resolving the move is nonetheless required, and the Control team doubtless also benefited from the fact that events on the front line that took a month in this game are often played out in a week or less in other games. The smoothness of play was probably also due in part to the fact that issues of grand strategy, which might be important in a game that covered years, did not arise in the 100 days covered here.

The "dual-hatting" aspect of the game was less successful. As the Control team had anticipated, the players reported some psychological difficulty in thinking anew about issues previously pondered in another role. The Blue team spent the large majority of its time considering issues at the level of the national political leaderships, while Red spent the lion's share of its considerations in TVD-level issues; neither side was able to structure its discussions to take a balanced account of both views.

It was also difficult to account in the game for the logistical issues that would doubtless be so important in a protracted war. A small Control team given an afternoon to turn around a move faces significant time pressures in simply resolving the political issues and the grosser military issues, and less glamorous logistical difficulties were predictably given shorter shrift. The issue of NATO munitions, and the difficulty of moving large numbers of troops from the superpowers' homelands to the battlefield, were seen by both the players and the Control team as two issues especially worthy of more consideration in any future efforts at gaming protracted war.