

NUCLEAR WEAPONS AND 50 YEARS OF INTERNATIONAL POLITICAL HISTORY:
RISKS, DANGERS, THREATS, CRISES, PROPOSALS AND CONSIDERATION OF USE

Milton Leitenberg

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REPORTER ("Meet the Press"; Sept. 25, 1961): Well, do you mean to imply, sir, that you would then perhaps use nuclear weapons in connection with the Berlin situation?

McNAMARA: Yes, I definitely do. We will use nuclear weapons wherever we feel it necessary to protect our vital interests. Our nuclear stockpile is several times that of the Soviet Union, and we will use either tactical weapons or strategic weapons in whatever quantities, wherever, whenever it's necessary to protect this nation and its interests.

DRAFT VERSION

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INTRODUCTION¹

This study essentially is divided into two portions. The first is designed to provide a general understanding of the forms of past risks of engagement of nuclear forces--the deployed and nuclear armed ships and aircraft of the U.S. and USSR. Its purpose is to demonstrate which kinds of events, activities and practices were not dangerous, or less so, and those that were more dangerous.

The second portion provides a narrative of the ways in which, during the fifty years since 1945, recourse to threats of nuclear weapon use were made by any of the nuclear weapon states, and in the instances and ways in which their use was suggested, planned for, or considered on specific occasions by senior decision makers. This assessment therefore does not deal with the general considerations or assumptions of nuclear deterrence, nuclear doctrine, strategic planning and targeting, or alliance policies for possible theater use by the U.S. and NATO, or the former USSR and WTO.

The events that will be described stand in marked contrast to one of the most common and major assumptions of post-World War II political history; that nuclear weapons were dealt with in great caution by the two superpowers, and that consideration of or recommendations for nuclear weapon use were rare and infrequent, aside from during a few well known superpower crises: The Cuban Missile Crisis in 1962, and the Berlin crisis, 1958 to 1961. Instead, this narrative unquestionably demonstrates a frequent recourse to or consideration of nuclear weapon use, in a variety of forms.

The most important questions to be answered are:

- What was the course of events: What actually happened in particular nuclear crises?
 - How serious was the use of nuclear weapons considered? If and when consideration was serious, who proposed their use, how wide was the circle of policy-makers involved in the assessment, and on what considerations was such an assessment based?
- What has been the nature of the interaction between U.S. and USSR nuclear-armed forces during these crises, for the most part at sea?
 - What kinds of analogous activities (deployments, alerts) of Soviet military forces have been discernible? Is anything known concerning consideration of nuclear weapon use by the USSR?

It is obvious however, that no actual use--detonation--of nuclear weapons took place in the past fifty years, and that all suggestions or considerations of use were for various reasons ultimately rejected. This raises the question of whether or not any political utility was gained by any party through explicit threats, or implicit ones such as crisis deployments or changes in readiness of nuclear weapons.² This study will not attempt to make a net assessment of that

¹ This study is the result of work carried out during two periods a decade ago in which I was provided grant support to study the issues and events discussed in the paper: by the Berghoff Stiftung for Peace and Conflict Research in Germany, and by the Ministry of Foreign Affairs and FOA in Sweden. I would like to thank the administrators and oversight officials responsible for that support: Dr. Dieter Senghaas, and Manne Wangborg and Dr. Lars Wallin.

²See a further note on the political utility of nuclear weapons and/or threats at the end of the Introduction.

experience, but rather to provide as wide a survey as possible of the threats, proposals, considerations, etc. It will also therefore not attempt to resolve the question of whether nuclear weapons "kept the peace" between the U.S. and USSR between 1945 and 1990, and whether direct conventional war between the two superpowers might otherwise have occurred. (However, see extend note following the introduction.)

Finally, it would be useful to indicate the degree of misjudgment by respected political scientists and officials regarding the consideration of nuclear weapons use in the past fifty years. Only a few of many examples of misleading and at times totally inaccurate statements are provided here. The first is by Valery Giscard D'Estaing, at the time President of the French Republic:

"One cannot help being impressed by the fact that since the last war there have been very numerous conflicts almost always involving, directly or indirectly, a nuclear power, but never so far, have these conflicts led to the use of the nuclear capability or even consideration of such use."³

In 1980, Robert Art wrote:

"Neither superpower nor the other nuclear states have employed physical nuclear compellence against non-nuclear states, because of the far flung alliances and quasi commitments of the other superpower and because of the presumed effects that such action would have on nuclear proliferation."⁴

and in 1977 Stanley Hoffman wrote:

"The existence of nuclear weapons continues to constrain America to considerable prudence both during crises (such as Cuba in 1962) and in the resort to conventional force in areas of almost assured escalation (such as Eastern Europe)"⁵

Even McGeorge Bundy, while immersed in the study of the very events themselves, wrote:

"The offshore crisis of 1958, so far from being a model for the future, turns out to be the last case of a crisis between the United States and a nation not the Soviet Union in which nuclear weapons or threats of their use play any role whatever."

And he claimed that following the Cuban Missile Crisis, since ". . . October 1962 there has been no open nuclear threat by any government."⁶

Both statements are incorrect, as are Giscard and Art, and Hoffman is questionable.

In contrast to the above, an author of a commemorative volume on President Kennedy wrote of the years up to the early 1960's that "while nuclear war was the fulcrum of all strategy,

³"France's Defense Policy", Address by Valery Giscard D'Estaing at the Institute for Advanced Studies in National Defense, Paris, June 1, 1976.

⁴ Robert J. Art, "To What End Military Power," *International Security*, 4:4 (Spring 1980), 17.

⁵ Stanley Hoffman, "The Uses of American Power," *Foreign Affairs*, 56:1 (October 1977) 28.

⁶ McGeorge Bundy, "The Unimpressive Record of Atomic Diplomacy," in Gwyn Prins (Edited) *The Choice: Nuclear Weapons Versus Security*, Chato and Windus London 1984, pp. 48-50.

officers and diplomats used the threat of it in almost any crisis," and Daniel Ellsberg wrote: What I discovered, going back to Truman who made such threats in 1950, is that every term of every President has seen the serious recommendation by the Joint Chiefs of Staff of plans involving the initiation of nuclear warfare under certain circumstances. More significantly, at least four Presidents have secretly authorized advanced preparations for such first-use, or have actually threatened adversaries with U.S. first-use in an ongoing crisis"⁷

and

"Every president from Truman to Reagan, with the possible exception of Ford, felt compelled to consider or direct serious preparation for possible immanent initiation of tactical or strategic nuclear warfare, in the midst of an ongoing intense non-nuclear conflict or crisis."⁸

Writing in 1981, Michael Nacht offered a somewhat "middle-of-the-road" interpretation, explicitly referring to nuclear threats that the United States had made, but then referring to authorities that deemphasize the same aspect.

"There is no doubt that American military power, although still awesome, has declined significantly in relative terms to that of the Soviet Union, and the propensity to use such power has declined even more rapidly.

"Some of these trends could no doubt be temporary, and perhaps will be reversed in the years ahead. But it is worth noting one consequence that is likely to endure: the reluctance of the United States to use, or even to threaten credibly to use, nuclear weapons to resolve regional disputes outside Europe. At several moments during the period of American nuclear superiority over the Soviet Union - the Korean War and the Quemoy-Matsu crisis in the 1950's, the Cuban missile crisis and the Khe Sanh siege during the Vietnam War in the 1960's, and the Arab Israeli War in the 1970's, for example - the United States threatened, explicitly or implicitly, to use nuclear weapons as a coercive technique to further its policy preferences. But with the deployment of very large and sophisticated nuclear forces by the Soviet Union, a nuclear standoff of sorts between the superpowers has been reached. Assuming that this state will be maintained - a sensible assumption in light of the domestic forces that influence nuclear weapons policy in both countries - both sides have thus been denied the ability to exercise nuclear coercion against each other."

* * * *

"This judgment, of course, cannot be verified. The delicacy of the nuclear balance at the central strategic level has always been at issue, even among the pioneers of American strategic thought. But, at the regional level, I am impressed not only by the evidence of the last decade that this judgement is correct; I take note also of the views of two of the leading contributors to the literature on limited war, neither known for their softheadedness. Robert Osgood has stated that "outside Europe the credibility (in

⁷ "Nuclear Armaments; An Interview with Daniel Ellsberg", Conservation Press, 1980.

⁸ Daniel Ellsberg, "Introduction: Call to Mutiny," in E.D. Thompson and Dan Smith (editor) Protest and Survive, Monthly Review Press, London, 1981, p. 4. (Given the events during the Mayaguez crisis, Ellsberg's omission of President Ford seems an oversight)

American eyes) of initiating the use of nuclear weapons under any circumstances seem[s] to reach its high point in 1954, during the Quemoy and Matsu crisis and the fall of Dien Bien Phu, and has steadily declined ever since." [See "The Post War Strategy of Limited War: Before, During, and After Vietnam," in Strategic Thought in the Nuclear Age, Lawrence Martin, (ed.) (London: Heinemann, 1979), p. 104.] William Kaufmann has stated: "Where both sides have large numbers of nuclear weapons (that is, thousands), it remains possible - at least on paper - for one side to achieve an exploitable military superiority over the other, although this kind of superiority is much more likely to be achieved at the strategic than the tactical level. Despite this possibility, any nuclear exchange, strategic or tactical, would be fraught with the danger of escalation to unrestricted bombing and unprecedented civilian and military damage. . . The idea that the United States, or for that matter the Soviet Union, is straining at the nuclear leash or is likely to launch nuclear weapons except in almost unimaginable circumstances is simply at variance with these realities. The decision is too hard, as anyone who has come at all close to it in the last twenty years knows only too well. Talk about an early use of nuclear weapons - even when it appears in supposedly serious Pentagon studies - is either the equivalent of cocktail party conversation or sheer bluff." "Defense Policy", in Setting National Priorities: Agenda for the 1980's, Joseph Pechman (ed.) (Washington, DC, The Brookings Institution, 1980), p. 294. Kaufman, uniquely, has served as a principal consultant to the secretary of defense since 1961."⁹

A particular irony of William Kaufman's comment is the fact that he was the author of a detailed plan in 1960 for a preemptive counterforce nuclear attack on the USSR. [See Kaplan, Wizards. . .

Aside from such drastically different views, there have been outright misstatements by major officials: President Truman, in his recollections claimed to have sent a direct threat to Stalin in 1946 regarding the delayed Soviet withdrawal from Iran. No such message was ever sent. On the other side, General MacArthur in then secret testimony to the U.S. Senate, stated "I have never, of course, discussed the use of the bomb with him [President Eisenhower] in any way, shape or manner; so I wouldn't be able to give you any information whatsoever on that subject."¹⁰ MacArthur had made his views on the proposed use of nuclear weapons in the Korean War known to the Joint Chiefs of Staff on numerous documented occasions, and on the election of President Eisenhower, to the President via intermediaries. As will be seen later on, it is even possible to present contradictory positions offered by President Eisenhower on possible use of nuclear weapons by selectively quoting from different portions of the minutes of a single National Security Council meeting. The wealth of documentation on this subject that has become available in the last decade and a half, reflected in the books by Betts (1987), Bundy (1988) and Newhouse (1989) has made a serious and thorough examination of these issues possible,

⁹Michael Nacht, "Toward an American Conception of Regional Security", Daedalus, 110:1 (Winter 1981), pp. 1-22.

¹⁰ Testimony on Korea, General Douglas MacArthur, to the Senate Armed Services and Senate Foreign Relations Committee, Historical Series, 195-, p. 29.

something which studies in earlier decades were not able to do.¹¹

A Further Note on the Political Utility of Nuclear Weapons

There are two broad interpretations - not necessarily contradictory - of the effect of nuclear weapons on US and Soviet policies in the past 50 years. One is that they provided political leverage, the second that "they kept the peace", that is, at least a non-nuclear peace and no major war on the European continent. Writing in 1981 and 1982, an assessment by a broad-based US panel of arms control specialists wrote

"American strategic nuclear forces have three primary objectives: (1) deterring attacks on the United States; (2) deterring attacks on our allies; and (3) supporting US foreign policy. All three of these objectives are important, but the first is most fundamental. Most strategists agree on the importance of these objectives, but they differ markedly on how much nuclear capability is need to achieve the latter two."¹²

"Strategic nuclear forces are intended and believed to serve political purposes as well. The relative Soviet-American strategic balance may be a factor in determining the inclination of Soviet leaders toward taking risks in many places throughout the world as well as the responses of American leaders to Soviet actions. This balance, real or perceived, is also part of the underpinning of relations between Washington and the nations of Western Europe and Japan. These countries depend on US security guarantees, including the ultimate guarantee of being under the American nuclear umbrella. US strategic capabilities play some role in defining American relations with other nations as well. The manner in which US commitments, warning, promises, and interests are taken into account by decision-makers throughout the world depends to some extent on its strategic strength. The strategic balance is taken by many as a sign of overall power and the relative willingness of the two superpowers to bear costs in order to retain their power."¹³

Writing in 1994 and remarking on the reasons that the US and USSR had not gone to war in the past half century, the historian Arthur Schlesinger Jr. wrote:

"One wonders whether it is not more of a tribute to the atomic bomb, which simultaneously emboldened the Western democracies to oppose the spread of Stalinism and demanded restraint in the mode of opposition. Few things are more chastening than doomsday briefings. Historians looking back may be struck most by the gap on both sides between the violence of their talk and the circumspection of their action. It is the atomic bomb, as political scientist Elspeth D. Rostow once remarked, that should have been awarded

¹¹ For example, Nuclear Diplomacy, The First Twenty-Five Years, by George Quester, The Dunellen Company, New York, 1970.

¹²Challenges for US National Security: A Third Report, Carnegie Panel on US Security and the Future of Arms Control, Carnegie Endowment for International Peace, Washington DC, 1982, p. 34.

¹³Challenges for US National Security: A Preliminary Report, Carnegie Panel on US Security and the Future of Arms Control, Carnegie Endowment for International Peace, Washington DC, 1982, p. 50.

the Nobel Peace Prize."¹⁴

As a more concrete indication of how these considerations were taken to be relevant by western political decision makers, the following excerpt of remarks by US Secretary of Defense McNamara to a meeting of NATO Ministers of Defense, in Athens, in May 1962 is highly informative.

"The Role of General War Strength in Alliance Strategy:

"What does the Alliance accomplish by creating this complex machinery to maintain nuclear superiority over the Sino-Soviet Bloc? And what is the impact on NATO's policies of both the grave damage that would result from nuclear war and the great variations in that damage under different strategies?

"My Government feels that the strategic capabilities I have described have important political consequences. The Alliance continues to possess much of the diplomatic freedom that it has enjoyed in the past. We can confidently reject the missile threats that Mr. Khrushchev so imprudently brandishes. If the Soviets or their satellites impinge on our interests we can resist with considerable confidence that our antagonists will not wish to escalate the conflict. The question at issue now is the point at which NATO, not the Soviets, would wish to escalate a non-nuclear conflict.

"As the President has indicated on a number of occasions, the United States is prepared to respond immediately with nuclear weapons to the use of nuclear weapons against one or more members of the Alliance. The United States is also prepared to counter with nuclear weapons any Soviet conventional attack so strong that it cannot be dealt with by conventional means. But let us be quite clear what we are saying and what we have to face. Owing to our non-nuclear deficiencies, there is, first, a high probability that in an ambiguous situation the West, not the East, would have to make the decision to initiate the use of nuclear weapons. Secondly, there is the almost certain prospect that, despite our nuclear superiority and our ability to destroy the Soviet target system, all of us will suffer deeply in the event of a major nuclear war.

"The Berlin crisis exemplifies a type of threat that we should expect to face elsewhere in the NATO area. In such a crisis the provocation, while severe, does not immediately require or justify our most violent reaction. Also as such a crisis develops, as military force is threatened or becomes engaged - even in limited quantities - the increasingly alert nuclear posture of the belligerents makes the prospective outcome of a nuclear attack for both sides even less attractive."¹⁵

Sec. Def. McNamara's message was clearly intended to cut both ways, and it was in fact the speech with which US policy makers - following the several years of crises over Berlin - began the effort within NATO to reduce reliance on planned rapid recourse to the use of NATO nuclear weapons to a Soviet conventional attack, a process that took five years, eventually resulting in the change from NATO's M-14/2 to M-14/3 planning documents in 1967.

¹⁴Arthur Schlesinger Jr., "The Measure of Diplomacy: What Makes a Strategy Grand?", *Foreign Affairs*, 73:4 (July-August 1994), p. 150.

¹⁵Remarks by Secretary McNamara, NATO Ministerial Meeting, May 5, 1962, (Athens), Declassified.

The general positions on the political utility of nuclear weapons and nuclear threats have been strongly debated and disputed for decades, the literature on the question is large, and only several indicative references are provided below.¹⁶

[Note: Some sections of this study are only presented in outline form, while others are in full text]

¹⁶ Robert S. McNamara, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions", Foreign Affairs, 62:1 (Fall 1983), pp. 59-80.

Morton H. Halperin, Nuclear Fallacy: Dispelling the Myth of Nuclear Strategy, Ballinger Publishing Company, Cambridge, 1987.

Robert F. Helms, The Effects of Nuclear Weapons on Post WWII US/USSR Confrontations Intensity Peak Levels, June 6, 1975, US Army Command and Staff College, Fort Leavenworth, Kansas, (Thesis).

Ronald A. Roberge, "The Nuclear Threat as an Instrument of National Policy", Military Issues Research Memo, Army War College, Strategic Studies Institute, Carlisle Barracks, Pennsylvania, March 8, 1977.

Dennis Gormley and Joyce Kaufman, "An Assessment of the Role of Soviet Operational-Strategic Forces in Regional Conflicts", Pacific Sierra Research Corporation, February 1980.

Sidney Drell, Wolfgang Panofsky, et. al., letter to Senator _____, Congressional Record, _____.

Agatha S.Y. Wong-Fraser, The Political Utility of Nuclear Weapons, Expectations and Experience, University Press of America, Frederick, Maryland, 1980 (?).

A. Self-Initiated Events

- Introduction
- The Event categories, and record
- The Assessment: were they dangerous; what risk was there of initiation of U.S. - U.S.S.R. nuclear engagement via accident

Introduction:

The peak of concern regarding "Accidental Nuclear War" was in the early 1980's during the years in which U.S.-U.S.S.R. strategic arms control talks were stalled, Soviet overseas interventionary deployments had peaked, and U.S.-U.S.S.R. political relations were poor. The concern was widespread: official and semi-official Washington (the proposals for "Crisis Reduction Centers"), and pushed by NGO's.

However, as a substantial portion of this record, and in particular the discussion and analysis in this section, pertains to the 1950's and 1960's, it would be useful to establish at least some of the nuclear weapons related context of that period.

On October 30, 1954, President Eisenhower approved NSC 162/2, the US policy document that was the basis for what was commonly referred to as "massive retaliation." The document reflected the abandonment of the assumption that the US might fight large-scale limited wars without recourse to nuclear weapons. The US military services were directed to henceforth plan on using nuclear weapons in conflicts where their use would be desirable from a military point of view. An important point in the guidance was the emphasis on tactical nuclear weapons "for deterrence of local aggression."¹⁷ Public expressions of the policy were common and frequent. In January 1956 ". . . The Air Force Chief of Staff, General Nathan Twining, while granting the possibility of "peripheral action" of a non-nuclear character for "a few more years," asserted that developments were rapidly approaching the day when any conflict would be waged with atomic weapons." The Air Force Secretary, Donald Quarles, insisted that even the condition of "mutual deterrence" would not inhibit the United States from the use of nuclear weapons. No aggressor, he said, "should ever again expect us to employ our air power and weapons as we did in Korea" - i.e., with mere "iron bombs" and a conscious restraint. In future, the United States would use "modern quality weapons as are needed for the job in hand."¹⁸

The declaration that the US might respond by use of nuclear weapons to nonnuclear aggression directed at areas other than the United States and Western Europe remained the policy of the Eisenhower Administration for the remaining six years of its tenure. And as will be seen, it was a period in which the administration threatened and considered the use of nuclear weapons on several occasions.

Secondly, it was a period of massive deficits in US nuclear weapons security compared to

¹⁷Phrasing from a summary by Gen. Edward Atkeson.

¹⁸Townsend Hoopes, The Devil and John Foster Dulles, Little Brown and Co., Boston, 1973, p. 312.

later years:

- there were no Permissive Action Links (PAL's) on nuclear weapons; their application and use was not initiated until 1962, during Secretary of Defense McNamara's tenure.
- there were not even manual locks or padlocks on some weapons or the places in which they were stored, as Sec. Defense McNamara again discovered on taking office.
- the US nuclear weapons stockpile rose dramatically in these years (as can be seen from the tables which have been placed at the end of this section) with the stockpile reaching its peak numbers in 1967. It was also the period in which there was the greatest continual movement of US nuclear weapons, in the bomber airborne alert program, in shipboard deployments, etc., which has direct significance regarding accident.
- finally, "command and control" was much looser than it would become in the next and all subsequent administrations. Very soon after President Kennedy took office, McGeorge Bundy, his National Security Advisor, wrote a memorandum to the President entitled "Policies previously approved in NSC which need review":

"The most urgent need is for a review of basic military policy. What is our view of the kind of strategic force we need, the kinds of limited-war forces, the kind of defense for the continental US and the strategy of NATO? What should be your thinking about the great decisions, at crisis moments, on levels of US military action? The urgency of these matters arises from existing papers which in the view of nearly all your civilian advisors place a debatable emphasis (1) on strategic as against limited-war forces, (2) on "strike-first," on "counter-force" strategic posture, and (3) on decisions-in-advance, as against decisions in the light of all the circumstances. These three forces in combination have created a situation today in which a subordinate commander faced with a substantial Russian military action could start the thermonuclear holocaust on his own initiative if he could not reach you (by failure of communication at either end of the line). There are good arguments for the decisions which led to this situation, but there are arguments on the other side, and it seems absolutely essential that you satisfy yourself, as President, on these basic matters."¹⁹

Years later, Daniel Ellsberg, who was assigned as a consultant to the NSC and the Department of Defense on these issues at the time, wrote that "a low-level military commander could have sent off nuclear weapons" during the Cuban missile crisis, and that President Kennedy "was very worried about it", and took steps to see that it would not happen."²⁰ Harold Brown, who played a major role in the Kennedy administration in the development of more rigorous controls on nuclear weapons, commented years later

"The possibilities of accidents or unauthorized use was understood at the time. There was a reliance, with respect to unauthorized use, on military discipline. . . . But we subsequently concluded that that really wasn't enough, in many cases. . . . When the Kennedy administration came in in 1961, we began looking at some sort of mechanical control. The impetus for that was, I think, substantially accelerated as a

¹⁹McGeorge Bundy, Memorandum to the President, January 30, 1961, Declassified.

²⁰"Nuclear Peril", Washington Star-News, December 19, 1974.

result of the Cuban missile crisis. And during the subsequent years, 1963 and 1964, actions began to be taken which put mechanical controls first on tactical nuclear weapons, which of course are deployed at a much lower level of command, and subsequently on strategic nuclear weapons, or at least most categories of strategic nuclear weapons."²¹

All these aspects should be kept in mind as the context for the events discussed in the following pages.

(1) Nuclear Weapon Accidents²²

United States:

Official U.S. categorization:

"major"	"minor"	-
"accident"	"incident"	-
"Broken Arrow"	"Bent Spear"	"Dull Sword"

Nuclear weapon accident rate variables are the numbers if the weapons, the deployment methodology or practices (movement) for them, and standard accidents-per-mile rates. Same must apply to all nuclear weapon states.²³

U.S. "major": officially around 35; certainly higher as it excludes (a) any TNW reporting, (b) accidents on overseas territory (for example, 9 in or near Canadian territory), (c) fires on board US aircraft carriers should also have been considered "major", as well as on several other nuclear-equipped naval vessels.

U.S. "minor": data for one service only - the U.S. Navy - and only for the years 1965-1985; shows 628 such events (only 266 involved the weapons, 362 involved auxiliary systems); Another set of U.S. Navy data, for the Pacific fleet alone, for 13 years, 1965-1977, produced 379 minors. The implications clearly are that the total numbers are certainly higher than publicly known even now.

7/89: 42 U.S. submarine collisions since 1983, all would have to be at least Bent Spear, and one Fall-1986 collision of a USS-SSN and a Soviet sub in the north Atlantic.

U.S. peak in the early years due to years of airborne alert of B-47s and B-52s; QRA, etc.

U.S.S.R.:

Using the same categories as for the U.S., I had identified 10 major and 41 minor by 1976.

Admiral Watkins, 1975: U.S.S.R. had over 200 submarine accidents "... in the last 10 years"; (this very likely includes minors)

Arkin and Handler, 1989, claim 77 "accidents on Soviet ships", and 23 on submarines. (Janes

²¹Interview transcript with Harold Brown, May 16, 1985, for CBS News/Walter Cronkite documentary on "Hiroshima".

²²Sources: Phelps/ARPA-DoD, 1960; Leitenberg (SIPRI), 1968; Leitenberg (SIPRI), 1976; US DoD, 1979; Arkin and Handler, 1989; Gregory, 1990.

²³"Nuclear weapons are handled daily throughout the world as a matter of routine. From a nuclear surety point of view, any time a weapon is exposed to people, there is a possibility of it being subjected to an insecure or unsafe environment. . . ." Air Force Regulation 122-3. Quoted in Leitenberg, 1976.

claims 27.) Soviet ships lost to sinking or burned included:

Golf submarine, 1968	Victor submarine, 11/83
November submarine, 1970	Y class submarine, 10/86
Kashin destroyer, 1974	Echo II submarine, 6/89
Charlie I submarine, 6/83	Alfa submarine, 7/89
Y class submarine, (?)	Mike submarine, 4/89

and several others.

As occurred during the development tests of missiles in all the nuclear weapon states, the USSR had its share of mishaps during the testing of ICBM's, SLBM's, space launch booster rockets, etc., both explosions and missiles going off course down range. Presumably, in all such tests there were no nuclear warheads mounted in the missiles, only dummy test vehicles. On one occasion, however, a Soviet SS-N-8 SLBM missile travelled 1,500 miles off course and landed in China, in Manchuria.²⁴

The U.S.S.R. did have a bomber alert, on the ground; the percentage of aircraft held in the alert status unknown.

The U.S.S.R. increased its general strategic alert rates in the 1970's and 1980's.

Great Britain:²⁵

The status of accidents of nuclear weapons held by British military services is much the same as that of France. There have been a large number of major accidents of nuclear weapon delivery systems, primarily aircraft crashes, at the same time as there is no substantiated case of involvement of nuclear weapons. In the British case there is the suggestion that at least one aircraft type - at some time - carried nuclear weapons in routine peacetime operations. Although the British government has released no descriptions regarding the peacetime practices it followed as regards its aircraft deployed nuclear weapons - which the French government did in 1970 - it claimed officially in 1981 that "no accidents have occurred involving damage to nuclear weapons held by British forces." In response to questions in Parliament at the time of the sinking of the Sheffield off the Falkland Islands, the government offered two replies:

". . . There has never been any incident involving a British nuclear weapon leading to its loss

²⁴Michael R. Gordon, "Second Soviet Mishap is Reported by US Officials", New York Times, September 18, 1986; "Missile Mishaps", Arms Control Today, 16:7 (October 1986) pp. 21-22.

²⁵Britain has no ICBMs, but deployed SLBMs, bomber-delivered nuclear weapons, and tactical nuclear weapons. Britain's early nuclear bombers were the Canberra, Valiant, and Vulcan. British aircraft carrier-borne nuclear weapons were delivered by Scimitar, F-4, and Buccaneer aircraft during different periods, and most recently by Harrier. Ground-based nuclear strike aircraft presently were the the Buccaneer S2, Tornado GR-1, Jaguar A, and previously also included the F-4 Phantom. ASW nuclear weapons were carried by Nimrod long distance patrol aircraft and by carrier and frigate borne Lynx, Wasp, and Sea King ASW helicopters. Before the British Polaris SLBM force became operational in 1967 the prime responsibility for delivery of nuclear weapons rested with Britain's V-bomber force of nearly 200 aircraft.

or to the dispersal of radioactive contamination."²⁶

"It would not be in the interests of national security to depart from the longstanding practice, observed by successive governments neither to confirm nor deny the presence or absence of nuclear weapons in particular locations at given times."²⁷

Some months earlier the Minister of Defense had similarly stated, "We never confirm or deny rumors about the carriage of nuclear weapons on any of our ships or aircraft." Ten Vulcan bomber accidents ("major") have been publicly identified, as well as those of Shackleton (ASW) aircraft; probably 22 to 30 "incidents", perhaps others.

France:

France deploys a full "triad" of strategic nuclear delivery systems, as well as tactical nuclear weapons. There is no publicly available record of any accident involving the French ICBM's or nuclear ballistic missile submarines. Records of accidents involving French conventional submarines are in the public record, however.²⁸ The French strategic bomber force, on the other hand, as well as French aircraft types assigned to tactical nuclear weapon delivery, have suffered numerous crashes that resulted in total destruction of the aircraft.²⁹ There is no public report, however, of the involvement of nuclear weapons in any of these accidents. The significance of the aircraft accidents depends entirely on the peacetime practices of the French air force; that is, whether or not nuclear weapons have at any time been airborne in peacetime since they were deployed with French military forces. Incidents in transport handling, and maintenance can be assumed.

China:

No information is available. However, the Chinese ICBM testing and space launch program has suffered major disastrous accidents, and there is no reason not to assume the same for its nuclear weapon delivery systems, given the record of all the other nuclear weapon states.

Assessment:

The two basic questions: (a) could an accident involving a nuclear weapon produce a nuclear detonation; (b) could such a detonation have led to a U.S.-U.S.S.R. nuclear exchange.

(a) In theory, for some years, yes; several small yields resulted from a series of 17 safety tests carried out by the US Atomic Energy Commission between November 1955 and October 1958. The same outcome in totally destructive accidents of military systems was guarded against by holding a warhead component "capsule" out, then warhead redesign, new conventional explosives, and on the U.S.S.R. side, the practice of not mating many warheads to their delivery systems.

(b) No; not a single one of the half dozen major U.S. studies in the 1980's that reviewed the

²⁶Hansard, House of Commons, Written Answers, July 23, 1982, p. 340.

²⁷Hansard, House of Commons, Oct. 18, 1982, p. 46.

²⁸Le Monde, October 25, 1972.

²⁹Various issues of Le Monde, Flight International, etc.

risks of US-Soviet nuclear engagement even considered it as a mechanism leading to nuclear war. Writing in 1960, Assistant Secretary of Defense Barber/DoD, using an analogue to the U.S. Bomarc accident, introduced the issue of an accidental nuclear explosion on the Soviet border, in a crisis, and its source unidentifiable.)

(2) Alert Failures or False Alerts - "false indications of missile attack"³⁰

- (1) Sensor failures; in the early 1960's; DEW line radar echoes from rising moon, flock of geese, etc.
- (2) US Navy SECT buoy failures; reported "US SLBM attacked and sunk"
- (3) Computer and human failures; the November 9, 1979, and June 3 & 6 1980 events: two were computer component failures; one, a simulation test tape incorrectly run into a computer without disconnecting it from a NORAD computer

Assessment:

What do these events mean? Are they dangerous - and if so, to whom? The side acting, or the side observing, (the potential target), via satellite, Elint, Comint, ground based spies, etc.?

The events last 2 to 6 minutes, sometimes US SAC and/or US C³ aircraft and tankers start engines, and/or take off.

To assess the meaning and danger of events such as the true accidents, and the alert failures, look at the matrix of relevant analogous events over a period of nearly four decades, that is, events that operationally did not appear of a significantly different nature, and at very much greater frequencies, both historically and continuously:

Group #1: particularly in earlier years, the peacetime "SOP. (Standard Operating Procedures) book" - and then a computer monitor screen which presented a list of error source checks; operating personnel were directed to assume system error and to locate its source;

Group #2: Number of evaluation events per day; look at the table for 1979 and 1980, of Routine Missile Display Conferences/Possible Threat Evaluation Conferences/Threat Assessment Conferences; what generates the high numbers;

- in 1985, the U.S.S.R. alone carried 488 SLBM, ICBM tests or space launches³¹
- for half a dozen years in the late 1970's and the early 1980's the USSR carried out a rapid fire and sequenced "chain" of ICBM, SLBM, ABM, and ASAT tests. These would consist of 2 ICBM's, 2 ABM's, 1 ASAT, 1 INF (SS-20), and 1 SLBM all fired from

³⁰Sources: US Congress, Committee on Armed Services, House; June 1980
 US Congress, Committee on Armed Services, Senate; October 1980
 US Congress, Committee on Government Operations, House, May 1981
 US Congress, General Accounting Office, May 1981

³¹See reference #3 sources, above. Also "Soviets Conduct 124 Rocket Missile Flights in First Six Months", Defense Daily, July 10, 1980.

operational silos in rapid and precise sequence. These were carried out a year and a half apart, on three occasions.³²

- In addition, the USSR carried out all of its test launches of its ICBM's, MRBM's, etc. from operational silos, whereas the US not only carried out such tests at an order of magnitude less occasions per year, but virtually on every occasion took the missiles to be used for test launching out of their operational silos and transported them to a missile firing range from which to be test fired.
- French, Japanese, Chinese, Indian space launches, sounding rockets, ICBM tests, strays and detonations, ground rocket motor tests.
- satellite reentry debris, particularly if their reentry trajectory approaches the U.S.
- computer error; no external sensor input; NORAD claimed 2-3 computer errors per year around the 1980 time period.

The first four of the above groups are all actual sensor registrations of events that must then be routinely excluded. The first two alone generate about 2 events per day, 365 days per year, for the U.S. side to evaluate; the total is about three per day.

Group #3: U.S. 1957 to 1968 airborne alert rates; at peak, rate was 30% (and U.S.S.R. sensors and COMINT were presumably of a lower quality in the mid-1960's than during the 1980's). Then 30% runway alert. Also nuclear weapon delivery systems on Quick Reaction Alert (QRA) in Europe, U.S. and allied aircraft, even Pershing missiles for some years.

In addition, some of the associated practices accompanying the US air-alert posture during this period were certainly at least equally troublesome, some might argue even more so, than the air alert itself.

When Sec. of Defense McNamara took office, he discovered that SAC

". . . has but one pre-planned Ground Alert launch option. This is to launch the whole Ground Alert Force. Moreover, I understand that there is no procedure for recall other than to permit the bombers to fly to the Positive Control Line and then turn back."³³

The "Positive Control Line" was the so-called "Fail Safe" point, at which US airborne bombers enroute to the USSR's borders were to turn around and return to their bases unless they received orders to proceed further as they approached that point. The SAC bomber force had in fact been sent on its

³²"Soviets Stage Integrated Test of Weapons", Aviation Week and Space Technology, 116:26 (June 28, 1992), pp. 26-27.

see also:

- Molly Moore, "US Protests Soviet Pacific Missile Tests; Impact Closest Yet to American Soil", Washington Post, October 2, 1987.
- Bill Gertz, "Soviets Test-Fire ICBM Just North of Hawaii", Washington Times, October 2, 1987.
- Owen Wilkes, "Missile Testing in the Pacific; The 'Soviet Threat', Part 3", New Zealand Monthly Review, (June 1986), pp. 7-8.
- Alton Quanbeck and Barry Blechman, "Risks of Missile Tests in the Pacific Northwest", New York Times, January 30, 1974.
- Edward Neilan, "Soviet Cruise Missile Tested in Sea of Japan", Washington Times, December 28, 1987.

³³Robert S. McNamara, Memorandum for the Chairman, Joint Chiefs of Staff; Subject: SAC Ground Alert Response (S), October 26, 1961; declassified.

way to that point on at least several occasions in the years before 1958 due to misinterpreted radar indications of the Dewline radar system. And the USSR had complained about those flights in the UN, saying that the US nuclear-armed bombers had made "provocative flights" across the Arctic toward the USSR.³⁴ Soviet Foreign Minister Gromyko had asked for an urgent meeting of the UN Security Council to discuss the Soviet complaint. The White House press secretary's response was that "Mr. Gromyko's statements are not true", and that of the US Dept. of State, "It is categorically denied that the US Air Force is conducting provocative flights over the Polar regions or in the vicinity of the USSR."³⁵ Of course, everything hung on the word "provocative": SAC did fly, aircraft did reach the "fail safe" line, and they were loaded with very high yield weapons in those years. It took some years for Sec. McNamara's suggested modifications of a system of graduated Ground Alert responses to be initiated, as well as "provision for possible early recall" of bombers that had taken off, long before they had reached the "Positive Control Line", which, he wrote, ". . . would reduce the likelihood of a false alarm accidentally triggering a general war".³⁶

Group #4: SAC B-52 weekly aircraft scramble exercise, on every B-52 base, (roughly 40 or so) for about 30 years.

Group #5: The JCS did 40 C³ (Command Post, or CPX) exercises per month, a rate of over one per day

Group #6: U.S. 1955-1960 deep penetration (and some low altitude) reconnaissance flights over, or towards U.S.S.R. borders. Followed by U-2 and SR-71 overflights. (See detailed description below in Section B, part 1.)

Group #7: SAC alert rate and aircraft dispersion to secondary airfields determined by U.S.S.R. Y-class SLBM "routine" patrol locations: the two were, in a sense, paired in a continuous year-in-year-out cycle, whenever the subs came within their "normal" Atlantic Ocean patrol positions of 1,200 miles offshore.³⁷ That placed East Coast SAC bases and Washington DC C² at under 8 minutes from the Soviet SLBM launch areas. Examples in August 1978, March 1981, were reported by SAC in the public press. In addition the U.S.S.R. did the 1984-85 post-INF SLBM deployments on the surface.

Perhaps an eighth category is relevant as well: the November 9th, 1979 tape insertion error (despite the claim of a two-man rule for such operations) was on a WWMCCS computer. Again, look

³⁴"Report of Mock SAC Attacks Across Arctic Angered Russia", New York Times, April 19, 1958.

³⁵E.W. Kenworthy, "US is 'Glad to Discuss' Gromyko Charge in UN", New York Times, April 19, 1958.

³⁶R. S. McNamara, op. cit. (The term "general war" denoted a large scale nuclear war.)

³⁷ - "B-52 Alert Ends", International Herald Tribune, March 12, 1981.
 - "The Russians Are Coming", Newsweek, June 11, 1975, p. 11.
 - "A Soviet War of Nerves", Newsweek, January 5, 1981, p. 23.
 - Paul Bracken also discusses an instance in April 1978 (The Command and Control of Nuclear Forces, 1983, pp. 61-63).

at "regular" performance background (about 1980):

- Defects every 35 minutes ("mean time between defects")
- Maximum ok time; 1 hour
- 12-hour-long off period during a C³ exercise in November 1980
- 1977 exercise ("Prime Target"), WWMCCS linked to LANTCOM, EUCCOM, REDCOM, NMCC:

EUCCOM tried 124 uses - failed in 54

LANTCOM tried 295 uses - failed in 132

TAC tried 63 uses - failed in 44

REDCOM tried 290 uses - failed in 247

Overall, the computers worked only 38% of the time

Comment, Assessment, Analysis (see composite evaluation tables on the following pages)

Attention is drawn to interactive practices that already appear in this group, and these are used to assess the "accidental" events. My assumption is that several of these were far more dangerous - carried much more frequent and heightened risk - as well as being more "threatening" to the U.S.S.R. than the true accidents. (The "routine missile display conferences" are considered "not threatening" to the U.S.; the MDC's "possibly threatening".) If one looks closely at the three 1979-80 alert failures, as well as an event on October 3, 1979, when an "SLBM detection radar picked up a low orbit rocket body. . . and generated a false launch and impact report", and another in March 1980 when NORAD registered a series of Soviet training launches that ". . . generated an unusual threat fan" - and examines precisely what orders went to aircraft on runways, which orders were or were not countermanded, and what decisions were made by officers monitoring command sites, one finds that the system worked as it should have. NORAD personnel checked with sensor sites and immediately learned that the sensors were not showing what their computer errors were producing on their monitor screens. In 1979 and 1980 procedures were such that duty officers were required to alert some runway bomber crews, airborne command post aircraft, etc. on any ambiguous notice of SLBM or ICBM attack, and those notices were quickly countermanded. At the same time, duty officers had no authority to go beyond those alerting steps. Given the time-line involved in missile warning/command sequences this is not at all surprising, although one can imagine that there could have been alternate sets of instructions depending on whether there was a situation of political crisis or not. That was in fact exactly the modification to procedures initiated after the 1979-80 alert failures: "under most conditions" duty officers could check NORAD warning data with sensor sites themselves before alerting any response systems at all.

I see the three alert failure events that attracted major public and US Congressional attention, and that were seen by some in the arms control community as indicating imminent danger, as little more than another exercise for either side, the (US) actor, or the (USSR) viewer. If anyone should have been truly alarmed, it should have been to the "routine", weekly, "analogous events" all through the 1950's and 1960's that have been described, and which together must have numbered in the thousands.

What if the true accident occurs during a crisis, or prompts, or includes "cascading accidents",

as the most sophisticated studies suggest would be quite dangerous?³⁸ The "accidents" that have happened in actual crises have been interactive ones (overflight snafus) and command misjudgments (with the exception of sequence of events in 1957 in the U.S.-U.S.S.R.-Turkey-Syria engagement). My own judgment is that events pertaining to an actual crisis would dominate any sequence, and that a true accident happening by coincidence during such a crisis would still be recognized for what it was, a true "error".

³⁸Paul Bracken, The Command and Control of Nuclear Forces, Yale University Press, New Haven, 1983; Scott Sagan, The Limits of Safety: Organizations, Accidents, and Nuclear Weapons, Princeton University Press, Princeton, 1993.;

Bruce Blair, The Logic of Accidental Nuclear War, The Brookings Institution, Washington, D.C., 1993.

Scott Sagan, "Nuclear Alerts and Crisis Management", International Security, 9:4 (Spring 1985), pp. 99-139.

Bradley A. Thayer, "The Risk of Nuclear Inadvertance, A Review Essay", and Responses, by Bruce Blair, Peter Feaver, Scott Sagan, Security Studies, 3:3 (Spring 1994), pp. 428 - 520.

B: US-USSR Interactive Engagements:

(1) US Aircraft Penetration of the USSR; 1950's and 1960's.

In 1972 a Soviet author published data stating that "from 1953 through 1956, USAF aircraft violated the borders of the USSR 130 times and the airspace of the other socialist countries 211 times".³⁹ All this was long before the U-2 and then SR-71 flights, which of course must have increased the numbers enormously. (U-2 flights began in 1956.) The aircraft included a wide variety of types, including a reconnaissance version of SAC's B-47 nuclear bomber, the RB-47, which apparently was used on relatively low level and deep penetration flights. Records accumulated by a US Dept. of State staffer and declassified from the National Archives in 1993 recorded 31 of these planes as having been shot down by Soviet interceptor aircraft or missiles between 1950 and 1970.⁴⁰ In remarks made at the Czechoslovak embassy in Moscow in 1960 Soviet Premier Khrushchev stated that on July 1, 1956, a US reconnaissance plane had flown as far as Kiev, 250 miles inside Soviet borders.⁴¹ In his memoirs published in English, he had written

"When Stalin died, we felt terribly vulnerable. . . The Americans had the Soviet Union surrounded with military bases and kept sending reconnaissance planes deep into our territory, sometimes as far as Kiev. We expected an all-out attack any day."⁴²

Risky programs were continued into the 1970s to obtain what could be considered either strategic or tactical intelligence. US efforts to get the Soviet air defense forces to activate (turn on) the large Pechora radar were unsuccessful until a SR-71 provoked it into doing so at some time in 1970's. A report which noted that Soviet SAM missiles had been fired at an SR-71 in 1983 added that ". . . since its entry into service and the start of high altitude reconnaissance missions, more than 900

³⁹A. Ye. Yefremov, Yevropa i Yadernoye Oruzhiye (Europe and Nuclear Weapons), Moscow, 1972; pg. 16; reprinted in S. A. Tyushkevich, et. al., The Soviet Armed Forces: A Historical View of Their Organizational Development, Moscow, 1978, translated and republished by the U.S. Air Force.

⁴⁰"Special Report; Secrets of the Cold War", U.S. News and World Report, March 15, 1993, pp. 30 - 56. (There have been other reports indicating that as many as 48 or 49 US or allied reconnaissance aircraft may have been shot down.)

In his book, Dropshot. . ., Greg Herken stated that "Between 1945 and 1947 there were more than forty cases in which American or Allied (usually British) aircraft were shot down within Soviet territory or along its borders." (Greg Herken, Dropshot: The American Plan for World War III Against Russia in 1957, _____, p. 15.) I know of no (other) corroboration of such high numbers in such a short period of time, and possible "1947" should read "1957".

⁴¹Hanson Baldwin, "The Vulnerable Soviet; Moscow Reveals Defense Weakness in Publicizing US Plane Incursion", New York Times, May 11, 1960. A small additional "trailer", "Alaska Flights Reported", carried a claim by an Alaskan State Senator that aircraft presumed to be Soviet made "monthly flights over Alaska in recent years". I have found no subsequent corroboration of this, although Soviet aircraft routinely flew towards Alaska in international airspace.

⁴²Khrushchev Remembers: The Last Testament, Little, Brown, and Co., Boston, 1974, page 210.

SAM's . . . have been fired at the SR-71 but without success."⁴³

Border provocations by aircraft for the purpose of gathering electronic intelligence (Elint) were certainly not solely a US activity. In 1981, one source claimed that "NATO is being penetrated on a regular basis" by pairs of MIG-23 aircraft that flew alongside borders and sometimes crossed over them.⁴⁴ It claimed that a MIG-25 had flown ". . . the length of the Rhone Valley in France". (The aircraft's flight profile is not much poorer than the SR-71's at its maximum capability.) It also claimed three penetrations of US airspace in 1980: a Russian Bear reconnaissance bomber which allegedly reached Baltimore in March or April, a Backfire bomber over Alaska, and a MIG-25 flying from Cuba which reached Jacksonville, Florida in April. (These have not been confirmed by US authorities, although several defecting MIG pilots from Cuba have flown their aircraft to Florida airports undetected, flying at extremely low altitudes. The report that "Between January and November 1983 the US recorded 77 violations of US airspace by Soviet aircraft flying to and from the USSR and Cuba in efforts to identify the frequencies used by US air defense radars"⁴⁵ I interpret as Soviet aircraft flying within the so-called US Air Defense Identification Zone (ADIZ), which extends out 200 miles from the US coastline, and is an entirely different matter.)

⁴³Defense and Armament, no. 24 (November 1983), p. 9.

Soviet air defense forces also made numerous attempts to shoot down each individual U-2 flight in the years 1956 to 1960.

⁴⁴"The Spies in NATO's Skies", Foreign Report (Economist), No. 1664 (January 21, 1981), pp. 3-5.

⁴⁵Defense and Armament, 1983, op. cit.

2. Naval Incidents at Sea, and Interactions During Maritime Maneuvers

The discussion of these interactions between ships and aircraft of the Western nations - primarily the US, but also of France, Britain, and Sweden - and those of the USSR can be divided into four subgroups:

- interactions during antisubmarine (ASW) operations, which means essentially continuously and constantly, beginning in the early 1960's,
- ship-ship interactions in particular geographic regions or for specific reasons,
- during naval maneuvers,
- fleet interactions during crises

The definition of an "incident" (in the lowest of the categories for risk of escalation) need not be an actual collision, touching, scraping, "bumping", "shouldering", or purposeful ramming of ships; it also includes any approach of one ship to another so close that one of the ships must take evasive action to avoid a crash. Their incidence peaked just prior to the signing of the US-USSR Agreement on the Prevention of Incidents On and Over the High Seas, on May 25, 1972: some 150 to 170 of these events had taken place in the preceding 18 months, or at a rate of one every three to four days. Negotiations on the issue began in October 1971. Notably, their peak incidence was precisely at the height of the period of so-called "detente" between the US and USSR. After the signing of the agreement their occurrence did not go down to zero, but decreased by two-thirds, to an annual rate of around 40 per year, or just under one event per week. The events began around 1963-1964, when Soviet ships began to be deployed in the Mediterranean. According to a US Navy official involved in the negotiations, the agreement came about because "both navies are in the same place at the same time."

That, however, is a very inadequate explanation for why the incidents took place.⁴⁶ The number of events per year began to rise appreciably when the Soviets decided to challenge the US "occupation" of the Sea of Japan. Later on, a Soviet effort to exclude US naval vessels from an annual deployment into the Black Sea became a factor. Some of the decrease in the incident rate was due to a curtailment of US naval patrols in the Sea of Japan, and the Soviet Navy didn't give up its efforts to

⁴⁶ Sean M. Lynn-Jones, Avoiding Confrontation at Sea: The 1972 US-Soviet Agreement on Naval Accidents, Occasional Paper No. 2, JFK School of Government, Harvard University, May 1, 1984. Also published as Sean M. Lynn-Jones, "A Quiet Success for Arms Control: Preventing Incidents at Sea", International Security, 9:4 (Spring 1985), pp. 154-184.

D. C. Daniel and G. D. Tarleton, "The Soviet Navy in 1984", US Naval Institute Proceedings, 111:5 (May 1985), p. 63.

Harry H. Almond Jr., "Dangerous Military Activities", US Naval Institute Proceedings, 115:10 (December 1989), pp. 97-99.

William Arkin, "Provocations at Sea", Bulletin of the Atomic Scientists, 41:10 (Nov. 1985), pp. 6-7.

Rick Atkinson, "Navies Keep Superpower Diplomacy Afloat", Washington Post, June 8, 1984.

"Ship Scraping Eases: Navy Continues Sea Exercises", St. Louis Post Dispatch, May 13, 1967.

"Some Bumps in the Night", Newsweek, April 2, 1984, pp. 40-41.

William H. Honan, "US and Russia: Now Hear This! Rules for Chicken of the Sea", New York Times, October 10, 1971.

"Soviet Sub Blamed in Collision", New York Times, March 15, 1977.

exclude US naval vessels from the Black Sea as late as 1988.⁴⁷ On other occasions US naval vessels were the ones to carry out aggressive operations which resulted in incidents. Some of these were the Hollystone submarine operations in which US submarines literally entered harbors of the Soviet Northern and Pacific fleets for intelligence purposes.⁴⁸ Some of these missions resulted in US and Soviet submarines colliding, and in one case, apparently nearly led to an underwater combat situation. Another was the occasion, on May 6, 1972, when a Soviet G-II Class ballistic missile submarine accompanied by a Soviet surface flotilla left Cienfuegos harbor in Cuba. It was the first time that the USSR had brought a ballistic missile submarine to Cuba, and there were questions as to whether the USSR wasn't testing the constraints of the Kennedy-Khrushchev agreements following the Cuban missile crisis. The dates of the Soviet visit also precisely overlapped the final weeks (May 3 to 17, 1972) of the US-USSR negotiations on the incidents at sea agreement. US surveillance ships and ASW aircraft kept the Soviet submarine under extremely close surveillance after it left Cuba and forced the SLBM to the surface via sonar contacts. Soviet and US surface vessels interacted vigorously, and Soviet surface vessels fired flares at low-flying US ASW aircraft.⁴⁹ Of course, during the Cuban missile crisis there had been direct military engagement between US surface vessels and Soviet submarines. US surface ships used extremely vigorous ASW procedures for extended periods of time, including the use of warning depth charges, to force Soviet submarines to surface.⁵⁰ These operations in fact caused substantial friction between Sec. of Defense McNamara and the Chief of Naval Operations, Adm. Anderson, when senior members of the US administration learned that they were taking place during the crisis.

Close surveillance which frequently overlapped with harassment was a constant aspect of strategic ASW; each side's effort to locate and hold under constant surveillance the other side's SLBM submarines while they were out on routine patrols. On the western side the closer range aspects of these efforts were carried out with attack submarines, ASW patrol aircraft, and aircraft carrier ASW groups. On the Soviet side, attack submarines would attempt to pick up British, French, and US SLBM submarines as they left their respective harbors to go on patrol. These efforts led to what were

⁴⁷ John H. Cushman Jr., "2 Soviet Warships Reportedly Nudge US Navy Vessels: Acts Called Deliberate", New York Times, February 13, 1988.

George C. Wilson, "Soviets Bump US Ships in Black Sea", Washington Post, February 13, 1988.

Adm. Eugene J. Carroll, "Black Day on the Black Sea", Arms Control Today, 18:4 (May 1988), pp. 14-17.

Richard C. Armitage, "Asserting US Rights on the Black Sea", Arms Control Today, 18:5 (June 1988), pp. 13-14.

Richard Halloran, "2 US Ships Enter Soviet Waters off Crimea to Gather Intelligence", New York Times, March 19, 1986.

⁴⁸ Laurence Stern, "US Spying in Soviet Waters", Washington Post, January 4, 1974; Seymour Hersh, "Submarines of US Stage Spy Missions Inside Soviet Waters", New York Times, May 25, 1975.

⁴⁹ Raymond L. Garthoff, Detente and Confrontation: American Soviet Relations from Nixon to Reagan, The Brookings Institution, Washington DC, 1985, pp. 301-302.

Captain Leslie K. Fenlon, "The Umpteenth Cuban Confrontation", US Naval Institute Proceedings, 106:7 (July 1980), pp. 40-45.

⁵⁰ "Sighted Sub, Surfaced Same", Time, June 28, 1963, p. 18.

called "cat and mouse" interactions⁵¹, with extra attack submarines reportedly aiding the departing SLBM when necessary. Attack and SLBM submarines frequently interacted under the seas, and on some occasions collided with one another.⁵² These operations did not end with the dissolution of the USSR, nor did the degree of aggressiveness which led to physical contact of the two submarines: in March 1993 it was a US attack and a Soviet SLBM submarine, and this was reported as ". . . the second such incident in 13 months."⁵³

Another category of interaction took place regularly during naval maneuvers: each side used the other's maneuvers, at times just to watch, at times to actively interfere, and at times to practice submarine, aircraft, or SSM missile attack patterns that would be used in wartime. These activities apparently led to every conceivable form of interaction:

- among surface ships
- between submarines and surface ships
- between bombers and reconnaissance aircraft and ships, as well as with fighter interceptor aircraft from aircraft carriers
- among interceptor aircraft

Using the ships of the opposing side during maritime exercises, bombers practiced missile runs, and submarines their torpedoing patterns. All of this was not without consequence: in the Mediterranean alone "more than a dozen Soviet and American airmen have lost their lives. . . there have been more than 100 'hairy situations'".⁵⁴ The US also shot down two Libyan aircraft in 1981. Reconnaissance aircraft and carrier interceptor aircraft flew wingtip to wingtip and at times collided. In the Mediterranean Soviet pilots routinely flew reconnaissance missions in aircraft bearing Egyptian, Syrian, and Libyan markings. In 1968 a Soviet TU-16 reconnaissance plane made four low passes over a US aircraft carrier, and then taking too tight a turn crashed into the Mediterranean. In June 1980 another Soviet TU-16 crashed while circling a Japanese naval vessel in the Sea of Japan in the same kind of maneuver.

Some examples of the more "integrated" of these interactions, and with greater danger of miscalculation, are given below.

- A Soviet Victor class submarine joined in the US "Team Spirit" '84 exercises in the Sea of Japan. US ships opportunistically exercised sinking the Soviet submarine. A US naval officer commented, "We practice on each other. That way we're saving the taxpayers' money."⁵⁵ In

⁵¹"How Submarines Collect Signal Intelligence", Microwave Systems News, No. 5 (October-November 1976), pp. 50-52.

⁵²This event involved a Soviet attack submarine and a US Polaris submarine (USS James Madison). Jack Anderson, "US, Soviet Subs Scrape Hulls", Washington Post, January 1, 1975. "US Silent on Crash of Submarines" (Reuters), Chicago Tribune, January 2, 1975.

⁵³Barton Gellman, "US and Russian Nuclear Subs Collide", Washington Post, March 23, 1993.

⁵⁴William Honan, "The Games Pilots Play", New York Times, August 23, 1981; reprinted as "Mediterranean Sport: Chicken of the Sea", International Herald Tribune, August 27, 1981.

⁵⁵"Too Close an Encounter", Time, April 2, 1984; "Moscow's Muscle Flexing; Soviet Ships Prowl the North

turn the Soviet submarine successfully and without being detected took up a position directly underneath the US aircraft carrier Kitty Hawk, and apparently surfaced inopportunely, hit the aircraft carrier, and sustained sufficient damage to have to return to its base on the surface, escorted by a Soviet cruiser that had also been in the vicinity.

- During the US fleet exercises in the North Pacific in October 1982 (Sept. 30 and Oct. 1) Soviet TU-26 Backfire bombers practiced mock guided missile attacks - simulating targeting and firing their AS-4 ASM's - on two US carriers.⁵⁶ Approach distance is not close, but the carrier can detect the missiles' electronic guidance systems locking onto the carriers. The area of the maneuvers was within striking distance of carrier based aircraft to the Soviet Pacific Fleets base at Petropavlovsk.
- During a NATO naval exercise off the coast of Iceland in 1982 five Soviet submarines practiced torpedo attack patterns against the US and other NATO vessels. Similar torpedo runs were carried out by Soviet submarines against US ships in the Baltic and in the Black Sea in the 1980's.
- Two years later, two US carriers in the Sea of Japan prompted a reaction of over 100 Soviet jet fighters, bombers, and reconnaissance aircraft - the opportunity for a perfect exercise.⁵⁷
- Soviet naval vessels fired flares at low-flying reconnaissance aircraft on numerous occasions; examples include at a British Vulcan aircraft flying over the Kiev in 1984, and at two Swedish Viggens in the Baltic. In a September 1989 incident in the Mediterranean, a Soviet destroyer fired its 130 mm. gun at a US Navy P-3 reconnaissance aircraft. This incident followed the July 1989 Dangerous Military Activities Agreement, and prompted the US Navy to further suggest establishing direct communication links between US patrol aircraft and Soviet surface ships.
- In April 1984 a US frigate (USS H. E. Holt) was overly aggressive in shadowing the Soviet aircraft carrier Minsk. After an exchange of signal flag messages, with each side disregarding the other's messages, the Minsk fired four signal flares over the US ship and four others directly at it, three of which hit the ship, and one narrowly missing the bridge and the Holt's captain.⁵⁸
- As indicated, aircraft interactions are common also, and most often are over international waters. At least in more recent years, live fire was reserved for occasions in which an aircraft is over national territory; in 1987 Japanese interceptor aircraft used live fire to warn off a Soviet TU-16 Badger bomber that had not responded to radio warnings, and had crossed over the island of Okinawa twice for a period of 10 minutes⁵⁹. In 1984, Soviet MIG interceptors fired at a US

Atlantic in Biggest Manuevers Ever", Time, April 16, 1984, pp. 6-8.

⁵⁶David Wood, "Soviet Planes Practice Mock Carrier Raid; Bombers Fly Close to US Warships", Los Angeles Times, November 9, 1982; Drew Middleton, "Russia Surveys Games of US Navy in Pacific", New York Times and International Heralds Tribune, October 4, 1982.

⁵⁷Hedrick Smith, "US Ships Meet Major Response off Soviet Coast", New York Times, December 19, 1984.

⁵⁸"Moscow's Muscle Flexing. . .", 1984, op. cit., p. 8.

⁵⁹Margaret Shapiro, "Japanese Planes Fire to Warn Soviet Bomber; Craft Entered Airspace over Okinawa", Washington Post, Dec. 10, 1987.

(Japanese aircraft had reportedly scrambled to meet approaching Soviet aircraft on no less than 825

Army helicopter that had strayed into Czechoslovak territory while patrolling the West German Czech border.⁶⁰

One other category of activity deserves mention. By the 1970's Warsaw Pact naval exercises in both the Baltic and the North Sea were accompanied by flights of long-range bombers. In 1976 John Erickson wrote,

"Soviet air activity results in the commitment of flights of strike bombers to within minutes of Danish airspace, turning what was an abnormal alert situation into a regular occurrence and thus straining the Danish military alert system."⁶¹

A Danish source echoed the same problem.

"A Danish military analyst has pointed out that 'activities that previously warned of hostile action have today become part of the normal scene, making the distinction between a naval exercise and an isolated attack against Denmark difficult. This, in turn, has reduced the early warning and reaction period.'"⁶²

These kinds of incidents are of course most dangerous when they take place during a crisis and an alert-related deployment. Several of these have taken place while US and Soviet fleets were in extremely close proximity for weeks during crises in the Eastern Mediterranean. In these events, submarines, surface ships, interceptors, and reconnaissance aircraft all circled each other at close quarters. At 1800 yards, ships are in very close firing range, aircraft fly just over deck level, and nuclear weapons are present. At times shipboard gun fire control radar have been switched on by Soviet vessels, and guns trained on an adjacent ship's bridge.

"Maritime operations have unique features that could bear on escalation. While a skirmish at sea would take place in relative isolation from other forces, and is unlikely to lead to civilian casualties, other aspects of naval operations imperil stability. Communications with ships, and especially submarines, are more tenuous than those with air and ground forces. Furthermore, opposing naval forces shadow each other and mingle as no others do. . .

"Such proximity demands virtually instantaneous reactions to aggressive tactics even in peacetime, and has led to tense encounters during crisis. During the Yom Kippur Crisis, Soviet naval squadrons, consisting of surface and submarine units, maintained close contact with four US carrier and amphibious groups for a week after the DEFCON 3 alert was over; the two fleets continually targeted each other for immediate attack.

"This is not an isolated incident. In the Jordanian crisis of 1970, Soviet Navy crews assumed

occasions in the previous year, 1986, but in only three other cases had Soviet aircraft actually overflown Japanese territory.)

⁶⁰"Shots by MIGs Miss US Copter on West German - Czech Border", New York Times, April 21, 1984.

⁶¹John Erickson, "The Northern Theatre", _____, 1976.

⁶²Orla Moller, "Danish Security Policy", The Atlantic Community Quarterly, - : - (Fall 1977), p. 329.

battle stations, loaded SAM launchers, and locked their fire control radars on US aircraft."⁶³

In fact, in 1973 US and Soviet naval ships remained in close contact from October 24 to November 7-8, and in some instances, for three and a half weeks, 24 hours 'round the clock. In addition to the 1970 and 1973 engagements, US and Soviet fleets in the Eastern Mediterranean also interacted in 1975-76 and in 1982, on both occasions in relation to events in Lebanon.

Most serious of all perhaps - or as serious as events during crises involving nuclear alerts and forces - were interactions during military interventions in which one or the other side was already heavily engaged. Several of those are discussed in further detail in section B-3 that follows. The Soviet exercise of invasion procedures north of the Iranian border in 1980 led to the Carter administration's announcement of a nuclear threat "umbrella" for the Persian Gulf area, the establishment of the US Readiness Command, and US base agreements with Kenya, Oman, and Egypt for the use of facilities in case of conflict. On other occasions the USSR practiced airlifts of multi-divisional size for the transport of airborne units to Africa in extremely short time frames. In some of these cases one or the other superpower steered clear of the area in which the other was involved, or did limit its involvement in obvious ways; in other cases it did not.

Comment, Analysis, Assessment

"Incidents at Sea" began when the USSR was still very much behind in the strategic balance. The evidence is very strong that, in general, "the USSR" - and possibly that can be translated into "Soviet naval officials" - decided to be the initiator in this process. Except on very rare exceptions, US naval officers commanding ships must operate under specific orders. It is inconceivable that Soviet naval commanders, or field forces of any element of the Soviet military, could do otherwise and initiate activities such as these on their own. Therefore they must have been acting under orders; indeed, some practices that Soviet ships used in interfering with NATO maritime maneuvers were frequently repeated⁶⁴, which even more strongly suggests a conscious and pre-determined policy. Orders could conceivably read: "Do so and so" (intervene in opponents maneuvers, bring your ship close alongside, cut across right of way, make contact and sideswipe, etc.), or they could read, "Do not be prevented from doing so and so." In interviews in the early 1980's with civilian US naval analysts and with US naval officials specializing in US-Soviet ship interaction, it was impossible to ascertain if western ships carry out all of the same kinds of problematical practices during maneuvers, short of sideswiping that Soviet ships have displayed, or what their operational orders actually are. At least for the first of these two questions, the answer is probably "more or less the same."

Paradoxically then, the expectation of escalation on the part of the military command ordering

⁶³Crisis Stability and Nuclear War, 1987, op. cit., p. 64.

⁶⁴Examples are Soviet ships maintaining a course that violated standard navigational "rules of the road", "and at the last minute raising a signal flag that its steering was broken." Fred Hiatt, "Soviet Frigate Collides with US Destroyer", Washington Post, November 18, 1983.

the policy must have been nil, or close to it, despite the fact that nuclear weapon-bearing platforms were frequently involved: attack and SLBM submarines, submarines and US aircraft carriers, etc. Since they took place, many of them and regularly, it is obvious that someone wanted the initial events. Apparently, at the same time, the same decision makers wanted to be assured of limitation and control; some point at which there would be an absolute cut-off of the interaction, and no further escalation. That can only mean that the initiator must have decided that in advance as well, together with deciding on the practice. If there had not been political approval even before, it is likely that on the Soviet side after the first initial incidents, the events were brought to the attention of political leadership "probably at a fairly high level", and since it is rather likely - if not certain - that the Soviet political leadership did not want incidents leading to a crisis, this implies that the senior military, either in the General Staff as a whole or in the Soviet naval command, were pushing the political limits of interactive engagement with US or NATO forces. Though crucial information has been released from former Soviet archives since 1989-90 on many other important issues, there has been no information to date which explains who formulated Soviet policy on these events and exactly what it was.

If the discussion above offers some approximation of how US and Soviet political and military leadership approached these events under "ordinary" peacetime circumstances, and suggests a modicum of control of risk, it is much less satisfactory - or not very satisfactory at all - for the situations which involved greater political and military investment. As noted earlier, several of the most problematic US-Soviet naval interactions took place in the Eastern Mediterranean. In his own analysis, McConnell carefully separates Soviet actions into "before and after" categories, depending on whether Israeli or Syrian/Egyptian military operations had already occurred to upset a status quo. Before any Israeli action he believed that Soviet responses indicated that they would not be disturbed if the US went to Israel's assistance; after Israeli military action they would go to the aid of their regional allies and interfere with US naval operations. This sounds very intelligent and discriminating, and may be perfectly correct, but in the situations of crisis and confrontation, in some instances with armed combat going on in the region at the same time, and in some of these the military forces of one or another side actively engaged in the regional fighting, and in other cases concomitant nuclear alerts, anything could have gone wrong, and it is probably rather remarkable that no more serious US-Soviet engagements ever took place.

3. Other US-USSR Military Interactions: Rules of the Game

a. Foreign Military Intervention

There is a substantial literature on "Rules of the Game" pertaining to US-USSR military interactions, which is not being summarized here.⁶⁵ A portion of it pertained to US or Soviet engagement in a "limited war" against a client state of the other superpower; other analyses dealt with direct US-Soviet military interactions short of war. I have found myself skeptical of virtually all of it. Entire sections of this study, such as the US aircraft penetrations and overflights of Soviet territory in the 1950's, 1960's, and 1970's, contravene various proscriptions that others see as having been in "tacit" operation. One has only to think a short moment to produce a list of other contraventions of the supposed "rules", for example:

- Project Hollystone, a program of US submarine penetrations of Soviet harbors for intelligence purposes, whose operations between 1960 and 1975 were disclosed in the press, but in fact seem never to have been terminated to this date, and which not infrequently produced interactions of US and Soviet nuclear armed vessels, one as recently as in the early 1990's.
- US covert operations that dropped sabotage teams into the Ukraine and the Baltic states until the early 1950's.
- US support for the Khampa insurgents that fought the Chinese government in Tibet in the early 1950's.
- US training, collaboration with and support of the Nationalist Chinese sabotage teams from Taiwan that landed on the Chinese mainland in the 1950's and early 1960's.

There are many others.

I have selected one representative quotation from an important and credible study by way of example, simply to demonstrate how grossly in error it is:

"Low-Intensity Crises. The superpowers have adhered to a tacit code that has kept their confrontations at a low level of intensity: Refrain from use of deadly force against the adversary or his allies; do not stampede the adversary into decisions, or force him to choose between humiliation or escalation; and refrain from spreading a crisis to

⁶⁵ Neil Matheson, The 'Rules of the Game' of Superpower Military Intervention in the Third World, 1975-1980, University Press of America, Washington DC, 1982.

Joanne Gowa and Nils H. Wessell, Ground Rules: Soviet and American Involvement in Regional Conflicts, Foreign Policy Research Institute, Philadelphia, 1982.

Oran R. Young, The Politics of Force, Bargaining During International Crises, Princeton University Press, 1968.

James M. McConnell, "The 'Rules of the Game': Superpower Coercive Diplomacy in the Third World", undated: see also McConnell and Dismukes, Soviet Naval Diplomacy, 1979, op. cit.

Bruce Allyn, "The Soviet Approach to Crisis Prevention in Third World Areas, Harvard Law School, Nuclear Negotiation Project, January 1984.

Brad C. Hayes, "Naval Rules of Engagement: Management Tools for Crisis", RAND N-2963-CC, July 1989.

Morton Halperin, Limited War in the Nuclear Age, J. Wiley and Sons, New York, 1963.

another region."⁶⁶

In contrast, the following examples demonstrate dramatically different behavior in the real world:

Soviet military role in Egypt, 1969 to 1972, in the "war of attrition": 20,000 Soviet troops were based in Egypt performing operational military roles: among which were flying "Egyptian" combat aircraft in engagements with Israeli aircraft (in which Soviet pilots were shot down and killed), flying "Egyptian" reconnaissance aircraft in the Mediterranean, manning SAM missile sites (which Israeli aircraft attacked and destroyed, again killing Soviet military personnel.)

It is quite easy in this instance to anticipate escalatory chains that would have led to more aggravated Israeli-Soviet military interactions and possibly Soviet-US ones as well. Interviews with former US and Israeli government officials on whether and what thought or planning is given in advance to such contingencies, if "clearances", consultations, or approvals are requested prior to particular combat initiatives, or prior to entire military campaigns such as Israel's invasion of Lebanon in 1978 and again in 1982, produced varying inconclusive responses. Israel apparently did not consult the US government prior to its 1978 invasion of Lebanon, but most certainly did prior to the 1982 invasion, and received US approval in that instance; see _____.

Soviet "advisors" at SAM sites in Vietnam, which were downing US aircraft and which were in turn attacked and destroyed by US pilots, presumably resulting in casualties of Soviet military personnel.

Soviet military role in Syria in 1982: After Israel targeted and destroyed a large number of SAM missiles and sites in the Bekka Valley in Lebanon (at which time Reagan administration officials leaked to the press that Soviet "advisors" at the sites had been killed), the USSR immediately resupplied Syria with an equal number of a new generation of SAM's, which required Soviet operational and maintenance personnel. Here again it is not difficult to anticipate the possibility of subsequent US-Syrian-Soviet interactions, at least some of which soon occurred, but in which it is unknown if Soviet personnel in Syria participated. Syrian ground-based air defenses shot down several US carrier aircraft in 1984 when a US fleet supporting US marines carried out shelling and bombing raids over Syrian controlled areas surrounding Beirut, Lebanon.

In the Cuban missile crisis, Soviet military personnel of course carried out operational military roles, which included the shooting down of a US reconnaissance plane by Soviet air defense personnel.

Chinese assistance in Vietnam, 1965 to 1975: most of that assistance was carried out by troops doing railroad construction and maintenance and truck transport between the Chinese border and Hanoi, but it apparently also included air defense personnel. As many as 200,000 to 300,000 Chinese troops were rotated through Vietnam, of whom 20,000 to 30,000 apparently died in combat as a result of US bombing raids.

Chinese ground forces of course also fought in the Korean War, on North Korea's behalf, and suffered one million killed during the war, and although China was not a nuclear weapon state itself

⁶⁶Crisis Stability and Nuclear War, 1987, op. cit., pg. 71.

at the time, it most certainly was an "ally" of the USSR.

There are numerous "smaller" examples (if I recall, Soviet pilots flew in Yemen in the early 1970's, and US-supplied mercenary pilots in the Congo in 1960); I have included above only those that involved the largest number of military personnel and which lasted for extended periods of years.

(b) The Korean War.

The Korean War is so significant in so many ways, that it is worth selecting out for special attention. Although it was of course known to both the Soviet and the US governments all along - and very likely to some of the western authors who wrote about "limited war", "tacit codes", and "rules of the game" - former senior Soviet military officials were the first to publish data on the USSR's direct combat participation in the Korean War, something which the US government has not done to this date.⁶⁷ That participation was in the form of an entire air force and ground air defense units that fought US and other United Nations air contingents throughout most of the war.

In the early phases of the war the USSR supplied all the "North's" aircraft; after the Chinese entry into the war, the USSR supplied half: all told, 5,000 Soviet airmen. According to Lt. Gen. Georgi Lobov, who at the time commanded the Soviet 64th Fighter Air Corps which fought in North Korea, the USSR claimed to have downed 1,300 US aircraft in air combat or by ground antiaircraft guns.⁶⁸ The number of aircraft that each side downed are in gross dispute. A memorandum by General S. M. Shtemenko, Chief of the Soviet General Staff, to A. N. Poskrebyshev, head of Stalin's personal secretariat, dated December 9, 1951, provides the detailed numbers of American aircraft, by aircraft type, allegedly shot down by Soviet fighter aircraft. It claims 510 US aircraft shot down for a loss of 63 Soviet aircraft.⁶⁹ That is a ratio of 8:1 in favor of the USSR. On the US side, General Weyland wrote that "United Nations Command Air Forces killed over 840 MIGs at a greater than 10:1 ratio", and another US source gave figure of 792 Soviet MIG aircraft lost to 78 US Sabrejets.⁷⁰ Whatever

⁶⁷General Alexander P. Smolchekov, in Seoul, South Korea, in 1990: the January 1991 issue of the Soviet monthly journal, Sputnik; and papers in The Truth about the Korean War, Kim Chullbaum, editor, (Eulyoo Publishing Company, Seoul, 1991), by Yevgeni Vetalyayev, Yevarest Buklemishev, Nikolay Orlov-Rimin, Shin Songhil and Shin Samsoon, Chu Yongbok, Im Un, Yu Songchol; see also ref. #4.

⁶⁸Gen. Lobov's series of articles published in the USSR is quoted in "Secrets of the Korean War", US News and World Report, August 9, 1993, pg. 45.

The US Air Force's official history, The United States Air Force in Korea, 1950-1953, by Robert F. Futrell, 1961, refers only to unconfirmed reports of Russian pilots flying from time to time.

⁶⁹Appended to "The Soviet Role in the Early Phase of the Korean War; New Documentary Evidence", by Kathryn Weathersby, The Journal of American-East Asian Relations, 2:4 (Winter 1993), pp. 457-458.

General Dmitri Volkogonov reportedly claimed even higher numbers in an interview, that 1,069 US aircraft were shot down by Soviet pilots in 1951 alone.

⁷⁰Gen. O. P. Weyland, "The Air Campaign in Korea", Air University Quarterly Review, 6:3 (Fall 1953), pp. 3-28. Charles S. Kennedy (Director, Foreign Affairs Oral History Program, Georgetown University) in American Heritage, (September 1992), pp. 33-34.

the actual numbers, the basic point is the same; Soviet military forces and US military forces were engaged in direct combat for an extended period of time - several years - and a very substantial number of US or Soviet pilots and aircraft - or both - were lost.

Perhaps even more astonishing the more one thinks about it, is Stalin's decision to initiate the war in the first place. Declassified Soviet documents have now clarified Stalin's initial rejection of pleas (apparently) initiated by Kim Il Sung in 1949 to invade the South, then his reversal and approval in principle in December 1949-January 1950, after Communist Chinese consolidation of their victory in October 1949, saying that "changes in the international situation" now made the proposed invasion feasible, which had not been the case previously.⁷¹ There is no question but that the North Korean invasion could never have taken place without Stalin's (Soviet) approval:

- Kim Il Sung had no independence of action with Soviet approval,
- the preparations for the invasion required a Soviet logistical supply train from March through June 1950,

- the invasion plan was drawn up by elements of the Soviet General Staff seconded to North Korea.

These decisions by Stalin must be placed in the context of the US-USSR nuclear weapons relationship that existed at the time:

- the USSR had carried out its first nuclear weapons test in 1949,
- but it apparently had no deliverable nuclear weapons for several years after that, until 1952.
- The United States very definitely did - between 300 and 400 in 1950.

Although there is good reason to believe that Stalin did not expect US military intervention following the North Korean invasion of South Korea, it seems equally clear that he was not perturbed by the virtually absolute US nuclear superiority at the onset of the war nor for the remaining years of it until he died in 1953, and that he had no compunctions about precipitating the war under those conditions. He did however subsequently renege on his initial offer to Mao Tse Tung to supply a Soviet air arm in support of the Chinese ground forces that entered the war in support of the North Koreans.

(Other aspects of the war that are substantial caveats to the "tacit limits" or "rules" are not being discussed here, primarily the US bombing of the North Korean hydroelectric and irrigation dams in the final year of the war.⁷² The bombing of dams by the German air force in the Netherlands during World War II had been listed as a "war crime" only eight years earlier, at the Nuremberg trials.)

⁷¹See the series of papers by Kathryn Weathersby, which contain the declassified original USSR-North Korean documentation:

- "Soviet Aims in Korea and the Origins of the Korean War, 1945-1950: New Evidence from Russian Archives", Working Paper No. 8, Cold War International History Project, Woodrow Wilson Center, Washington DC, November 1993.
- "New Findings on the Korean War", Bulletin, Cold War International History Project, Issue #3, Fall 1993.
- "Korea, 1949-1950; To Attack or Not to Attack? Stalin, Kim Il Sung, and the Prelude to the War", Bulletin, Cold War International History Project, Issue #5, Spring 1995.

⁷²"The Attack on Irrigation Dams in North Korea; A Quarterly Review Staff Study", Air University Quarterly Review, 6:4 (Winter 1953-1954), pp. 40-61.

4) Tactical Nuclear Weapons

(a) Nuclear War at Sea

This was a subject to which very little attention was paid until 1979-80. Six to seven papers appeared in the U.S. Naval literature in 1979-84, two papers in International Security by Barry Posen and Desmond Ball, the books by Tritten (1986) and Daniel (1987), and a monograph by William Arkin in 1987. Papers by U.S. Navy authors uniformly insisted that there was no U.S. Navy intention or preparation to fight a tactical nuclear war at sea. Nevertheless, historically, the U.S. Navy had deployed a large numbers of nuclear weapons at sea, TNW's as well as strategic, and larger quantities of the former in earlier years. The very first U.S. strategic weapons deployed outside of the U.S. were on aircraft carriers. By 1954-1955 these were a very substantial force (see section below on carrier strike forces and deployments), and they were followed by Regulus missiles, then Polaris, etc. Carriers were positioned off the North Norwegian coast prior to Polaris deployment, and in the Eastern Mediterranean, and their nuclear weapons in early years were relegated to the SIOP, and were targeted on "naval targets of choice": USSR North Sea Fleet bases and Soviet oil facilities from the carriers positioned in the Eastern Mediterranean. As for TNW's, there were SAM's, ASROC, SUBROC, naval artillery, carrier bombs, depth charges for helicopters and P-3 delivered ASW. In the 1970's when the U.S. reduced the size of its TNW holdings, naval nuclear weapons were reduced particularly, and several categories were removed entirely and not replaced. In 1987, Arkin estimated 3,715 U.S. naval TNW's and 2,536 for the USSR (as well as 190 for the UK, 36 for France and 130 for China). My own estimates for Soviet naval TNW's, made in 1969-1970, and then in 1981 for the Soviet Baltic and Northern Fleets only, suggested substantially higher numbers.⁷³

As indicated, the USSR deployed large numbers of naval TNWs - the nuclear torpedo on the aging stranded Whiskey class submarine in the Baltic in 1981 being almost apocryphal. More critical on the Soviet side was a combination of technical capability - or lack of it - and its priority naval mission in earlier years, which produced a strikingly dangerous combination. Given the early important nuclear strike role of U.S. carriers (again see section below) the first mission of the Soviet fleets was to sink those carriers. Once U.S. SLBM's were deployed, their task naturally evolved into sinking both the SLBM's and the carriers, since these were the two U.S. naval nuclear capabilities to strike the USSR in case of war. However, the early Soviet surface and submarine platforms for SSM and sub-launched cruise missiles in the 1950's, 1960's, and 1970's carried no reloads; what was in the missile tubes was all that the ships carried. They would either sink their target with that payload, or they were lost in combat after firing. It was presumed that those SSM tubes carried nuclear warheads; but would they fire first? Soviet general war doctrine until sometime in the 1968 to '75 period was that war would be nuclear, and Soviet "tattletail" ships were positioned on constant "tailing" duty behind U.S. carrier strike forces, so that the carrier's position was always known. In crises, Soviet ships were frequently positioned within missile range of their naval targets, in fact, often in immediate proximity to them. The question was always; would they fire first, and with what.

⁷³See also Richard Fieldhouse and Shunji Taoka, Superpowers at Sea: An Assessment of the Naval Arms Race, SIPRI and Oxford University Press, 1989; Chapter 3, "Naval Nuclear Weapons: Status and Implications", pages 83 to 152.

In the unclassified US naval literature of the 1960's and the 1970's one finds a half dozen sources that attempted an assessment of this question, and one finds them evenly divided on the question. However, in the 1980's two major studies on Soviet naval warfare reached decidedly optimistic conclusions, and one has to presume that they meant those judgements to hold retroactively for the earlier decades as well. (Although that would presumably contradict the conclusions of McGwire, Petersen, and Hines, etc., regarding Soviet policy for initiating the use of nuclear weapons on land. See below.) After surveying the relevant literature by Soviet authors, James Tritten concluded that a Soviet decision to use nuclear weapons would have been

"neither a Soviet Navy decision nor one that will hinge on naval matters. Rather it will depend on the political context."⁷⁴

and Donald Daniel essentially concurred:

"While a nuclear response cannot be ruled out, it would certainly be surprising in any situation except the . . . one where the Soviet Union was sure that the US would strike preemptively at all Soviet land-based intercontinental systems after the sea-based missiles had been (nearly) eliminated."⁷⁵

As for the U.S., one U.S. naval mission had always been to "attrite" the Soviet SSBN force, (even) using conventional munitions: ". . . attriting the Soviet SSBN force has long been a priority mission for the U.S. Navy, even when it dropped from public discussion during the 1970's." The USSR had tried to introduce the issue of U.S. ASW against their SSBN's in the SALT talks on several occasions, an issue that the U.S. uniformly rejected. Sec. Navy Lehman's remarks in 1984 and the "Maritime Strategy", therefore, at the peak of the "bad" years, were not at all something "new." "Associated with the maritime strategy's offensive surface naval actions are offensive submarine operations that would aim to put Soviet nuclear ballistic missile submarines (SSBN's) at risk. There is every reason to believe this conventional counterforce campaign would be undertaken intentionally, as a deliberate attempt to degrade the Soviet's strategic retaliatory capability by conventional means."⁷⁶

"A deliberate conventional campaign against Soviet SSBNs could be understood by the Soviets as the beginning of a damage-limiting strategic first-strike. Given the importance of nuclear weapons and nuclear war in Soviet doctrine, even the appearance of such a campaign could trigger dire consequences. American leaders may be surprised by the Soviet response, since they seem to believe that so long as nuclear weapons have not been used in destroying Soviet strategic forces, the prospect

⁷⁴Cdr. James J. Tritten, Soviet Naval Forces and Nuclear Employment: Weapons, Employment, and Policy, Westview Press, Boulder, Colorado, 1986, pg. 101.

⁷⁵Donald C. Daniel, Antisubmarine Warfare and Superpower Strategic Stability, Univ. of Illinois Press, Urbana, Illinois, 1986, pp. 153-154.

⁷⁶Joshua M. Epstein, The 1988 Defense Budget, The Brookings Institution, Washington DC, 1987, pp. 51-52; summary of Adm. James D. Watkins, The Maritime Strategy, US Naval INstitute, Annapolis, 1986, pp. 2-17.

of Soviet escalation is not raised."⁷⁷

Added to the above, in the early years there had been the basic U.S. Navy planning for TNW attack by carrier strike aircraft against Soviet SLBM bases, although this was on the assumption of full nuclear war.

After 1975, it is presumed that Soviet policies for war at sea changed just as they did on land. This reduced the danger of initiation of nuclear war enormously, since the point of Soviet naval policy had been to get the U.S. carriers at the very earliest moment at the onset of war. Now much heavier force loadings appeared on the new generation of Soviet surface naval vessels, and the new classes of Soviet ships that began to be deployed around 1980-82 had on-board reload capability for the first time. Now it did not have to be presumed that all or most Soviet SSM missile tubes were armed with nuclear warheads. The change was analogous to that with Soviet tactical strike aircraft in Europe: for those aircraft there was an order of magnitude increase in both their range and payload capability, enabling them to perform a conventional strike role. (As will be noted in a moment below, this increase in Soviet tactical air conventional bombing capability also had a converse effect on European nuclear stability.) In 1987 the Crisis Stability and War study offered the following assessment:

". . . the paramount U.S. goal would be to bottle up the major Soviet fleets in their home waters north of the Greenland-Iceland-Norway (G-I-N) gap, and behind the straits connecting the Seas of Japan and Okhotsk to the Pacific. Thus NATO would seek to prevent passage of Soviet ships, especially attack submarines, through the G-I-N gap."

"The highest priority for the Soviet Union would be protection of their home waters, which are intended to serve as sanctuaries for their SSBNs. In contrast to U.S. SSNs, most Soviet strategic submarines stay within range of Soviet air and surface fleet support because of superior U.S. antisubmarine capabilities. Therefore, the primary Soviet objective would be to prevent the passage of U.S. surface ships and submarines through those same choke points into Soviet home waters.

"Were both sides to confine themselves to these complementary priorities, the oceans might not be a particularly fertile ground for crisis interactions or escalation. But each side appears to have other objectives that are potentially dangerous: the disruption by Soviet submarines of the sea lines of communication for reinforcements to Europe; and deployment of NATO fleets into Soviet home waters."⁷⁸

This was, however, incredibly optimistic - and unrealistic. A year before, the Director of Defense Programs at the National Security Council (and a Navy Captain) had presented the following description of US naval strategy at the time.

"Although the US objective in the initial stage of the conflict would be to control escalation, preparations must be made for the transition to war, specifically global war, in the event that deterrence fails. Brooks pointed out that it is often assumed that the United

⁷⁷Barry R. Posen, "Inadvertent Nuclear War? Escalation and NATO's Northern Flank", International Security, vol. 7 (Fall 1982), p. 43.

⁷⁸ *Crisis Stability and Nuclear War*, Desmond Ball, et.al., American Academy of Arts and Sciences, and Cornell University Peace Studies Program, January 1987.

States "won't shoot first," but the primary objective of the next phase, "seizing the initiative," would be to establish sea control aggressively. Because the Soviets would presumably want to focus on Central Europe, the US strategy would be to divert their attention and divide their forces by forcing them to engage in battle outside the European theater. US naval forces would attempt to destroy Soviet forces in the Mediterranean, Indian Ocean, and other forward areas, as well as fight their way toward Soviet home waters. A crucial element in this stage would be anti-submarine warfare: as the battle groups move forward they would be waging an aggressive campaign against all submarines, including ballistic missile subs (SSBN's). Offensive anti-air and anti-surface warfare are also key elements of the strategy; destroying Soviet bombers and surface ships, and using carrier battle groups to bring added strength to NATO's northern and southern flanks, in conjunction with allied efforts, would increase US offensive strike capability.

"In the final phase, "carrying the fight to the enemy," the tasks would be similar to those in the earlier phases but more aggressively applied as the US sought war termination on favorable terms. As Brooks put it, we would "do more farther forward better," including attacking the Soviet homeland and eliminating at least part of the Soviet SSBN force."⁷⁹

Though it was clear that the U.S. and Soviet navies retained "other objectives," not least that of power projection which led to so many of the potential nuclear interactions already discussed (and which the Crisis Stability and War study does not even mention), it seems possible that in sum, the 1980s actually saw a substantially decreased likelihood of nuclear warfare at sea, if only because of the increased conventional attack capabilities of major Soviet surface attack vessels.

b) Conventional War in Europe and Preemptive Conventional Attack on TNW's

In thirty years or more of undoubtedly thousands of academic papers on European security, NATO and Warsaw Pact force levels etc., this was a virtually undiscussed subject. Yet it had always been a part of both U.S. and USSR planning for any war in Europe. Senior Soviet military officials interviewed by Raymond Garthoff in 1989 acknowledged that it had always been a part of their plans.⁸⁰

The vulnerability of U.S. tactical nuclear weapons deployed with U.S. forces in Europe was a major pre-occupation of the Joint Committee of Atomic Energy (JCAE) of the U.S. Congress in the early 1970s.⁸¹ After 1975 that concern was increased as the USSR switched WTO policy from

⁷⁹"US Maritime Strategy for the 1980's", summary of a presentation by Capt. Linton Brooks, Security Digest, International Security Studies Program, the Wilson Center, Washington DC, November 1986, pp. 1-2.

⁸⁰Raymond Garthoff, personal communication, 1989.

⁸¹Milton Leitenberg, Tactical Nuclear Weapons in the European Context, SIPRI, 1978, pp. 40 - 49.

preemptive TNW attack on NATO nuclear weapons to attack on the same systems by conventional munitions delivered by Soviet tactical strike aircraft. In addition, a part of Soviet planning for very rapid ground offensive included the use of special forces: airborne divisions and spetsnaz troops far behind the front lines, part of whose task would be to find and destroy NATO TNW weapon systems.⁸² Michael McGwire's description was as follows:

"The problem remained of how to defeat NATO in Europe without precipitating nuclear strikes on Russia. One aspect was the danger that NATO's use of nuclear weapons would escalate to an intercontinental exchange, a danger the Soviets responded to in two ways. In 1967-68 they set out to develop the military capability, using conventional means only, to launch preventive strikes against the means of nuclear delivery and related facilities for NATO command and control and to mount a blitzkrieg offensive into Western Europe. Such operations would make NATO's resort to nuclear weapons much more difficult, and, even if the Soviets were not fully successful, NATO's nuclear capability would be greatly reduced and the escalatory momentum would be lessened. This military response to the danger of escalation was reinforced in the second half of the 1970s by a political campaign that had two objectives. One, the Soviets wanted to persuade NATO to declare a policy of no first use of nuclear weapons. The other was persuade the United States that resort to nuclear weapons in NATO Europe would inevitably escalate to an intercontinental exchange and lead to the nuclear devastation of North America."⁸³

A very similar understanding was developed by the U.S. Department of Defense's major analyst on the subject:

"The overall Soviet assessment, then, was that not only did the potential for escalation make any nuclear use extremely threatening to the security of the Soviet homeland, but use of such weapons would impose additional constraints rather than facilitate offensive operations. This assessment encouraged the Soviets to enhance their attempt to defeat NATO conventionally and to destroy preemptively as much of NATO's nuclear capability as possible with conventional operations early in any conflict. An absolute requirement for the achievement of this objective was the continued development of nuclear forces to match at least, if not exceed, NATO's nuclear capability at the global, theater, and tactical levels. The development of such a capability would enable the Soviets to restrain further NATO's incentives for initial use and perhaps even in response to Soviet selective use, as well as better enable them to prevail in the event of escalation to a theater-wide or even global nuclear conflict."⁸⁴

⁸²"... on the high-intensity, short-duration nuclear battlefield, the primary airborne role became the independent performance of such missions as capture and retention or destruction of nuclear missiles, air force and naval bases, and other important objectives deep within the theaters of military operation." Dennis M. Gormley, "The Direction and Pace of Soviet Force Projection Capabilities", *Survival*, 24:6 (November-December 1982), pg. 270.

"Months before the (NATO) INF enplacements in Europe, construction of full scale Pershing II and GLCM mock-ups reportedly were observed at Spetsnaz training centers in Eastern Europe and the USSR." Mark J. Berkowitz, "A Spetsnaz Threat to Rail M-X?", *Armed Forces Journal International*, 127:2 (September 1989), pp. 72-74.

⁸³Michael McGwire, *Military Objectives in Force and Foreign Policy*, The Brookings Institution, Washington, D.C., 1987, pg. 338.

⁸⁴J.G. Hines, Phillip A. Petersen, Notra Trulock, "Soviet Military Theory From 1945-2000: Implications for

(c) Theater Nuclear War in Europe: Crisis Nuclear Weapon Dispersion and Preemption

At the time of the Cuban Missile Crisis in October 1962 Daniel Ellsberg was assigned to draw up U.S. options that might be taken if the USSR attacked U.S. Jupiter missiles in Turkey with conventional weapons: there were no nuclear alternatives in the list of options prepared.⁸⁵ The likelihood that U.S. planners would have altered that stance in the years after 1962, as nuclear response in NATO became progressively de-emphasized, was extremely un-likely. Nevertheless, the composite of US/NATO, and USSR/WTO planning for any European war or crisis produced an inherently and highly unstable set of interactions, and paradoxically, there are indications that these became more so in the early 1980's.⁸⁶

Before 1975 - perhaps at some time between 1968 and 1975 - experts are unanimous that the USSR had planned on intercontinental nuclear preemption, and this almost certainly held for an attack on US TNW's located in Europe as well.⁸⁷ Some portion of US/NATO TNW's were always on Quick Reaction Alert (QRA), and any additional NATO nuclear alert also invoked a U.S. nuclear alert. Warsaw Pact exercises were trained to signals of U.S. preparations for nuclear use; The USSR even exercised release during NATO exercises before NATO forces in the field had received their release to use TNW's. The USSR's "No First Use" declaration was highly qualified; "It has never been quite clear what 'anticipating enemy preparations to use its TNF' has meant. Dispersal might indeed be the primary indicator."⁸⁸ And one only has to look at the detailed sequence of US/NATO and USSR/WTO actions that were planned in the sequential circumstances of "Heightened Readiness,"

NATO", The Washington Quarterly, 9:4 (Fall 1986), pg. 9.

⁸⁵Daniel Ellsberg, personal communication, October 1988.

⁸⁶Early in 1984 Johan Holst wrote: "The arrival of approximate nuclear parity on the ground in Europe coupled with qualitative improvements in Soviet conventional forces has raised the spectre of preemptive nuclear instabilities in Europe due primarily to four factors:

- (1) The disposition of short-range nuclear weapons in NATO's nuclear arsenal;
- (2) The large number of nuclear munitions;
- (3) The physical location and vulnerability of the special munitions sites and the difficulty of dispersing nuclear munitions to the launchers;
- (4) The commingling of nuclear and conventional forces."

Johan J. Holst, "Arms Control and Alliance Security: A Preliminary Exploration", NUPI Notat, No. 298(B), April 1984.

⁸⁷Michael MccGwire, Stephen Meyer, Raymond Garthoff, and Petersen & Hines are all unanimous on this point.

⁸⁸Stephen M. Meyer, Soviet Theater Nuclear Forces, Part II: Capabilities and Implications, Adelphi Paper 188, Winter 1983-84, and Part I, Development of Doctrine and Objectives, Adelphi Paper 187, Winter 1983-84, International Institute for Strategic Studies (IISS), London.

See also Desmond Ball, Can Nuclear War Be Controlled, Adelphi Paper 169, IISS, Autumn 1981; "Nuclear Weapons and NATO", F.A.S. Public Interest Report, 39:5 (May 1986), pp. 1-12; and William M. Arkin, "Playing Chicken in Turkey", Bulletin of the Atomic Scientists, : , (October 1985), pp. 5-6.

"Readiness for Combat" and "Deployment for Combat" that were anticipated in advance of the initiation of any NATO/WTO military engagement to see how obvious the situation was.⁸⁹ NATO considered it an absolute must to disperse its TNWs in a crisis situation: vulnerability was too high at the 90 locations at which they were stored under normal conditions, all well-known and identified, vs. over 300 dispersal sites. And for the USSR, NATO TNW dispersal very likely meant the time for preemption.

In the early 1980's there were apparently further changes in Soviet operational practices and readiness, as well as an event that is one of the murkier episodes in cold war nuclear history. It stands in marked contrast to the three U.S. alert failures in 1979-81 which received enormous international attention, expressions of fear and concern, etc. Yet it was an episode - if valid as reported to date in the unsatisfactory and ambiguous information - as best as can be discerned of infinitely greater danger. The "routine" setting for it was instituted in 1982:

". . . of significance to pre-emptive surprise is Defense Minister Ustinov's 1982 declaration of the highest peacetime readiness norm ('combat alert duty') for 'troops and naval forces stationed on the forward edge of our motherland and the socialist community'. Previously, only the Strategic Rocket Forces (SRF) and, occasionally, SSBNs and the National Air Defense Troops have been singled out for the performance of combat alert duty. Upgrading ground force readiness presumably includes corresponding improvements in organic missile readiness. Indeed, a portion of Soviet nuclear forces in Eastern Europe has reportedly been placed on 'quick alert' for the first time. This change in Soviet operational planning may relate to the introduction of new enhanced-range missiles into Eastern Europe in late 1983; it would roughly correspond to the quick-reaction alert status of a portion of NATO's Pershing missiles."⁹⁰

It was in these circumstances and in the highly frictional US-USSR relations of the early 1980's that Soviet military forces reacted in a very unaccustomed manner to a NATO command post exercise of the exact same sort that they had monitored on numerous previous occasions.

"For both sides the growing threat represented by the increasingly offensive character and heightened readiness of each other's principal adversary placed an added premium on rapid military response at the earliest signs of hostile intent. At the same time, it also increased the danger that ostensibly defensive preparations taken in a crisis, might be misperceived or misunderstood as offensive in nature, triggering, as a consequence, a rapid sequence of unintended military interactions between the two sides that propel

⁸⁹Crisis Stability and Nuclear War, Desmond Ball et. al., American Academy of Arts and Sciences and Cornell University Peace Studies Program, 1987, pages 36-41 and 66-69.

Paul B. Stares, Command Performance: The Neglected Dimension of European Security, The Brookings Institution, Washington, D.C., 1991, pp. 111-125.

Alexander George et. al., Inadvertent War in Europe, Center for International Security and Arms Control, Stanford University, June 1985, Appendix B: Alert Levels, pp. 59-61.

Bruce G. Blair, The Logic of Accidental Nuclear War, The Brookings Institution, Washington, DC, 1993, pp. 336 - 337.

⁹⁰Dennis M. Gormley, "Power and Policy: Doctrine, the Alliance, and Arms Control", IISS Conference Paper, September 1985, pg. 10.

them to dangerously high levels of combat readiness. In such volatile circumstances, the likelihood of further misunderstandings, as well as accidents between two such heavily armed and well-primed adversaries, would be very high. Even more alarming is that preemption would likely become a more attractive option--certainly if war were considered inevitable to avoid falling victim to the first and potentially devastating blow at the outset. As will be discussed . . . the widespread vulnerabilities of NATO's command arrangements to attack did little to dissuade preemptive action and arguably represented yet another source of crisis instability.

"Something akin to this kind of crisis dynamic apparently took place during the 1983 NATO Able Archer command post exercise held to test new alliance nuclear release procedures. Warsaw Pact Intelligence officers reportedly mistook the exercise as a NATO deception plan to hide preparations for the real thing, causing them, to the horror of Western intelligence officers monitoring events, to sound the alarm in Moscow. Although it is unclear whether Moscow ordered any concrete measures in response, or even whether NATO hurriedly assured the Soviet Union that it was just an exercise, this incident nevertheless shows how actions can be dangerously misinterpreted in a certain climate of relations."⁹¹

It seems clear that had there ever again been a real prewar crisis in Europe, or perhaps one as serious as that involving Berlin in 1958 to 1961, the 1986 Stockholm CBM's would have had no bearing on the above kind of interactions. (Even on the conventional level, one can perhaps think of what might have transpired under the post-1986 CBM regime as an "August 1914 with notifications," if in fact anyone would have felt obliged to maintain the prohibitions under those circumstances)

Having first conceived of these notions of relative risk among the categories of US and Soviet operations involving nuclear weapons systems in peacetime for the Ministry of Foreign Affairs in Sweden in 1987, I was in no small measure surprised to read of a still-classified US Dept. of Defense study prepared in 1989 "on the lessons learned from US and Soviet military crises" that emphasized most particularly NATO-WTO nuclear weapons dispersion - war initiation and nuclear preemption interactions.

"A central theme of the studies is that US and Western leaders should carefully judge Soviet interests in any crisis and avoid taking action that Soviet leaders might interpret as an attempt to initiate an attack.

"The Politburo will make the final decision on the significance of any US military measures taken during a crisis,' one of the studies says, adding that 'Senior Soviet leaders receive large amounts of raw intelligence data; they tend to act as their own

⁹¹Paul Stares, op. cit., pg. 122. Stares accepts without question the rendition of this event by virtually its only public source, Oleg Gordievski, the Soviet defector to the UK. It appears in Gordon Brook-Shepherd's book, The Storm-Birds: Soviet Post-War Defectors, 1989. (David Binder, then of The New York Times, has also attested to a very similar sequence of events.) There are substantial reasons, however, to be sceptical about several major features of the story. Only one of these is the fact that John Walker had provided the USSR with the ability to read apparently all US codes and cables for 17 years, which makes at least a strong possibility that Soviet intelligence knew both that "the real thing" was not taking place, and what was taking place.

intelligence officers and tend not to be very good at it.'

'In a period of tension, the study said, Soviet leaders 'have a marked preference for hard data on changes in the . . . readiness of US and NATO forces as clear indications of western intentions.'

'For example,' it notes, 'the Soviets consider the activation of the NATO Alert System [used to mobilize forces and equipment throughout Western Europe] as one of the clearest indicators of NATO's short-term preparations to go to war.'

' . . . The classified study warns explicitly that "the Soviets consider the movement and readying of NATO combat forces so that they would be capable of striking the USSR with little warning as too threatening to treat as NATO efforts at deterrence."⁹²

Comment, Assessment, Analysis:

After the 1968-1975 period of change in Soviet policy on the form that a NATO/WTO war in Europe would take, it would seem that again, on balance, dangers were reduced as regards the issues dealt with in this section.

NATO's prevalent assumption was that if it did not disperse its TNWs in a crisis, it would be inviting preemption. But now that attack would be by Soviet conventional weapons, and therefore not, by itself, the initiation of nuclear war. Should dispersion not take place, the outcome for NATO would be the potential loss of a portion of its own nuclear assets, but not inducing the USSR to initiate nuclear war. NATO strike aircraft with conventional munitions would also be targeting Soviet TNW storage sites presumably even more so than previously, if that is possible, once NATO's "Deep Strike" plans were promulgated.

The Soviet military leadership - with its additional long knowledge of NATO's earlier transition from MC 14/2 to MC 14/3 long before it altered its own disposition on TNW use in Europe as well as its continuous intelligence penetration of NATO's Nuclear Planning Group throughout the 1970's and into the early 1980's - could easily follow a very similar line of reasoning, if they chose to do so. NATO TNW dispersion, they could then understand, did not mean imminent use, but protection and preservation of its nuclear assets. Why then should Soviet and WTO forces have exercised nuclear release and preemptive attacks, if they did not want to initiate TNW use and had actually purchased TNW systems superiority, at least numerically, so as not to have to, and to ensure that NATO didn't either? That is something that only former Soviet military officials can answer, or the 1989 disclosures

⁹²R. Jeffrey Smith and Patrick E. Tyler, "Soviets Girded for War in '68, Study Says: Nuclear Missiles Were Put on 10-Minute Alert During Czech Uprising", Washington Post, November 29, 1989.

Other sources with important discussions of crisis escalation risks in NATO-WTO interactions are:

- Douglas M. Hart, "Soviet Approaches to Crisis Management: The Military Dimension", Survival, 26:5 (September-October 1984), pp. 214-223.
- Dennis M. Gormley, and Douglas M. Hart, "Soviet Views on Escalation", Washington Quarterly, 7:4 (Fall 1984), pp. 71-84.
- Barry Posen, "Inadvertent Nuclear War? Escalation and NATO: Northern Flank", International Security, 7:2 (Fall 1982), pp. 28-54.

were operative [see below], but the overall circumstances that obtained in the mid to late 1970's and in the 1980's suggest that despite maneuvering, the USSR would not have initiated TNW preemption.

5. Nuclear Threats: Alerts and Crisis Deployments

This section deals only with general considerations; specific events are surveyed in Part C of the study, which follows.

Threats to use nuclear weapons can be grouped into four categories of "imminence":

(1) Routine deployments, though these may be of systems kept at very high levels of readiness. They would include the strategic systems of the five nuclear powers, as well as theater and tactical nuclear weapons that were positioned closer to the borders of an opposing nation or alliance.

(2) Verbal threats to use nuclear weapons (such as those by the U.S.S.R. to France and England at the time of the 1956 Suez crisis), either in public statements or in diplomatic messages delivered to a head of state.

(3) Specific deployments of nuclear weapons during a crisis, either aircraft, aircraft carriers, or submarines, which can take place without any change in alert status.

(4) Increased alert levels of part or all of a nation's nuclear weapon systems, either publicly announced, or carried out without public announcement.

This study is concerned only with the last three of the above categories of events.

The U.S. and U.S.S.R. showed notable differences in national styles regarding the utilization of nuclear weapons during crises. The U.S. carried out alerts, both public and secret, and crisis deployments, again both public and secret. Until quite recently - as recent as the major Cornell-AAAS study in 1987 - it had been stated that the U.S.S.R. had never initiated a strategic alert. That is now known to be incorrect. The U.S.S.R. did, however, make a much more frequent use of verbal threats, variously described as "bluster", "saber rattling", or "nuclear blackmail" by different interpreters, and presumed in many instances to have been made for propaganda effect or hoped-for political benefit unrelated to the immediate crisis, or in many cases, not even in the context of any particular crisis at all.

The United States (after 1959) maintained a system of five "Defense Readiness Conditions" or levels of readiness for its conventional and nuclear forces, shortened to the acronym DEFCON:

- DEFCON 5; normal peacetime condition
- DEFCON 4; increased alert
- DEFCON 3; advanced alert, war possible
- DEFCON 2; full alert, war imminent
- DEFCON 1; maximum alert, general war

NATO followed the same system. U.S. SAC forces were normally kept at level four; as were NATO nuclear forces. Each level denotes specific degrees of preparation or deployment, but these varied for different regional commands, in the US military system.

There were three occasions when U.S. global military forces were placed on DEFCON 3 or lower during a crisis with the U.S.S.R.: on May 16, 1960, prior to President Eisenhower's trip to the Paris Summit, from October 22 through November 20, 1962, during the Cuban missile crisis - the only occasion in which SAC went to DEFCON 2 - and on October 24, 1973, during the Arab-Israeli War. The last was described as "a mild form of 3", but the Sixth Fleet maintained higher alert levels for nearly six weeks. It seems that there were other occasions in which portions of U.S. nuclear forces

were placed on increased alert, and some of these occasions appear to be still classified.

If one is primarily concerned to identify to what degree and in which instances nuclear weapons have in any way been involved in post-World War II international political interactions, until the books by Betts, Bundy, and Newhouse were published in the mid-1980's, the very few existing comparative surveys of the use of military force after 1945 all contained major drawbacks. Many were prepared for the U.S. government and have seen only extremely limited circulation. In addition, these deal only with conventional warfare.⁹³ The major study by George and Smoke, published in 1974, with the explicit title Deterrence in American Foreign Policy: Theory and Practice, was very heavy on theory and extremely thin on the practice that would matter most to its title, a thorough examination of the instances of U.S. crisis deployments of nuclear weapons.⁹⁴ Howe's volume Multicrisis is excellent, but dealt with only two events, the Middle East war of 1967 and the Quemoy conflict of 1958.⁹⁵ The extensive Brookings study of the use of military force by the United States, The Use of the Armed Forces as a Political Instrument, did examine the use of nuclear weapons in crises, but its major focus was on the use of conventional forces.⁹⁶ The attention it gives to nuclear weapons is very circumscribed. The companion Brookings study on the U.S.S.R. is even less satisfactory, as it contains no systematic treatment of the nuclear weapons aspect at all.⁹⁷ In the Brookings study Blechman and Kaplan present a list of incidents in which U.S. strategic nuclear forces were involved. Nineteen incidents are listed (five of which involved Berlin). (See the tables, below.) In the chapter which follows I have particularly noted their use of criteria which circumscribed attention to attack carrier deployments since 1950, when nuclear weapons began to be deployed on board U.S. aircraft carriers. In some more recent cases of fleet interactions during crises, there were simultaneous deployments by the U.S. and the U.S.S.R. (See table by McConnell and Dismukes.) The number of events in this category increased as Soviet military capabilities expanded. In several other cases, the U.S. and U.S.S.R. exchanged notes involving nuclear threats during a particular crisis, with the U.S. usually simultaneously deploying its nuclear-weapons systems. Finally, we will survey what is known for both the U.S. and U.S.S.R. regarding instances in which the use of nuclear weapons was considered assessed, or proposed.

⁹³By way of example: United States Naval Operations in Low Level Warfare, Vols. I and II: Aerospace Systems Division, Bendix, Ann Arbor, Michigan, December 1968; and An Analysis of International Crises and Army Involvement: Historical Appraisal, 1945-1974, Final Report, Strategic Studies Institute, U.S. Army War College, October 1974.

⁹⁴A.L. George and R. Smoke, Deterrence in American Foreign Policy: Theory and Practice, New York: Columbia University Press, 1974.

⁹⁵J.T. Howe, Multicrisis: Sea Power and Global Politics in the Missile Age, Cambridge, Mass.: MIT Press, 1971.

⁹⁶B.M. Blechman and S.S. Kaplan, The Use of the Armed Forces as a Political Instrument, Washington, DC: The Brookings Institution, 1976, published as Force Without War: U.S. Armed Forces as a Political Instrument, Washington, DC: The Brookings Institution, 1978.

⁹⁷S.S. Kaplan, Mailed Fist, Velvet Glove: Soviet Armed Forces as a Political Instrument, Washington, DC: The Brookings Institution, September, 1979.

6. Deployment of US Nuclear-Capable Attack Carrier Strike Forces

Why should there be a separate consideration of nuclear weapons on board deployed aircraft carriers in relation to nuclear threats, crisis alerts etc.? For the simple reason that there has probably never been a proper examination of or appreciation for the nuclear strike capability of U.S. attack carriers, nor the degree to which they have been deployed in a wide range of circumstances which involved actual or imminent conflict. At least through the mid-1960's the nuclear strike mission of the aircraft carrier was substantial. In 1960 Chief of Naval Operations Arleigh Burke stated that "there were more nuclear bomb carrying planes aboard five Navy carriers in the Mediterranean and Far East than in Russia's entire heavy bombers fleet."⁹⁸ In the following year Secretary of Defense McNamara supplied further detail. "From the decks of a single carrier of the Forrestal class, fifty attack aircraft can be launched armed with megaton nuclear weapons. Six carriers of this class, as well as nine other attack carriers, are deployed throughout the world's oceans, and two other attack carriers are currently in maintenance."⁹⁹ The "nine other attack carriers" carried a slightly reduced nuclear complement. In 1964 when a Polaris submarine squadron was deployed to North Pacific waters, the third carrier of the Seventh Fleet, "was released from deterrent duty" in the area,¹⁰⁰ just as the very first Polaris submarines deployed in the North Atlantic had released US attack carriers from deployment off the Northern coast of Norway. The nuclear weapons capacity of U.S. aircraft carriers were at that time committed to the SIOP, or at least a major portion of them were, which in fact limited their ability to be deployed in a crisis, since it was necessary for them to remain "on station" within strike radius range of their assigned targets.¹⁰¹

Though there were subsequent statements of changes in the mission priorities of the attack carrier force, there was little public evidence of their reduced reliance on nuclear weapons, as was indicated by the events surrounding the Pueblo and EC-121 crises, both in the Sea of Japan in 1969. Certainly there were no public indications of actual reduction in nuclear weapons aboard these vessels, despite ostensible changes in mission, until the total removal of all US naval shipborne TNWs in 1992. In addition, since some of the deployments of carriers in crises became the occurrence of interactions and incidents with nuclear armed components of the Soviet fleets, they are important for that

⁹⁸"Burke Disputes Air Force," *Missiles & Rockets*, 6:11, (14 March 1960). Three years earlier, a brash naval commander had written "It was now possible, for example, for one small naval aircraft carrying one small bomb with the equivalent destructive power which would have occupied more than 20,000 TBM Avengers in World War II. In a single strike, naval aircraft might obliterate every major seaport of any specified maritime nation. In a single strike, naval aircraft could exceed, by several times, the weapon power delivered by more than 204,000 offensive naval air sorties during three years of the Korean War. Indeed, on a single modern carrier, in the space of a few steps, one could walk about and pat the lethal warheads of weapons whose destructive power exceed all the ordnance the U.S. Navy had exploded in its entire history." Cdr. Malcolm Cagle, "A Philosophy for Naval Atomic Warfare," *United States Naval Institute Proceedings*, 83:3, (March 1957) p. 251.

⁹⁹McNamara, R. S., Address in Atlanta, Georgia, 11 November 1961.

¹⁰⁰Hayes, J. D., Rear Adm. (USN), "Sea Power, July 1964-June 1965, A Commentary," *Naval Review*, 1966, p. 244.

¹⁰¹Admiral Williams; in *Strategic Force Modernization Programs*, Hearings, Committee on Armed Services, United States Senate, 97th Congress, First Session, October-November 1981, p. 192.

additional reason. Soviet naval fleets were also heavily armed with nuclear weapons of a variety of sorts, possibly to an even greater degree than were U.S. fleets.¹⁰²

As for the perceived utility to U.S. policymakers of deploying carriers in the various crises, the assessments were unanimous. In 1975 Secretary of Defense Schlesinger stated:

"In each case, in recent years in which the United States has attempted to employ power, or has established a presence in a threatened area of the world, the aircraft carrier, with its air wing, has been the indispensable ingredient in the exercise of American power in these potential brushfire situations."¹⁰³

Former Secretary of State Kissinger concurred, in a 1978 address at the Naval War College:

In the crises in which I was involved, the use of naval power - particularly of carrier power - turned out to be almost invariably the crucial element. . . "¹⁰⁴

and former Assistant Secretary of State Leslie Gelb also concurred, on two occasions:

"The use of the carrier in crisis diplomacy may be its most important mission. Carriers allow us to threaten to intervene in a crisis without committing ourselves to intervention. . . the carrier . . . in the risky, but necessary moves of crisis diplomacy, plays a key role."¹⁰⁵

"From a State Department point of view, there is no question that the aircraft carriers play a very important role in terms of how friends, neutrals, and potential adversaries see us. When they look at United States force posture, one of the first things they point to is a sign of United States interest, presence, and will. This turns out to be the aircraft carrier. That is just a fact."¹⁰⁶

In Soviet public statements, certainly, "the carrier force of the United States became the central element in Soviet analysis of American 'globalism', a view of an aggressive imperialist power ready to intervene politically around the world."¹⁰⁷

¹⁰²U.S. and Soviet fleets deployed a wide variety of tactical nuclear weapons (although the yield of U.S. carrier air dropped weapons were something less than "tactical") SAM's, torpedoes, depth charges, and airdropped munitions. The 1981 incident in which an aged Soviet Whiskey class submarine that stranded itself virtually on Sweden's coast - and was apparently armed with a nuclear torpedo --was a startling reminder of the prevalence of naval TNWs in Soviet fleets.

¹⁰³Quoted in Secretary of the Navy, Dept. of the Navy, 11 June 1975.

¹⁰⁴"Why Aircraft Carriers Can't Loose," *U.S. News and World Report*, 18 September 1978, p. 21.

¹⁰⁵Leslie H. Gelb, Hearings, *DOD Appropriations for FY 1972, Committee on Appropriations, U.S. Senate, 92nd Congress, 1st Session, May 1971, pp. 901-903.*

¹⁰⁶Leslie H. Gelb, *Arms Control Implications of Current National Defense Program*, Hearing, Committee on Foreign Relations, U.S. Senate, 96th Congress, 1st Session, 24 May 1979, p. 64.

¹⁰⁷Lawrence T. Caldwell, *Soviet-American Relations: One Half Decade of Problems and Issues*, The Atlantic Institute for International Affairs, Paris 1976, p. 45-46. There are dozens of examples of Soviet statements, complaining of and decrying US aircraft carrier deployment, routine, or during political events.

Aircraft carrier nuclear strike capability developed quite early. By the end of 1949, six AJ-1 Savage aircraft and 12 specially configured P2V-3C Neptune aircraft comprised "Composite Squadron Five, . . . on January 6, 1950, the squadron was declared ready to launch an atomic strike" from the three Midway-class aircraft carriers that had been fitted for storage and assembly of nuclear weapons.¹⁰⁸ At that time, and for some years to come, nuclear weapons were not stored at overseas land bases, even for use by SAC. By February 1950, "The Navy succeeded in getting atomic bombs allocated for its use with the Sixth Fleet in the Mediterranean." From 1950 on the nuclear strike capacity of the attack carriers grew as the size of the weapons became smaller, and as smaller Navy aircraft were specifically designed for nuclear weapon delivery and were deployed on board the entire attack carrier force. (These aircraft were the A3D-2, A4D-1, A3J-1, A-4E, A-4F, A-6A, a-7, RA-5C, etc.) Excellent summaries of these developments and deployments are available in the open literature.¹⁰⁹

Over the years, a series of lists have become available, primarily from U.S. naval sources, detailing the number and occasions of U.S. deployment of military and or naval forces during international political events of various kinds. These lists differ in their content: the numbers of events cited, the duration of years covered, and/or the nature of the events selected.¹¹⁰ A member of the staff of the US Navy Operational Archives made clear that the release of partial lists was not based on any common set of criteria for the inclusion of events, and that "every time they get one of these requests they put together another list. They have different criteria on what they will put in."¹¹¹

¹⁰⁸ -Norman Polmar, *Aircraft Carriers*, MacDonald; London, 1969, p. 500-508.

-Norman Polmar, *Strategic Weapons*, Crane, Russak, London, 1975, p. 19.

-Vincent Davis "The Politics of Innovation: Patterns in Navy Cases, Chapter II, Case No 1, The Development of A Capability to Deliver Nuclear Weapons by Carrier-Bound Aircraft"; Vol. 4, Monograph No. 3, 1966-67, Graduate School of International Studies, University of Denver.

¹⁰⁹Wilson, D.P. Jr., "Evolution of the Aircraft Carrier: A Case Study in Technology and Strategy," in *CVAN-70 Aircraft Carrier*, Joint Hearings, Senate and House Armed Services Committees, 91st Congress, 2nd Session, April 1970, p. 487-502.

Holmquist, C.O., Capt. (USN) "Developments and Problems in Carrier-Based Attack Aircraft," *Naval Review*, 1969, pp. 195-216.

Holmquist, C.O., Capt. (USN) "Naval Aviation Today," *Naval Review*, 1962-1963, pp. 220-230.

Amme, C.H. Jr., Capt. (USN) "Developments and Problems in Naval Weapons," *Naval Review*, 1962-1963, pp. 211-219.

Cagle, M.W., Comm. (USN), "A Philosophy for Naval Atomic Warfare," *U.S. Naval Institute Proceedings*, (83) 3, (March 1957), pp. 249-258.

¹¹⁰I have focussed attention here on lists based on released portions of classified data held by the Department of the Navy, and the Department of Defense. There are many other such lists including a series of reports prepared for ARPA in the U.S. Department of Defense, and I have catalogued these elsewhere; Milton Leitenberg, A Survey of Studies of Post WWII Wars, Conflicts, and Military Coups, September 1977.

¹¹¹Personal communication, U.S. Navy Operational Archives Branch, 26, April 1976.

Until the appearance of a synoptic report in 1991, the two most extensive and official lists indicating the number, time and place of U.S. attack carriers deployments in times of crisis became available in 1970. Admiral Thomas Moorer, then Chief of Naval Operations had presented a list of "Wars/Near Wars since 1946," in which the list represented "only major/minor conflicts or crises where U.S. Naval units were involved as prime factors, alerted, or redeployed." The list specifically identified those of the conflicts or crises "where an attack aircraft carrier force was either on-scene or alerted for the purpose of deploying to the general crisis area." There were 36 such carrier "deployments" in the list between 1950 (reckoning from the date of carrier nuclear capability), and April 1969. Moreover, of the total of 73 events listed, the date and location of 18 were deleted, although an indication that an entry was missing and, in some cases the dates for these, were indicated. It is reasonable to assume that some proportion of these 18 involved attack carrier deployments and would be added to the 36 identified ones, and this is in fact the case.¹¹²

Only several days before Admiral Moorer had sent his list to Senator Mondale, Secretary of the Navy Chaffee had sent Senator Case a "list of instances in which aircraft carriers were used in support of foreign policy since the Korean War." The list was divided into two portions, an unclassified section of 42 cases between the dates of July 1954 to July 1969, and 7 additional instances in the same period which had been classified, and were then declassified. This provided a total of 49 deployments.¹¹³ However, there were indications that this list too was not complete. There is a rather large gap in the entries, between April - May 1964 and June 1967, which seems quite inconsistent with the rate of the previous entries, and an authoritative U.S. Navy source offered the judgement that "It is probably not a complete list." The list also carried the footnote that it was "representative of attack carrier actions in support of U.S. foreign policy. It does not include similar actions performed by antisubmarine warfare aircraft carriers and amphibious assault (helicopter) carriers," and some of these may have been carrying nuclear weapons as well.

The earliest list of all, though much was circumscribed compared to the above two, was presented in 1964 by Admiral David L. McDonald and lists 15 "Crises Involving Carriers". However, two of the entries in this short list do not appear in either the Moorer or the Chaffee lists: "March - December 1951, Yugoslavia" and "September 1960 - Berlin."¹¹⁵ The attack carrier mission in the

¹¹²Adm. T. H. Moorer to Sen. W.F. Mondale, 6 September 1969, in *CVAN-70 Aircraft Carrier*, *ibid*, pp. 163-165. Sen. Mondale noted that from an operational standpoint, the carrier portion of the list was somewhat inflated, as in several instances the "alerted" carriers never left their berths in port.

¹¹³Letter of Secretary of the Navy John H. Chaffee to Senator Clifford P. Case, 5 September 1969. This list implies that about 12 of the 18 deleted entries in the Moorer list, two-thirds, involved attack carrier deployments. In addition the two lists do not overlap in other aspects.

¹¹⁴Personal communication, U.S. Navy Operational Archives Branch, 26, April 1976.

¹¹⁵ McDonald, D.L. Adm. (USN), "Carrier Employment Since 1960," *U.S. Naval Institute Proceedings*, 90:11 (November 1964), pp. 26-33. For reasons that are not clear other naval authors that subsequently use McDonald's

Berlin case is described as "Contributed to nuclear strategic deterrent." James Cable, in *Gunboat Diplomacy*, (1971) also published a list which contained descriptions of 17 U.S. attack carrier deployments between 1950 and 1969,¹¹⁶ and Howard Eldredge, a member of the staff of the U.S. Joint Chiefs of Staff, published a list of "U.S. Navy Response to Crisis, 1960-1976", which included 31 carrier deployments.¹¹⁷ And of course, during the U.S. war in Southeast Asia, strike carriers were not only present but in combat operation in the South China Sea continuously between May 1964 and May 1975, at times as many as four or five were on location at a time.¹¹⁸

It might also be useful to indicate the variability in lists of conflicts or U.S. actions in them derived from U.S. Department of Defense sources: Secretary of Defense McNamara stated that in the eight years between 1958 and 1966 there had been 164 "significant outbreaks of violence," each representing a "threat to an established government."¹¹⁹ In their major study, *Force Without War, U.S. Armed Forces As a Political Instrument*, Blechman and Kaplan catalogued 215 incidents in which the United States employed its armed forces for political purpose between 1946 and 1975, excluding the two major active wars in which the U.S. was engaged in Korea and in Vietnam.¹²⁰ Writing in 1968, Hughes wrote that "The United States has taken action in 54 conflicts which involved force and violence within nations or between nations. The United States took some form of combatant action in only 14 cases, yet it committed some form of its military resources to 39 of the 54 conflicts."¹²¹ In 1973 Emerson presented a list of "U.S. Military Hostilities Abroad . . ." which included 27 U.S. military engagements between 1946 and 1970.¹²²

list selected out only twelve of the fifteen cases to refer to.

¹¹⁶Appendix, "Fifty Years of Gunboat Diplomacy" in James Cable's *Gunboat Diplomacy*, (International Institute of Strategic Studies) 1971.

¹¹⁷ Howard S. Eldredge, "Nonsuperpower Sea Denial Capability: The Implications for Superpower Navies Engaged in Defense Operations" in Uri Ra'anani et.al., *Arms Transfers to the Third World: The Military Buildup in Less Industrialized Countries*, Westview Press, Boulder, CO. 1978, pp. 22-24.

¹¹⁸"Carrier Deployments to Southeast Asia: 1964 May- 1965 May," Appendix 2, *A Short History of the United States Navy and the Southeast Asian Conflict, 1950-1975*, Edward Marolda & A. W. Price, Naval Historical Center, Dept. of the Navy, Washington D.C. 1984, pp. 107-109.

¹¹⁹ E. Weintal and C. Bartlett *Facing the Brink: An Intimate Study of Crisis Diplomacy*. Scribners, New York City, 1967, p. 10.

¹²⁰ Blechman, B.M., Kaplan S.S., *Force Without War; U.S. Armed Forces As a Political Instrument*. The Brookings Institution, Washington D.C., 1978.

¹²¹ Lt. Col. D. R. Hughes, "Contingency Planning: A New Perspective." *U.S. Naval Institute Proceedings*, 94:11 (November 1968), pp. 27-37.

¹²²Terry Emerson, "Chronological List of 199 U.S. Military Hostilities Abroad Without A Declaration of War, 1798 to 1972." in *War Powers Legislation, 1973*, Hearings, Committee on Foreign Relations, U.S. Senate, 93rd Congress. 1st Session, April 1973, pp. 143-148.

The 1970 Sec. of Navy Chaffee list, referred to above, was the basis for the nuclear weapons-crisis involvements that were studied in The Blechman and Kaplan survey. They record "47 incidents in which two or more U.S. Aircraft Carriers were used."¹²³ There are three important points to note, aside from the date for which their data ends:

- First, as indicated, the Chaffee list was incomplete,
- Second, it was additionally incomplete in omitting several alerts that were classified at the time, (and some of which may still be)
- but most importantly was the decision by the researchers to use the criterion of two (or more) deployed aircraft carriers before counting the event. Given the quotations from Admiral Moorer and Secretary of Defense McNamara that this section began with, it is altogether puzzling why the carrier deployment of a single aircraft carrier should not have been deemed sufficient to count as an event. If that had been done the number of events would presumably have been much higher, perhaps more than twice as high, as is indicated below. Their accounting is therefore misleading.

In 1984 Zelikow updated the Blechman and Kaplan study, using their original accounting criteria and methodology to cover the years 1975 to 1982.¹²⁴ Forty four additional events were listed, (making a total of 259 events between 1946 and 1982) of which five involved two or more attack carriers, and an additional eleven involved only one aircraft carrier. Yet here too omissions can be noted immediately, for example the task force that included the carrier Enterprise to Africa in 1975, the very first year of the supplement, is not in the list.¹²⁵ As early as 1977, even before the Blechman and Kaplan study was published but while draft copies were in circulation, a researcher at the Center for Naval Analysis with access all the sources in the U.S. Navy's Operational Archives Branch (which he listed, and which make up a remarkably large group of internal historical compilations), pointed out the discrepancies between the number of carrier deployments available in that record and those in the Blechman and Kaplan study. He showed that between 1955 and 1975, aircraft carriers "had participated in 59 of 99 Navy responses to international incidents and crises."¹²⁶ Further, these 59 carriers responses excluded five categories of naval deployments, including "Humanitarian operations") and "operations that are routinely undertaken to support U.S. diplomacy", as well as applying more restrictive assumptions for the selection of carrier "participation": "only units within the crisis theater which played an active role in the response are included in the calculation." (This

¹²³ Blechman and Kaplan, op. cit.

¹²⁴ Philip D. Zelikow, "Force Without War, 1975-1982," *Journal of Strategic Studies*, 7:1, (March 1984), pp. 29-54.

"Enterprise Task Force Threat to Arabs, USSR says," *Defense Space Bureau Daily*, 17 January 1975. Finney, J.W., "Kissinger Said to Regret Fleet Bypassed Vietnam," *N.Y. Times*, 12 January 1975. Finney, F.W., "Kissinger Denies Expressing Regret Over Fleets Route," *N.Y. Times*, 12 January 1975. Tergerson, D., "U.S. Nuclear Carrier Enterprise on Way to Kenya Port," *Los Angeles Times*, 2 February 1975.

¹²⁶ Robert B. Mahoney, *U.S. Navy Responses to International Accidents and Crisis, 1955-1975; Survey of Navy Crisis Operations*, Center for Naval Analysis, CRC 322; Volume I, July 1977.

removed Senator Mondale's objection to some of the entries in Admiral Moorer's 1970 list).

Finally, in 1991, a researcher at the Center for Naval Analysis produced an unclassified study which provided details of "... 207 U.S. responses to international incidents and crises, exclusive of the Korean and Vietnam wars. . . (in which) U.S. naval forces have played a major role. ... since the end of World War II."¹²⁷ This list followed the same exclusionary guidelines as did the 1977 Center for Naval Analysis study. Putting various of the numbers together, it becomes clear that in the forty years that U.S. attack carriers were deployed with nuclear weapons --1950-51 to 1992, and excluding deployments involved in the wars in Korea and Vietnam/Southeast Asia, which would boost the numbers greatly- they were deployed in crises and conflicts about 100 times.

Attack carrier deployments during political and international crises have often been spoken of in a rather benign way, giving them a key role in "crisis diplomacy." As already noted, in a presentation which examined "the range of contingencies in which carriers can and should be employed", Gelb included "crisis diplomacy" as one of three such contingencies.

"The use of the carrier in crisis diplomacy may be its most important mission. While gunboat diplomacy and showing the flag no longer carry the full meaning of the Kaiser sending a gunboat to Agadir or Teddy Roosevelt sending the Great White Fleet around the world, the essential role is still there. Carriers allow us to threaten to intervene in a crisis without committing ourselves to intervention."¹²⁸

By contrast, the relatively extended narrative that follows demonstrates strikingly that the reality and provocation of attack carrier deployment in a crisis is quite different from what one is led to believe by the use of the innocuous and misleading phrase, "showing the flag". Evidence of the difference between hard operational reality and euphemistic academic and public phrasing is presented in an oral history recorded by Admiral Arleigh Burke, concerning events during the Eisenhower administration:

". . . the first incident that I really had much to do with him (Secretary Dulles) on was when the Chinese shot down a patrol plane of ours in the China Sea.* In those days the CNO had authority to move fleets. I was in command of the fleets. And so I moved the Seventh Fleet right up to their doorstep. I gave the orders, and then I went over to see Mr. Dulles to tell him what I had done, because the orders could be cancelled. It takes a little while to carry them out, but one of the great troubles in this government is the length of time it takes to make a decision. I would make a decision and would go over and check it and see whether they disagreed with it. Dulles didn't disagree, although he probably didn't think it was the finest thing to do. And then I went to the President. And the President was irate

¹²⁷ Adam B. Siegel, *The Use of Naval Force in the Post-War Era: U.S. Navy and U.S. Marine Corps Crisis Response Activity, 1946-1990*, Center for Naval Analysis, CRM 90-246, February 1991.

¹²⁸ Leslie Gelb, op. cit.

*This would appear to be entry No. 5, August 23, 1956 in Secretary Navy Chaffee's list of 1970.

that the Chinese should deliberately shoot down our plane. Then came discussions.

"As you know, the Chinese Communists and all Communist countries have a statement that their territorial waters run out to twelve miles. Ours is three miles. I put the fleet on the three-mile line - just as close to it as we could get it. And I flew airplanes above the three-mile line with the idea that we weren't going to get pushed around. We were going to go in and try to pick up any survivors of that plane. The chances of there being any survivors from that aircraft were very slight indeed. The plane came down just about on the three-mile limit - I don't know where it actually came down, now - but I didn't want to be pushed around. I wanted to make it very evident to the Chinese that they could not shoot down our people without danger to themselves. And I wanted this to be clear. I wanted to indicate to them that if they wanted to fight, "Come on, let's fight," and if they didn't want to fight, "Stay out and don't play with our airplanes."

"And so I put the fleet there, and we stayed there two or three days and, of course, by that time obviously, the people were either dead or they were captured - you can't do much. Mr. Dulles asked me when I was going to move the fleet, and I said, "I'm not going to - for a while."

"And he said, Well, I don't think you're doing any good."

"I said, "Maybe not, but they aren't doing any harm either. And I think they're doing good, because I want to keep that fleet there to give the Chinese plenty of opportunity and indicate to them that if they want to come out, now is the time, and indicate that we're angry, that we don't like it."

"And so, he said, "Well, you might have an incident."

"I said, "That's right. That's exactly right. We might have an incident. But if there is an incident, it will be because the Chinese cause it. We aren't going to cause an incident. We're going to be right on the three-mile limit."

"He said, "Well, some of your people might make a mistake."

"I said, "That's right, they might. But they probably won't, because they realize the seriousness of it. They're grown men. They feel a great responsibility on their own shoulders. They know what's going to happen - what might happen - and they probably won't."

"He said, "I would advise withdrawal."

"Then the Secretary and I went to the President about it, just to make sure that everybody understood. And the President let me keep the fleet there."

"Questioner: Now, did they test that three-twelve-mile limit themselves?"

"No. They stayed away.

"And then I got a little closer to Mr. Dulles. He could see what I was driving at. . . I also would inform him of what I proposed to do with the Fleet, when I thought it might possibly have any effect upon international relations, so that he would know and it wouldn't catch him by surprise. Mostly, they didn't have any effect, and wouldn't have had any effect, but it was a good thing for him to know where the ships were."¹²⁹

In a second rendition, Admiral Burke describes his reaction to the Quemoy-Matsu events two years later in 1958. He moved the Seventh Fleet "in", again on his own jurisdiction, and in this case against the initial opposition of both Secretary of State Dulles and President Eisenhower. He convinced them, successively, of the necessity of putting US naval logistics advisors on the islands and vessels of the Nationalist Chinese Navy, of flying air cover for the Chinese Nationalist Navy, of supplying them with extra LSTs, and at each step against their initial opposition. Finally,

"Well, eventually, he was persuaded. The President was a little reluctant, too. He wasn't so eager to do this. But Mr. Dulles went over to my side on this things, and he supported me to the President, and then we got permission to escort these LSTs with our ships within three miles of Quemoy and Matsu. We did a lot of things staying outside the three-mile limit. *Actually, we did a lot of things within the three-mile limit, too, without authority.* And it worked all right. It worked just exactly the way we predicted it would, if we make it evident - quite evident - not by saying anything, not by putting out any proclamation - but that we were in there, and if they intended to get Quemoy and Matsu, they were going to have to fight the Seventh Fleet and the whole United States. And we were not going to tell them - not say a damn word - just do those things which would make it clear to them. And this worked."¹³⁰

Before going on to simply note a few of the occasions that produced interaction of U.S. and Soviet nuclear armed naval elements, it is important to point out that beginning in the 1960's the USSR also used its naval fleets for deployment in "crisis diplomacy" events, and that use became progressively more elaborate and more interactive with U.S. fleets.¹³¹ (Some of those particularly

¹²⁹ Transcript of a Recorded Interview, Adm. Arleigh A. Burke, Washington, D.C., 11 January 1966, J.F. Dulles Oral History Project, Princeton University Library.

¹³⁰ *ibid*

¹³¹ Bradford Dismukes and James M. McConnell, edited, *Soviet Naval Diplomacy*, Pergamon Press, New York, 1979.

Michael McGuire and John McDonnell, *Soviet Naval Influence: Domestic and Foreign Dimensions*, Praeger, New York, 1977.

Kenneth G. Weiss, *Power Grows Out of the Barrel of a Gunboat: The U.S. in Sino-Soviet Crises*, Center for Naval Analysis, PP 376, December 1982.

Anthony R. Wells, *The June 1967 War: Soviet Naval Diplomacy and The Sixth Fleet: A Reappraisal*, Center for

provocative "interactions" in fact, led to the 1972 U.S.-U.S.S.R. incidents at sea agreement, which did not however end the "incidents".) Some examples of situations in which fleets of one or both nations were deployed in crises are indicated below:¹³²

- early in 1961, and again in May 1962; crises in Laos, U.S. Seventh Fleet concentrations in South China Sea
- 1965; April, 2 carriers accompany the US invasion force that occupies the Dominican Republic
- 1967; Mideast War, U.S. and Soviet fleets in the eastern Mediterranean
- 1968; Following North Korea's capture of the USS Pueblo, the US assembled an extremely large task force in the Sea of Japan, including three attack carriers. The USSR placed a smaller contingent of ships from its Pacific Fleet between the US ships and the North Korean coast. The US also initiated other events involving US nuclear forces.
- 1970; Syria-Jordan crisis, U.S. and Soviet fleets in Eastern Mediterranean; very interactive. The USSR had no less than 52 ships in the area by September-October 1970, and the number rose to 72; plus US nuclear alert.
- 1971; India-Pakistan War, U.S. carrier task force to the Indian Ocean and Bay of Bengal. 15 Soviet ships were in the same area
- 1973; Mideast war, nuclear alert, plus Soviet and U.S. fleets "interdigitated" in the Eastern Mediterranean; highly interactive, at close quarters, for several weeks.
- 1976: Morocco, U.S. Sixth Fleet goes to the aid of King Hassan
- 1976: August, during the Korean demilitarized zone tree-chopping incident between the U.S. and North Korea; aircraft carriers (and several B-52 bombers) deployed.
- 1976; off the Lebanon coast, U.S. and Soviet fleets; interactive
- 1977; Soviet fleet, including aircraft carriers, in the Caribbean
- (1978; President's National Security Advisor, Brezezinski, pressed to send a carrier task force to the Red Sea when Soviet and Cuban troops came to Ethiopia's aid following the Somali invasion of Ethiopia. However, no U.S. deployment was agreed to).
- 1979; February, as China massed troops on the Vietnamese border, and Soviet troops, tanks and aircraft maneuvered constantly on the Soviet-Chinese borders, U.S. and Soviet naval fleets both gathered in the South China Sea. The USSR and Vietnam had signed a defense support pact just prior to the Chinese invasion, and Deng Xiaoping had visited Washington for consultation in January-February 1979.

Naval Analysis, PP 204, October 1977.

Stephen S. Roberts, *Superpower Naval Crisis Management in the Mediterean*, Center for Naval Analysis, PP 317, August 1981.

Robert A. Weinland, *Superpower Naval Diplomacy in the October 1973 Arab-Israeli War*, Center for Naval Analysis, PP 221, June 1978.

Ann M. Kelly, "The Soviet Naval Presence Survey The Iraq-Kuwati Border Dispute: March-april 1973", Center for Naval Analysis, PP 122, June 1974.

Robert J. Ciarrochi, "U.S. Soviet and Western European Naval Forces in the Persian Gulf Region, Congressional Research Service, Foreign Affairs and National Defence, 87-956F, December 8, 1987.

¹³² Sources, not indicated here, are in M. Leitenberg's research files.

- 1979; April, Soviet naval fleet, including an aircraft carrier, was in the South Atlantic, off the coast of Angola.
- 1979; April, U.S. places a carrier strike force off the coast of Yemen following the invasion from South Yemen, and "... senior administration planners contemplated using the (aircraft carrier) Constellation and its planes to halt the flow of Soviet arms to southern Yemeni forces if that had been necessary to contain the invasion . . . "
- 1979; December, 2 carrier strike forces placed in the Arabian Sea as the U.S. Iranian (hostage) crisis mounted. Aircraft carrier returned from the same area in October.
- 1980; January, U.S. carrier strike force off South Africa.
- 1980; August, Soviet forces built up and maneuvered on the USSR- Iranian border in presumed anticipation of U.S. military action inside Iran. U.S. carrier remained in the Arabian Sea.
- 1981; May, Soviet fleet and aircraft carrier off Lebanese coast, continuing Israel-Syria crises over Lebanon.
- 1983; February, U.S. carrier placed off the coast of Libya during Egyptian and Sudanese belief that Libya's Quaddafi planned a military invasion of Sudan.
- 1983: September-October, U.S. fleet off the Lebanese coast, (and remain until withdrawn in April 1984). (Eric Rouleau's Le Monde report that 8-10,000 Soviet troops were in Syria at the time and 1,000 inside Lebanon has never been confirmed)
- 1983; October, carriers involved in the U.S. invasion of Grenada
- 1984; April, for the first time, a Soviet helicopter carrier (the Leningrad) accompanied by a cruiser, took part in maneuvers in the Gulf of Mexico together with Cuban naval vessels. This happened to follow the mining of Nicaraguan harbors by the US CIA.
- 1984; November, a US carrier sent toward Cuba as a U.S. oceanographic vessel drifted toward Cuban waters.
- 1984; 2 U.S. carrier strike groups in the Persian Gulf, during the Iran-Iraq war.
- 1987; two carriers placed off the Lebanese coast following the taking of U.S. hostages; "... carriers. ... contain [a] folder in locked files detailing how to bomb dozens of targets in Lebanon in case Reagan should decide on military action..."
- 1989; November, during a coup attempt against the Philippine government of Corazon Aquino, two US aircraft carriers were in the area to support the Government.
- 1990-91: extensive US aircraft carrier operations in the Gulf War following Iraq's invasion of Kuwait
- 1994&1995; US sends carriers to the Gulf on Iraqi troop mobilization on the Kuwaiti (1994) and Jordanian (1995) borders, although at this time all nuclear weapons would have been removed from US aircraft carriers for several years.

The basic question of what the standing orders may have been at any time between 1950 and 1992 regarding the U.S. aircraft carrier's nuclear weapons complement under any circumstances, even including combat with Soviet fleet elements in any of their engagements, is not resolvable from the unclassified literature.

7. Alerts of the U.S. Strategic Air Command (SAC)

Having reviewed deployments of U.S. nuclear armed aircraft carriers, it would be useful to include a brief discussion of analogous uses of the U.S. Strategic Air Command (SAC). SAC combines the ICBM missiles of the United States and its long range bomber force, (successively B-29s, B-36s, B-47s, B-58s, FB-111s, and B-52s), the aerial refueling tankers for the bombers, and the ground-based and airborne command and control facilities for the entire force. SAC has participated in both the general worldwide alerts of all U.S. forces and in some "selective alerts" of specific segments of U.S. forces. Selective alerts have been described as "fairly common occurrences", but no definitive listing is available of them, nor of those in which SAC bomber or missile forces participated. Presumably, if it were available, a list of SAC alerts would not be coextensive with the list of attack carrier deployments, but if it would be larger or smaller is not known. The indications from the information provided here is that it would be a good bit shorter. A list extracted from an official SAC history published in 1974 follows, which contains information on airborne alert rates and related information as well.

SAC Alerts; and related events¹³³

	<u>Date</u>	<u>Incident or Operation</u>	<u>Descriptive Comments</u>
1)	1946	"...a tour..."; on the occasion of the shooting down of Yugoslavian aircraft by US aircraft	"... first instance in which SAC bombers were used as an instrument of international diplomacy"
2)	1948	Berlin Blockade	true alert
3)	1953	Operation Big Stick	30 day exercise
4)	1956	The Suez Crisis	"to demonstrate... readiness" (vs. 1957 Murphy article; full alert)
5)	1956	Power House & Road Block	two week exercise
6)	1957	1/3 ground alert &	one-third of force on 15 minute ground alert "Reflex Action" initiated
7)	1958	Lebanon (July-Aug.)	true alert
8)	1958	Quemoy (Aug.-Sept.)	partial alert
9)	1958	Headstart I	alert test
10)	1959	Airborne Alert	initiation of constant fraction on airborne alert
11)	1960	Short Order	initiation of "Positive Control" flight procedures
12)	1961	50% ground alert	one-half of forces on 15 minute ground alert

¹³³Strategic Air Command; The Development of Strategic Air Command, 1946-1973, Headquarters, Strategic Air Command, September 19, 1973.

13)	1961	Berlin crisis	delayed phase-out of B-47
14)	1961	"Looking Glass", Airborne Command Post	constantly airborne SAC command
15)	1961	Airborne Alert	airborne alert training (fraction <u>on</u> airborne alert not indicated; exists in McNamara posture statements)
16)	1962	Cuban Missile Crisis	true alert; full aircraft and missile alert
17)	1967	general alert level	"40% of bomber force and nearly 100% of ICBM force on alert" continued
18)	1968	Dispersal Program	additional bases to which planes could be dispersed
19)	1969	Satellite Basing	(same as #18 above)

It is noticeable that the list does not include known SAC alerts during the 1956 Suez, 1970 Jordan-Syrian, or October 1973-Mideast events. Though information in some of these cases may still be considered classified, there seemed to be a general interest in presenting "a low profile" when it came to actual alerts, although language in most parts of the history was reasonably "tough", and bravura. Despite that, what the list demonstrates most clearly is that this official history can hardly be considered complete. For example, it was reported in 1958 that

"... SAC consistently scrambles on real and test alerts; so realistic are SAC scrambles that SAC crews always head out toward Fail Safe point not knowing whether their mission is for test or the real thing. And the U.S. has even put SAC alert crews into the air deliberately to reinforce U.S. diplomacy at precise pressure points, e.g., during Russia's threats of intervention in the 1956 Suez crisis, to show on Communist long-range radarscopes that the U.S. carries a thermonuclear stick big enough to last at least until the U.S.'s own big ballistic missiles are operational. It would be a major propaganda victory indeed if Khrushchev could bamboozle the West into keeping SAC's bombers on the ground. For then Khrushchev could rattle his rockets without fear of successful contradiction."¹³⁴

The rate of such test alerts is not known, whether they ever occur in crisis periods or not, and whether the Soviets routinely - or in the exceptional case - perceive them, and if so what their assessment of or reaction to them may be.

In addition, in 1973 press reports stated that

"U.S. officials... also disclosed that President Nixon had put the nuclear armed Strategic Air Command on alert on one undisclosed occasion during his first term and during the Jordan Crisis in 1970 had ordered a more extensive alert of U.S. forces than publicly known at the time.

"Because both of these alerts had gone largely unnoticed, the officials said, they were taken aback by the swift publicity given to last month's (October 1973). They had intended

¹³⁴"Fail Safe; The Safety Catch on the Deterrent", *Time*, April 28, 1958. (At least some of the alerts were known by the code name of "Chrome Dome".)

that only the Soviet Union receive the full brunt of the warning.

"The officials did not disclose the date or reason for the previously unknown alert involving the Strategic Air Command, which includes both B-52 bombers and intercontinental missiles."¹³⁵

Some of the descriptive phraseology in the SAC history alongside specific entries clearly demonstrates the "uses to reinforce U.S. diplomacy", the interest in sending an implicit - if not explicit - threat or warning, and to display "a thermonuclear big stick".

"1946; SAC Bombers First Used as Instrument of International Diplomacy: ... in mid-November... a flight of six B-29s. The Superfortresses flew along the border of Soviet-occupied territory, visited capitals of several free-European countries, and surveyed numerous airdromes for possible use by B-29s. This flight, planned and executed after two U.S. Army C-47s were shot down over Yugoslavia, is regarded as the first instrument of international diplomacy. While the flight could not be regarded as a direct threat to Russia, the presence of B-29s and their reputation as carriers of the A-bomb served notice that the United States was not abandoning Western Europe to the Communists."

"1953; Operation Big Stick: In August and September, the 92nd Bomb Wing made the first mass B-36 flight to the Far East, visiting bases in Japan, Okinawa, and Guam. Nicknamed Operation Big Stick, this 30-day exercise came shortly after the termination of hostilities in Korea and demonstrated U.S. determination to use every means possible to maintain peace in the Far East."

"1956; Power House and Road Block, 1,000 Aircraft Exercise: Within a two week period ending on 11 December (that is, following the Suez Crisis, and Soviet missile threats), SAC executed the largest and most complex B-47 and KC-97 exercise to date. In two closely related exercises, called Power House and Road Block, more than 1,000 B-47s and KC-97s flew gigantic simulated combat missions over North America and the Arctic."

"1958; The Lebanon Crisis, July and August: In the middle of July, the President of Lebanon, fearful that a Russian invasion [sic] was imminent, asked the United States for help. President Eisenhower took action by sending ground, naval, and air forces to the area. He also ordered SAC to place its bomber forces on alert. Generation of additional ground alert forces (SAC was already in the process of building up its ground alert forces to the one-third level) began immediately. Within a few hours, over 1,000 aircraft were poised and ready for takeoff. A full show-of-force was maintained for several days. When it became clear that the Russians did not intend to invade Lebanon, the alert forces were gradually phased down."¹³⁶

¹³⁵Keat, J.S., "Red Multiwarhead Snags Arms Talks", Baltimore Sun, November 18, 1973.

¹³⁶Strategic Air Command..., op. cit., 1974. It is assumed that the reference to a presumptive "Russian invasion" is

"1959; Airborne Alert: Based upon satisfactory results in 1958, SAC continued to test airborne alert in 1959. As General Power testified before Congress in February; "We in the Strategic Air Command have developed a system known as airborne alert where we maintain airplanes in the air 24 hours a day, loaded with bombs, on station, ready to go to the target... I feel strongly that we must get on with this airborne alert... We must impress Mr. Khrushchev that we have it, and that he cannot strike this country with impunity."

"1962; Cuban Missile Crisis: All bombers and missiles were armed with nuclear weapons. SAC was ready."

In 1947 and 1954 SAC bombers were used in overtly political gestures: in 1947 flown to Uruguay for the inauguration of the Uruguayan President, and in 1954, flown to Nicaragua "in connection with maneuvers to overthrow the . . . Arbenz government in Guatemala" following its acceptance of Soviet bloc support.¹³⁷ In later years they were also used in other efforts to reinforce messages of US military capability:

- In 1976 following the North Korean tree-chopping incident at Panmunjom the US flew in TNW-capable F-111 and F-4 aircraft and placed US forces in Korea on DEFCON 3. In addition 3 B-52's were flown from Guam and practiced bombing runs on the southern side of the Demilitarized Zone.¹³⁸
- Between January and June 1980 the United States flew 12 flights of B-52 bombers on reconnaissance missions over the Arabian sea ". . . exhibiting their ability to find and attack Soviet ships in the area". This followed the January 1980 promulgation of what was referred to as "the Carter Doctrine" in relation to the Persian Gulf region, and Blechman and Hart commented that "The implications of these missions were not lost on the Russians."¹³⁹

A list of non-exercise SAC alerts related to political crises, from available information but likely to be quite incomplete, would include the following events.

- 1) 1948 - Berlin Blockade
- 2) 1956 - Suez Crisis
- 3) 1958 - Lebanon

pure error despite this volume being an official command history. The Lebanon incident followed the 1958 coup in Iraq, and the leaders of Lebanon and Jordan feared a similar possibility in their countries, and not a Russian invasion.

¹³⁷Greg Herken, Dropshot. . ., op. cit., 1978, pp. 15-16.

¹³⁸"The War of the Poplar Tree", Newsweek, August 30, 1976, pp. 10-13.

¹³⁹Barry Blechman and Douglas Hart, "Dangerous Shortcut: Nuclear Threats Are No Substitute for Conventional Military Strength", The New Republic, July 26, 1980, pp. 13-15.

- 4) 1958 - Quemoy
- 5) 1960 - Sec. Def. Gates; post U-2 Eisenhower-Paris alert
- 6) 1961 - Berlin
- 7) 1962 - Cuban Missile Crisis
- 8) 1968-1972 - "Nixon first term"
- 9) 1970 - (Jordan-Syria; or other?)
- 10) October 1973 - Mideast

THE UNITED STATES

[Events that must be synopsized; the first two to exclude them from the others:]

1. Iran, 1946 (Truman did not deliver any threat)
2. Berlin, 1948-49 (B-29's to the UK; but they were not equipped to deliver nuclear weapons, and none were moved to the UK)
3. Korean War, 1950 to 1954
4. Vietnam, Dien-Bien-Phu; Project Vulture 1954; US version, and French version
5. Taiwan Straits crisis (I), 1955
6. Taiwan Straits crisis (II), 1957-58
7. Lebanon, 1958
8. Berlin, 1958-61
9. Secretary of Defense Gates/post U-2, 1960
10. Laos, 1961
11. Secretary of Defense McNamara analogue of 1960; JFK trip to Berlin, 1961 or 1962
12. Cuban missile crisis, 1962
13. Chinese missile sites, 1963
14. Vietnam, 1968
15. North Korea (Pueblo capture), 1968
16. China-Soviet border clash, 1979
17. Vietnam, 1970
18. Classified, 1970 (probabilities are Syria-Jordan, Cienfuegos, or Vietnam).
19. India-Pakistan war, 1971
20. North Korea (EC-121 shot down)
21. Mideast War, 1973
22. Mayaguez Crisis, 1975
23. North Korea (Panmunjom tree incident), 1976

Brief note also of the more generic statements, aside from NSC 162/2 (10/30/1954), and US policy for the defense of NATO.

- (a) "The Eisenhower Doctrine" (Lebanon, 1957)
- (b) to North Korea: Sec. Def. Schlesinger, June 20, 1975
 President Ford, June 26, 1975
 President Carter, May 30, 1977
 President Clinton, July 13, 1993
- (c) "The Carter Doctrine" (and Sec. Def. Harold Brown) - the Gulf region, 1980
- (d) Sec. Def. Weinberger ("broader use"), Jan. 12, 1981.
- (e) USSR/Caribbean (warning of another Caribbean missile crisis if. . .), April 19, 1983.

THE USSR

Note was made earlier of one quotation from Crisis Stability and Nuclear War (1987) to indicate the prevalence of the assumption that the USSR had avoided placing its nuclear forces on alert in the entire post-war period. It would be useful to include several additional examples to show how uniform this understanding was, in the very best of available sources:

Johan Holst:

"The absence of relevant technology may explain, for example, the fact that Soviet strategic forces never went on alert, even during the Cuban missile crisis, until the mid-to-late sixties."¹⁴⁰

Even as meticulous an observer as Richard Betts, writing in 1987 and relying on US intelligence sources, pronounced that the USSR had not placed any of its strategic nuclear forces on alert at the time of the Cuban missile crisis. Khrushchev's official pronouncement to the contrary in December 1962 was considered to be self-serving propaganda (see below).

And in regard to the Soviet invasion of Czechoslovakia in 1968, Benjamin Welles:

"At no time, however, did either the Soviet Union and its Warsaw Pact allies or the United States and its NATO allies move toward their nuclear triggers - the true touchstone of world crisis."¹⁴¹

Arkady Shevchenko (upon being asked ". . . has the Soviet Union ever gone on nuclear alert"):

"I don't think that the Soviet Union in my time ever went on the real nuclear alert. There was no situation when they really needed to do that, in the '70's or even early '80's."¹⁴²

And the incomprehensibly fatuous and implausible remark by George Kennan, given even the historical record that was available at the time of Soviet nuclear threats:

"The Russians, ... for all their sins, and I don't think anyone knows them better than I do, have not threatened people with nuclear weapons. ... I don't detect any real intention on their part of using these weapons."¹⁴³

All of these were wrong.

Two other extremely important points should also be noted by way of introduction. First, whatever it may do to (or for) US academic strategic analysts and their theories of strategic deterrence, on no occasion, ever, did Soviet political or military authorities announce an alert, an increased level of readiness, or a deployment of particular elements of their strategic forces. Not even the exercises of those that were routine or those that were highly unusual. Obviously, some might interpret this as a rather significant indication of Soviet attitudes to war fighting. And secondly, in no case were the

¹⁴⁰Johan Jorgen Holst, "Comparative US and Soviet . . .", NUPI?

¹⁴¹Benjamin Welles, "A Bit of High Noon on the Diplomatic Front", New York Time, December 8, 1968.

¹⁴²Arkady Shevchenko, Transcript of interview tapes, CBS-TV, Walter Cronkite, "Hiroshima", 1985.

¹⁴³George F. Kennan, _____, quoted in Kenneth W. Thompson, "The Coming of the Third World War: A Review Essay", Political Science Quarterly, 94:4 (Winter 1979-80), pg. 67.

alert-related activities and operations carried out by Soviet command or operational units detected by US intelligence. Conversely, what was public - one might say blatant - were the multitude of generic Soviet threats of annihilation addressed to this or that party.

There is perhaps also a third point, and one wonders if it is not as important - although in quite a different way - as the Cuban missile crisis itself, and that is that the USSR had no hesitancy to initiate the Berlin crisis in 1948-1949, when it had no nuclear weapons at all, or the Korean War in 1950, when it had no operational ones. Both events, one also has to note, were the responsibility of Stalin.

An outline of the categories of events that should be reviewed for a history of relevant Soviet policy are the following:

- (1) the verbal (and written) threats; a very long series of these, directed at many different countries (Iceland, France, Britain, West Germany, Greece, Japan, etc.), at times in circumstances of crisis but more often not in circumstances of crisis.
- (2) exercises of conventional invasion, often extending for periods of months, some of which included nuclear units or involved nuclear alerts in the subsequent invasions:
 - 1950 and after, Yugoslavia
 - 1956, Hungary
 - 1968, Czechoslovakia
 - 1979, Afghanistan
 - 1980, Poland
 - 1980 Iran (CPX-C² only)
- (3) "chained" strategic missile tests: 1980's
- (4) SLBM surge exercises: 1970, 1980
- (5) true crisis alerts:
 - May 1960 (partial and cut short)
 - October to November 1961, Berlin crisis
 - October 1962, Cuban missile crisis
 - 1968, Czechoslovakia
 - 1969, China (and bomber targeting exercises)
 - 1973, Arab-Israeli War
 - possible events in 1979, Afghanistan; 1981, Poland; and 1982-1984

Of the true alerts during crises, the 1962 events surrounding the Cuban missile crisis are particularly important because they have provided evidence on Soviet civil-military interactions at the very highest level regarding nuclear use authority, pre-crisis predelegation to use nuclear weapons, and the proclivities of the most senior military command.

Soviet strategic nuclear forces also had graduated readiness levels: Blair refers to three: "constant", or "routine" as the base level, "increased" ("vysshaia") as the next higher, and "maximum alert" as the highest.¹⁴⁴ A summary description written by Berman and Baker in 1982 is still

¹⁴⁴Bruce Blair, The Logic of Accidental Nuclear War, The Brookings Institution, Washington DC, 1993, pp. 24-25.

essentially valid:

"Another important aspect of Soviet operational philosophy is the alert level of Soviet strategic forces. Until recently, the USSR was known to keep only a small portion of its land-based missiles on full alert, and its bomber forces apparently have never been maintained in a peacetime ground-alert posture. Only a small fraction of the strategic missile submarine force is deployed at sea. While technical constraints partially explain the low levels of alert in the past, the continuing practice appears to be related to broader aspects of the Soviet operational philosophy."¹⁴⁵

Much greater detail was provided by Blair in 1993, particularly regarding the Soviet ICBM forces which were the only element kept at substantial readiness, but that is not reviewed here.

"Chained" Strategic Missile Tests; 1980's:

This consisted of firings, in rapid sequence, from operational launchers, of two ICBM's, an SLBM, two ABM's, an INF (SS-20) missile, and an ASAT missile. This apparently was done on three occasions, about a year and a half apart, in the early 1980's. (See pg. __, earlier.)

SLBM Surge Exercises:

In 1970,

"Virtually all seaworthy Soviet ballistic missile submarines surged out of port and disappeared for many days. The scale of the surge, the unusual pattern of operations (the subs did not communicate back to higher authority and they dispersed to unexpected locations), and the sudden departure without full crews in some cases caused concern within the intelligence community that the Soviets were acting as if a real emergency existed. . .

Some considered notifying the President that a threat of attack possibly existed."¹⁴⁶

Incidentally, this event provides another useful touchstone for evaluating the degree of danger that was inherent in the three 1979-80 US missile alert failures discussed in section A-2; in this case, US intelligence personnel eventually decided that the Soviet procedures being witnessed were an exercise, did not betoken any danger, and did not inform senior political officials. In 1979, at the time of the Soviet invasion of Afghanistan, the USSR again surged SSBN's, this time from the Pacific Fleet's port of Petropovlosk, and "in the early 1980's" - in 1981 - another SLBM surge similar to that in 1970 took place, and was assumed to have possible relation to the Soviet-Polish crisis or to tense US-Soviet relations. In this case information regarding it and the high number of Soviet SLBM's involved was leaked to the western press and received wide attention in NATO countries.

The True Crisis Alerts:¹⁴⁷

¹⁴⁵Robert P. Berman and John C. Baker, Soviet Strategic Forces: Requirements and Responses, The Brookings Institution, Washington DC, 1982.

¹⁴⁶Bruce Blair, 1993, op. cit., pg. 181.

¹⁴⁷Except for materials referenced separately:

- on Soviet decisions and policy in the Cuban missile crisis
- on the 1969 events dealing with China

May 1960, in a somewhat anomalous incident, a US Dept. of Defense official called a worldwide nuclear alert in conjunction with President Eisenhower travelling to the Paris summit (see the US section). This was detected by Soviet intelligence, and the commander of the Soviet Air Force recalled all airborne aircraft to their bases for potential loading with nuclear weapons. Under normal peacetime conditions, Soviet "long-range bombers conducted routine airborne patrols and supported a ground alert posture, but they were unarmed. . ." Except in crises, Soviet bombers were never put on alert on airbase runways, loaded with nuclear weapons. The US alert was brief, and was called off, and the Soviet reaction did not go beyond recalling bombers to their bases. (There were no operational Soviet ICBMs at the time.)

The Berlin Crisis, 1961

The USSR raised the nuclear alert level for the Strategic Rocket Forces, long-range bomber forces, air defense forces, and fighter aviation commands in all of the USSR's military districts and the Army's Groups of Forces.

(In an interview with the former Soviet diplomat, Arkady Shevchenko, he had remarked that the United States shouldn't have taken Khrushchev's nuclear threats over Berlin seriously; ". . . that was only to scare you.")

[The Cuban missile crisis, 1962, is dealt with out of chronological order, below.]

The USSR Invasion of Czechoslovakia, 1968

A half hour before the Warsaw Treaty Organization invasion began, the intermediate range ballistic missile forces in Byelorussia - those targeted on NATO - received alert orders, raising their alert status from the "constant", or "routine" level, to "increased". Intermediate range ballistic missiles in the Baltics and in the Ukraine were similarly alerted. In that middle status, nuclear warheads were mated to missiles, and the alert was maintained for three weeks. A still classified US Dept. of Defense study prepared in 1989 stated that:

"Some Soviet strategic missile units were at full combat readiness - capable of launching a missile in 10 minutes in case of escalation."

The USSR was

". . . prepared to resort to theatre nuclear weapons, if necessary, to prevent NATO's taking

- and the reference below to the 1989 Washington Post story, which is based on still classified US Dept. of Defense and CIA studies, all of the information in this section on Soviet alerts is based on information in Bruce Blair's 1993 study. His sources for this particular material are interviews with former officers of the Soviet Strategic Rocket Forces, some that are now retired and remain in Russia, and some that defected to the West, and members of the US government, in the Dept. of Defense, and in the intelligence community. See Bruce Blair. 1993, op. cit., pp. 23-26, 179-181, 339-340,; and Bruce Blair, Global Zero Alert for Nuclear Forces, The Brookings Institution, Washington DC, 1995, pp. 17-18, fn. 25.

As regards the Cuban missile crisis, extensive testimony from senior Soviet military and political officials has become available since 1990, and is referenced separately below.

advantage of [the] crisis. . . to launch a surprise attack."¹⁴⁸

An addendum to the study prepared by the US CIA ". . . asserts that an all-out war in Europe might have resulted if US and NATO forces had mobilized to deter the Soviet invasion." These activities were not detected by the United States, but independently "some NATO forces were ordered to the lowest of four stages of military preparedness for war under the special alert system during the period of the war."¹⁴⁹ Some of the Soviet units that invaded Czechoslovakia "came equipped with tactical missiles that customarily are allotted a nuclear role. . . Although it was not known whether these units actually brought along nuclear warheads. . .". They were deployed to a specially guarded area at Mlada, north of Prague.¹⁵⁰

1969, Border Clashes with China

The USSR declared a countrywide stand-down and alert of their air force, much of which was "dual capable", that is, could deliver nuclear as well as conventional weapons. Shorter range nuclear missiles were deployed to the USSR-China border areas, and "During the summer and fall of 1969, the Soviets conducted a war of nerves with China by raising the possibility of a nuclear strike on China, particularly Chinese nuclear facilities. . ." These included the Chinese nuclear test site, their nuclear production facilities, and the bases at which Chinese nuclear weapons were located. Garthoff cites evidence indicating that Soviet bomber units based at Siberian and Mongolian airfields had been practicing bombing attacks on targets constructed to look like the Chinese nuclear facilities.¹⁵¹

But of perhaps the greatest interest in this episode are two other aspects of this affair. The first

¹⁴⁸The quotations are from the classified document and are quoted in R. Jeffrey Smith and Patrick E. Tyler, "Soviets Girded for War in '68, Study Says. Nuclear Missiles Were Put on 10-Minute Alert During Czech Uprising", Washington Post, November 29, 1989.

¹⁴⁹ibid.

¹⁵⁰Thomas Wolfe, Soviet Power and Europe, Johns Hopkins University Press, Baltimore, 1970, pg. 474.

¹⁵¹Raymond L. Garthoff, Detente and Confrontation: American-Soviet Relations from Nixon to Reagan, The Brookings Institution, Washington DC, 1985, pp. 208-211.

There are several additional anomalous instances in which mention of a potential Soviet attack on Chinese nuclear facilities appears. Writing in 1966, Harold Hinton had postulated that in July 1964, sometime after the Harriman-Khrushchev talks, ". . . Khrushchev decided about this time. . . to knock out the CPR's (Chinese People's Republic) nuclear weapon installations with a missile strike, probably with non-nuclear warheads." Harold C. Hinton, Communist China in World Politics, Houghton Mifflin Co., New York, 1966, pg. 478.

In October 1979 the US Dept. of Defense had drawn up a classified "staff study" entitled "Consolidated Guidance No. 8: Asia During a Worldwide Conventional War", which "concluded that the United States should bolster China's military potential so that Peking could assist the West in a war with the Soviet Union"; Richard Burt, "Study Urges US Aid to Chinese Military", New York Times, October 4, 1979. Soviet Premier Brezhnev's reaction to this was to tell Chaban-Delmas in Moscow that he "would not tolerate the nuclear arming of China... after the destruction of Chinese nuclear sites by our missiles, there won't be much time for Americans to choose between the defense of their Chinese allies and peaceful coexistence with us", in Nancy Dall Milton, The China Option, Pantheon Books, New York, 1984, pp. 24-25, 310.

is the multiple sources of evidence regarding "overtures" or conversations between Soviet and American diplomats in which the USSR either proposed a joint US-USSR nuclear attack on China's nuclear facilities, or asked what the US reaction would be to such action by the USSR alone. The second is testimony regarding the nature of the proposals for nuclear weapons use that Marshal Grechko, the USSR's Defense Minister at the time, made to the Politburo, and the length of time that these proposals were held under consideration.

There are numerous sources for the approaches to the United States for possible joint nuclear attack on Chinese nuclear facilities, and "soundings" of US official receptiveness - as well as that of the USSR's Warsaw Treaty Organization allies - to unilateral Soviet attack.¹⁵² Soviet threats and hints that nuclear weapons might be used followed a full scale USSR-Chinese conventional military engagement in the Ussuri River area on March 15, 1969, with hundreds of troops on both sides killed or wounded. A striking rendition of this affair was presented in interviews with former Soviet officials in the documentary Messengers from Moscow aired on PBS-TV in 1994.¹⁵³ Nikolai Leonov, "Head of KGB Analysis, 1971-1985": ". . . they had worked out a plan for the nuclear castration of China. . . I have been told that such plans were quite deeply worked out". Yevgeni Bazhanov, at the time an assistant to Department Head Mikhail Kapitsa at the Foreign Ministry, gets into a dispute with his former superior on film on Bazhanov's recollection of drawing up what he describes as disinformation documents regarding the prospect of a Soviet nuclear strike against China: he portrays it all as a shrewd disinformation plan to be passed to western embassies and the western press, which would thereby permit the message to reach the Chinese and scare them into behaving as the USSR wanted them to on the border questions. However, if Shevchenko's description of Marshall Grechko's suggestions are even approximately valid, it could scarcely have been a tricky "disinformation" effort.

Shevchenko provides the following description in his book:

"From others I had heard that the Soviet leadership had come close to using nuclear arms on China. . .

"A ministry colleague who had been present at the Politburo discussion told me that Marshall Andrei Grechko, the Defense Minister, actively advocated a plan to 'once and for all get rid of the Chinese threat'. He called for unrestricted use of the multi-megaton bomb known in the West as the 'blockbuster'. That bomb would release enormous amounts of radioactive fallout. . .

"Fortunately, not many military men shared Grechko's mad, bellicose stance. In 1970 I talked with one of Grechko's colleagues, Nikolai Ogarkov. . .

¹⁵²There is some possibility that H.R. Haldeman, President Nixon's Chief of Staff, turned the much more prevalent and acknowledged second version - potential Soviet unilateral nuclear attack - into the first - proposed joint US-USSR nuclear attack - which he reported. Sources for the second are numerous: Transcript, Dept. of State Press and Radio News Briefing, August 28, 1969, pp. 10-16; former CIA official Arthur Macy Cox's book The Myths of National Security; The Peril of Secret Government, 1976; Arkady Shevchenko, Breaking with Moscow, Ballantine Books, New York, 1985, pp. 218-220, and many others.

¹⁵³Program #3: "South: Fires in the Third World".

"Ogarkov took a more realistic view of the prospect of war with China. He felt that the Soviet Union could not attack China with a nuclear barrage because it would inevitably mean world war. The alternative was to use a limited number of nuclear weapons in a kind of 'surgical operation' to intimidate the Chinese and destroy their nuclear facilities. But according to Ogarkov, that too was risky.

"Disagreements about bombing China stalemated the Politburo. They were unable to reach a decision for several months. Grechko based his warlike position upon the assumption that America, then openly hostile to China, would not actively resist Soviet punitive action and would 'swallow it'. It was decided to put out feelers through various channels to test this notion. The Foreign Ministry, the KGB, and the military intelligence took soundings of Washington's possible reaction to a nuclear strike. The Soviet Embassy in Washington was instructed to pursue this inquiry casually and at the middle level of bureaucracy. However, Ambassador Dobrynin's report contained a sober assessment that the United States would not be passive regarding such a blow at China. He concluded that there would be a risk of serious Soviet-American confrontation. Moscow dropped the plan. . .

"This knowledge cooled passions in the Politburo and strengthened Brezhnev's middle-of-the-road position: not to attack China, but instead show Soviet power by stationing large contingents of troops armed with nuclear weapons along the entire length of the border. At the same time, attempts would be made via diplomatic negotiations, to find solutions to territorial and other disputes with Peking."¹⁵⁴

In his 1985 TV interview Shevchenko seems to combine both proposals and attributes them to Grechko:

"There were some people among the Soviet military, not among the civilians - it was not an idea which was born in the Politburo, among the Soviet civilian leadership. But Soviet military, particularly Marshall Grechko. . . who even thought that it would be [the] best way to, just to give the Chinese a lesson. Not to start a nuclear war, but just to give them a lesson. And to show them that they have to be careful. What he meant was that, you know, to try to have a limited nuclear strike. And to destroy, let's say, a few of their nuclear facilities. And perhaps a couple of cities. That was his idea, which was not accepted by the Politburo. They were much more careful. After he made this proposal, there were debates about it in the Politburo, which I learned. They tried to sound what could be the reaction of American and the world to the thing."¹⁵⁵

The United States reacted to the events occurring on the Soviet-China border by raising the alert level of the Strategic Air Command. This was detected by Soviet intelligence, and reported to senior Soviet foreign policy officials, but with no further effect.

¹⁵⁴Arkady N. Shevchenko, 1985, op. cit., pp. 218-220.

H. R. Haldeman claimed that the ". . . USSR placed 1,800 nuclear weapons on the Chinese border"; The Ends of Power, Times Books, New York, 1978.

¹⁵⁵Shevchenko Tapes, CBS-TV, 1985, pp. 31-35.

1973: The Arab-Israeli War

Following the US global strategic alert during the Mideast war the USSR increased the combat readiness of portions of the Soviet Strategic Rocket Forces. The Soviet order was quickly cancelled with the end of the US alert.

Blair makes no mention of the controversy as to whether the USSR moved nuclear warheads through the Dardanelles to or towards Egypt during the 1973 Mideast crisis, and by implication presumably does not believe that it took place. (The arguments concerning this allegation appear in the narrative of US alerts, in the discussion of the 1973 US alert.)

Others

As already indicated, the USSR surged ballistic missile submarines at the time of their invasion of Afghanistan.

1962: The Cuban Missile Crisis

In 1964, McGeorge Bundy wrote

"The Cuban missile crisis was the most important single event of the Kennedy Presidency. As the President himself pointed out afterward, it was the first direct test between the Soviet Union and the United States in which nuclear weapons were the issue."¹⁵⁶

On the Soviet side, Chairman Khrushchev had stated in a December 1962 speech,

"The Soviet government instructed the USSR Defense Minister to put the entire army of the Soviet Union, and above all the Soviet intercontinental and strategic missile troops ... strategic aviation and naval forces, in a state of combat readiness. Our submarine fleet, including atomic submarines, took up positions as instructed. A state of heightened combat readiness was proclaimed for the ground forces, and the discharge from the Soviet Army of the older contingents of the strategic rocket troops, the anti-aircraft troops, and the submarine fleet was postponed. The armed forces of the Warsaw Treaty countries were also placed in full combat readiness."¹⁵⁷

However, as Bruce Blair noted in 1993, at the time that Khrushchev stated this, and subsequently, it was a statement that ". . . Western analysts generally consider to be highly inaccurate and misleading."

In the United States, a small library of material had been published on the Cuban Missile

¹⁵⁶McGeorge Bundy, "The Presidency and the Peace", *Foreign Affairs*, 42:3 (April 1964), pg. 359.

¹⁵⁷December 12, 1962. "Khrushchev's Report on the International Situation - 1", *Current Digest of the Soviet Press*, vol. 14 (January 16, 1963), p. 5.

Soviet publications also repeated it on other occasions:

"In the autumn of 1962 the Soviet Union and the other Socialist Countries acted in a united front in defense of revolutionary Cuba. . . The Strategic Rocket Forces, the Air Defense Force and other fighting services of the Soviet Armed Forces were placed on alert."

"Embodiment of Lenin's Ideas about Proletarian Internationalism in the Military Alliance of Socialist Countries", *Voenna-Istor. Zhurnal*, March 1973: APN Daily Report, April 27, 1973.

Crisis, but all of it without access to either materials from the USSR or much of the US government's own documentary record. That was all changed between 1987 and 1994: the US government released perhaps as many as 10,000 declassified documents, the USSR a small number, and a series of conferences was held with former government participants in the crisis: in 1987 in the Bahamas, in 1989 in Moscow, in 1992 in Havana, and in 1994 again in the United States. The last three of these conferences all had participation by former senior Soviet military and political officials. The disclosures - at this point virtually all from the Soviet side - were startling, and history had to be rewritten.¹⁵⁸ That rewriting included the most basic parameters of the nuclear weapons aspect of the confrontation, as well as the estimates of the risks that had been involved in both the initial Soviet deployment and the US response to force their withdrawal. It was difficult to say if the situation was more dangerous as US policymakers conceived of it at the time - their understanding having been that there were no Soviet nuclear warheads yet in Cuba - neither strategic or tactical - and thinking that the US position was totally dominant and essentially safe as far as the continental US was concerned, or as it actually was, with both Soviet strategic and tactical nuclear warheads already in Cuba when the crisis broke and the US established a naval quarantine of the island.

The genesis of the idea for the USSR's eventual deployment of strategic nuclear missiles in Cuba was a promenade conversation between Khrushchev and Defense Minister Rodion Malinovski. Malinovski was bitter about the deployment of Jupiter missiles by the United States in Turkey, on the USSR's southern border, and the overall purpose of the idea was clearly to redress a rapidly widening strategic weapons imbalance between the US and the USSR. It was not to protect Cuba from another Bay of Pigs type of invasion staged with US assistance. When the request to emplace the missiles was made to Fidel Castro by a special Soviet emissary and by the Soviet ambassador, it was clear that its intended purpose was on behalf of the entire "socialist camp", and in a letter to Khrushchev, Castro made explicit that it was for that purpose that Cuba was accepting the emplacement of the missiles. At the time the crisis broke - in October 1962 - the balance of strategic weapons was 17:1 in favor of the US - omitting US carriers in the SIOP and US TAC nuclear strike forces. It was a number that US Secretary of Defense McNamara only made public 25 years later. The USSR's General Gribkoff, speaking in 1994, also claimed the same ratio of 17:1 as the estimate made at the time by the Soviet General Staff (and it was the precise estimate I made at SIPRI in 1969). Only six individuals in the

¹⁵⁸Some of the major compendia of the newly available information are:

The Cuban Missile Crisis, 1962; National Security Archives, Declassified Document Set, January 1990.

CIA Documents on the Cuban Missile Crisis, 1962, Mary S. McAuliffe, editor, US Central Intelligence Agency, October 1992.

Proceedings of the Hawk's Cay Conference on the Cuban Missile Crisis, March 5-8, 1987, typescript.

Raymond L. Garthoff, Reflections on the Cuban Missile Crisis, Revised Edition, The Brookings Institution, Washington DC, 1989.

Gen. Anatoli I. Gribkov and Gen. William Y. Smith, Operation ANADYR: US and Russian Generals Recount the Cuban Missile Crisis, Edition Q, 1994.

James G. Blight et. al., Cuba on the Brink: Castro, The Missile Crisis, and Soviet Collapse, Pantheon Books, New York, 1993.

Raymond L. Garthoff, "Cuban Missile Crisis: The Soviet Story", Foreign Policy, #72 (Fall 1988), pp. 61-80.

John Newhouse, "A Reporter at Large; Socialism or Death", The New Yorker, April 27, 1992, pp. 52-83.

Soviet leadership were involved in making the decision, four of them politicians and three of them in the Politburo: Khrushchev, Anastas Mikoyan, Frol Kozlov, Malinovsky, Marshal Sergei Biryuzov, the head of the USSR's Strategic Rocket Forces, and a sixth. (Gen. Gribkov's description was that ". . . all the members of the Politburo in the Defense Council reviewed it, on May 21." He had been asked to draw up the plan on May 18.)¹⁵⁹ The full Politburo was informed, and voted its "approval" when the missiles were already on the high seas en route to Cuba. Foreign Minister Gromyko was informed but not Ambassador Dobrynin in Washington nor Soviet Ambassador to the UN Valerian Zorin in New York. All Soviet military forces, everywhere, were put on "full alert, strategic alert" during the actual crisis. The Soviet military commanders were however not informed about the Soviet missile deployment to Cuba, and when Marshall Grechko ordered the Warsaw Treaty Organization forces to go on full alert, they were given a false reason to do so: alleged US maneuvers in NATO. The USSR did not inform its WTO allies.

As for the actual deployment:

- There were 42,000 active Soviet combat troops in Cuba (the US CIA estimate had been 12,000 to 15,000). It had been planned to send 55,000 troops but only the 42,000 had reached there by October 22, 1962.
- All the nuclear warheads were in Cuba, 158 in all. The megatonnage that could have reached the US was 800 kt to 1 MT.
- 36 warheads were for the USSR's R-12 missile (the US designation SS-4), with a range of 2,500 km.
- There were 2 regiments of cruise missiles, with ranges of 10 to 180 kilometers, for naval and army use, with 80 launchers and nuclear warheads.
- There were 6 warheads for the Ilyushin medium bombers, of 5-6 kt each.
- There were Luna (or FROG) missiles, with 35-40 km range, 6 launchers and 12 warheads, each with 2 kt in yield¹⁶⁰
- All of these nuclear warheads were subsequently supposedly removed, but there was never any

¹⁵⁹These, and the particulars of the nuclear weapons and warheads deployment in the following paragraph were given by General Anatoli Gribkov at a seminar at the Woodrow Wilson Center for Scholars, on April 4, 1994. General Gribkov had been planning officer and then execution officer for Operation ANADYR in the Soviet General Staff. Notably, at the seminar he publicly modified the numbers of nuclear weapons the USSR had reportedly deployed - increasing them - that he had himself released in Havana in 1992, and which also were in his 1994 coauthored book, on the grounds that Russia had declassified the relevant documents by April 1994, but had not done so previously.

See also Bill Keller, "Warheads Were Deployed in Cuba in '62, Soviets Say", New York Times, January 29, 1989.

¹⁶⁰Roger Hilsman and Elie Abel had written that the Soviet units manning the FROG missiles had been equipped with nuclear warheads, and following them Alexander George et. al. had repeated that. But this was apparently an assumption, without corroborating evidence. As late as October 1986, in a letter to me, Raymond Garthoff, who had been the Secretary of the US ExCom. during the Cuban missile crisis, still maintained that the claims of Hilsman, Abel and George were ". . . erroneous statements. . . No one believed there were or would be tactical nuclear weapons with the protective units. Accordingly, that subject was never raised with the Soviet Union."

US verification of that - only of the missiles - since the US government did not know that the warheads were there. On November 7, when all the nuclear weapons that were being discussed by President Kennedy and Khrushchev had been removed, all the tactical nuclear warheads were still in Cuba: the warheads for the cruise missiles, the FROG's and the bombers. The local Soviet commander in Cuba asked Moscow what he should do with them, Moscow replied by asking him what he thought should be done with them, and he suggested withdrawal. They were withdrawn on November 20.

-In 1987 Soviet sources claimed that the US U-2 that was shot down over Cuba during the crisis was shot down by a local Soviet commander, but without the authority to do so.¹⁶¹ That appears not to be the case; in an exchange of letters between Premier Khrushchev and Fidel Castro, Castro takes responsibility for the Cuban air defense forces having shot down the plane, but claims that ". . . the decision to shoot down the American spy plane had been made with the agreement of the Soviet military advisors in Cuba."¹⁶²

As startling as the particulars of the deployment of the Soviet warheads, and of their removal, is the matter of the pre-delegation of the authority for using the tactical nuclear warheads. Early in October the following written order from Defense Minister Malinovsky was delivered to General Issa Pliyev, commander of the Soviet forces in Cuba:

"Only in the event of a landing of the opponent's forces on the island of Cuba and if there is a concentration of enemy ships with landing forces near the coast of Cuba, in its territorial waters. . . and there is no possibility to receive directives from the USSR Ministry of Defense, you are personally allowed as an exception to take the decision to apply the tactical nuclear Luna missiles as a means of local war for the destruction of the opponent on land and on the coast with the aim of a full crushing defeat of troops on the territory of Cuba and the defense of the Cuban Revolution."¹⁶³

This had been decided on in July, but when General (and Defense Minister) Malinovsky was asked to put it on paper, he had replied, "It's not necessary, he knows what he's doing." Gen. Pliyev was given oral orders when he left for Cuba. When the written order was sent early in October, it was signed by General Zacharov, Chief of the Soviet General Staff, not by General Malinovsky.¹⁶⁴ The

¹⁶¹Raymond L. Garthoff, "Cuba: Even Dicier Than We Knew: Details of the Missile Crisis", Newsweek, October 26, 1987, p. 34.

¹⁶²Jean-Edern Hallier, "Castro, Khrushchev Letters Hint of Nuclear War", Le Monde, reprinted in The Cleveland Plain Dealer, December 2, 1990.

¹⁶³Bruce J. Allyn, James G. Blight, Letter to the Editor, New York Times, November 2, 1992; quoting from USSR General Staff Archives, "Anadyr", File 6, Volume 2, p. 144.

That meant using the Soviet nuclear weapons on Cuban soil.

¹⁶⁴Description by Gen. Gribkov, April 4, 1994.

William Lee claims that the Soviet field commander in Cuba did not have the release ciphers for the 12 "Luna" missile warheads, despite the authorization memorandum (and that because Malinovsky did not himself sign the written authorization it was not really a (proper) authorization). He also refers to a total of 162 warheads, rather than 158. William T. Lee, "The Nuclear Brink that Wasn't - and the One That Was", Washington Times, February 7,

rationale for the delegation of the authority to order nuclear weapons use to the local commander was allegedly the possibility that if the US invaded Cuba, it might possibly destroy any means for General Pliyev to be able to communicate with Moscow. Sergei Khrushchev, Khrushchev's son and his confidante, has suggested that his father was not fully informed, "but Russian generals insist that he approved the order about tactical nuclear warheads, notwithstanding his fear of nuclear war".¹⁶⁵ Finally, on October 22, the day of President Kennedy's speech, Gen. Pliyev was given another order: "You can't use any nuclear weapons". According to General Gribkov, "Khrushchev had said 'We will never fight the Americans over Berlin', and he said the same thing about Cuba."

One further fact remains to be registered: on October 26, Fidel Castro suggested in a letter to Premier Khrushchev, that (in the official Cuban government translation) in the event of a US invasion of Cuba, which he considered ". . . is almost imminent within the next 24 or 72 hours. . . following that event the Soviet Union must never allow the circumstances in which the imperialists could launch the first nuclear strike against it".¹⁶⁶ There are varying published translations of the letter, which are in rather sharp dispute concerning the crucial sentence: Castro apparently dictated the letter (in Spanish) to the Soviet ambassador in Havana, Alexiev, who put it down in Russian and sent it on to Moscow. The recollection of Fedor Burlatsky, Premier Khrushchev's speechwriter, of Castro's telegram reading, "I proposes the immediate launching of a nuclear strike on the United States" seems to be a bit off.¹⁶⁷

Soviet Verbal Threats or Diplomatic Notes

1956: British, French, and Israeli Invasion of Suez

"On 5 November. . . when the Soviet attack on Hungary had achieved its initial objectives, the Soviet Government intervened in the Egyptian crisis. In a Note handed to the British Ambassador in Moscow, on the evening of the 5th, and broadcast the same evening, the Russians declared:

"The Soviet Government considers it necessary to draw your attention to the aggressive war being waged by Britain and France against Egypt, which has the most dangerous consequences for the cause of peace. . . In what position would Britain have found herself if she had been attacked by more powerful states possessing every kind of modern destructive weapon? And there are countries now which need not have

1995.

¹⁶⁵ Allyn and Blight, Nov. 2, 1992, op. cit.

¹⁶⁶ Prime Minister Fidel Castro's Letter to Premier Khrushchev, October 26, 1962, in the international edition of Granma, October , 1992.

¹⁶⁷ Fedor Burlatsky, "Castro Wanted a Nuclear Strike", New York Times, October 23, 1992; see also Hallier (ref. #23).

sent a navy or air force to the coasts of Britain, but could have used other means, such as rocket technique... We are fully determined to crush the aggressors and restore peace in the Middle East through the use of force.'

"This was, of course, a serious threat which altered the nature of the crisis. At the same time Marshal Bulganin wrote to President Eisenhower stating that the situation in Egypt called for immediate action by the United Nations, and proposed that the United States and the Soviet Union, as states possessing 'nuclear weapons as well as powerful armies and navies should use these means under United Nations auspices to 'curb aggression' in the Middle East. Co-operation with the United States Sixth Fleet in the Mediterranean was specifically mentioned. The Soviet representative at the United Nations called on the Security Council at 1 a.m. on 6 November to endorse joint Soviet-American intervention if the British and French did not halt within twelve hours. The American Government immediately rejected the Soviet proposal, and instantly warned Russia on the same day that rocket attacks on Britain or France would be followed by American retaliation. The Soviet Government must have known of the American counter-threat well before its own twelve-hour ultimatum expired at 1 p.m. (New York Time) or 6 p.m. (GMT), and the American action was also known in London before the British Prime Minister announced the final cease-fire in the House of Commons at 6 p.m. on 6 November."¹⁶⁸

The note to the UK was addressed to Prime Minister Anthony Eden, and a similar note was sent to Prime Minister M. Guy Mollet, of France. Prime Minister Ben Gurion of Israel got a more general letter.

At the time the USSR had no operational rockets that could reach London, Paris, or Israel. It did have bombers capable of nuclear delivery. The Turkish Government had received a request from the USSR for the passage through the Dardanelles of a Russian naval force consisting of a cruiser and three destroyers. General Alfred Gruenther, then Supreme Allied Commander of NATO, made a speech in Paris, reminding the USSR that the US stood prepared to retaliate against nuclear attack against any of its NATO allies."

1957: The Bulganin Notes

In March 1957 Marshal Zhukov made his famous speech in Moscow which included the statement that in any future war nuclear weapons would inevitably be used as the main striking weapon.¹⁶⁹ Soon after, Marshal Bulganin sent a series of notes to heads of government of Norway, Denmark, West Germany, and several others, demanding various accommodations or treaties between that respective government and the USSR. These notes were published in the USSR and in

¹⁶⁸S.M. Mackintosh, Strategy and Tactics of Soviet Foreign Policy, Oxford University Press, London, 1962, pp. 187-188.

¹⁶⁹Krasnaya Zvezda, March 17, 1957.

some of the recipient states.¹⁷⁰ The various demands were coupled with warnings of underestimating the military power of the USSR. An example of one of the letters to the Norwegian Prime Minister reads:

"Norway runs a great risk by loaning its territory to aggressive big powers and by allowing them to install military bases directed against the Soviet people.

"The Soviet Union has the means to reply in the most vigorous manner to these aggressive moves and, in particular, to move against these bases near the border with the USSR.

"Norwegian territory could be used at any time by the forces of the North Atlantic block against the Soviet people. Even if no foreign bomber is stationed in the aerodromes built at NATO's recommendation, even if no foreign ship is found now in the Norwegian Sea bases, again built according to NATO plans, the situation could change tomorrow and even against the wishes of the Norwegian government and people. . .

"It is not difficult to demonstrate the terrible danger Norway would court therefore if its territory were used by certain aggressive big powers to establish anti-USSR military bases."¹⁷¹

On April 1, the Danish Prime Minister released text of one of the Bulganin letters to him. Bulganin said that "It would be veritable suicide to tolerate, in the event of nuclear war, the installation of foreign bases in Denmark, since one H bomb could destroy everything within a radius of several hundred kilometers." He emphasized the strategic position of Denmark, 'guardian of important straits' important, he believed, to NATO. If NATO could control them, it would control the entry and exit to the Baltic. That, Marshal Bulganin said, "gives the Danish Government important responsibilities toward other peoples."

1957-58: Syrian-Turkish Crisis

This was an extended set of interactions involving a half-dozen countries and which included 2 sets of Soviet maneuvers in the Southern Caucasus and US and Soviet naval fleet deployments off the Syrian coast.¹⁷² It began with the crisis in Jordan in April 1957, moved to Syria, followed by Syrian-Turkish-US-Soviet interactions which peaked around October 1957, prior to which, "An army of Russian troops, training in the use of nuclear weapons, went on autumn maneuvers near the Turkish frontier". The USSR stated on several occasions that it "would not remain passive" if war broke out - there were letters and statements by Bulganin, Khrushchev, Marshal Zhukov, and Admiral Katsanov, and the USSR publicized its naval deployments and field maneuvers. "Khrushchev warned that ' . .

¹⁷⁰Izvestia (Bulganin to Adenauer), Feb. 12, 1957, Sept. 10, 1957, Sept. 11, 1957, December 12, 1957; translations can be found in the Current Digest of the Soviet Press.

The letters to Norway and Prime Minister Gerhardsen's replies were published in the Norwegian daily, Aftenposten, March 27, 1957, April 16, 1957, December 14, 1957, January 1, 1958, January 25, 1958.

¹⁷¹Several of these letters were summarized in Revue Militaire D'Information, No. 283, May 1957.

¹⁷²J. M. Mackintosh, 1962, op. cit., pp. 221-235.

if the rifles fire, the rockets will start flying', in which case Turkey would 'not last one day.'¹⁷³ Nadav Safran writes that Khrushchev informed Nasser that the Soviet troop movements to the Caucasus were bluffs; he didn't want Nasser to take them as a go ahead signal for any Egyptian initiatives, and he didn't want to get involved in serious military conflict with the West.¹⁷⁴ (The coup in Iraq followed in July 1958, US deployment to Lebanon, British to Jordan, and another round of Soviet maneuvers.)

1958: The Quemoy Islands Crisis

On September 7, 1958, Khrushchev wrote to President Eisenhower. He reviewed the US military steps in the Taiwan Straits, refers successively to US ". . . atomic blackmail ... the policy of atomic blackmail ... policy of intimidation and atomic blackmail.", and then wrote:

"It would be a serious miscalculation for the United States to believe that one can make short work of China, just as some powers used to do in the past. Such a miscalculation would have grave consequences for the cause of world peace. Let us, therefore, make this quite clear, for any misunderstanding and equivocal statements are the most dangerous things in such matters.

"An attack on the Chinese People's Republic, which is a great friend, ally and neighbor of our country, is an attack on the Soviet Union. Loyal to its duty, our country would do everything to defend, jointly with People's China, the security of both countries and the interests of peace in the Far East and throughout the rest of the world.

"Nothing could be more erroneous than to try to read in this message of mine an intention to lay the color on too thickly, let alone any threats. All we want to do is to draw your attention to the situation which no one would be able to get out of, neither you, nor we, should a war break out in the Far East."¹⁷⁵

President Eisenhower replied in a public address on September 11, and in a letter to Khrushchev, which resulted in a second letter from Khrushchev on September 19.

"As for blackmail and threats with regard to People's China, one must say that they have not achieved and cannot achieve their purpose. As I noted in my previous message, certain American military leaders are even trying to threaten China with atomic weapons. Press reports say that units of the American air force, equipped with nuclear weapons, have been rushed to Taiwan together with various rockets and guided missiles of the 'Nike-Hercules' type, and that missile-launching ramps are being built and so on.

"Such actions by the United States government cannot, naturally, reduce tension in that area, cannot improve the general climate or create the conditions for greater confidence. On the contrary, these actions tend to aggravate the situation and increase the danger of an outbreak of war involving the most devastating modern weapons.

¹⁷³Townsend Hoopes, The Devil and John Foster Dulles, _____, 1973.

¹⁷⁴Nadav Safran, From War to War, Pegasus Press, 1969, p. 118.

¹⁷⁵Documents on International Affairs, edited, Gillian King, Oxford University Press, London, 1962, pp. 182-204. Khrushchev's letters were published in Soviet News, Sept. 9, 1958, and Sept. 22, 1958.

"I must tell you outright, Mr. President, that atomic blackmail with regard to the Chinese People's Republic will intimidate neither us nor the Chinese People's Republic. Those who harbor plans for an atomic attack on the Chinese People's Republic should not forget that the other side too has atomic and hydrogen weapons and the appropriate means to deliver them, and if the Chinese People's Republic falls victim to such an attack, the aggressor will at once suffer a rebuff by the same means.

". . . To touch off a war against People's China means to doom sons of the American people to certain death and to spark off the conflagration of a world war. It means to assume grave responsibilities before mankind, before history. The responsibility for this will also rest with you personally, Mr. President.

". . . I told you earlier, and I feel it necessary to stress once more, that an attack on the Chinese People's Republic is an attack on the Soviet Union. We have a Treaty of Friendship, Alliance, and Mutual Assistance with this great friend, ally, and neighbor of our country, a treaty meeting the fundamental interests of the Soviet and Chinese peoples, the interests of peace, and let no one doubt that we will fully honor our commitments."¹⁷⁶

1960: The U-2 Crisis

On May 13, 1960, following the downing of the U-2 over the USSR, the Soviet government delivered a Note to Norway. The Norwegian airfield of Bodo was one of the receiving fields for U-2 aircraft, and the U-2 that the USSR had just shot down was to have landed there. The operative paragraph of the Note is the following:

"The government of the Soviet Union presents to the government of Norway a protest against the provision to foreign aircraft of the possibility of using Norwegian territory for the preparation and carrying out of incursions within the borders of the Soviet Union. The Soviet Government considers it necessary to inform in advance that if such provocations will be repeated from the territory of Norway, then it (the USSR) will be forced to take appropriate measures in response. It is known that the Soviet Union has means at its disposal which allow in the case of necessity the complete rendering harmless of the bases used for the carrying out of aggressive acts against the Soviet Union. It goes without saying that the responsibility for the consequences lie in the governments of states carrying out aggression against other states, and on the governments of those states which are their collaborators."¹⁷⁷

¹⁷⁶ibid. See also:

J. T. Howe, Multicrisis: Sea Power and Global Politics in the Missile Age, Massachusetts Institute of Technology Press, Cambridge, 1971.

J. R. Thomas, "Soviet Behavior in the Quemoy Crisis", Orbis, 6:1 (Spring 1962), pp. 38-64.

J. R. Thomas, "The Limits of Alliance: The Quemoy Crisis of 1958", in Sino-Soviet Military Relations, Raymond L. Garthoff, editor, Frederick Praeger, Publishers, New York, 1966, pp. 114-149.

¹⁷⁷The Soviet note to Norway delivered on May 13, 1960, was published in Aftenposten on May 13, 1960. Also in Johan J. Holst, Norsk Sikkerhetspolitikk i Strategisk Perspektiv, Vol. 2, Documents, Oslo, 1967, pp. 142-144.

Soviet Defense Minister Malinovsky announced that future U-2 flights would result in Soviet strikes against the bases from which the flights originated, and that message was also directed to Turkey and Pakistan, other countries from which U-2's flew, as well as to Norway.

1959 to 1961: The Berlin Crisis

There were numerous examples of what commentators referred to as "rocket-rattling" from the late 1950's to 1960.

"The Soviet Union attempted to coerce the West on several occasions from 1956 to 1958 with threats of newly obtained nuclear weapons. Each time Premier Khrushchev demanded that the Western powers pull back from their positions or reduce their stated commitments. In these instances, Khrushchev threatened to use his Medium Range Ballistic Missiles to knock NATO countries "out of commission" and emphasized that if war broke out between the superpowers, West Germany would have 'no chance of survival.'"¹⁷⁸

"Khrushchev was to warn that if some ambiguous conditions were fulfilled in Berlin 'our rockets will fly automatically' (July 1959); that the Soviet Union had stockpiled 'so many rockets, so many atomic and hydrogen warheads that, if we were attacked, we could wipe from the face of the earth all of our probable opponents' (November 1959); that 'in case of need Soviet artillerymen can support the Cuban people with their rocket fire if the aggressive forces in the Pentagon dare to launch an intervention against Cuba' (July 1960)"¹⁷⁹

"How shortsighted are the leaders of countries who permit themselves to be pushed into a web of military adventures! It is not enough that they give away their land for foreign military bases, thus like a magnet attract to themselves a crushing retaliatory blow. To be turned into a 'zone of death' - this is the fate..."¹⁸⁰

In regard to the Berlin crisis in particular, the statements of this type were numerous:

-Khrushchev told US Ambassador Averill Harriman in 1958-59 that "Your generals talk of tanks and guns defending your Berlin position. Your tanks would burn, and the missiles would fly."¹⁸¹

¹⁷⁸Paul G. Larsen, Diplomacy: New Approaches in History, Theory, and Policy, The Free Press, New York, 197-, p. 194.

¹⁷⁹Hannes Adomeit, "Soviet Risk-Taking Behavior: From Confrontation to Coexistence?", Adelphi Papers 101, International Institute for Strategic Studies, Autumn 1973, p. 18.

¹⁸⁰V. Ovchinnikov, Pravda, Aug. 19, 1961, in Current Digest of the Soviet Press, 13:23 (Sept. 13, 1961), p. 15.

¹⁸¹Averill Harriman, American and Russia in a Changing World, _____, 196-, p. 62.

-In 1959 he said that he ". . . could incinerate the whole of the Federal Republic with eight hydrogen bombs."¹⁸² (Another quotation attributed to Khrushchev was that Germany would "burn like a candle" if there were war.)

-In 1961 he similarly told the British Ambassador to Moscow, Sir Frank Roberts, that "all of Western Europe was at his mercy: six hydrogen bombs would annihilate the British Isles, while nine others would take care of France."¹⁸³ He also warned Italian Premier Fanfani that both Italy and Great Britain were "hostage" to Soviet missiles and would be destroyed if nuclear war resulted from a Western resort to force in Berlin.

Radio addresses by Khrushchev on August 7, 1961 and August 11, 1961 warned that "the aggressor's allies. . . American military bases throughout the world. Any state which would be used as a springboard for an attack on the Socialist camp will experience the full devastating power of our blow. . . "¹⁸⁴ The largest portions of these addresses were directed to Germany, but there were paragraphs to "the Italian people", "the Greek people", warning them of their potential destruction with utter certainty, ". . . our hand will not falter", etc.

Perhaps as important as any of the remarks of Khrushchev's that explicitly threatened nuclear weapon use, were the exchanges between him and President Kennedy at their personal meeting in Vienna, Austria, on June 4, 1961. These were described, a bit summarily, by Dean Rusk in an oral history recording in 1985, the first time that they had ever been disclosed other than in the most general terms. Previous descriptions of the conversation had indicated only that they had been very difficult and acrimonious regarding the issues of a German Peace Treaty and the abrogation of Allied four-power rights of access to Berlin, and stressed the less important aspect that Khrushchev had allegedly pressured the "younger" Kennedy. Rusk provided the following description:

"Well, toward the end of that summit meeting, Mr. Khrushchev, in very harsh terms, presented President Kennedy with an ultimatum on Berlin. He said that he was going to make certain arrangements with the East Germans, and that would include control over the access routes to Berlin and so forth, and then he said 'If there's any attempt on the part of the West to interfere with these arrangements, there will be war.' Well, now, in diplomacy you almost never use the word 'war' you speak of the 'gravest possible consequences' or something of that sort. But, Mr. Kennedy had to look Khrushchev straight in the eye and say, 'Then, Mr. Chairman, there will be war. It's going to be a very cold winter.'

". . . Well, I had follow-up talks with Mr. Gromyko about Berlin, following the June 1961 summit. At the beginning of those talks Mr. Gromyko took the same harsh line that

¹⁸²Vice Admiral Friedrich Ruge, "Nuclear Policy as it Affects NATO", Advance Study Paper No. 14, Center for Strategic Studies, Georgetown University, March 1964, p. 11.

¹⁸³The Washington Post, July 12, 1961; Facts on File, 1961, p. 278.

¹⁸⁴The Soviet Stand on Germany;: 9 Key Documents Including Diplomatic Papers and Major Speeches by N. S. Khrushchev; Proposals for a German Peace Treaty, With Letter to the American People from Nikita S. Khrushchev, Crosscurrents Press, 1961.

Mr. Khrushchev had taken, but I had to remind him that, if they wanted war, they could have war in five minutes; all they had to do was start one; but if they did not want war, we'd better talk about it some more. And so, Sir Alec Douglas Hume of Great Britain and I talked with Mr. Gromyko at considerable length on several occasions, and we talked and talked and talked and finally, I think, talked a good deal of the fever out of that problem."¹⁸⁵

The US Department of State Memorandum of Conversation for the meetings between Kennedy and Khrushchev were not declassified until 1990. Khrushchev's formulations referring to war over Berlin were the following:

"He could not understand why the US wants Berlin. Does the US want to unleash a war from there?

"Mr. Khrushchev continued by saying that if the US should start a war over Berlin there was the nothing the USSR could do about it. However, it would have to be the US to start the war, while the USSR will be defending peace. History will be the judge of our actions. The West has been saying that Khrushchev might miscalculate. But ours is a joint account and we must see that there is no miscalculation. If the US wants to start a war over Germany let it be so; perhaps the USSR should sign a peace treaty right away and get it over with."¹⁸⁶

Given this degree of direct confrontation at the very highest level to fuel anticipation of a military confrontation on the ground in or approaching Berlin, and military planning for such a contingency, both conventional and nuclear, it would also be important to review what actually happened at Checkpoint Charlie, but that is not included in this study.¹⁸⁷

"Non-Crisis Miscellany"

There were innumerable examples of these, in Tass and Novosti Press Agency special analytical articles, in Radio Moscow broadcasts, addressing variously any nation that hosted US military bases: Iceland, Greece, Norway, Australia, etc. Only a few examples of these are included here:

-Central Committee staff member, Stanislav Menshikov, speaking to an Australian TV audience in 1983; Australia "would no doubt be one of the targets of a nuclear attack"

¹⁸⁵Dean Rusk, oral interview, for War and Peace in the Nuclear Age, Public Broadcasting System/WGBH-TV, Boston, Transcripts of Tapes D04080 and D05007, 1985.

¹⁸⁶Department of State, Meeting Between the President and Chairman Khrushchev in Vienna, June 4, 1961. Memoranda for the conversations of 10:15 a.m. and 3:15 p.m., Declassified. (Rusk's attribution of the "...cold winter..." response by Kennedy does not appear.) See The Berlin Crisis: 1958 - 1962, Document Set, The National Security Archive and Chadwick-Healey, Washington DC, Summer 1992.

¹⁸⁷Raymond L. Garthoff, "Berlin 1961: The Record Corrected", Foreign Policy, No. 84, Fall 1991, pp. 142-145. The major studies on the Berlin Crisis, Robert Slusser (1973), Honore Catudal (1980), Hannes Adomeit (1982), Marc Trachtenburg (199-), are not referenced here.

in a nuclear war; US "bases" would be destroyed, "as well as facilities not connected with them, such as ports in which American ships might dock."¹⁸⁸

-Iceland was a frequent recipient of these messages because of the US airbase at Keflavik, as well as a port at which US attack submarines docked. A typical one was titled "Iceland, the US Aircraft Carrier": "It is absurd to believe that a country's security can be ensured by the deployment of military bases, not to mention nuclear weapons, on its territory. It is rather the other way round - the stationing of nuclear weapons on foreign territories by the USA turns these countries into targets for strikes in the event of war."¹⁸⁹

-There was another resurgence of Soviet reminders during the NATO-WTO INF deployment controversy in the early 1980s that any location of NATO nuclear weapons would suffer nuclear incineration. These were directed to the Netherlands, the UK, Sicily (Italy), etc., but also Norway again, even though that country held no NATO nuclear weapons. In October 1981 Leonid Brezhnev said that the alternative to NATO accepting the Soviet negotiating offers was to let the United States set ". . . a stage for war as if Europe were some kind of box of lead soldiers which deserves no better fate than to be dissolved in the furnace of nuclear explosions."¹⁹⁰

1983: Japan

On January 18, 1983 Japanese Prime Minister Nakasone stated that Japan could or should be "an unsinkable aircraft carrier" in defense against the Soviet long-range Backfire bomber. In addition, Mr. Nakasone indicated Japan's intentions to control strategic straits near Japan and to block passage of Soviet submarines and surface vessels.¹⁹¹

On the very next day, the Soviet news agency Tass released a statement in Moscow which, according to the Reuters dispatch, stated that:

-Japan's role as an "unsinkable aircraft carrier" would result in Japan being "a likely target for a retaliatory strike". The phrase "retaliatory strike" is one that is nearly always used in conjunction with nuclear weapons.

-that further, "for such a densely populated, insular country as Japan, this could spell a national disaster more serious than the one that befell it 37 years ago". The reference to "the national disaster ... that befell [Japan] 37 years ago" was an obvious and barely disguised allusion to

¹⁸⁸Tanjug (Yugoslavia) Press Agency, July 25, 1983; presumably US facilities such as Pine Gap and Nurrungar, long before criticized by Australian academic researchers, were the locations that Menshikov was alluding to.

¹⁸⁹Col. D. Belsky, "Iceland, the US Aircraft Carrier", Soviet Weekly, June 6, 1981, p. 7.

¹⁹⁰"Arms Control: Man in the Middle", Newsweek, December 7, 1981, p. 15.

¹⁹¹"Reagan, Nakasone Confer on Defense and Trade Issues", International Herald Tribune, January 19, 1983; H. S. Stoker, "Japanese to Study Guarding Sea Lane", New York Times, January 21, 1983; "Nakasone Confirms Remarks on Defense", Washington Post, January 22, 1983, and International Herald Tribune, January 22-23, 1983.

the use by the United States of nuclear weapons against Japan in 1945.

-The Soviet statement also said that "there were no unsinkable aircraft carriers in the nuclear age".¹⁹²

There was an aspect to this particular Soviet statement, however (which may in fact have been among the last of its character), which was totally overlooked at the time. And that was its relation to guarantees not to use, or threaten the use of, nuclear weapons against non-nuclear weapon states, to nuclear weapon free zones, and to the USSR's offer of a "No First Use" agreement for nuclear weapons to NATO, which it was pressing at the time.

On May 26, 1978, Soviet Foreign Minister Gromyko had declared from the rostrum of the United Nations General Assembly that the USSR would never use nuclear weapons against those states which renounce the production and acquisition of nuclear weapons, and which do not have nuclear weapons on their territories. The Soviet promise came during the United Nations Special Session on Disarmament, and was an expression of the "negative security guarantees", or assurances, that the Non-Nuclear Weapon States had been seeking at least since 1968. This meant that nuclear weapon states would not use, or threaten to use, nuclear weapons against non-nuclear weapon states. The 1978 security assurances by the USSR did not contain any caveats about nations allied or associated with another nuclear power, (which the parallel US statement did), and Japan therefore clearly fulfilled all the requirements for such a guarantee.

The Soviet statement of January 19, 1983 seemed to effectively wipe out the earlier promise in 1978 by the Soviet government of such assurances. The two missions of air defense and anti-submarine warfare which Prime Minister Nakasone's 1983 remarks invoked were ones that Japan's air and naval forces already had performed for quite some time. There was nothing novel in them, and they are carried out by conventional weapons. Much as the Soviet government might have been irritated with Prime Minister Nakasone's statement, and whether the intentions of the Japanese Prime Minister were wise or not, the point of this entire issue was that nothing a nation might decide to do in the way of defense capabilities based on conventional weapons should set it out for the threat of the use of nuclear weapons. The Soviet statement of January 19, 1983 did precisely that. A week after the initial Soviet statement, Yuri Andropov privately stated that the USSR might increase the targeting of Japan with its SS-20 missiles.

The USSR threw all this in the hopper for the sake of the nuclear threat, and even more, as the threat had wider implications even than undermining the Soviet government's previous position on negative security assurances to non-nuclear weapon states. First, the underlying assumption behind any proposal for Nuclear Weapon Free Zones - which the Soviets had been so anxious to see in the Baltic in the early 1980's - of course depends on the promise of neighboring nuclear powers not to use or threaten to use nuclear weapons against any of the non-nuclear weapon states joining such a zone. Second, in 1981, the USSR suggested an agreement with NATO nations on the "No First Use"

¹⁹²Reuters, Moscow, January 19, 1983; Don Oberdorfer, "Nakasone Statements Bring Soviet Warning", Washington Post and International Herald Tribune, Jan. 21, 1983.

of Nuclear Weapons in the context of any possible European conflict. Questions were then raised in the West as to whether such a Soviet offer could be credible or could be relied on in time of actual warfare. Continental Western Europe was also an "unsinkable aircraft carrier" and NATO nations as well as other European states carried out anti-submarine warfare using conventional weapon systems. The extremely sharp USSR statement regarding Japan, in time of peace and with little or no essential change in Japanese military capabilities or role, cast a good deal of doubt on Soviet guarantees at the time.

FRANCE

France disposed of several nuclear weapon delivery systems: MRBM/ICBM's, SLBMs, and aircraft, both land and carrier based. French Mirage IV land based nuclear strike aircraft had their nuclear weapons "permanently fastened underneath" the aircraft. These forces were placed in "half-alarm . . . during numerous maneuvers" and in "the cases of dubious tracks which are reported", presumably unidentified radar detections. The strategic air force was placed "under high alertat the time of the Czech events," presumably the Soviet/WTO invasion of Czechoslovakia in 1968. The planes, however, were not armed: "We were ready, in a minimum of time required to arm the planes and possibly to fly on a mission if this conflict should have worsened, if France were threatened."¹⁹³

The two French aircraft carriers, the Foch and the Clemenceau, carried Etendard and subsequently Super-Etendard aircraft for the nuclear delivery role. Both French carriers were "... currently equipping ... with tactical nuclear weapons," air dropped bombs, in 1976.¹⁹⁴ French aircraft carriers were deployed in several crises, ". . . if the situation is particularly grave or if the French President has a particularly strong diplomatic signal that he wishes to transmit."¹⁹⁵ One such instance was during Djibouti's transition to independence.¹⁹⁶ In 1993 the Foch joined other NATO ships patrolling in the Adriatic, off to the coast of Yugoslavia.¹⁹⁷ There is no publicly available information regarding French thinking on the possible role of nuclear weapons in any of the circumstances in which it deployed its carriers.

¹⁹³"La Bombe ou de A a H", Radiodiffusion Television Francaise: 1970; transcript of a TV documentary film made with the collaboration of the French government.

¹⁹⁴Admiral Joire-Noulens, "Quelle Marine et pour quoi faire des le temps de paix", Defense Nationale (July 1976), pp 21-42.

¹⁹⁵Stephen S. Roberts, "(France); Naval Policy Outside of Europe", -

¹⁹⁶"Marine et Defense de la France", Revue Maritime, (March 1977) p. 234.

¹⁹⁷News from France, (French Embassy Press and Information Service, Washington DC), February 18, 1993.

GREAT BRITAIN

During "The Confrontation" between Indonesia and Malaysia, begun by President Sukarno in 1963 and which lasted through 1966, Britain deployed military forces from all its services to defend Malaysia "including aircraft carriers and, for a spell, the Royal Air Force presence was reinforced by the visit of some V-bombers to Singapore - an event which raised the prospect of the ultimate deterrent against any Indonesian escalation of the conflict."¹⁹⁸

In December 1965 Britain placed the aircraft carrier HMS Eagle off the coast of Tanzania. Zambia feared air attack by Rhodesia at the time, and the purpose of the deployment was to prevent such attacks.¹⁹⁹ The IOC for tactical nuclear weapons on board British aircraft carriers is not known, however several British carrier borne aircraft were designed for nuclear weapon delivery not long after the UK development of its own nuclear weapon capability. The Scimitar was the first of these, and was deployed on UK aircraft carriers from 1958 to 1965, when it was replaced by Phantom F-4K aircraft. Buccaneer S-1 and S-2 aircraft were operational from 1962 at least through 1977, and were later replaced by Jaguar.²⁰⁰

In January and February 1972 Belize was still British Honduras, the last British colony on the mainland of the Americas. Guatemala had long laid claim to all of British Honduras, and a U.S. Government attempt to mediate differences had broken down in 1968. Press accounts of the period do not make clear what took place. Some reports claimed a buildup of Guatemalan troops along the border, but the British Foreign Office claimed it knew of no such reports.²⁰¹ It is also possible that the Prime Minister of British Honduras was pressing for independence. In any event, 1000 British Grenadier Guards were landed together with the arrival of a Royal Navy task force led by the aircraft carrier Ark Royal. It is possible that the naval component had been ordered to the area by the Admiralty without notice to or the approval of the British Foreign Office. Questions regarding the complement of weapons on board British carriers did not appear at the time, (as they did just 10 years later at the time of the Royal Navy deployment to the Falklands, but it is very likely that the Ark Royal did carry nuclear weapons at the time. The carriers' Buccaneer and Phantom aircraft, both nuclear capable, carried out flights over British Honduras during the "exercise . . . providing air support . . . with army units."

The 1982 events in the Falklands, however, provided the first major public attention to crisis

¹⁹⁸ James H. Wylie, The Influence of British Arms: An Analysis of British Military Intervention Since 1956; George Allen & Unwin, London, 1984, p. 68.

¹⁹⁹ James Cable, Gunboat Diplomacy, IISS., London, 1971; p. 224.

²⁰⁰ Milton Leitenberg, "Background Information on Tactical Nuclear Weapons," in Tactical Nuclear Weapons: European Perspectives, SIPRI, Taylor & Francis, London, 1978, see pp. 72;122-123.

²⁰¹ "Gunboat Diplomacy," New York Times, January 30, 1972; Patrick Keatley, "Caribbean Show of Strength," The Guardian, February 5, 1972.

deployment of British naval vessels carrying nuclear weapons. A number of the British ships that set out for the Falklands, particularly those that left from exercises in the Atlantic, were carrying their normal complement of nuclear weapons, primarily ASW weapons. When Government ministers discovered that, they were quite surprised and ordered that the weapons be offloaded en route, at Ascension Island. The British did not take nuclear weapons into the combat area in the South Atlantic.²⁰² Nevertheless there continued to be claims that they had, and that they had been on board the Sheffield when it was sunk, a dispute which continued for several years.²⁰³ Vulcan bombers, Britain's main strategic bombing aircraft at the time, were used in attacking Argentinian forces at Port Stanley airport, but this was no different than extensive use of U.S. B-52's in bombing North Vietnam, Laos, and Cambodia in the 1960's and 1970's, and no nuclear issues were raised by their use.

Of greater significance is the question of whether, and to what degree the British government gave considerations to the use of nuclear weapons. Freedman quotes one source who spoke to the press some years afterwards:

"Certainly the nuclear option was one of the options studied on 2 April (1982) . . . part of the work done that day involved examining the possibility of retargeting Polaris against Argentina."²⁰⁴

Freedman comments "that the nuclear option was raised in internal studies, only to be dismissed. . . . This was never taken seriously as a realistic possibility, and thereafter no staff work was devoted to the matter." However, if accurate, it is striking to note what the alleged "nuclear option" proposed: if British naval forces were suffering a defeat, the Argentinian city of Cordoba--Argentina's second largest city with a population of one million inhabitants--would be hit with a nuclear weapon.²⁰⁵ This allegation, however, has been denied. Lord Lewin, Chief of the Defence Staff at the time stated

"There was never any thought whatsoever of giving advice to the War Cabinet that nuclear weapons should be used. It never entered our remotest thought,"

and Admiral Leach, then Head of the Royal Navy, stated:

"We did not contemplate a nuclear attack and did not make any preparatory moves for such action. . . . No variation whatever was applied to the normal patrols of the Polaris submarine."²⁰⁶

²⁰² The most thorough discussion appears in Lawrence Freedman, "The South Atlantic Crisis of 1982: Implication for Nuclear Crisis Management," RAND N-2926-CC, May 1989, pp. V, 8-12, 16; See also Lawrence Freedman, *Signals of War*, Faber and Faber, London, 1990, and Lawrence Freedman, *Britain and the Falklands War*, Blackwells, London, 1988; and Shaun Gregory, *The Command and Control of British Nuclear Weapons*, Peace Research Report #3, School of Peace Studies, University of Bradford, December 1986, pp. 95-97; 133.

²⁰³ *The Times*, November 3, 1982; *Latin America Weekly Report* November 12, 1982.

²⁰⁴ *New Statesman*, August 31, 1984: quoted in Freedman, op. cit.

²⁰⁵ "Falkland-Krieg", *Der Spiegel*, 38:35 (August 27, 1984), p. 99; quoting the *New Statesman* probably Duncan Campbell and John Rentoul, "All out War," *New Statesman*, August 24, 1984.

²⁰⁶ Rodney Cowton, "Nuclear Option in Falklands Denied," *The Times*, August 24, 1984; quoted in Freedman, op.cit.

Freedman's conclusion is generous and optimistic, perhaps it could be described as a nuclear minimalist expectation, but even if correct, how applicable it is to carrier nuclear events that involved the U.S. and/or USSR, either alone or together, is not known:

"Britain's nuclear capability was generally considered irrelevant to the conduct of the war, but even if Argentina had been a nuclear power, as it might be one day, it is by no means clear that nuclear capabilities would have played a significant role. However, nuclear powers cannot escape their status, even when their nuclear capability has slight relevance to a particular conflict. Any risk of nuclear escalation is considered unacceptable, and a nuclear power can expect to be charged with running such a risk simply by virtue of being a nuclear power.²⁰⁷

²⁰⁷ L. Freedman, *op.cit.*

CHINA

Michael Kapitsa, Deputy Head of the Far East Department of the USSR's Ministry of Foreign Affairs, and later one of Soviet Foreign Minister Gromyko's senior deputies, recently claimed that on Khrushchev's visit to Beijing in 1958, at the time of the second Taiwan strait crises, Mao Tse Tung suggested to Khrushchev that the USSR should provoke a nuclear war with the United States. After Khrushchev suggested that the USSR and China "pool" their Pacific fleets, a proposal which the Chinese rejected, Mao reportedly said "By the way, you have nuclear arms, America is afraid of you. Why don't you provoke a war ... and strike America." Khrushchev asked what for? "To destroy imperialism forever (Mao replied)." Interviewed for the same documentary film series, Mao's interpreter, Zhu Ray Zhen, denied that Mao had ever asked Khrushchev to start a war.²⁰⁸

In his memoirs published in 1988, former Soviet Foreign Minister Andrei Gromyko presents a somewhat modified rendition which indicated a more developed Chinese suggestion on the same occasion. According to Gromyko, Mao assumed that an American attack on China would take place as a consequence of the Quemoy-Matsu crisis (which peaked in September 1958). Mao suggested that the Chinese forces would retreat when attacked, drawing US forces deep within Chinese territory, at which point ". . . the Soviet Union should catch them with all its means. . ." - destroying the US forces with Soviet nuclear weapons. Mao argued that China could survive a nuclear war even if it lost 300 million of its population.²⁰⁹ Gromyko wrote that he travelled to Beijing on a secret visit in August 1958, directly after Premier Khrushchev's discussion with Mao in Beijing in the same month, to reject Mao suggestion on behalf of the USSR. Following press previews of Gromyko's memoirs, the Chinese Foreign Ministry released a brief statement saying that Gromyko's ". . . recollection and related description do not square with the facts."²¹⁰ Unfortunately, the USSR - and Russia since - have released no official Soviet documents pertaining to the incident.

In 1989 a researcher at Stanford University, in effect, claimed to turn these allegations on their head. Referring to "recently published documents" Xue Litai claimed that "... the Chinese side of the documents say that Khrushchev wanted the buildup; he wanted the Chinese to attack the offshore islands in 1958. Khrushchev offered, indeed pressed them to get the Tupolev bombers and was willing to arm them with missiles. It was the Chinese, because they were confronted with an immense display of American power, who backed down. It was Mao who was timid under fire. It was Mao who was not willing to stand and attack. We have now a lot of Chinese materials on the whole history of the Taiwan Straits crisis, and it's clear that the Chinese were always

²⁰⁸Transcript, Program #2, "Messengers from Moscow," Pacem Distribution International, January 9, 1994, pp. 18-19.

²⁰⁹Philip Taubman, "Gromyko Says Mao Wanted Soviet A-Bomb Used on G.I.'s", New York Times, February 22, 1988.

²¹⁰"China Denies Report that Mao Sought U.S. Troop Massacre", (Reuters), Los Angeles Times, March 1, 1988.

concerned about the nature of American power, always willing to be the ones who backed down."²¹¹

The "documents" referred to have in fact never been published or released, and it appears doubtful that Xue Litai ever saw any.

At the time of the 1969 border skirmishes with the USSR, and presumptive Soviet nuclear threats against China, there is every indication that Chinese officials from Mao on down took these quite seriously, as indicated by massive civil defense measures, the digging of underground tunnel systems and the storage of grain in China's urban centers.

In October 1978, during the period of increasing Chinese-Vietnamese tensions which led to China's invasion of Vietnam, a Chinese radio broadcast announced the deployment of the "Second artillery Unit" in Yunan Province, close to the Chinese Vietnamese border.²¹² The unit is presumed to deploy intermediate range missiles, but the nature of their warheads was unknown.

There is at least one occasion on record in which Chinese government officials responded to U.S. deployment of nuclear weapon delivery systems in neighboring countries in a manner analogous to numerous Soviet statements. Interestingly enough, the remarks were made before China had developed its own nuclear weapons. They followed U.S. deployment of Matador missiles in the area in 1957. An official Chinese statement read:

"The setting up by the USA of bases for launching rockets with nuclear warheads on China's territory of Taiwan, which it occupies, and in South Korea and Japan has aggravated tension in the Far East....The setting up of such bases.....will bring inestimable disaster upon those countries first of all, should war be started by the U.S.A."²¹³

²¹¹Xue Litai referred to two apparently published works, the "memoirs of Liu Xiao" and "Han Hianlong's book on the history of Chinese foreign policy", and a promised USSR-China exchange of ". . . a grand set of documents". Such documents however have never been released, neither Soviet nor Chinese ones. April 7-8 1989 meeting at Stanford University, "Issues in Soviet Nuclear History".

²¹² "PRC: Missiles on Borders With Vietnam;" Defence and Foreign Affairs Daily, November 22, 1978.

²¹³ quoted in J.H. Kalicki, The Pattern of Sino-American Crises: Political-Military Interaction in the 1950's, Cambridge University Press, 1975, p. 180.

D. Two Alleged Cases of Unannounced Nuclear State "Alert" and/or Preparation for Use

ISRAEL

Israel has had nuclear weapons since the mid-1960's. On October 6 1973, Egyptian forces attacked across the Sinai and Syrian forces attacked on the Golan Heights in a joint campaign. Israeli military forces had not been prepared on this occasion, as they had been in 1967. Israel lost 500 tanks and 49 aircraft in the first three days. In several sectors few defenders remained between the Syrian forces and major Israeli population centers, including the city of Haifa.

At this point the senior Israeli leadership of Golda Meir and General Moshe Dayan apparently panicked and ordered a nuclear alert and the arming of a portion of the Israeli nuclear stockpile.²¹⁴ It is not clear how many weapons were armed, but they appear to have included Jericho missile launchers located at Hirbat Zachariah and eight F-4 aircraft kept on 24-hour alert at Tel Nof airfield. The initial target list allegedly included the Egyptian and Syrian military headquarters in the vicinities of, respectively, Cairo and Damascus, but these targets may have been altered. Mohammed Heikal later reported that Soviet military officials had informed the Egyptian Chief of Staff that Israel had armed and prepared three warheads for use. There are also indications that the U.S.S.R. further informed both the United States and other Egyptian officials on October 9, and that Israeli communication intercepts had recorded those notifications.

It is at this point that Brezhnev proposed to Henry Kissinger that Soviet and U.S. troops be placed as an interposition force between the Israeli and Egyptian armies. He added that if the U.S. was not interested in such a collaboration, the U.S.S.R. would airlift several divisions to the region to serve the function alone. The U.S. response was a nuclear alert, ordered by Henry Kissinger and then Secretary of Defense James Schlesinger, and Israel apparently placed its nuclear forces on alert for a second time in response to the U.S. alert. Finally, and only at the end of this sequence did the alleged transport of Soviet nuclear warheads through the Bosphorus take place. This last portion of the events is disputed in a half-dozen contradictory accounts, and these are discussed in the summary of the 1973 alert, below, in the sections on both the U.S. and U.S.S.R.

²¹⁴Seymour M. Hersh, The Samson Option: Israel's Nuclear Arsenal and American Foreign Policy, Random House, New York City, 1991, (Chapter 17, "Nuclear Blackmail", pages 225 to 240).

PAKISTAN

There is only one public description of the events that occurred in May 1990²¹⁵, and although it appears not to be altogether accurate, there has never been any public explanation by U.S. government officials (or any other) to clarify the record.

According to declassified U.S. government estimates, Pakistan's uranium enrichment plant had produced enough weapons grade material to build several nuclear devices per year throughout the 1980's.²¹⁶

In 1986, India had carried out the largest military exercise in its history, involving over a thousand armored vehicles, 400,000 troops, and all branches of the Indian armed forces. Named "Brass Tacks", the exercise was carried out about 100 miles from the Pakistani border, and integrated Indian tactical nuclear weapons into the maneuver. In response, Pakistani armored units moved to the border, and in mid-January the two forces faced each other within firing range along the border. The Indian exercise had been carried out in secret, with no public notice. At this point the Indian government notified its press of the maneuvers. Simultaneously, the head of the Pakistani atomic energy and nuclear weapons development program provided an interview to an Indian reporter in which he stated that Pakistan had nuclear weapons that it did not want to use them, but "... if driven to the wall there will be no option left." The confrontation abated.

Between January and late-April 1990, Indian armored forces were again deployed in the same Rajasthan desert area, within 50 miles of the Pakistani border, and 200,000 troops were deployed to Kashmir. Pakistan again moved its own armored forces to the Indian border, and this time allegedly also armed F-16 aircraft with nuclear weapons. U.S. Deputy National Security Advisor to the President, Robert Gates was sent to the Pakistani and Indian capitals to confer with both governments and to defuse the confrontation.

Subsequent to the publication of the above report, Gates, as well as unidentified State and Defense Department officials remarked to journalists on an unattributable basis that the above narrative was exaggerated, insofar as Pakistani F-16 aircraft had not been armed with nuclear weapons during the crisis. There appears to be no clear evidence at this point to provide a confident assessment of what actually did or did not happen.

²¹⁵The sole source is Seymour Hersh, "A Reporter at Large: On the Nuclear Edge", The New Yorker, March 29, 1993.

²¹⁶"Memorandum for Dr. Kissinger"; President's Foreign Intelligence Advisory Board; July 18, 1986, Declassified.

E. U.S.-U.S.S.R. Attempts at Amelioration

- (1) The Hot Line, and its updates (1971; 1984)
- (2) The 1971, 1972, and 1973 U.S.-U.S.S.R. agreements
- (3) The 1987 Nuclear Crisis Reduction Centers
- (4) The 1989 Dangerous Military Activities Agreement

By way of background, introduction:

- (a) The complete failure of the 1958 US-UK-USSR Surprise Attack Conference. The conference was convened at US urging, and US proposals suggested during the conference dealt with basic issues; the USSR wanted a blanket non-aggression treaty (which they again sought 20 years later).
- (b) In all the decades of arms control studies carried out under the aegis of the UN Secretary General's office, no study was ever produced on the subject of surprise attacks.
- (c) US Sec. of Defense McNamara began attempts to arrange meetings between the US Joint Chiefs of Staff and the USSR's General Staff; proposals for such meetings were rejected by the USSR for 15 years. Tentative first conversations were held by General Jones and General Ogarkov during the SALT II negotiations, and then initiated in earnest under Gorbachev's tenure, in 1988-1989.

The Agreements:

- June 1963; Memorandum of Understanding Between the U.S.A. and the U.S.S.R. Regarding the Establishment of a Direct Communication Link
- November 1966; France-U.S.S.R. Direct Communication Link
- August 1967; U.K.-U.S.S.R. Direct Communication Link
- September 1971; U.S.A.-U.S.S.R. improvements to the Direct Communication Link
- September 1971; Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the U.S.A. and the U.S.S.R.
- May 1972; Agreement Between the U.S.A. and the U.S.S.R. on the Prevention of Incidents on and Over the High Seas
- 1972; Basic Principles. . .
- May 1973; Protocol to the Prevention of Incidents on and Over the High Seas
- June 22, 1973; Agreement Between the U.S.A. and the U.S.S.R. on the Prevention of Nuclear War
- July 1976; Agreement Between France and the U.S.S.R. on the Prevention of the Accidental or Unauthorized Use of Nuclear Weapons
- October 1977; Agreement Between the U.K. and the U.S.S.R. on the Prevention of Accidental Nuclear War
- July 1984; "Hot Line" Expansion Agreement
- September 1986; Document of the Stockholm Conference on CSBM
- September 1986; International Treaty on notification of military as well as civilian nuclear accidents; Nuclear weapon states promise to report on nuclear weapon accidents as

well, which are still excluded from the treaty proper
 September 1987; Agreement Between the U.S.A. and the U.S.S.R. on the Establishment of
 Nuclear Risk Reduction Centers
 June 1989; Dangerous Military Activities Agreement.

Comment, Assessment, Analysis:

Essentially disparaging, until the 1986 and 1987 agreements.

- (1) U.S. Secretary of Defense Robert McNamara's rendition of the President Johnson-Premier Kosygin use of the "hot line" in the 1967 Mideast war: an unqualifiedly disastrous conversation, essentially a Soviet threat. It was not used often, and experience with it when it was used was often poor.
- (2) In the September 1971 US-USSR (Measures to Reduce the Risk of Outbreak of Nuclear War) agreement, Articles 2, 3, and 5 that refer to nuclear weapon and missile accidents are filled with caveats instead of being mandatory. The international agreement in September 1986 provided for mandatory reporting, either bilaterally or via the IAEA, for any nuclear accident involving civilian or military nuclear facilities or materials, with the exception of nuclear weapons or nuclear weapons testing. However the five nuclear weapon states "affirmed their intent also to report accidents arising from such activities."
- (3) the 18 month prelude to the U.S.-U.S.S.R. incidents at sea agreement; why and what was taking place was discussed in an earlier section of the study.
- (4) and what took place after the agreement; the number of incidents per year decreased by two-thirds; but left a rate of one per week.
- (5) the 2 U.S.-U.S.S.R. 1971 and 1973 agreements and the 1972 Basic Principles had no operational value and were not serious at all, and when rapidly followed by the October 1973 Mideast Crisis, the treaties were scarcely referred to except for the expression of disagreement as to when they would apply to any real event. The USSR had pressed for the agreements, and Kissinger described the USSR's motive for pressing for them during SALT as Soviet interest in gaining US approval for joint US-USSR action against China. The US rejected those suggestions and the treaties were a diplomatic outcome of the rejections.

In a marvelous display of diplomatic frippery Kissinger described the agreement in 1973 as a "significant step toward the prevention of nuclear war" and "a significant landmark in the relationships of the United States to the Soviet Union and in the relationships of the two great nuclear countries toward all other countries in the world." However, in his memoirs, published in 1979, he harshly commented that ". . . we eventually agreed in June 1973 on a bland set of principles that had been systematically stripped of all implications harmful to our interests".

Raymond Garthoff presents an alternative and much more sympathetic evaluation of the 1971 and 1973 agreements than that presented here, arguing that they had intrinsic value. See his extensive study, Detente and Confrontation: American-Soviet Relations from Nixon to Reagan, The Brookings Institution, Washington, D.C., 1985, and Revised Edition, 1994.

- (6) significant loopholes in the 1986 CSBM: No advance notification required for alert

exercise of any size, or for mobilization in place, or of buildup of forces in garrison.

- (7) The 1987 US-USSR Agreement on Nuclear Risk Reduction Centers. "These centers serve as confidence building measures intended to reduce the risk that nuclear war between the superpowers might be initiated by accident, miscalculation, or misunderstanding." However, they are a bit less than one might imagine; they are not to serve as a crisis management role, but essentially as a transmission point for data exchange provisions in a series of US-USSR agreements:

- SALT
- INF
- 1971 Accidents measure
- 1972 incidents at sea agreement
- missile test notifications
- any additional US-USSR treaties signed after 1987

US personnel staffed the Washington Center, and Soviet (now Russian) personnel staffed the Moscow one, and they were served by a direct satellite link as established in the 1984 Hotline modernization.

- 8) The June 1989 US-USSR Dangerous Military Activities Agreement was perhaps the first (in addition to the 1972 incidents at sea) to deal with real and dangerous US-Soviet military interactions that traditionally develop into incidents. Appropriately named, it called for the establishment of special communications channels between all types of US and Soviet military forces, to avert

- (1) accidental border incursions (the Czech MIG attacks on US helicopters; reconnaissance flights)
- (2) exposure to laser devices (Soviets' "illumination" of US bomber flight crews and US satellites)
- (3) disruption of military activities in high tension areas. It is possible that this provision was subsequently expanded to cover "low tension" areas as well (Soviet destroyer firing at US P-3 overflight, and another incident in which a Soviet naval vessel in the Baltic fired at low flying Swedish reconnaissance aircraft.)

CONCLUSIONS:

Many years ago, Bernard Brodie called into question the notion that any large-scale conflict could be the result of "accident", and pointed out that there had been no such thing as an "accidental war" in 300 years.²¹⁷ He did not think nuclear weapons would make such an event any more likely than it had been before. In all the substantial number of cases when nuclear weapons were used as instruments of threat and coercion during international crises, "alerts", etc., in the post W.W.II period - some 45 years - none of the occasions of such use were accidental. They may have been ill-considered or in our opinion foolish, catastrophically dangerous or provocative as precedents, but they were not "accidents". To re-emphasize this, they were not "accidental", "inadvertent", "unintentional", or "stumbled into". All the talk of the risk or possibilities of "accidental" or "inadvertent" nuclear war a decade ago was thoroughly misleading.²¹⁸ One cannot say that such a thing absolutely could never happen, but it is not what the historical record showed did happen, and amply so. Escalation could conceivably occur as a result of an exchange of sequential threats, and that might be termed "miscalculation", but that is a very different matter. In addition, the use of nuclear weapons was proposed, and on occasion seriously considered, although the last such instance may have been 25 years ago.

Finally all the misleading talk of "accident" and "unintentional" was itself not "accident": neither the US nor the Soviet government was much interested in explaining to their own or to an international public exactly what they did do - the activities that both carried on routinely - that ran substantial risk, and thereby set the discussion on a more meaningful track. Nuclear equipped forces were deployed worldwide, they interacted constantly, they were moved during crises, in short, they were used, and the US and Soviet governments chose to continue those practices. The real and overwhelming danger was policy and military operational practice, four decades of routine, constant and ongoing practices and behaviors by the US and by the USSR, all duly decided upon and carried out. Two of the larger areas of operational practice in which this applied were the kinds of interactions and engagements of the US and Soviet military forces reviewed in Part B of the study, including the WTO/NATO interactions of tactical and INF ("LRTNF", etc.) nuclear weapons. Interactions could have gone wrong in any of these areas independently, or in combination. "Confidence Building Measures" did not address the likely interactions of such acts as dispersion of theater nuclear weapons

²¹⁷Bernard Brodie, "On Clarifying the Objectives of Arms Control", ACIS Working Paper No. 1, University of California, Los Angeles.

Brodie wrote

"By 'accidental war' I mean not only one which neither side wanted but also one where neither side realized until war was actually upon it that the policy it was pursuing would make that war unavoidable. It is of such a definition that I can find no historical example this side of the Thirty Years' War, which was also not accidental."

The same point is demonstrated in Richard Ned Lebow's superb historical review, Between Peace and War: The Nature of International Crises, Johns Hopkins University Press, Baltimore, 1981.

²¹⁸It is probably not fair to pick out one of the more serious studies at the time, but one example is Daniel Frei, Risks of Unintentional Nuclear War, Geneva: United Nations Institute for Disarmament Research, Geneva, 1982.

in a European crisis with long-standing military criteria for likelihood and expectation of attack and preemption.

But what was the period of greatest danger? Was it in 1962 when US aircraft carriers were in the SIOP and on location, carrying 100 MT each, when TAC was to deliver 22,000-24,000 MT on the USSR in 48 to 60 hours, when SAC carried 20 MT weapons among others, when the US stockpile was at its height, in numbers and in megatonnage and Soviet targets were not yet hardened, when there were no "fratricide" constraints, no "nuclear winter" constraints, weapons allocation was often 4 to 6 per target, and the psychology of many members of the US Joint Chiefs of Staff in those years was both "can do" and to do²¹⁹. If very great one-sided superiority is more dangerous, that was the time. Or was it safer because the USSR wouldn't act then, wouldn't contest, and everything depended on US self-control. But the Cuban and Berlin crises, both precipitated by the USSR, came precisely then. It was in 1961 that Khrushchev had said:

". . . There was a time when the American Secretary of State Dulles brandished thermonuclear bombs and followed a policy of 'from positions of strength' with regard to the Socialist countries. . . That was bare-faced atomic blackmail, but it had to be reckoned with at the time because we did not possess sufficient means of retaliation, and if we did, they were not as many and not of the same power as those of our opponents.

"But today the situation has changed radically. . ." ²²⁰

But, in fact, the situation hadn't changed very much at all yet, at least not vis a vis the continental US, although Europe was by then certainly vulnerable to Soviet nuclear attack. And in the 1987 to 1992 reassessments of the Cuban missile crisis, one finds the major US participants claiming that the nuclear balance between the US and USSR had not been a significant factor in the outcome, and that the determining factor was the very great US conventional military superiority in the area. Moreover, they (suddenly!) didn't see that there had been much danger of nuclear war during the Cuban crisis. Former Secretary of Defense McNamara stated that "the danger wasn't one of nuclear war but of uncontrollable conventional war"²²¹, and Ray Cline, the senior CIA intelligence analyst in 1962 who briefed President Kennedy, his National Security Advisor, McGeorge Bundy and the members of the Excom, wrote in 1989 that "none of the informed officials I talked with at the time thought the chances

²¹⁹Milton Leitenberg, United States Counterforce Nuclear Weapons Capabilities, FOA/Ministry of Defense, Stockholm, 230 pages, 1985.

²²⁰Soviet Stand on Germany, 1961, op. cit., p. 145.

²²¹Quoted in Marc Falcoff, "Learning to Love the Missile Crisis", The National Interest, No. 16 (Summer 1989), p. 69.

As if to corroborate that assessment, a year after the Cuban missile crisis, in November 1963, Khrushchev would say at a Kremlin celebration of the Bolshevik Revolution, that "If the Americans attack Cuba, we shall attack America's allies who are even closer to the Soviet Union", (Quoted in Michael Beschloss, The Crisis Years, Kenedy, and Khrushchev, 1960-1963, 1991, p. 659), but US policymakers had feared that at the time of the Cuban missile crisis as well. However, as we have already seen in the rendition of the 1958 to 1961 Berlin crisis, US plans for dealing with any Soviet attack on West Berlin in those years were virtually all nuclear.

(of 'actual nuclear exchange') were more than one in a thousand."²²²

But things did change: the US-USSR strategic nuclear balance, and both Soviet capabilities and proclivities for external military engagement beyond those in the WTO countries in which it had occupation forces since 1945. Some see true strategic parity having come with a certain level of Soviet ICBM launchers, in the late 1960's and the initiation of the SALT negotiations, others see it as arriving a half-dozen years earlier, in a functional sense, when some particular level of potential US casualties even after a US first strike would no longer be considered acceptable, and others not until the arrival of Soviet MIRV's and substantial ICBM accuracy in the late-1970's. In any case, in the mid and late 1970's, following the US withdrawal from Vietnam in 1975 and with the tenure of a truly anti-interventionist US President - Carter - Soviet interests in contending force projection unquestionably increased. The fact that by that decade Soviet (or US) strategic sensors were better, and experience of discerning exercises, etc., much longer, those factors certainly didn't improve security at all: policy worked in the opposite direction, and to a very much greater degree. The naval incidents at sea numbers in 1970 and 1971 were already the indication of that, even though there was also some indication - if only partial - of a bilateral interest to control events. Now both sides had worldwide capability, deployable forces, and third world clients, and both in their turn took opportunities to use them. And both had counterforce, hard target, first strike, and Launch on Warning/Launch Under Attack nuclear targeting policies and the forces for them. It was precisely those US policy makers who knew what use the United States had made of the combination of strategic superiority and worldwide military projection forces who most feared the possibility that the USSR would now practice precisely the same behavior, to the disadvantage of US interests and positions. The notion that the USSR would use its newly gained capabilities to pressure US positions and clients in the third world was explicit in numerous of the statements of the more intellectual of the figures such as Paul Nitze and Fred Ikle in the Committee on the Present Danger in the years 1975 to 1981.²²³ It was in

²²²Ray S. Cline, "The Cuban Crisis Revisited: Nuclear War Seemed Remote", Washington Post, February 5, 1989.

²²³In 1978, Fred Ikle wrote:

"Here we enter a realm of ghastly speculation. It may well be that the anticipation of nuclear war, when it turns into an immediate possibility, is so horrendous, so unfathomable in all its implications, that no responsible leader - not even the future masters of the kremlin - would ever want to cross the last threshold. But if this is the case, then conventional arms would presumably carry the day, and we would presumably lose.

"Alternatively, it might turn out that nuclear weapons are usable - in which case we could be even worse off. For in this case the nuclear threat could be turned against us, more convincingly and brutally than we ever wielded it against Stalin or Khrushchev. Even as recently as 1973, during the Mideast War, it was still the United States that reminded the Soviet Union of the nuclear threat. By alerting our nuclear forces, President Nixon meant to send Brezhnev a message of our determination. In another US-Soviet crisis it could well be the other way around. The President might receive the chilling news that the Russians had alerted their nuclear forces first. At that point, the long-suppressed fear of nuclear war would suddenly dominate our thinking. We could no longer ignore the fact that the changed nuclear balance had shortened the reach of our deterrent. In a distant but vital area - such as the Persian Gulf region - how could we rescue American conventional forces from defeat?"

fact a repeat of fears that had also been professed by President Nixon and Admiral Moorer (Chairman of the US Joint Chiefs of Staff) in 1969-70.

Was this therefore the period of greater - or greatest risk? That was difficult to say. Yes, there were more interactions in third world locations, and now that both sides were equal, an escalation chain in a particular incident was much more likely to occur. Yet perhaps that same equality, the fact that there was a strategic balance, meant that neither side would do rash things, and if there was a conventional US-USSR military confrontation in an LDC, both would make substantial efforts to contain it. All this was theoretical speculation. The rhetoric of both sides certainly wasn't helpful in the early 1980's: the Reagan administration's fondness for the notion of "horizontal escalation" appeared to be slightly suicidal, and the 25-year-long claim by the USSR that any initial engagement would lead to total escalation and all-out nuclear war was continued, despite its implausibility. My own conclusion was to assume that the increase in Soviet conventional force projection capabilities and the inclination to use them would make for a continuing and constantly increased period of tension and risk. Writing in 1985 and 1986, I anticipated a period of one confrontation after another.²²⁴ "Detente" had been an utter failure, in regard to the US-USSR strategic weapon competition, the buildup of conventional projection forces in both the US and USSR, and once President Carter was gone, both sides military engagement in the third world.

Then Mikhail Gorbachev came along and changed the policies and the practices of the USSR, and the resultant expectations changed as sharply. Which of the two periods - 1955 to 1964 or thereabouts, or 1970 to 1985 - had been the one of greatest risk for US-USSR nuclear interaction is difficult to say; both were dangerous, for different reasons.

Fred Ikle, "What it Means To Be Number Two", Fortune, November 20, 1978; p. 82.

²²⁴Milton Leitenberg, "United States and Soviet Strategic Arms Control: The Decade of Detente, 1970-1980, and a Look Ahead", Arms Control (UK), 8:3 (December 1987), pp. 213-264.