

# F.A.S. PUBLIC INTEREST REPORT

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SPECIAL ISSUE:  
PD-59 &  
COMMAND AND CONTROL

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## COMMAND AND CONTROL: USE IT OR LOSE IT?

We have adopted a so-called countervailing strategy whose purpose is to make it clear to the Soviets that we could respond to an all-out Soviet attack not only by targeting and attacking their industry but also their military capabilities so as to deny them, by any plausible definition of victory, a victory in a nuclear exchange...

To that end we need to maintain forces able to survive a Soviet attack and deal a victory denying counterblow while maintaining significant forces in reserve, *assuming that we have command and control and communications to operate those forces.*

—Secretary of Defense Harold Brown, FY 1981

Nothing ought to be of more concern to arms controllers than the growing disproportion between the extraordinarily good ability to command, control, and communicate (C<sup>3</sup>) with strategic forces before they are attacked, and the very poor ability thereafter.

A nation that strikes first with strategic forces does so with its command structure, control mechanisms, and communication devices wholly intact, alerted and ready. Each and every telephone line, satellite, and antennae is functioning and every relevant person is alive and well. By contrast, the nation which seeks to launch a retaliatory attack may find its chain of command highly disrupted, its telephone lines dead, its satellites inoperative, its radio signals interfered with, and its communications officers out of action.

This always dramatic disproportion is today increasing. The *unattacked* forces have ever more flexible first-strike capabilities. They can be retargeted with many options, and have ever increasing accuracy against hardened targets such as missile silos or command bunkers. Accordingly, no fixed land-based target, or set of targets numbering in tens or hundreds, can be expected to survive a deliberate attack. Indeed, as a result of MIRV, strategic forces have the capacity to strike thousands of targets which means, in particular, that airspace could be barraged making even airborne command posts of uncertain survivability.

### EMP From Only A Few Bombs

Worst of all, as indicated within, the effects of such electrical phenomena as electromagnetic pulse could be used with devastating effect, with only a few nuclear weapons, to put satellites out of action while affecting the communications of an entire enemy continent. Considering that tens of nuclear weapons could be spared for this purpose alone, and that a handful might suffice, the feasibility of highly organized retaliation in response to a massive attack is questionable.

It has long been argued by arms controllers that vulnerable strategic forces, such as ICBMs built in exposed ("soft") locations, were a form of "instability" precisely because they were effective if fired first but—because vulnerable to attack—useless in retaliation. Such a

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## NUCLEAR WAR-FIGHTING PLANS SURFACE

On August 6, the Administration took a pre-emptive strike at the Republican platform by leaking its Presidential Directive (PD) 59 which was subsequently defended by Secretary of Defense Brown on August 20. The leaks emphasized U.S. attacks on Soviet command and control and/or leadership bunkers. FAS was instrumental in raising the question of how these measures squared with the need to terminate the war. And in a subsequent statement (see page 7) timed to the Secretary's speech it argued that PD-59, "evolutionary" though it might be, was effectively rationalizing the new hard-target kill capability that MX would soon make possible. Indeed, on September 7, the New York Times carried reports that the chief of the Strategic Air Command, General Richard H. Ellis had written Secretary Brown that PD-59 could not, in fact, be carried out until MX (and cruise missiles and Trident-armed submarines) became available.

Presidential Directive 58 on protecting the leadership (which became known on August 12) would presumably update or complement the almost 100 existing Federal

relocation centers for government personnel. (Among other things, it would match the reported existence of as many bunkers around Moscow for similar purposes.) Meanwhile, PD-53 would attempt to improve military communications. For the significance of these events, especially PD-59, an insightful article by Dr. Desmond J. Ball of the International Institute for Strategic Studies is printed on page 3.

Meanwhile, assertions were made in Washington that the Soviet authorities were gaining confidence that they could "win" a nuclear war; on investigation, see page 6, these rumors could not be supported from the unclassified literature.

The great vulnerability on our side (see page 3) for the Soviet side), appeared to be command and control for which see the above comments upon which members are asked to comment. How should FAS view the various aspects of C<sup>3</sup> and what are the arms control implications? □

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disproportion between their value on first and second strike, respectively, was considered both a temptation to enemy attack and an inducement to one's own pre-emption. In a crisis, it would lead military officers to recommend to political authorities that it was "now or never." (As a latent form of this recommendation phenomenon, observe that the Strategic Air Command chief wrote Secretary Brown on April 9, 1979, that the countervailing strategy options could only be exercised if the United States fired its missiles at the first sign of an attack or attacked first. See Washington Post, August 21, 1980.)

But nothing has the extraordinary "use it or lose it" quality of command, control and communications under modern conditions. And precisely because the strategic forces of the two sides include nuclear submarines, whose basing is highly invulnerable to direct attack, the vulnerability of what is termed C<sup>3</sup> is getting attention as the weakest link in the deterrent.

Moreover, assuming that enough command and control survive to fire spasmodically, the C<sup>3</sup> may be insufficient for controlled responses. That neither side is likely to be able to control its forces once more than some tens of nuclear weapons have been fired is probably the most decisive argument against limited nuclear war, and the best argument that it would surely escalate.

### A Conclusion For Arms Controllers

Perhaps the single most important conclusion for arms controllers in confronting this subject is the importance, for each side, of avoiding attacks on command, control, and communication (including satellites) if, somehow, nuclear forces are deliberately or accidentally fired. Preparations to attack C<sup>3</sup> are, in effect, a kind of supercounterforce and correspondingly destabilizing. Should either side carry out deliberate efforts to attack the C<sup>3</sup> of the other, it appears almost certain that a spasm war would result in which the attacked nation gave its military commanders either by prior agreement or last desperate message, the authority to fire at will. As its ability to communicate gave out, it could and would do no less than use its last communications channel for the final order.

To get some idea of the dimensions of the problem, the United States C<sup>3</sup> involves the following very short (and vulnerable) list of military command centers. One Soviet nuclear weapon could put both Washington (with all 16 civilian successors to the President) and the Pentagon (the major command post) out of action. The Alternative National Command Post at Fort Ritchie is vulnerable also to direct nuclear attack in an era in which the accuracy of Soviet missiles with large warheads is approaching one-tenth of a mile. The Strategic Air Command headquarters in Omaha would not survive a direct attack. Nor would the headquarters of the Commander-in-Chief of our force in Europe (CincEur), the Pacific (CincPac) and the Atlantic (CincLant).

True, the latter three headquarters have airborne command posts ready to take off with their commanders, but would they do it on time? Just as the Afghanistan invasion

started on Christmas Eve, and the Yom Kippur war on Yom Kippur, even attacks induced by crises would be expected to occur at night or unexpected times. Would the military leadership be able, for example, to get into its plane in less than a half an hour (or even 15 minutes) to escape the atomic cloud.

The Strategic Air Command's "Looking Glass" headquarters is permanently in the air. Thus, it has a certain amount of what is termed "location uncertainty." But consider the diagram on page 3 showing that a single explosion detonated in the atmosphere about 300 miles above

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Chicago would produce an electromagnetic pulse coverage of 25,000 volts per meter over the entire United States and adjacent waters! Aircraft are vulnerable to these effects at ranges "very dependent on many factors" according to an article in *Signal Magazine* of January, 1980. See also "Doomsday Plans Are Vulnerable To N-Pulse" in which Joseph Albright of the *Atlanta Constitution* (24 September, 1980) says even the electronically hardened Boeing 747 (E-4Bs) which have not yet replaced the electronically vulnerable command posts (E-4As) would lose 26% of all critical circuits if flooded with an 800-volt electromagnetic pulse. Thus, there is a real chance that even airborne command posts might not be operative. Here is what the Defense Department says about EMP:

The effect of nuclear weapon detonations, particularly those occurring at high altitudes, is of continuing concern . . . Such detonations can cause electromagnetic pulse (EMP) and radio propagation blackout over wide areas of the earth from only a few suitably located explosions, *not necessarily relatable to an act of war. (italics added)*

The United States also maintains certain Minuteman missiles with radio transmitters, rather than warheads, which it proposes to launch into a very high ballistic missile orbit from which the transmitters would scream out a last message for about one half hour. Whether these missiles can be safely hidden amidst the other 1,000 armed Minuteman missiles is a question only the U.S. Air Force (and/or Soviet intelligence) are qualified to guess. But, obviously, attacks on all Minuteman missiles would, presumably, have a reasonable probability of destroying the handful devoted to message carrying.

### Would The Messages Arrive?

In addition to attacking these C<sup>3</sup> nodal points, a calculated attack could be expected to try to cut the links between the points so that messages to them even if they survived, would not arrive.

Some tentative conclusions upon which FAS members are encouraged to comment for the December Report seem to be as follows:

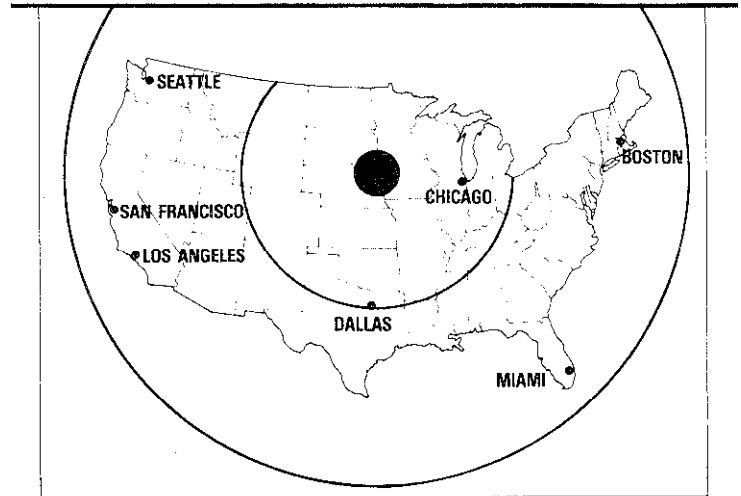
We should improve the survivability of our C<sup>3</sup> to the point where it does not tempt attack in crises as a way of neutralizing our entire strategic force.

But we ought not talk of attacking Soviet command and control lest we simply encourage the Soviet Union to devolve nuclear authority in advance on ever more junior officers. Further, we ought not, in fact, launch such attacks, unless *our* command and control is attacked lest we lose all chance of war-termination. In particular, Soviet leadership bunkers ought not be attacked except in some final parting salvo as an alternative to attacking Russian innocents in cities.

We ought not kid ourselves that we are prepared to fight a protracted nuclear war when no plausible improvement in C<sup>3</sup> is likely to permit it; countervailing strategies with numerous complicated options that cannot, in fact, be carried out could become an expensive kind of self-delusion.

In particular, as General Ellis pointed out above, these

EMP GROUND COVERAGE OF AT LEAST 25,000 v/m  
FOR BURST HEIGHTS OF 100 Km (INNER RING) AND 500 Km.



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options require more and more warheads (that is, if they are going to be carried out *in retaliation*) and thus the options could and will dominate our procurement planning for a long time if we permit our war plans to be built around such ambitious possibilities. □

### SOVIET C<sup>3</sup>—REDUNDANT BUT RIGID

Overall, the Soviet C<sup>3</sup> system for the strategic nuclear forces is believed to be at least as good as that of the United States. Indeed, the former U.S. Navy Secretary J. William Middendorf declared in 1975 that "the Soviets have the best command and control one can imagine." True, some elements, such as the airborne command posts and satellite early-warning and real-time intelligence systems, are technically much less capable than their U.S. counterparts. On the other hand, protection of the political and military leadership is much more comprehensive, and the extensive and redundant communications links make it difficult for any U.S. strike to isolate the Soviet national command authorities completely from the strategic forces or to destroy the whole strategic intelligence network.

Perhaps the greatest weakness in Soviet C<sup>3</sup> is its reliance on highly centralized command-and-control procedures which expose the whole system to disruption. Observation of Soviet military exercises gives the impression that ships, aircraft and commands have carefully and specially planned roles, and that operational communications flow directly between headquarters in Moscow and the individual units in the field. Local commanders seem to have relatively little scope to adapt general orders to receive central orders. This tendency could be even more pronounced in the strategic forces, since Soviet leaders would be particularly loathe to allow lower commands much room for initiative where nuclear weapons were concerned.

—From *Strategic Survey, 1979, International Institute for Strategic Studies.*

## PD-59: A STRATEGIC CRITIQUE

by Desmond J. Ball

It is fundamental to any evaluation of the new targeting policy formally adopted by the Carter Administration on 25 July to appreciate that, contrary to some media claims regarding the novelty of the concepts, they are really not all that new. There have been some changes of emphasis and priority, undertaken in a very evolutionary way, rather than any drastic revision of either the basic guidance for the employment of nuclear weapons in the event of a nuclear exchange with the Soviet Union (the NUWEP) or the actual targeting plans (the SIOP).

The SIOP has, at least since 1962, contained a range of options. The current SIOP, SIOP-5D, includes some 40,000 designated target installations which not only allows great scope for choice, but actually requires such choice since there are only 9,200 weapons in the SIOP force. These installations cover a variety of target types, divided into four general categories: Soviet nuclear forces, other military targets, political and military leadership facilities, and the Soviet economic-industrial base. The Soviet nuclear forces only became a separate target set in August 1950, but the other three categories had all been present in the war plans of the late 1940's. The fact that current planning requires that relatively less emphasis be accorded the destruction of the Soviet economic and industrial base and that greater attention be directed toward improving the effectiveness of our attacks against military targets should not obscure another fact that military targets already account for just one half the target installations in the SIOP — with the other 20,000 made up of 3,000 targets associated with the Soviet nuclear forces; 2,000 leadership targets; and some 15,000 economic-industrial targets.

Part of what *is* new is the appreciation that the choice of targets is as much an exercise in deterrence as the execution of the plans is in war-fighting. As one White House official stated in late 1977, as the NTPR got underway, "In the past nuclear targeting has been done by military planners who have basically emphasized the efficient destruction of targets. But targeting should not be done in a political vacuum.

"Some targets are of greater psychological importance to Moscow than others, and we should begin thinking of how to use our strategic forces to play on these concerns." (New York Times, 16 Dec. 1977)

Hence there are some changes to exploit potential Soviet fears, such as threatening Moscow's food supply or making a target of Russian troops in the Far East ('kicking the door in!') so the Soviet Union would be more vulnerable to attack from China; and some consideration has been given to the adaptation of targeting to the dismemberment and regionalizations of the USSR, enhancing the prospect for regional insurrection during and after a nuclear exchange.

The most important consequence of this notion of targeting what the Soviets fear most, however, is the attention now being devoted to the targeting of the Soviet *assets for political control* — the Soviet state and its instruments of domestic and external coercion. But how realistic is this

both as a strategy policy and as a targeting objective? Unless it is realistic, and is perceived by the Soviets as such, it has no value as a deterrent.

The second noteworthy aspect of the recent developments in targeting policy is the recognition that the current US *command, control and communication* (C<sup>3</sup>) system is inadequate to support any policy of extended nuclear war-fighting. Hence the issue of Presidential Directives 53 and 58 and a wide range of other measures intended to improve the *survivability* and the *endurance* of the US C<sup>3</sup> system. But is it really possible to design a C<sup>3</sup> system that can operate in a nuclear environment in such a way and for a sufficient length of time to support the current US strategic policy of *escalation control*?

Let me address these two questions. First, how realistic is the concept of counter political control targeting? There seem to me to be several problems. One is that political control assets comprise, potentially at least, an extremely large target set. Political control in the Soviet Union emanates from the Kremlin in Moscow outward through the capitals of each of the Republics and down through those of the Oblasts and the Krays. Targeting the CPSU headquarters and other governmental and administrative buildings in each of these, as well as military headquarters and command posts and KGB centres throughout the Soviet Union could require many thousands of weapons. Already, the Commander of SAC has written to Secretary Brown to the effect that coverage of all these political control assets would require a major increase in the SIOP forces. To be effective, then, this policy could come into conflict with arms control objectives.

There is also the problem that the locations of many political control assets are not known. This is a tacit admission in the following statement by Secretary Brown in his *F. Y. 1981 Posture Statement*:

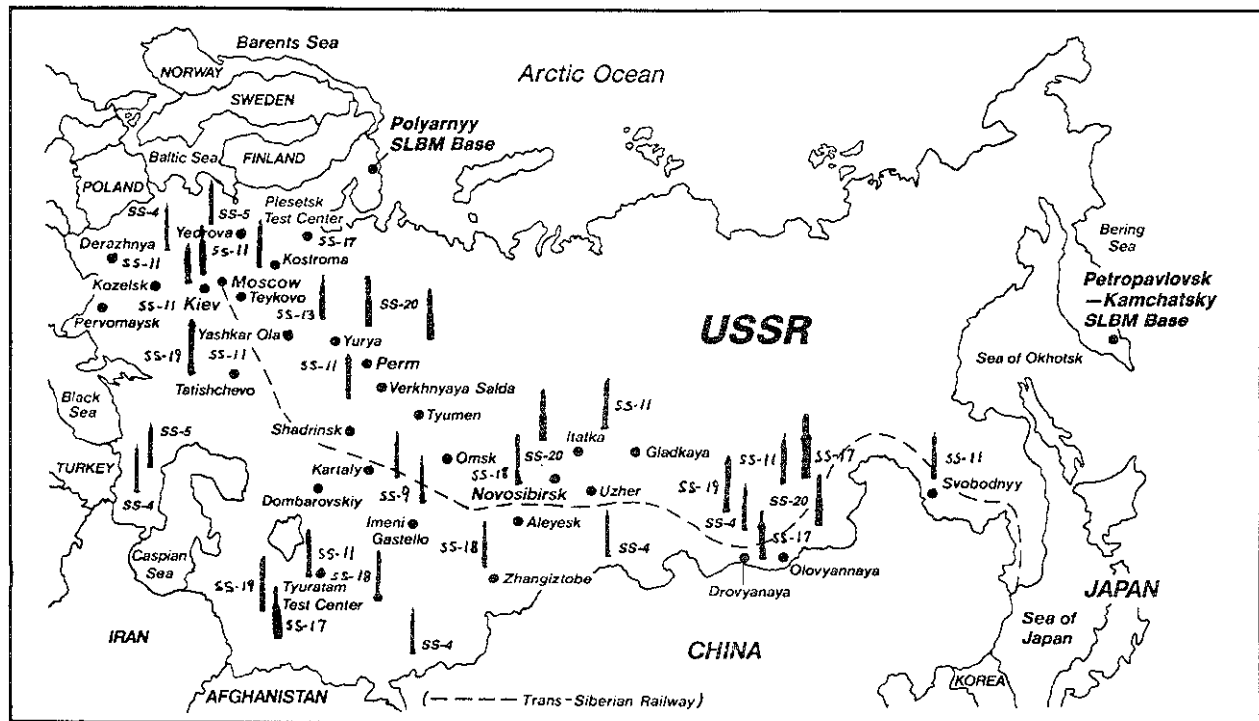
"Hardened command posts have been constructed near Moscow and other cities. For some 100,000 people we define as the Soviet leadership, there are hardened underground shelters near places of work, and at relocation sites outside the cities. *The relatively few leadership shelters we have identified would be vulnerable to direct attack.*" (*italics added*)

Even where facilities have been identified, it would be difficult (if not impossible) to know exactly which elements of the leadership had dispersed to which facilities.

Moreover, the destruction of the political control facilities does not necessarily mean the destruction of the political control personnel. KGB officers are less likely to be in KGB buildings than dispersed among the population they are tasked with monitoring and controlling.

Indeed, this points to a larger problem. Many of the political and military leadership centres are located in or near major urban areas — particularly Moscow and the Republic capitals. Attacks on these would be virtually indistinguishable from counter-city attacks. Escalation control would be difficult to pursue following such attacks.

In fact, such attacks would probably mean the end of escalation control. As Colin Gray has pointed out (Naval War College Review, Jan.-Feb. 1980):



—Reprinted with permission, Vol. 113, No. 12, Aviation Week and Space Technology, September 22, 1980.

Among the difficulties in PD-59 limited war options is the fact, shown above, that Soviet ICBMs lie in 26 sites scattered over a wide region of often heavily populated European Russia. As a consequence, “limited” attacks on Soviet ICMBs might, some estimate, kill 20 to 30 million Russians counting 30 day fatalities alone.

“Once executed, a very large strike against the Soviet political and administrative leadership would mean that the US had ‘done its worst.’ If the Soviet Government, in the sense of a National Command Authority, were still able to function, it is likely that it would judge that it had little, if anything, left to fear.”

Finally, a counter political control strike would make it impossible for the Soviets to negotiate war termination.

The second question was: is it possible to design a C<sup>3</sup> system that is more survivable and has greater endurance than the strategic forces it is intended to support? It seems to me that, *a priori*, the answer to that must be “no,” since C<sup>3</sup> systems are vulnerable to all the threats to which the forces could be subject plus a variety of additional ones. The strategic forces gain protection through hardening, proliferation, mobility and camouflage. Many C<sup>3</sup> systems, such as radar sites, VLF antennae and satellite sensor systems are necessarily relatively “soft;” some C<sup>3</sup> elements, such as the National Command Authorities, cannot be proliferated; major command posts, satellite ground stations and communication nodes are generally fixed; and radar sites and communication stations are extremely difficult to camouflage because of their electronic emissions. C<sup>3</sup> systems are generally more vulnerable to the blast effects of nuclear weapons than are the strategic forces, and have various peculiar vulnerabilities as well — susceptibility to electromagnetic pulse, electronic jamming, deception, etc.

There are five particularly noteworthy vulnerabilities:

- (i) the NCA
- (ii) the airborne C<sup>3</sup> systems
- (iii) satellite systems

(iv) the “hot line” and

(v) the communication systems for the FBM submarines.

These impose quite debilitating physical constraints on the situations in which escalation might be controlled, the time period over which control might be maintained, and the proportion of the SIOP forces that could be employed in a controlled fashion. The boundary of control in any militarily significant exchange (as compared to demonstration strikes) is unlikely to lie beyond either a few days or a few tens of detonations!

There is another problem with respect to the practicality of the concepts embodied in PD-59 — control and limitation require that *all* the participants in the conflict be willing and have the capability to exercise restraints — in weapons, in targets, and in political objectives. It is most problematical as to whether the Soviets would “play the game.” Despite some improvements in the capabilities for control, Soviet doctrine still seems to be that in the event of a nuclear exchange the Soviet forces would be used massively and simultaneously against a range of targets — nuclear forces, other military forces, the military-industrial base and, almost certainly, the US and NATO military, political, and administrative control centres.

Despite all the resources now being devoted to C<sup>3</sup>, therefore, the uncertainties that inevitably remain make the use of nuclear weapons for controlled escalation no less difficult to envisage than their use in a massive retaliation. □

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## DO THE RUSSIANS PONDER NUCLEAR VICTORY?

On August 21, the Washington Post carried an article on PD-59 by former Under Secretary of the Navy James Woolsey which asserted:

"The Soviets have also started (sic) writing and talking about actually being able to win a nuclear war. This has confused and confounded particularly the extreme wing of the assured destroyers. The latter have, in effect, been told by the Soviets, 'As far as mutual assured destruction goes, you take care of the mutuality—we'll take care of the destruction'."

Queried, its author said he had gotten this impression about Soviet writings from two other senior observers of the Soviet scene—a former NSC staffer and a former counselor to the State Department—at a summer Aspen conference. But both these observers denied it, one claiming that he did not follow this debate closely. The other believed that the debate over surviving and winning a nuclear war, although somewhat subjective in interpretability had "gone underground" in the mid 70s—far from having just started up—after having been closed out in favor of the Soviet hawks at that time.

On September 16, in defending PD-59 to the Foreign Relations Committee, Secretary Brown did come up with a statement showing the Russian military had not given up on the notion of a "protracted" nuclear war which, if it occurred, might be won. He quoted Marshall Ogarkov (effectively the chairman of the "Joint Chiefs of Staff") as writing in the Soviet Military Encyclopedia:

"... the possibility cannot be excluded that the war could also be protracted. Soviet military strategy proceeds from the fact that if a nuclear war is foisted upon the Soviet Union, then the Soviet people and their armed forces must be ready for the most severe and prolonged trials. In this case, the Soviet Union and the fraternal Socialist states ... (have) objective possibilities for achieving victory."

Secretary Brown argued that PD-59 was a "key part" of the effort to show the Soviet Union that such beliefs of protracted wars are "unfounded and dangerous", and Senator Javits went so far as to challenge the Soviets to disown this view.\*

In fact, the Ogarkov quotation is a good deal less ominous when quoted in full (see adjoining box). The war is expected to be "comparatively brief" and the "objective" possibilities for achieving victory are created only by the "just goals of the war and the advanced nature of the (Soviet) social and state system." (Surprisingly, the full statement also includes the assertion that the Soviet Union will not use nuclear weapons first. This assertion has only been made formally by the People's Republic of China and, more recently appears to have been dropped even by that nuclear power. It is definitely not U.S. policy and pro-

\*This rationale of PD-59 is dubious since PD-59 makes protracted war more likely rather than less by preparing for limited responses. Thus it encourages the "unfounded and dangerous" notion of protracted war and it certainly reflects our own view that protracted war is a bare possibility, else why would we bother to work out the options.

## OGARKOV'S FULL QUOTATION

Soviet military strategy allows that world war may commence and be waged for a certain period of time using conventional weapons alone. However, the expansion of military operations may lead to its transformation into general nuclear war, the primary means of conduct being nuclear weapons, primarily strategic. At the foundation of Soviet military strategy lies the proposition that the Soviet Union, based on the principles of its policy, will not employ these weapons first. It is also opposed in principle to the use of weapons of mass destruction period. However, any aggressor should know clearly that in the event of a nuclear missile attack upon the Soviet Union or another country of the Socialist commonwealth, it will receive a destructive retaliatory strike.

*It is considered that in light of modern means of destruction, world nuclear war would be comparatively brief. However, taking into account the enormous potential military and economic resources of the coalition of belligerent states, one cannot exclude the fact that it might also be prolonged. Soviet military strategy is based on the fact that should the Soviet Union be thrust into a nuclear war, the Soviet people and their armed forces need to be prepared for most severe and protracted trials. In this case the Soviet Union and fraternal socialist states, in comparison to the imperialist states, will have definite advantages stemming from the just goals of the war and the advanced nature of their social and state system. This creates objective possibilities for them to achieve victory. However, to realize these possibilities there is a need for timely and comprehensive preparation of the country and the armed forces. (Italics show phrases DOD left out)*

Soviet Military Encyclopedia, Volume 7  
Section on Military Strategy, pgs. 555-565

bably not firm Soviet policy either.

Looking further into this debate on writings, it appears that the most careful observers cannot find much in the way of inflammatory new statements in the open Soviet press. A recent paper by Robert L. Arnett entitled, "The Consequences of World War III: The Soviet Perspective," reviews the Soviet literature from 1962 to 1980 and criticizes Western experts who portray the Soviets as believing the nation can win a nuclear war. He concludes that they err on four counts:

"First, some have incorrectly assumed that Soviet adherence to the notion of 'war as a continuation of politics' means that Soviet leaders believe nuclear war can serve as a practical instrument of policy. Second, these analysts have argued that Soviet writers do claim that nuclear war can serve as a means to achieve political objectives. In fact, for two decades, Soviet writers have argued just the opposite. Third, these Western analysts have over-exaggerated the importance of Soviet statements about the possibility of victory in such a war. Finally, these Western writers have ignored or downplayed what the Soviets have said about the consequences of a nuclear war:

specifically, the Soviet belief which has been continuously expressed during the past two decades, that not only the United States but also the Soviet Union would suffer unprecedented destruction if World War III occurs."

What appears to have happened recently is that the Soviet buildup of strategic forces has made American observers much more sensitive to Soviet intentions and much more conscious of the possible implications of such statements as exist. But this is not the same as their having "started writing and talking about actually being able to win a nuclear war." Readers who disagree should write in and send relevant statements. □

### **PRESIDENTIAL DIRECTIVE 59: AN EVOLUTIONARY STEP BACKWARDS**

*(Excerpts from a statement released by the Executive Committee of August 20, 1980)*

What is new, however, in the present era is a tendency to move toward one *particular*, and highly controversial, option made possible by higher accuracy and multiple warheads. This particular option is the option to attack Soviet missile silos. Support for this option exists in America today only because it would match the growing, and analogous, Soviet capability to destroy U.S. missile silos. Also new in U.S. planning is the emphasis on the destruction of command and control centers. According to news reports, a new Presidential Directive, PD-59, incorporates both of these notions.

We oppose, and have long opposed, both of these tendencies, which violate elementary rules of strategic logic. This new directive is likely to undermine deterrence of limited nuclear war rather than, as is claimed, to strengthen it; make nuclear war itself more likely; make it more difficult to prevent nuclear wars once begun; and make the arms race more difficult to stop.

In the first place, it does *not* strengthen deterrence of limited war to give evidence of believing in its feasibility. Those most concerned about Soviet strikes at U.S. Minuteman missiles should not be advertising their view that we *are* able to respond in a fashion that would keep the war limited. On the contrary, in conformance with common sense and strategic logic, they should be emphasizing that escalation would be highly likely or inevitable—which indeed is true. This is why the Soviet response to our strategic superiority in the fifties and sixties was to deny the possibility of a limited nuclear war, just as the French deny it in confronting the larger Soviet strategic forces.

In the second place, nuclear war is most likely to come about not through lapses in deterrence, but through unwanted escalation from lower levels of violence. But these new U.S. options to threaten Soviet missile silos, and command centers, require firing in the early stages of a nuclear war. Thus, they generate a cycle of expectations that encourage escalation rather than discourage it. They make both sides trigger happy, and put the forces of each side on a hair trigger. This is a major disservice to U.S. security.

In the third place, attacks on command and control centers can only make it impossible to terminate nuclear

war should it occur. Further, threatening such attacks can only encourage each side to give its officers instructions to fire at will, if communications break down. It is fundamentally inconsistent to talk of limited nuclear war while talking of attacks on command and control centers. We should be proposing quite the opposite that, if nuclear war starts, neither side will attack command posts.

The Administration PD-59 and its announcement is really conforming to technological and political pressures rather than to common sense or strategic logic.

1). By matching the feared Soviet capability to attack U.S. Missile silos, it satisfies that "matching" tendency in the arms race which, increasingly, is the dominant theme.

2). It rationalizes the counter silo use to which the 2,000 hard-target killing MX warheads will be put once installed (i.e., to threaten Soviet land-based missile silos) and, by so doing, it strengthens the case for MX.

3). It represents a pre-emptive political strike at the Republican Party since its platform contains this charge:

"We reject the mutual-assured-destruction (MAD) strategy of the Carter Administration which limits the President during crises to a Hobson's choice between mass mutual suicide and surrender. We propose, instead, a credible strategy which will deter a Soviet attack by the clear capability of our forces to survive and ultimately to destroy Soviet military targets."

Asked about this strategy on Issues and Answers on Sunday, August 17, 1980, Secretary of Defense Brown indicated that, while our approach remained one of deterrence, two things had happened: a) the Soviet Union had secured greater forces, and b) there were some signs in Soviet military writings that some in the Soviet Union thought a nuclear war was winnable. But the latter signs have been there for decades. Indeed, we have these signs in this country with Reagan Administration strategists writing articles entitled "Victory is Possible."\*

In fact, the Soviet buildup, to the extent it *threatens* our forces, should be answered by *defending* our forces. A first-strike threat is no answer to a first-strike threat. To say that our missiles can destroy Soviet missiles first, is no answer to a fear that they may strike first and destroy ours. In our desire to match Soviet threats, we are losing sight of keeping our weapons secure.

It is a disgrace that the United States, with all its wealth and technological superiority, should be imitating the Soviet strategy of heavy emphasis on land-based missiles and counterforce capabilities when there is so much reason to believe that this is a blind alley and counter-productive. We believe the time has come for the United States to give a long look at U.S. national security policy in general and at the arms race in particular, so as to avoid the errors that will result in emphasizing politically motivated schemes to match the Russians. Some kind of high-level commission of experts, citizens and government officials, as proposed by Senator Kennedy, and endorsed by hawks and doves, is in order. We believed it before PD-59 and we believe it all the more now. □

\*Colin Gray, in *Foreign Policy*, Summer, 1980

## ANTHRAX IN SVERDLOVSK

A Soviet journal has published, in May 1980, a discussion of the incidence of anthrax in Sverdlovsk. The May 1980 issue of the Journal of Microbiology, Immunology and Epidemiology, pg. 111-113, asserts that anthrax is endemic to the Sverdlovsk oblast and that its soil is infected over a "vast territory in patchwork fashion." It appears to have been submitted to the journal August 29, 1979 four months before the stories circulated in the European press, and is signed by two reputable Soviet scientists: Ivan Semenovitch Bezdenezhnykh, Chief Epidemiologist of the RSFSR Ministry of Health, and Vladimir Nikolayevich Nikiforov, Chief Specialist in Infectious Diseases of the RSFSR Ministry of Health.

The article lacks statistical data but, according to reliable specialists known to FAS, is no more lacking in this regard than comparable epidemiological articles published in the open Soviet literature.

Also a Soviet legal journal reported on September 25 that two persons in Sverdlovsk were punished for selling anthrax-infected meat at the time.

Responsible U.S. Government officials continue to give heavy odds that the Sverdlovsk incident was the result of a violation of restraints on biological warfare preparations. And the Soviet Union refuses to permit U.S. & U.S.S.R. scientists to discuss the matter, or to itself do or say anything more than its initial denial. The United States, for its part, is apparently not about to disclose the intelligence information upon which its analysts rely for their high probabilistic estimates of a violation. And so the matter seems likely to rest, pending any new information. □

## REAGAN RESPONDS ON HOROSCOPE

FAS wrote Ronald Reagan inquiring about the interview he gave the L.A. Times Syndicate (See FAS PIR, September 1980) which said he read a horoscope daily and described the circumstances in which he found a Jeanne Dixon prophecy about him to have been accurate. FAS had confirmed the accounts in that article. On August 27,

Mr. Reagan wrote FAS as follows, assuring us concerning the horoscope but not discussing his relationship with, or confidence in, Ms. Dixon:

Dear Mr. Stone:

Thank you for your letter and for giving me a chance to comment on the issues you raised.

Let me assure you that while Nancy and I enjoy glancing at the daily astrology charts in our morning paper (when we are home, which isn't too often these days), we do not plan our daily activities or our lives around them.

I can honestly tell you they have never played a part in decisions I have to make nor will they.

I'm afraid there will be many things written about me in the next four months which will be more fiction than fact.

Thanks again and warm personal regards.

Sincerely,

Ronald Reagan

## FAS DENIED SOVIET VISA

In June, FAS made preparations to discuss the case of Andrei Sakharov in Moscow. FAS Director Stone applied for a visa and wrote the Soviet Academy of Sciences Presidium and its Institute for the U.S.A., of his intention to visit Moscow in September for that purpose. Also, he and Bernard Feld, editor-in-chief of the Bulletin of Atomic Scientists, joined in a letter to Ambassador Dobrynin asking for permission from Moscow authorities to travel together to Gorki to meet with Sakharov.

No answer was received with regard to the Gorki request. Stone's application to travel to Moscow could not be decided by Embassy authorities. In mid summer, a letter was received from the Soviet Academy of Sciences observing that President Alexandrov could say "nothing new" about the Sakharov affair and wondered if Stone did not want to "consider again the value" of the trip. It was persistence in the face of this attempted polite deflection that produced visa delays to the very last minute affecting the denial. □

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