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NUCLEAR POSTURE AND THE NPT

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Nuclear Weapons: A No-First-Use Doctrine Exists for All Non-Nuclear States

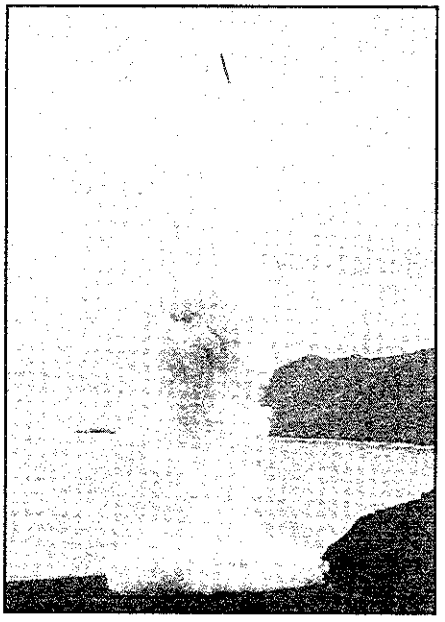
A U.S. doctrine dating from 1978, the Negative Security Assurance, has effectively become a doctrine of no-first-use of nuclear weapons against states known to be non-nuclear.

Accordingly, if a President of the United States wanted to do so he could, with little political risk and some advantage, repackage this Carter Administration doctrine—reiterated frequently during the Reagan and Bush Administration years—in a way that would substantially advance U.S. goals at the Nuclear Non-Proliferation Review Conference. At this conference, Third World states are seeking just such affirmations that they are not subject to nuclear threat as a price of their extension of the Nuclear Non-Proliferation Treaty (NPT).

The Negative Security Assurance, first presented by Secretary of State Cyrus Vance to the United Nations on June 12, 1978, seems more complicated than, in the present era, it is. It reads:

1 "The United States will not use nuclear weapons against any non-nuclear-weapons state party to the NPT [Non-proliferation Treaty] or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on the United States, its territories or armed forces, or its allies, by such a state allied to a nuclear-weapons state or associated with a nuclear-weapons state in carrying out or sustaining the attack."

Today, we need not fear non-nuclear states weapon states engaging in aggression "allied to" or "associated with" such nuclear powers as China or Russia and certainly not with Britain or France. Since this clause, inserted in 1978 for the North Korean contingency, no longer applies, the negative security assurance can be updated to read:



2 "The United States will not use nuclear weapons against any non-nuclear weapons state party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices".

But what difference does it make whether the states covered by our assurance are "party" to relevant treaties. In the effort to assure us that they are non-nuclear, this is neither necessary (they may have abstained from signing for some other reason) nor sufficient (they may be false adherents to the treaty they signed).

Accordingly, a U.S. President could further simplify the Negative Security Assurance by asserting that:

3 "The United States will not use nuclear weapons against any state which has provided credible assurances that it is a non-nuclear weapon state."

In most cases, the signature of a state on the NPT or a comparable international agreement would be the assurance necessary but not in all cases, e.g., if the signatory were not, as North Korea is not, fulfilling allits obligations for special inspections and the like, it would lose the protection. Or if India or Pakistan provided credible assurance that they were not nuclear-weapon states, they would receive the assurance without such signature.

There would, as the accompanying newsletter by William Arkin indicates, be some concern in the Defense Department that such a formulation could weaken deterrence of the use of biological and chemical weapons by non-nuclear states by eliminating a U.S. ability to respond with nuclear weapons. But all law-abiding states should have an interest in deterring biological and chemical weapons. Accordingly, these states would not object if the President qualified the above declaration by having it read:

(continued from page 1)

4 "The United States will not use nuclear weapons against any state which has provided the U.S. with credible assurances that it is a non-nuclear weapon state except in response to the use, by such states, of other weapons of mass destruction."

Such an updated form of the long-standing negative security assurance should be helpful in debates with Third World states over the Non-proliferation Treaty. In particular, updating this doctrine would be a great deal easier to provide than a date-certain for the world-wide elimination of nuclear weapons— something that is becoming a new demand in some Third World countries.

There are, of course, a few states which can, perhaps, no longer give credible assurances that they have no nuclear weapons. India and Pakistan may be such states and Israel certainly is. On the other hand, these three require no such assurance from a strategic point of view, had none before and, in particular, are not themselves party to the NPT whose extension is under debate.

Could and should the U.S. go further in extending its non-first use doctrine to nuclear states? A few problems, not insurmountable, would have to be addressed. NATO would have to accept an alliance strategy of foregoing first use of nuclear weapons. (It is close to this already).

For political reasons, Russia would have to adopt the same no-first-use strategy against the U.S.

We recommend that the U.S. announce "no-first-use against non-nuclear states", as in Statement 4 above, as soon as possible, explaining to Congress that this represents virtually nothing more than was asserted in past years while exploring, through negotiations with Russia and NATO, ways to expand its pledge to include all existing nuclear weapon states.

—Reviewed and Approved by FAS Executive Committee

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1994 Election Results

Rosemary Chalk, Val Fitch and David Hafemeister have been elected to the FAS Council. They take the places of Denis Hayes, Martin Sherwin and Valerie Thomas, whose terms have expired. Robert Adams was elected to fill out the unexpired term of Lawrence Scheinman, who has joined the Clinton Administration.

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Agnosticism When Real Values Are Needed: Nuclear Policy in the Clinton Administration

"We will continue to pursue arms control agreements to reduce the danger of nuclear conflict and promote stability," President Clinton stated in "A National Security Strategy of Engagement and Enlargement," the first full articulation of the Administration's foreign policy, issued in July. "We also need to maintain robust strategic nuclear forces . . . ," wrote the President, for in case efforts fail to prevent the spread of chemical, biological, or nuclear weapons, "U.S. forces must be prepared to deter, prevent and defend against their use."

Herein lies the basis for the contradiction in current U.S. nuclear policy: The public priority is to stem the spread of weapons of mass destruction and the missiles that deliver them, while out of view the nuclear establishment develops a strategy to counter proliferation through counterforce and to conduct nuclear operations in the Third World. The Administration asserts that it is reducing the role of nuclear weapons as part of a policy of aggressively pursuing indefinite extension of the Nuclear Non-proliferation Treaty (NPT). However, it tolerates government efforts to expand missions for nuclear weapons, specifically for contingencies against proliferators. (See pages 8-10.)

Unveiling the results of the Defense Department's Nuclear Posture Review on September 22, Secretary of Defense William Perry said once again that it is time to change the way we think about nuclear weapons. However, despite being advertised as "a total review . . . which accounts for the numerous important changes the world has experienced over the last half decade," the year-long reexamination is disappointingly retroactive. "We want to hedge . . . against a reversal of reform in Russia," Perry explained to reporters at a Pentagon news conference. "I believe this Nuclear Posture Review . . . should be judged by how successful we were in achieving the balance between leading on the one hand and hedging on the other."

Only the Clinton-Yeltsin Joint Statement issued September 28, following their summit, told the truth by calling the minor changes undertaken by the Pentagon "adjustments" rather than "reductions."

"Reductions" in nuclear forces are tightly circumscribed because the Administration forcefully rejects the pursuit of nuclear disarmament. Terminal objectives such as ending testing or fissile materials production may suggest that the nuclear machine is no longer wanted or needed. But the Administration has no intention of giving up reliance on nuclear weapons, not even well into the next century, and believes that its arms control pursuits will ensure extension of the Nuclear Non-Proliferation Treaty and an end to nuclear testing, greater control over Russian nuclear materials and forces, as well as stronger instruments to thwart additional proliferators.

William M. Arkin, *well-known expert on nuclear issues, now serves as a consultant to FAS. In this issue of the PIR, he examines in depth questions raised by the Nuclear Posture Review, and in particular its impact on the Nuclear Non-Proliferation Treaty*

Caution on the part of the Administration is even more remarkable because of how much value it places in renewal of the Nuclear Non-Proliferation Treaty ("NPT"). The future of the treaty will be decided in May 1995 when signatories meet in New York to determine whether, and for how long, it should be extended.

Numerous non-nuclear states will once again argue that the regime perpetuates the distinction between the "haves" and "have-nots" and that short-term extension will more likely persuade the nuclear powers to make genuine progress towards nuclear disarmament, as they are required. The argument is as old as the 27-year-old treaty itself, but with the Administration's ever more aggressive counter-proliferation program, it has new impetus.

"Under START II," Jack Holum of the Arms Control and Disarmament Agency said on April 8 of this year, " . . . we are committed to reduce nuclear weapons to their 1972 levels. Our making good on this commitment will wipe out twenty years of the arms race." Holum pledged that the U.S. was fulfilling its commitments under Article VI of the NPT. "We have to concede that at most times over the life of the Treaty, arms control took a distant back seat to the arms race. But today things have changed dramatically."

Regarding treaty review, Deputy Secretary of Defense John Deutch asserted at the Nuclear Posture Review press

Deputy Secretary John Deutch, *testifying in October to Congress on the Nuclear Posture Review, could not accurately describe U.S. negative security guarantees to non-nuclear countries—a sure sign that the pledge needs to be simplified and strengthened.*

conference that the U.S. position was now "unbelievably strong." But the disarmament hesitation and the repudiation of original review objectives to truthfully reduce the role of nuclear weapons leave far too many loose ends in the task of harmonizing potentially antagonistic nuclear warfighting and non-proliferation goals. Within the U.S. government, and specifically in the nuclear establishments of the Defense and Energy Departments, antagonism towards disarmament provides a dangerous opening. The Nuclear Posture Review may pretend to continue the post-Cold War reductions trend, but in reality it sides with nuclear advocates who do not want to pursue further cuts in strategic nuclear forces, and who believe that significant nuclear warfighting options and capabilities are still needed.

Amidst nuclear crises in Korea and the former Soviet republics, and with other foreign policy hot-spots taking greater precedence, the White House proved unwilling to confront the nuclear union. Thus, U.S. policy regarding the future use of nuclear weapons against Third World states has been left in the hands of a small nuclear cabal that has been agitating since the Gulf War to revive warfighting strategy to counter weapons of mass destruction. Though nuclear planners and developers have, for now, been denied new weapons, and the troublesome Third World focus was suppressed during the public unveiling of the Nuclear Posture Review, the contradiction between U.S. diplomatic objectives and the secret new nuclear strategy remains.

To bring nuclear forces and doctrines in line with post-Cold war realities, in October 1993 former Secretary of Defense Les Aspin signed the "Terms of Reference" for the undertaking, "a comprehensive, basic, wide-ranging, integrated review of the entire U.S. nuclear posture." Aspin posited that "residual and emerging threats may not be amenable to the approaches that worked during the Cold War. . . . It remains undetermined if the objectives or the methods of Cold War-style nuclear deterrence will be appropriate when facing the new nuclear dangers . . . " Various proposals to expand nuclear roles beyond the Soviet scenario or European defense would be examined.

A Preposterous Review

Aspin said in his 1994 Report to the President and Congress that the review would form "the foundation that shapes U.S. nuclear force posture in the post-Cold War world." What emerged instead is the ambivalent policy of 'leading' and 'hedging.'

Nuclear capabilities remain more or less the same as those proposed in the Bush Administration, and any reductions undertaken are largely to preserve the remainder of the force. As John Deutch said, "It is . . . necessary for us to maintain a hedge to return to a more robust nuclear posture should that be necessary."

Contrary to the fundamental re-examination promised, the Nuclear Posture Review restricted itself to decisions that were required in the 1994-2003 time period, making no recommendations even as to the *desired* level of nuclear forces after START II. "We who have to run programs," Deutch said at the Pentagon press conference, "believe that it would not be prudent to commit now for a reduction below those levels."

Nuclear forces today are at only a fraction of their previous size, nuclear warhead production remains idle for the fourth year in a row, and warheads continue to be retired from active service well before they reach the end of their projected lives. The future, in fact, doesn't look bright for proponents of an enduring system. Current Air Force plans call for delivery of the 20th B-2 bomber in early 1998; the last Ohio class (Trident) submarine under construction will be delivered to the Navy in 1999. A number of proposals were entertained in the review process to seek minimum deterrence, even to eliminate all land-based ICBMs, but their repudiation sends a clear message to nuclear planners and developers: Modernization will eventually take place.

It is as if the Nuclear Posture Review is the product of a conservative administration that has just succeeded a liberal one. Perry has said that the decisions "put our nuclear programs . . . on a stable footing after several years of rapid changes in our forces and programs." Reductions do not cut back any capabilities. Pre-review plans were for the U.S. active nuclear stockpile to decline to about 4,450 warheads in the year 2003, comprised of some 3,500 strategic and 950 non-strategic weapons. Clinton now retains the same numbers through a slightly different composition.

Inter-Continental Ballistic Missiles

Under the review, the post-START II land-based Min-

uteman III intercontinental ballistic missile (ICBM) force will be reduced from 500 to 450 single-warhead missiles. Retiring 50 missiles will provide a supply of needed spares to keep the other 450 operational. Air Force estimates are that missile life spans can be extended to the year 2020 if solid-propellent rocket motors are replaced or reworked at the turn of the century. Guidance sets, all 1960s' technology, are also increasingly insupportable, according to Congressional testimony of Admiral Henry Chiles in April of this year.

In 1990, the General Accounting Office was already questioning the life span of the Minuteman III because of the absence of sufficient spares. The posture review merely supplies missile parts for cannibalization under the guise of reductions. Fewer missiles will also allow the more accurate and higher yield W87 warhead, currently on the MX missile, to arm the entire force with sufficient spares. High-yield warheads removed from retired missiles will be retained in order to maintain a "significant upload hedge," that is, to increase the size of the force in the future.

Submarine-Launched Ballistic Missiles

The fleet of Trident ballistic missile submarines, with their submarine-launched ballistic missiles (SLBMs), will be reduced from 18 to 14 by the year 2003. The previous plan was to have Trident I missiles on eight of the 18 submarines, but all 14 will now have the newer and more accurate Trident II missile. Even with the "reduction" of four submarines, however, the number of warheads on the force will remain approximately the same (the number per missile will increase from four to five) and the accuracy and lethality of the overall force will increase.

Deployment of Trident IIs was more or less necessitated by the projected life span of the Trident I missile, which was designed with routine modernization in mind. The prospect of spending $2.8 billion for additional Trident II missiles will not sit well with Congress. In the FY 1995 defense budget, it restricted future purchases because of the cost, and a funding battle will likely ensue next year as well. Nevertheless, "reducing" the number of submarine platforms will result in considerable savings by foregoing expensive nuclear refueling of four Ohio class boats. The USS Ohio, for instance, the first of the class and now 13 years old, already awaits a $300 million overhaul. The Pentagon also hopes to take advantage of Congressional concern for the health of the "industrial base," stressing that the Trident II is the only U.S. ballistic missile currently in production.

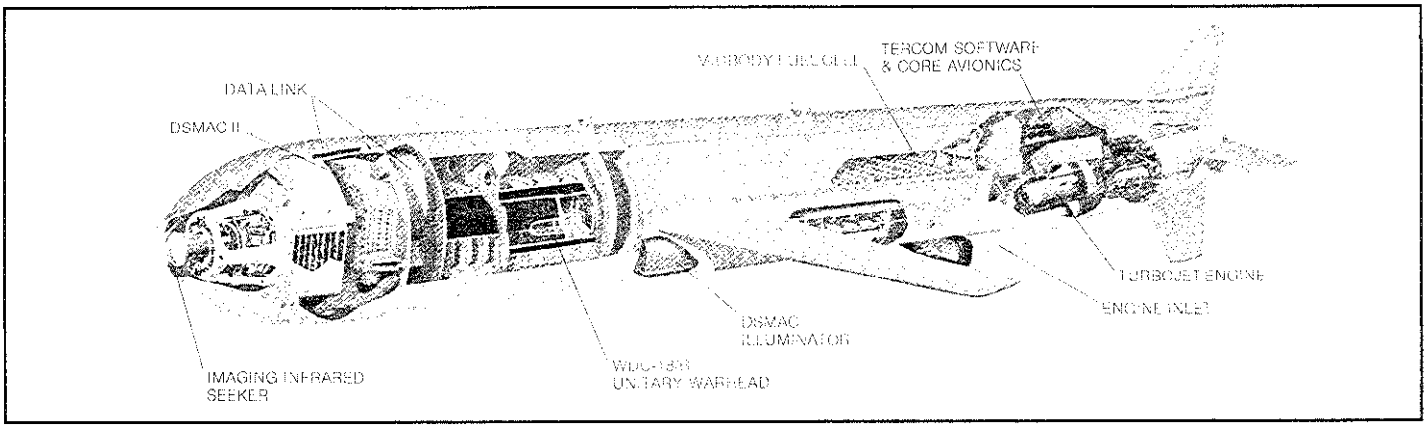
Bombers

The posture review plans to reduce the size of the nuclear-committed bomber force from 114 to 86 by cutting the number of aging B-52H bombers from 94 to 66. The bomber force will carry more or less the same number of nuclear warheads as was previously planned. The reductions are necessitated by the need to reduce the operating costs of the force and the demands of retaining a working fleet of aging bombers.

Though the review takes credit for eliminating nuclear carriage on the newer B-1B bombers, making the troubled B-1Bs conventional-only bombing platforms was the long-standing Bush Administration plan. The review cleverly side steps the question of the future of B-2 production, stating that there is no requirement for additional B-2 stealth bombers "in a nuclear role." Against Defense Department objections, Congress preserved the option to build more B-2s by appropriating $125 million in the FY 95 budget for spare parts to keep suppliers and the prime contractor, Northrop Grumman, in operation. Perry and Deutch opposed the scheme. "We simply cannot afford additional B-2 aircraft," Deutch wrote. Now, however, the Defense leaders have changed their minds, stating in the review that "the U.S. will maintain selected portions of the defense industrial base that are unique to strategic and other nuclear systems."

Tomahawk SLCMs

The Nuclear Posture Review decided that all navy surface ships would eliminate nuclear capability. A 1991 Bush Administration decision already halted routine carriage of tactical nuclear weapons on vessels, and the Aspin Bottom-Up Review decided that aircraft carriers would no



Tomahawk" *Under the Nuclear Posture Review, the Tomahawk sea-launched cruise missile will be the primary weapon for global nuclear missions against weapons of mass destruction. Elimination of nuclear capability aboard suface ships will result in a stock of almost eight missiles per attack submarine, a two-to four-fold increase per boat (depending upon the type of submarine) over previous nuclear plans.*

longer carry nuclear bombs. Only attack submarines will continue to have nuclear capability—carrying nuclear-armed Tomahawk sea-launched cruise missiles, though presumably not under day-to-day conditions.

Ambassador Linton Brooks, former chief START negotiator and retired Navy captain, wrote in *Proceedings* in May that "Although the nation has retained nuclear sea-launched cruise missiles and can, in theory, redeploy them, it is hard to visualize circumstances in which redeployment would be politically feasible."

The Nuclear Posture Review, however, creates those very conditions. The number of nuclear Tomahawk missiles does not decline, and by retaining the capability on stealthy submarines, the Pentagon subtly acquires far greater secrecy and ambiguity regarding their role.

Non-Strategic Weapons

The status of non-strategic nuclear forces was surprisingly highlighted in the review. Deutch stressed at the press conference that Russian reductions in non-strategic warheads were not taking place as rapidly as expected, while the U.S. was going significantly lower. "Non-strategic nuclear forces remain one of the central problems we will be facing in managing our nuclear relationships during the coming year," he said.

Only this summer, NATO quietly pledged to keep "substrategic forces widely deployed in Europe at the minimum level necessary to preserve peace and stability." The ever more vague "alliance" requirement for U.S. weapons on European soil evidently sealed any possibility that the Clinton camp could finally end U.S. overseas nuclear deployments (as Russia has been forced to do). Nowhere was it claimed that Russian tactical nuclear weapons (or military forces) were a threat to the United States or its European allies (or anyone); it was purely implied in the habit of old-fashioned balance. The entire premise of the post-Cold War world—that U.S. national security and nuclear forces are no longer coupled to issues of balance and parity with Russia—was thus abandoned in favor of hesitation.

Playing With Stability

Given its aversion to disarmament, the White House has instead stressed its desire to find ways to improve strategic "stability" and impose greater control over remaining nuclear forces. One of the first concrete symbols of the end of Cold War was President Bush's elimination of bomber alert and stand-down of Minuteman II ICBMs in September 1991. This action set the stage for important watershed statements by the two sides that they were no longer adversaries. Greater transparency and openness to strengthen U.S.-Russian relations and "concrete steps to adapt the nuclear forces and practices of both sides to the changed international security situation" is one of the claimed accomplishments of the Clinton-Yeltsin Washington meeting.

Mutual detargeting of strategic missiles, agreed to by Presidents Clinton and Yeltsin at their January 1994 summit, was referred to on numerous occasions in the Nuclear Posture Review. While hailed in a May DOD Fact Sheet as a measure "to improve strategic stability, increase mutual confidence, and step back from Cold War nuclear force postures," the impact on operational ICBMs and SLBMs is mostly symbolic. Admiral Henry Chiles, Commander of U.S. Strategic Command (STRATCOM), told Congress this year that the United States would "retain the ability to rapidly retarget our forces if so directed by the President." Minuteman III launch control centers are in fact being upgraded under a program called "rapid execution and combat retargeting" (REACT) to improve their flexibility. A more rapid SLBM Retargeting System is also being installed in Trident submarines. "In a world of more diffuse threats than those imagined even five years ago, this is both an important and timely investment," Rear Admiral John T. Mitchell, Director of Strategic Systems told Congress last year.

The Nuclear Posture Review did decide to finally install coded control devices (commonly called PALs) on all U.S. nuclear weapons, meaning that for the first time submarines will have similar locks as the rest of the nuclear force. And for the first time, the Pentagon revealed that "more" ballistic missile submarines were patrolling on "modified alert" rather than "alert," with a reduced number of boats at sea day to day. Again the impression offered is that warfighting preparations are activities of the past.

STRATCOM Goes For Real-Time War Plan

However, coincident with the Nuclear Posture Review, STRATCOM is in the middle of a major initiative to revise the nuclear war planning process. A new "adaptive" scheme will replace the old fixed war plan preparation process. The old system required nearly a year and a half lead time to produce the nuclear war plan, called the single integrated operational plan (SIOP). In December 1992, a 10-person Strategic Planning Study Group was formed "to develop a flexible, *globally-focused*, war-planning process known as the Strategic War Planning System." The group developed procedures for what they now call "a Living SIOP," a real-time nuclear war plan, that is, one that can receive virtually instantaneous warfighting commands.

Even during "peacetime," daily automated target changes will take place for a variety of potential adversaries in addition to Russia (e.g., China, North Korea, Iraq, Iran) and wholesale revision of an attack plan for a new enemy will be possible in a matter of months. The new process, slated to be active in 1999, "will provide STRATCOM an adaptive planning capability that will enable planners to present to the President *within hours* viable options in response to global crises," the former STRATCOM commander wrote earlier this year.

Testifying before the House Foreign Affairs Committee on October 5, John Deutch stated:

"Should a direct threat emerge which would require us to reactivate targeting, we would hold at risk those assets valued by the leadership of the hostile state. By doing so, we would make clear that, because we were prepared to

Will The Real Non-Nuclear Pledge Please Stand Up?

Representative Lee Hamilton: ***"We retain the option of using nuclear weapons even after a non-nuclear attack. Is that correct?"***

Deputy Secretary Deutch: ***". . . if a party is a signatory to the non-proliferation treaty, a non-nuclear power . . . we have said we will not use nuclear weapons under any circumstances against that country if it gets itself involved in hostilities anywhere in the world. If it attacks the United States with conventional forces, I guess we would still have that prospect . . . as remote as it is."***

Hamilton: ***"We would still have the prospect of what?"***

Deutch: ***"Using nuclear weapons."***

—House Foreign Affairs Committee Hearing
October 5, 1994

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respond and were capable of doing so, those leaders should never attack us."

The doctrine includes both the former Soviet Union and "other potentially hostile powers . . . "

Nuclear Warmaking In The Third World

Barely one month into the Clinton Administration, General Lee Butler, then STRATCOM commander, said "Our focus now is not just the former Soviet Union but any potentially hostile country that has or is seeking weapons of mass destruction." Butler told Congress that his command had established a new globally oriented intelligence center that would "monitor forces and analyze targets . . . to assess from STRATCOM's operational perspective the growing threat represented by . . . global proliferation . . ." A year later, the new commander, Admiral Chiles, could report that STRATCOM had now "been tasked" to take the lead in such nuclear planning. "Systems and procedures to accomplish this task have been developed, and planning coordination with regional commanders has begun," he said.

The globalization of nuclear planning came amidst the Nuclear Posture Review deliberations where supposedly U.S. policies regarding the role of nuclear weapons against weapons of mass destruction was to be resolved. One of the original reasons for a review at all was to evaluate adoption of a "no first use" policy for conventional conflict, as well as to determine the role of nuclear weapons in countering chemical and biological weapons. The need for resolution was clear. Washington's obsession with proliferation sent a powerful message to nuclear scientists and planners as to the continued importance of nuclear weapons; the development of new nuclear options for Third World conflict also threatened to undermine non-proliferation goals.

Operation Desert Storm was barely over when Secretary of the Air Force Donald Rice testified before Congress that the United States must " . . . deter emerging regional nuclear capabilities." The annual report of the Joint Chiefs for 1991 similarly described the post-war task: "There is a high likelihood that weapons of mass destruction will continue to proliferate . . . [and] the number of nations with long-range nuclear weapons will very likely increase. Therefore, even under the most optimistic assumptions about future US-Soviet relations, our nation requires a capable strategic Triad of survivable systems to deter any potential adversary . . . "

Some dismissed the proliferation hyperbole as the military's way of drumming up support for defense spending after a victorious war and the demise of the Soviet Union. In nuclear circles, however, the public statements were only the tip of a secret iceberg. Secretary of Defense Dick Cheney's post-Gulf War Top Secret nuclear weapons employment policy (NUWEP) formally tasked the military to plan for nuclear operations against nations capable of, or developing weapons of mass destruction. In response to Cheney's NUWEP, Butler established a Deterrence Study Group (chaired by former Secretary of the Air Force Thomas Reed, and called the Reed Panel), and in late 1991, as their briefings and draft report began to circulate, many realized for the first time that the new threat mongering was actively spawning expanded missions.

"It is not difficult to entertain nightmarish visions in which a future Saddam Hussein threatens American forces abroad, US allies or friends, and perhaps even the United States itself with nuclear, biological, or chemical weapons," Reed testified before Congress in January 1992. "If that were to happen, US nuclear weapons may well be a resource for seeking to deter execution of the threat. . . . " Reed (and co-author retired Air Force Colonel Michael Wheeler) argued that U.S. security guarantees offered to non-nuclear powers were obsolete:

"We are not comfortable with the . . . suggestion that a nation can engage in any level of chemical or biological aggression and still be shielded by an American non-nuclear pledge."

Long-standing American policy is that the United States will not threaten non-nuclear nations with nuclear weapons unless they are "allied" with a nuclear power. State Department and ACDA officials, as well as others inside and outside government, were extremely alarmed in early 1992 when efforts were mounted to abandon this declaratory policy, which some saw as the core of U.S. non-proliferation diplomacy. Despite the emotional proliferation juggernaut, it appeared that the White House sided against the Reed-Wheeler clique. Still, when the new President appointed Reed Panel member John Deutch as Under Secretary of Defense, and panel advisor Ashton Carter as Assistant Secretary in charge of nuclear policy, it must have seemed to the true believers that the future was going to be pretty much like the past.

Doctrine Is Born

"The appalling specter of nuclear proliferation is the

CW Treaty Before The Senate

Dr. Barbara Rosenberg, Director of the FAS Chemical, Biological and Toxins Working Group, reports that there has been little mail received by Congress encouraging ratification of the Chemical Weapons Convention. FAS urges members to make their views known to their senators on this important arms control treaty.

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new global nightmare that threatens to spark an arms race with murderous portent," General Butler told Congress in April 1992. House Armed Services Committee Chairman Les Aspin, called proliferation "the most serious security threat to the United States in the future." Candidate Clinton labeled proliferation "the gravest threat we are most likely to face in the years ahead" in a Los Angeles campaign speech.

STRATCOM targeters embarked on compiling new targets outside the former Soviet Union, and together with the other regional commands, began to evaluate new weapons requirements appropriate for Third World contingencies. In its first weeks, the Clinton White House was quoted as saying that it was "too busy" with other pressing matters to review the Third World nuclear planning initiatives. It took Boris Yeltsin to focus the new President's attention. Yeltsin complained at the April 1993 Vancouver summit that one of three "irritants" of superpower relations was continued covert U.S. attack submarine patrols near Russian waters. Clinton immediately directed a review, and Aspin was provoked to undertake the fundamental examination of nuclear practices and policies as a result.

Joint Operations Quietly Reframed

Perhaps unknown to the new president or many in his administration, the Joint Chiefs quietly issued a new official "Doctrine for Joint Nuclear Operations" in April 1993. Much of the earlier Eurocentric focus of nuclear use in the face of conventional defeat was replaced by the currently fashionable language about weapons of mass destruction. White House backing or not, the official U.S. military policy was now that "the fundamental purpose of US nuclear forces is to deter the use of weapons of mass destruction, particularly nuclear weapons. . . . Deterrence of the employment of enemy WMD, whether it be nuclear, biological, or chemical, requires that the enemy leadership believes the United States has both the ability and will to respond promptly and with selective responses that are credible (commensurate with the scale or scope of enemy attacks and the nature of US interests at stake) and militarily effective."

"A selective capability of being able to use lower-yield weapons" in regional contingencies, the JCS says, "without destabilizing the conflict, is a useful alternative for the US National Command Authorities."

A glimpse of the nuclear establishment's handiwork was publicly revealed in Aspin's first annual report to Congress, where the Department's consideration of a new strategy was unveiled. His February 1994 report stated that "consideration must be given as to whether and how U.S. nuclear weapons and nuclear posture can play a role in deterring the acquisition or use of nuclear weapons by other nations." In addition, it stated that nuclear weapons were not the only weapons of mass destruction the U.S. might face, and included the statement that "the role of U.S. nuclear forces in deterring or responding to such non-nuclear threats must be considered."

Again, State Department and ACDA officials protested the role expansion, and to some it appeared that they were successful in fighting back a strategy that would certainly complicate NPT extension.

DOD Gives Dispute The Silent Treatment

By September 1994, however, the nuclear advocates had scored a partial victory. Following the pattern of 45 years of nuclear secrecy, Perry and company simply decided that the best tack in resolving the policy dispute was just to remain silent. At the Nuclear Posture Review press conference, Defense Department spokesmen had nothing to say on the controversies. Deutch spoke vaguely about targets "in other countries," and in response to one question about deterring chemical weapons use, he gave a completely muddled and confusing answer: "No one is suggesting that if chemical or biological weapons were used that you would deter with nuclear weapons. Certainly a country who is considering using them would have to take that into account. That's how we contribute to deterrence."

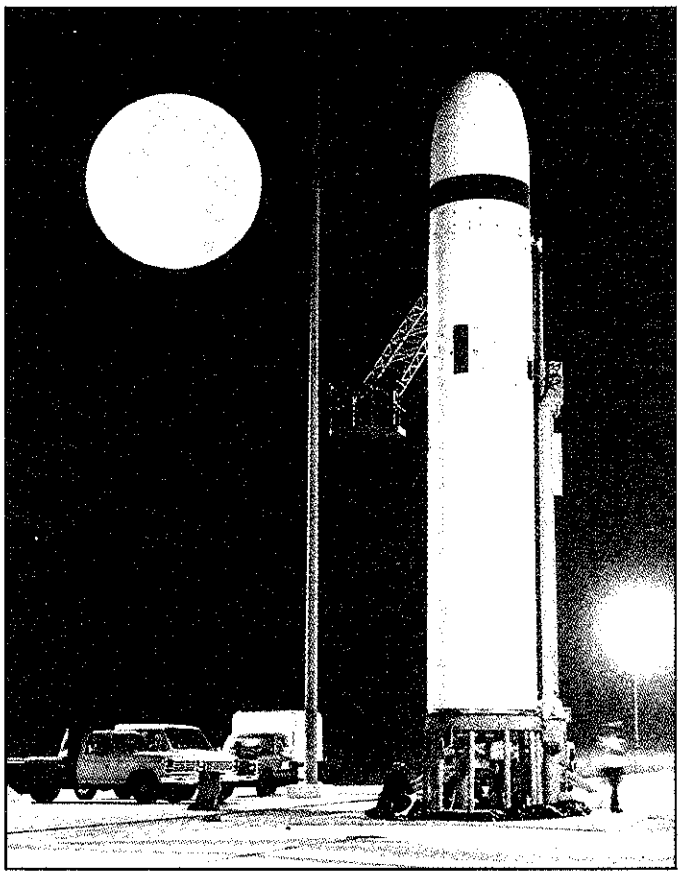
The briefing charts illustrated the belief that the U.S. should "enhance conventional capabilities to counter the proliferation threat," but the true nuclear focus was left unacknowledged.

At a time of post-Cold War defense cutbacks, the prospects of another bankrupting B-2, MX or Trident obviously deters the Defense Department from pursuing major new weapon systems. And in the short term, idle modernization is useful to counter NPT critics, for it allows the U.S. to assert compliance with its disarmament requirement. In addition, with the impression offered that new nuclear weapons will never be needed, test ban proponents can argue that there is no need for further testing.

Labs Develop New Nuclear Aspirations

An idle complex, however, has propelled nuclear advocates in the military and the DOE laboratories to redouble their efforts to develop a new generation of weapons. The Gulf War placed potential Third World battlefields clearly in their target sights. In the Fall of 1991, two Los Alamos scientists aired their concept for a set of post-Cold War, post-Gulf War nuclear weapons. In a article titled "Countering the Threat of the Well-armed Tyrant," they offered four weapons alternatives:

- a 10-ton penetrating "micronuke" for bunker destruction



Trident II: *The Pentagon proposes to arm four additional ballistic missile submarines with the more accurate Trident II missile, a program that would cost $2.8 billion.*

- a 100-ton "mininuke" to counter ballistic missiles
- a 1000-ton counter-projection force "tinynuke" for battlefield attacks
- exotic technology warheads

Livermore scientist Thomas F. Ramos, then serving as science adviser to the top nuclear weapons official at DOD, also suggested a new "small diameter warhead." Such a warhead would be able to fit into more types of launchers, Ramos said. "Such warheads could potentially be adapted to existing delivery systems for conventional munitions, such as those employed so successfully during Operation Desert Storm," he wrote.

The DOE laboratories lobbied for one of the military commands to "request" new weapons. The two Los Alamos scientists went door to door, giving their briefing—"Potential Uses for Low-Yield Nuclear Weapons in the New World Order." Support of the Defense Science Board was quietly secured in the summer of 1991, when it recommended that DOE create a prototype generic warhead should a test ban occur and the U.S. has to "regenerate forces" in the future.

The Soviet threat would not be the baseline. Unknown future threats in the Third World were suggested to drive new weapons. The Reed Panel was a vocal proponent of the new weapons: "The technology is now in hand to develop power projection weapons and very low yield nuclear weapons in earth penetrators with precision guidance . . . ," their report stated. The JCS provided the military scenario. "By the end of this century . . . ," they stated in their 1991 annual report, "TBMs [tactical ballistic missiles] with greater range and accuracy are likely to be deployed and the number of countries with a nuclear capability could grow. The risk of a Third World country using these weapons against US forces could be significant."

In late 1991, the Air Force formally established a new nuclear weapons program—Project PLWYD (pronounced Plywood, for *P*recision Low-*Y*ield *W*eapons *D*esign)—to investigate, among other tasks, "a credible option to counter the employment of nuclear weapons by Third World nations." In July 1992, staff officers from the European Command briefed the DOD Joint Requirements Oversight Council on their idea for a new nuclear-armed air-launched standoff missile (called ALSOM). Air force officials asked that the ALSOM effort be folded into PLYWD, so that the two could stress more usable mini-nuke designs, lest low-yield weapons get tainted as "old" nuclear proposals intended for a European battlefield.

The Defense Nuclear Agency similarly hoped for a low-yield device; right after the Gulf War it began its own research on "a very low collateral effects nuclear weapons concept."

When the mini-nukes program was first publicly revealed in April 1992, it was hardly appreciated how advanced and widespread the weapons development efforts were. By the summer of 1993, however, there was enough evidence on the public record to indicate that DOE and their nuclear counterparts in DOD were preparing the groundwork for the next generation. Again, the Clinton Administration remained agnostic.

Congress, however, well understood the potential danger a mini-nukes program posed to U.S. non-proliferation efforts and adopted a total prohibition against "research and development which could lead to the production by the United States of a low-yield nuclear weapon . . . [that is] a nuclear weapon that has a yield of less than five kilotons."

No New Designs

Testifying before Congress on April 20 of this year, Admiral Chiles stated that "There are no new nuclear weapon or ballistic missile programs on the drawing boards to replace our current systems." Deputy Secretary Deutch reiterated at the posture review press conference "I want to stress that at the present time we do not see the need for new nuclear warheads to be added to our arsenal. No new design nuclear warhead is required as a result of this review." The Pentagon pledge reflects current fiscal and political reality, and recognizes that the mini-nukes experience and the controversies sparked by attempts to publicly change nuclear policy vis a vis weapons of mass destruction have left little chance that Congress will support a new nuclear system.

Congress, nevertheless, supports the notion that the nuclear laboratories retain their "competence" to design and

develop new weapons—their own version of the 'hedge.' Months before the Nuclear Posture Review was completed, Perry threw his weight behind the "competence" camp. Speaking at George Washington University, the new Secretary stated that "we plan to maintain a minimum production and R&D capability for nuclear weapons, even while we're in the process of dramatically reducing the number of nuclear weapons we have deployed."

One of the first steps of the Nuclear Posture Review was to determine "which adversaries and what threats to national security" demanded future U.S. nuclear planning. A long list eventually included a "Regionally Assertive Russia, Fragmented Russia, China, North Korea, Iran, State Sponsored Terrorism, India-Pakistan, and a Nuclear Snowball in Mid-East," according to a January 1994 internal briefing.

Tip-toeing Around The Mini-Nuke Ban

Such scenarios form the basis for nuclear warriors to justify new research. So, Nuclear Posture Review or not, warhead programs gestate at low levels within the Defense and Energy Department bureaucracies, as nuclear advocates endeavor to find a political formula that might avoid the pitfalls of the mini-nukes program.

The first tack is secrecy. The FY 1995 DOE budget request to Congress, for instance, included Phase 1 (conceptual research) and Phase 2 (feasibility) nuclear warhead studies for an "ICBM replacement warhead, gravity bomb studies, and enhanced safety warheads for the Navy." These were all "safety" upgrades to maintain "competence," none particularly controversial. Mysteriously, however, the request deleted references to work on a potentially controversial "High Power Radio Frequency (HPRF)" nuclear warhead, mentioned in previous year budgets. Old neutron bomb and SDI enthusiasts had for years fancied a "tailored" nuclear weapon that could utilize a low yield nuclear explosion to generate an electromagnetic pulse or high-powered microwave beam to neutralize military-electronic equipment, destroy mobile missiles, and disable electrical power networks. A new high-power radio frequency warhead program was initiated in August 1989 with just such a mission.

Journalist Finds HPFR on Development List

In March 1994, John Fleck of the *Albuquerque Journal* obtained a corrected list of warheads on the drawing boards, and revealed that despite its absence from the DOE budget, high power radio frequency was still under development. In testimony before Congress, the Energy Department was forced to describe the weapons as a "non-lethal [sic], ICBM-delivered, and nuclear-driven . . . device intended to damage electronics and/or electrical components." Los Alamos and Sandia laboratories, together with Air Force laboratories in San Antonio were working on the program. Despite the pledge of no development, it is scheduled to reach an engineering development decision in March 1995.

High Power Radio Frequency's extremely low-yield nuclear "driver" is probably a prohibited research program under the mini-nukes Congressional restriction. At the least, it contradicts the Defense Department's assertion that it has no new designs on the drawing boards. Even more clearly, a Navy proposal to conduct an "advanced technology demonstration" of a "Global Positioning System Aided Minibus" violates the no new weapons pledge, as well as the mini-nuke prohibition.

A January 31 Navy memo states "There is a need for a low cost highly accurate payload delivery system, with the capability of performing ballistic nuclear and non-nuclear missions to improve precision strike capability from secure platforms . . . " The memorandum attempts to justify spending $13 million between 1995-97 for a demonstration of a satellite-aided kinetic energy "minibus" (payload) compatible with Trident or other ballistic missiles.

Minibus, according to this and other documents, was originally part of the fledgling conventional submarine-launched ballistic missile program. The submariners want to "leverage the significant investment already made" in their Poseidon submarines and Trident I missiles slated for elimination under arms reduction agreements by transforming them into new weapons systems. Their view is that America needs a stealthy low cost "extremely flexible non-nuclear deterrent" for regional warfare, the nuclear capability was almost an afterthought, the standard assumption and outcome of the largely independent nuclear union.

Research and development funding for a minibus is not explicitly in the FY 1995 budget, nor do Defense or Energy Department reports to Congress include any references to it. Nuclear agnosticism in the Clinton Administration allows the services and laboratories to search for such new weapons ideas unmolested. Contrary to the statutory system that suggests that generating requirements is the exclusive bailiwick of the user (unified combatant) commands, in the secret nuclear world the true believers in the labs and in the services run the show and create nuclear "needs."

STRATCOM Finessed By Alliance

The creation of the unified Strategic Command in 1991 in theory segregated all U.S. strategic nuclear weapons and planning into a single high-level command. By streamlining control of nuclear forces into one national command, the intent was to remove the services and labs as "advocates" of nuclear weapons. Creating STRATCOM, however, has hardly had the effect of creating a "top down" system for developing new requirements. The services still "own" the nuclear systems; the Air Force Space Command, Air Combat Command, Air Force headquarters in the Pentagon, and the Navy staff all still independently generate "requirements." None of this is done without the knowledge of the Defense Department's civilian leadership. Quite to the contrary, the disarmament opponents dissemble and mislead in order to help create the new nuclear reality. *—William M. Arkin*

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Editor's Note: A list of the references used in the preparation of this article is available upon request to FAS offices in Washington.

REACTIONS TO JULY/AUGUST NEWSLETTER ON ARROGATION

The mail bag and comments on the last newsletter were generally favorable. For example, Carl Kaysen wrote that it was "a brilliant piece: thoughtful, serious and well-balanced." Priscilla Johnson McMillan wrote it was "an act of bravery" and a casting about "for some responsible means of establishing and protecting the truth." But there was criticism.

Treatment of Edward Teller

Two former FAS Chairmen (William Higinbotham and John Toll) asked whether the criticism of Edward Teller for "arrogation on the right" implied that other scientists who worked on the hydrogen bomb were wrong to do so.

Here the answer is simple: Teller was criticized for his tactics of arrogation to himself of decisions that, with a different presentation, might have taken a different course, not for work on it after the Government decided on it.

Higinbotham felt Teller was a "sensitive and kind man . . . paranoid about the Soviet threat," as were others. Toll felt that "history has shown that Teller was right in this matter and that the development of thermonuclear weapons by the U.S. helped to prevent an extremely dangerous situation."

Others supported the treatment of Teller. Wolfgang K.H. Panofsky wrote of the PIR's "merited critical view of Teller's role."

Treatment of Heisenberg

About three-quarters of the critical letters concerned the treatment of Heisenberg and took objection to the heavy reliance on *Heisenberg's War* by Thomas Powers in the newsletter discussion of the role of German scientists. Accordingly, I read many reviews of Powers' book, both pro and con, work by David Cassidy (a Powers critic and Heisenberg biographer) and an especially interesting and relevant forthcoming book by Mark Walker, *Nazi Science: Myth, Truth, and the German Atom Bomb*.

I then prepared a summary of the six main issues that seem in contention and incorporated the comments of both Powers and Walker so as to provide, in a few pages, a current assessment of the situation. Readers can receive the summary, as sent to those who criticized the treatment of Heisenberg, by requesting from FAS "Getting To The Bottom of the Heisenberg Affair."

In brief, the summary suggests the following:

A. Both authors agree that there was an "absence of zeal" in Heisenberg's approach to building the bomb.

B. There were contemporaneous indications of internal German dissidence about building the bomb (from scientist Houtermans, publisher Rosbaud, and German spy Respondek) and these are better treated in Powers' work than in that of Walker.

C. Despite some suggestive possibilities, there does not, however, appear to be any decisive proof of any action of omission or commission by Heisenberg leading to the stalling of the German program.

D. Accordingly, whether or not there was a "conspiracy" to slow down the bomb has not been established.

E. With regard to the visit of Heisenberg to Bohr in Copenhagen, Walker believes that all evidence agrees on three and only three points: that Heisenberg told Bohr that nuclear weapons were feasible and that the Germans were working on them and that Heisenberg was ambivalent. In addition, Powers points out that Heisenberg gave Bohr a sketch of a reactor (which Hans Bethe confirms) and that a Heisenberg colleague (Hans Jensen) went back to try to re-emphasize Heisenberg's message that German scientists did not want to work on the bomb.

F. Powers believes that the attacks on Heisenberg's integrity were "unwarranted" and Walker agrees that "many" of them were.

In my own current opinion, the German atomic scientists were caught between two schools that did *not* want to hear any evidence of their dissidence—the German nationalists (ready to cry "sold out the nation") and the sensitive American atomic scientists (ready to cry "inventing legends of morality and putting on airs that they were more moral than Allied scientists.")

Accordingly, no serious effort was made to elicit from Heisenberg and others exactly what happened, and a number of American atomic scientists bear the responsibility for not having tried to find out. Also, it is Walker's view, with which I agree, that the Farm Hall transcripts do not resolve these issues decisively, as so many believe.

In the end, the claim made by Heisenberg, on April 27, 1964, seems entirely plausible: "The German physicists did not want to build atomic bombs and were glad that they were spared the decision about producing atomic bombs by external circumstances. In this, what you called 'social conscience' played a considerable role, although there were other motives, not least the pure self-preservation instinct. No one will ever be able to state objectively the relative weight of the various motives; but it would be unjust if the motive of 'social conscience' were completely negated."

In any case, had Heisenberg been as enthusiastic, optimistic and misleading about building the A-bomb as Edward Teller was about building the H-bomb, the German bomb program would have received much greater resources and would have been much further along.

—Jeremy J. Stone

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COMMENT FROM NIELS BOHR'S SON

In a contribution to the July/August *Public Interest Report* of the Federation of American Scientists, Dr. Jeremy J. Stone has considered the possibility that my father, professor Niels Bohr, favored nuclear proliferation in the post-war period. I should like to state emphatically that such an attitude is entirely at variance with the basic views held by my father on the issues arising from the advent of nuclear weapons.

In his Open Letter to the United Nations, of July 9th, 1950, my father gave an account of his views in the years after the war. Describing the views he brought to the attention of the U.S. government in the immediate post-war years, he wrote:

"It appeared to me that the countries which had pioneered in the new technical development might, due to their possibilities of offering valuable information, be in a special position to take the initiative by a direct proposal of full mutual openness."

The special position referred to would, of course, be undermined by any assistance to the proliferation of nuclear weapons.

It should be added that my father saw any contribution he could make in these matters as being based on the confidence that had been shown him by the statesmen with whom he had been in contact. In all his undertakings, including the Terletsky visit, he took the utmost care to retain this confidence.

Aage Bohr

In our May/June and July/August newsletters we defended Niels Bohr against charges that he "assisted" in proliferation and "violated confidence" placed in him. All information available has borne out that defense.

But that Niels Bohr may have seen "favorable aspects" to proliferation—if the world "openness" required by his "universal control" could not be achieved—still seems indicated by Bohr's statement that the atomic bomb would "completely chang[e] all future conditions of warfare." (FAS July/August PIR, pg. 2). His "first serious question" to Robert Oppenheimer when he came to Los Alamos in 1943 was "Is it really big enough?"—to effect these changes in the "whole situation of war and the tolerability of war."

In Oppenheimer's summary of this and other conversations with Bohr (New York Review of Books, Dec. 17, 1964), Bohr is said to have known that "it would not be quite in character for the Soviet Union to make an open world." So Bohr knew international control might not work and that the bomb might make future war intolerable.

Under these conditions, is it so unreasonable for Professor Bohr to tell Terletsky that "Only the proliferation of these powerful weapons in different countries could guarantee its non-use in future . . . ", as Terletsky reported? Terletsky has been a credible witness and quotes Bohr expressing the same basic point of view in three successive sentences, not just one. Still, this whole question deserves more research.

J.J.S.

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