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THE CASE AGAINST NOT HAVING A COMPRE-
HENSIVE TEST BAN TREATY

S. T. Cohen

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Santa Monica, California

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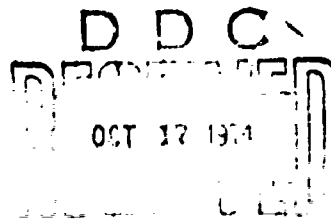
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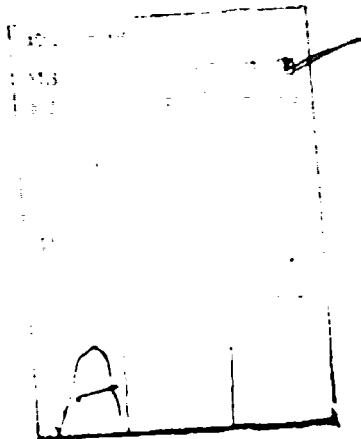


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THE CASE AGAINST NOT HAVING A COMPREHENSIVE TEST BAN TREATY

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I'm not going to argue in favor of a Comprehensive Test Ban Treaty (CTBT) -- this, in my opinion, would be inimical to U.S. long-range security interests. But, it will be argued here, in terms of U.S. national security policies -- which some of us may not like but, nevertheless, represent a fact of life and reflect, in our democratic way of life, the Nation's resolve as well -- there seem to be no compelling reasons why (assuming acquiescence by the Soviet Union and other nations so disposed) the U.S. should not enter into such an agreement. In this vein, we shall consider the essence of these policies, as they relate to a CTBT, and attempt to determine whether any truly legitimate road-blocks might stand in the way of U.S. acquiescence.

First, and this is the most critical point bearing on this issue, it should be recognized that the current U.S. administration is on record as favoring "a comprehensive test ban, adequately verified." This also was the position of Presidents Johnson, Kennedy, and Eisenhower; and so it should be noted that for many years the U.S. has favored a complete cessation of testing provided an adequate monitoring system could be employed.

Next, aside from the verification issue, which will be discussed in a moment, it is important to appreciate the basic U.S. position -- namely, the cessation of testing by the U.S., the USSR and, to a much less significant extent, some other nations is in the interests of the

^{*}This Paper is drawn from a presentation given to the Arms Control Working Group during the 32nd meeting of the Military Operations Research Society, at Monterey, California.

United States. It is not necessary to imply here that this position is supported and blessed by facts and logic -- it is not. To the contrary, it is fundamentally a matter of religious faith and is based on the cardinal arms control axiom that the mutual restriction or reduction of any phase of nuclear weapon system development works toward greater security. Having embraced this basic belief, all that remains to be done is to furnish the rationalization for any agreements that happen to be consummated.

On these grounds alone, and remember we're talking about national policy, any and all arguments, however well-intentioned, for the necessity to develop new nuclear warheads having yields above some verification threshold (whatever that means) are simply null and void. Such arguments may seem to have some internal consistency and, in terms of relating to certain military objectives, they seem to carry great logic. But this is apt to be a narrow brand of logic and we should remember that military objectives are not always correlated with national policy objectives, especially when we're talking about arms control. So to press forward with arguments on the military importance of a given nuclear warhead, in opposing an arms control issue, more likely than not is to bark up the wrong tree. First, let us consider one real-world example and then we'll deal with some well-intended, extra-terrestrial fantasies held forth by those arguing against a CTBT.

Several years ago, one, with seeming impunity, could have (and many did) made the case that this was no time for a CTBT because it was vitally necessary to test the Spartan warhead for the Safeguard system. After all, the President had announced the goal of a 12-site nationwide ABM system whose completion was deemed essential to defend the populace and our Minuteman missiles. At the same time, however, the United States had entered into the SALT negotiations and, while the President was promoting Safeguard domestically, his delegates were trying to do away with it in Helsinki and Vienna.

When all was said and done, Safeguard all but bit the dust in SALT I and the importance of the Spartan warhead all but vanished. And we should keep in mind that, while the President fought a desperate battle with the Congress to sell the Safeguard concept and keep it alive, when

he decided to sack it in SALT the approval was almost unanimous. The fact that Safeguard's demise made a shambles of the U.S. strategic Sufficiency Conditions -- strategic military objectives which the President held to be vitally important -- hardly was noticed in the scramble to bless an agreement held to be in line with U.S. arms control policy. So much for a vital military objective when the possibility for an arms control agreement arises.

With this example in mind, to press forward with arguments such as: (1) the necessity for an improved MIRV capability; (2) the requirement to check out the reliability of our strategic warheads; (3) the need to check out the performance -- i.e., the weapon effects and their interaction with a target -- of certain large-yield warheads; and (4) the need to more fully plumb the nature of larger-yield warheads to make sure that no surprises exist whose exploitation by the Soviets might redound disastrously for the U.S. -- all these are essentially irrelevant, in view of our controlling test ban policies. These are items that we would much rather not do if we thought the Soviets would be willing to join us in not doing them.

Such nuclear tests represent mutual nursuits which are held to be fundamentally bad. They may be tolerated (sometimes barely) by us when we cannot reach agreement with the Soviets to choke them off, but the nation hardly regards them as representing it's best interests. Keep in mind that this is an attitude -- better yet, a national policy -- which does not necessarily stem from the position of the Bulletin of Atomic Scientists or the New York Times, or the Senate Foreign Relations Committee. Rather, it is the product of many years of high-level deliberation by our senior policy-makers, particularly in the Executive Branch; and, as mentioned, it is a product that has been accepted and endorsed by two Republican and two Democratic Presidents.

Thus, it would seem pointless to continue to bring up these kinds of arguments so that, in theory, a President can weigh pros and cons and objectively reach a decision. Hogwash! For more than fifteen years the national decision has been on the pro (pro-test ban) side; and should a President desire a treaty, then what his policy dictates to him is that he can readily sign on the dotted line if domestic politics indicate a

go-ahead and the other major party (the USSR) is willing -- PROVIDED that the verification issue does not pose internal U.S. problems which are too thorny. And even then the U.S. has a great propensity to rationalize on the meaning and implications of verifiability. To this point, we might briefly retrace the hassle over on-site inspection during the period (1958-1963) leading up to the Atmospheric Test Ban Treaty.

At the beginning of the Geneva test ban talks, the U.S. position was that an unlimited number of on-site inspections should be allowed to minimize the possibility of clandestine underground testing. The Russians said nyet! So the U.S. unilaterally embarked upon a series of evaluations (spelled rationalizations) of the seismic verification problem at each phase leading to sharp reductions in the annual inspection level until two things happened: (1) The Soviets edged slightly up, from zero to perhaps two or three, in their allowed inspection quota, and then began to back down to zero; and (2) influential Congressional factions began to balk. And so a CTBT stalemate took place which still seems to exist.

Now this verification rationalization process was not really intellectually honest; and it certainly wasn't technically replete for, while U.S. decision-makers were convincing themselves that seismic detection progress was better than they had originally thought, research and experimentation on decoupling techniques were indicating that this progress could readily and effectively be negated. The point to be made here is that whereas "adequate verification" may be an essential and inviolate tenet of U.S. policy, "adequacy" is a negotiable (better yet, self-negotiable) quantity and U.S. policy makers have shown a great propensity to negotiate it away. In so doing, no serious attention has been paid to the views of the other side; and, certainly, the other side has paid scant attention to us while this (internal) process went on and its results were explained to them. (That this self-negotiation process received treatment in SALT I comparable to that in the 1958-1963 test ban negotiations, one should review the testimony of William Van Cleave before the Senate Government Operations and Armed Services Committees last year.) Therefore, we should keep in mind that, when the verification caveat begins to interfere with the arms control

policy objective, it is the definition of verification which begins to erode, not the objective.

Now this may seem like an irrelevant aside, since the major theme of this Paper is to relate the test ban issue to national policy; and one might wonder why haggling over the price of "adequacy" is being discussed when the U.S. still professes that verification is essential to its policy. For clearly, by our own pronouncements, there is a verification threshold for underground tests which is still too high to be acceptable; the U.S. has said so, officially, stating that there are important developments below this threshold (whatever it may be and nobody knows what it is) whose exploitation by an evading party to a CTBT would work against us. So, on these grounds, the time still would not seem ripe for a treaty. But is this really the case? One strongly suspects not, for were the Soviets to suddenly want a CTBT and were there no serious U.S. domestic impedances, we would see a U.S. re-evaluation of the verification issue and a treaty would soon become feasible.

What is being implied here is that our officialdom in the Executive Branch are operating under U.S. national security policies which make it readily and easily possible to show that "adequate verification" is essentially at hand. In fact, it could be argued that the verification problem effectively disappeared several years ago; and had the opportunity to conclude a CTBT arisen, the U.S. would have had no difficulty in accommodating, safely in accordance with its own security policies.

Were we to pick up the verification problem by judging "adequacy" on the basis of progress in seismic detection techniques, we would wind up in the same sorry state of ten years ago, with the conclusion that our capabilities had not progressed to the point where we could dispense with on-site inspection. That is, were we honest with ourselves, we would again reach this conclusion. On this basis, the thesis presented here would crumble and no fair case could be made for a CTBT.

On the other hand, though, if we were to examine the significance, to the U.S., of Soviet clandestine testing below our assessed verification threshold (again, whatever that is) -- this being done in the context of U.S. security policies -- we would find that any such testing

by the Soviets could not lend to any significant risk to the U.S. Ergo, why not consummate a CTBT?

In this policy framework, what about the military significance of nuclear warheads which might emerge from testing below the verification threshold determined by the U.S.? (The Soviet Union has never seriously concerned itself with this problem, always allowing that national verification means would be just fine, but never holding a meaningful dialogue -- which really couldn't be held anyway, since a mutual discussion of classified military matters would be required -- with the U.S. which would show why this was so.) As has been indicated, the U.S. maintains that this is a militarily important area. In terms of its security policies, however, it truly doesn't mean it. Let's explore this seeming inconsistency.

One military area of possible concern, regarding a CTBT, is that of tactical nuclear weapons, where many allow that discriminate, low-yield weapons are particularly appropriate to give credibility to the U.S. stockpile. In this respect, the importance of advanced classes of clean, tailored effects warheads, which will stem from continued testing, is stressed. But is this importance recognized by the U.S. government, in terms of its security policy objectives? Obviously not.

As a consequence of this policy toward tactical nuclear weapons, there are no serious indications that significant changes in the stockpile are in the offing, and there has been no real effort to incorporate the considerable progress (if one wishes to call it that) that has taken place in our nuclear testing program during the past dozen years. In fact, it has been alleged (by knowledgeable people) that, during the 1960s, there was a conscious and deliberate refusal to invest in discriminate tactical nuclear weapon capabilities because this would run contrary to then-prevailing (and still prevailing) policies.

Even though a (rather small) school of thought exists (to which I belong) which holds to the great importance of gaining advanced discriminate weapon capabilities and, on occasion, senior officials seem to give lip service to having a discriminate stockpile, nevertheless, the government -- viewed as a controlling entity -- really hasn't wanted or cared that much to reach for this potential. Nor has the relevant

part of the Congress -- the Joint Committee on Atomic Energy -- which, if anything, now seems disposed to cut down on our tactical nuclear capabilities.

Therefore, we should realize that U.S. policy apparently places no premium on the need to modernize the tactical nuclear stockpile through currently available technology, let alone what may become available through future testing; and it places no importance whatsoever on whatever Soviet testing may accomplish in this area, let alone on whatever the Soviets already have accomplished. As a matter of fact, it has been revealed that we don't even know what warheads exist in the Soviet nuclear stockpile and we may never have known what existed; but since we seem not to have really cared, our ignorance has been bliss.

In sum then, regarding a future imbalance in the U.S.-USSR tactical nuclear net technical assessment, because the Soviets cheated under a CTBT and we didn't, the relevance of a potential imbalance is essentially ruled out by the way the U.S. chooses to regard the problem. We can debate how wise or unwise this policy attitude may be; but it happens to be a long-standing government attitude and that's the way it is. As a consequence, there is no verification problem regarding tactical nuclears because there is no problem on tactical nuclears: Our policy precludes the necessity for substantial warhead improvements, along discriminate lines, and it also precludes meaningful Soviet improvements (and who is to say that these improvements, however we may perceive them, have not already been achieved in the Soviet test program) -- whether the Soviets like it or not.

Several years ago, when the U.S. embarked upon its Safeguard program, one could have made the argument that to discontinue nuclear testing, through a CTBT, would have jeopardized the development of the Sprint system and, looking further into the future, seriously restricted the potential effectiveness of Hardsite defense systems. Furthermore, the Soviets, being able to cheat at these low-yield levels applicable to accurate short-range ABM systems, could have developed optimum warheads for such weapons; and so a potential ABM gap might have loomed as a realistic prospect. (It is doubtful whether this factor would

have been considered seriously by the U.S. had there been good prospects for consummating a CTBT; but, nevertheless, at that time this kind of argument might have had a strong intellectual appeal.)

Today, however, we are more than a year into the SALT I treaty era and a new determinant equation exists for ABM. On the U.S. side, we aren't allowed to deploy enough Sprint missiles to make site defense a truly significant capability and so to argue the importance of warhead improvements holds little water.

Therefore, noting how U.S. strategic policy can suddenly be formalized into a new framework, thanks to an arms control treaty, the U.S. needs to continue testing of improved low-yield ABM warheads cannot be too important. However, what about the Soviet ability to pursue this area, in the event of a CTBT, and how much of an imbalance might be created by such clandestine pursuit?

First of all, we really can't acknowledge this possibility because, through SALT I, the Soviets, like ourselves, have substantially constrained their ABM deployment and, by our verification assessment, they simply can't get away with any illegal deployments. Therefore, it would not be of first-order importance for them to develop advanced warheads for their existing ABM weapons, plus the fact that the size of their Galosh missiles indicates more of an interest in high-yield warheads whose testing can be detected.

Second, there is the prospect for the Soviets upgrading their air-defense SAMs to provide an ABM capability; in which case, there may be an important potential in improving low-yield warheads for these missiles. That this might work against U.S. security, again such an argument might seem to have intellectual appeal; but, in terms of U.S. policy, as reflected by our adherence to the SALT I treaty, it has to be fantasy since, obviously, the U.S. had to weigh this prospect in assessing the viability of the ABM agreement and, obviously, it had to have reached the conclusion that the Soviets couldn't conduct a SAM-upgrade program lending to a significant deployment without our becoming aware of this treaty evasion. So, whether the Soviets like it or not, SAM-upgrade is not in the cards for them. As a consequence, were

they, for their own esoteric research reasons, to explore warhead possibilities for these weapons under a CTBT, this could not possibly work toward jeopardizing U.S. security.

Summing up the verification problem regarding Soviet clandestine testing of ABM warheads, there is no verification problem because, thanks to SALT I, there is no ABM problem. And since SALT I clearly and unmistakably is consonant with U.S. strategy policy -- in fact, SALT I more truly is U.S. strategic policy -- we need not worry about Soviet misbehavior since no potential harm (to us) is in the offing.

All in all, it would appear that the Soviets have little to gain through unverified cheating on a CTBT. Of course, it is possible that, for their peculiar set of reasons, they may have a different viewpoint; but then, if they stubbornly insist on being irrational, that's their problem.

At the risk of seeming snide, one might describe the U.S. policy approach to dealing with the problem of ignorance in the context of arms control as represented by the venerable motto: "What you don't know can't hurt you." In this respect, in order to conduct the requisite arms control rationalization, the U.S. has a record of viewing intelligence unknowns either benignly or indifferently. This attitude is, of course, in sharp contrast to that of the good old pre-arms control days when truly unknown quantities were shaped into major threats to scare a Congress and an American public (both groups then largely suspicious of monolithic evil Communist motives) into backing new U.S. military developments.

Whereas some may not view too kindly such an attitude, nevertheless, to a significant degree it seems to have become an ingrained fact-of-life. And, whereas its existence naturally would be hotly denied by the powers that be, nevertheless, there is an abundance of history to show that, indeed, this situation has prevailed whenever the U.S. has embarked on arms control pursuits. In essence, this probably somewhat less than objective behavior represents effective U.S. policy. Toward supporting this allegation, a few examples in the nuclear weapons and testing area are presented.

In presenting the case for a CTBT, in 1963, ACDA Director William Foster allowed that a treaty would preserve the U.S. advantage in tactical nuclear weapons (an advantage, assuming it actually existed, in which the U.S., with its Conventional Emphasis policies, placed little stock). Mr. Foster maintained that the U.S. was superior to the Soviets in this area, having a "more diversified and numerous arsenal."

Quite possibly this assessment was correct, but apparently there was little hard intelligence data to prove it out. Edward Teller, who was keenly concerned with the Soviet test program, disputed Foster's contentions, allowing that our analysis of Soviet atmospheric tests was akin to trying to tell what a neighbor is cooking by sniffing the smoke from his kitchen. But such arguments -- which happened to be correct -- were of no avail and the unknown was officially made out to be a U.S. advantage.

In coping with the expressed concern that, were a CTBT signed, the Soviets might elect to cheat on a significant scale by decoupling nuclear explosions through the construction of underground cavities, Mr. Foster stated that: "Since this form of decoupling has never been tried on any practical scale so far as we know, a potential evader would again be unsure that he could escape detection." This remark really should have raised hackles in the arms control community, and elsewhere as well, but nothing happened and a totally unfounded government position became gospel on test ban policy. Our ignorance, at that time, of Soviet decoupling competence was profound (it still is). In fact, one might say that if they had been checking out the cavity concept and had done so competently, by definition we never would have known it. Nonetheless, ignorance was conveniently translated into bliss and, by U.S. dictate, there was no way for the Soviets to upset the CTBT applecart by decoupling.

More recently, namely this year, we have a statement by the Chairman of the JCS on the U.S./Soviet theater nuclear weapon balance where the Chairman admits to uncertainties in this balance but, at the same time, alleges: "Nevertheless, I continue to believe that the U.S. is at least the equal of the USSR in overall capability and probably still the superior in nuclear weapons technology." Whereas one winces at the

thought of disputing the Chairman's belief, it should be pointed out that he had even less to go on than did Mr. Foster some ten years earlier. For, according to Carl Walske* (until very recently the Assistant to the Secretary of Defense for Atomic Energy): "We have little knowledge of the Soviet warhead designs, of their vulnerability, or of Soviet testing or development philosophy...We do not know what the Soviets have accomplished in their program since 1963..."

So here we go again with the old myths brought up to date. These remarks hardly are meant to imply that the Chairman is in favor of a CTBT, but rather that high U.S. officialdom seems to be continuing to regard voids of knowledge optimistically rather than apprehensively. (One would guess that on the civilian side in Washington, most high-ranking officials, were they to come to a crunch on a CTBT because it looked like a serious possibility, would offer little argument against the Chairman's belief and probably would wax even more optimistically than he.)

In this framework of ignorance and in connection with current pros and cons on a CTBT, the argument is made that the U.S. has to go on testing in order to check the reliability of its ongoing stockpile and maintain a required level of confidence. In terms of the letter and law of U.S. policy on a CTBT, what this concern has to imply is that a serious asymmetry (a "reliability gap," if one may coin a term) may result if the Soviets are to go on testing below the verification threshold while we, being good sports, refrain.

But how in heaven's name can one assess this problem? If we don't have a good idea of what the Soviets have tested and developed over the last ten years, then we really don't have any idea of their potential reliability problems and, thus, no idea of how to evaluate the matter. And, moreover, if the U.S. doesn't attach real military importance to Soviet testing at low (unverifiable) yields, then why should it concern itself with something so esoteric as a low-yield reliability gap. Clearly, it isn't about to.

* Testimony to Subcommittee on Arms Control, International Law and Organization, U.S. Senate, July 1971.

Again in the same vein -- i.e., of ignorance -- we have the intellectually appealing argument that the future of nuclear weapon technology holds some unknown number of surprises. And were one side -- let's say the Soviets -- to uncover these surprises in due course of time, the other side could be placed at considerable disadvantage.

In some other world (like on a New Mexican mesa or in the central California wine country) this might seem to have a strongly persuasive twist (backed up by a lot of technical history). But in the real world, an argument such as this has to be out of this world.

What are the surprises? Well, we really don't know or they wouldn't be surprises; but let's grant that they may, or ever will, be important. By definition, our ignorance here has to remain total (so we should be tolerant) but since we're not living in a static world, we must try to relate this "surprise" factor to some time-frame; and here is where we get into trouble -- justifiably -- with the policy people, if we want them to take this factor into account.

It may be unfair for them to ask that the surprises be spelled out, but it's not unfair for them to ask whether the Soviets will come across these surprises in five, ten, or twenty years or whether they already have a handful of them tucked away, unbeknown to us, in their nuclear arsenal. Obviously, we have no way of answering such queries: We apparently don't know where the Soviets have been; we don't know where they are; and we don't know where they're going -- and maybe they've already gone there.

Since we have a record (part of which has been discussed here) on how the U.S. deals with such intangibles, were this issue advanced in any determined fashion, those responsible for U.S. CTBT policy (who really have already defined surprises away) would give it predictable treatment: "Yes, you seem to have a good point; but who, including you, knows what it means? and, besides, we think we're in good shape versus the Soviets and, since we don't know what they're doing or can do, obviously what we don't know is not all that important compared with the known benefits of a CTBT." (That they may not know what the benefits of a treaty may be, indeed they don't. But to argue this

print is going against national policy and one can't go against the grain and hope to be effective.)

This Paper may seem to be jaundiced, and even sarcastic, on the subject at hand. If so, it has not been inadvertent. We're living in a nation which has become unhappy (increasingly so) with its nuclear stockpile; and continues to seek ways and means to restrict or reduce this stockpile -- even though nuclear arms control negotiations thus far have produced no tangible results toward reducing nuclear stockpiles or prospects of nuclear war, and there is fair evidence that our primary potential nuclear adversary, the Soviet Union, shares neither our arms control aspirations or our nuclear (one should say anti-nuclear) policies.

These considerations have dominated the CTBT issue since its inception and have resulted in a stacked deck -- called national security policy -- which makes it all but impossible to play the game of nuclear arms control from the standpoint of the loyal opposition. The trouble is that it is loyalty to another cause, not the national cause.

As to whether the national cause is out of touch with reality, that's each individual's subjective judgment. Maybe this is the case, but for a dissident to fight City Hall with his own technical arguments -- however well-reasoned -- I'm afraid that many, if not most, of these arguments are too narrowly reasoned and, therefore, in a pragmatic sense, ill-reasoned.

The broader problem, of course, includes the political parameters and, in my opinion, is dominated by them. Politics is the art of the possible, and if there is any possibility of keeping nuclear testing alive in the U.S., it will have to be based on an accommodation to the existing politics -- or policies, both being the same thing.