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THE SECRETARY OF STATE
WASHINGTON
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SECRET
MEMORANDUM FOR: THE PRESIDENT
FROM: Cyrus Vance
SUBJECT: Comprehensive Test Ban

I fully support your recent decision that we should seek a five-year comprehensive test ban. Specifically, I endorse restricting nuclear weapons experiments to minimal yields (a few pounds or somewhat higher).

I understand your decision on duration to mean that we must gear our verification requirements to the five-year period of the treaty, and that the testing restraints would begin as soon as the treaty enters into force.

Some concerns that continue to be expressed appear to overlook the flexibility and assurances offered by the five-year approach. As we plan for the next steps in the negotiations and chart a US course for implementation of the treaty, these concerns will have to be dealt with. But I believe the answers to a few key questions would help keep things in perspective.

On permitted experiments...

1. Why haven't we been routinely testing weapons in our stockpile for reliability, if such tests are so critical? It is striking that no certified nuclear weapons has ever failed to explode.

2. Especially for a five-year treaty, why can't the weapons design talent be maintained by a vigorous Safeguards program that stresses computer simulation and an enhanced quality assurance program?

3. Would we be content to see non-nuclear weapons states conduct experiments at the hundreds of pounds or tons level? Wouldn't some special arrangement to allow this freedom cause the treaty to be rejected as discriminatory?

4. What military advantages of permitted experiments would justify the total loss of non-proliferation benefits?
On National Seismic Station Networks...

1. Aren't the requirements for necessary internal stations less demanding in the context of a five-year treaty than they would be under an indefinite treaty? How much do we gain by going beyond a basic network? Isn't the key difference between none and some, rather than between some and a bit more?

2. If we apply the best minds, couldn't we substantially improve our detection capability and our analysis of all-source verification data? Wouldn't we then see a significant lowering of the threshold for test detection in the Soviet Union?

3. Given the five-year duration, isn't it extremely unlikely the Soviets could gain any strategic advantage through undetected low-level testing during such a short period? Wouldn't the Soviets have to assume a formidable political risk if they were to attempt any clandestine testing?

On a Delay in Testing Constraints...

1. Can't we reduce the time it takes to install a realistic NSS network so that it could begin operation within a year or two after test constraints begin? In the context of a five-year treaty, wouldn't this adequately protect our security interests?

2. Is it conceivable the Soviets would allow us to take up to four years installing an elaborate network of internal seismic installations with no testing constraints in effect?

3. Wouldn't any significant delay in ending testing after entry-into-force virtually eliminate any non-proliferation benefits of a CTB?