

# Science and Global Security

The Technical Basis for Arms Control and Environmental Policy Initiatives

Feiveson

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January 19, 1990

Prof. Matthew Meselson  
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Dear Matt:

Although I would like to get further peer review on a final draft, I feel very favorable toward publishing your article, "Verification of Biological and Toxin Weapons Disarmament." Would you and your co-authors be willing to consider the following comments?

- 1) Paper need some references and a little more "tutorial" material. For example, references would be helpful on pp. 2.2 (infectious agents stockpiled), 2.6 (large technical resources...), 3.3 (already developed...), 7.7 (U.S. and Soviet declarations), 9.4 and 9.6 (on compliance issues). Tutorial material would be helpful on pp. 2.6, 7.6. What are BL4 and BL3 classifications?
- 2) p. 4.6-5.8: section isn't really relevant to verification and perhaps could be shortened.
- 3) p. 9.8: Experience with "non-compliance" allegations might be used to suggest the kinds of information that could be collected during on-site inspections.
- 4) p. 10.4: Idea of "no secret military facilities..." seems so fundamental and far-reaching that it deserves at least some elaboration. What would be the principal objection to such openness?
- 5) p. 3.9 (last line) The air-burst 1 MT "high casualty production area" of 100 km<sup>2</sup> is a bit too low. The equivalent radius for deaths, even using the conservative overpressure model, is 5.8 km, with 10 km as the equivalent radius for total casualties. (Using the conflagration model, these radii are 11 and 13.2 km, respectively.) The areas associated with these 4 radii are 110, 310, 380, and 550 km<sup>2</sup>, respectively. See "The Consequences of 'Limited Nuclear Attacks' on the U.S.," Daughterty, Levi, and von Hippel, International Security, Spring 1986, p. 16, Table 2.

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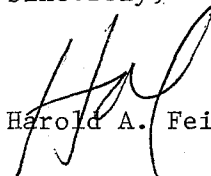
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6) The recommendations in sections 4.1-4.4 would benefit by supplementing words like provisions, allegations, facilities, activities, procedures, and inspections with specific examples, precedents, anecdotes, or other such handles for the reader.

I trust responding to these comments could be done relatively easily.

Sincerely,



Harold A. Feiveson

HAF/jw