

HARVARD UNIVERSITY  
THE BIOLOGICAL LABORATORIES



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Mr. Julian Perry Robinson  
Science Policy Research Unit  
Mantell Building  
University of Sussex  
Brighton BN1 9RF  
ENGLAND

Dear Julian,

Here are six copies of the 15 October draft sent to Piel plus cover letter and notes relating to illustrations. I have also sent copies to Col. Bay (Bug Dayway) and to several persons in Washington. Piel says all revisions should reach Scientific American by 15 November.

You will note increased figures for spending in FY71 and 72. This comes from a DoD statement of 6 December 1971 and may account for most of the \$16M for protective clothing spent before FY77 but not attributed to ~~particular ways~~ on our earlier tabulation. I will try to verify all spending figures we present.

Some miscellaneous questions:

--Is the evidence on delayed effects of nerve gas you cite that of Duffy and Burchffel at the Harvard Medical School?

--What does NMAD weigh?

--Should the rationale given for decontamination be amended to include allowing the relaxation of protection or the avoidance of spread to clean areas?

--What is the basis for taking ECT40 as 12 mg-min/m<sup>3</sup>? Since your dosage-distance plot reaches this value only 50 km downwind, would it be more accurate at the top of page 15 to delete the words "...at least twice that percentage of all..."? What is the meaning of "seriously endanger"?

--What caused the revision of your earlier estimate of 50 mg-min/m<sup>3</sup> at 90 km to about 19 mg-min/m<sup>3</sup> for the same strength, wind speed, and Pasquill category?

--I have misplaced the references to the Salt Lake Tribune(?) with the photos we want. Please let me have them again.

I Feel there are still some weaknesses in the article.

(i) No reason is suggested for Soviet incentives favoring chemical disarmament. (ii) The discussion of verification measures is thin. (iii) The most recent result we cite from the bilateral talks occurred in 1978. Coming in 1980, the article can give the impression that the talks are stalled--which they are not. (iv) We fail to make the point that retaliation is not in itself an objective and that arguments about retaliation in kind tend to obscure the larger issues of deterring war itself and, failing that, denying success to the Soviets. Chemicals are irrelevant to the first and of dubious, possibly negative value for the second.

as ever,