

29 January 1981

Dr. Saul Hormatz
7301 Park Heights Avenue
Baltimore, MD 21208

Dear Saul,

I would be most grateful for your comments on the enclosed review of a recent Defense Science Board panel report on chemical warfare. I apologize for the gaps where classified information is left out and for reference to a report you will not have seen.

Neither the DSB panel report ~~nor my review~~ addresses the underlying question of whether we are better or worse off with a policy of deterring Soviet first-use of chemicals by maintaining a chemical retaliatory ~~capability~~ ^{of our own}. I would value your views on this as well as on the more detailed points and arguments in my review. What errors, misplaced emphases, and omissions do you find? Is it correct that round-for-round GB, GD, and VX present considerably less percutaneous vapor hazard than mustard?

The immediate decisions facing the administration are, of course, whether to produce binary GB and VX artillery munitions and the Bigeye bomb. The pressure to show chemical toughness is so great just now that the minimal likely decision is to make a commitment in principle to "modernization", but to defer actual production for technical reasons. The Army chemical people say that binary artillery rounds give a better agent cloud distribution than the existing single-fill rounds, and also that earlier nerve agent toxicity estimates need to be revised upwards. Making these adjustments, they say, will substantially increase the casualty production percentages in new weapons effects tables. Considering the design of the munitions-- binaries presumably having base ejection-- does this sound plausible?

Also, for your possible interest and comment, I enclose a memo by Julian Robinson which concludes that HCN is probably not a major threat in a European war.

It was a great pleasure to meet you last week and I know that Joe found it extremely helpful. There are quite a few things I would still like to discuss with you, in addition to just having a nice meal somewhere with you and Pete. I'll telephone ahead next time I plan a trip to Washington.

Sincerely Yours,

Matthew Meselson