

Malabarba



DEPARTMENT OF THE ARMY
U.S. ARMY TROOP SUPPORT COMMAND
NATICK RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
NATICK, MA

REPLY TO
ATTENTION OF

February 15, 1990

FEB 20 1990

Clothing and Individual
Equipment Division

Dr. Matthew Meselson
Fairchild Biochemistry Building
Harvard University
7 Divinity Avenue
Cambridge, MA 02138

Dear Dr. Meselson:

I have enclosed a copy of Dr. Sampson's report *Technology Demonstration For Lightening the Soldier's Load*. This was the document I used to provide the detailed weights for the items you were interested in. I think you'll find it a useful reference.

More importantly, I also have enclosed a copy of the narrative *Heat Stress Induced by Chemical Protective Clothing: Problems, Current Approaches, and Novel Proposals*. Debra Ridgeway, Jim Sampson, and I put this together to provide Natick's Technical Director, Dr. Lewis, a thumbnail sketch of the heat stress issue. The document was not meant to be a comprehensive report.

I would appreciate your comments, particularly on the Novel Proposals for Possible Solutions section and on the three strawman work effort proposals that are enclosures 1-3 of the narrative. Dr. Lewis is trying to focus Natick's program to ensure we obtain the largest impact from our scarce resources, and our goal is to provide him with some alternatives from which to choose.

The Ballistics Research Laboratory has published a report by Dr. Terry Klopocic titled *The Aura Fatigue and Heat Stress Algorithms*. I believe this would be of interest, and consequently, we are trying to obtain a copy for you. I'll forward it to you when it arrives.

Finally, if you need any further data or assistance, don't hesitate to call me.

Sincerely,

Dale Malabarba
Chief, Clothing and Individual
Equipment Division
Advanced Systems Concepts Directorate

Enclosures (2)