Tom Wander

Copy Kazan

PROGRAM ON SCIENCE AND INTERNATIONAL SECURITY

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
1333 H Street, NW
Washington, DC 20005

Russia

CW

FAX COVER SHEET

11-15-Sept

Sent on January 5, 1995 at 6:32 pm

TOM WANDER

TO: PROFESSOR MATTHEW MESELSON
OF: Harvard University
FAX: 1-617-496-2444
VOICE:

Dick Magee
NJ Inst Tech

FROM: DR. TOM WANDER
FAX: (202) 371-0970
VOICE: (202) 326-6652; (202) 326-6490
INTERNET: BSMITH@AAAS.ORG

Bill Holm S.A.!

Mark Evans Edgwd
410 671 1463

PAGES: 8

MESSAGE:

See last page for phone conversation notes.

Siebenaler would have address etc.

KAZAN-NW-9/6/95

American
Association
for the Advancement of
Science

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(202) 371-0970
Program On Science and International Security
Directorate for International Programs

January 5, 1995

Dr. Matthew Meselson
Professor of Biochemistry &
Molecular Biology
Harvard University
Fairchild Biochemistry Building
7 Divinity Avenue
Cambridge, MA 02138

Dear Matt:

Thank you for agreeing to be on the organizing committee for the workshop that AAAS, along with the Potomac Foundation, is proposing to convene on chemical weapons disposal. The meeting is tentatively scheduled for early September (perhaps 11-15) 1995 in Kazan, Russia. The meeting would explore the technical alternatives for chemical weapons disposal in the context of health, safety and environmental concerns. For your information, I have enclosed a working draft that briefly describes the workshop and sketches out a tentative agenda. Any comments on the substance or the participants would be greatly appreciated. As I mentioned, we are particularly in need of good European (NATO-country) analysts. If anyone beyond Julian Perry Robinson and Hermann Martens comes to mind, please let me know.

I also hope something comes of the Persian Gulf project, although funding prospects are somewhat uncertain at the moment. Again, if you or Dr. Toukan are able to generate names of possible Gulf-state participants, it would be very helpful. Please let me know.

Best regards for the new year,

Sincerely,

W. Thomas Wander
Director

Enclosures

#7 Justification

INTRODUCTION

Over the last several years, momentum toward the destruction of chemical weapons stockpiles has grown considerably. In 1989, the Soviet Union and the United States signed a joint memorandum promising to exchange information about their respective stockpiles of chemical weapons. In 1990, the same two countries signed a bilateral agreement to destroy much of their chemical weapons within ten years. Finally, the Chemical Weapons Convention (CWC), which calls for the global elimination of chemical weapons, was opened for signature in January 1993.

At this point, the CWC has been signed by some 160 countries. It could well enter into force in late 1995 or early 1996, six months after being ratified by 65 nations (16 had deposited instruments of ratification through October 1994). Once the treaty becomes effective, state parties will have up to 15 years to destroy their chemical weapons.

Russia, with at least 40,000 tons of chemical weapons, has the largest stockpile in the world. Destroying these weapons in a way that minimizes technical, environmental, safety, and health problems will be a major challenge.

To explore the technical and environmental dimensions of chemical weapons dismantlement in Russia, the American Association for the Advancement of Science and the Potomac Foundation propose to convene a five-day international workshop in Kazan, Russia in September 1995. This will be the second in a series of AAAS workshops exploring scientific issues related to chemical and nuclear contamination and will focus specifically on security and environmental concerns about the destruction of chemical weapons. The meeting will feature the participation of scientists, policymakers, and environmental activists. Participants will be drawn from NATO countries and several regions of Russia (e.g., Tartarstan, Udmurtia, Chuvasia, Perm, Volgograd, and Moscow.)

The workshop will provide an important forum for a public dialogue among European, U.S., and Russian scientists about feasible, effective and acceptable options that address both the technical issues presented by the weapons-destruction requirements of the CWC and the environmental, safety and health issues related to such destruction. Importantly, this will be one of few, perhaps the only, such exercise taking place outside of Moscow and will involve participants from several of the regions in which chemical weapons are stored and where dismantlement will likely proceed under the terms of the CWC.

Substantively, the workshop will explore the strengths and weaknesses of the various technical options available for disposing of chemical weapons. The disposal process is an inherently complex one that involves more than the destruction of chemical agents.

Agents and munitions must be transferred from the stockpile to the disposal facility and unpacked. Containers must be opened and drained to allow access to the agent. The various materials involved -- agents, energetics, metal parts, and dunnage -- must be destroyed or treated. Finally, waste products produced by the disposal process itself must be treated.

These disposal tasks must be accomplished in a manner that does not expose workers or the public to either acute, high-level exposure to chemical agents or to unacceptable chronic, long-term, low-level exposure to agents or disposal products. In addition, technologies must be employed that minimize the risk of environmental damage. Finally it would be valuable to design a system of disposal that meets these objectives while securing the broadest possible public support.

In trying to design a suitable disposal system, Russian policymakers (like their Western counterparts) are likely to encounter a skeptical public. For instance, Russian grass-roots environmental activist, Oksana Alexeeva, a member of the Coordination Council of the Green Party of Chuvashia, states that "the former production [of the chemical weapons plant in Cheboksary] caused many ecological and health problems, and we don't need any more problems." Claiming that Russian President Boris Yeltsin "is planning to bring to the territory of Chuvashia 80% of all stockpiles of chemical weapons in Russia," Alexeeva fears the consequences of such a plan because the destruction would occur "only 5 kilometers from the city limits" and "the population lives 60-90 meters lower than the plant." She pointed out that the Green Party's objective of preventing the destruction of chemical weapons in Chuvashia is widely supported in the republic across the political spectrum and among all ethnic groups. Another proposed site in Chepaevsk has also been rejected by local officials and environmentalists.

Thus, although much work on chemical demilitarization in Russia has been carried on among experts and within governments, the overall objective of obtaining a technically sound design for chemical weapons disposal that enjoys widespread public confidence requires public discussion of the criteria employed and the ability of the candidate technologies to meet those criteria. Moreover, since the actual disposal of weapons will not occur in Moscow, it is essential that such public meetings take place in regions that will be the site of destruction activities and involve citizen groups and public officials, as well as scientists, that have expressed concern about the impact of chemical weapons destruction.

In sum, this advanced research workshop will explore in a comprehensive way an extremely important topic at a critical time. The CWC is likely to enter into force in late 1995 or early 1996. Russia, with the largest stockpile of chemical weapons in the world, faces a daunting technical and political challenge in meeting the weapons destruction requirements of the convention and doing so in a way that allays health, safety and environmental

concerns of its technical experts, public officials, and local populations.

To address these problems, this workshop will bring together scientists and engineers from several countries, local and national Russian policymakers, and local citizen groups in areas affected by chemical demilitarization to develop

* a common understanding of the status of chemical weapons stockpiles and the requirements for chemical weapons destruction arising from international agreements,

* acceptable criteria -- including health, safety and environmental factors -- for designing a chemical weapons disposal system in Russia,

* a common base of technically sound information concerning candidate technologies,

* recommendations about a technically feasible, effective, and politically acceptable chemical weapons disposal system in Russia.

Appendix I: Tentative Programme, Timetable and Organization

WORKSHOP: THE SCIENTIFIC AND ENVIRONMENTAL ASPECTS OF CHEMICAL DISARMAMENT TECHNOLOGIES

Day 1: Monday, September 11, 1995

Arrival
Evening - Opening banquet - Presentations by NATO and Russian representatives

Day 2: Tuesday, September 12, 1995

9:00 - 9:30 am - Opening remarks and orientation
9:30 - 11:30 am - Panel I: Status Report on the Current State of Chemical Weapons Disposition, Arms Control Issues, and Destruction Plans

Paper 1: Dr. Pavel Syutkin, Acting Chairman of the presidential Committee on Matters Pertaining to Chemical and Biological Issues, Moscow
Paper 2: Dr. Theodore Prociv, Deputy Assistant, Chemical/Biological Matters, Assistant to the Secretary of Defense for Atomic Matters, US Department of Defense, Washington, DC

Discussants: Vil Mirzayanov, formerly of State Scientific Research Institute for Organic Chemistry and Technology, Moscow, Russia or
Rafael S. Khakimov, Member of Tatarstan State Council, Kazan, Russia
Michael Moodie, Chemical and Biological Arms Control Institute, Alexandria, VA, (703)739-1538

11:30 - 12 noon - Break

12:00 - 2:00 pm - Panel II: Technical Alternatives and Issues: Storage, Reprocessing, and Destruction of Chemical Weapons

Paper 1: Dr. Carl R. Peterson, MIT, Cambridge, MA

Paper 2: Alexei A. Kolesnik, Chair of the Environmental Protection Commission of Tatarstan Parliament

Discussants: Col. Louis Jackson, U.S. Department of Defense
Col.-Gen. Mikhail Kolesnikov, Deputy Minister of Defense, Interdepartmental Commission for the Problems of the Elimination of Chemical Weapons, Moscow, Russia (or Gen. Petrov)

2:00 - 3:30 pm - Lunch

3:30 - 5:30 pm - Panel III: Environmental and Health Concerns in Chemical Weapons Facilities and the Communities in which they are located

Paper 1: David A. Koplow, Lawyers Alliance for World Security, Washington, DC

Paper 2: Rustem Khamitov, Chairman of the Environmental Commission of the Bashkortostan Parliament, Bashkortostan, Russia

Discussants: Dr. Elisabeth M. Drake, Associate Director, MIT Energy Laboratory, Cambridge, MA
TBD - Russian Ministry of Environment Rep.

Early evening: Tour of Kazan

Day 3 - Wednesday, September 13, 1995

9:30 - 11:30 am - Panel IV: Economic and Political Problems in Chemical Weapons Destruction

Paper 1: Sergey G. Shukin, Chairman of the Committee on Ecology and Rational Management of National Resources, Parliament of Udmurtia

Paper 2: TBD - Local government, Toole, Utah

Discussants: Representative of German Company LUB, German Company designing plants in Kambarka and Saratsov (Gorny) to destroy lewisite

11:30 - 12:30 Lunch

12:30 - Leave for Cheboksary, Dinner, tour of City?

Day 4: Thursday, September 14, 1995

9:30 - 12:30 pm - Tour of Chemical Plant
12:30 - 1:30 pm - Lunch
1:30 - return to Kazan, dinner with keynote speaker

Day 5: Friday, September 15, 1995

9:30 - 11:30 am - Panel V: The Chemical Weapons Convention, Verification, Transparency, and other Arms Control Issues

Paper 1: Julian Perry Robinson, University of Sussex, UK

Paper 2: John Gee, Provision Technical Secretariat,

Organization for the Prohibition of Chemical Weapons Preparatory Commission, The Hague

Discussants: Sergei Kisselev, Member of Russian Delegation to Prep. Com., The Hague
Oksana LAlexeeva, Green Party of Chuvashia

11:30 - 12:00 pm - Break

12:00 - 2:00 pm - Panel VI: Science and Policy Issues: Technical Requirements and Regulations

Paper 1: Venera Pechnikova, Secretary, Environmental Committee of the Parliament of Chuvashia

Paper 2: Amy Smithson, Sibia Hawkins (Greenpeace), Dr. Billy Richardson, former Pentagon

Discussants: Dr. Matthew Meselson, Harvard University
TBD - European prep com member

2:00 - 3:30 pm - Lunch

3:30 - 5:00 pm - Meeting of Organizing Committee

5:30 pm - Final dinner banquet - Report on Workshop by Rep. of Organizing Committee

Revised agenda to NATO

& Firm Commitment on Funding

"accurate tentative Dates"

Revised agenda

~~Fax~~ follow up call

Meet in Kazan Russia

Sept 11 – 15

Tom Wander

Call

Tom

overview on side of general

Matt's opinion meeting

~~[illegible]~~ would benefit from inclusion of an American Army Chem with real

M.M. Kaufman

experience in the chem side the issue

3:45 PM
Mon
13 March 95

Called Tom Wonder -

Kazan, Russia dates are -

"Accurate tentative dates"

I relayed to him your opinions on the inclusion of an Amer Army Chemist + also the program being overweight on the side of generalists

He agrees & in a few days will be FAXing a revised agenda with a follow-up call.