

OFCM Special Session: Atmospheric Transport and Dispersion Modeling for Homeland Security

*In conjunction with the
GMU Conference on Transport and Dispersion
Modeling*

Samuel P. Williamson
Federal Coordinator for Meteorology
June 19, 2003

Welcome

Special Thanks to
Dr. Zafer Boybeyi
Defense Threat Reduction Agency (DTRA)
&
George Mason University

Theme

Improving and optimizing the capability of Federal agencies to support homeland security requirements for atmospheric modeling of the release from weapons of mass destruction through a shared understanding of National operational and research needs.

Overview

- Background
- Objectives
- Agenda
- Summary

Background

- OFCM has a long history in coordinating ATD modeling activities among the Federal agencies
- In June 2000, conducted Workshop on Multiscale Atmospheric Dispersion within the Federal Community
- In December 2001, conducted a Workshop on Effective Emergency Response
- In January 2002, OFCM formed the Joint Action Group for the Selection and Evaluation of Atmospheric Transport and Diffusion Models (JAG/SEATD)

Background

- In August 2002, JAG/SEATD published its report: *Atmospheric Modeling from Weapons of Mass Destruction: Response by Federal Agencies in Support of Homeland Security*
 - Was briefed to the Office of Homeland Security and the Federal Committee for Meteorological Services and Supporting Research
 - Both endorsed results and challenged the OFCM to keep moving forward on the report's recommendations

Objectives

- Refine the requirements for ATD modeling support/plume forecasts and develop a concept of operations to support those requirements
- Refine, prioritize (if possible), and document the community's research and development needs
- Develop a common model evaluation framework that supports our customers' needs and requirements

Agenda

Welcoming Remarks/Set the Stage

Mr. Samuel P. Williamson, Federal Coordinator

*Invited Talk: Radiological Dispersal Device
(RDD)/Improvised Nuclear Device (IND)*

Preparedness Activities

*Mr. Craig Conklin, Director, Technical Services
Division, Office on National Preparedness,
FEMA/DHS*

Agenda

Panel 1 (8:40): Operational Requirements and the Current State of the Science

Moderator: CAPT Frank Garcia, Jr., ODUSD (S&T)

Panelists:

Dr. Paula Davidson, NWS Mr. Mark Miller, NOS

Mr. Ron Meris, DTRA

Dr. Stephen McGuire, NRC

Mr. Bill Petersen, EPA

Dr. Walter Chrobak, DOE

Coffee Break (10:10-10:30)

Agenda

*Invited Talk (10:30): National Research Council
Report: “Tracking and Predicting the
Dispersion of Hazardous Agents”*

Introduction: Dr. Laurie Geller, BASC

*Speakers: General William Odom, USA Ret.,
Hudson Institute*

Dr. John Wyngaard, Penn State University

Agenda

Panel 2 (10:50): ATD Research Needs and Priorities

Moderator: Dr. Walter Bach, USA/ARO

Panelists:

Dr. Jay Boris, NRL Mr. Walter Schalk, ARL Mr.

John Pace, DTRA Ms. Jocelyn Mitchell, NRC

Dr. David Bacon, SAIC Dr. Zafer Boybeyi, GMU

Lunch Break (12:15-1:30)

Agenda

Panel 3 (1:30): Developing a Common Framework for Model Evaluation

Moderator: Dr. Paul Try, OFCM/STC

Panelists:

Dr. Steve Hanna, GMU Dr. Jim Ellis, LLNL

Dr. Jeff Weil, CIRES/CU Dr. Priscilla Glasow, Mitre

Mr. Bruce Hicks, NOAA/ARL

Wrap-up (3:00): Mr. Bob Dumont, OFCM

Agenda

Coffee Break (3:10-3:30)

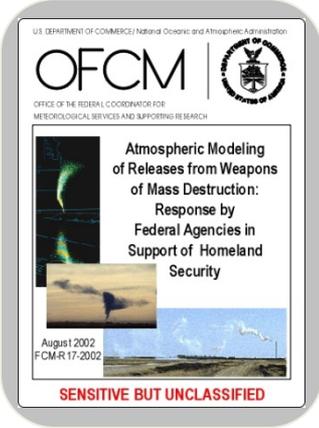
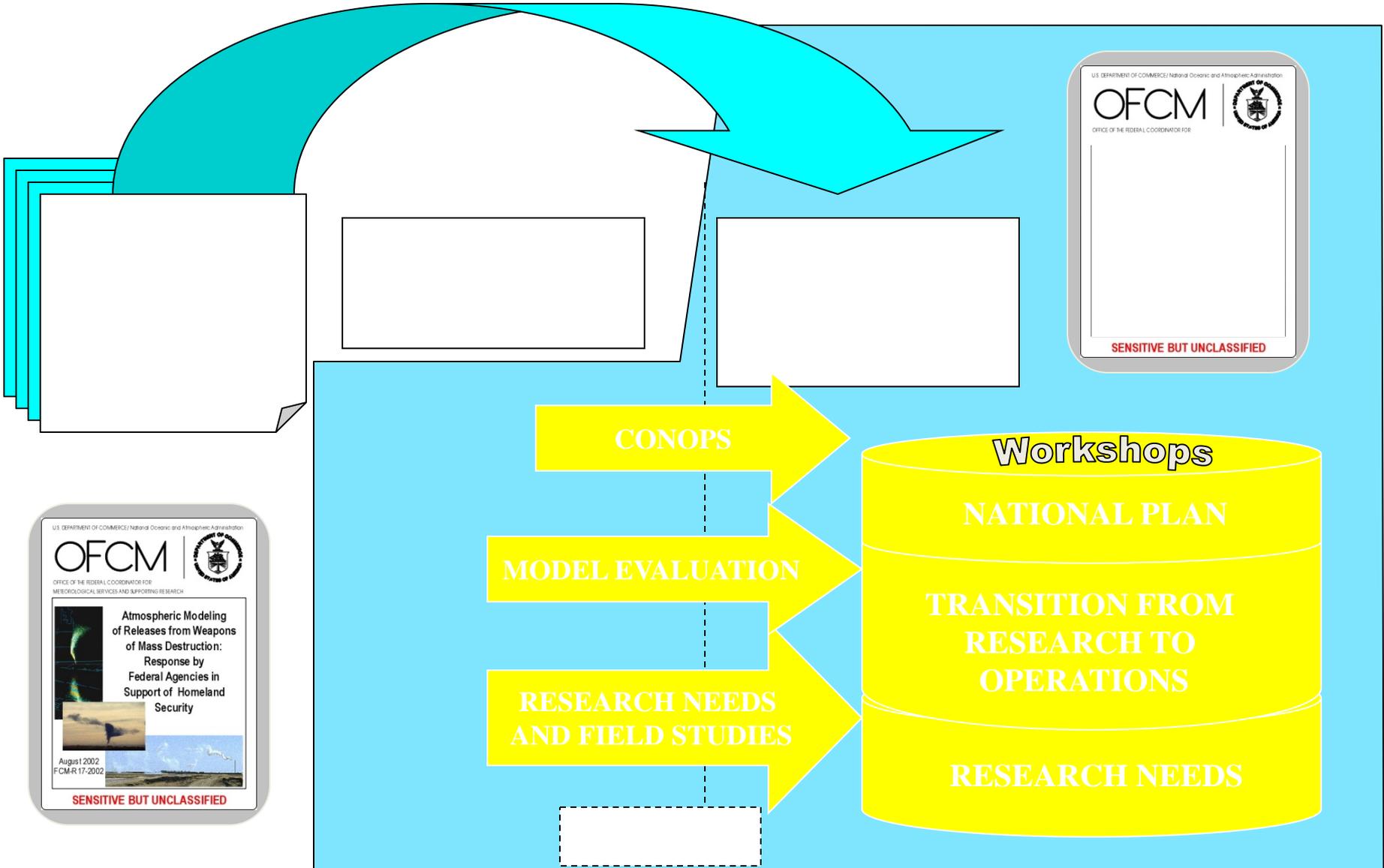
*Federal Agencies Only (3:30): Special Session on
Default Source Term Selection*

Moderator: Mr. Bruce Hicks, NOAA/ARL

Adjourn: Approximately 5:30

Summary/Next Steps

- Develop an environmental support concept of operations in support of Homeland Security that:
 - Is consistent with the new National Response Plan
 - Will form the basis for the Homeland Security Environmental Support Plan
- Develop an R&D plan and pursue interagency support, including DHS
- Complete the development and implementation of a common framework for model evaluation among the Federal agencies



Plan to Develop Research Plan

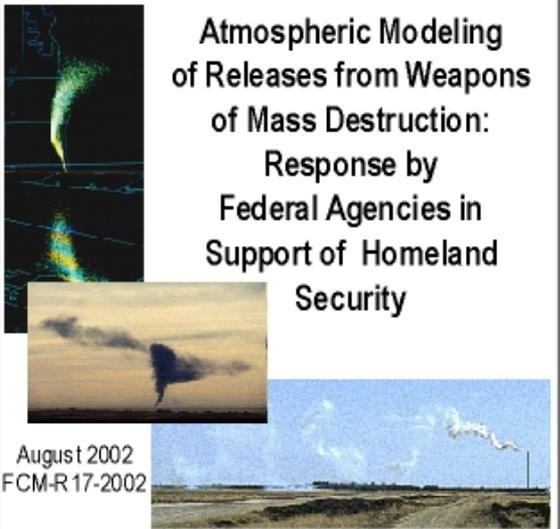
The Way Ahead

U.S. DEPARTMENT OF COMMERCE/ National Oceanic and Atmospheric Administration

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OFFICE OF THE FEDERAL COORDINATOR FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

**Atmospheric Modeling
of Releases from Weapons
of Mass Destruction:
Response by
Federal Agencies in
Support of Homeland
Security**



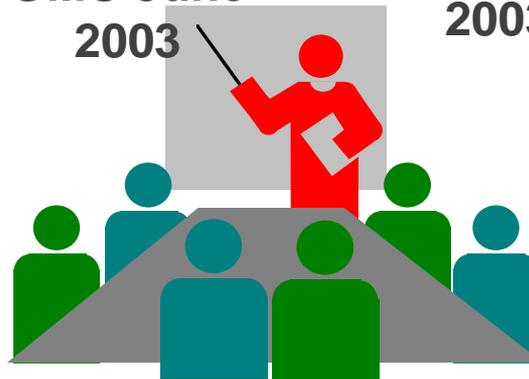
August 2002
FCM-R 17-2002

SENSITIVE BUT UNCLASSIFIED

**JAG/SEATD Study
January - August 2002**

**1 day
Session at
GMU June
2003**

**2 - 3 day
Workshop
November
- December
2003**



**Joint Action
Group to
develop
Research Plan**

U.S. DEPARTMENT OF COMMERCE/ National Oceanic and Atmospheric Administration

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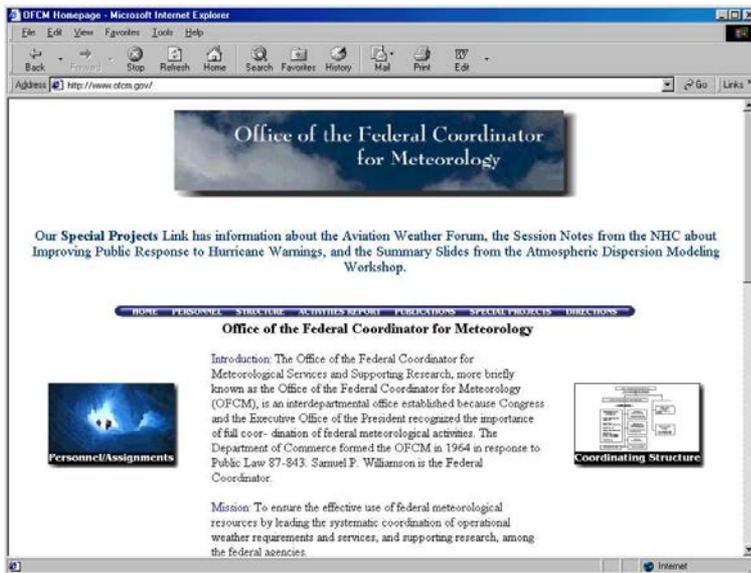
**Research Plan
for Federal
Atmospheric
Transport and
Dispersion
Modeling**

DRAFT

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ADMINISTRATIVE REMARKS

PRESENTATION AVAILABILITY



Presentations and special session summary will be available on the OFCM web site shortly after the forum

Click on “Special Projects” and navigate to Homeland Security

<http://www.ofcm.gov/>

BACKUP\
EXTRA