

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

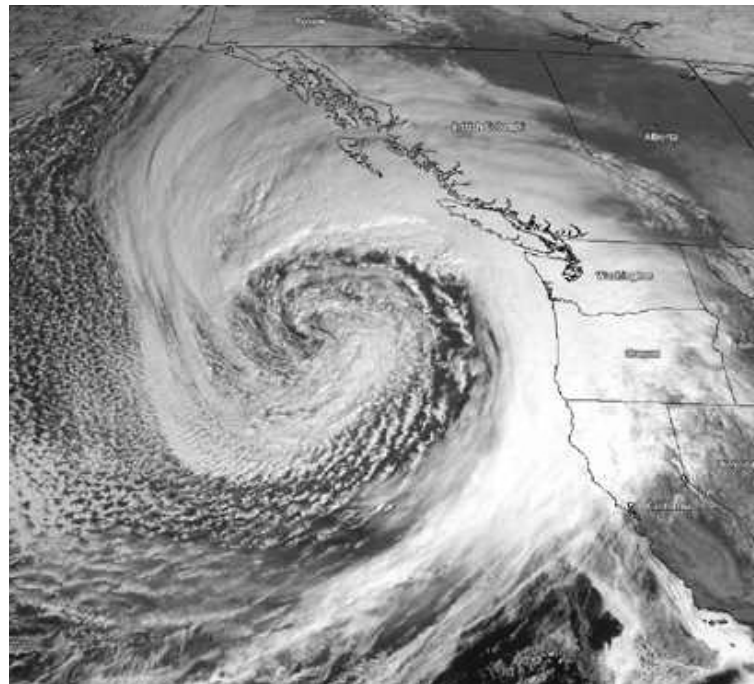
OFCM



OFFICE OF THE FEDERAL COORDINATOR FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

National Winter Storms Operations Plan

FCM-P13-2000



NOAA/NESDIS GOES-10 Ch. 1, 2, 4
27 October 1999 18:30 UTC

Washington, DC
November 2000

THE FEDERAL COMMITTEE FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH (FCMSSR)

DR. D. JAMES BAKER, Chairman
Department of Commerce

DR. ROSINA BIERBAUM
Office of Science and Technology Policy

DR. RAYMOND MOTHAS (Acting)
Department of Agriculture

MR. JOHN J. KELLY, JR.
Department of Commerce

CAPT FRANK GARCIA, USN
Department of Defense

DR. ARISTIDES PATRINOS
Department of Energy

DR. ROBERT M. HIRSCH
Department of the Interior

MR. RALPH BRAIBANTI
Department of State

MR. RANDOLPH LYON
Office of Management and Budget

MR. MONTE BELGER
Department of Transportation

MR. MICHAEL J. ARMSTRONG
Federal Emergency Management Agency

DR. GHASSEM R. ASRAR
National Aeronautics and Space
Administration

DR. MARGARET S. LEINEN
National Science Foundation

MR. PAUL MISENCIK
National Transportation Safety Board

MS. MARGARET V. FEDERLINE
U.S. Nuclear Regulatory Commission

DR. NORINE NOONAN
Environmental Protection Agency

MR. SAMUEL P. WILLIAMSON
Federal Coordinator

MR. JAMES B. HARRISON, Executive Secretary
Office of the Federal Coordinator for
Meteorological Services and Supporting Research

THE INTERDEPARTMENTAL COMMITTEE FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH (ICMSSR)

MR. SAMUEL P. WILLIAMSON, Chairman
Federal Coordinator

DR. RAYMOND MOTHAS
Department of Agriculture

MR. JOHN E. JONES, JR.
Department of Commerce

CAPT FRANK GARCIA, USN
Department of Defense

MR. RICKEY PETTY
Department of Energy

MR. LEWIS T. MOORE
Department of the Interior

MR. JEFFREY MACLURE
Department of State

MR. DAVID WHATLEY
Federal Aviation Administration
Department of Transportation

DR. JONATHAN M. BERKSON
United States Coast Guard
Department of Transportation

MR. FRANCIS SCHIERMEIER
Environmental Protection Agency

MR. JOHN GAMBEL
Federal Emergency Management Agency

DR. RAMESH KAKAR
National Aeronautics and Space
Administration

MS. PAMELA STEPHENS
National Science Foundation

MR. DONALD E. EICK
National Transportation Safety Board

MS. LETA A. BROWN
U.S. Nuclear Regulatory Commission

MS. JENNIFER BAFFI
Office of Management and Budget

MR. JAMES B. HARRISON, Executive Secretary
Office of the Federal Coordinator for
Meteorological Services and Supporting Research

**FEDERAL COORDINATOR
FOR
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH**

8455 Colesville Road, Suite 1500
Silver Spring, Maryland 20910

**NATIONAL WINTER STORMS
OPERATIONS PLAN**

FCM-P13-2000

Washington, D.C.
November 2000

CHANGE AND REVIEW LOG

Use this page to record changes and notices of reviews.

Change Number	Page Numbers	Date Posted	Initial
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Changes are indicated by a vertical line in the margin next to the change.

Review Date	Comments	Initial

FOREWORD

This is the 25th edition of the *National Winter Storms Operations Plan*. The purpose of the plan is to coordinate the efforts of the federal meteorological community to provide enhanced weather observations of severe winter storms that impact the coastal regions of the United States. The goal is to improve the accuracy and timeliness of severe winter storm forecast and warning services provided by the Nation's weather service organizations. These forecast and warning responsibilities are shared by the National Weather Service, within the Department of Commerce and the National Oceanic and Atmospheric Administration (NOAA), and the weather services of the United States Air Force and the United States Navy, within the Department of Defense. While the plan documents requirements for surface, upper air, and satellite observations of all types, it focuses on the coordination of requirements for aircraft weather reconnaissance observations provided by the Air Force Reserve Command's 53rd Weather Reconnaissance Squadron and NOAA's Aircraft Operations Center.

Within the organizational infrastructure of the Office of the Federal Coordinator for Meteorological Services and Supporting Research, the Working Group for Hurricane and Winter Storms Operations and Research (WG/HWSOR) is responsible for maintaining the plan. All of the chapters in this edition have minor updates or changes. In Chapter 2, *Aircraft Reconnaissance*, the section on Reconnaissance Flights was revised to incorporate the procedures that are documented in a letter of agreement between the Federal Aviation Administration (FAA), the National Oceanic and Atmospheric Administration (NOAA), and the Air Force Reserve Command (AFRC). The information on satellite and data buoy observations in Chapter 3 has also been extensively updated.

During January and February of 1998, winter storm missions were flown in the Northeast Pacific Ocean in support of an adaptive observing strategy experiment called NORPEX 98. Similar missions were successfully flown during 1999 and 2000 seasons, and the continuing requirements to conduct winter storm missions in the North Pacific Ocean east of the international date line are now documented in Chapter 2, *Aircraft Reconnaissance*. The memorandum of agreement (MOA) between AFRC and NOAA was recently updated to reflect AFRC's requirement to support winter storm operations and associated research as delineated in the Department of Defense Appropriations Act and *National Winter Storms Operations Plan*. A copy of the new MOA can be found in Appendix I.

Samuel P. Williamson
Federal Coordinator for Meteorological
Services and Supporting Research

TABLE OF CONTENTS

CHANGE AND REVIEW LOG	ii
FOREWORD	iii
TABLE OF CONTENTS	v
LIST OF FIGURES	vii
LIST OF TABLES	viii
CHAPTER 1 RESPONSIBILITIES OF COOPERATING AGENCIES	1-1
1.1 General	1-1
1.2 Responsibilities	1-1
CHAPTER 2 AIRCRAFT RECONNAISSANCE	2-1
2.1 General	2-1
2.2 Responsibilities	2-1
2.3 Operational Control of Aircraft	2-1
2.4 Reconnaissance Planning and Flight Notification	2-2
2.5 Reconnaissance Flights	2-5
CHAPTER 3 OTHER OBSERVATIONS	3-1
3.1 General	3-1
3.2 Satellite Observations	3-2
3.3 Automated Coastal Marine and Ocean Observations	3-6
CHAPTER 4 COMMUNICATIONS	4-1
4.1 Department of Commerce	4-1
4.2 Department of Defense (DOD)	4-1
4.3 U.S. Coast Guard	4-1
CHAPTER 5 PUBLICITY	5-1
5.1 News Media Releases	5-1
5.2 Distribution	5-1

APPENDIX A	ABBREVIATIONS	A-1
APPENDIX B	DEFINITIONS	B-1
APPENDIX C	AIR TRAFFIC CONTROL CLEARANCE LETTER	C-1
APPENDIX D	ALTITUDE RESERVATION APPROVAL REQUEST	D-1
APPENDIX E	FORMAT FOR NHOP/NWSOP FLIGHT INFORMATION FOR INTERNATIONAL AND DOMESTIC NOTAM ISSUANCE	E-1
APPENDIX F	EAST AND GULF COAST STORM TRACKS	F-1
APPENDIX G	ALASKAN STORM TRACKS	G-1
APPENDIX H	HAWAIIAN STORM TRACKS	H-1
APPENDIX I	OFFICIAL INTERAGENCY AGREEMENTS	I-1
APPENDIX J	RECCO FORM, CODE TABLES, AND REGULATIONS	J-1
APPENDIX K	TEMP DROP CODE	K-1
APPENDIX L	DISTRIBUTION	L-1

LIST OF FIGURES

Number	Figures	Page
Figure 2-1.	Sample mission evaluation form	2-4
Figure 2-2.	National Winter Storms Operations Plan coordination request	2-6
Figure 2-3.	Winter Storm Plan of the Day (WSPOD) format	2-7
Figure 3-1.	NDBC Buoy Locations - Atlantic basin	3-7
Figure 3-2.	NDBC Buoy Locations - Pacific basin	3-8
Figure 3-3.	C-MAN Sites	3-9
Figure F-1.	Air Force track CORONET COAST 01/01R	F-4
Figure F-2.	Air Force track CORONET COAST 02/02R	F-7
Figure F-3.	Air Force track CORONET COAST 03/03R	F-10
Figure F-4.	Air Force track CORONET COAST 04/04R	F-13
Figure F-5.	Air Force track CORONET COAST 05/05R	F-16
Figure F-6.	Air Force track CORONET COAST 06/06R	F-19
Figure G-1 through Figure G-23	Alaskan tracks	G-2 to G-24
Figure H-1 through Figure H-19	Hawaiian tracks	H-2 to H-20
Figure J-1.	Reconnaissance code recording form	J-2
Figure K-1.	Example TEMP DROP Message	K-7

LIST OF TABLES

Number	Title	Page
Table 2-1.	Requirement for aircraft reconnaissance data	2-12
Table 3-1.	Satellites and Satellite Data Availability for the National Winter Storms Operations Plan	3-5
Table 3-2.	Moored Buoy Payload Data	3-10
Table 3-3.	C-MAN Payload Data	3-11
Table 4-1.	Reconnaissance organization communications capabilities	4-2
Table F-1a.	Flight Plans and Logs for routes CORONET COAST 01	F-2
Table F-1b.	Flight Plans and Logs for routes CORONET COAST 01R	F-3
Table F-2a.	Flight Plans and Logs for routes CORONET COAST 02	F-5
Table F-2b.	Flight Plans and Logs for routes CORONET COAST 02R	F-6
Table F-3a.	Flight Plans and Logs for routes CORONET COAST 03	F-8
Table F-3b.	Flight Plans and Logs for routes CORONET COAST 03R	F-9
Table F-4a.	Flight Plans and Logs for routes CORONET COAST 04	F-11
Table F-4b.	Flight Plans and Logs for routes CORONET COAST 04R	F-12
Table F-5a.	Flight Plans and Logs for routes CORONET COAST 05	F-14
Table F-5b.	Flight Plans and Logs for routes CORONET COAST 05R	F-15
Table F-6a.	Flight Plans and Logs for routes CORONET COAST 06	F-17
Table F-6b.	Flight Plans and Logs for routes CORONET COAST 06R	F-18
Table J-1.	Reconnaissance code tables	J-3
Table J-2.	Reconnaissance code regulations	J-5