ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7210 .52

3/17/93

SUBJ: METEOROLOGIST WEATHER PROCESSOR (MWP)

1. PURPOSE. This order establishes the operational procedures and responsibilities for use of the MWP and its associated briefing terminals within the Air Route Traffic Control Centers (ARTCC) and the Air Traffic Control System Command Center. It also provides the basis for development of supplemental facility operational procedures for using MWP displayed weather products.

2. DISTRIBUTION. This order is distributed to branch level in Washington and regional air traffic offices, and to all air route traffic control centers.

3. BACKGROUND. National Weather Service (NWS) meteorologists assigned to the Center Weather Service Units (CWSU) and the Central Flow Weather Service Unit (CFWSU) currently use a variety of data sources to gather weather information. The intent of the MWP program is to improve the timeliness and quality of weather information available to the meteorologists, air traffic personnel, and to the pilot.

4. SYSTEM DESCRIPTION. The MWP program provides an automated, interactive workstation to receive, display and manipulate weather radar data, satellite data, alphanumeric weather data, and graphical weather products. Each MWP installation will consist of a Meteorological Work Station (MWS) and a site specific number of MWP Meteorological Briefing Terminals (MBT). The meteorologist can annotate and manipulate this data at the MWS for display of weather information at the MBT's. The briefing terminals are comprised of a high resolution color monitor and a personal computer. A selected terminal in each facility will be equipped with a color graphics printer. The briefing terminals are display-only and cannot be used to alter or revise weather products generated by the MWS with the exception of adding selected map backgrounds. There is no certifiable correlation between the MWP displayed radar data and the controller's plan view display (PVD). Also, there is no display of aircraft movement data. The following individual products will normally be available for display:

a. Individual radar site data. This is normally NWS radar data or it may be weather data from Federal Aviation Administration (FAA) long-range radar sites.

b. National radar image products. This is a composite display of many mosaicked radar weather products, and all data may not be from the same time observation.

c. Radar mosaic products. Each MWP installation has a predetermined number of specific site locations which will be mosaicked in its displays.

d. Satellite products. Different imagery techniques are employed and most satellite data requires interpretation by the meteorologist.

e. National meteorological center (NMC) graphic products. These are chart-type products and normally require meteorologist interpretation.

f. Alphanumeric products. Printed weather information and a wide range of reported data, including hourly sequence reports, terminal forecasts, airmen's meteorological information, significant meteorological information, area forecasts, and any other weather products residing in the data base.

g. Manually created products. These may be any product created locally by the meteorologist or standard products which have been annotated. It will be possible to overlay one or more products on the same display.

5. USE AND LIMITATIONS.

a. The NWS meteorologist provides meteorological support to air traffic facilities in accordance with the provisions of Order 7210.38, Center Weather Service Unit, and, except as specified in paragraph 5b below, is the only person authorized to use the MWS and its associated display terminal to annotate, manipulate, generate, or display weather products. The workstation may also be used as a visual aid for required weather briefings.

b. The weather coordinator will use the MBT as a vehicle and/or visual aid in disseminating weather information to the area managers, area supervisors, and traffic management workstations. In the absence of the meteorologist, the weather coordinator may also use the MWS and its associated display terminal to call up specified weather products. However, no annotation or interpretation of the displayed data shall be made by the weather coordinator.

c. Area managers, area supervisors, and the traffic management unit (TMU) will use the MBT as the primary source for current and forecast weather data affecting their area of responsibility. Since various products are displayed as a direct result of MBT keyboard entries, facility guidelines for access and use of these terminals are required. The TMU will also be equipped with a color printer to make hard copies of any weather

data which may be required for continued use or future reference.

d. Air traffic control specialists may use MBT displayed weather data for:

(1) Weather familiarization.

(2) Providing specific weather reports or other alphanumeric weather data requested by users.

(3) Providing overall verbal descriptions which do not require interpretation of the displayed weather data. For example, a general outline of an area of cloud coverage, or severe weather activity but not the speed at which a front is advancing.

e. NWS radar and satellite data displayed on the MBT are not correlated with the FAA long range radar displayed on the controller's PVD, and air traffic control specialists are not trained to analyze or interpret weather data on MWP displays. Therefore controllers shall not:

(1) Attempt to provide pilots with specific information on MBT displayed weather radar data.

(2) Provide weather radar advisories or aircraft vectors based on MBT displayed data.

NOTE: The above guidance does not pertain to PVD derived weather information and the associated requirements specified in Order 7110.65, Air Traffic Control, Chapter 2, Weather and Chaff Services.

6. OPERATIONAL AND MAINTENANCE SUPPORT. When the CWSU is staffed, the meteorologist is responsible for requesting service for the MWS. In the absence of the meteorologist that responsibility is transferred to the designated weather coordinator. Reporting of MBT outages is the responsibility of the area manager/area supervisor. All outages and service requests shall be brought to the attention of the facility system engineer (SE).

7. USE OF RECORDERS. Air traffic facilities shall record (archive) MWP data and products. Although checking and changing recorder tapes is not an Air Traffic or NWS responsibility, the facility Air Traffic manager and the local Airway Facilities manager should develop an agreement on the procedures to be followed.

8. TRAINING. The CWSU meteorologist will provide any required in-facility weather coordinator/controller familiarization with the MWP and briefing terminals.

9. SUPPLEMENTS. Each regional air traffic division shall standardize procedures within its respective ARTCC's through regional supplements to this order where necessary. Each ARTCC shall issue facility supplements to this order that define site specific procedures for use of the MWP equipment within the facility. The following information should be included:

a. Name/location of individual radar sites adapted in the MWP and radar sites used in the various mosaic products.

b. Listing of the products to be displayed at various briefing terminals, which, if any, may be overlaid. Change in product availability when CWSU is closed.

c. Methodology and guidelines for the conduct of weather briefings through the MWS and MBT's.

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