



DEPARTMENT OF THE NAVY

CHIEF OF NAVAL AIR TRAINING
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CNATRINST 3710.8G
N33
17 October 1997

CNATRA INSTRUCTION 3710.8G

Subj: RESTRICTION OF FLIGHT INTO, THROUGH, OR WITHIN AVIATION
SEVERE WEATHER AREAS

Ref: (a) OPNAVINST 3710.7Q

1. Purpose. To amplify instructions contained in reference (a), to provide additional guidelines for operation of aircraft under the operational control of the Chief of Naval Air Training (CNATRA) in areas of hazardous weather, and to establish uniform guidelines for the issuance of CNATRA Aviation Weather Warnings (CAWWs) by cognizant Naval Training Meteorology and Oceanography (NAVTRAMETOC activities) serving the Naval Air Training Command (NATRACOM). This instruction has been revised to modify CAWW METOC criteria and SIGMET flight restriction policy and should be read in its entirety.

2. Cancellation. CNATRINST 3710.8F.

3. Background. Pilots are responsible for reviewing and becoming familiar with weather conditions for the area in which the flight is contemplated. Forecasts of severe weather or reports of existing severe weather are matters of utmost concern. Flights shall be planned to circumvent areas of forecast or existing severe weather whenever possible.

4. Discussion. NAVTRAMETOC activities receive, via the Automated Weather Network (AWN), Severe Weather Watch (WW) bulletins issued by the National Weather Service (NWS). These bulletins are used by NAVTRAMETOC to notify aviation activities in the NATRACOM of severe weather conditions that may affect planned flight areas. In view of possible communications time delays and occasionally unforeseen weather conditions by the NWS, further safety precautions are needed to protect student pilots. As a result, CNATRA tasks cognizant NAVTRAMETOC activities to issue CAWWs when certain conditions and parameters exist as outlined in this instruction. NAVTRAMETOC is further tasked with evaluating the validity of existing watches/warnings and determining whether or not they are progressing as forecasted.

a. Severe Weather Watch (WW) bulletins. The National Severe Storms Center (NSSC) in Norman, Oklahoma is responsible for issuing severe thunderstorm and tornado watches (WW). Local National Weather Service Forecast Offices (WSFOs) and National Weather Service Offices (WSOs) are responsible for issuing severe thunderstorm and tornado warnings for their respective areas of

17 OCTOBER 1997

responsibility. Based on the following criteria, a watch is issued when severe weather conditions are favorable for development and a warning is issued when severe weather conditions are imminent or are occurring. Watches and warnings may indicate any or all of the following phenomena:

(1) Severe Thunderstorm

(a) Wind - thunderstorm-related surface gusts of 50 knots or greater and/or

(b) Hail - 3/4 inch in diameter or greater.

(2) Tornado - Tornado watches/warnings imply that thunderstorm activity, usually severe, is also expected/occurring.

b. CAWWS. A CAWW indicates any or all of the following criteria:

(1) Embedded thunderstorms.

(2) Severe thunderstorms.

(3) Tornadoes.

CAWWS will be issued for the area of concern when this criteria has been reported, detected by radar, or when imminently expected within 100 miles of the station. CAWWS may be issued in the event that WW coverage is inadequate or non-existent. Cognizant NAVTRAMETOC activities will issue CAWWS and disseminate them locally and to other NAVTRAMETOC activities via the AWN. CAWWS may be issued from 2 hours prior to field opening until the field closes for the day.

c. Significant Meteorological (SIGMET) Information Messages. The NWS issues SIGMETs for severe convective and non-convective phenomena. Convective SIGMETs are routinely issued for 2-hour periods and are reviewed/updated each hour. Non-convective SIGMETs are issued for 4-hour periods and are not normally updated. The hazardous weather criteria for issuance consists of the following:

(1) Convective

(a) Tornadoes.

(b) Lines of thunderstorms (squall lines).

(c) Embedded thunderstorms.

(d) Hail 3/4-inch in diameter or greater.

17 OCTOBER 1997

(2) Non-convective

(a) Severe or extreme turbulence.

(b) Severe icing.

(c) Widespread dust/sand storms lowering visibility to below 3 miles.

NOTE: Low-level Wind Shear (LLWS), microbursts, Convective Wind Shear (CWS), severe turbulence, severe icing, and hail are all possible with thunderstorms.

d. Military Weather Advisory. The Air Force issues and uses scheduled Military Weather Advisories (MWAs) in lieu of NWS WWS. Provided to pilots filing from U.S. Air Force Bases, the MWA is a graphical estimate of the weather producing potential of the existing air mass. Pilots are cautioned when filing from Air Force bases that although WWS, SIGMETs, and CAWWs may not be routinely used, a request can be made of the servicing Air Force weather activity to provide pertinent WW, SIGMET, and CAWW data (available via the AWN). If the data is not obtainable, reference (a) states "a close evaluation must be made of the current MWA to determine if the flight can be conducted within the spirit of the restrictions imposed by this instruction."

5. Policy

a. Reference (a) states: Except for operational necessity, emergencies, and flights involving all-weather research projects or weather reconnaissance, pilots shall not file into or through areas that the NWS has issued a WW unless one of the following apply:

(1) Storm development has not progressed as forecasted for the planned route. In such situations:

(a) Visual Flight Rule (VFR) filing is permitted if existing and forecast weather for the planned route permit such flight.

(b) Instrument Flight Rule (IFR) flight may be permitted if aircraft radar is installed and operative, thus allowing detection and avoidance of isolated thunderstorms.

(c) IFR flight is permissible in positive control areas if visual meteorological conditions can be maintained, thus enabling aircraft to detect and avoid isolated thunderstorms.

17 OCTOBER 1997

(2) Performance characteristics of the aircraft permit an en route flight altitude above existing or developing severe storms.

b. In addition to the above restrictions:

(1) Aircraft under training missions under the operational control of CNATRA shall be restricted in the same manner where a CAWW has been issued.

(2) In conjunction with paragraph 5a(1), only a qualified forecaster can make the determination as to whether storm development has not progressed as forecasted.

c. Although NWS Wws and SIGMETs are provided at non-military airfields, CAWWs may not be available. However, CAWW remarks are appended to NAVTRAMETOC hourly aviation observations when a CAWW is issued. Pilots should request the servicing weather facility provide pertinent NAVTRAMETOC observations available via the civilian weather communication network.

d. Pilots operating outside of their individual air fields will ensure that every effort is made to avoid WW and CAWW conditions along their flight route.

e. It is not the intent to restrict flights within areas encompassed by or adjacent to a severe weather area unless storms have actually developed or are developing as forecast.

f. All pilots are encouraged to provide NAVTRAMETOC activities with pilot reports of encountered unforecasted weather conditions to the utmost extent possible.

6. Action

a. NAVTRAMETOC activities located at naval air stations serving as home bases for CNATRA aircraft shall:

(1) Plot all aviation severe weather activity and ensure pilots are advised of its existence during weather briefing when their proposed route of flight is into or through such an area.

(2) Notify local NATRACOM activities of the existence of Wws/CAWWs/SIGMETs when they become effective along known and projected flight routes within 100 miles of the station, providing both geographic coordinates and valid times.

(3) Interpret all warnings received to ensure accuracy and adequate coverage area, and make recommendations to clearance

17 OCTOBER 1997

authority for continuation or restriction of flight. When appropriate, indicate on the flight briefing form (DD-175-1) when warning conditions are not expected or have not developed as forecasted.

NOTE: Safety of flight will always take precedence in each case.

(4) For CAWWs issued outside of the local flying area, coordinate with the cognizant NAVTRAMETOC activity.

(5) Issue CAWWs for weather which meets the criteria defined in paragraph 4b for the areas of responsibility outlined in (a) through (c) below. A CAWW will restrict training flight operations only within the geographic area delineated in the CAWW. Flight operations may continue elsewhere within the individual areas of responsibility.

(a) NAVTRAMETOC DET Corpus Christi, TX - within 100 miles of Naval Air Stations, Corpus Christi and Kingsville.

(b) NAVTRAMETOCFAC Pensacola, FL - within 100 miles of Naval Air Stations, Pensacola and Whiting Field.

(c) NAVTRAMETOC DET Meridian, MS - within 100 miles of Naval Air Station, Meridian.

b. In order to maintain uniformity, cognizant NAVTRAMETOC activities will prepare and disseminate CAWWs via the AWW using the following format:

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WWXX1 K___ DDHHMM
CAWW K___ VALID UNTIL DDHHMM
(The specific warning area is defined on this line).
(The specific meteorological parameters for which the
warning is being issued are defined on additional lines
as necessary).
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Example:

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WWXX1 KNMM 231000
CAWW KNMM VALID UNTIL 231200
20N NMM-30SW NMM-15S PIE-10W JAN-15N GWO-20N NMM
AREA SVR TSTMS MOVG FROM 2415. SFC WIND GUSTS TO 50
KTS. TOPS TO 500. HAIL TO 1 IN.
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CNATRAINST 3710.8G

17 OCTOBER 1997

c. Clearance authorities shall withhold or approve flights through areas where a WW or CAWW is occurring or forecast to occur in accordance with instructions contained herein. TRAWING commanders are responsible for establishing local guidelines to ensure safety of flight in and through areas where SIGMETs are in effect.


W. H. ROBERSON
Chief of Staff

Distribution:

CNATRAINST 5215.1Q

List I (Less FF-KK)

NAVTRAMETOC DET Corpus Christi, TX

NAVTRAMETOCFAC Pensacola, FL

NAVTRAMETOC DET Meridian, MS

NAVTRAMETOC DET Whiting Field, FL

NAVTRAMETOC DET Kingsville, TX

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