ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
SOUTHERN REGION

SO 6310.7B

2/14/90

SUBJ: SAFEGUARDING AIRPORT SURVEILLANCE RADAR (ASR) TYPE ANTENNAS

1. PURPOSE. This Order provides guidelines for safeguarding Airport Surveillance Radar (ASR) type antennas when wind conditions exceed or are forecast to exceed the velocities that ASR antennas can safely withstand.

* 2. DISTRIBUTION. This Order is distributed to the branch level in the Regional Air Traffic and Airway Facilities Divisions; Airport Traffic Control Towers; RATCF's, TRACON's; and all Airway Facilities field offices. *

* 3. CANCELLATION. Order SO 6310.7A, Safeguarding Airport Surveillance Radar (ASR) Type Antennas, dated 11/13/78, is cancelled. *

4. BACKGROUND. A review of procedures for safeguarding ASR type antennas was conducted as a result of a loss of an ASR antenna due to wind velocities exceeding antenna tolerance levels. The results of this review disclosed a lack of clear guidelines to Air Traffic facilities for safeguarding antennas.

5. ANTENNA OPERATIONAL CHARACTERISTICS. The maximum wind velocity that rotating ASR antennas, with beacon antenna installed, can safely withstand is 80 knots. The nonrotating maximum wind velocity is 130 knots.

6. PROCEDURES.

a. Steady winds or gusts to velocities indicated above shall be reason to stop antenna rotation. The practical wind velocity limits for stopping the antenna rotation should be less than the maximum allowable limit but, of course, are contingent upon the particular circumstances, e.g., risk to the antenna might have to be compromised for an urgent need to continue operation of the radar for air traffic control purposes.

b. Because of the varied conditions of air traffic density, alternate airports for aircraft, etc., the decision to stop antenna rotation should:

(1) Be made jointly between operations and maintenance personnel at the local level.

(2) Be made by the supervisor on duty when maintenance personnel are not available.

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