

2. Pilots are reminded that the surveillance radar used by ATC does not provide altitude information unless the aircraft is equipped with Mode C and the radar facility is capable of displaying altitude information.

#### b. Provisions of the Service

1. Many factors, such as limitations of the radar, volume of traffic, controller workload and communications frequency congestion, could prevent the controller from providing this service. Controllers possess complete discretion for determining whether they are able to provide or continue to provide this service in a specific case. The controller's reason against providing or continuing to provide the service in a particular case is not subject to question nor need it be communicated to the pilot. In other words, the provision of this service is entirely dependent upon whether controllers believe they are in a position to provide it. Traffic information is routinely provided to all aircraft operating on IFR flight plans except when the pilot declines the service, or the pilot is operating within Class A airspace. Traffic information may be provided to flights not operating on IFR flight plans when requested by pilots of such flights.

#### NOTE-

Radar ATC facilities normally display and monitor both primary and secondary radar as well as ADS-B, except that secondary radar or ADS-B may be used as the sole display source in Class A airspace, and under some circumstances outside of Class A airspace (beyond primary coverage and in en route areas where only secondary and/or ADS-B is available). Secondary radar and/or ADS-B may also be used outside Class A airspace as the sole display source when the primary radar is temporarily unusable or out of service. Pilots in contact with the affected ATC facility are normally advised when a temporary outage occurs; i.e., "primary radar out of service; traffic advisories available on transponder or ADS-B aircraft only." This means simply that only aircraft that have transponders and ADS-B installed and in use will be depicted on ATC displays when the primary and/or secondary radar is temporarily out of service.

2. When receiving VFR radar advisory service, pilots should monitor the assigned frequency at all times. This is to preclude controllers' concern for radio failure or emergency assistance to aircraft under the controller's jurisdiction. VFR radar advisory service does not include vectors away from conflicting traffic unless requested by the pilot. When advisory service is no longer desired, advise the controller before changing frequencies and then

change your transponder code to 1200, if applicable. Pilots should also inform the controller when changing VFR cruising altitude. Except in programs where radar service is automatically terminated, the controller will advise the aircraft when radar is terminated.

#### NOTE-

Participation by VFR pilots in formal programs implemented at certain terminal locations constitutes pilot request. This also applies to participating pilots at those locations where arriving VFR flights are encouraged to make their first contact with the tower on the approach control frequency.

c. **Issuance of Traffic Information.** Traffic information will include the following concerning a target which may constitute traffic for an aircraft that is:

#### 1. Radar identified

(a) Azimuth from the aircraft in terms of the 12 hour clock, or

(b) When rapidly maneuvering civil test or military aircraft prevent accurate issuance of traffic as in (a) above, specify the direction from an aircraft's position in terms of the eight cardinal compass points (N, NE, E, SE, S, SW, W, NW). This method must be terminated at the pilot's request.

(c) Distance from the aircraft in nautical miles;

(d) Direction in which the target is proceeding; and

(e) Type of aircraft and altitude if known.

#### EXAMPLE-

Traffic 10 o'clock, 3 miles, west-bound (type aircraft and altitude, if known, of the observed traffic). The altitude may be known, by means of Mode C, but not verified with the pilot for accuracy. (To be valid for separation purposes by ATC, the accuracy of Mode C readouts must be verified. This is usually accomplished upon initial entry into the radar system by a comparison of the readout to pilot stated altitude, or the field elevation in the case of continuous readout being received from an aircraft on the airport.) When necessary to issue traffic advisories containing unverified altitude information, the controller will issue the indicated altitude of the aircraft. The pilot may upon receipt of traffic information, request a vector (heading) to avoid such traffic. The vector will be provided to the extent possible as determined by the controller provided the aircraft to be vectored is within the airspace under the jurisdiction of the controller.

#### 2. Not radar identified