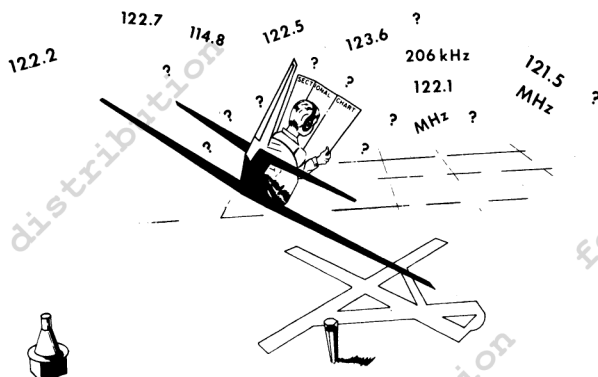


U.S. DEPARTMENT OF TRANSPORTATION  
Federal Aviation Administration

VFR PILOT EXAM-O-GRAM® NO. 50

INTERPRETING SECTIONAL CHARTS (SERIES 2)



This Exam-O-Gram discusses radio communications and how radio data appearing on back-to-back Sectional Aeronautical Charts can be used to assist the pilot in the expeditious and safe operation of his aircraft on the ground and in the air.

Lack of knowledge often causes pilots to avoid the use of appropriate radio communications. This is especially true of those pilots who are not knowledgeable in the use of aeronautical charts and other publications that list this data.

Pilots are encouraged to use all of the radio communication services available, even where it is not mandatory, to enhance safe flight. Pilots who do not use the benefits of radio communication actually create a hazard to themselves as well as other aircraft.

Radio communications will vary at different airports depending upon the type of flight and facilities available. Examples of airports used in this Exam-O-Gram exemplify the important aspects of radio communication during VFR flight using a variety of facilities.

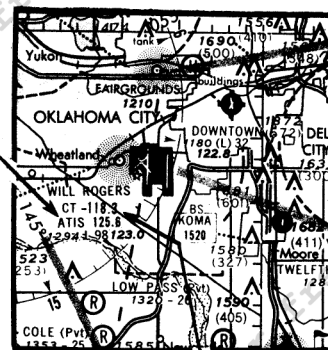
HOW IS RADIO COMMUNICATION FIRST USED IN PREPARING FOR A LANDING AT AIRPORTS SERVED BY ATIS (Automatic Terminal Information Service)?

When 15 to 20 miles from these airports, tune your receiver to the ATIS frequency. You will hear repeated broadcasts of information that will help you plan your approach for a landing. ATIS frequencies are printed on the chart in the airport information data, and listed in the bottom margin of the chart, as shown in the illustration. These frequencies can also be found in the Airman's Information Manual (AIM), Airport/Facility Directory. Controllers expect pilots to obtain ATIS and advise, during the initial call, that they have received this information. Refer to Exam-O-Gram No. 43 for more details about ATIS.

WHAT ADDITIONAL COMMUNICATIONS ARE REQUIRED AT AIRPORTS THAT ARE SERVED BY A CONTROL TOWER?

The Control Tower (CT) must provide an orderly flow of air traffic in the vicinity of the airport, by sequencing aircraft in terms of safety and efficient utilization of airspace.

Therefore, you are required to contact the control tower at least 5 miles from the airport. The primary transmitting and receiving (SIMPLEX) frequency is printed on the chart as shown, for example 118.3 MHz at Will Rogers Airport. If you can receive, but cannot transmit on a primary tower frequency, there are other transmitting frequencies available. Most towers have one of three additional frequencies (122.4, 122.5, or 122.7 MHz) available to receive pilots with limited transmitting capability. These frequencies are listed on the bottom margin of the chart as shown in the illustration, and followed by a letter R. (R means tower receive only.) They can also be found in the Airman's Information Manual.



WILL ROGERS ..... ATIS 125.6 ..... 118.3 257.8 122.7R ILS

\* Exam-O-Grams are non-directive in nature and are issued solely as an information service to individuals interested in Airman Written Examinations.

**IS IT MANDATORY THAT YOU COMMUNICATE WITH APPROACH CONTROL PRIOR TO LANDING?**

No. Under a VFR flight it is not mandatory, but Radar Advisory Services are available to pilots on VFR flights at many of the busy airports. Although not mandatory, the service should be used because controllers can advise you of possible conflicting traffic and also give heading information that will direct you to the airport. If used, Approach Control should be contacted 15 or 20 miles out after receiving ATIS. If advisory services are available the appropriate radio communication frequencies can be found in the Airman's Information Manual, Part 3, Airport/Facility Directory under Radar Services.

**WHAT FREQUENCY WOULD YOU EXPECT TO USE AFTER LANDING AND CLEARING THE RUNWAY?**

Normally the Control Tower will direct you to contact or monitor Ground Control on one of the frequencies assigned to Airport Ground Control. In the event the tower does not direct you to change frequencies, remain on the tower frequency. Ground Control frequencies are normally 121.6, 121.7, 121.8, and 121.9 MHz, one of which is assigned to each airport having this service. Ground Control provides information for surface traffic except on the active runway, and the appropriate frequencies can be found in the Airman's Information Manual, Airport/Facility Directory.

**IN WHAT SEQUENCE WOULD YOU CONTACT THE FACILITIES IF YOU DEPART AN AIRPORT SERVED BY ATIS, GROUND CONTROL, AND A CONTROL TOWER?** You would use the following order:

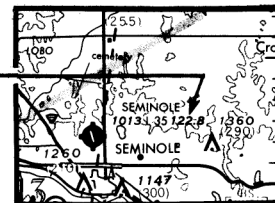
1. ATIS.
2. Ground Control.
3. Control Tower.

**WHY ARE SOME AIRPORT SYMBOLS AND AIRPORT INFORMATION PRINTED ON THE CHART IN A BLUE COLOR WHILE OTHERS ARE COLORED MAGENTA (PURPLISH RED)?**

Airports within the United States having Airport Traffic Areas (Control Towers) are shown in blue, all others in magenta. If a Control Tower is located at the airport, this fact can be noted in the airport information data by a CT with a frequency listed. The frequency 123.6 MHz has been designated for use at airports with Airport Advisory Service. Pilot requests for AAS on other station frequencies will be answered, but the FSS will then simultaneously transmit on the requested frequency and also 123.6 MHz. This will keep other traffic aware of the requester's position.

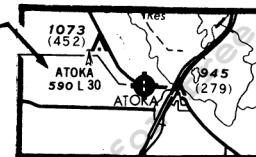
**WHAT FREQUENCY IS USED WHEN OPERATING AN AIRCRAFT AT AIRPORTS SERVED ONLY BY AN AERONAUTICAL ADVISORY STATION (UNICOM)?**

The airport information, as shown in the illustration, indicates that only UNICOM is available for communication at this airport on the frequency of 122.8 MHz. The frequency assigned to Aeronautical Advisory Stations depends upon the type of facilities available at an airport. See the Airman's Information Manual, Part 1, and Exam-0-Gram No. 35 for full details on the use of UNICOM. Pilots are encouraged to use this service when operating at airports served only by UNICOM.



**WHAT FREQUENCY WOULD YOU USE WHEN OPERATING AT AN AIRPORT THAT HAS NO FACILITIES FOR RADIO COMMUNICATIONS?**

As shown in the illustration, there is no facility for radio communication at this airport. At airports that have no communications facilities, you should transmit on 122.9 MHz, which is the frequency assigned to Aeronautical Multicom Service. DO NOT EXPECT A REPLY. About 15 miles from the airport, tune to 122.9 MHz and listen for other traffic transmission, at 5 miles transmit your position, altitude, and intentions. Follow-up an announcement of your position on downwind, base, and final approach. When departing this airport, tune to 122.9 MHz and listen before you taxi. Then broadcast your position on the airport and intention. Follow this up with an announcement before you taxi onto the runway for takeoff.



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