WORKING THE RADIO IN THE AIRPORT ENVIRONMENT

OBJECTIVE

Demonstrate understanding of the concepts of pilot communications procedures in the airport environment.

PROCEDURE

Instruct students to work in pairs to answer the following questions.

QUESTIONS

1. You are flying Cherokee 1234W. You are currently 6 miles to the east of John Wayne Airport, and your plan is to enter the traffic pattern and practice a few landings. You've checked the ATIS and have information Charlie. What is your initial radio call to John Wayne Tower? Use the four W's concept to break out your call.

   "John Wayne Tower, Cherokee 1234W, 6 miles east, inbound for practice landings with Charlie."

   - *Who you're talking to: John Wayne Tower*
   - *Who you are: Cherokee 1234W*
   - *Where you are: 6 miles east*
   - *What you want: inbound for practice landings [...with Charlie]*

   The "What you want" line could be any variation of plain English wording explaining you'd like to stay in the pattern and do multiple landings. Also, remember that aircraft callsigns can sometimes be shortened to the last three characters (i.e., 34W), but you should always use your full callsign on initial contact with ATC.

2. John Wayne Tower tells you to "Report base for Runway 2 Left." What will your next radio call be?

   a. "Tower, Cherokee 34W, unable."
   b. "Tower, Cherokee 34W, downwind, 2 Left."
   c. "Tower, Cherokee 34W, right base, 2 Left."

   You have been told to report base; you fly to base, and then report your position. You do not fly to a different position (downwind), and since you are capable of doing it, there's no reason to say "unable."

3. John Wayne Tower sees you on base and tells you, "Cherokee 34W, winds 010 at 5, cleared for the option Runway 2 Left." Are you cleared to land? What type of landing are you allowed to do?

   Yes, you are cleared to land. You may make a touch-and-go, low approach, missed approach, stop-and-go, or full stop landing.

4. True or False: When cleared to "Taxi to" a runway "via" a set of taxiways, you are automatically cleared to cross all runways on your taxi route. Why or why not?

   ***False**. A pilot must be cleared to cross each runway individually.*

As a group, review the following scenario and discuss the question that follows.

You are flying your Cessna 172 to the local Gardner Municipal airport, which is nontowered. You are 5 miles to the west, and you plan to enter the traffic pattern via the 45-degree entry to downwind on the west side of the airport to fly a standard traffic pattern to runway 36. After you make your radio call, you hear this transmission:

"Gardner traffic, Cherokee 1234W, 5 miles to the east, will be overflying the field for downwind to 36, Gardner."

5. Describe how you would plan to enter the traffic pattern and any additional radio calls you might make. Consider that your Cessna 172 and the Cherokee fly at similar speeds, so without further action, you will both enter the downwind leg at the same time and place.

   Answers may vary. The primary issue is the potential traffic conflict with the Cherokee. Neither aircraft truly has right-of-way over the other. Students could choose to immediately make another position report to try to highlight the conflict to the other aircraft, and then continue to make standard radio calls for downwind, base, and final, while listening to the radio calls from the Cherokee to ensure there won't be conflict. Above and beyond answers may include that the pilot is looking out the window for the traffic or using an in-cockpit display of nearby traffic because of ADS-B technology.

   A better option might be to directly call the other aircraft on the radio and work out a plan to deconflict, so that you and the other pilot arrive on downwind at different times or at offset locations or altitudes. Aircraft-to-aircraft radio calls are not standard and would only need to be "plain English" so each pilot could understand what the other was doing. These calls could also include enough information for each pilot to try to obtain a visual on the other, so that you could see and avoid each other. Once the pilot of each aircraft understood the plan, both pilots would need to monitor each other's progress and radio calls to ensure safe flight. Continued use of standard radio calls in a nontowered environment would be expected.

   One aircraft could perform a series of 360-degree turns to allow the other aircraft to move ahead in the traffic pattern. Perhaps the Cherokee could overfly the traffic pattern by 500 feet or more then descend to pattern altitude after the Cessna is on downwind. The Cherokee could then enter the downwind at a 45-degree angle.