

Airfreddy's **Guide on Learning To Fly**

**Step-by-Step Guide On the Private
Pilot License From Start To Finish**



ATC Light Signals And Radio Failures

[Pilots Handbook of Aeronautical Knowledge Chapter 14](#)

LOSS OF RADIO: In most cases I have seen over the years, as soon as a student feels that they have lost radios; They will immediately go to change the transponder code. They always forget to trouble shoot the problem and assume that the radio's are out. You want to come up with a set of steps that work for your airplane to trouble shoot the problem before you jump to the transponder codes.

In most cases the loss of radio's is really not a big deal unless it is your first time.

The loss of radios could be from many different things. The first thing you want to do is check your headset and make sure they are connected properly. The next thing you want to check is the intercom. If you are using one like mine, check all of the connections. If the intercom is installed in the aircraft, then you want to make sure it is on. Another thing you want to check is the radio when you transmit. If you notice on most of the radios between the standby frequency and the active frequency there will be a "T" which stands for "transmit". If you push the transmit button and the "T" appears, then the radio is working and there is a problem with either the headset or a connection. If this happens, plug in the backup microphone that should be in the glove compartment. If none of the above work, then the radio is out and you need to go on to the loss of radio communications procedures.

In this case, the first thing to do is set the transponder to the appropriate setting (7600). Then you want to enter the airport airspace at an altitude of 1000 feet above the traffic pattern altitude. Rock your wings and begin to look for light signals. Continue to look for the light signals, make sure you will not interfere with

other traffic and enter the pattern. Continue a normal traffic pattern and follow the light signals.

Here is the FAA Advisory Circular on Light Signals

LIGHT SIGNALS





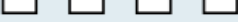

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady green 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
Flashing green 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady red 	Stop	Stop	Give way to other aircraft and continue circling
Flashing red 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
Flashing white 	Return to starting point on airport	Return to starting point on airport	Not applicable
Alternating red and green 	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

Figure 14-42. Light gun signals.



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