

IFR COMMUNICATIONS

Most communications follow the “4 W’s” format¹:

W – Who (Who you are calling)

W – Who (Who you are- full call sign on initial call)

W – Where (Where you are, incl altitude if airborne. Also incl ATIS if applicable)

W – What (What you want)

Clearances- Write whole clearance down, don’t try to understand, visualize, or make sense of clearance while you are writing. Then read it back. Only then² try to understand clearance. Here’s the format for the initial clearance:

C – Cleared to.... This is your clearance limit, which is usually your destination airport, but it may be some fix short of your destination. If it is short of your destination, you should receive an Expect Further Clearance (EFC).

R – Route.... You may hear “as filed”, or the route may be modified.

A – Altitude.... They may grant you the altitude you filed, or not. You may hear something like “Maintain 3000, expect 9000 in 15 minutes”. This is important to note in case of lost communications

F – Frequency.... This is the initial frequency for departure control.

T – Transponder....

Upon contacting the tower for takeoff clearance, you may hear “hold for IFR release”, even though you have already been issued your IFR clearance. This means a space has not yet been made for you in the air traffic control system. You will be advised when released.

REQUIRED IFR COMMUNICATIONS

§91.183 IFR communications.

¹ You can listen to live communications between aircraft and controllers at <http://www.liveatc.net/>

² If you try to understand a part of the clearance while it is still being given, you will stop listening. You can always review the clearance and ask for clarification AFTER you read it back.

Unless otherwise authorized by ATC, the pilot in command of each aircraft operated under IFR in controlled airspace must ensure that a continuous watch is maintained on the appropriate frequency and must report the following as soon as possible—

- (a) The time and altitude of passing each designated reporting point, or the reporting points specified by ATC, except that while the aircraft is under radar control, only the passing of those reporting points specifically requested by ATC need be reported;
- (b) Any unforecast weather conditions encountered; and
- (c) Any other information relating to the safety of flight.

AIM 5-3-3. Additional Reports³

Hazardous or Unforecast Weather

Safety Info

Avionics Malfunction

Leaving an altitude for a new assigned altitude

Altitude change when VFR on top

500 FPM cannot be maintained during climb or descent

Airspeed varies by 5% or 10 kts, whichever greater

Time and altitude reaching assigned holding fix

Departing a holding fix

Missed approach with request for specific action

WHEN NOT IN RADAR CONTACT, ADD THE FOLLOWING

Time estimate over a designated reporting point off by more than 3 minutes

Leaving FAF inbound on a nonprecision approach

Leaving OM (or OM substitute) inbound on a precision approach

³ The AIM says these items *should* be reported, not *must* be reported. On the other hand, FAR 91.183 list things that *must* report.

ADDITIONAL COMMUNICATIONS

Declaring Minimum Fuel (Not an emergency, but alerts ATC to your fuel status)

Don't be afraid to declare an emergency if fuel status or other situation puts the outcome in doubt

LOST COMMUNICATIONS PROCEDURE

If VMC:

Proceed under VFR and land as soon as practicable.

IF IMC:

Use 2 memory aids. For Route, think “AVE F”. For Altitude, think “AME”, as in Aviation Medical Examiner. See underlined words below in FAR 91.185.

§ 91.185 IFR operations: Two-way radio communications failure.

- (1) *Route*. (i) By the route **assigned** in the last ATC clearance received;
- (ii) If being radar **vectored**, by the direct route from the point of radio failure to the fix, route, or airway specified in the vector clearance;
- (iii) In the absence of an assigned route, by the route that ATC has advised may be **expected** in a further clearance; or
- (iv) In the absence of an assigned route or a route that ATC has advised may be expected in a further clearance, by the route **filed** in the flight plan.
- (2) *Altitude*. At the highest of the following altitudes or flight levels for the route segment being flown:
- (i) The altitude or flight level **assigned** in the last ATC clearance received;
- (ii) The **minimum** altitude (converted, if appropriate, to minimum flight level as prescribed in §91.121(c)) for IFR operations; or
- (iii) The altitude or flight level ATC has advised may be **expected** in a further clearance.
- (3) *Leave clearance limit*. (i) When the clearance limit is a fix from which an approach begins, commence descent or descent and approach as close as possible to the expect-further-clearance time if one has been received, or if one has not been received, as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.
- (ii) If the clearance limit is not a fix from which an approach begins, leave the clearance limit at the expect-further-clearance time if one has been received, or if none has been received, upon arrival over the clearance limit, and proceed to a fix from which an approach begins and commence descent or descent and approach as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.