

CFI Bootcamp

Flight Instructor Training

Emergencies

Lost Communications in VFR/IFR

What you Need to Know

Today's Bootcamp+ Network Programming

What's on for Today's Show?

Live Show – 1st Hour

Open Mic – 2nd Hour onward

Monitor the Chat - Links/Info

Wings Credit for This Presentation



Today's Bootcamp+ Network Programming



What's on for Today's Show?

PH Rebroadcast – Weds 8 pm ET
Power Hour Podcasts – Full Shows
The Last of the Bundles
Step-by-Step Workshop –
Sept 24th (8-10 pm Eastern Time)

What We Will Cover

- VFR – Are radio communications required?
- What are the consequences of not using a radio?
- Should you Squawk 7600?
- Light Gun Signals and some FUN history
- What do you do at a towered airport?

What We Will Cover

- IFR – Lost Communications Procedures – 91.185
- Why don't both radios work?
- Audio Panels – How do they work and what's to know?
- What about 91.3 – Is it going to be a bigger emergency?



What We Will Cover

- What do the regulations require me to do?
- What about the “Clearance Limit”?
- The FAA’s letter of interpretation – Tuuri - 2010

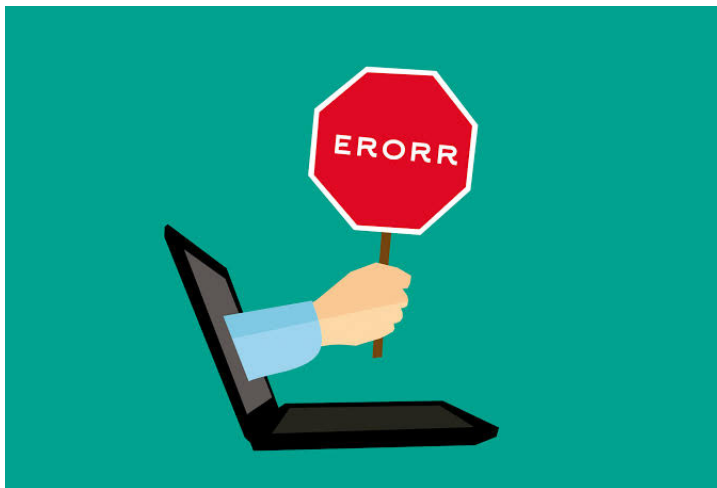
Radio Communications May Not be Required

- Recreational and Sport don't need to be trained per the FARs
- Private pilots and beyond require training
- The airspace dictates whether communications is required
- Some planes have no radios – Lost comm all the time



What are the Consequences?

- Outside of A, B, C, D and SUA airspace - None
- When required possible Pilot Deviation – Establishing two-way communications, obtaining clearances, following ATC instructions



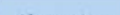
What Should I do?

- In class G and E – operate normally
- In A, B, C, D and restricted areas – Squawk 7600
- Exit the airspace and land at a non towered airport
- If you must, sequence yourself into the traffic pattern
- Comply with ATC instructions via light signals



91.125 – Light Signals

- Replaced flags
- Have a sight and can be directed to an individual airplane
- Were introduced in the 1930s
- Problem – Easy to forget - Disuse

How Light Gun Signals Work			
	COLOR & TYPE	GROUND	AIR
	Steady Green 	Cleared for takeoff	Cleared to land
	Flashing Green 	Cleared for taxi	Return for landing (to be followed by a steady green)
	Steady Red 	STOP	Give way to other aircraft and continue circling
	Flashing Red 	Taxi clear of runway in use	Airport unsafe, do not land
	Flashing White 	Return to starting point on airport	N/A
	Alternating Red/Green 	Exercise extreme caution	Exercise extreme caution

pilotmall.com

Still Think VFR is VFR Everywhere with Standard Procedures?

- Aviation English is only required at Towered airports
- VFR can be anything – Communication in other languages OK
- [Here's a Video About Lost Comm in the UK](#)
- Starts off Familiar – Until it isn't

North America's First Air Traffic Controller

- Archie League - 1929
- Had a wheelbarrow with a mounted beach umbrella and a folding chair that he wheeled to the approach end of the runway
- He used two flags – Red “hold” and Checkered for GO
- FAA gives the Archie League Award for exceptional ATC service



Fun Archie League Facts

- He had a degree in Aeronautical Engineering
- Served as a pilot in WW II
- Had the rank of Colonel
- He became head of the staff responsible for the safe and efficient operation of aircraft in the ATC system
- [A video about Archie](#)

Lost Communications IFR – 91.185

- Parroted back on every IFR checkride
- Why are both radios not working?
- What about the audio panel?

The Procedure

- If VFR and you can land VFR then do that
- For the route, use the following in this order (AVE F)

LOST COMMUNICATIONSS	
IFR	
ROUTE	
A V E F	ASSIGNED —The route ATC assigned in the last clearance
	VECTORED —Direct to the fix, route, or airway ATC was vectoring to
	EXPECTED —The route ATC advised to expect in a further clearance
	FILED —The route filed in flight plan

The Procedure

- For the Altitude apply the highest of these on each route segment

ALTITUDE	
M E A	MINIMUM ENROUTE ALTITUDE or other applicable minimum altitude
	EXPECTED – The altitude ATC advised to expect
	ASSIGNED – The last altitude ATC cleared

Leaving the “Clearance Limit”

- This is the farthest fix/location you were cleared to
- May be a fix from where an approach begins (rare)
- It usually the Airport – Cleared to the Palo Alto airport via...

Leaving the “Clearance Limit”

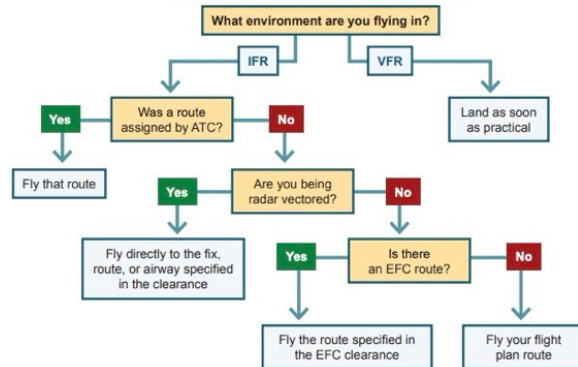
- If the fix is from where an approach begins – leave the fix as close to the ETA as filed or amended
- If the fix is not from where an approach begins – Proceed to a fix from where an approach begins and leave the fix as close to the ETA as filed or amended

Leaving the “Clearance Limit”

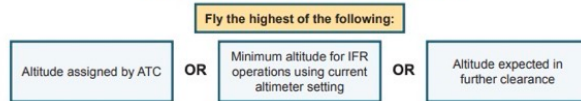
- You will need to fly to the airport, then proceed to a fix from where an approach begins
- What about altitude off an airway on the way to the airport?
- 2000/1000 within 4nm of the highest obstacle – ATC has no idea

IFR Two-Way Radio Communications Failure Procedures: FAR 91.185

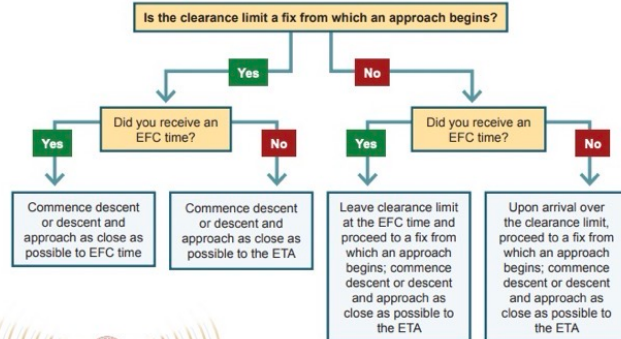
Step 1: Route Procedures



Step 2: Altitude Procedures



Step 3: Leave Clearance Limit



Review full course online anytime at
airsafetyinstitute.org/radiocomm

FAA Legal Interpretation - Tuuri

- Says you need to fly to the airport first
- Says ATC should not issue you a clearance that you don't have the navigation equipment for
- [Tuuri Legal Interpretation](#)



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

800 Independence Ave., S.W.
Washington, D.C. 20591

NOV 23 2010

Mr. David Tuuri
3530 Perch Drive
Mansfield, OH 44903

Dear Mr. Turri,

Special Announcement

- Initial CFI Airplane 7-Day Courses
- Sept 14 – 20 (8am – 3pm PDT – In person Palo Alto, CA, or Zoom
- Oct 12– 18 (11am – 6pm EDT – In person Opa-Locka, FL or Zoom
- **[Register Here](#)**
- [Course Syllabus – Hour by Hour Here](#)



Special Announcement!

Reminders!



CFI Study Group
on Facebook



Society of Aviation and
Flight Educators



National Association of
Flight Instructors

Join SAFE, NAFI and the CFI Study Group by Clicking on the Images Above