

RADIO COMMUNICATIONS

FORMAT

The format for a typical radio call is much like a phone conversation, except that we go to great lengths to be clear and concise. On the phone I might say "Hello Mr. President, this is Dave. I'm at home and I got your message. Can we meet tomorrow?"

The call follows this format:

YOUR NAME: Hello Mr. President

MY NAME: This is Dave

INFO YOU NEED: I'm at home and I got your message

MY REQUEST: Can we meet tomorrow?

A radio call sounds similar. You might say: "Hello Fresno Ground, this is SportCruiser 642JB. I'm on the Signature ramp and I have information Alpha. I request to taxi for departure VFR to the northwest. On the radio, our "Name" is called a "Call-sign."

YOUR CALLSIGN: Hello Fresno Ground

MY CALLSIGN: This is SportCruiser 642JB

INFO: I'm on the Signature ramp and I have information Alpha.

REQUEST: I request to taxi for departure VFR to the northwest.

A radio call is similar to a phone call in one other way; a person is on the other end. So don't get upset if you make a mistake because we are all well aware that we all make mistakes every day. You will certainly sound like a novice at first but its only temporary!

CALL SIGNS

- All numbers are spoken one at a time and the phonetic alphabet is used for all letters, so "642JB" comes out "six four two juliet bravo."
- In an extended conversation, the controller's call sign is frequently omitted.
- Saying the entire callsign on every transmission can be cumbersome, so the controller may shorten your call sign ("two Juliet bravo"). If she does it, you may follow suit or use your complete call sign.
- When replying to an instruction, you may put your call-sign at the beginning or at the end of your call.

READ-BACKS

Instructions – you must repeat back so that the controller can correct you

Information – you don't have to repeat back, except for the *altimeter setting*. It is critical that you repeat back instructions regarding

runways. When you get to the takeoff runway, the tower controller will tell you either: 1) Hold Short, 2) Position and Hold, or 3) Cleared for Takeoff along with the runway number. You must read back this instruction. If the tower omits the runway number, your professional response should still include it. Similarly, on approach the tower will tell you 1) cleared to land, 2) cleared touch and go, 3) cleared stop and go, 4) cleared low approach, or 5) cleared for the option (meaning you can do any of the first four.) You must read this back.

PROFESSIONAL RADIO TECHNIQUES

No "Extra" Words – When controllers are busy, you can help them by keeping your transmissions as concise as possible. Make it a habit to be as concise and you'll sound more professional. Drop words like "Hello" or "This is" or "I request." The example above might sound like: "Fresno Ground, SportCruiser 642JB, Signature ramp with Alpha, taxi for takeoff VFR to the Northwest." You will learn with experience just how much you can shorten your call and still be easily understood.

Standard Terms & Phrases – If you use standard phrases, the controller may understand what you're saying even when he doesn't hear your whole transmission. The best ways to learn standard phraseology are by studying the AIM and by listening to others' calls. The examples on the next page are full of standard terminology.

- Letters, as in a call sign or ATIS code, are spoken with the phonetic alphabet.
- Numbers are always spoken one digit at a time.
- A decimal point is spoken as "decimal" or "point", e.g., "118.2" may be "one one eight decimal two" or "one one eight point two."
- This is non-standard but you need to be ready for it: Controllers may omit leading numbers in a radio frequency! For example, most ground control frequencies begin with 121 so the frequency "121.7" may be given as "point seven." All VHF freq's begin with a "1" so controllers sometimes omit the one. "Switch 118.2" is sometimes given as "switch one eight two" or "switch eighteen two." If it isn't clear, ask the controller to repeat the frequency.

Courtesy Calls – As a general rule, if you're going to say something that the controller isn't expecting to hear or will have to write down, start your conversation with a "courtesy call." A courtesy call ensures you have the controller's full attention and gives her time to "pick up her pencil." To make a courtesy call, just say the first two parts of the transmission (the YOUR NAME & MY NAME parts) and wait for her to respond, then start over with the whole transmission.

EXAMPLES

The examples on the following two pages are not text-book perfect examples of "how to do it" but simulated examples of radio communications for a typical training flight for a controlled airport (with an operational control tower), followed by examples for Fresno Chandler Executive Airport (without operational control tower). Read through the communications and identify examples of the principles you've learned.

- Identify the four parts of a radio call: Your callsign, my callsign, info, and request. Note how they don't always appear in the same order.
- Identify where "extra" words have been omitted.
- Identify where call signs are shortened or omitted.
- Identify which read-backs are mandatory.
- Identify standard phrases and terminology. Note any words or phrases you don't understand and ask your instructor.
- Why did the pilot not read back the squawk?
- Where do you get the frequencies?

OUTBOUND COMMUNICATION (CONTROLLED AIRPORT)

Fresno Ground 121.7

Pilot: Fresno Ground, SportCruiser 642JB, Signature Ramp with information Alpha, taxi for takeoff VFR to the Northwest.
GND: SportCruiser 642JB, Fresno Ground, taxi via India to runway 29R.
Pilot: SportCruiser 642JB, taxi via India to runway 29R.

Fresno Tower 118.2

Pilot: Fresno Tower, SportCruiser 642JB, holding short of runway 29R.
TWR: 2JB, continue holding short for landing traffic.
Pilot: 2JB, hold short, runway 29R.
TWR: 642JB, Cleared for Takeoff, right turn-out approved.
Pilot: SportCruiser 642JB, cleared for takeoff, runway 29R, right turnout approved

Fresno Approach 119.6

Pilot: Fresno Approach, SportCruiser 642JB.
Appr: Aircraft calling Fresno Approach, go ahead.
Pilot: Fresno Approach, SportCruiser 642JB is 8 miles west-northwest of Fresno, 3 thousand 5 hundred, VFR. Will be doing airwork in this area for 30 minutes and returning Fresno. Request flight following.
Appr: 642JB, ident and say type of aircraft.
Pilot: 642JB is a SportCruiser light-sport aircraft, ICAO ID Charlie Romeo Uniform Zulu (CRUZ).
Appr: SportCruiser 642JB, squawk one two three four.
Pilot: 642JB
Appr: SportCruiser 642JB, radar contact 10 miles northwest Fresno. Remain clear of Class C airspace.
Pilot: 642JB, wilco.

Approach 119.6

Appr: 642JB, Fresno Approach, you have traffic 3 miles west of your position, southbound; a King Air descending through five thousand for two thousand five hundred.
Pilot: 642JB, looking.
Pilot: 642JB, traffic in sight.

INBOUND COMMUNICATION (CONTROLLED AIRPORT)

Fresno Approach 119.6

Pilot: Fresno Approach, SportCruiser 642JB
Appr: 642JB, go ahead.
Pilot: 642JB is direct Fresno. Field in sight.
Appr: 642JB, radar service terminated. Contact Fresno Tower on 118.2.
Pilot: 642JB, switching Tower 118.2

Fresno Tower 118.2

Pilot: Fresno Tower, SportCruiser 642JB, Tank Farms inbound with Bravo for touch-and-goes.
TWR: 642JB, Fresno Tower, enter left base for runway 29R. Altimeter three zero one two.
Pilot: Enter left base for runway 29R, 642JB. Three zero one two.
Pilot: Fresno Tower, SportCruiser 642JB, left base runway 29R for the option.
TWR: 642JB, cleared for the option, runway 29R.
Pilot: 642JB, cleared for the option, runway 29R.
TWR: 642JB, make left closed traffic.
Pilot: Left closed traffic, 642JB.
Pilot: Fresno Tower, 642JB, left abeam runway 29R, full stop.
TWR: 642JB, cleared to land, runway 29R.
Pilot: Cleared to land runway 29R, 642JB.
TWR: 642JB, when clear of the active, contact ground point seven.
Pilot: 642JB, switching ground.

Fresno Ground 121.7

Pilot: Fresno Ground, SportCruiser 642JB, clear of runway 29R on Kilo, taxi to Signature ramp.
GND: 642JB, taxi to the ramp.
Pilot: 642JB, taxi to the ramp.

Fresno Chandler Executive Airport

Prior TO TAKEOFF/ENTERING THE TRAFFIC PATTERN

Check Fresno Chandler WX AWOS 135.225 (559-488-1040)

TAKEOFF/DEPARTURE

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 642JB, Departing 30, left closed traffic (or straight out departure, etc.), Chandler

TURNING CROSSWIND

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 642JB, left crosswind, Chandler

ENTERING TRAFFIC PATTERN

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 642JB, 5 miles NW, Enter Forty-Five for left Three Zero, Chandler

DOWNWIND

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 642JB, downwind, Three Zero (or touch and go, etc.), Chandler

TURNING BASE

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 2JB, left base, Three Zero, Chandler

TURNING FINAL

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 2JB, left final, Three Zero, Chandler

CLEAR THE ACTIVE

Chandler Traffic - CTAF/UNICOM 123.0

Pilot: Chandler Traffic, SportCruiser 2JB, cleared the active

Airport Communications

CTAF/UNICOM: 123.0
WX AWOS-3: 135.225 (559-488-1040)
FRESNO APPROACH: 119.0 119.6
FRESNO DEPARTURE: 119.0
WX ASOS at FAT (6 nm NE): PHONE 559-255-3413