

## Communication Radio “Scripts”

Here are examples of a typical sequence of radio transmissions for three different types of airports: a towered field, a towered field with approach control, and a non-towered field.

### Towered Field Example: Austin Executive

Austin Executive tower (as is typical) has 3 frequencies that the controllers use: “tower”, “ground”, and “ATIS”. Tower is used for aircraft in flight or on the runway. Ground is for taxiing aircraft. ATIS is a continuously looping recording of weather and other useful information.

### Taxi, Takeoff, and Departure

1. Copy Executive ATIS (118.82). ATIS: “Austin Executive tower information C. 1842Z. Wind 170 at 10. Visibility 10. Few clouds at 6,500. Temperature 28, dew point 21. Altimeter 29.92. Runway 13 in use. .... Advise on initial contact you have information C.”
2. Switch to Executive ground (119.45).
  - 2.a. You request: “Executive ground, Skyhawk 413ES, on ramp, information C, VFR to Taylor, ready to taxi.”
  - 2.b. Ground clears: “Skyhawk 413ES, Executive ground, runway 13, taxi via A.”
  - 2.c. You read back: “Runway 13, taxi via A, Skyhawk 413ES.”
3. You taxi and run-up. Later, when at the assigned departure runway, and ready to go, switch to Executive tower (120.3).
  - 3.a. You request: “Executive tower, Skyhawk 413ES, taxiway A at 13, ready for departure.”
  - 3.b. Tower clears: “Skyhawk 413ES, left turnout approved, report leaving D airspace, runway 13, cleared for takeoff.”
  - 3.c. You read back: “Left turnout, report leaving D airspace, runway 13, cleared for takeoff, Skyhawk 413ES.”
4. You take off and turn as approved. Later, as you leave the class D airspace:
  - 4.a. You report: “Executive tower, Skyhawk 413ES, leaving D airspace.”
  - 4.b. Tower: “Skyhawk 413ES, roger. Frequency change approved.”
  - 4.c. You: “Frequency change approved, Skyhawk 413ES.” (or “Roger, Skyhawk 413ES.”)

## Arrival, Landing, and Taxi

1. Copy Executive ATIS (118.82), when 20–10 miles out. ATIS: “Austin Executive Airport information E. 2042Z. Wind....”
2. Switch to Executive tower (120.3).
  - 2.a. At roughly 10 miles out, you request: “Executive tower, Skyhawk 413ES, 10 miles east, 2,500, information E, landing Executive.”
  - 2.b. Tower clears: “Skyhawk 413ES, Executive tower, report mid-field downwind.”
  - 2.c. You read back: “Report mid-field downwind, Skyhawk 413ES.”
3. When you get to the requested reporting point:
  - 3.a. You report: “Executive tower, Skyhawk 413ES, mid-field downwind.”
  - 3.b. Tower clears: “Skyhawk 413ES, runway 13, cleared to land.”
  - 3.c. You read back: “Runway 13, cleared to land, Skyhawk 413ES.”
4. Fly the remainder of the pattern, land, and roll-out.
  - 4.a. Tower: “Skyhawk 413ES, turn right at B, contact ground 119.45.”
  - 4.b. You read back (when you’re not busy): “Right at B, contact ground 119.45, Skyhawk 413ES.”
5. You exit as cleared, pull across the hold-short line, and switch to Executive ground (119.45).
  - 5.a. You request: “Executive ground, Skyhawk 413ES, clear of 13 on B.”
  - 5.b. Ground clears: “Taxi to parking via B – A.”
  - 5.c. You read back: “To parking via B – A, Skyhawk 413ES.”

## Towered Field with Approach Control Example: Austin Bergstrom

Communications procedures at Austin Bergstrom are an extension of those at Executive. In addition to its tower, Austin Bergstrom airport has Austin approach control. Tower focuses on traffic taxiing, taking off, and landing, while approach focuses on traffic within about 20 miles of airport. In addition to tower, ground, and ATIS frequencies, Austin tower has a “clearance” frequency for getting a departure clearance, which keeps the ground frequency less busy.

## Taxi, Takeoff, and Departure

1. Copy Austin ATIS (124.4). ATIS: "Austin Bergstrom International Airport ATIS information J. 1842Z. Wind 150 at 7...." Note that ATIS says "All VFR departures contact clearance delivery on 125.5 prior to taxi."
  2. Contact Austin clearance delivery (125.5)
    - 2.a. You request: "Austin clearance delivery, Skyhawk 413ES, information J, VFR to Executive."
    - 2.b. Clearance delivery assigns: "Skyhawk 413ES, departure frequency 127.22, squawk 0314."
    - 2.c. You read back: "Departure frequency 127.22, squawk 0314, Skyhawk 413ES"
  3. Switch to Austin ground (121.9). Taxi to a place on the ramp to run-up, then taxi to the nearest yellow spot painted (with a number) on the ramp.
    - 3.a. You request: "Austin ground, Skyhawk 413ES, spot 1, information C, VFR to Executive, ready to taxi."
    - 3.b. Ground clears: "Skyhawk 3ES, Austin ground, runway 17L, taxi via K – B – F, hold short of 17L."
    - 3.c. You read back: "Runway 17L, taxi via K – B – F, hold short of 17L, Skyhawk 3ES."
  4. You taxi as cleared. When at assigned departure runway, and ready to go, switch to Austin tower (121.0).
    - 4.a. You request: "Austin tower, Skyhawk 413ES, taxiway F at 17L, ready for departure."
    - 4.b. Tower clears: "Skyhawk 3ES, fly heading 150, runway 17L, cleared for takeoff."
    - 4.c. You read back: "Heading 150, runway 17L, cleared for takeoff, Skyhawk 3ES."
    - 4.d. You take off, and turn to the assigned heading.
    - 4.e. Tower: "Skyhawk 3ES, contact departure."
    - 4.f. You read back: "Contact departure, Skyhawk 3ES."
  5. Switch to the departure frequency that clearance delivery assigned.
    - 5.a. You report: "Austin departure, Skyhawk 413ES, passing 800, climbing to 2,000."
    - 5.b. Departure assigns: "Skyhawk 3ES, radar contact. Turn left heading 045, maintain VFR at or below 2,500."

- 5.c. You read back: “Turn left heading 045, maintain VFR at or below 2,500, Skyhawk 3ES.”
- 5.d. You get more vectors assigned. Eventually, departure says: “Skyhawk 3ES, resume own navigation, squawk VFR, radar services terminated, contact Executive tower 120.3.”
- 5.e. You read back: “Resume own navigation, squawk VFR, contact Executive tower 120.3, Skyhawk 3ES.”

## Arrival, Landing, and Taxi

1. Copy Austin ATIS (124.4), when 20 miles out. ATIS: “Austin Bergstrom Airport information K. 2042Z. Wind....”
2. Switch to Austin approach (frequency depends on which direction you’re coming from—see sectional chart).
  - 2.a. At roughly 20 miles out, you request: “Austin approach, Skyhawk 413ES, 20 miles east, level 2,500, information K, landing Austin.”
  - 2.b. Approach assigns a transponder code: “Skyhawk 413ES, Austin approach. Squawk 0456.”
  - 2.c. You read back and set your transponder code: “Squawk 0456, Skyhawk 413ES.”
  - 2.d. Approach, after seeing you on radar, says: “Skyhawk 3ES, radar contact 5 miles northwest of Smithville. Turn right heading 300, maintain VFR at or below 2,500.”
  - 2.e. You read back: “Turn right heading 300, maintain VFR at or below 2,500, Skyhawk 3ES.”
  - 2.f. You get more vectors assigned. Eventually, approach will say: “Skyhawk 3ES, contact tower 121.0.”
  - 2.g. You read back: “Contact tower, Skyhawk 3ES.”
3. Switch to tower (121.0)
  - 3.a. You report: “Austin tower, Skyhawk 413ES, level 2,000.”
  - 3.b. Tower clears: “Skyhawk 3ES, runway 17L, cleared to land.”
  - 3.c. You read back: “Runway 17L, cleared to land, Skyhawk 3ES.”
4. Fly the remainder of the pattern, land, and roll-out.
  - 4.a. Tower: “Skyhawk 3ES, turn right at K, contact ground .9.”

- 4.b. You read back (when you're not busy): "Right at K, contact ground .9, Skyhawk 3ES."
5. You exit as cleared, pull across the hold-short line, and switch to ground (121.9).
  - 5.a. You request: "Austin ground, Skyhawk 413ES, clear of 17L on K, taxi to Atlantic."
  - 5.b. Ground clears: "Skyhawk 3ES, taxi to Atlantic via K."
  - 5.c. You read back: "To Atlantic via K, Skyhawk 3ES."

## **Non-Towered Field Example: Taylor**

At Taylor, there is no air traffic control, so pilots coordinate among each other by self-announcing their location and intention on the CTAF (common traffic advisory frequency).

### **Taxi, Takeoff, and Departure**

1. Switch to the Taylor CTAF (122.8).
2. Before you start taxiing, you announce: "Taylor traffic, Skyhawk 413ES, on the ramp, taxiing to runway 17, Taylor."
3. Before you enter the runway for takeoff, you announce: "Taylor traffic, Skyhawk 413ES, departing runway 17, departing the pattern to the southwest, climbing to 3000, Taylor."

### **Arrival, Landing, and Taxi Sequence of Calls**

1. Switch to the Taylor CTAF (122.8).
2. At about 10 miles out, you announce: "Taylor traffic, Skyhawk 413ES, 10 miles southwest, 3000, runway 17 full stop, Taylor."
3. As you enter the downwind leg, you announce: "Taylor traffic, Skyhawk 413ES, entering right downwind, runway 17 full stop, Taylor."
4. As you turn to the base leg, you announce: "Taylor traffic, Skyhawk 413ES, right base, runway 17 full stop, Taylor."
5. As you turn on the final leg, you announce: "Taylor traffic, Skyhawk 413ES, final, runway 17 full stop, Taylor."
6. As you clear the runway, you announce: "Taylor traffic, Skyhawk 413ES, clear of runway 17, Taylor."

## Read Backs

Read back to ATC: all (1) clearances, (2) vectors, (3) restrictions, (4) runway assignments, (5) transponder squawks, and (6) frequencies. Basically anything with a number or routing. End the read back with your call sign.

## How to Say

Use digits (11 is “one one”, not “eleven”). Use phonetic letters (alpha, bravo, charlie, ...).

- **Aircraft ID:** Type-name digits-and-phonetic-letters
- **Heading:** “Heading” digits
- **Altitude (< 18,000 ft MSL):** Digits “thousand”, optional digit “hundred”
- **Transponder code:** 4-digits
- **Frequency (MHz):** 3-digits “point” 1-or-2-digits
- **Speed (knots):** Digits “knots”
- **Runway:** “Runway” digits, optional left-center-right
- **Distance:** Digits “miles”
- **Airspace:** Phonetic-letter “airspace”
- **Yes or no:** “Affirm” or “negative”
- **Will do or cannot do:** “Wilco” or “unable”

## Phonetic Spelling and Digits

A: AL-fah	N: no-VEM-ber	0: ZE-RO
B: BRAH-voh	O: OSS-cah	1: WUN
C: CHAR-lee	P: pah-PAH	2: TOO
D: DELL-tah	K: keh-BECK	3: TREE
E: ECK-oh	R: ROW-me-oh	4: FOW-er
F: FOKS-trot	S: see-AIR-rah	5: FIFE
G: golf	T: TANG-go	6: SIX
H: ho-TELL	U: YOU-nee-form	7: SEV-en
I: IN-de-ah	V: VIK-tah	8: AIT
J: JEW-lee-ETT	W: WISS-key	9: NIN-er
K: KEY-loh	X: ECS-ray	.: point
L: LEE-mah	Y: YANG-key	
M: mike	Z: ZOO-loo	

Example:

413ES = FOW-er WUN TREE ECK-oh see-AIR-rah

heading 300 = heading TREE ZE-RO ZE-RO

2800 (altitude) = TOO thousand AIT hundred

runway 17L = runway WUN SEV-en left