

**FLIGHT DEPARTMENT** 

# Flight Communication Standards



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# **REVISION HIGHLIGHTS**

The following items were changed, modified, added, or deleted in this revision.

Rev#	Date	Page	Description	Initials
02	01-17-2008	All	Complete revision	WSC
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06	03-22-2016	iii, iv, 9, 12-15, 17	Revised phraseology for runway crossing instructions; added note advising that not all airplanes may have a two-way radio at uncontrolled airports; repaginated	PMC

# LIST OF EFFECTIVE PAGES

This list of effective pages is used to determine the current status of every page in this manual.

Page	Rev#	Date	Page	Rev#	Date	Page	Rev#	Date
Cover	06	03-22-2016						
i	05	10-23-2014						
ii	05	10-23-2014						
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1	05	10-23-2014						
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#### INTRODUCTION

# General

The air traffic control environment, especially in high-density traffic areas such as Daytona Beach, Orlando, Tampa, etc., demands effective pilot-controller communication. As a frequency becomes increasingly congested, pilots must strive to listen intently and respond promptly and effectively to ATC. Not doing so places an unnecessary burden on the frequency and those needing to use it, and could result in compromising the safety of flight.

A professional handling of all radio communication is essential to maintain safe aircraft operations. A pilot must communicate clearly, concisely, and efficiently.

The following examples depict a typical training activity scenario originating from the ERAU ramp at the Daytona Beach International airport (KDAB). The examples demonstrate how to initiate radio calls or respond to ATC with the goal of simultaneously minimizing the time spent transmitting and ensuring the communication of all necessary information. By decreasing the amount of time spent using a frequency, more time becomes available for use by ATC and other pilots. In addition, note the following:

- 1. The aircraft call sign is stated first in every response (allows ATC to immediately know who is responding).
- 2. Only the necessary information is read back (heading, altitude, etc.). Read backs are condensed into as few words as possible.
- 3. Assigned altitude changes are acknowledged by reporting vacation of your current altitude for the newly assigned altitude.

Since communication can be dynamic, the examples provided cannot cover every possible scenario. However, each example should be used as the basis for other situations you may encounter.

By conducting your radio communications consistent with the examples provided, you not only help to minimize frequency congestion, but you further enhance and demonstrate your professionalism and help to improve aviation safety.

# **Communication Radio**

Ensure that the desired communications radio is on. Then:

- ✓ Check the audio panel to ensure that the desired transmitter and receiver have been selected.
- ✓ Check that the correct frequency has been selected.
- ✓ Adjust the volume and squelch controls (if applicable):
  - Volume control Adjusts the sound you will hear through the cabin speaker and/or headset.

#### NOTE

The volume control does not affect the output of the radio transmission. However, having little or no volume will result in being unable to listen for other transmissions. This could create the appearance of a loss of communication, creating unnecessary confusion in the cockpit and placing strain on ATC.

 Squelch control (may be automatic or manual) –Adjusts the sensitivity of the receiver (adjusts reception ability).

#### NOTE

Squelch controls on some older radios require manual adjustment.

Failure to properly use these controls will negatively impact the safety of flight.

# **Communication Etiquette**

A two-way radio simply means that the radio may be utilized to receive and transmit (although not at the same time). Almost every transmission from air traffic control requires a response. If you hear a controller issue an instruction to another aircraft, you must wait for that aircraft to respond before making your transmission.

#### **NOTE**

Radio frequencies can be very congested and only one transmitter can operate at any given time on any one frequency.

Aircraft radio communications can be related to talking with a friend over the phone. Each thought requires a response, we must listen for the appropriate time to respond, and we must express ourselves clearly. One of the most misunderstood essentials of radio communications is the art of understanding. Failure of a pilot to listen, interpret, understand, or maintain situational awareness causes a high level of stress and frustration to other pilots and degrades safety.

# **Microphone Operation**

Before attempting to make a transmission, be sure that no cabin air vent is directed at the microphone of your headset. Adjust vents as necessary.

Since noise-canceling microphones have a small hole on the opposite side of the mouthpiece (part of the noise-canceling feature) take care not to cover that hole. Follow the manufacturer's directions on how to position the microphone in front of your lips.

When ready to speak, depress the push-to-talk (PTT) button located on the control yoke, and pause momentarily before beginning to speak (there is a slight lag between depressing the PTT button and the radio's transmission of the spoken signal).

#### **NOTE**

Failure to pause momentarily may cut off the beginning of your transmission.

#### NOTE

Shouting will cause garbled, distorted, and unintelligible transmissions. If you do not hold the microphone close enough to your lips when speaking and/or speak too softly, the noise-canceling feature of the mic will not be able to distinguish your voice from background noise and will not eliminate the background noise.

# **Nomenclature**

As with all professional occupations, aviation has a language of its own that is used between pilots and controllers to express ideas and concepts. It is very important that everyone converse in the same manner to preclude misunderstandings. Definitions of many common phrases used in radio communications can be found in the Pilot/Controller Glossary (P/CG) addendum of the Aeronautical Information Manual (AIM). Terms in this manual that are defined in the P/CG appear in italicized font.

Always acknowledge a transmission. A controller has no way of knowing that you received his/her last transmission unless you acknowledge it. If you do not respond, the controller must repeat the transmission again, adding to his/her workload. If you do not understand an instruction or message, simply say, "Say again."

If ATC asks a question requiring a yes or no answer, respond appropriately with either affirmative or negative. Do not use the term roger. Roger means only that you received and understood the last transmission.

# <u>Aircraft Identification</u>

Use of the "Riddle" call sign (e.g., "Riddle Four Zero Five") is authorized when communicating with ERAU Eagle Data/Eagle Ops and when communicating with ATC. The full call sign of the aircraft (e.g., "Skyhawk Four Zero Five Echo Romeo") must be used when communicating on the practice area or CTAF/UNICOM frequencies.

"Riddle" call signs use group form, as opposed to the full call sign in which the digits of the registration number are spoken individually. Riddle 462 is "Riddle Four Sixty-Two"; Riddle 405 is "Riddle Four Zero Five."

# **Radio Communications**

Communicating over a two-way radio is very similar to conversing over the telephone with an unfamiliar person. To initiate conversation, you would:

- 1. Address with whom you are speaking
- 2. Identify yourself and where you are calling from
- 3. State why you are calling

A typical telephone conversation might occur as follows:

"Hello Matt, this is Josh and I'm calling from Embry-Riddle Aeronautical University's Alumni Relations Department. I was wondering if you would like to provide a donation to

the University." Matt might respond, "Sure, I would be happy to do so!" to which Josh would respond, "Thank you so much for your continued support of ERAU."

The conversation has ended, and both parties are at an understanding.

Radio communications have a similar order:

- 1. To whom are you speaking (name of the controlling agency)
- 2. Who you are (aircraft call sign),
- 3. Where you are (position)
- 4. What you want (to land, flight following, etc.)

A typical radio transmission might occur as follows:

"Daytona Approach, Riddle Four Sixty-Two, ten southwest Flagler, two thousand, information Alpha, landing Daytona Beach."

Subsequent transmissions only require the appropriate reiteration of details (altitudes, headings, landing clearances, etc.).

#### **NOTE**

Make transmissions on all available communications radios prior to becoming airborne to check for an inoperative or weak radio.

#### FLIGHT COMMUNICATION EXAMPLES

# **Prior to Engine Start**

# Ramp Out

Confirms the most current hobbs and tach time and notifies the Flight Data (referred to as Eagle Data) operator when you are beginning your flight activity. Eagle Data is also used to request fuel, oil, maintenance, and due-back time extensions prior to ramping out.

#### **Eagle Data – 122.825 MHz**

#### 1. Ramping Out

Aircraft: "Eagle Data, Riddle 462 (Four Sixty-Two), ramping out, no discrepancies."

Eagle Data: "Riddle 462 (Four Sixty-Two), due-back 17:48 (one seven four eight)."

Aircraft: "Riddle 462 (Four Sixty-Two), due back 17:48 (one seven four eight)."

#### NOTE

If you find any discrepancy between the hobbs or tach times shown on the aircraft's clipboard and its hobbs or tach meter, advise Eagle Data as follows:

Aircraft: "Eagle Data, Riddle 462 (Four Sixty-Two), ramping out, with discrepancy."

Eagle Data: "Riddle 462 (Four Sixty-Two), hobbs and tach please."

Aircraft: "Riddle 462 (Four Sixty-Two), hobbs 1466.7 (one four six six point seven), tach 0926.4

(niner two six point four)."

# NOTE Do not use the word "decimal."

Eagle Data: "Riddle 462 (Four Sixty-Two), due-back 17:48 (one seven four eight)."

Aircraft: "Riddle 462 (Four Sixty-Two), due back 17:48 (one seven four eight)."

# 2. Contacting Eagle Data - Aircraft Servicing Required

Aircraft: "Eagle Data, Riddle 462 (Four Sixty-Two), A12 (alpha one two), request fuel."

Eagle Data: "Riddle 462 (Four Sixty-Two), sending fuel."

# **Automatic Terminal Information Service (ATIS)**

An hourly observation assigned a given alphabetic code that the pilot must record for later use.

#### Daytona ATIS - 120.05 MHz

Listen to ATIS to obtain the weather conditions and other pertinent information concerning the Daytona Beach International Airport.

# **Clearance Delivery (VFR)**

After obtaining the ATIS, contact clearance delivery to obtain the appropriate departure instructions. If requesting practice instrument approaches, provide only your initial request.

#### Daytona Beach Clearance Delivery – 119.30 MHz

Aircraft: "Daytona Clearance Delivery, Riddle 462 (Four Sixty-Two), requesting V-F-R

departure to south practice area at 2,000 (two thousand), information

Bravo."

#### NOTE

If a student pilot is conducting a solo flight, the FAA requests that on <u>initial</u> contact with an ATC facility, the pilot includes "student pilot" during the call. For example:

Aircraft: Daytona Clearance Delivery, Riddle 462 (Four Sixty-Two), student pilot,

requesting V-F-R departure to south practice area at 2,000 (two thousand),

information Bravo."

#### NOTE

All ERAU student pilots shall comply with this FAA procedure when conducting a solo flight.

Clearance: "Riddle 462 (Four Sixty-Two), Daytona Clearance, *maintain* V-F-R at or

below 2,000 (two thousand), departure frequency 125.35 (one two five point three

five), squawk 0116 (zero one one six)."

#### NOTE

Clearance information is issued in the same order each time: clearance limit, route of flight, altitude, departure frequency, and transponder code. Writing C-R-A-F-T vertically on a sheet of paper prior to receiving your clearance better prepares you to record the information as it is issued.

Aircraft: "Riddle 462 (Four Sixty-Two), V-F-R at or below 2,000 (two thousand), departure

125.35 (one two five point three five), *squawk* 0116 (zero one one six)."

Clearance: "Riddle 462 (Four Sixty-Two), read back correct, contact ground 121.90 (one

two one point niner) for taxi."

#### **NOTE**

Clearance delivery may abbreviate the ground frequency as "ground point niner." Since 121.XX is a common range for many airports' ground control frequencies, the numbers prior to the decimal are sometimes omitted.

# **Clearance Delivery (IFR)**

After obtaining the most current ATIS information, contact clearance delivery to obtain your IFR clearance.

#### **NOTE**

For control towers that have no clearance delivery frequency, make your IFR clearance request on the ground control frequency.

#### **Daytona Beach Clearance Delivery – 119.30 MHz**

Aircraft: "Daytona Clearance Delivery, Riddle 462 (Four Sixty-Two), I-F-R ISM (India

Sierra Mike), information Bravo."

Clearance: "Riddle 462 (Four Sixty-Two), Daytona Clearance, cleared to ISM (India Sierra

Mike) via radar vectors, V152 (victor one fifty-two), then as filed. Maintain 3,000

(three thousand), expect 4,000 (four thousand) 10 (one zero) minutes after

departure. Departure frequency 123.90 (one two three point niner), squawk

4276 (four two seven six).

#### **NOTE**

Clearance information is issued in the same order each time: <u>c</u>learance limit, <u>r</u>oute of flight, <u>a</u>ltitude, departure <u>f</u>requency, and <u>t</u>ransponder code. Write C-R-A-F-T, vertically on a sheet of paper prior to receiving your clearance to be better prepared to record the information as it is issued.

Aircraft: "Riddle 462 (Four Sixty-Two), cleared ISM (India Sierra Mike), radar vectors, V152

(victor one fifty-two), then as filed. *Maintain* 3,000 (three thousand), *expect* 4,000 (four thousand) 10 (one zero) minutes after departure. Departure 123.9 (one two

three point niner), Squawk 4276 (four two seven six)."

Clearance: "Riddle 462 (Four Sixty-Two), read back correct, contact ground point niner

for taxi."

# **After Engine Start**

# **ERAU Flight Operations (Eagle Ops)**

While taxing on the ERAU ramp, each aircraft shall monitor Eagle Ops frequency (123.30 MHz) to allow the Flight Supervisor the ability to contact you if necessary. This enhances the safety of ramp operations.

# Eagle Ops - 123.30 MHz

Tune this frequency prior to commencing taxi on the ramp. Change frequency only when in a position to contact ground control.

# **Requesting Taxi for Takeoff**

# **Daytona Beach Ground Control**

Prior to operating on a taxiway at KDAB, you must first obtain a clearance from Daytona Beach Ground Control.

#### Daytona Beach Ground Control - 121.90 MHz

Aircraft: "Daytona Ground, Riddle 462 (Four Sixty-Two), R2 (romeo two), ready to taxi."

Ground: "Riddle 462 (Four Sixty-Two), Daytona Ground, runway 7L (seven left) at N4

(november four), taxi via E (echo), N (november), hold short runway 16 (one six)."

Aircraft: "Riddle 462 (Four Sixty-Two), runway 7L (seven left) at N4 (november four) taxi via E

(echo), N (november), hold short runway 16 (one six)."

#### **NOTE**

Before moving, brief the taxi route with the pilot monitoring (PM) while referring to the airport diagram to avoid any confusion. Confirm the assigned or intended runway, runway crossing and/or hold short instructions, the location of complex intersections (three or more taxiways intersecting) along the taxi route, and the location of runway incursion hot spots relative to the taxi route.

#### NOTE

In order to preclude misunderstandings in radio communications, ATC will not use the word "cleared" in conjunction with authorization for aircraft to taxi. Pilots should also avoid using the word "cleared" when reading back taxi instructions.

# **Holding Short of Runway**

Ground: "Riddle 462 (Four Sixty-Two), cross runway 16 (one six) at N (november)."

Aircraft: "Riddle 462 (Four Sixty-Two), cross runway 16 (one six at N (november)."

#### NOTE

Per the ERAU SOPM, prior to crossing any runway, confirm with the PM that a clearance to cross was received by asking, "Cleared to cross (Runway Number)?" Wait for the PM to respond, "Cleared to cross (Runway Number)."

#### NOTE

Be patient while waiting for a crossing clearance. Controllers must coordinate the crossing of every aircraft across each runway.

After receiving a clearance to cross a runway:

- a. Acknowledge the clearance
- b. Check for landing and departing traffic
- c. Perform the necessary intra-cockpit verbal coordination
- d. Add power to begin moving. If the controller adds, "without delay," move the aircraft as soon as possible, while still adhering to the above actions.

#### NOTE

Monitor ground control while performing the before takeoff run-up and before takeoff checklists.

# **Requesting Takeoff**

# **Daytona Beach Tower**

Prior to taking off, you must first obtain a takeoff clearance from tower.

Daytona Tower Runway 7L/25R - 120.70 MHz Daytona Tower Runway 7R/25L - 118.10 MHz

After completing the run-up, prior to beginning the before takeoff checklist, position the aircraft to face the approach end of the runway (to check for traffic). During the before takeoff checklist, tune in any frequencies you may be using immediately after takeoff (departure, practice area, CTAF of destination airport, etc.).

Change to the tower frequency after completing the before takeoff checklist. Take a moment to listen for other aircraft taking off or landing and then make your radio transmission. In the event an aircraft has been instructed to "line up and wait," wait until that aircraft receives takeoff clearance then make your radio call.

Aircraft: "Daytona Tower, Riddle 462 (Four Sixty-Two), runway 7L (seven left) at N4

(november four), ready for departure."

Tower: "Riddle 462 (Four Sixty-Two), Daytona Tower, fly heading 110 (one one zero),

runway 7L (seven left) at N4 (november four), cleared for takeoff."

Aircraft: "Riddle 462 (Four Sixty-Two), 110 (one one zero), runway 7L (seven left) at N4

(november four), cleared for takeoff."

#### NOTE

If a takeoff clearance cannot be issued, you may be instructed to "hold short." Do not cross the hold short line.

Tower: "Riddle 462 (Four Sixty-Two), Daytona Tower, hold short runway 7L (seven

left)."

Aircraft: "Riddle 462 (Four Sixty-Two), hold short runway 7L (seven left)."

#### NOTE

Traffic conditions may allow aircraft to taxi onto the runway and wait briefly for takeoff clearance. Do not begin takeoff roll until instructed.

Tower: "Riddle 462 (Four Sixty-Two), Daytona Tower, runway 7L (seven left) at N4

(november four), line up and wait, traffic crossing down field."

Aircraft: "Riddle 462 (Four Sixty-Two), runway 7L (seven left) at N4 (november four), line up

and wait."

#### NOTE

No other response from the tower (e.g. "roger") authorizes the pilot to cross the hold short line.

# **After Takeoff**

# **Daytona Departure Control (VFR)**

After takeoff, you will be instructed to contact departure control.

Daytona Departure North – 125.80 MHz Daytona Departure South – 125.35 MHz

#### NOTE

The departure control frequency is normally assigned by clearance delivery. Use the frequency assigned unless instructed otherwise.

Tower: "Riddle 462 (Four Sixty-Two), contact departure."

Aircraft: "Riddle 462 (Four Sixty-Two), contact departure."

Aircraft: "Daytona Departure, Riddle 462 (Four Sixty-Two), leaving 800 (eight hundred) for

2,000 (two thousand)."

Departure: "Riddle 462 (Four Sixty-Two), Daytona Departure, radar contact, follow the

shoreline southbound."

Aircraft: "Riddle 462 (Four Sixty-Two), shoreline southbound."

#### NOTE

Departure control will inform you when you are clear of Daytona Beach Class C airspace, and when it is safe to change frequencies and proceed on course.

Departure: "Riddle 462 (Four Sixty-Two), radar service terminated, squawk V-F-R,

frequency change approved."

Aircraft: "Riddle 462 (Four Sixty-Two), squawk V-F-R, frequency change approved."

# **Daytona Departure Control (IFR)**

After takeoff, you will be advised to contact departure control to continue your flight to your destination airport.

Aircraft: "Daytona Departure, Riddle 462 (Four Sixty-Two), leaving 900 (nine hundred) for

3,000 (three thousand)."

Departure: "Riddle 462 (Four Sixty-Two), Daytona Departure, radar contact, turn right

heading 180 (one eight zero), expect on course in four miles, climb and

maintain 4,000 (four thousand)."

Aircraft: "Riddle 462 (Four Sixty-Two), right heading 180 (one eight zero), leaving 1,000

(one thousand) for 4,000 (four thousand)."

# In the Practice Area

Practice areas have been designated to allow for local dual and solo flight training and practice. While in the local practice areas, monitor the respective practice area frequency, making position reports prior to beginning a new maneuver, or at regular intervals.

North Practice Area – 122.85 MHz South Practice Area – 123.50 MHz

Aircraft: "Ashby Practice Area, Skyhawk 462ER (Four Six Two Echo Romeo), 2 (two) east

Lake Ashby, 2,700 (two thousand seven hundred), stalls."

#### NOTE

While in the practice areas, due back time extensions and other assistance may be requested from Eagle Ops on 123.30 MHz.

# **Approaching a Non-Towered Airport**

#### CTAF and UNICOM

# For the appropriate frequency, refer to one of the following: Airport/Facilities Directory VFR Sectional ERAU In-Flight Guide

Tune the appropriate CTAF frequency and initiate position reporting at least ten miles from the destination airport. When communicating with traffic at a non-towered airport, use the full aircraft call sign.

Aircraft: "DeLand Traffic, Skyhawk 462ER (Four Six Two Echo Romeo), 6 (six) west Lake

Ashby, 2,000 (two thousand), airport advisory."

#### **NOTE**

Requesting an airport advisory is not necessary if the active runway can be determined by listening to other aircraft on the same frequency. Maintain vigilance as some aircraft might be operating without a two-way radio, or could be on the incorrect frequency.

CTAF: "Two aircraft in the pattern, runway 12 (one two) in use at DeLand."

Continue making position reports every two to three miles while maneuvering to enter the traffic pattern on a 45° angle to the downwind.

#### NOTE

Keep track of the position of other aircraft. Maneuver to avoid creating traffic conflicts.

# **Turning Downwind**

Aircraft: "DeLand Traffic, Skyhawk 462ER (Four Six Two Echo Romeo), entering left

downwind, runway 12 (one two), DeLand."

On Base

Aircraft: "DeLand Traffic, Skyhawk 462ER (Four Six Two Echo Romeo), left base,

runway 12 (one two), DeLand."

On Final

Aircraft: "DeLand Traffic, Skyhawk 462ER (Four Six Two Echo Romeo), final, runway 12

(one two), full stop, DeLand."

#### NOTE

Similar calls are made for other legs of the pattern. Announce landing intentions (full stop, touch-and-go, low approach) on final, or sooner.

# After Landing (Clear of the Runway)

Aircraft: "DeLand Traffic, Skyhawk 462ER (Four Six Two Echo Romeo), clear of runway

12 (one two), DeLand."

#### NOTE

Multiple airports share the same CTAF frequency. When making position reports at non-towered airports, begin each transmission with the name of the airport (e.g. "DeLand Traffic") and end each transmission with the name of the airport (e.g. "DeLand").

# **Instrument Holding/Approach**

#### NOTE

Obtain the appropriate ATIS/AWOS/ASOS before requesting practice instrument procedures.

Aircraft: "Daytona Approach, Riddle 462 (Four Sixty-Two), 7 (seven) west Flagler, 2,000

(two thousand), request hold Ormond V-O-R, I-L-S 7L (seven left), R-NAV 7L

(seven left) Daytona, information Bravo."

Approach: "Riddle 462 (Four Sixty-Two), squawk 0156 (zero one five six)."

Aircraft: "Riddle 462 (Four Sixty-Two), 0156 (zero one five six)."

Approach: "Riddle 462 (Four Sixty-Two), radar contact 18 (one eight) miles northwest

Daytona, turn left direct Ormond VORTAC, climb and maintain 4,000

(four thousand), advise ready to copy holding instructions."

Aircraft: "Riddle 462 (Four Sixty-Two), direct Ormond VORTAC, leaving 2,000 (two

thousand) for 4,000 (four thousand), ready to copy.

#### NOTE

Say "standby" if you are not ready to copy the clearance.

Approach: "Riddle 462 (Four Sixty-Two), hold northwest of Ormond on the 342 (three four

two) radial at 4,000 (four thousand), expect further clearance at 1620Z (one six

two zero Zulu)."

Aircraft: "Riddle 462 (Four Sixty-Two), hold northwest Ormond, 342 (three four two) radial,

expect further clearance 1620Z (one six two zero Zulu)."

#### NOTE

Assume right-hand turns if turn direction is omitted from the clearance. When holding without an IFR clearance, the EFC is sometimes replaced with "advise ready for the approach/to leave the hold."

# **Crossing the Holding Fix**

Aircraft: "Riddle 462 (Four Sixty-Two), Ormond, 4,000 (four thousand), 1600Z (one six zero zero

Zulu)."

Approach: "Riddle 462 (Four Sixty-Two), roger, advise when ready for the approach."

Aircraft: "Riddle 462 (Four Sixty-Two), wilco."

# **Leaving (Crossing) the Clearance Limit (Holding Fix)**

Aircraft: "Riddle 462 (Four Sixty-Two), ready for the approach."

Approach: "Riddle 462 (Four Sixty-Two), fly heading 220 (two two zero), vectors I-L-S

runway 7L (seven left) approach, descend and maintain 2,000 (two thousand)."

Aircraft: Riddle 462 (Four Sixty-Two), heading 220 (two two zero), leaving 4,000 (four

thousand) for 2,000 (two thousand)."

# **Approach Vectoring**

Approach: "Riddle 462 (Four Sixty-Two), turn left heading 160 (one six zero), advise ready

to copy missed approach instructions."

Aircraft: "Riddle 462 (Four Sixty-Two), left heading 160 (one six zero), ready to copy."

Approach: "Riddle 462 (Four Sixty-Two), upon completion of the approach, *fly runway* 

heading, climb and maintain 2,100 'two thousand one hundred), return to this

frequency."

Aircraft: "Riddle 462 (Four Sixty-Two), runway heading, 2,100 (two thousand one hundred),

return this frequency."

Approach: "Riddle 462 (Four Sixty-Two), four miles from FOLIG, turn left heading 100

(one zero zero), descend and *maintain* 1,600 (one thousand six hundred). *Maintain* 1,600 (one thousand six hundred) until established on the localizer, *cleared I-L*-

S runway 7L (seven left) approach."

Aircraft: "Riddle 462 (Four Sixty-Two), heading 100 (one zero zero), leaving 2,000 (two

thousand) for 1,600 (one thousand six hundred), *maintain* 1,600 (one thousand six hundred)

until established, cleared I-L-S runway 7L (seven left) approach."

Approach: "Riddle Sixty462 (Four Sixty-Two), contact tower 120.70 (one two zero point seven)."

Aircraft: "Riddle 462 (Four Sixty-Two), tower 120.70 (one two zero point seven)."

# **Returning From the South Practice Area**

#### **NOTE**

Arrival procedures from the North Practice Area are similar.

#### **Daytona Approach Control**

Contact approach prior to entering Class C airspace.

Daytona Approach North – 125.80 MHz Daytona Approach South – 125.35 MHz

Obtain the current ATIS prior to contacting approach. On busy days, advise Eagle Ops of your return so other aircraft can take your spot in the practice area.

# **After Tuning the Appropriate Approach Frequency**

Aircraft: "Daytona Approach, Riddle 462 (Four Sixty-Two), 2 (two) northwest Lake

Ashby, 2,000 (two thousand), full stop Daytona, information Charlie."

Approach: "Riddle 462 (Four Sixty-Two), Daytona Approach, squawk 0163 (zero one six

three) and IDENT."

Aircraft: "Riddle 462 (Four Sixty-Two), 0163 (zero one six tree)."

Approach: "Riddle 462 (Four Sixty-Two), radar contact 3 (three) miles northwest of Lake

Ashby, fly heading 060 (zero six zero), join the Rose 7 arrival, maintain

2,100 (two thousand one hundred)."

Aircraft: "Riddle 462 (Four Sixty-Two), heading 060 (zero six zero), join the Rose 7 arrival,

leaving 2,000 (two thousand) for 2,100 (two thousand one hundred)."

#### NOTE

Arrival procedures can be found in the ERAU In-Flight Guide. Please review these procedures in detail. Be alert for any ATC instructions that are different than the published/expected procedure.

Approach: "Riddle 462 (Four Sixty-Two), maintain 1,500 (one thousand five hundred) until

advised, contact tower 118.10 (one one eight point one)."

Aircraft: "Riddle 462 (Four Sixty-Two), leaving 2,100 (two thousand one hundred) for 1,500 (one

thousand five hundred), tower 118.10 (one one eight point one)."

# **Approach and Landing**

# **Daytona Beach Tower (VFR)**

Prior to landing you must obtain clearance from Daytona Tower.

Daytona Tower Runway 7L/25R - 120.70 MHz Daytona Tower Runway 7R/25L - 118.10 MHz

#### NOTE

Initial contact should inform tower of your position, altitude, or any pertinent information from approach (e.g. following traffic).

Aircraft: "Daytona Tower, Riddle 462 (Four Sixty-Two), Rose 7 arrival, 1,500 (one

thousand five hundred)."

Tower: "Riddle 462 (Four Sixty-Two), Daytona Tower, enter right downwind, runway

7R (seven right), descend to pattern altitude pilot's discretion."

Aircraft: "Riddle 462 (Four Sixty-Two), right downwind, runway 7R (seven right), descend

to pattern altitude at pilot's discretion."

Tower: "Riddle 462 (Four Sixty-Two), wind 090 at 8 (zero nine zero at eight), runway 7R

(seven right), cleared to land."

Aircraft: "Riddle 462 (Four Sixty-Two), runway 7R (seven right) cleared to land."

**Daytona Beach Tower (IFR)** 

Aircraft: "Daytona Tower, Riddle 462 (Four Sixty-Two), FOLIG."

Tower: "Riddle 462 (Four Sixty-Two), Daytona Tower, runway 7L (seven left), *cleared* 

low approach."

Aircraft: "Riddle 462 (Four Sixty-Two), runway 7L (seven left), cleared low approach."

NOTE

When executing a full stop landing, replace "cleared low approach" with "cleared to land." Report the beginning of the missed approach. You are in the departure phase again after crossing the threshold of the runway.

#### **After Touchdown**

Tower: "Riddle 462 (Four Sixty-Two), turn left next taxiway, *contact* ground point

niner when clear."

Aircraft: "Riddle 462 (Four Sixty-Two), ground point niner."

# **After Landing**

# **Daytona Beach Ground Control**

#### Daytona Beach Ground Control - 121.90 MHz

Ensure the entire aircraft has passed the hold short line when it is stopped. Contact ground after completing the after landing checklist.

Aircraft: "Daytona Ground, Riddle 462 (Four Sixty-Two), runway 7L (seven left) at N4

(november four), taxi Riddle."

Ground: "Riddle 462 (Four Sixty-Two), Daytona Ground, taxi to the Riddle ramp via

november, cross runway 16 (one six) at N (november)."

#### NOTE

Although no instruction was issued to maintain the right side of the November taxiway, stay to the right side per the Letter of Agreement with Daytona Beach ATC.

Aircraft: "Riddle 462 (Four Sixty-Two), taxi Riddle via november, cross runway 16 (one

six) at N (november)."

#### NOTE

Per the ERAU SOPM, prior to crossing any runway, confirm with the PM that a clearance to cross was received by asking, "Cleared to cross (Runway Number)?" Wait for the PM to respond, "Cleared to cross (Runway Number)."

After crossing into ERAU's ramp, monitor Eagle Ops frequency (123.30 MHz).

# After Parking/Shutdown

Notifies Eagle Data the flight has returned and informs them of the status of the aircraft.

#### **Eagle Data – 122.825 MHz**

#### NOTE

Complete this procedure after the shutdown checklist has been completed.

# Ramp In

Aircraft: "Eagle Data, Riddle 462 (Four Sixty-Two), in and up, Bravo 14 (one four).

Eagle Data: "Riddle 462 (Four Sixty-Two), hobbs and tach."

Aircraft: "Riddle 462 (Four Sixty-Two), hobbs 1468.4 (one four six eight point four), tach 0927.4

(niner two seven point four)."

# NOTE Do not use the word "decimal."

Eagle Data: "Riddle 462 (Four Sixty-Two), in and up 1.7 (one point seven), please four point

and gust lock."

Aircraft: "Riddle 462 (Four Sixty-Two), wilco."

#### **NOTE**

The phrase "in and up" means the flight is ramping "in" and is discrepancy-free, or "up" for the next flight. If a maintenance discrepancy exists, ramp "in and down" to "down" the airplane and prevent it from being re-dispatched. Eagle Data will ask for the reason for downing. Fill out the clipboard appropriately and take it to the maintenance hangar.

#### OTHER COMMUNICATION PROCEDURES

# **Operations in Class D Airspace**

When operating under VFR from an airport with an operating control tower:

- ✓ Establish two-way communication with the tower prior to entering Class D. Initial radio transmissions remain the same as those used with Class C Approach.
- ✓ If an ATIS/AWOS/ASOS is not available, expect to receive pertinent weather information on initial contact with tower.
- ✓ Unless advised to do so, you are not required to continue communications with the controller after clearing the airspace following departure. It is courteous to report clear and/or wait for tower to issue a frequency change before leaving the frequency.
- ✓ Use of approach and departure control frequencies is not mandatory for arriving or departing at these airports (although recommended, especially in high traffic areas).

# **Other Local Frequencies**

To ensure that you have the most up-to-date information possible, please consult your Airport/Facilities Directory and/or FAA approved aeronautical charts for the most current information.

# **Opening a VFR Flight Plan**

A VFR flight plan automatically activates search and rescue operations if a pilot does not reach their destination in time.

Use these examples to model your communication to a flight service station (FSS):

# **FSS Transmits/Receives Same Frequency**

Aircraft: "St. Petersburg Radio, Riddle 462 (Four Sixty-Two), open flight plan from D-

A-B to P-I-E, 1206Z (one two zero six Zulu)."

# FSS Transmits/Receives via Remote Communication Outlet (RCO)

Aircraft: "St. Petersburg Radio, Riddle 462 (Four Sixty-Two), receiving Lakeland,

116.00 (one one six point zero').

FSS: "Riddle 462 (Four Sixty-Two), St. Petersburg Radio, go ahead."

Aircraft: "Riddle 462 (Four Sixty-Two), open flight plan from D-A-B to P-I-E, 1206Z

(one two zero six Zulu)."

#### FSS Transmits/Receives via VOR/VORTAC

Aircraft: "St. Petersburg Radio, Riddle 462 (Four Sixty-Two), receiving Lakeland V-O-

R, over."

FSS: "Riddle 462 (Four Sixty-Two), St. Petersburg Radio, go ahead."

Aircraft: "Riddle 462 (Four Sixty-Two), open flight plan from D-A-B to P-I-E, 1206Z

(one two zero six Zulu)."

#### NOTE

The "open flight plan" time given to FSS is the time you took off.

# **Practice Instrument Approaches to Non-towered Airports**

Extreme vigilance should be given for aircraft utilizing runways other than the one you are approaching. Regardless of other aircraft operations, announcements on the CTAF must be made:

- Once established on the final approach segment or immediately upon being released by ATC
- ✓ When departing the final approach fix (FAF if non-precision approach; outer marker, glideslope intercept, or other fix if precision approach) inbound
- ✓ Once every two to three miles while along the final approach segment
- ✓ Upon completion or termination of the approach
- ✓ Upon executing the missed approach procedure

# <u>Summary of Recommended Communication Procedures at Non-Towered Airports</u>

Facility at Airport	Frequency Use	Outbound Procedure	Inbound Procedure	Practice Instrument Approach
UNICOM (no tower or FSS)	Communicate with UNICOM station on published CTAF frequency (122.70, 122.80, 122.725, 122.975, or 123.00). If unable to contact UNICOM station, use self-announce procedures on CTAF.	Before taxiing and before taxiing on the runway for departure.	10 miles out. Entering downwind, base, and final. Leaving the runway.	
No tower, FSS, or UNICOM	Self-announce on MULTICOM frequency 122.90.	Before taxiing and before taxiing on the runway for departure.	10 miles out. Entering downwind, base, and final. Leaving the runway.	Departing final approach fix (name) or on final approach segment inbound.
No tower in operation, FSS open	Communicate with FSS on CTAF frequency.	Before taxiing and before taxiing on the runway for departure.	10 miles out. Entering downwind, base, and final. Leaving the runway.	Approach completed/ terminated.
FSS closed (no tower)	Self-announce on CTAF.	Before taxiing and before taxiing on the runway for departure.	10 miles out. Entering downwind, base, and final. Leaving the runway.	
Tower or FSS not in operation	Self-announce on CTAF.	Before taxiing and before taxiing on the runway for departure.	10 miles out. Entering downwind, base, and final. Leaving the runway.	

# **Self-Announce Position/Intentions**

The self-announce procedure is used at airports that do not have an operating tower or FSS on the airport. Pilots broadcast their position, intentions, or ground operation on the designated CTAF.