

2017

First Response Safety

for
Professional Aerial Applicators
and
Local First Response Units



This manual has been created for the sole purpose of creating open lines of communication between aerial applicators and local first responders. The information provided is to be used as reference material to facilitate better training methods between the local first responders and the aerial applicators. This should not be considered a legally binding document, or used as the sole reference in the event of an emergency.

*A special thank you to:
Trooper Tim Schaefer: Safety Consultant
Trooper Steve Schell: Safety Consultant
Darrel Mertens: Pilot Consultant
Jason Adamson: Pilot Consultant*

Thank you for your collaboration and making this safety partnership a possibility.

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Applicator's Emergency Quick Reference

Answering the questions quickly and accurately makes a difference in the confidence of first responders entering a scene. Accurate information allows first responders to assess a scene while in transit or very quickly upon arrival at the scene. Improved response times means increased survivability in the event of an accident.

Applicator's Emergency Quick Reference

First responders typically ask:

1. What Chemical, fertilizer, or seed is onboard?
Do you have a label?
2. What quantity was it mixed in?
3. Is the aircraft a Turbo prop (Turbine) or piston engine and what fuel is loaded?
4. How much fuel can the aircraft carry?
5. Was the load jettisoned prior to landing?
6. Is there a fire?
7. What is the condition of the pilot and aircraft?
8. Did you leave a copy of field map and load configuration with the office or person answering the phones?

Quick Reference

Turbo Prop Engines (Turbine)

1. Jet A Fuel: SDS 001975
2. Jet A with PFA 56 MB Fuel : SDS 636070

Radial or Horizontally Opposed Piston Engines

1. Aviation Gasoline, 100 LL: SDS 001769

MSDS or the new SDS sheets for all agricultural products used in the U.S. available at: <http://www.cdms.net>

The Aircraft's N number can give more data at:

http://registry.faa.gov/aircraftinquiry/NNum_Inquiry.aspx

Aircraft Accident Emergency Procedures

1. Look for secondary hazards such as downed power lines.
2. Approach the aircraft from the rear and upwind if possible.
3. Open the cockpit door or remove the quick release pins and the door.
4. Look at the 5 point harness as some of the newer airplanes have airbags.
5. Locate the Red handle marked M for Mixture on the left hand side of the cockpit. There may be a metal safety feature that keeps the pilot from accidentally pulling the M handle back in flight.
6. De-tent the metal safety feature and pull the Red M handle all the way towards the back of the cockpit to shut off the engine. Ask if there are other shut down procedures or refer to the photos of specific aircraft.
7. Assess the pilot's condition.
8. Remove the pilot from the cockpit and move to a safe distance away from the aircraft.

Safety Harnesses and Airbags in the Cockpit

The majority of aircraft flying today have a 5 point safety harness made of standard seat belt material. There is a quick release latch located at the pilot's waist. Pull the latch handle towards the left to release the harness.

There are **AIRBAG** features on some of the newest aircraft as pictured below.



Turbo Prop (Turbine) Engine Aircraft

Turbo prop engines are indicated by the long pointed cone-like nose and the air scoop just underneath the nose of the aircraft where the propeller is attached. The engine uses Jet A Fuel. Examples are:

Thrush



Older Model Thrush



Air Tractor



Ag Cat with Turbine Conversion



Fuel is stored in the wings of the aircraft. The Fuel is always stored in the upper wing of the Bi-plane.

Thrush

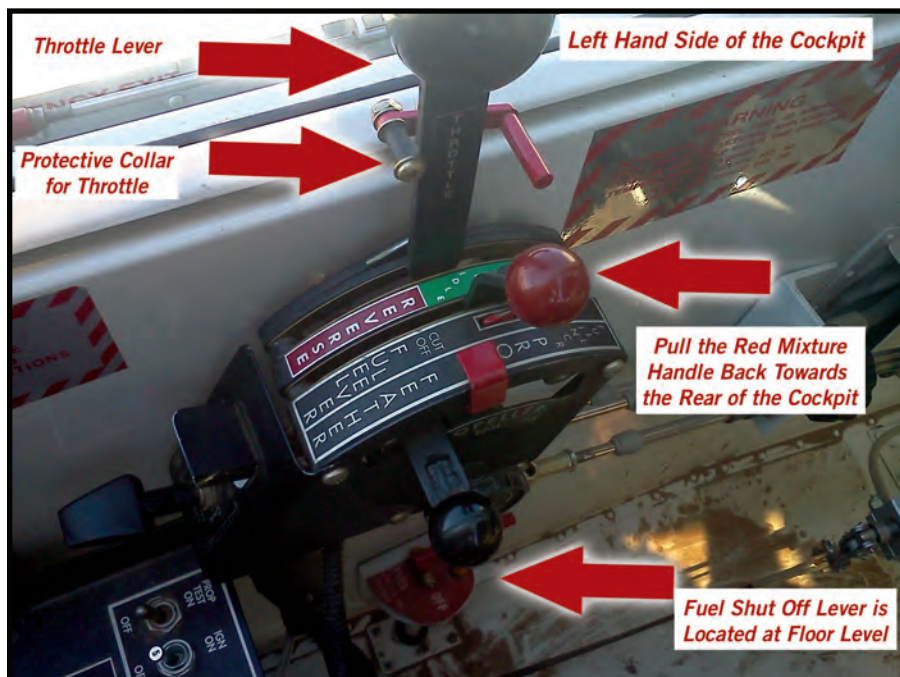


The long pointed nose of the aircraft indicates a turbo prop (turbine) engine that runs on Jet A fuel. Fuel is stored in the wings of the aircraft.





De-tent the metal safety feature, then pull the red Mixture lever towards the rear of the cockpit.



Air Tractor

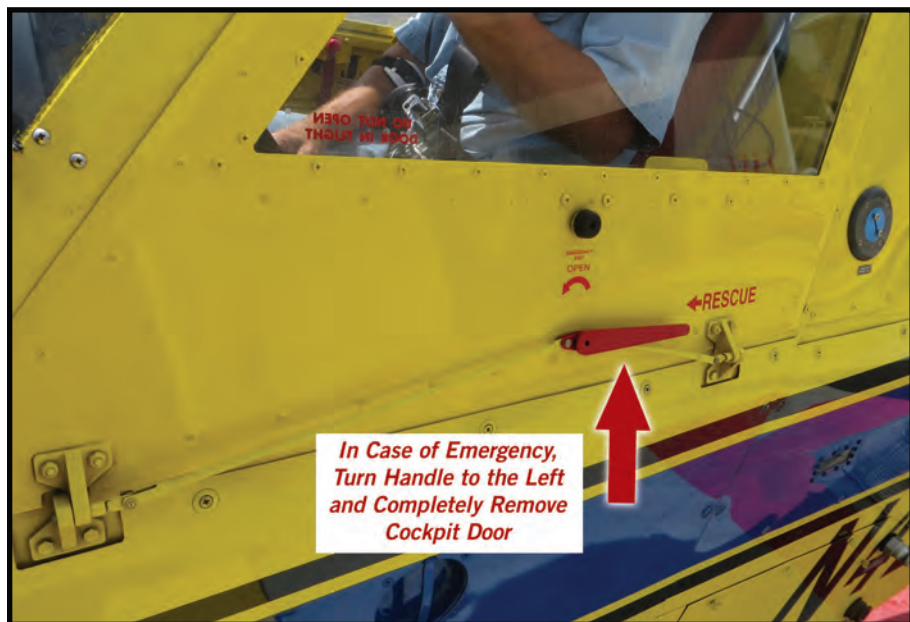


Long pointed nose with an air scoop on the front indicates a turbo prop (turbine) engine. Engine runs on Jet A Fuel. Fuel is stored in the wings.



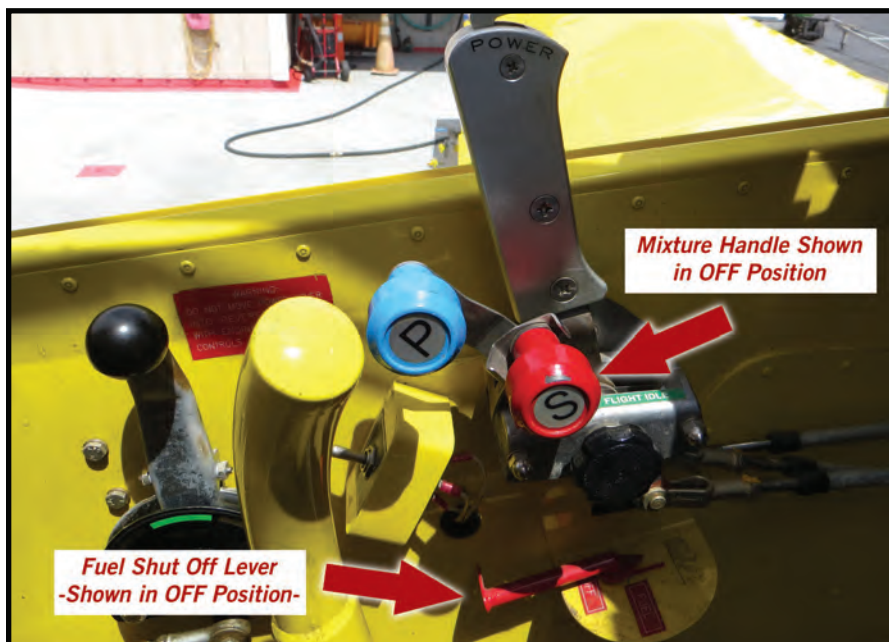
Cockpit Door Opens at the Top Then Swings Outward and Down

Mixture is the Red Handle on the Left Hand Side of the Cockpit



Only the newer model aircraft have airbag restraints so look carefully.





The Fuel shut off lever is directly below the throttle quadrant. Pull red handle toward rear of cockpit to shut the engine off.



Ag Cat w/ Turbine Conversion



The long pointed nose and air scoop in front indicates a turbo prop engine. Turbo Prop engine runs on Jet A fuel. The fuel is always stored in the top wing.





The fuel shut- off lever is on the floor directly underneath the red mixture handle.



Radial Engines

Radial Engine is indicated by the blunt nose and large round piston engine behind the propeller. The fuel is stored in the wings of the aircraft. The engine uses Aviation Gasoline 100 LL.

Examples are:

Weatherly



Radial Air Tractor



Ag Cat



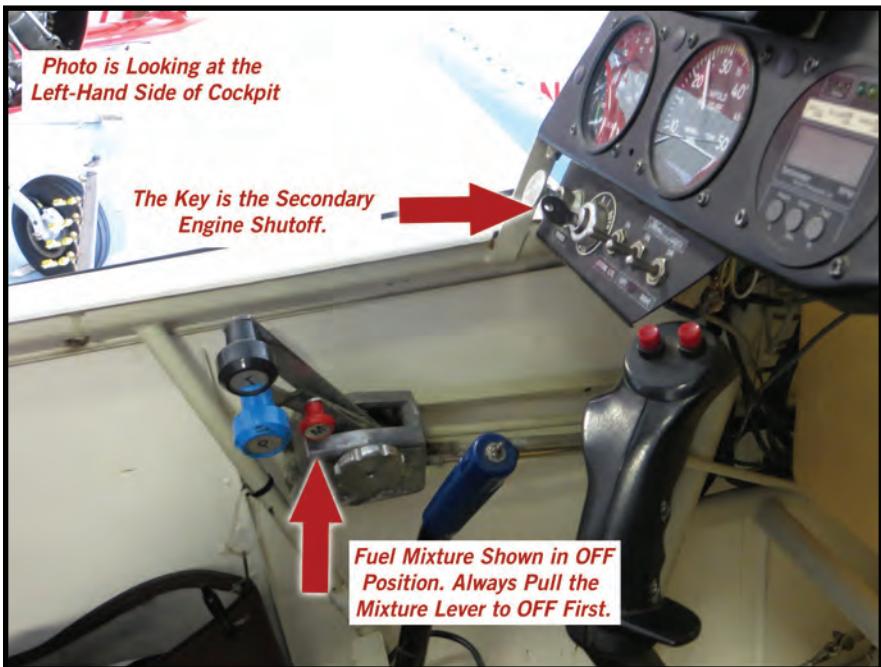
Weatherly



The fuel is stored in the wings of the aircraft. The engine uses Aviation Gasoline 100 LL (Low Lead).



Cockpit door opens from the top and then swings out and downward.



Fuel shut off lever is directly below the red mixture lever.

Radial Engine Air Tractor



The fuel is stored in the wings of the aircraft. The engine runs on Aviation Gasoline, 100 LL.



Pull the Red Mixture lever all the way towards the rear of the cockpit. See next photo for the secondary switches to shut off.



The photos indicate secondary shut off methods.



Ag Cat With Radial Engine



The fuel is stored in the upper wing of the bi-plane. The engine runs on Aviation Gasoline, 100 LL (Low Lead).



The cockpit door opens at the top and then swings out and down. Remember there are quick release pins to remove the cockpit door if needed.



Look for the metal safety latch and then pull the M (for Mixture) lever all the way to the rear of the cockpit. The ignition switch and fuel shut off lever are also noted.

Horizontally Opposed Piston Engine

The blunt nose behind the propeller indicates a piston engine. The engine runs on Aviation Gasoline, 100 LL. Examples are:

Cessna-Ag Husky



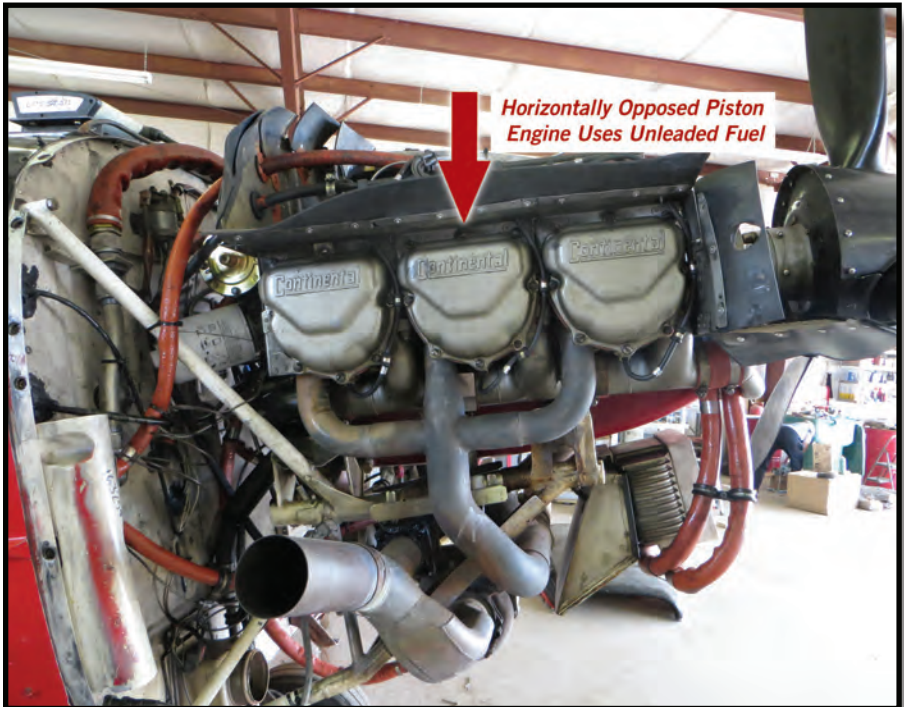
Pawnee Brave



Cessna-Ag Husky



Fuel is stored in the wings. The engine runs on Aviation Gasoline, 100 LL (Low Lead). The nose is blunt and the piston engine is located directly behind the propeller.





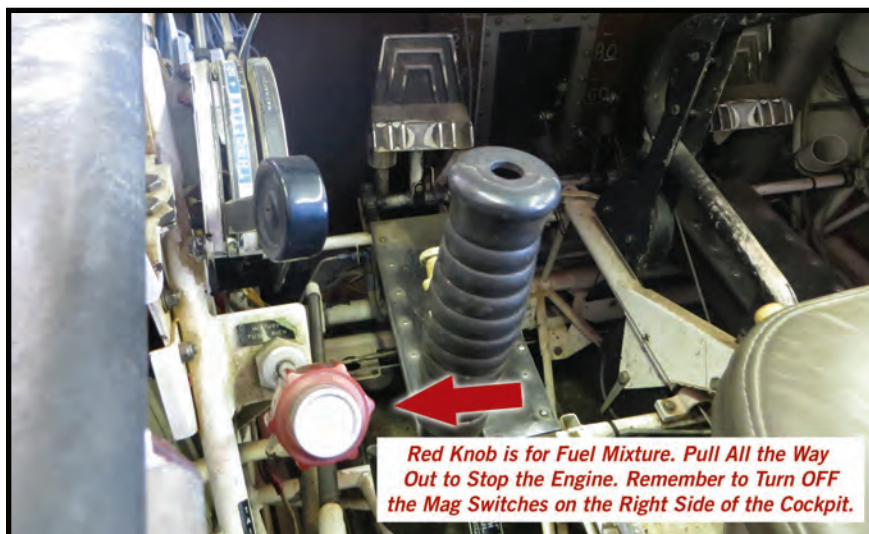
The cockpit door opens from the top and then swings out and downward.





THE MAGS MUST BE SHUT DOWN

Mags are hot and could cause a fire even if the engine is off. Be aware the MAG, ALT, and BATT switches are not always located next to each other.



Pawnee Brave



Horizontally opposed piston engine runs on Aviation Gasoline, 100 LL. The fuel is stored in the wings of the airplane.

Rotorcraft

Bell Jet Ranger III



Scott's Bell 47



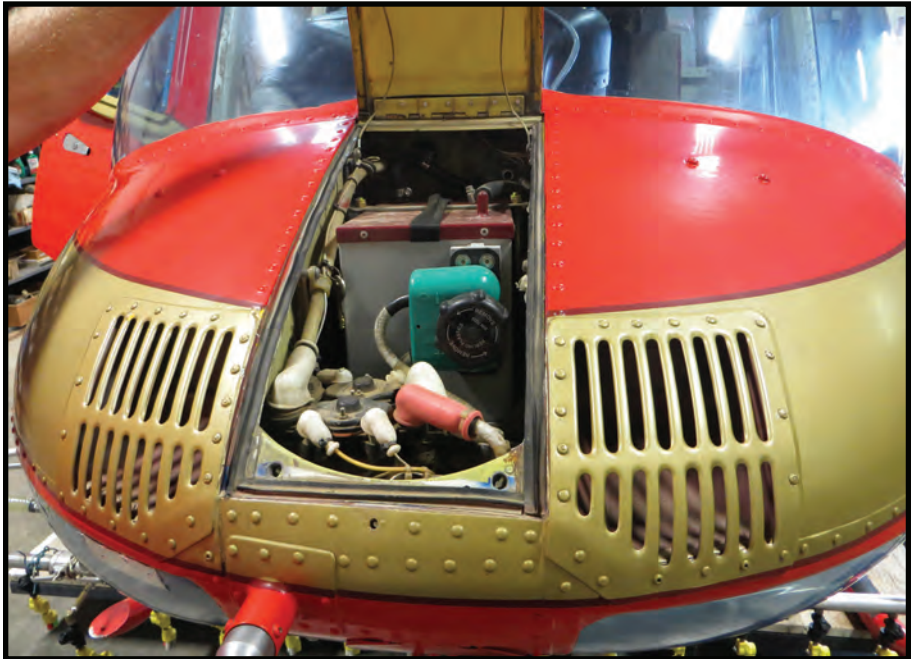
BELL JET RANGER III



Turbine Engine runs on Jet A Fuel







The battery compartment is located in the front nose portion of the helicopter.

Scott's Bell 47



Engine has been converted to a turbine and runs on Jet A Fuel.

Aerial Applicators Northeast, CO Region

Northeast Regional Contact

Darrel Mertens
970-522-1941
Yuma, CO

Aero Spray, Inc

Craig Michael—Owner/pilot
Shira Michael—Owner
Cell: 970-630-0922

*Typically flies out of state for
contract jobs*

Aero Applicators, Inc.

Sterling, CO
970-522-1941
Darrel Mertens—Owner/Pilot
Roger Bock—Pilot

AgOne Application

Platteville/ Fort Lupton, CO
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Matt Reck—Owner/Pilot
Matt Shulze—Manager

Air Dusters, Inc.

Roggen, CO
303-849-5600
Cell: 970-302-6200
Dan Schellenberg—Owner/Pilot
Jason Schellenberg—Pilot
Neil Wicke—Pilot

Aurora Aviation

Grant, NE
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Roger Gordan—Owner/Pilot

Aurora Coopdba Tri-County Ag

Wray, CO
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Greg Allen—Pilot
Stan Magnus—Pilot
Cody Perrin—Pilot

CO Fire Aviation

Fort Morgan, CO (970)
867-8414
Chris Doyle—Owner
Kyle Scott—Owner

Crop Air, Inc.

Eaton, CO
970-454-2939
Dana Gustafson—Owner/Pilot
Neil Wicke—Pilot

Easton Aerial Sprayers

LaSalle, CO
970-284-6701
Robert Easton—Owner/Pilot

Frenchman Valley Aerial

Holyoke, CO & Imperial, NE
970-854-2728
308-882-5121
Cell: 970-520-2728
Jerry Steggs—CO Manager/Pilot

Frontier Helicopters

Johnstown, CO
970-587-5105
970-539-0798
Ron Osborne—Owner
Gary Osborne—Owner
Mark Curley—Pilot
Steve Owen—Pilot

Grace Flying Service

St. Francis, KS
785-332-2251
Cell: 785-341-1478
Robert Grace—Owner/Pilot

King Air, LLC

Cope, Yuma, Burlington, CO
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970-630-5252
Travis King—Owner
Butch Graves—Pilot
Phil Pomeroy—Pilot

McClung Aerial Spraying, Inc.

Big Springs, NE
308-889-3481
Greg McClung—Pilot
Brent McClung—Pilot

Scott Aviation, Inc.

Fort Morgan, Akron, CO
970-867-8414
970-768-0553
Kyle Scott—Owner/Pilot
Justin Mook—Pilot
Gene Smith—Pilot

Stratton Equity Co-op Co.

Stratton, Kirk, & Burlington CO
Cell: 719-348-5506
719-348-5396
Troy Pepper-aerial manager

Yuma Ag Service

Yuma, CO
970-848-5158
Jerry McPherson—Owner/Pilot
Georgetown, CO

Jeff Poe—Pilot
303-569-2083
Cell: 303-807-0939
*Usually flies contract work
with other operators*

Tri-Me Spraying Service

Arriba, CO
719-768-3367
Darrel Lehrkamp—Owner/Pilot

Aerial Applicators

I-70 Corridor

Barker Farm Services, Inc-CO

Flagler, CO
Dolle Barker-
Lerhkamp- Owner

Farm Air Service, Inc

Burlington, CO
719-397-2936
Cell: 719-340-1430
Nicolas & Mandy Scott—
Owner/Pilot

Flagler Aerial Spraying

Flager, CO
719-765-4532
Cell: 719-349-0234
Dallas Saffer—Owner/Pilot

Koch-Operations, Inc.

Arriba, CO
719-768-3289
Cell: 719-740-1740
Bernie Koch—Owner/Pilot

Middleton Spraying Service

Goodland, KS
785-899-5781
Cell: 785 899-8409
Robert Middleton—Owner/Pilot

Warrior Aviation

Bethune, CO
719-346-8091
Cell: 719-340-8091
Ken Hildebrandt—Owner/Pilot

Aerial Applicators

Southeast, CO Region

007 Dusting, Inc.

La Junta, CO
719-383-9007
Ben Sollenbarger—Owner/Pilot

Air Care, Inc.

Lamar, CO
719-336-5718
Dan Tinnés—Owner/ Pilot
Allen Tinnés—Pilot
Keith Tyree—Pilot
John Conyers—Pilot

Air Sprayers, Inc.

Two Buttes, CO
719-326-5969
Ron Drosselmeyer—Owner/Pilot

Bailey Flying Service

Dalhart, TX
806-244-6511
Bob Bailey—Owner/Pilot

Barlow Aerial Spraying

Eads, CO
719-438-2224
Kirk Barlow—Owner/Pilot

Coen Aerial Spraying

Wiley, CO
719-829-4122
Brady Coen—Owner/Pilot

Custom Applicators, Inc

Walsh, CO
719-324-5838
Cell: 719-529-0555
Steve Cogburn—Owner/Pilot

Denton Aerial Spraying

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719-688-8440 cell Don
719-688-1176 cell Lynden
719-892-4855
Lynden Gill—Owner
Don Koenig—Pilot

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719-326-5980
Cell: 719-529-1392
Vic Doyle—Owner/Pilot

Jet Stream Ag Aviation, Inc.

Fowler, CO
719-263-5300
Cell: 719-469-1469
Sam Rogge—Owner/ Pilot
Mark McCuistion—Pilot
Todd Leach- Pilot

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Clint Lawless- location Manger

Kevin Hefley

Walsh, CO
(719) 529-9878

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George Pomeroy—Pilot

Plains Spraying, LLC

Walsh, CO
719-529-0501 cell Chris
Chris McCall- Owner
Steve McCall- Owner
Travis Konkel- Pilot

Reid Aviation & Aerial Spraying, LLC

Springfield, CO
719-353-1346
Josh Reid—Owner/Pilot

Saffer Spray Service, Inc.

Eads, CO
719-438-5346
Roger Saffer—Owner/Pilot

Syracuse Flying Service

Syracuse, KS
620-384-5152
Cell: 620-384-4354
Dusty Dowd—Owner/Pilot
Brad Wenman- Pilot

Aerial Applicators Northwest, CO Region

Coulter Aviation

Meeker, CO
970-878-5045
Cell: 970-756-4457
Lance Coulter—Owner/Pilot

Mountain Air Spray, Inc.

Craig, CO
970-824-6335
Cell: 970-326-6800
Adam Tucker—Pilot
Blaine Tucker—Pilot
Luke Tucker—Pilot

Aerial Applicators Southwest, CO Region

Colorado Crop Care, Inc.

Monte Vista, CO
719-852-5480 or
800-456-3990
Cell: 719-782-6794
Jerry Keeter—Owner/Pilot

Rocky Mountain Ag, Inc.

Monte Vista, CO
719-688-5812
Allen Tinnes 719-688-5718
Montee Tinnes 719-688-0951

Olathe Spray Service, Inc.

Olathe, CO
970-323-5580
Cell: 970-209-1589
Leonard Felix Jr.—Owner/Pilot
Deven Felix—Pilot
Seth Felix—Pilot

Tanner Flying Service

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Donnie Tanner—Pilot

Colorado State Patrol

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Ted Bandy
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Brad Kennerson
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Sterling

Steve Schell
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Fax: 303-273-1911

Capt. John Hahn

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Cell: 303-961-2935

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Sgt. Tim Maestas

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Sgt. Luke Armstrong

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Tammy Ottmer

Office: 303-273-1913

Cell: 303-829-0345

Charlotte Smith

303-273-1901

Ronda Bonfield

303-273-1900



Meet the New Kids On the Crop.

The new Thrush 510G now available in both single and dual cockpit versions. Powered by the revolutionary GE H80 turbine engine, the 510G is the talk of the fields thanks to its higher cruise speeds, enhanced hot and high performance and increased fuel efficiency. It requires no hot section inspections and boasts a TBO of 3,600 hours. The Thrush 510G is built to deliver the superior productivity, security and value you've come to expect.

Come meet the single and dual cockpit 510G – the newest airplanes in ag aviation. Visit us online, or call Eric Rojek at 229.789.0437.



Where innovation is nothing new.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

In Appreciation...

***A very special thank you to the photo contributors
and the businesses that allowed us access to their aircraft.
Without you this project would not have been possible.***

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Sam Rogge
Travis King
George Pomeroy
Ron Osborne
Angelo Root
Trooper Tim Schaefer
Trooper Steve Schell*

***Manual written by
Jessica Freeman
On behalf of
The Colorado Agricultural Aviation Association***

