The Flight Box



Up to the minute weather at the airfield

Letter from the President

December 2016

Has this year come to an end already?
... Wow, it has gone fast ...

From flying in the snow in January to the Christmas float, It has been a good year. A good trip to Gatlinburg TN. earlier in the year turns to a somber reminder later in the year.

A great Wings over Salem & Warbirds Over Salem was also a great event with a not so great a turnout, a great trip to Woodruff, SC. It has been a great year for me.

I am looking forward to another year as RVRC's President and with Summit moving in everything is looking good with Summit and our club's relationship, I hope to have another good year.

I would like to wish every club member a very MERRY CHRISTMAS, HAPPY NEW YEAR, and very best wishes to all during this great season!

Gary Jordan RVRC's President

Minutes of the General Membership Meeting

Meeting called to order: 7:00pm

- 12 members present, 0 junior member (s), 0 Associate, and 0 guests
- a quorum (19) was **not** met

Guests:

- none
- * It is with great regret that we inform you of the passing of Sam Butler, he was our former Treasurer before Jim Bowen.
 - ~ Sam Butler's Roanoke Times Obituary

Reminders:

- ★ You must be a Member in good standing, aircraft labeled with FAA & AMA numbers, along with dues current with the AMA & RVRC to fly at RVRC's Airfield !!!
- THERE IS A NEW FIRE EXTINGUISHER IN THE SHED & RESTOCKED FIRST-AID KIT
- * REMINDER THAT YOUR AMA Membership expires at the end of December; please renew before the Holidays.
- ★ Dan Quinn with Summit has hung NO TRESPASSING signage, due to our recent event with the outside gate key reader from a stranger in a RV entering our open gate during the Labor Day Cookout Festivities, which demolished the post and reader. And along with with the recent vandalism during the weekend of Wings Over Salem has lead Summit to hang signage on the exterior of the fence. There is to be NO ONE ON THEIR LAND with out the express consent of Summit and we are to remind people that if they are not a club member that this is private property and they need to vacate the premise. If you do see someone please be courteous and explain to them that with the previous owners this land use to have a public access but due to the vandalism of recent that this is no longer the case.

Announcements:

- -The Board Of Directors DID meet with Summit, on the 14th of October, and here are the details ... We left with a good repertoire with John and Carl Milko, Dan Quinn and John Reed. Their normal business hours are Monday Friday 8 AM 5 PM.
 - Summit is in the process of formulating a lease agreement contract but hasn't finalized the documents. The Board Of Directors will bring it before the General Membership at a Monthly meeting for discussion once it has been received.
 - * Summit expressed that they were more concerned with bringing activities from Botetourt County to Salem and trying to have their operations underway by December 2016. When fully operational they could have upwards of 8 10 maintenance flights per day & there could be days where they don't fly at all.
 - Summit's intentions are to have no sorties after dark, unless emergency such as forest fire. If there is a sortie at night all of Summit's aircraft have landing & navigation lights. And will trigger the AWAS also.
 - * Approach Flight Pattern Details are that Summit's pilot's intentions:

 Circle the field, signaling the AWAS, then come in for approach from the

 South to the West ... meaning we need to land our R/C aircraft ASAP!!
 - The TrussMark airport classification is Daytime VFR & Summit has no plans on installing runway lighting nor paving the large grass runway.
 - Summit is receptive to us wanting to make field improvements, such as fixing the runway, installation of more gravel on roadway and under canopies, additional canopy at East end of field (next to singular one by bleachers), etc.
 - * They just want to know when these activities are going to happen in advance, so they can schedule around them if need be.
 - Some of the employees of Summit are interested in joining the Club and getting into the sport ... they're to be treated no different than anyone else. If they decide to join our club their membership cost and voting privileges will be like any other member. The Officers of Summit want there to be no misconception of partiality or bias between RVRC and Summit.
 - ★ Basically they are happy with our club, who we are, our community involvement & "we look forward to a long lasting relationship between Summit Helicopters & RVRC"
 - * We discussed RVRC's operations during events & RVRC's / AMA's safety procedures

New Business:

- **-Nomination Committee formed**, for elections of club officers for 2017. Any interest to any Board vacancies please direct all interest to Dallas Jarrell or Bob Davis, their contact information was sent in a secured email to General Membership, or contact the board at board@rvrc.org
- **-Renewals for year 2017-2018** ~ David & Jim are working on implementation of payments on-line via PayPal for renewal registration & new member registration on our RVRC's website. The Treasurer & Secretary are in the development stage of this undertaking, however it is our goal to have this in place and ready for implementation for April 2017 time frame.
- ★ Please understand this is a work in progress for the renewals ~ we are trying to make it easier for you in the future ... hoping to have the new member protocol as well but our 1st priority is renewals.

Announcements:

-Elections of Board Officer for the new year will be held at the January General Membership Meeting on the second Monday the 9th ... your presence is requested as a Quorum is needed to vote these people into office.

-Christmas Parade Float, we MADE THE PAPER this year in the Salem Parade on December 2nd. Gary & Denise Jordan were driving the float in their X-terra, Derrick, Jamie, Bryson, Jordan, & Olivia Smith along with David & Vickie Vietmeier road in the float! RVRC was one of five floats and four walking groups pictured out of 96 entries!

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Salem Chistmas Parade from page 1



People on the Roanoke Valley Radio Control float wave as onlookers wave back.

* Once again a special thanks to: Mike Fetz, Don Hepler, Larry Marsh, Bill Morgan and Gary Jordan for building the float! ... and to ... Derrick, Jamie, Bryson, Jordan, & Olivia Smith along with David Vietmeier for decorating the float!

Treasurer's Report Prepared by Jim Bowen ~ RVRC's Treasurer for the month of

November

RVRC Treasurer's Report for November 2016	
Prepared December 3, 2016.	

11/30/2016 Closing Balance

RVRC Treasurer's Report for November 2016 Prepared December 3, 2016.		
Checking Acc't	\$5,926.99	
Money M'kt Acc't (as of Nov 30, 2016)	\$34,764.17	
Cash on hand (replacement name tag)	\$3.00	
Total funds:	\$40,694.16	
Income/Expense by Payee - Nov 2016		
Checking Account 11/1/2016 Beginning Balance	\$7,052.30	
DEPOSITS None.	\$0.00	
Deposits, total	\$0.00	
EXPENSES		
Payee: 11/7/2016 Tidy Services 11/7/2016 Lowell's Lawns, Etc. 11/7/2016 William E. Morgan 11/11/2016 Salem-Roanoke County Chamber of Co 11/12/2016 Derrick Smith 11/14/2016 City of Salem 11/14/2016 City of Salem 11/14/2016 Northwest Hardware 11/14/2016 Wire And Cable Your Way 11/18/2016 Grand Rental Station 11/18/2016 Lowe's 11/25/2016 Gary Jordan	70.00 540.00 58.81 50.00 48.42 45.00 58.34 78.16 47.00 57.68 5.94 65.96	New fire extinguisher and flag. Salem Christmas Parade entry fee Two towing straps for moving bleachers. Monthly dumpster lease fee & pickup Electric utility bill Pipes and hdwr for AWAS beacon & antenna Wire for burial to power the AWAS beacon. Trenching machine rental for AWAS beacon wire.
TOTAL EXPENSES	\$1,125.31	

\$5,926.99

Old Business:

-Discussions being held on field improvement:

- >Something to be done for reduction of dust under canopies.
- Additional Canopies to be put at East end of field by single canopy.
- ▶Paved runway improvements ~ repair cracks & dips in order to make it more level.
 - → David Vietmeier is working with a sister company of his employer that specializes in highway work for recommendations and quotes. This will be done sometime after the New Year.
 - → If you have any concerns or ideas please bring them to Bill Morgan
 - → SUMMIT agrees with our field improvements and gives their blessing to proceed ~ all they as is *advanced* notification before activities begin

-Early Warning Alert System (EWAS): UPDATE

- → Jim Bowen gave a demonstration of the system at the meeting ~ thank you!
- Jim Bowen reports that: The Aircraft Warning Alert System (AWAS) is now installed and appears to be functional at RVRC. Many thanks to Rick Littleton, Jim Lewis, and Mike Fetz for helping with the installation.
 - When an incoming manned aircraft pilot triggers the system by radio, a flashing red beacon light is illuminated. The beacon is located on a pole at the fence beside our RVRC runway. The beacon can be activated any time of the day or night and will continue to flash for ten minutes once triggered. If the system is re-triggered while the beacon is flashing, the timer is re-set to end ten minutes past the latest re-triggering, extending the beacon time.
 - During the day, from about 8:00 AM local time until a few minutes after sundown, an audible alert is also triggered at the field when the beacon is triggered. The audible alert is an alternating high-low tone that lasts for 15 seconds, is silent for 45 seconds, recurs for 10 seconds, is silent for 50 seconds, recurs for 10 seconds, then remains silent, unless the system is re-triggered.
 - The beacon and audible alerts tell our model aircraft flyers to land immediately, as a manned aircraft is approaching with intention to land. We hope this system will improve safety at the field. Our members must remain vigilant for manned aircraft, however, because not all the Summit helicopters have radios. Our members need to land immediately whenever a manned aircraft approaches the field, whether or not the AWAS system is activated.
 - The system also keeps a log of the times of the alert events, to help in diagnosing any problems that may occur.

Old Business (con't):





-Approach Flight Pattern we have details on an approach vector and fly by from Summit's meeting ~ details are that Summit's pilot's intentions:

- Circle the field, signaling the AWAS, then come in for approach from the South to the West ... meaning we need to land our R/C aircraft ASAP!!
- Summit's Flight Operations is bringing in a Cesna 182 as pilot transport vehicle and it will now be housed in the Hangar that Al James use to house his C182. This plane will frequent the field more often. As a reminder when you see any FULL SCALE aircraft on approach please land immediately!!

-Discussions on Aircraft Sound Testing:

Only one plane that has broken the sound barrier; large Giant Scale plane that was at 98 db under old regs was within limits now 2db over new limits. Pilot agreed to put a three-bladed prop to reduce noise. The BOD appreciates his cooperation.

- President Jordan reminds us that there are things we can still do as pilots to help improve our sound from the planes ... examples of different types of mufflers and multi-bladed props other than the traditional two bladed type. Not only with these different style of propellers will you reduce the noise but you can increase your speed also.
 - → Also a BIG THANK YOU !!! The President and the Safety Committee has observed that everyone has moved there flight pattern more to the West end of the runway which has reduced the sound to the area of the concerned neighbor!

Old Business (con't):

Muffler for combustion engines Mile High RC Mufflers

• Ways of abating noise problems from the AMA

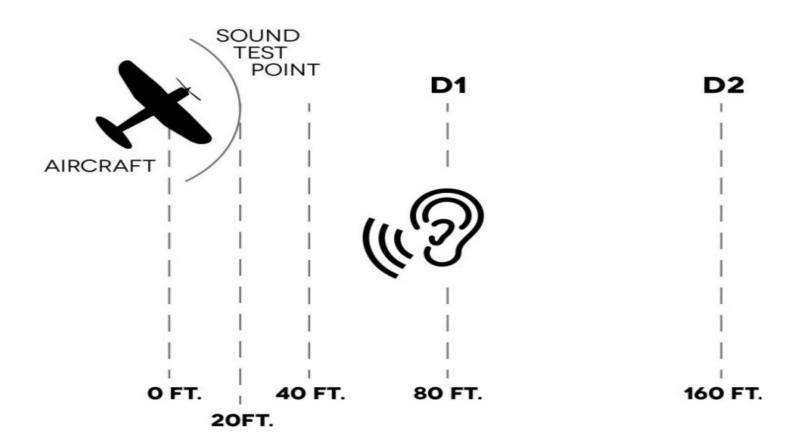
- Try a three-blade propeller. The most important thing to remember about airplane noise is most of what you hear does not come from the engine, it comes from the propeller. What you hear when your engine unloads in the air are the propeller tips going supersonic, so getting the engine rpm down will limit much of that. So you think a bigger, two-blade propeller will slow the engine down, resulting in lower noise, right? Wrong! Yes, it will slow the engine down, but now you have longer blades and the tips are actually going faster (physics). The answer is to add blades so you can keep the diameter down while also reducing the rpm. The reason you see most of the big International Miniature Aerobatic Club (IMAC) fliers now using three-blade propellers is not for performance, but noise control. If you don't know how to figure for a three-blade propeller, ask your engine manufacturer for a recommendation. A rule of thumb is to reduce diameter or the pitch by one inch or both if needed.
- Use as large as possible "canister-type" muffler. Nearly all engines, glow and gas, sold in the US market today are supplied with a large can-type muffler. Most of these supplied mufflers will adequately control the combustion noise coming from the cylinder. Aftermarket mufflers will do a better job of quieting the engine, so look for those.
- Soft mount your engine. There can often be quite a bit of noise coming from your airframe, especially if it contains a lot of fiberglass or is an open structure covered in plastic film. When the engine is hard mounted to the firewall, the vibration will be carried back through the airframe and essentially act as a drum unless there is some type of absorption material in there to soak it up. Many of the newer 30% and 40% aerobatic aircraft have foam turtledecks and other foam parts that absorb much of the vibration noise. If not, your beautiful machine will sound more like a drum kit than a purring kitten. There are several soft-mount systems on the market. To my knowledge, all full-scale piston engines are soft mounted.

-Summit Helicopters, has confirmed that operations will be in full swing by December however, they may not be completely moved in the facility across from our clubhouse during at that time. They have their Certificate of Occupancy as of the end of September. *REMEMBER there will be a lot more activity out here and on the flight line*.

REMINDER ~ IF YOU SEE A BIRD OF ANY KIND (PLANE OR HELICOPTER) OR IF YOU SEE ANY PEOPLE ** DO NOT FLY !!!

◆ PER THE PRESIDENT & THE BOARD OF DIRECTORS, have mandated that we do not want to put an aircraft down anywhere near Summit's employees nor their equipment!!

Sound Table Sample Noise Test at a Local Flying Site		
Distance (ft)	Sound Pressure (dB)	
20	96	
40 (double the 20' distance)	90 (reduction of 6dB)	
80 (D1)	84	
160 (D2)	78	
320	72	
640	66	
1280	60	



-Models of the Month:

None submitted for presentation

-Meeting Adjourned: 7:49 PM

Let's keep in mind that it's Summit's land & we are stewards of their property. It is a privilege to be here, therefore we need to respect their wishes and demands.

-<u>Items of Interest:</u>

Newsletter Submission Date Change; Secretary has moved date to 2nd Monday of the Month preceding publication to enable an earlier and more timely distribution of the newsletter to the General Membership. Office of the Secretary's goal is to have the Newsletter presented and posted to the website with in 7-10 days after the monthly General Membership Meeting.

- -The creation of our FaceBook Page has now over 67 members strong and still growing. That's 3 new members over last month!! The BOD feels that highlighting club events along with club members aircraft builds, tips, tricks, and techniques is a positive support for our members, the sport and our hobby as a whole. Reminder this is a closed page and you must ask to join and Gary, Derrick, or David will admit you as they are Admin Users.
- -Night & Day Fun Fly's if you have dates or types / styles of fun fly's please start a forum post on RVRC's website & FaceBook Page and please notify Board via email of your interest.
- **-FAA registration OF OUR MEMBERS IS REQUIRED**, *ALL* members should be registered at www.faa.gov/uas/registration. Once registered pilots will receive a Federal registration number that is to be placed on or within aircraft over 250 grams (0.55 lbs.). Members are encouraged to continue placing their AMA numbers on their aircraft as well. Members only have to register once, they do not have to register each unique aircraft. The FAA requires registration regardless if you fly a multi-rotor, helicopter, fixed wing, or any other type of radio control model aircraft that uses a ground control system with a communication link, such as a transmitter.
- ★ Question was raised about FAA renewals ~ you will be notified from the FAA every 3 years.

Safety Highlights:

By-Laws and Safety Code to be updated sometime in January on website and in hard copy after approved revision proposal passed in September 12th Meeting.

-Safety Committee Reports:

- It doesn't matter if anyone gives you permission to fly and they're on the field DO NOT FLY as this is a liability issue!
- From RVRC's Safety Code ... section VI. GENERAL
 - **M.** If a member is found to be in repeated violation of the AMA and RVRC Safety Codes, the member shall, at the discretion of the Board, having flying privileges restricted and/or brought before the general membership for a vote on expulsion from the Club.
 - **N.** The field is normally open for flying every day of the week except Sunday morning. No gas or glow powered models may fly until after 12:00 noon on Sundays only. Other scheduled events may close the field to general flying. Every effort will be made to give the RVRC membership advance notice of the field closing for whatever reason.
 - O. Flying is to cease when the lawn service is mowing the field or the hay cutters are inside RVRC's normal operating area.
 - This applies to any persons on the airfield during all times!!

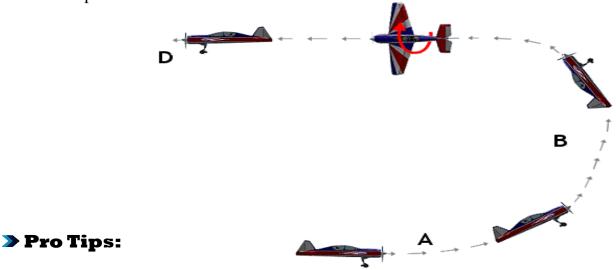
-First Aid Kit

- Due to recent events at our field we are moving the First Aid kit to the Shed under lock ... all members should have combination to the shed; if needed please see a Club Officer
 - We want everyone to be safe ... and <u>please</u> by all means use the items that you require for minor First-Aid but <u>please</u> let a Board Member and the Safety Committee know if something is used so that we can replenish it and have it available for the next member

Please by all means let a Board Member and the Safety Committee know if something used for the health and well being of our members needs to be corrected.

Safety Highlights (con't):

- → **Do not** use DSM2TM receivers in your aircraft!
- → Be mindful of spectator's locations and their safety at ALL times.
- All members *please* review the **Safety Code** (WEBSITE HYPERLINKS IN BLUE) in its entirety.
 - * We've had many members ask, who have been at the airfield during the week mid-day ... so *please* review the above link as it is stated what the proper procedures are to be followed in certain cases!
 - ★ If there is ANY full scale aircraft or personnel on the field then there is to be NO R/C FLYING AT ALL !!!! This includes: Summit personnel, Mowing Crews, Salem Utilities, Salem Waste Disposal and dump truck, Port-A-John personnel and tanker truck. If doesn't matter if they give you permission to fly and they're on the field DO NOT FLY as this is a liability issue.
- Large War-Birds and Jet Pilots especially, but all pilots should, start practicing using an Immelmann Turn at the East End of the Field and Runway strip. This should be performed now so as to keep all R/C Aircraft away from the Cessna C182 Hangar and away from ALL buildings.
 - If you don't know how to perform this maneuver ... it is explained below:
 - > Fly the plane straight on level flight Step A
 - > Start with 90 degree half-roll climb up using up-elevator until the plane is head back to the opposite direction Step B
 - > Keep the plane in straight and level inverted flight.
 - ➤ Half-turn the plane to a normal flying position using aileron, you will now be heading opposite to the first direction but gaining higher altitude. Step D
 - This picture shows how the Immelmann turn is done.



- *When you are comfortable with this maneuver, start matching the speed of the half roll to the height of the half loop. If your roll is short, slow down the half roll to add symmetry to the two components.
- *A tight half loop will make the maneuver much smaller but will provide greater exit speed!

Tidbits from the Secretary

Members,

I wish to add some insight into this sport and hobby we all love and ask for your insight as well ... not just in modeling but education also. We have a rich history in this club as it has been in existence over four decades. We have many members with talents and varied experience that I ask for those individuals if they remember instances of positive and remarkable things that have happened in our club history to please share them for submission in our Newsletter.

Sincerely, David Vietmeier

Members did you know ...

On the morning of December 7, 1941, very few American fighter pilots were able to get airborne to fight the Japanese attackers on Pearl Harbor, Hawaii. Second Lieutenants Kenneth M. Taylor and George S. Welch, were two of them, they took two Curtiss-Wright P-40B Warhawk fighters from a remote airfield at Haleiwa, on

the northwestern side of the island of Oahu, and against overwhelming odds, each shot down four enemy airplanes: Welch shot down three Aichi D3A Type 99 "Val" dive bombers and one Mitsubishi A6M2 Type 0 ("Zero") fighter. Taylor also shot down four Japanese airplanes.

Although both officers were nominated for the Medal of Honor by General Henry Arnold, they were awarded the Distinguished Service Cross.

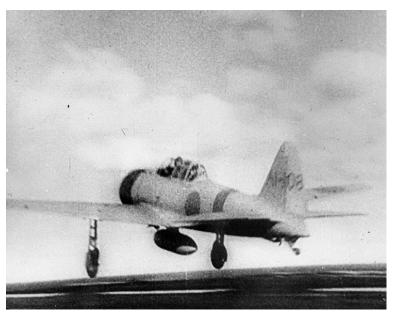


During the War, Welch flew the Bell P-39 Airacobra and Lockheed P-38 Lightning on 348 combat missions. He had 16 confirmed aerial victories over Japanese

airplanes and rose to the rank of Major.



Suffering from malaria, George Welch was out of combat and recuperating in Australia. When North American Aviation approached General Arnold to recommend a highly experienced fighter pilot as a test pilot for the P-51H Mustang, Arnold suggested Welch and authorized his resignation from the Air Corps. George Welch tested the P-51H, XP-86 Sabre and YF-100A Super Sabre for North American Aviation. Reportedly, while demonstrating the F-86 Sabre's capabilities to Air Force pilots during the Korean War, he shot down as many as six MiG 15s.George Welch was killed while testing a F-100A Super Sabre, 12 October 1954.



Mitsubishi A6M2 Type 0
Model 21, A1-108, taking off
from Akagi, an aircraft carrier
of the Imperial Japanese Navy,
on the 7th December 1941,
flown by PO2c Sakae Mori,
takes of from IJN Akagi, an
aircraft carrier of the Imperial
Japanese Navy, 7 December
1941.

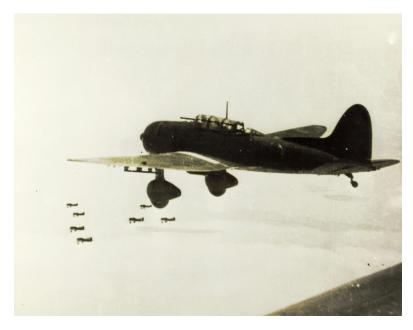
Ken Taylor scored two more victories at Guadalcanal before wounds received in an air raid sent him back to the United States. He remained in

the Air Force until he retired in 1971 with the rank of Brigadier General. He died in 2006.

The Curtiss-Wright Corporation Hawk 81B (**P-40B Warhawk**) was a single-seat, single-engine pursuit. It was a low-wing monoplane of all-metal construction, and used flush riveting to reduce aerodynamic drag. It had an enclosed cockpit and retractable landing gear. Extensive wind tunnel testing at the NACA Langley laboratories refined the airplane's design, significantly increasing the top speed.

The P-40B Warhawk was 31 feet, $8\frac{3}{4}$ inches long, with a wingspan of 37 feet, 4 inches. Its empty weight was 5,590 pounds, an 7,326 pounds gross. The maximum takeoff weight was 7,600 pounds.

The P-40B was powered by a liquid-cooled, supercharged, 1,710.60-cubic-inch-displacement Allison Engineering Co. V-1710-C15 (V-1710-33), a single overhead cam (SOHC) 60° V-12 engine, which produced 1,040 horsepower at 2,800 r.p.m., and turned a three-bladed Curtiss Electric constant-speed propeller through a 2:1 gear reduction. The V-1710-33 was 8 feet, 2.54 inches long, 3 feet, 5.88 inches high, and 2 feet, 5.29 inches wide. It weighed 1,340 pounds.



Allison Engineering Co. V-1710-33 V-12 aircraft engine at the Smithsonian Institution National Air and Space Museum Steven F. Udvar-Hazy Center. is heavier than the initial production P-40, the P-40B was slightly slower, with a maximum speed of 352 miles per hour. It had a service ceiling of 32,400 feet and range of 730 miles.



Armament consisted of two air-cooled .50-caliber Browning AN/M2 machine guns mounted in the cowling and synchronized to fire forward through the propeller arc, with 380 rounds per gun, and four Browning AN/M2 .30-caliber machine guns, with two in each wing.

Curtiss-Wright produced 13,738 P-40s between 1939 and 1944. 131 of those were P-40B Warhawks.



A flight of six Curtiss-Wright P-40B Warhawks of the 44th Pursuit Squadron, 18th Pursuit Group, over the island of Oahu, Territory of Hawaii, 9:00 a.m., 1 August 1941. (U.S. Air Force)



Roanoke Valley Radio Control, Inc.

Board Officers

Gary Jordan 588-9969 President
Derrick Smith (832) 472-5636 Vice-President
Jim Bowen 389-4243 Treasurer
David Vietmeier 314-8421 Secretary & Newsletter Editor

Board Members

Bruce Davidson 384-6760 Member at Large Richard Alexander 204-8767 MAL & Safety Chair

Bill Morgan

Jeff Stubbs

Mike Fetz

Committee Chairs

Field Maintenance Chair

Contest Director

Safety Committee Member

\Flight Instructors please contact the Board at: board@rvrc.org

The RVRC holds regularly scheduled meetings on the 1st Monday of each month at the field in Salem.

Submissions to the newsletter are welcome & encouraged—especially any tips or hints to help fellow modeling enthusiasts. Items wanted to buy, or for sale, are also welcome.

Please mail information to:

RVRC Office of the Secretary P.O. Box 241 Salem, VA. 24153

Or send your correspondence electronically to:

secretary@rvrc.org

DEADLINE IS THE 2nd Monday OF EACH MONTH PRECEDING PUBLICATION

Next RVRC meeting Monday, January 9th, 2017, at 7PM ~ RVRC Clubhouse & Airfield

Up to the minute weather at the airfield