



# PROP WASH

April 2017 / Issue 4

## Last Meeting

Apr. 19, 2017

Membership: 22  
In Attendance: 13  
Guests: 2

## Topics

New members  
Bylaws  
72 MHz Mgmt Board  
Member Cards/Tags  
Website  
T-Shirts  
Flying Site Development  
Storage Shed

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## Next Meeting

Thursday  
May 25, 2017  
6:00 PM

@The Field

Club news and summary of our last meeting...

Welcome **new members**, Chris Guss, Steve Smith and Ryan Smith!

Safety Officer, Jim Kingsley, prompted a discussion about flying alone at the field, when nobody else is present. This obviously presents some additional risk, especially for larger aircraft. But it was ultimately voted not to add any pertinent restrictions at this time. However, it was agreed to prohibit alcohol or recreational drugs at the field, and this restriction has been added to the **bylaws**, which can now be accessed from our website.

Jim Kingsley & Ken Hummel completed and presented the **72 MHz Frequency Management Board**, and it looks fantastic. Details for installing it at the site should be resolved soon, so it will be available for use.

The new **membership cards** were filled out by those in attendance, but a minor revision is needed. So, Jim Shickley will make the change and provide finished/laminated cards at the next meeting. The new **parking tags** are now available, and were also handed out.

The membership approved a \$30 expenditure to register our **website** domain for two years at lzrcclub.com. This will facilitate promotion of our club, since it is easier to remember. The new address is now active, so spread the word!

We resumed discussion regarding **T-shirts**. Jim Shickley has already prepared the layouts, and provided them to Jim Kingsley's daughter-in-law at *BigFrog Custom T-Shirts*. By next meeting, we should have an updated quote for 40 gray shirts with small black logo on front, and large black logo on rear, including our website address.

## Flying Site Development

We had a club work day at the field on April 22. Bill Turton mowed the perimeter grass again, and Jim Shickley piloted the heavy equipment that cleared the rocks & debris, and graded the entire area (a 2-day task that he began the prior evening). Our crew then rolled out the new geotextile fabric in two 120' rows, and secured it with lawn pins & staples. It turned out beautifully! A smaller group returned the following day to assist with seeding & rolling, and everything went well. Micky and Bill tested out the new runway, and it passed with flying colors! A huge "thank you" goes out to all who contributed their time researching, pricing, resolving issues, and working at the field. We couldn't have done it without so much dedicated effort. Check out the photos on our website.

**NOTE:** When you visit the field, please be very careful on the freshly seeded area. For now, we should park only where grass already exists, such as in the access lanes.

Within the next couple weeks, Carl plans to do some maintenance on the **access road** and southwest corner of the pond, due to a leakage/drainage issue.

Bill & Jim S. performed some minor repair on the **porta potty**, and it is now on site. The **picnic bench** and **pilot stations** are also there.

Last week, the officers discussed proposals for **signage** at the site. Jim has created layouts related to the road/entrance, parking, flying zone, and site rules. And Bill will soon follow up with their production.

The officers have been shopping **storage sheds**, primarily to secure and protect items such as a mower, fuel, lawn care supplies, grille, pilot stations, first aid kit, frequency management board, trainer aircraft, and (future) row boat. I am compiling a summary of the sheds currently under consideration, priced from economy to premium. So, expect to see more information this week. Due to our remaining needs and limited funds, we've got some complicated decisions and substantial challenges to procure the essentials.

Weather permitting, our **next club meeting** will be at the flying site on Thursday **May 25** at 6:00 PM. I hope to see you then!

Jeff Williams  
Secretary, LZRC



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agency@mail@kruegerins.com

## Safety Tip Flying Site Precautions



We are very fortunate to have a new flying site, and we're all eager to gather out there and fly this summer. But it's imperative we don't allow ourselves to become complacent regarding safety. Given our close proximity to a major highway, we have heightened responsibilities, and must keep this in mind at all times.

Obviously, nobody wants to put our club (or the motorists) at risk. So specifically in regard to the LZRC flying site, the club officers ask that you please respect the following:

- Do **not** fly north of the flight line.
- If you are not reasonably proficient with a particular model/type, do **not** fly it (without assistance).
- If you are not completely comfortable flying in the present conditions (wind, visibility, sun position, etc.), do **not** fly.
- If you have any reason to suspect the integrity of your aircraft is compromised in any way, do **not** fly it.  
*It is strongly recommended to conduct "test flights" at a safer location. We've all experienced situations when our craft doesn't seem to be reacting exactly as expected. If this happens, promptly bring it down for a thorough inspection/diagnosis.*
- Ensure your Tx and Rx antennas are routed and/or oriented appropriately.  
*See the following Tech Tip for more details.*
- If you choose to do a maiden flight, please take exceptional care throughout the process, especially with larger aircraft.  
*A spotter is also highly recommended.*
- Perform a comprehensive range check for maiden flights of any kind, including a simple hardware configuration change.
- Other pre-flight verification:
  - Sufficient voltage of your Tx and flight/Rx packs.
  - Proper control surface motions.

## Tech Tip Antenna Placement & Orientation



The possibility of unmanageable interference or system failure is ever present, but there are simple steps we can take to optimize reception between our transmitter (Tx) and receiver (Rx).

First, locating the Rx away from signal-blocking items, such as motors, batteries, aluminum or carbon fiber, as well as potential noise emitting devices, such as ESCs/BECs, can greatly improve signal robustness.

Another important factor is relative orientation of Tx & Rx antennas, aka polarization. In general, the signal emanates from the sides of your Tx antenna, not from the end (Fig. 1). At the (pointy) end, the signal is practically non-existent. Reception is best when both Tx & Rx antennas are oriented in the same plane. In other words, if you fly with your Tx antenna pointing to the side (horizontally left or right), your Rx antenna should also be oriented horizontally. If you have a diversity or satellite Rx, it is best to position the antennas 90° to each other (Fig. 2), to maximize coverage over multiple orientations.

Some newer Tx's now employ diversity, including two (internal) antennas oriented 90° to each other. Diversity does not directly increase your range in terms of distance, but it does help to ensure the strongest signal possible throughout your aircraft's attitude and range of motion.

It is also best to keep the end of your Rx antenna as straight as possible. I'm referring to the last 31mm of your (2.4 GHz) antenna. Any length of wire ahead of that is not acting as an antenna, just a shielded conductor. If your (non-diversity) Rx has a second short wire exiting on the opposite side of the unit, it is typically not an antenna, but a ground element/reflector (Fig. 3), and contributes a relatively small amount to overall performance.

One last thing: 2.4 GHz signals do not pass well through humans or vehicles. Though it may be unlikely someone will walk or drive directly in front of you, you never know!

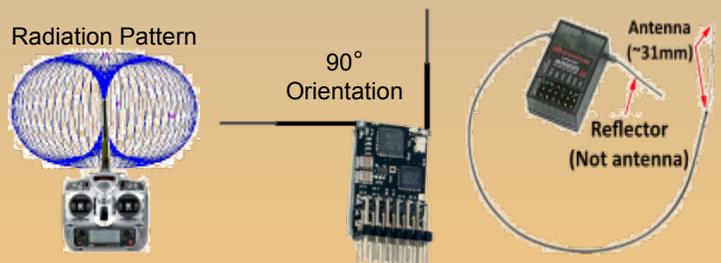


Fig. 1

Fig. 2

Fig. 3

Feel free to submit your own content for these pages.  
And if you believe any of the information provided here is incorrect, please let me know.

## Upcoming Events

5/20/2017 - 5/21/2017

### **Battle for Bean Town**

Lima, OH

Site: Larks Club Field

Field opens at 8am. Engines start at 9am.

Pilots meeting is 9:30am. First round at 10am.

Saturday 6 rounds 760 followed by 6 rounds 761.

Sunday 6 rounds provisional GNAT followed by 6 rounds provisional Limited B.

5/20/2017

### **Big Foam Fly In**

Louisville, OH

Site: Fano Field

Visit: ncrchawks.com

Flying 9am-4pm.

75" Min span or length for prizes, Any size open flying after 1pm. Fano field is at the corner of State St and Saint Peters Church Rd.

Raffle, 50/50, food and drinks will be available.

Sponsor: NORTH CANTON RC CLUB INC

5/27/2017 - 5/28/2017

### **17th Annual Columbus IMAC Challenge**

Lewis Center, OH

Site: WMAA Club Field

Visit: mini-iac.com

Events; 411-415 (JSO). IMAC basic, sportsman, intermediate, advanced, unlimited, freestyle.

Great event for 1st time IMAC competitors. Experienced pilots available for coaching. Friday practice. Located at the base of Alum Creek Dam.

Sponsor: WESTERVILLE MODEL AERO ASSN

6/2/2017 - 6/4/2017

### **Spring Fling 3D Meltdown**

Doylestown, OH

Site: Doylestown Barnstormers RC

Visit: doylestownbarnstormers.com

All flying styles welcome, all aircraft type welcome!

Fri., Sat. night. Airplane raffle, Door prizes, 50/50.

Food all weekend. Pilot dinner Sat. 6pm. Camping, no

hook ups. Landing fee \$20, includes pilots dinner.

\$10 Flying only.

6/3/2017

### **Flying Aeros Electric Fun Fly**

Bazetta, OH

Site: Flying Aeros RC Field

Visit: www.flyingaeros.com

Sanction #17/569. Various prize drawings, 50/50, Concessions.

Open 8am, flying 9am. No landing fees

Sponsor: FLYING AEROS ASSN

6/11/2017

### **Mahoning County Model Club Fun Fly**

Columbiana, OH

Site: Shaker Woods Field

Sanction #17/923

Sponsor: MAHONING COUNTY MODEL CLUB

6/16/2017 - 6/18/2017

### **Father's Day Airshow**

North Jackson, OH

Site: 4551 1/2 Gibson Rd. Jason Mcquistion

Visit: nighthawksrc.com

Sanction #17/141

Open fly all day in for any AMA member

Combat, glider contest and pilot prizes all 3 days

Sponsor: NIGHT HAWKS

6/17/2017

### **Sparks Over Larks**

Delphos, OH

Site: 7651 Elida Rd.

Visit: larksclub.homestead.com. Sanction #17/63. 2nd annual electric fun fly. Registration \$10 opens at 9am. Fly any size & type of electric aircraft Visit Facebook @

LARKSCLUB. Additional contact Andrew Augustine 785-493-6031 or email augiefly@hotmail.com. Sponsor:

LARKS

6/17/2017

### **Ravenna Thunderbirds Joint Night Fly**

Ravenna, OH

Site: Jetway Airport

Sanction #17/1163

Open to all area clubs. No fees. Open flying until dusk

Elec w/ lights only after dark. Food and beverages available

Sponsor: RAVENNA THUNDERBIRDS RC CLUB INC