



5001 Beardsley Rd.
Richland Wa

TCRCM Leading Edge



October 2026

From the Editor

Following links to web sites can provide valuable information.

If you click on any of the red underlined words (called a hyperlink) in the Leading Edge newsletter, a web site will pop up. There may also be an arrow or shape that says "click here" or "enter here" or a similar phrase. The intention is to make it easier to access more info on a topic, enter a drawing, or even provide an e-mail address.

Some hyperlinks will open in the same window as the newsletter and others will open a new page in front of what you were reading.

Hopefully hyperlinks will make your life easier.

CP

2026 Officers

President: Gary Grosso
president@tcrcm.com

VP/Web Admin:
Dave Holland

Secretary/Newsletter:
Camille Page
secretary@tcrcm.com

Treasurer: John Patton

Safety Officer:
John Pulsipher

Field Manager: OJ Brooks

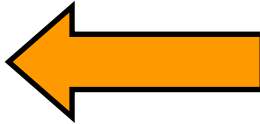
Comm. Liaison:
Scott Page

Lead Instructor:
Lyle Laughery
instruction@tcrcm.com

Past newsletters can be found at <https://www.dropbox.com/home/TCRCM%20Newsletters>

Calendar of Events

- ✈ **October 21, 6:30 club meeting, Change of Location**— Kennewick Mid-Columbia Library, 1620 S. Union St, inside by the back fireplace
- ✈ **November 18, 6:30 club meeting,** Kennewick Mid-Columbia Library, 1620 S. Union St, big room, just inside the main door and to the right



Nominations for Officers

The October club meeting will include nominations for 2027 club officers. The positions up for nomination/elections are: president, vice-president, secretary, and treasurer. Other positions are appointed at the president's discretion. Please consider volunteering to serve with the BOD or try to coax you friends into volunteering. If you plan to nominate someone, please thank them for their service and get their permission first. Elections will occur during the November club meeting.



October 2026

www.tcrcm.com

President's Message

Dear TCRCM Members,

It's hard to believe we're already into October and that summer is behind us. I hope everyone had a great summer flying season and made the most of the many opportunities to get out and enjoy our hobby. Fall is here, but we're not done flying yet! There is still plenty of warm weather ahead, along with some great flying conditions, so take advantage of every opportunity to get out to the field.

Our summer Float Fly season has come to an end, and as always, it was a lot of fun. We were fortunate to have some great weather and some excellent flying toward the end of the season. Thanks to everyone who came out, participated, and helped make these events such a success.

I also want to give a **big shout-out to OJ and his crew—Joe, Rodney, and Matt—for keeping our field in excellent condition all year long.** The work they do is not always noticed because much of it happens quietly behind the scenes, but the results are something we all appreciate every time we arrive at the field. A well-maintained field makes a tremendous difference, and their time and effort deserve our thanks. If you would like to lend a hand and help the crew, give OJ a call. Every extra set of hands makes the job easier.

As your president, I remain committed to strengthening our club—not only our facilities, but also the camaraderie and pride that make TCRCM a great place to be. The progress we continue to make happens because members step up, support one another, and work together. **That is what makes a club strong.**

October 2026

As we move through the remainder of the flying season, let's keep the momentum going. Get out to the field, enjoy some flying, lend a hand when you can, and continue treating one another with the respect that makes TCRCM a club we can all be proud to call our own.

Thank you for your continued support, enthusiasm, and commitment to TCRCM. I look forward to seeing everyone at the field!

With appreciation,
Gary Grosso
President, TCRCM



Gary and Scott

Club Minutes

from September 16, 2026

Membership:

The club currently has **53 members**.

Financial Report:

The financial report was presented to the membership.

Field Maintenance:

The field looks great! Many thanks to OJ and his crew for their continued work and dedication to keeping the field in excellent condition.

Members who are willing and able to help with field maintenance are encouraged to contact OJ, complete the volunteer form on the club website, or email secretary@TCRCM.com.

Fertilizer and Weed Control:

SpringGreen will be applying fertilizer and weed control to the field next Wednesday. Please yield to them.

Irrigation:

Irrigation water will be shut off at the end of October. The irrigation system will then be blown out for the winter.

Open Fun Fly:

An Open Fun Fly is scheduled for **September 26**.

Winter Banquet:

Don P. and Lyle L. have generously volunteered to organize the winter banquet. Thank you to both of them for taking this on!

Next Club Meeting:

The next club meeting will be held **October 21**

Aerial Combat Event:

Joe C. suggested adding an invigorating aerial combat event to next year's activities and offered to help organize the event. Who is up for a little fun?

Officer Nominations:

Nominations for elected club positions will take place during the **October 21 club meeting**..

Battery Winner:

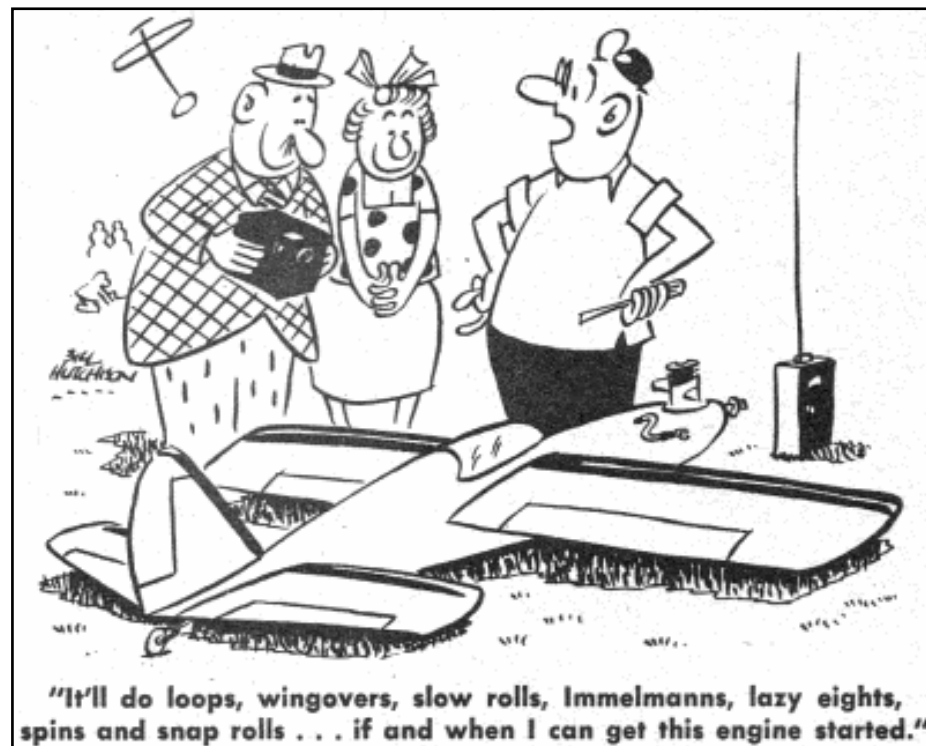


Congratulations to **Scott Page**, this month's battery winner! Many thanks to RCBat-tery.com for their continued support through the years.



Congratulations to Our New Solo Pilots!

Congratulations to **JB Aguilhon-Levesque** and **Jeffrey Broussard** on successfully completing their solo flights! Well done, gentlemen!



The MQ-25A Stingray: The Navy's Flying Gas Station Takes to the Air

by Scott Page

Most of us at the field have pushed a stick while watching an airplane from the ground, so there's something familiar about the Navy's newest aircraft. The MQ-25A Stingray has no cockpit, and the people flying it are on the ground. Although it's a "drone"; It's not small. One Navy admiral said it's as long as an F/A-18 and has the wingspan of an E-2 Hawkeye.

What It's For

Aircraft carriers have always had a fuel problem. Their strike jets can only go so far before they need a drink, and for years the Navy has handled this by "buddy tanking": hanging fuel tanks and refueling gear on Super Hornets and using them as tankers. It works, but it takes fighters away from their main job. By one estimate, up to one-third of a carrier's strike fighters get diverted from combat roles just to serve as aerial tankers. [Simple Flying](#)

The Stingray was built to take over that job. It is an unmanned, carrier-capable tanker that launches from catapults, recovers with an arrested landing, and delivers 15,000 pounds of fuel to receiving aircraft at a mission radius of 500 nautical miles. Vice Adm. Mike Shoemaker said the MQ-25 can stretch the Super Hornet's unrefueled combat radius of about 450 nautical miles to more than



700. It will support fighters including the F/A-18 Super Hornet and F-35C Lightning II. Its secondary job is surveillance: it is

designed to carry sensors forward and take on the "dirty, dangerous, and boring" reconnaissance work without putting pilots at risk. [Inside the MQ-25 Stingray: The Navy's First Carrier-Based Drone Isn't a Weapon, It's a Gas Station +3](#)

Airframe Highlights

Modelers will appreciate the numbers. The Stingray uses a single Rolls-Royce AE 3007N turbofan, from the same engine family used on the Cessna Citation X and Embraer ERJ-145. It has a 75-foot wingspan and is 51 feet long. For storage on the carrier, the wings fold to 31.3 feet. Reported top speed is about 620 km/h (roughly 385 mph), with a service ceiling of 39,000 feet. The production version adds features not found on T1, including a retractable electro-optical/infrared sensor turret. [Inside the MQ-25 Stingray: The Navy's First Carrier-Based Drone Isn't a Weapon, It's a Gas Station +3](#)

As RC pilots, we might expect it to be flown like our models, but

The MQ-25A Stingray, continued

it isn't. Boeing describes the MQ-25A as an autonomous aircraft with a human on the decision-making loop. The operators, called Air Vehicle Pilots, send it commands, and the aircraft does the flying. [Boeing](#)

First Flight

The first production-representative MQ-25 flew on April 25, 2026, from MidAmerica St. Louis Airport in Illinois, where Boeing builds the aircraft. A company-owned TA-4J Skyhawk and a Navy UC-12M Huron flew as chase planes. An earlier attempt on April 22 ended in an aborted takeoff. The Stingray took off at 10:49 a.m. CDT and flew for about two hours. [The Aviationist](#)

During the flight, the aircraft taxied, took off, flew, and landed on its own, and responded to commands from the MD-5 ground control station. Both Boeing and Navy Air Vehicle Pilots controlled it from that station, which uses Lockheed Martin's MDCX system.

[Boeing, U.S. Navy Achieve Successful MQ-25A Test Flight - Apr 27, 2026 +2](#)

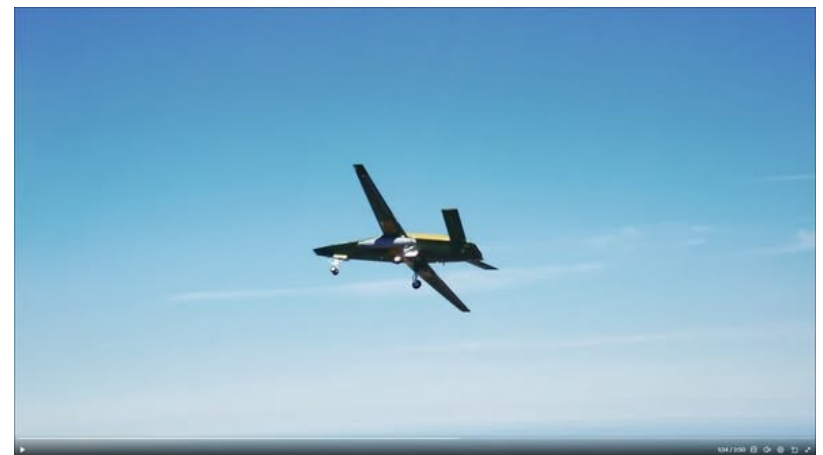
What's Next

Things moved quickly after the first flight. The Pentagon approved low-rate production the following month. On September 14, 2026, the Navy awarded Boeing a \$562 million contract for

the first three production aircraft (Lot 1), along with long-lead parts for three more in Lot 2. Lot 1 deliveries are expected in 2029. The full program calls for 67 operational aircraft and nine test aircraft. [The Navy Orders Its First Production MQ-25 Stingrays, the Drone Tankers Meant to Free Up Super Hornets +2](#)

The ships are getting ready too. In March 2026, USS Theodore Roosevelt became the first carrier fitted with an Unmanned Air Warfare Center to support MQ-25A operations. Operational service is still a few years out, however. Budget documents now place initial operational capability in the second quarter of fiscal year 2029. [aerocorner The Aviationist](#)

When it does join the fleet, the Stingray will be the first unmanned aircraft to take a permanent place in a carrier air wing. It will be a big step toward manned and unmanned aircraft working side by side, and a reminder that the skills we practice at the flying field aren't so far from where aviation is heading.



Gate Lock Reminder

Eight percent of our club members are new to TCRCM and most of those are also new to the RC hobby. For information essential to everyone, here is a PSA.

Quick reminder for everyone using the field gate:

1. **Scramble the combination to 0000** whenever the lock is left unattended. Please don't leave it sitting on the open code.
2. **Keep the locks daisy-chained.** The combination lock's shackle should pass *through* the keyed lock's shackle, not just through the chain. That way, opening *either* lock opens the gate, so those with a key and members with the combo can both get in.

See the photo for the correct setup. Thanks for helping keep the field secure and accessible for everyone! ✈



October 2026

RCBATTERY.COM
OFFER AVAILABLE TO TCRCM READERS ONLY.



Get
15%
Off

► YOUR NEXT PURCHASE ◀

SIMPLY GO TO **RCBATTERY.COM** AND ENTER PROMO CODE:

26OCTRCB!TCRCM AND GET 15% OFF YOUR NEXT PURCHASE.

Promo code is only valid until Oct 31, 2026, and can only be used once per user and not in conjunction with any other offer or discounted price.
Discount does not apply to shipping cost.

Discount code doesn't apply to items already discounted

Wayne and Lyle



Ron



Ruben



Trimming Your Bird!

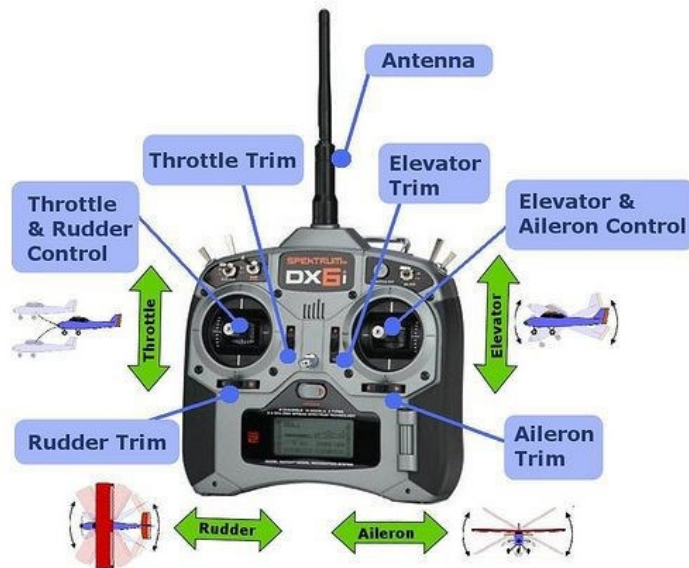
A good guide for setting your aircraft's trim adjustments...

There's a lot more to getting your airplane trimmed than just sliding the tabs on your transmitter. A correctly trimmed airplane is much more stable and fun to fly! When building a model airplane, it is important that the plane be balanced and wing incidences be set correctly. Take your time with these procedures!

Many of the planes we see anymore are ARF's. If you think that you do not have to take the time to trim an ARF — you'd be wrong. Before any ARF hits the runway carefully check the control surface throws and the center of gravity or CG. During the first flight do

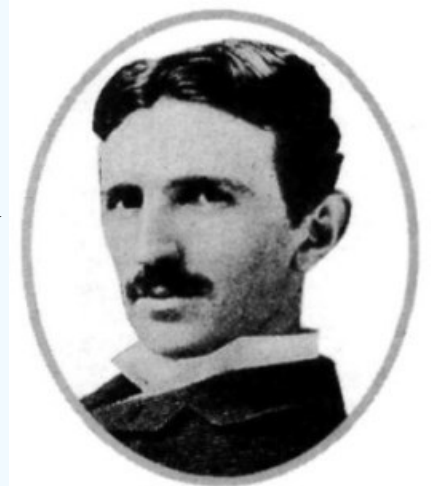
the trim thing until it flies straight and level hands off.

Then check for balance and thrust angle issues using the chart below. The engine thrust an-



gle and the CG interact with each other. Roll or Yaw issues can be caused by unequal lateral balance. To check lateral balance, suspend the aircraft by the tail and hold the spinner. If the plane has a heavy side, that's the side it will consistently tip toward. In addition to the trim check below, check for non-centering servos, play in control linkages, and aileron and elevator gap if things don't seem right.

The very first example of radio control was demonstrated in New York City in 1898. Its inventor—Nikola Tesla—was a 43-year-old immigrant who was duly awarded U.S. Patent no. 613,809 on November 8, 1898. It was only one of 113 U.S. patents that this prolific genius received during his lifetime. Many electrical engineers and historians regard his basic inventions as the foundation of the 20th century as we know it. In the decades that followed, the military and its suppliers attempted to implement Tesla's work in various R/C projects—including boats and aircraft—without very much fanfare.



This is Nikola Tesla—the father of R/C and much of today's electronic technology.

TRIM FEATURE	FLYING MANEUVERS	OBSERVATIONS	CORRECTIONS
Control Centering	Fly general circles and random maneuvers.	Try for hands off, straight and level flight.	Readjust linkages so TX trims are centered.
Control Throws	Random maneuvers.	Too sensitive.	Change linkage to reduce throws.
		Insufficient control.	Change linkage to increase throws.
Engine Thrust Angle (pitch)	From fast straight flight, cut throttle.	Aircraft continues straight flight for a short distance.	Thrust angle is OK.
		Plane pitches nose up.	Decrease down thrust.
		Plane pitches nose down.	Increase down thrust.
Engine Thrust Angle (yaw)	With throttle on, pull to vertical flight.	Plane tends to yaw right	Add left thrust.
		Plane tends to yaw left	Add right thrust.
Center of Gravity Longitudinal Balance	From level flight at low throttle and in trim, push the nose to 45 dive and neutralize controls.	Plane continues in dive for a short distance, and gradually pulls out.	CG is good.
		Nose pitches up abruptly.	Add nose weight.
		Nose pitches down more (tucks under).	Remove nose weight.
Split Elevators Yaw and CG	Into wind, Pull open loops using only elevator. Repeat test with outside loops to inverted entry.	Wings are level throughout.	Trim is fine.
		Plane tends to left when right side up, and to right when inverted.	Add right rudder or weight to right wing.
		Planes tends toward right when right side up and left when inverted	Add left rudder, or weight to left wing.
		Plane goes left, right side up and inverted.	Raise right half of elevator, or lower left half of elevator.

		Plane goes right, right side up and inverted.	Raise left half of elevator, or lower right half of elevator.
Yaw2	Into wind, do open loops, using only elevator. Repeat tests using outside loops from inverted entry.	Wings are level throughout.	Trim is correct.
		Yaws to right in both inside and outside loops.	Add left rudder trim.
		Yaws to left in both inside and outside loops.	Add right rudder trim.
		Yaws to right on inside loops, and left on outside loops.	Add left aileron trim.
		Yaws to left on inside loops, and right on outside loops.	Add right aileron trim.
Lateral Balance	Into wind, do tight inside loops, or pull to straight up flight into hammerheads. Repeat test from inverted entry.	Wings stay level and plane falls randomly in each direction from hammerheads.	Trim is correct.
		Falls off to left from both inside and outside loops.	Add weight to right wing.
		Falls off to right in both inside and outside loops.	Add weight to left wing.
		Falls off in opposite directions on inside and outside loops.	Change Aileron trim.
Aileron Rigging.	With wings level, pull to vertical climb , and neutralize controls.	Climb continues same path.	Trim is correct.
		Nose tends to go to inside loop.	Raise both ailerons slightly.
		Nose tends to go to outside loop.	Lower both ailerons slightly.
Wing Incidence	Knife edge flight.	Plane tends to nose up position (as if up elevator is applied).	Reduce wing incidence.
		Plane tends to nose down position (as if down elevator is applied).	Increase wing incidence.
Aileron Differential.	With wings level, roll repeatedly left or right.	Model stays on heading.	Aileron Differential is correct.
		Model yaws in direction of roll (barrel roll).	Too little differential (reduce down throw).
		Model yaws opposite the direction of roll.	Too much differential (increase down throw).

Why I Heat My Batteries During the Winter

By Scott Page

I can't convey the number of times between October and December that I've heard "I always get 7 minutes (or whatever) of flying time but today I lost power after only 5 minutes. I don't understand,"

Battery powered vehicles are revolutionary, however, one critical factor that significantly affects their performance is temperature.

Cold weather electric flying requires an understanding of two limiting factors.

- ✈ Lipo batteries experience a voltage drop when exposed to cold temperatures due to slow chemical reactions. This drop can affect the functionality of devices that rely on stable voltage levels.
- ✈ The internal resistance of Lipo batteries rises in cold environments, limiting the power output. Higher internal resistance leads to decreased efficiency and reduced performance.

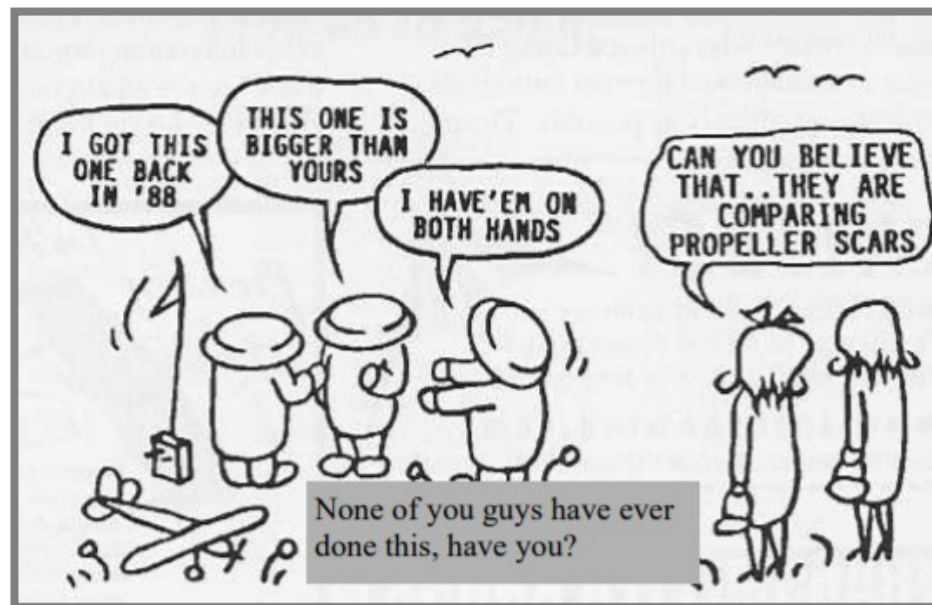
Rather than donning my teacher hat and attempting to teach a physics lesson I decided to do an experiment to illustrate what's going on – at least with regard to resistance.

I've taken a single "60C" 2200mAh 3 cell battery and brought it to equilibrium at four different temperatures with the same charge state. At those temperatures I've tested the battery to determine its resistance, and maximum amperage it can deliver without damaging the cells.

See the results of the tests in the next column. If they are not self-explanatory, feel free to ask me about this in person.

Temperature °F	Resistance mΩ	Max safe amps	C value
0 °F	119.1 mΩ	17.9	8C
45 °F	42.7mΩ	32.4	15C
75 °F	20.8 mΩ	52.6	24C
88°F	14.1 mΩ	67.3	31C

The takeaway should be to keep your batteries in a heat-controlled environment when operating in winter or cold environments. This year I'll be using a rechargeable heater in my lipo bag to keep the batteries well above room temperature.



Model Math

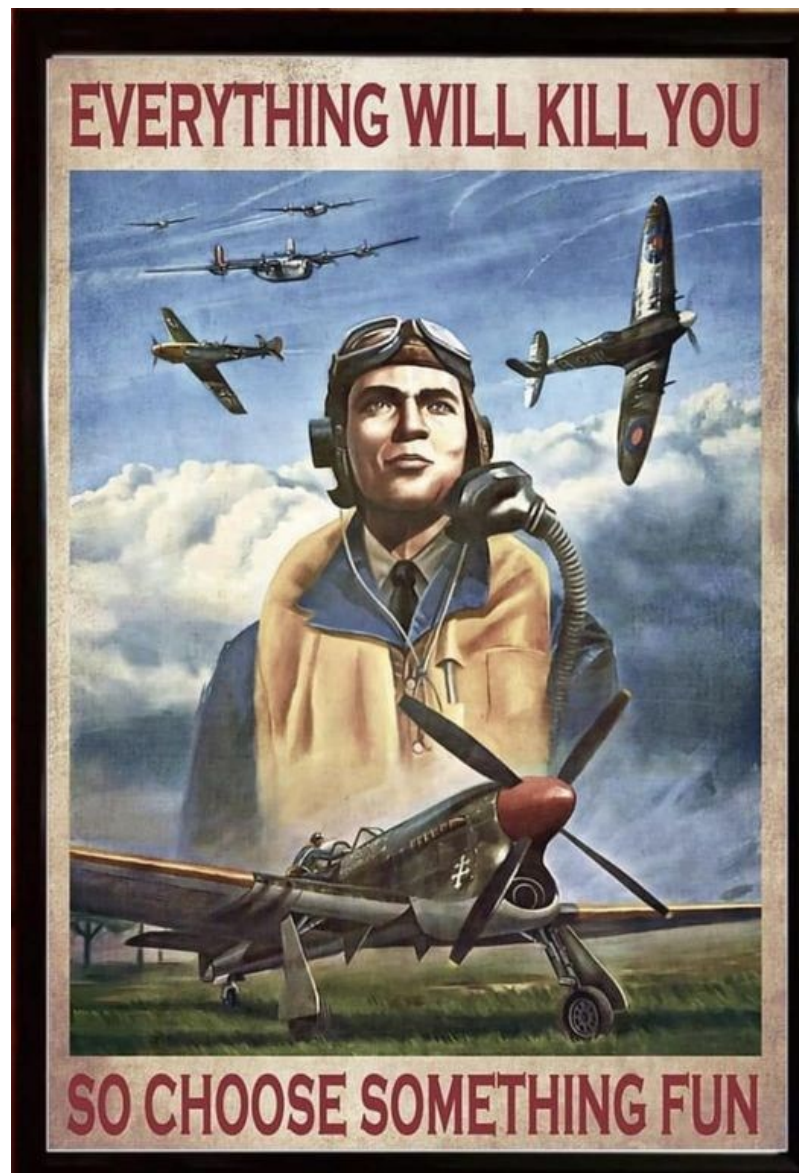
article from the annals of history

1. Watts= volts x amps
 2. Power loading: watts divided by flying weight (in lb.) = watts per lb. To convert the flying weight of your model in ounces to pounds, simply divide the weight in ounces by 16.
 3. Wing area: wingspan (in inches) X *wing chord* (in inches) = *wing area* (in sq. in.) divided by 144 = *wing area* (in sq. ft.)
 4. Wing Loading: *flying weight* (in oz.) divided by *wing area* (in sq. ft.) = *wing loading* (in oz. / sq. ft.)
 5. Stall Speed: *wing loading* divided by 4 X 3.47 = *stall speed*. *This is just a rule of thumb, but it will get you in the ballpark as to knowing how fast your model will land:*
 6. Propeller Pitch Speed: *rpm* X *pitch* (in inches) divided by 1056 = *flying speed* (in MPH) *This will give you a ballpark idea of how fast your model will fly at full throttle with a given prop and battery combination.*
- Scale: *full scale wingspan* (in inches) divided by *the model's wing span* (in inches) = *scale*

The basic formulas listed here should be helpful in getting you heading in the right direction. The speed related items are just a rule of thumb, but being precise really isn't necessary since we can't know the exact speeds we're flying anyway.



And finally, to properly set up a model's power system for best all-around performance for a Light-Weight Park-Flyer type scale model, a good rule of thumb for powering your model is that the calculated top speed using formula #6 should be roughly 4 times the stall speed obtained using formula #5.



Tips & Tricks

From the AMA Insider, November 2011 http://www.modelaircraft.org/insider/11_11/tips.htm

Get Clean!

If you forget to use a barrier cream or latex gloves to prevent your hands from getting sticky when using epoxy, don't use alcohol, acetone, or other solvents to clean them. Besides being harsh on your skin, those chemicals always leave a sticky residue no matter how many times you wipe your hands.

Instead use hand lotion to remove the epoxy residue. Just wash your hands with the lotion, rinse it off and then wash again with regular hand soap. It works like a charm and your hands will smell great!

—*from Allen Rice, Boca Raton, Florida*

Gloves for CA

If you're allergic to latex, one thing that works really well as an alternative—and is really inexpensive—is to use cheap plastic sandwich bags to cover your hands. They work well and are thin enough that you can feel that heat of the glue as it sets.

This works really well when you are applying glass cloth with CA, because you can hold the cloth to the balsa and feel when the glue sets. It lets you use very little CA to put down the cloth and saves quite a bit of weight.

—*from Bob Furr, the Eugene Prop Spinners, Eugene, Oregon*

Need a bench?

Need an extra workbench, yet don't have the space for a per-

manent one? How about an ironing board? If it has a padded top (if you choose), is adjustable for height, and you can even sit down while covering or doing close-up work. Best of all, you can fold it up and put it away.

—*From The Tail Spinner*

Local Table Building Tip

This table design has been passed down from generation to generation. It is a fast and simple way to create a sturdy work table. It is made from a hollow core door, table legs and plywood. The plywood squares were glued to the door with Liquid Nails. The folding table legs were then screwed to the plywood. It went from the local DIY store to completion in less than an hour. Yes, I let father and son work on it in the living room. It's been in use for over 15 years.

—*from Camille Page*



ADHESIVES CHART

MATERIALS →	Paper	Fabric	Felt	Leather	Rubber	Foam	Styrofoam	Plastic	Metal	Ceramic	Glass	Balsa	Cork	Wood
Wood	W	C/W	Sp/C	W/C/Ca	C/Ca	C	2K/H	L/C	2K/C/L	C/Ca	C/Ca	W	W	L/W
Cork	H/W	H/L	W	Ca/C	Ca/C	2K	W	L/Ca	C/Ca	L/Ca	Si	W	W	
Balsa	W	H/W	W	Ca/C	C/Ca	C	2K/H	L/Ca	2K/Ca	L/Ca	C/Ca	W		
Glass	A/W	A	A	A/Ca	Ca	Sp	2K/Sp	C/L	2K/C	2K/C/L	2K/L			
Ceramic	A/H	Ca/A	Ca/A	Ca/A/C	C/Ca	A	Ce/C	L/Ca/C	2K/C/L	Ce/Ca				
Metal	A/H	A	C	C/Ca	C/Ca	C	2K/H	2K/C	2K/C					
Plastic	H/Sp	Sp/C	Sp/C	Sp/Ca	C/Ca	Ca	Ca/C	L/Ca/2K						
Styrofoam	Sp/C	A/H	Sp	A	L	L/A	A/Sp							
Foam	Sp	Sp	Sp	C	C	Sp								
Rubber	Ca/C	A/C	C	Ca	Ca									
Leather	F/Sp	F	2K	C/F										
Felt	A/H	F/H	H/F											
Fabric	A/H	F/H												
Paper	A/W													

- A** All-purpose-glue
- F** Fabric glue
- Sp** Spray adhesive
- H** Hot glue
- C** Contact adhesives
- L** Construction adhesive (Liquid Nails, Loctite)
- Ce** Ceramic glue
- Si** Silicone
- W** Wood glue
- Ca** Cyanoacrylate (super glue)
- 2K** Two-component adhesive

Index of Articles Published in the Leading Edge for TCRCM

A Brief History of the Tri City Radio Control Modelers, June 2026, pp. 8-10
A Chronicle of Fields: In Search of Seeds of Greenness, Nov. 2021, p. 7
A Club My Mother Would Love, Feb. 2022, p. 19
A Crown for Unsung Heros, Feb. 2025, p. 4
A Hidden Gem in Spokane: Why B&B Hobbies Deserves Your Road Trip Before It's Gone, Feb. 2026, pp. 14-15
A New Method for Painting Foamies- Gary Grosso, Feb. 2022, p. 7
A Primer for Float Flying with TCRCM in 2025, Feb. 2025, pp. 5-9
Adhesives Chart, Dec. 2020, p. 10
Advice for Beginning RC Pilots- Cliff Geerdes, May 2021, pp. 9-11
A Few Quick Thoughts on Power, Performance, and Safety, June 26, p. 13
Aerobatics- Flip, Feb. 2026, p. 19
Aerobatics- Hanger Keyhole, Nov. 2025, p. 15
Aerobatics- Harrier, Jan.2026, p. 23
Aerobatics- Humpty Bumps, Oct. 2024, p. 10
Aerobatics- Inside and Outside Loops, August 2024, p.6
Aerobatics- Knife Edge Loop, Oct. 2025, p. 18
Aerobatics- Knife Edge Slide, April 2026, p. 20
Aerobatics- Knife Edge Tumble, Dec. 2025, p. 12
Aerobatics- Loopet/Waterfall, March 2026, p. 22
Aerobatics- Rolls, Point Rolls, and Slow Rolls, Nov. 2024, p. 7
Aerobatics- Snaps and Tumbles, April 2025, p.13
Aerobatics- Square Loops, Sept.2024, p. 7
Aerobatics- The Immelman, Jan. 2025. p.7
Aerobatics- The Rolling Circle, Dec. 2024. p.6
Aerobatics- The Split S, Feb. 2025. p.21
Aerobatics- The Stall Turn, March. 2025. p.19
Aerobatics- Torque Roll, Sept. 2025, p. 18
Antenna Hygiene- Scott Page, May 2023, p. 9
AMA Introductory Pilot Program, Sept. 2021, p. 6
AMA Safety Code, Feb. 2021, p. 4
AMA Safety Program Handbook, Feb. 2024, pp. 15-26

Answers to Survey of Discouraging Things in RC – Scott Page, May 2022, p.6
Applying Markings- Phil Clark, Dec. 2022, pp. 8-10
ARC of the Tri-Cities Event: Yea or Nay, April 2024, p. 8
Are You New to Aerobatics, May 2026, p. 4
Are you (still) legal? April 2024, p.14
Archer Receiver, Scott Page, Jan. 2024, p.5
Are you calibrating your ESC? You should. – by MotionRC, March 2021, p. 3
Are You Flying Legally? Dec. 2020, p.7
Atomic City Drone Club, March 2021, p. 3
Aviation First Steps, April 2026, p. 6
B-52 Loses Tail, Sept. 2026, pp. 9-11
Balsa, Jan. 2026, pp. 15-17
Basic Mixing- Setting Up Elevons Using Open TX – Scott Page, Sept. 2021, pp.16-18
Basic Quick Fix Mixing Tips- Michael Wargo, July 2021, pp. 9-10
Basic Servo Linkage Geometry, Part 1 *by Jack Sallade*, May 2025, p.11
Battery Testing Results, May 2023, p. 14
BEC FAQ by Dimension Engineering, Nov. 2021, pp. 9-10
Best in the West Jet Rally 2021 by Rob Skiba, Dec. 2021, pp.11-12
Birds of a Feather, Scott Page, July 2023, p.7
Build the Tiny Toni Pylon Racer, May 2022, p. 7
Building Model Airplanes- Don Paddock, Sept. 2023, p. 3
Building TIP: lining up the spinner and prop, Nov. 2020, p. 2
Building Tips: AMA Insider 2009, July 2026 pp. 10-12
“C” Stands For Crap, April 2026, p. 18
CA Glue Bottle Tips- Dave Holland, Feb. 2023, p. 9
Club Member Health- Don Paddock, Oct. 2024, p.4
Cold Weather Ahead – Scott Page, Dec. 2021, p. 3
Cold Weather Considerations, Dec. 2023, p. 10
Consider making an inexpensive BBQ into your next Lipo charging station, Feb. 2022, p. 12
Courtesy to Instructors, Oct. 2021, p. 3
Crap Dealer Misadventure – Scott Page, June 2022, p.8
Creating custom voice tracks for your transmitter – Scott Page, Nov. 2022, p.15

Cross Wind Landings, Feb. 2023, p. 9
 Customer Service, May 2024, p. 5
 Decoding a Standard Brushless Motor, July 2021, p.6
 Demonstration of Turbine Jets on Geotex, July 2025, p. 9
 Diagnosing and Disposing of Lipo Battery Packs, April 2024, pp. 10-12
 Did You Know? - LiPo battery ideal operating temperature, May 2021, p. 8
 Did You Make a Time Bomb Out of Your Transmitter? April 2024, p. 7
 Dihedral and Washout for Flight Stability, March 2024, p. 11
 Do You Still Have "It?" June 2022, p.4
 Do It Yourself 2 Ton Press Brake- Charlie Fite, Sept. 2021, pp. 7-10
 Do You Want to be a Flight Instructor, July 2024, p. 6
 Does TCRCM Need an AED? Feb. 2024, p. 9
 Egg Drop, May 2026, p. 5
 E-mail Etiquette, Jan. 2022, p. 10
 Electric Brushless Motor Info-Good Stuff, Wattflyer, July 2022, pp. 9-13
 Electric Power Systems by Scott Page, Dec. 2025, pp. 4-5
 Electrolytes: They Matter, Especially During Hot Weather, July 2026, p. 6
 Engine Offset Calculations, Aug 2026, p.13
 Ensuring Safe Skies: Safety Considerations for Flying Model Airplanes at a Club Field, Aug. 2024, p. 7-8
 Extra 260 Upgrade, Jim Anderson, June 2023, pp. 6-10
 Eye Safety, May 2025, *by Brett Ohnstad*, pp. 8-9
 FAA Final Rules for Unmanned Aircraft Remote ID, Jan. 2021, p.2
 FAA Update on RFID, Dec. 2020, p. 9
 Facebook- It's Not All Scum and Villainy, Sept. 2022
 Failsafe- Dave Holland, August 2022, pp. 8-9
 Failsafe- Why it Matters and When to Use It- Sept. 2026, pp. 2-3
 Faster LiPo Charging, Scott Page, June 2023, p. 4, April 2025, p. 12
 Faster USB Charging- and Not, Scott Page, May 2023, p. 10
 Finley Field Groundbreaking- 1983- Bill Bowen, Dec. 2020, p. 4
 First Example of RC: Tesla, Oct. 2021, p. 9
 First impressions on RadioMaster TX16 and EdgeTX, Dec. 2021, pp. 8-9
 Flexible Fiberglass for Foam Repair and Hinges, Nov. 2021, pp. 6-7

Float Flying and Night Flying, May 2023, p. 15
 Flying RC Aircraft: A Brain-Boosting Hobby with Cognitive Benefits by Scott Page, Oct. 2025, pp.3-4
 Flying Safe Online: Computer Security Tips for Model Airplane Enthusiasts, July 2025, p. 14
 Flying Site Safety Rules. April 2023, p.6
 Flying the Harrier, FlyRC staff, Nov. 2022, pp. 12-13
 FPG-9 Foam Glider, March 2022, p. 10
 FPV Rules and Etiquette, June 2026, pp.3-4
 Follow Your Intuition, Don Paddock, Oct. 2024, pp. 6-7
 Formulas for Model Aircraft, Jan. 2022, p. 11
 Frank Tiano, Feb. 2021, p. 6
 FRIA Process Improves, July 2024, p. 13
 FRIA Request Progress, May 2023, p. 12
 FrSky S6R/S8R Setup- Dave Holland, Sept. 2022, pp. 10-12
 FrSky Stabilized Receivers, S84 and Archer SR10+, Feb. 2025, pp. 11-15
 Fun Fly Mower Fundraiser, Nov. 2021, p. 8
 Fun in the Sun Pattern Contest, April 2024, p. 13
 FYI- PDQ, May 2021, p. 7
 Gate Protocol, Dec. 2020, p. 3, Jan. 2022, p. 7
 Get Paid to Fly Over Crops and Chase Birds, Feb. 2022, p. 14
 Give your ARF a second chance ... re-cover it, By KEN CHADWICK. Oct. 2025, p. 10
 Glass Finishing- Phil Clark, Jan. 2023, pp.8-10
 Glow|Gas|Electric|Equivalent Chart, July 2021, p. 5
 Glue Application Tip, July 2021, p. 9
 Glue Gun- Scott Page, August 2022, p. 15
 Got Spotter? April 2022, p. 3
 Hangars and Hangers, March 2026, p. 4
 Has Flying Gotten Boring for You?, Jim Wallen, August 2023, p. 3
 Have you passed The Recreational UAS Safety Test? Nov. 2021, p. 5
 Heat Stroke: More Serious Than You Think, July 2026, p. 4
 Heat Exchangers- Charlie Fite, Oct. 2021, pp. 15-16
 Heat Exhaustion and Heat Stroke— Jim Anderson, July 2022, p.2
 History of the TCRCM Logo- Robert Parazin – George Vargo, Dec. 2020, p. 1

Hobby 411- Washout- Scott Page, March 2023, p.6
HobbyKing: A Global Force in Making RC Flight Affordable and Accessible, Scott Page, Nov. 2025, pp. 3-4
Hot Dog Club Meeting, May 2021, p. 7
How Do You Store Your Planes? Jan. 2022, p.8
How Much Throw (surface deflection) Do I Need? Feb. 2022, pp. 4-6
How the ESC Controls the Motor, June 2021, p. 9
How to “Fine Tune” Frequency T16 TX16S Multi-Protocol Module, March 2024, p.8
How to Convert a Gas Engine to All Electric, Dec. 2025, p.8 By Melvin S. Harder
How to Convert an RC Gas Engine to Electric, April 2022
How to “Fine Tune” Frequency T16 TX16S Multi-Protocol Module, March 2024, pp.7-8
How to Flash the Receiver Firmware for OpenTX transmitters, Scott Page, June 2021, pp. 10-12
How to Land Your Airplane, Scott Page, July 2023, p.5-6
How to Make a Flying Superman, March 2022, p. 10
How to Repair a Flying Model Aircraft- Paul K. Johnson, March 2021, pp.7-8
Humpty Bumps, Scott Page, Oct. 2024, p.10
Important Safety Practices for Charging, Aug. 2021, p. 6
Improving Poorly Controlled, Dangerous Takeoffs, by Jim Devine, Oct. 2025, p. 16
In-Flight Check for CG, Sept. 2021, p. 18
Inside and Outside Loops by Scott Page, Aug, 2024, p. 6
Instruction Series Part 1, The Basics of Flight, May 206, pp.7-10
Instructor Letter- Scott Page, Jan. 2023, p.3
Introduction to Antennas, Sept. 2022, pp. 15-20
Is My LiPo Battery Safe to Use? Safety Message, March 2021, pp.4-5
It's a Club, Not a Business, Dec. 2020, p. 6
L-19 Bird Dog- Don Paddock, November 2023, p. 10
L-19 Bird Dog- Don Paddock, Jan. 2024, p. 3
Landings – Scott Page, July 2022, pp. 6-7
Leadership, July 2024, pp. 8-9
Learn to Fly Day, July 2024, pp. 4-5
Learn to Fly Day- Rob Skiba, Sept. 2021, pp. 3-5
Learning to Fly Day, Aug. 2021, p. 6
Learning to Torque Roll, A mini-lesson by Mike McConville, Oct. 2025, pp. 12-14

Life Cycle of a Running Shoe- Jim Anderson, Nov. 2021, pp. 2-3
Lipierior Batteries, Scott Page, Dec. 2020, p.5
LiPo Battery Charging and Safety, August 2022, pp. 16-17
LiPo Battery Recycling: The Hope, the Reality, and a Pause in the Plan, Aug. 2025, p.7
LiPo Recycling, Dec. 2021, p. 14
Lithium Battery Capacity vs. Voltage Charge, Feb. 2023, p. 6
Make your own brushless motor from a CD-ROM By TERRY SLATTERY, Sept. 2025, p. 16
Mass. company has been making balsa wood gliders the same way for 100 years By Chris Tanaka, Jan 2026, p. 11
Mastering the Crab Technique for RC Aircraft: A Practical Guide By: R. Scott Page, Sept. 2024, pp. 8-9
Mastering the Skies: A Guide to Improving Your Model Airplane Flying Skills , Sept. 2024, pp. 5-6
Mechanics- Control Linkages and Hinges, Barnyard Buzzards RC Club, April 2022, pp. 9-11
Meet Our New Field Marshal: OJ Brooks, Feb 2026, p.7
Mixes for Open TX, March 2021, pp.6-7
Model Aircraft Operations and the National Airspace System, July 2025, pp. 4-7
Model Math, Nove. 2024, p. 18
More Health Benefits of Engaging in Model Airplane Hobbies, Feb. 2025, pp. 18-19
More on LiPo Battery Storage, Dec. 2021, p. 4
Multiplex Connectors, Scott Page, Feb. 2023, p. 5
Muscle Memory, Scott Page, Sept. 2025, p. 4
Musing about Learning and Soldering - Scott Page, July 2022, pp. 15-16
Neil Armstrong, May 2026, p. 16
New Pilot Flight Instruction, July 2024, p.7
New Club Member Spotlight- Donn Schifano, Feb. 2026, p. 8
No Customer Service, June 2024, p. 5
Night Flying AMA Requirements, May 2023, p. 17
Oh Depron, My Depron, Where Have You Been? Jan. 2021, p.7
ON THE SAFE SIDE101 Ways to Stop a Spinning Propeller, Dec. 2025, p. 7
ON THE SAFE SIDE- Propeller Strikes and Arming Switches, by Jim Tiller, June 2025, p. 17
One Thing I Wish I'd Known, Dec. 2021, p. 5
OpenTx and Edge Tx, Nov. 2022, p. 10
Open TX Output Screen, May 2021, pp. 13-14
Origin of “The Calvin”- John Patton, Dec. 2020, p. 4

Parachute Contest, April 2024, p. 9

Parallel Charging, Aug. 2021, pp.4-6, April 2026, pp.8-10

Pattern Contest, June 2024, pp. 7-9

Peter Goldsmith's Trimming Sequence, Aug. 2021, pp. 9-11

Picking a Power System, Nov. 2024, pp. 14-16

Pilot Spotter Responsibility- Bob Ackerman, Oct. 2021, p.13

PNNL Drone Flight, Oct. 2021, p. 6

Portable Starting Tables Work Party, March 2023, p. 4

Preflight Safety Message, August 2022, pp. 13-14

Prepare Now for the April Egg Drop Competition, Feb. 2023, p. 7

Preserving Our Club's History-1983 Photos from Finley Field by the editor, Nov. 2025, pp. 7-8

Preventing covering from peeling up, May 2025, p. 6

Primary TCRCM Student Pilot Maneuvers, Jan. 2023, p. 4

Pro Flying in Japan, Chip Hyde, Dec. 2022, p.7

Product Spotlight - Miracle Anodized Aluminum Throw Meter- Scott Page, May 2022, p.4

Prop Balancing, Sept. 2022, p.9

Propeller Balance- What you should be looking for... by Lloyd Sullivan, Sept. 2025, pp. 14-15

Propeller Safety Moment- Dave Holland, May 2022, p.3

Propeller Safety Tricks- Jim Anderson, April 2022

Protecting Yourself from Hazardous Materials- Chris Myers, May 2021, p. 15

Put skis on your models (for your winter wings) By BOB KARASIEWICZ, 2004, p. 14

Race to Recovery, Feb. 2022

Radiomaster TX16 Transmitter: The Ultimate Choice for RC Enthusiasts, Chat GPT, Nov. 2024, pp. 7-8

Range Checking – Scott Page, June 2022, pp.6-7

Rant– Gender Bias, April 2024, p. 6

Reach Out to Curious Observers- Dave Mathewson, March 2021, p.10

Ready to Solo? June 2021, pp.6-7

Recruiting With Magazines, April 2026, p.7

Recycle Batteries- Give to Scott Page, July 2021, p. 2

Recycle those batteries, May 2021, p. 3

Removing an ESC from a Model Aircraft by Scott Page, March 2026, pp. 8-10

Reverse Thrust- How it works and how to configure it in your RC model, Bryce Wilson, Feb 2026, pp. 9-12

ROLLS, POINT ROLLS AND SLOW ROLLS by Scott Page, Nov. 2024, p. 6

RTC Battery Low? June 2024, p. 12

Safe Disposal of Lipo Batteries, Jan. 2021, p.6

Safety Article: Neutralizing Safety Concerns with Electric Power, Oct. 2021, pp. 7-8

Safety First by Joe Corder, Nov. 2025, p. 5

Safety Guidelines for Large 3D Aircraft at the TCRCM Field, By Jake Pulsipher, July 2025, p. 8

Safety is the Name of the Game, Jan. 2022, p. 9

Safety Message- Failsafe, Dec. 2020, p.8

Safety Message- The Recreational UAS Safety Test, July 2021, p. 3

Safety Message- True or False, March 2021, p. 5

Safety Officer Comments, Feb. 2024, pp. 10-11

Safety Third and Hubris – Scott Page, Jan. 2022, pp. 4-5

Scale Plans for the Novice- Jerry Bates, Oct. 2021, p. 9

Setting Inputs in Open TX, March 2021, pp. 2-3

Setting up FrSky S6R and S8R receivers, July 2021, p. 9

Setting Up Rates and Expo in Edge TX, April 2026, pp. 11-14

Shop Safety- use the right tool for the job – Scott Page, Nov. 2020, pp. 4-5

Shut That Door- Phil Clark, Feb. 2023, pp. 12-14

Six Keys to Success by Ed Anderson, Dec. 2021, pp. 6-7

SMOKE! - Sept. 2022, pp.6-7

Soldering info- Jim Smith, April 2023, pp. 14-16

So Your Child Wants to Build Models-Donn Schifano, June 2026, pp. 11-12

Social Media- MeWe, Feb. 2021, p. 4

Soldering info with a perspective on the equipment by Jim Smith, Sept 2025, pp. 11-13

Spot Landings and Landing Over Obstacles – Control your touchdown location, March 2024, pp. 12-15

Spotlight on HelloRadioSky: A Fresh Option for RC Airplane Pilots by Scott Page. March 2026, pp. 13-14

Spruce Goose, p. 11, April 2025

Square Loop, Sept. 2024, p.7.

State of Charge vs. Lipoly Pack Voltage (chart) March, 2023, p.5

STEM Grant and video of HHS Falcon Flyers, Nov. 2021, p. 4

Stratosurfer FPV Build, Jim Anderson, April 2025, pp.7-10

Sunglasses: Are Yours the Correct Color? - Bill Bowen, Oct. 2021, p. 4, June 2022, p. 12

Take Off and Grow – Don Paddock, July 2022, pp. 4-5
 Take Off and Grow – Don Paddock, Nov. 2022, pp. 6-7
 Tale of Two Dealers, May 2024, p. 4
 TCRCM By-Laws (link), March 2021, p. 9
 TCRCM Flying Site Safety Rules, Feb. 2024, pp. 12-14
 Text to Speech, Scott Page, July 2023, p. 8
 The Art of Landing- Clark Hymas, April 2023. P. 12
 The Art of Landing: How to Safely Land a Model RC Airplane on the Runway, Jan. 2025, pp. 8-10
 The Attitude of Gratitude, Don Nix, Oct. 2025, p. 11
 The Bixler RC Trainer and Perfect FPV Platform, Dec. 2023, p. 10
 The Circle of Flight (Mud Hole) July 2021, p. 4
 The Current State of Remote IDs, Sept. 2023, pp. 6-8
 The First Drone, July 2024, pp. 10-12
 The Flying W, a.k.a. The Capricorn, Jan. 2021, p.7
 The Health Benefits of Model Airplane Hobbies and Club Membership: Scott Page, Aug, 2024, pp. 3-5
 The History and Development of the RC Servo, Dec. 2023, pp. 4-6
 The History of Gyros, Sept. 2026, p.12
 The Importance of Elected Officers, by the editor Nov. 2025, p. 6
 The Importance of Volunteering in the Tri-City Radio Control Modelers Club by Scott Page, Oct. 2024, p.5
 The Not So Serious Crash Etiquette, Oct. 2021, p. 8
 The REAL Greenhouse Problem- Canopies, March 2021, p.11
 The Role of Rudder in Final Approach: Why Using Rudder is Crucial for Landing a Model Airplane, Oct. 2024, pp. 8-9
 The Spangenberg Aileron Linkage, Aug. 2026, p.12
 The Three Preventable Deadly Sins of RC Flying- Jeff Procise, Jan. 2023, pp. 5-6
 The Tony Tai Fun Fly Heli Event, Rob Skiba, Feb. 2023, p. 8
 Tillamook Air Museum, Sept. 2026, pp. 4-5
 Tips and Tricks, Scott Page, April 2023, p. 11
 Tips on Communication With Club Members, Fellow Fliers, and Prospective Fliers, April 2023, p. 13
 Tips on RC Servo Installation and Setup, Dec. 2023, pp.8-9
 Tool Holder- Dishwasher Caddy, Aug. 2021
 Tools Explained, Dec. 2021, p. 10
 Transmitters Using Open TX, March 2021, p. 5

Trimming Your Bird! Oct. 2021, pp. 10-12
 Turbine Usage at AMA Field Location in Eastern Washington, July 2025, p. 10
 Twilight/Night Flying, June 2022, p. 11
 Understanding and Preventing Tip Stalls in Radio Control (RC) Planes by Scott Page, Nov. 2024, pp. 4-5
 Understanding Deans Connectors, By Phil Laperriere, March 2026, pp. 17-18
 Understanding Your Two TCRCM-Related Memberships by Scott Page, Jan. 2026, pp. 6-7
 Unusual Antics, Sept.. 2025, pp. 5-7
 Update Your OpenTX Firmware to 2.3.14 While You Still Have Time, p. 10
 Update Your Spektrum DX Transmitters NOW, Feb. 2022, p. 10
 Using Cyanoacrylate, Feb. 2022, p. 11
 Voltage Ripple, June 2025, p. 15
 Voltage Telemetry, Scott Page, Jan. 2024, p. 5
 Vroom Hilda pattern, Oct. 2021, p. 2
 Washington Drone Laws, Sept. 2023, p. 5
 Washout: advantages and disadvantages, Oct. 2025, p. 15
 WDOT/Graffiti, May 2024, p. 9
 Weaver/Spillman Auction, May 2024, p. 7
 What Are Expo and Rates or Weights, March 2021, p. 6
 What Can Telemetry Do for You? – Scott Page, Sept. 2021, pp. 12-14
 What is a Drone? Feb. 2023, p.10
 What Is Pattern? May 2021, p. 2
 What is the TRUST and Why Do I Care, Sept. 2021, p.15
 What It Means to Be Part of TCRCM — And Why Your Involvement Matters, by Scott Page, Jan. 2026, pp. 8-9
 What's in a Claim? Scott Page, Jan. 2024, p. 7
 When a Phillips Screw is Not a Phillips Screw, Oct. 2022, p.5
 When Fun Takes Flight, July 2025, p. 9
 Why DSM2 and DSMX Systems Are a Poor Choice for Reliability. By ChatGPT, Nov. 2024, pp. 9-10
 Why I Heat My Batteries During Winter, Oct. 2023, p.4
 Why Overseas Shipping Sometimes Looks Shockingly Expensive by Scott Page, March 2026, pp. 15-16
 Why Simulators Work For Training- Scott Page, August 2026, pp.6-7
 Why Would You Convert Radio Control Gas Engines to Electric? March 2022, p. 7
 Why Would You Do That? August 2022, pp.6-7

Windssocks, May 2021, p. 3
Winter aircraft storage hints, Nov. 2025, p. 13
World's Fastest RC Aircraft, Feb. 2021, p. 1
WWII Through the Eyes of John Hanson, Jan. 2026, pp. 18-22
You Are Model Aviation's Ambassadors- from AMA Insider, May 2021, pp. 4-5
You'll Get a Charge Out of This, Feb. 2025, p. 10
Your First Successful Flight, Scott Page, Sept. 2026, pp. 6-8
Your New Co-Pilot: Using AI to Set-up Your Aircraft in Edge TX, May 2026, 11-13

Past newsletters can be found at

<https://www.dropbox.com/home/TCRCM%20Newsletters>

