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News Magazine
News and Info for Members and Friends



Photo by Jim Burk

Fourth Quarter 2018









From the Editor...

By George Krueger, Club Officer, Treasurer and Magazine Editor



With this issue we go to a quarterly system for our news magazine. That will ensure a variety of topics to cover with our various "seasons" of flying.

You will note that I have put events in chronological order. Also there is an added section on training and safety, a requirement of AMA Gold Leader clubs.

An added theme, starting with this issue, covers the management philosophy of our Club. See the President's Message for

elaboration. It's important to note that in spite of the "club" name in our title, the CVRC Club is a Charitable Corporation operating under Internal Revenue Code Paragraph 501.C.3, Tax Exempt Organizations. We are one of only four AMA-Chartered Clubs in the nation with this status. We operate and file tax returns under Corporate rules, not social-club rules. Our operations must be professional and consistent with Charitable Corporation guidelines and, among other things, serve the community. We do the latter with significant contributions from event profits to Wounded Warriors, Rebuilding America's Warriors (RAW), Marine Corps toy drives, materials and equipment used in our Learning Camps for Desert Recreation District counselors and kids, and field use for Desert Rec and Astro Camp functions.

In a related issue, the need for Club monetary savings occasionally comes up as a conversation topic. The Club funding is reported in each of our Meeting Minutes, and we do continue to build our Savings account (rebuild actually, after around \$25K of runway repaving this year). This magazine issue includes a reminder of the damage our field suffered in 2008. And a portrayal of the damage from recent storms. Our savings must be sufficient to cover the costs of repairs from events like these, or worse. Be reminded that a major upheaval or modest earthquake could rupture our nearby canal and wreak real havoc. We need to be prepared, financially and physically.

Special thanks to Orman Gilbert, who flew his full-scale Yak 52 for us during our Scale Contest on December 1. It was a treat to see and really impressed our visiting contestants!

Member Rick Bennett contributed an article for this issue. We thank him sincerely!

My thanks to photographers Jim Burk and Murray Ross for many of the photos in this issue. Jim and Murray do a great job! See many more of their photos on the club website www.CVRCclub.com

There are many photos and several written segments in these news magazines. I have attempted to label them and credit them properly...please forgive any errors. Unless otherwise noted, the photos and articles are my own. I hope you enjoy the magazine!

Board of Directors



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Club General Info

This magazine is intended for both members and non-members. For those new to the area or new to the club, here are a few notes about our operation. We welcome visitors. We are proud of our family-friendly and gracious environment. Membership is open to all. Our facilities are described on the following pages. Contact any club officer for more information (See Board of Directors page).

Academy of Model Aeronautics (AMA) Chartered Club

Website: www.CVRCClub.com

AMA Club Status: Gold Leader Club

Seven-Member Board of Directors

Average Membership: 150 Members

Annual Dues \$150.00

AMA Membership: Required (or Canadian MAAC)

Guest Flyers (AMA/MAC Members): Yes, 3 times

Training Pilots Available: Yes (hourly fee)

Airfield: 89452 54th Ave., Thermal CA

Field Available: 7 Days/Week, All Year

Allowed Motor Types: All (Gas Turbines w/Waiver)

Float Flying: Lake Hemet, CA (Summertime)

Club Meetings: Last Tuesday, Sep - May

Meeting Location: Sloan's Restaurant, 81539 CA-111, Indio CA

The content of Propwash is at the sole discretion of the Coachella Valley Radio Control Club Board of Directors.

There is no commercial connection between CVRC Club and any organization, advertiser, manufacturer, merchant or individual that is mentioned, featured, depicted or described in Propwash.

All photos in Propwash are by the Editor unless otherwise noted.

Airfield and Facility



Runway 865' x 70', Fine-Textured Asphalt Concrete Apron Areas

Ten Shade Covers

Shaded Spectator Area

Metz

Looking South

Land Owner: US Government

Lease: Bureau of Reclamation

Sublease/Steward: CVRC Club

Improvements: all by CVRC Club



Field Address:

89452 54th Ave., Thermal CA

From West: Hwy 10E, Hwy 86S:

From East: Hwy 10W, Left on Dillon Rd, Left on 86S, then:

Left (east) on Airport Rd,

Left on Pierce,

Right on 54th,

Left at Gate.

President's Message

By Dan Metz



An observation that has been repeatedly expressed by our visiting RC modelers is what a superb facility we have and how much they have enjoyed our hospitality. Some of this is coming from RC pilots who have driven several hours to get here. It's heart-warming to hear. It speaks to a successful outreach by our club members to the AMA/RC community at large, one of the obligations of a Gold Leader Club.

Hosting events does dedicate the field to very specific models and types of flying for blocks of time, varying from a single morning to 3 or 4 full days. One of our criteria is that

events should generate revenue for our selected charities and for our club, and thereby increase financial reserves without raising dues (dues have not increased since the early 1980's). We occasionally try a new type of an event. If it generates positive cash flow we consider repeating it. If it doesn't it will likely be dropped.

All our events are open to all our members and we always hope several will choose to participate. No one is ever excluded.

It is important to realize that our club is a 501c.3 charitable corporation. It is not just "a flying club with a field." We operate under the rules for professional corporations.

In the past we have accepted thousands of dollars from the AMA to help construct our flying site, and that carries a continuing obligation to serve the AMA community at large, not just our local club members. Our corporate status and our Gold Leader stature with the AMA enable our recognition by the FAA as a Community Based Organization (CBO) capable of setting and enforcing our own reasonable and safe rules for operating model airplanes, helicopters and drones in the national airspace system - very important in light of recent Federal rules changes. We operate on Federal land in concert with our leaseholder the Bureau of Reclamation. That lease can be terminated at any time for any reason, and therefore it's important that we assist Desert Recreation District in their educational programs for young people and otherwise maintain a positive relationship with them.

Many of the factors noted above are invisible to Club members at large. Be assured that your Board of Directors is aware of them all and assigns resources and airfield use to satisfy all requirements. We appreciate your understanding.

President's Message....

I am establishing a relationship with the Experimental Aircraft Association chapter at Jackie Cochran Airport (JCAP).

One of my goals is to establish an event-sharing calendar with the local Experimental Aircraft Association chapter at JCAP. That has started with my reaching out to their President.

I have always thought that with the JCAP Airport Authority being in turmoil we need to be sharing our fellowship, events and goals with the EAA and any similar on-airport local organizations. I have watched new hangers being constructed at JCAP and that leads me to think that we need to reach out and work together to protect our interests and theirs. With the FAA final Letter of Understanding with the AMA still up in the air I think we need to be proactive and work co-operatively with JCAP locals.

The AMA did strongly make the 400' altitude limit a non-starter. Let's wish them luck. After all the AMA is responsible for two things:. Airspace and Insurance. Everything else they do is secondary in my opinion.

At the AMA convention in Pomona I stopped at the FAA booth and talked with them for over a half hour. They ended up recruiting me as a local liaison to help make the drone community aware of their aerial responsibility. I cited my son at JPL as an example of STEM education that started with models.

So I am going to be making a model presentation to the EAA local chapter on a Saturday in January. I think that we can get them on board as a modeling messenger there to tell our story.

Safe flying,

Dan

Historical Note-Storm Damage 2008

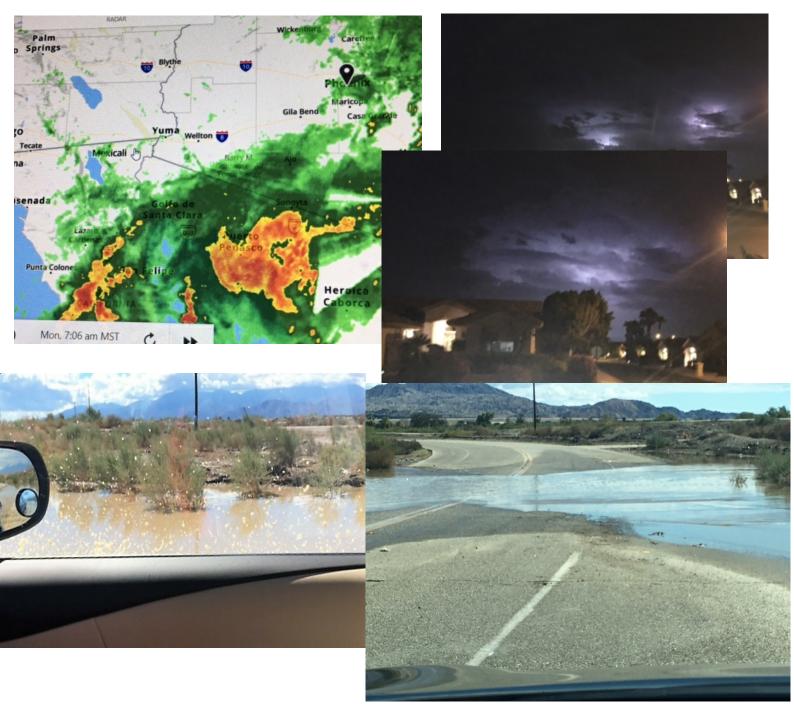
We can either learn from the past or make the same mistakes again. A powerful storm in 2008 did significant damage to our facilities which took a lot of time, manpower and money to repair. The pictures show the flooding, wrecked shade structures and beat-up tables that the storm created. We owe a lot to the people who stepped-up to these repairs and the re-setting of all the shade structure frames and covers.

This kind of event can and will happen again. We are self-insuring against major repairs, progressive maintenance and periodic renovation. That is among the reasons we continue to build our financial reserves. **Those funds cannot all come from members' dues**. Our annual events, sponsor contributions and financial gifts from members are necessary supplements. Please support all these; they keep your club viable!



Damaging Storm Sep 30 & Oct 1, 2018

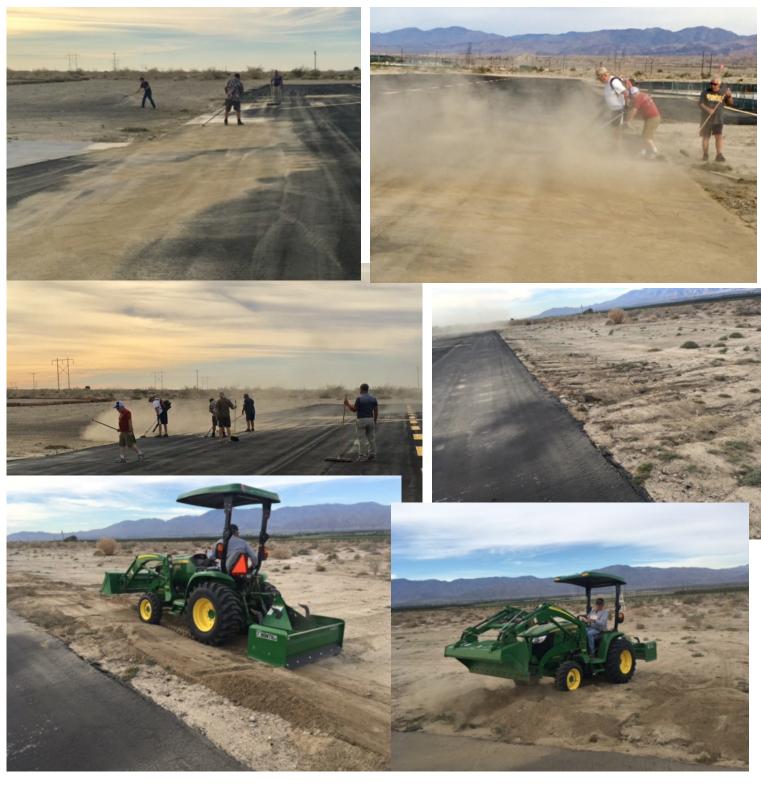
Some unusually severe weather rolled through our area, with lightning, strong winds and heavy rain starting Sunday September 30. One of our members was camped in an RV trailer on our flying field that weekend. He described the storm as "epic." They really thought they should move the trailer to a more-protected place, but that was impossible once the storm intensified. Our field saw lots of water flow over and around the berms in the parking lot, and subsequently water flow over the runway. Lots of mud was deposited on the runway and a large section of earth was eroded away from the southwest runway edge.



Storm Damage Repair Nov 4, 2018

After dryout from the storms in early October, a large work party was formed to remove the layer of mud from the runway and to restore the shoulder along the southwest edge of the runway. Brooms, shovels and blowers were used on the mud. Wayne Copeland used his tractor to move earth back to the runway shoulder and grade it smooth. We still need to stabilize that sandy soil with Earthcrete so it will resist washout.

We thank all our volunteers, and especially Wayne for his tractor-work.



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Top Fun, Nov.10, 2018

Rob Thomas, Event Director



Our annual Fun Fly was well-attended and saw a variety of models flying. A number of our wintertime residents were back in town and it was good to see them again. We took up a collection for Veteran's charities and we thank those who contributed. The Desert Recreational District sent out a group of older kids to watch, listen and learn. We got some of them on our co-pilot controllers to try their hand at RC flying. Some of our older visitors tried it too. A popular event was the paintball shoot at a flying model airplane (no one brought it down!). Our loyal members cooked up a great lunch for everyone. Some selected photos are presented here; see the club website for more.





Brandon Metz explains the fundamentals of aerodynamics and propulsion to a group of students from the Desert Recreational District. Brandon is a Project Engineer at Jet Propulsion Laboratories in Pasadena CA.

Top Fun 2018....



Counselors and students from the Desert Recreational District. They visited as a continuation of the learning-camps CVRC club is providing.



Eddie Mann and George Smith get ready to provide in-flight instruction via pilot and co-pilot controllers. Several of the DRD kids tried their hand at RC flying....It was harder than they thought...real airplanes react differently than video games and simulators!





Top Fun 2018....



The Paintball Shoot was a very popular event. Seemingly easy to hit a relatively slow-moving airplane but it wasn't! Eddie Mann flew his Valiant as the target. It survived the day with some hits but in good shape! What's that say about our shooting skills...?





Top Fun 2018...

Several turbine jets were flown at the event. At the top is Rob Thomas' BAE Hawk. All the jets were impressive. See many more photos on the website.



Top Fun 2018...



The use of a "student/instructor" setup allows people to try their hand at RC flying. Here, Matt Mitchell helps guests make their first flights!







George Krueger flew his smoke-equipped MXS.

For a 7-minute videodemo of this smoke system and instructions on how to build one, click here.

Top Fun 2018....



Ross

Super-detailed B-25 bomber by Alan Williamson

Ross

Dan Metz gets ready to fly his DeHavilland Jet

Thanksgiving Week Visitors

Thanksgiving week frequently sees a visit by some of our out-of-town members who bring their RV's to the field for a few days of flying. Dan Avilla and Neal Smiley were among the visitors this year. Both are accomplished jet fliers so we got to see some of their latest airplanes. Both of these gentlemen travel extensively, and both have been significant sponsors to our club events and donors toward our club expenses....we thank them sincerely!



Neal Smiley, Oceanside CA, F-4 Phantom Gas Turbine Jet

For a 5-minute video of Neal flying this jet, click here.

Neal Smiley, Mr.& Mrs. Dave Phillips

Dan Avilla, Prescott AZ, F-4 Phantom Gas Turbine Jet

Desert Recreational District Board Meeting Nov. 28, 2018

Each year we make a report of recent activities and future plans to the Board of our leaseholder, the Desert Recreational District. Dan Metz made the main presentation, supplemented by talks by Rich Wilabee, Joe Scuro and George Krueger. Our primary contact at Desert Rec, Barbara Adair, introduced us and played the 8-minute video we made highlighting the "learning camps" we conducted for the kids, where they built and launched model airplanes and rockets. We were warmly received.



Scale Masters Qualifier Dec. 1&2, 2018

RC Scale Airplane competitors employ a "ladder" system of qualifying for the annual national final event. To qualify, competitors must have flown in several regional competitions.

After receiving several requests to host a qualifying event we decided that we had an obligation as a Gold Leader Club to help and give it a try at least one time. That would show if it generated enough enthusiasm and revenue to be incorporated into our regular event schedule. The higher-division airplanes are beautiful to see and there were prospects of 20+ competitors for the event, with pilots coming from all over the Southwest.

Weather for the week was blustery and forecasts for the weekend were not good at all. This and other parallel model airplane activities in the region kept competitors away and event turnout was low - only 11 entrants including 3 of our own club members. However there were some very well-detailed airplanes to see and 2 days of reasonable flying weather for the competitors. For those that did participate it was a very enjoyable event. Those who didn't come missed a great weekend and a great BBQ rib lunch courtesy of Eddie Mann and his crew. The turnout by our Club volunteers to prepare and conduct the event was very good and we thank them all!



Scale Masters....







Scale Masters.....



Scale Masters....





Scale Masters....



Dan and Rich kept the action moving and announcements made.



Eddie Mann and his crew prepared his prizewinning 6-hour BBQ Ribs for our lunch. What a treat!

Aero-Tow, Dec. 8, 2018

Twenty one pilots joined us for a morning of large-sailplane flying. Three powerful tow planes successively pulled the sailplanes aloft and released them to hunt for rising air. Quite a treat to watch. The sailplanes had wingspans up to 25 ft., Weights up to 70 lbs.

The event was coupled with our weekend charity drive for Toys for Tots. The pilots contributed 18 new toys and \$375 in cash to the drive. We thank them sincerely!





Aero-Tow...





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Aero-Tow....

Overhead pictures taken from a DJI Spark drone, made using panoramic multiple image software. Pictures were taken at 2:30 pm...some folks had already left. Photos taken and images assembled by John Swain and originally presented on RC Groups. Photos used with permission.





Aero-Tow & Badge Day



Training and Safety: Why Won't My Corsair Go Straight?

By Rick Bennett



If you have a T-28 in your fleet, you know that it is reasonably easy to keep it going straight on the ground. If you have a Corsair, you know that it is NOT that easy to keep it going straight. The difference is in the fact that the T-28 has tricycle landing gear and the Corsair is a tail-dragger.

Just for fun, let's examine that. Try an experiment. Take a pencil and put it on a flat table. Place your index finger and your thumb on the lead part of the pencil and try to pull it across the table. It is very easy to pull the pencil in any direction. This is because the point of rotation is at the tip of the pencil which is also way ahead of the pencil's center of gravity.

Now, put your index finger on the eraser of the pencil and try to push it across the table. You will see that it is very

hard to keep the pencil going straight for any distance at all. In this case, the point of rotation is at the back of the pencil which is also way behind the pencil's center of gravity.

In your airplane, the horizontal point of rotation is called the Yaw Axis. By necessity, the center of gravity in a tail-dragger is behind the main landing gear so the plane will sit on its tail wheel. This also puts the center of gravity behind the yaw axis of the plane. The undesired effect is that the tail is always trying to "catch up" with the nose. Tail-draggers will always have a tendency to go off one way or other other----just like the pencil when pushed from behind.

If a tail-dragger gets too wild and its center of gravity reaches a point that is "outside" of the main landing gear, the plane will experience an uncontrollable groundloop. Again, think of a similar movement with the pencil. Learn to use the rudder, and now that you know why, good luck in maintaining directional control with your tail-draggers!

—--- Rick Bennett is a retired Boeing 767 captain and an instructor in full-scale power planes and gliders.

Training and Safety: That Pesky Rudder!

By George Krueger



Appropriate rudder inputs are probably the last thing an RC pilot learns to do. We shy away from them because inputs vary with the airplane's attitude (upright, knife-edge or inverted)), whether it's coming toward us or going away, and whether it's overhead or out in front of us.

How to predict which rudder input, right or left, is the needed one? The easiest way for most of us is to develop a set of "rudder rules" based on what the airplane is doing and the effect we want. You already know a couple rules:

- 1. Airplane upright and going away, right rudder steers the airplane to the right, left rudder steers it left.
- 2. Airplane upright and coming toward you, right and left rudder steer the airplane opposite. You encounter this on every landing.

Complications arise when the airplane is inverted. A very useful concept from PA Team Pilot Michael Wargo is that when <u>inverted</u>, the rudder-stick will move whichever "pointed-end" of the airplane you're viewing in the <u>same direction as the rudder-stick motion</u>. So, two more rules:

- 3. Airplane inverted, going away: right and left rudder-stick moves the <u>tail</u> (the pointed-end you're looking at) to the right or to the left, <u>same direction as the stick motion.</u>
- 4. Airplane inverted, coming toward you: right and left rudder-stick moves the <u>nose</u> to the right or left, <u>same direction as the stick motion</u>.

For knife-edge flight (i.e. wings vertical), we need "top rudder" because the rudder is producing pitch control and we want "nose up" to generate fuselage lift. Two more rules, these relayed to me by Steve Denty of the San Diego Silent Electric Flyers:

- 5. Airplane on knife-edge, viewing canopy, move the rudder-stick toward the tail for pitch--up.
- 6. Airplane on knife- edge, viewing landing gear, move the rudder-stick toward the <u>nose</u> for pitchup. Note: if rudder produces roll in your airplane, you will need to apply opposite aileron at the same time. You can set up a rudder-opposite aileron "mix" on a transmitter switch to do this for you.

With combinations of these rules, you can steer your airplane around in sustained inverted flight. You can take the "spiral" out of loops and similar maneuvers. You can create level axial rolls, crisp hesitation rolls, knife-edge circles and rolling circles.

Stop letting your left hand get a free ride! Timely inputs of both throttle and rudder controls are the hallmark of the most capable RC pilots.

To see Michael Wargo's video, "Top 10 All Time Best RC Flying Tips" click here. 22 minute clip.

See Steve Denty's demonstration of rudder use on landings here. 12 minute video filmed on-field in San Diego.

Coachella Valley Radio Control Club Safety and Training: Safety Rules

An AMA Chartered Club requirement is that club safety rules be periodically reviewed, and at least once annually. Here they are. **Read them!**

CVRC CLUB SAFETY RULES

- 1. A SPOTTER MUST be used
- 2. You must SCREAM OUT A WARNING LIKE "HEADS UP" if your plane is out of control.
- 3. AMA rules always apply
- 4. Always give way to full size aircraft. They have the right of way.
- 5. It is STRONGLY recommended that you are not the only one at the field for your safety.
- 6. Any flying that creates a hazard to other pilots or spectators is not allowed.
- 7. Range test all your aircraft prior to flying and double check the radio and control surfaces are set up the correct way.
- 8. When starting planes, they MUST be restrained in some manner. If on the tables use the wing holdbacks at the ends of the tables and/or make sure someone has a firm grip on the plane. Make use of the starting tables that are available to the North or South of the pit area if you feel it would be safer in your situation.
- 9. Carry your plane to and from the pit area to the flight line if the engine is running. Larger aircraft must be restrained by the tail while moving to and from the flight line. On return no taxiing past the pilot tations or the yellow lines on the taxi ways. It is suggested you kill your engine at that point. If your engine is still running hold the airplane by the tail and physically move it to where you plan to shut it down.
- 10. Traffic direction will be determined by the windsock. Takeoffs and landings are into the wind.
- 11. Pilots and spotters must be in the pilot box when flying.
- 12. Always check that the runway is clear and announce in a clear loud voice when taking off and landing.
- 13. Dead stick landings take precedence over takeoffs. If dead stick yell out to let other pilots know you need the runway.
- 14. A person or persons on the runway suspends all traffic except a dead stick landing. Call out loud and clear when entering the runway and when the runway is clear.

- 15. Helicopter and Quad flights are allowed on the Heli Pad area only, unless being flown for demonstration.
- 16. If other pilots are flying no hovering over the runway and keep your aerobatics for the ends of the runway.
- 17. Gliders should try to stay out of the Northwest Sky.
- 18. First Person View (FPV) is only allowed with a spotter. The aircraft must remain in visible view. FAA rules apply, as we are on Federal land.
- 19. If you are going to do a Maiden Flight or you feel you need to do some testing with no other planes in the air, announce your intentions. All pilots are required to stand down for 5 or 10 minutes while you do your test flight.
- 20. It is suggested that you set up your transmitter the same as those who you will be asking for help.
- 21. Electric planes should have a switch set up for throttle cut.
- 22. If you are not qualified to be a spotter who can take control of the airplane at least be ready to yell out if there is a problem.
- 23. Alcohol is forbidden, and no smoking in the pit area.
- 24. Children are not permitted beyond the spectator area unless under direct supervision of an adult or flight instructor.
- 25. Every member is a Safety Officer and has the right to ground an unsafe airplane or member who is flying in an unsafe manner. This action will be reported to a Board Member.
- 26. When in doubt of any rule, please ask!

Training and Safety: Transmitter Switch Setup

Our club safety rules suggest we all use a similar setup for transmitter switches and controls, in the event another pilot has to assist in flying or recovering our airplane. The recommended setup is shown below. The "in flight" switches are grouped on the left, so your right hand doesn't have to leave the primary control (right hand) stick. A Futaba transmitter is shown, but other transmitters are similar....you get the idea.

Switch positions should be "all forward and down" when the transmitter is angled in front of you, ready to taxi for takeoff. This is an easy safety check on configuration. As an operational note, it should be obvious that you should memorize all your switch locations so you can operate switches in flight WITHOUT looking at the transmitter. Taking your eyes off your airplane in flight is a VERY UNSAFE practice...don't do it!

See additional safety procedures on the club website.



When holding the radio at about a 45 degree angle every switch should be up or away from you before flying. Throtle Cut when not ready to fly should be down or towards you. Spektrum Radios should basically be set up the same way.

COACHELLA VALLEY R/C CLUB

THE PLACE TO GO!



Rise Up Hobbytown in Palm Desert is the place to go for equipment, parts, repairs, instruction and service. Please consider them as a first choice for your hobby needs. They are frequent sponsors of our Club events, community actions and charities. We are fortunate to have a viable hobby supplier in our area. Rise Up needs to be commercially successful to keep their doors open. Let's help them do that!

If you're new to the area or to Rise Up Hobbytown, here are info and directions:



77583 El Duna Court, Suite H (next to Desert Polymer Flooring), Palm Desert, CA

Directions: Hwy10, turn North on Washington St., Left at stoplight for Del Webb/Las Montanas Rd., follow street to intersection at Rise Up Hobbytown / Desert Polymer parking lot.

