

Flying Electrons - "Club Class"

Contestant Name
Contestant ID

Name	K-Factor	Flight 7	Flight 6	Flight 5	Flight 4	Flight 3	Flight 2	Flight 1
Contestant I.D.								
Takeoff	1	1	1	1	1	1	1	1
FREE Turn Around	0							
TRIM PASS	0							
FREE Turn Around	0							
Straight Flight Out	1	2	2	2	2	2	2	2
Half Reverse Cuban Eight	2	3	3	3	3	3	3	3
Straight Flight Back	1	4	4	4	4	4	4	4
FREE Turn Around	0							
Cobra	2	5	5	5	5	5	5	5
Half Cuban Eight	2	6	6	6	6	6	6	6
1 Horizontal Roll	3	7	7	7	7	7	7	7
FREE Turn Around	0							
One Inside Loop	3	8	8	8	8	8	8	8
FREE Turn Around	0							
TRIM PASS	0							
FREE Turn Around	0							
Straight Flight Out	1	9	9	9	9	9	9	9
Half Reverse Cuban Eight	2	10	10	10	10	10	10	10
Straight Flight Back	1	11	11	11	11	11	11	11
FREE Turn Around	0							
Cobra	2	12	12	12	12	12	12	12
Half Cuban Eight	2	13	13	13	13	13	13	13
1 Horizontal Roll	3	14	14	14	14	14	14	14
FREE Turn Around	0							
One Inside Loop	3	15	15	15	15	15	15	15
FREE Turn Around	0							
Landing Sequence	1	16	16	16	16	16	16	16
Total	30							

Flying Electrons Club Class – Maneuver Descriptions

The maneuvers in Club Class are no more difficult than those used during your pilot check-flight and are scored the same way every other pattern maneuver is scored. Don't worry, the judges know this is the first time many of you will be flying in a contest, so they won't be holding your feet to the fire with the judging criteria. The important thing is to have fun and let yourself be judged. Everyone starts pattern right where you are, and to have some of the best precision aerobatic pilots giving you positive feedback is priceless.

Essentially, all maneuver scores start as a 10, with deductions applied in half-point increments. The main criteria used to judge the degree of perfection are (in order of importance):

1. Precision of the maneuver.
2. Smoothness and gracefulness of the maneuver.
3. Positioning or display of the maneuver.
4. Size or dimensions of the maneuver relative to the maneuvering area, distance from the judges, and other maneuvers in the flight.

All of these must be met for a maneuver to be rated perfect. Don't worry, this isn't the National Championships. Just do your best.

Takeoff

Takeoff is scored as a ten or a zero. This isn't how the official rulebook describes it, but it's how we do it at our contests. Basically, if your plane gets in the air successfully, congratulate yourself. You just got your first "10".

FREE Turn Around

Trim Pass

FREE Turn Around

Following takeoff you get a free turn-around, a trim pass, and another free turn-around before you start being scored. The idea of the turn-around is to get yourself back on the same line you were flying just before the turn-around. You can do any kind of maneuver for this. Following your first free turn-around is your trim pass. If you've done your trimming homework you shouldn't require any adjustments, but this is when you'd make any last minute changes if needed. Lastly is another free turn-around. The most important thing about this turn-around is that it sets the stage for your first scored maneuver. This might be a good time to get some free practice in on the Half-Reverse Cuban Eight for later in the sequence. Above all, you should use this time to catch your breath and settle any nerves that may have popped up. Remember, you just got your first 10 moments ago, so you should be feeling pretty good about now.

Straight Flight Out

Your plane must be flown parallel to the flight line and flown in an absolutely straight and level path. Watch out for changes in heading (correct with rudder) and elevation changes. These will result in deductions.

Half-Reverse Cuban Eight

The Half-Reverse Cuban Eight, one of my favorites, is a scored turn-around maneuver. After you complete your Straight Flight Out maneuver, just pull back on the elevator until the plane reaches a 45 degree climb, which is much steeper than you think. Hold that path for a moment and roll to inverted.

Hold the inverted path for another moment and then pull back on the elevator to complete a 5/8 inside loop back to level flight in the opposite direction. The length of your 45 degree climb before and after the roll should be exactly the same length. You'll likely need to feed in some down elevator while inverted to hold a straight line.

Straight Flight Back

Straight Flight Back is essentially the same as Straight Flight Out. The important thing about it is that it be along the same line as the outgoing pass. Again, watch for changes in heading or elevation.

FREE Turn Around

Congratulate yourself. You've just completed your first sequence segment and have some time to catch your breath, just don't stop thinking. Use this opportunity to prepare yourself for what's next. Remember the wind is hardly ever straight down the runway, so use whatever kind of turnaround is needed to get your plane back on centerline.

Cobra

The Cobra is so-named because it's shaped like the hood of a cobra. It is a centered maneuver, meaning the middle of the maneuver is right in front of you and the judges. Following your free turn-around, establish straight and level flight and pull the elevator back to a 45 degree climb. Hold that line until the model is almost in front of you. Then ease off the elevator and throttle, and start pushing in some down elevator. Let the model ease over the top and continue to a 45 degree dive. Hold that line until the model is back to the same altitude that you started the maneuver and ease out of the dive.

Half Cuban Eight

The Half Cuban Eight is a scored turn-around maneuver. After completing the previous Cobra and re-establishing a nice level path, fly to the end of the box and pull back on the elevator to complete a 5/8 inside loop. Your plane should now be inverted on a 45 degree downline. Hold the inverted path for a moment and roll to upright flight (still on the 45 degree downline). Hold for another moment and pull back on the elevator to return to level flight. The length of your 45 degree downline before and after the roll should be exactly the same length. You'll likely need to feed in some down elevator while inverted to hold a straight line.

One Horizontal Roll

As with the Inside Loop, the Horizontal Roll is one of the first things you learn during your pilot training. It is also a center-maneuver. The center of the roll (when your plane is inverted) should be right in front of you and the judges. Maintaining heading and elevation is key to scoring maximum points. Having a well trimmed plane will reduce the number of adjustments needed throughout the maneuver.

FREE Turn Around

Ok, you just completed the second segment of your sequence. Take a deep breath and do any turnaround maneuver that'll get you back on centerline. Just one more maneuver to go before landing.

One Inside Loop

The Inside Loop is also a center-maneuver, meaning it's performed right in front of you and the judges. So, what could be easier than one of the first things you learned in your flight training? Pull back on the elevator and watch the plane go over the top, right? That will get you through the maneuver, but it'll cost you some precious points. The fact of the matter is that most loops you see are not round – they're shaped more like an egg or a figure "9". The key to getting maximum points on a loop is to keep the same radius throughout the entire loop. You'll need to ease off the elevator as you arc through the top

of the loop. This will flatten it out and get you well on your way to higher scores. The loop shouldn't be too tight either, but be mindful of your plane's power. Don't make the loop so big that you run out of power as you near the top.

FREE Turn Around

One more maneuver to go and you're done. Turn your plane around and get set up for your landing sequence.

Landing Sequence

As with the Takeoff sequence, the landing is scored as either a ten or a zero. Get your plane safely on the ground and you'll have another "10". Your caller will let you know if you're clear to land. There's no penalty if you have to go around again to avoid another plane that might be getting ready to takeoff or land. Be sure to call out your landing, just like you always do at the field.

What just took several paragraphs to describe actually happens relatively quickly. Therefore, we fly the Club Class sequence twice in succession. So, instead of landing, you simply start over with another Trim Pass and continue from there.

So, if you need anymore convincing, try on these Top-10 reasons for giving Pattern a try:

10. Learn to control the airplane, instead of the other way around.
9. Be able to put the plane in any attitude, at any point in the sky.
8. Learn the right way to trim your airplane.
7. Finally learn what that control surface called a "rudder" is used for.
6. Have a framework against which you can measure your progress.
5. Learn how to "let" yourself be judged, while picking up tips from some of the best RC pilots in the world.
4. Hang out with a great bunch of guys.
3. Enjoy the friendly competition of a pattern contest.
2. Learn how to fly in all kinds of conditions.
1. Have fun becoming the best that you can be, while gaining confidence in your piloting abilities.