

**BASIC**

# RMS

# AEROBATICS COMPETITION

## 2010

31 OCTOBER (SUN) 9.00am  
RMS TUAS WEST Flying Field

First Singapore Basic Aerobatics Workshop:  
Venue: RMS Tuas West Flying Field

Date: 24 Oct 2010

Time: 10-12pm

The invited speakers for this workshop will include experienced FAI judge, jury and pilots who have taken part in world FAI competitions.

The workshop is restricted to those who have signed up for the Basic Aerobatics Competition.



### Maneuver List:

- Take off
- 2 loops
- Inverted flight
- Outside loop
- Slow roll
- Cuban eight with 1/2 rolls
- Humpty bump
- Two turn spins
- Landing

**Show your Talents. Thrill the Audience.**

RMS warmly welcomes every modellers to participate in this aerobatic friendly meet. This contest is to encourage R/C pilots to get together and to share knowledge of R/C aerobatic flying.

All RC clubs and modellers are invited to participate in this competition.

For more information, please visit: [www.rms.org.sg](http://www.rms.org.sg)

THIS PLANE IS TOO BIG  
FOR THE COMPETITION!

NO HOVERING  
ALLOWED!



REGISTER BEFORE 30  
SEPTEMBER 2010

# RMS AEROBATICS COMPETITION 2010

31 OCT 2010 (SUN)

9AM

RMS TUAS WEST FLYING FIELD

Dear all pilots,

RMS warmly welcomes every modellers to participate in this aerobatic friendly meet. This contest is to encourage R/C pilots to get together and to share knowledge of R/C aerobatic flying. All RC clubs and modellers are invited to participate in this competition. This event will be held on 31 Oct 2010 at 9am, at RMS Tuas West Drive flying field.

**Venue:** RMS FLYING SITE AT TUAS WEST DRIVE (OPPOSITE RAFFLES MARINA)

**Entry fee:** Free for RMS members, \$20 for non-RMS members

Deadline for registration **30 September 2010**

## **Competition entry criteria**

MODEL is restricted to the following engine size:

1. Two stroke – up to 55 ( with muffler/pipe)
2. Four stroke – up to 110 ( with muffler/pipe)
3. Electric - up to 6-cells

## **Helpers**

Each pilot is allowed one caller during flight. Additional helper allow at starting box/ area.

## **Scoring**

Each competitor has 3 flights. The best of 2 will be taken for the final overall results and ranking.

Scores between 0 and 10 will be awarded for each maneuver and multiply by the K factor.

## **Execution of maneuver**

The maneuvers must be flown in the order as schedule.

Only one attempt for each maneuver allow in the flight schedule. Zero mark will be given if the schedule is not executed. Dropping any parts of the model during the flight will constitute a zero point for the entire flight. All maneuvers are to be executed in the centre of the flight line.

## **Maneuver list**

1. Take off
2. 2 loops
3. Inverted flight
4. Outside loop
5. Slow roll
6. Cuban eight with  $\frac{1}{2}$  rolls
7. Humpty bump
8. Two turn spins
9. Landing

## **Maneuver description**

### 1. Takeoff K=1

- The model is placed on the runway, takes off, and then turns 180 degrees toward the flight-line defined by upwind and downwind marker.
- ( Score = 0 or 10 )

### 2. Two consecutive loops K=3

- The model establishes an entry line and then performs two consecutive loops.

#### Downgrades

- Wings not level during loops
- Changes in heading during loops
- Loops not round
- Loops not superimposed
- Loops not centre
- Entry/Exit line different

### 3. Straight Inverted flight K=1

- The model performance a half roll to inverted, flies straight and level for 3 – 5 seconds and performance another half roll to upright position.

#### Downgrades

- Changes in heading and altitude
- Roll rates not constant.
- Inverted flight less than 3 seconds
- Wings not level during inverted flight.
- Entry/Exit line different

### 4. Outside Loop K=4

- Model enters from the Top and pushes 'down' to perform one outside loop.

#### Downgrades

- Wings not level during loops
- Change in heading during loops
- Loops not round
- Entry/Exit line different

5. Slow roll (3 -5 sec) K=3

- Model execute a slow roll in which inverted must be at the centre.

Downgrades

- Roll rate not constant during the roll. ( no pause)
- Changes in heading and or altitude
- The model does not roll exactly 360 degrees.
- The roll is completed in less than 3 seconds.
- Entry/Exit difference line

6. Cuban eight with ½ rolls K=3

- Model flies passes by you and pull in a 5/8 loop to a 45 degree down line, and at cross over point do a half roll and continues the 45 degree dive to entry altitude. Then pull into another 5/8 loop to a 45 degree down line, then a half roll at the cross over and pull level to the entry altitude to finish.

Downgrades

- Loops not round and of the same size and radius
- Changes in heading during loops, 45 degree straight lines and half rolls.
- Half rolls not superimposed or meet at cross over point.
- Entry/Exit line at different heading and altitude.

7. Humpty bump K=2

- The model start and end in a horizontal line. Pull up into a vertical up line, then into a half loop ( inside or outside loop), follow by a vertical down line and pull to level flight.

Downgrades

- Wings not level throughout the maneuver.
- Changes in heading during straight lines.
- Up and Down line not vertical
- Maneuver not centre
- Entry/Exit different

8. Two turn spins K=2

- The model begins and ends in a horizontal line. In order to spin the model must stall in a horizontal flight path with nose-up attitude increasing as the speed decreasing. The Nose drop as the model stall, as the nose drop, the wing also drops in the direction of the spin.

Downgrades

- Wings not level during entry and exit.
- Climbing flight path before stall
- Does more or less than two turns, 1 point per 15 degree deviation.
- Entry/Exit line different.
- The model does not stall or snap-roll into a spin – ZERO score.

9. Landing K=1

- At reduced power, the model executes a 180 degree level or descending turn to a downwind heading, flies a downwind leg then turns 180 degrees into the wind. Model flies a descending approach to the runway to touch down in the landing zone.

- (Score 0 or 10 )

## Maneuver list

1. Takeoff	K=1	6. Cuban eight with ½ rolls	K=3
2. Two consecutive loops	K=3	7. Humpty bump	K=2
3. Straight Inverted flight	K=1	8. Two turn spins	K=2
4. Outside Loop	K=4	9. Landing	K=1
5. Slow roll (3 -5 sec)	K=3		

### 1. Take off

### 2. 2 loops

### 3. Inverted flight

### 4. One Outside loop

### 5. Slow roll

### 6. Cuban eight with ½ rolls

### 7. Humpty bump no rolls

### 8. 2 turn spins

### 9. Landing

