## CATALOG





## FOREWORD

Thanks a lot for choosing our company developed and produced EXTRA-330 4channels proportional simulated 3D acrobatic remote control air-model, which particularly designed for middle and senior hobbies. Please read these instructions carefully and thoroughly before assembly and operation in order to use it more convenient for you. Also advise you to save this instructions appropriate for later reference when flying needs to be adjusted or serviced.

The EXTRA-330 remote control airmodel is developed and designed by well-experienced special person. It also in a maximum keeps EXTRA-330 original perfect looking and considered sufficiently the special requirements 3D free styles flying to airplane pneumatic looking design. The remote control airmodel also has equipped with powerful brushless motor system which was special designed for it and large capacity polymer Li-battery will offer you the best motive choice, bringing you into the exciting and endless fascination 3D free styles flying area.

## SPECIFICATIONS

Main wingspan: 960mm

Length: 897mm

Main-wing area: 19.33sq.dm

Wing loading: 32.07g/ sq.dm

Weight: 620g

Power system: 400 size inruner brushless motor and matched 8:1 gear-boxes

Power system's max traction: 1050g

Esc: sensorless 18amp

Propeller: sapac1365

Battery: 3 cells 11.1v1500mah lipo battery

Charger: input ac 110v-230v,output dc:12.6v for 11.1v 3cells li-po battery

R/C system: ppm-fm 4 channels proportional radio system

Servo: 9 gram micro (3 pcs)



## WARNING

Firstly please definitude a basic question that wireless remote control plane model is not just a children toy. It has some weight, and can fly more rapidness and more flying height. when flying, it also possess more powerful kinetic energy, and installed high speed rotating propeller before its head, All these enable it to have the suitable degree the risk, because all the incorrect operations of assembles, debugging and flight operate control have the possibility to create yourself or other people's injury accident. Our company and dealers shall not be liable for any damage or loss by operating improperly. So, while flying for the first time, please learn from those who have the flight experienced people so that can give you the proper guide when you assembles debugs as well as flies. Should better be you in carries on before the actual flight to understand first some airplanes as well as the flight basic general knowledge and carries on the certain time in the computer flight simulator the flying training to be able first the basic familiar remote control flight elementary operation main point, like this will enable you well to grasp the actual flight quickly to reduce possibly creating not essential loses.

## REMOTE CONTROL PLANE MODEL ASSOCIATION

To operate and control the simulated 3D remote control plane model need the extremely high operation skill, if you are the initial contact remote-control model movement beginner, suggested you join local the remote-control model movement association or from the exclusive agency where you purchase to request them to help you to grasp the basic flight main point, obtains the study operation skill and the primary service debugging experience by enables your remote control flying activity safe smooth carrying on, at the same time the partial remote-control model movement association also provides the specialized flying field as well as the flight accident injury insurance for you, enables you not to have the extra worries during experience flight joyful, and at the same time provides the populace by the basic safety control.



## FLIGHT SAFETY INSPECTION ITEM

1: Before each time flies please first inspects your transmitter as well as the receiver battery voltage whether in can guarantee the flight the normal condition

2: When use your remote control device must observe to turn on the transmitter first then put through the receiver battery plug the order, same when turn off the plane must observe after draws out the receiver battery plug then close the transmitter the order, and should form the habit, not the correct switch machine possibly makes the receiver to receive the disturbance accordingly cause the airplane to lose the control the situation and therefore is possible causes to own as well as other people body injury.

3: Each time before flying, please confirm the frequency is different from you if there is other airplane flying near, otherwise which will be cuase interference and have the danger of lose control.

4:Each time before flying, please confirm all the servo pole has bolt lock, and if all the rudder has adjust exactly stands in their proper position.

5:Before flying please check whether all rudder movement is normal, direction is right, journey is appropriate and the accelerograph control is exact and agility enough.

6: Avoid flying under the meteorological conditions having the rain as well as the wind power surpasses 3 levels, lest creating the out of control danger

7: The flight air zone scope should limit in the visual detection can

EXTRA BBOL



recognize airplane flight attitude scope clearly, at the same time have to avoid approaching yourself as well as the vehicles and surrounds.

8: Let the airplane not surpass 10 minutes in the flight to prepare to descend lest the power weakens or loses the power suddenly but to have the danger. due to the dynamic system full charge operating time is about 10 minutes, therefore your each time flight time not suitable excessively long.

9: The brushless motor dynamic system start performance not to be generally good, therefore when you in control airplane accelerator sticker should pay attention must achieve as far as possible gently prohibited continuously crude suddenly, like this possibly creates the dynamic system instantaneous to surpass the load to damage.

10: To be a competent remote control flight enthusiast should have the security idea and the responsible manner.

## FLIGHT ENVIRONMENT LIMITS

1: Carries on the remote control flying activity as far as possible in the approval location, and observes local the location use rule.

2: Do not in the high-voltage tower, the railroad peripheral carry on the remote control flying activity, the high tension cable electromagnetic radiation is possible to disturb the remote control system to create the out of control danger.

3: Do not carry on the remote control flying activity for a long time in the seashore as far as possible, the seashore high salt mist air environment possibly creates the part to corrode and the remote control system expires.

4: Don't carry on the remote control flying activity on the path which already was open to traffic, lest created the injury situation.

5: Don't carry on the remote control flying activity in the park, the parking lot, around the personal fishery or the civilian airport, lest injury other people, violates the correlation laws and regulations or any kind of dispute which plane crashes caused.





## THE INSPECTION PROCEEDINGS BEFORE FLY

1: Before each time flies please carefully inspects the airplane each spare parts whether perfect and work well, the remote control device works whether normally, power battery voltage whether normal, and each rudders movement is whether flexible.

If the component of the airmodel loose and fall off, it would stop flying. Fasten the loosen component and exchange for a new one.

2: Put your airmodel into a dry and ventilated circumstance. Avoid to touching greasiness or organic solvent, illuminating of sunshine and keeping a distance from heat source.

## THE USAGE AND MAINTAIN OF LIPO BATTERY NEEDING ATTENTION:

1: Due to Lipo battery belonging to soft-package, we must operate battery carefully so as to keep the quality of battery harmlessly.

2: Prohibition of using pointed projections to pierce the battery, opening or damaging seal-side, bending the polar piece, putting the battery into water, keeping away from heat source. Prohibition of welding the battery. Prohibition of putting the battery into microwave or high pressure container. Prohibition of using the damaged battery.

3: Prohibit short circuit at any time. If happen, it would harm battery seriously.

4: Prohibit from charging the battery by unset charger. It will harm battery seriously and burn heavily even exploit.

5: If the battery is not used long-term, it would discharge. Then would do harm to battery's quality. You had better charge the battery on a regular time schedule to maintain voltage above nine volts to avoid discharging.





## COMPLETE PROCEEDINGS FOR ASSEMBLY

1

1: Take out the parts of body and undercarriage from package, insert main undercarriage in slot placed on main undercarriage before battery frame.

2

2: Screw the fixed bolt of cockpit.push ahead the body shell lightly,and take down the front cabin.

3

3: Take out body set,put aileron ,servos and signal system in receiver,aim at all bolt of wings to relevant socket of body of airplane and insert. Use special nylon bolt to complete assembly of wings in relevant nut seat

4

5

4: Take out stabilizer, tear the safeguard layer allotted with protection ,and stick stabilizwer on relevant tail part of body

6

5: Take out vertical empennage, tear the safeguard layer allotted with protection, and stick vertical empennage on relevant tail part of body

7

6: To complete the tail wing, fixing 1.7*10 screw placed on the accessories bag in the box assemble hole in plastic bracket of tail wing.

8





7: Put tail wheel rocker on turing tail rocker and fasten it in rudder with screw.


5

8: Adjusting moderately collet to rectify the length of steel wire in tail wing and button the clollet rectified in triangle rocker on the face of tail wing.


10

9: Set up seat cabin and fasten it with screw

11

8

EXTRA 330L



## BEGINNING DEBUGGING AND TRAINING:

The set of the remote controller's channel:

Picture one: Eurasia standard: 1 aileron 2 elevator 3 throttle 4 rudder

Picture two: America standard 1, aileron 2 throttle 3 elevator 4 rudder


13-1


13-2

1: Open the receiver box cabin, and insert signal wire of aileron and servo into the first channel socket . Pay more attention to the direction of socket keep in unanimity with other three sockets.

2: Install the transmitter and battery , and then open the transmitter.Open the cabin of the battery in the fuselage as well as the upside canopy in fuselage, put the wire of battery and connector into the ESC cabin via hatch of battery cabin. Connect battery with power wire of ESC .put the battery into relevant cabin and then lock up the cabin.

3: Before leaving the factory we have done testing. As circuit make contact, it will come back to neutral place automatically. If the direction of servos have warp,we can adjust relevant

4: You also can rotate into or out clampt change the length of operating steel wire to rectify the direction of servos and make it in correct place.

5: If you are a novice in flying, I suggest you make collet fasten to inside hit of triangle rocker on the servo.It is convenient for you to operate the aircraft fluently.





# THE SPARE PARTS OF THE PRODUCT BILL

1: Main fuselage (1 set) including has assembled EPS fuselage and the revertex components, brushless motor and the electronic speed control, the remote-control receiver and 2 tail wings servo as well as the operation steel wire module

2: Mainwing (1 set) including EPS mainwing and reverted components, aileron servo, aileron operation steel wire module

3: Stabilizer (1 set)

4: Vertical tail wing(1 set)

5: Main langing gear: (1 set)

6: Extra propeller (1 pcs)

7: Battery: (1 cell) specification 1500mah-11.1V

8: Special-purpose charger (1 set) 12.6V special-purpose charger

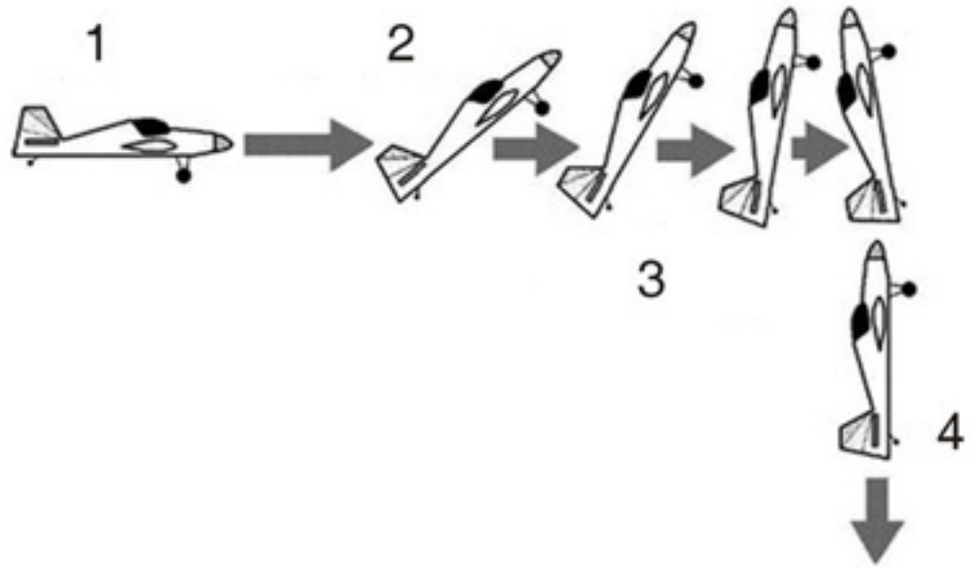
9: R/C transmitter: PPM-FM 4channels proportional remote control

10: Accessories pack: 1.7*10 screw(4pcs),nylon bolt M4*30 (1pc), clamp (2pcs), screwdriver (1pc)

## APPENDIX:

3D acrobatic remote control technology illustration.it is the same with radio of Europe and Asia standard

1：(Wall)



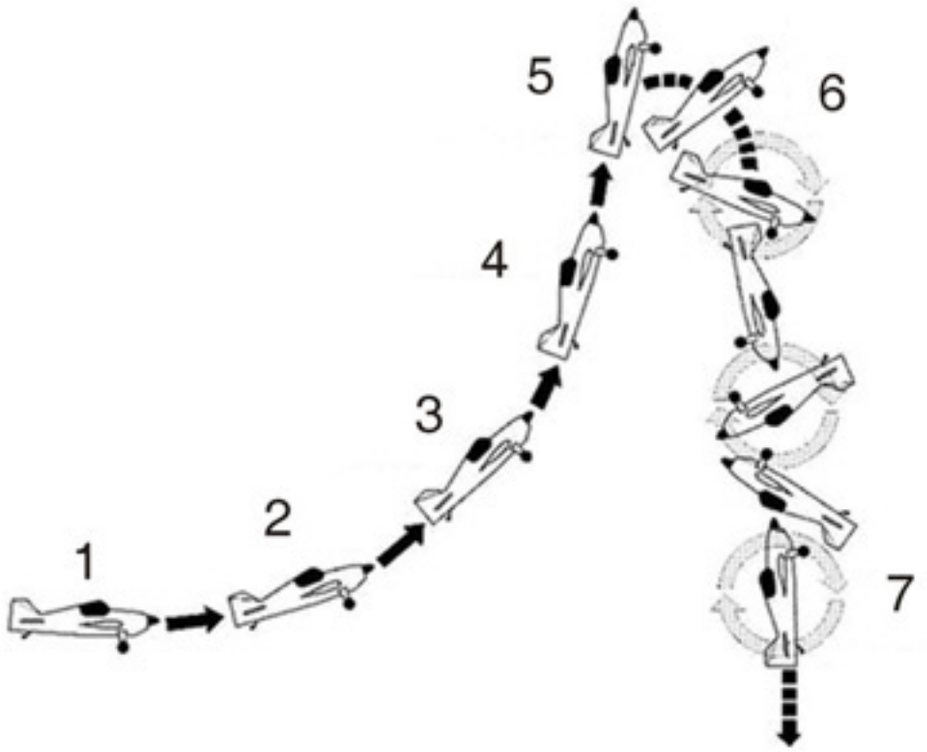

1: Decrease throttle and flying slowly to enter in the movement

2: Increase throttle and pull elevator stick quickly

3: After rising the head of plane decreasing throttle quickly

4: Keep position and falling vertically

2：(Water Fall)




1: Keep a certain altitude and straight line flying with high speed to enter in

2: Pull rudder stick forward to rise the head of plane

3: Decrease throttle

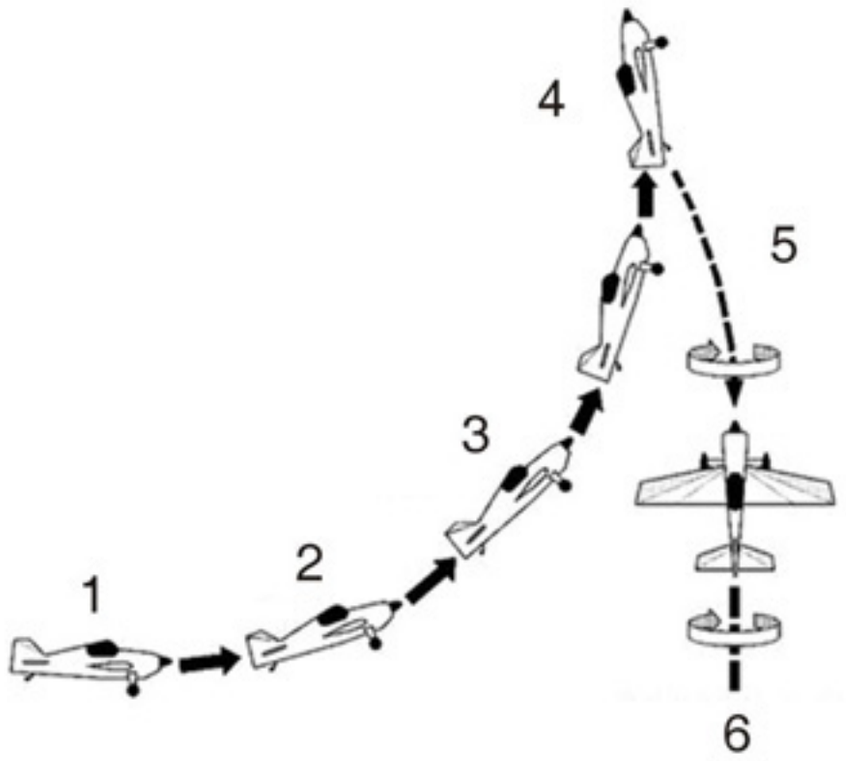
4: Ready to make circular flying vertically

5: Pause a while to push rudder stick forward quickly and keep full throttle

6: Rolling to adjust direction of head of the plane

7: Rolling quickly and falling

3：(Torque Roll)




1: Keep altitude and flying smoothly to enter in movement

2: Pull rudder stick to rise the head of plane

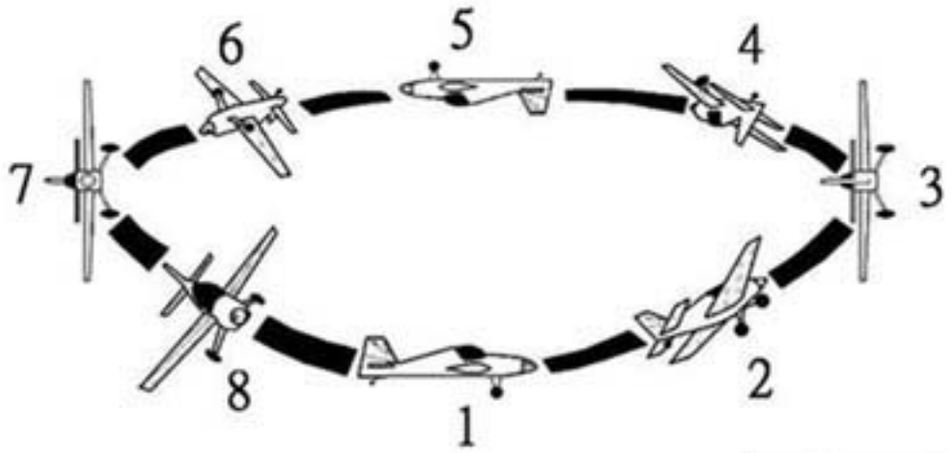
3: Gradually cut down the throttle

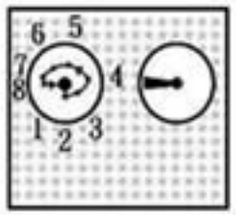
4: After making circular flying making the plane look back a lot

5: Adjust throttle and reduce height

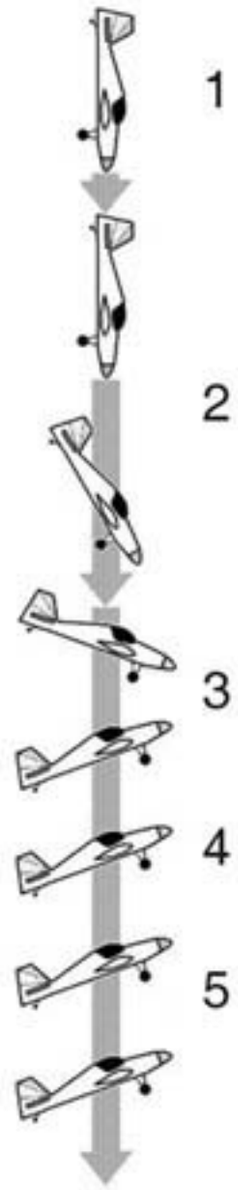
6: Body turn left slowly with a certain speed

4：(Rolling Loop)




5：(Parachute)



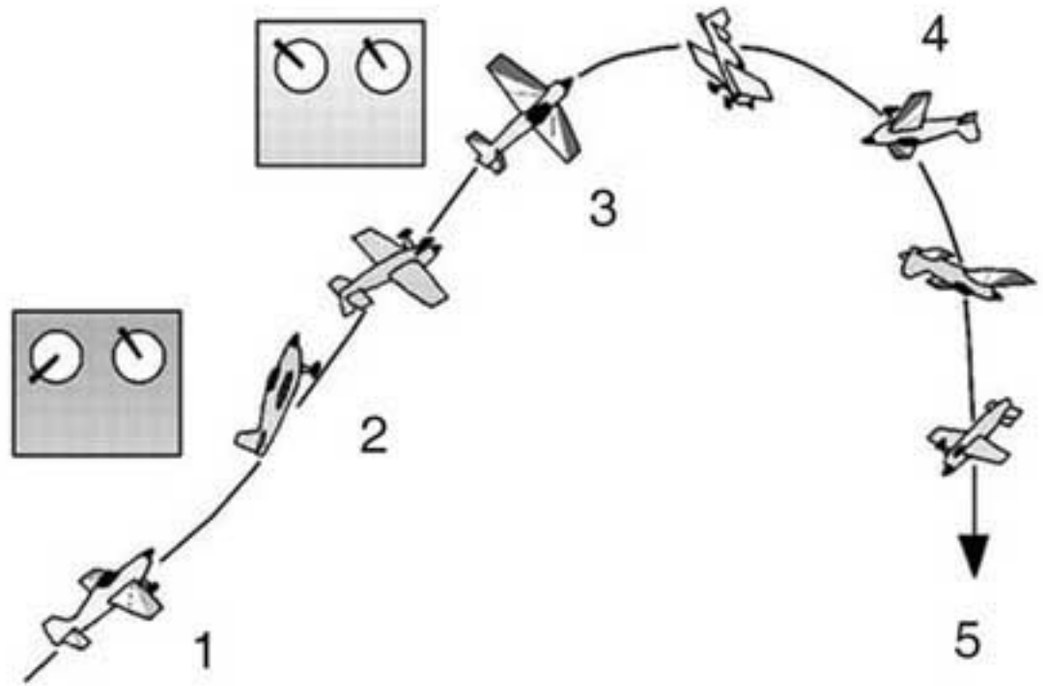

1: Cut down throttle stick in high sky to make.diving vertically

2: Full throttle and push rudder stick forward for a while

3: Decrease throttle and keep attacking pose

4: Adjusting throttle

5：(Lomcevak)




1: Wave elevator stick on the left hand with angles of 45 degeree left aileron roll and rotate

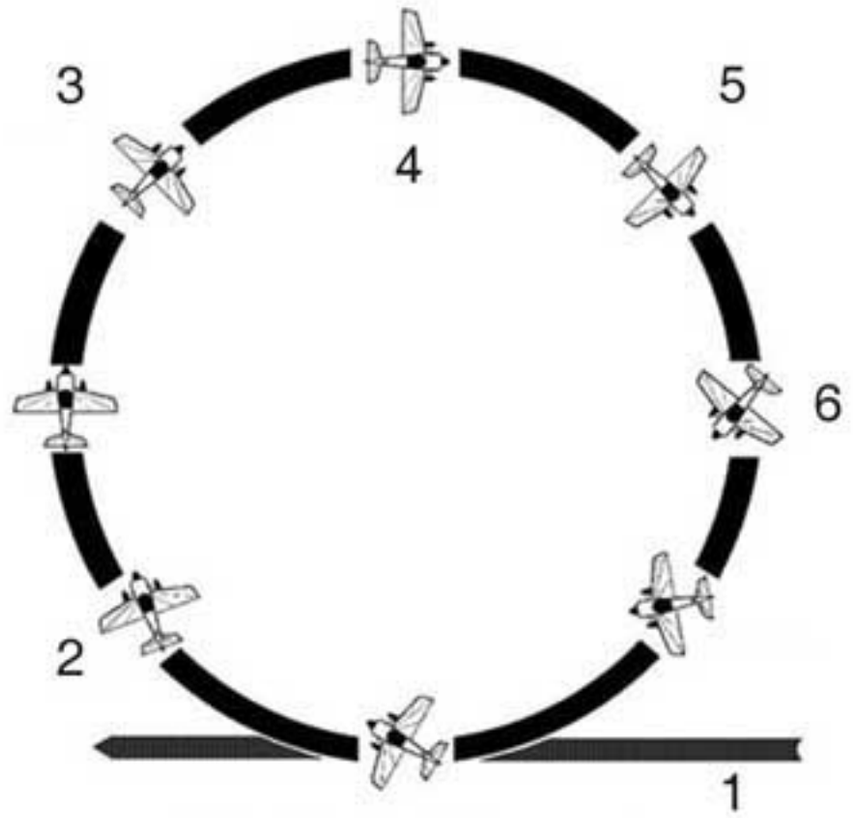
2: Push ruder stick

3: Rolling down and making circular flying at the same time

4: Flying up and down and rotating

5: Fly up and down and spin

7：(Knife-wdge loop)




1: Flying side and enter in the movement

2: Full throttle and push rudder stick forward

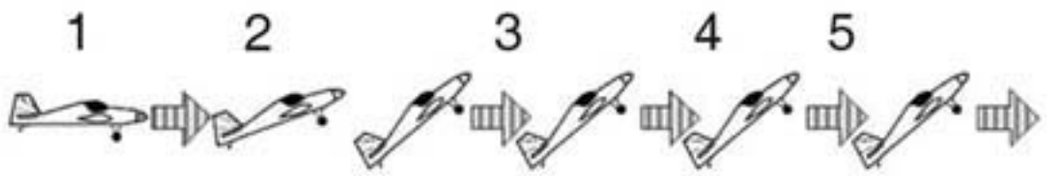
3: Full throttle and gradually decrease rudder stick on left side

4: Decrease throttle and come back rudder stick

5: With a bit little throttle and fall down naturely

6: Full throttle and push rudder stick right

8: (Harrier)




1: Keep a certain speed and enter in the movement

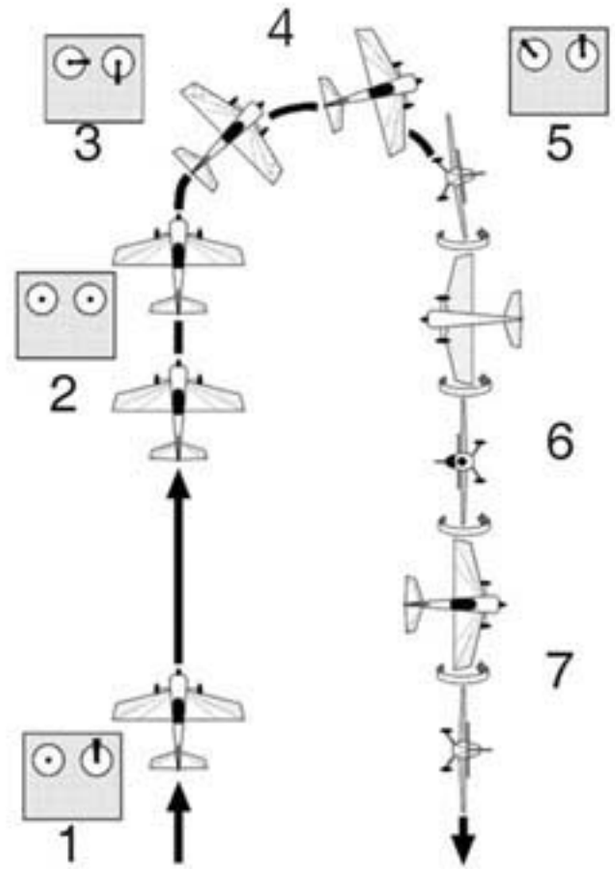
2: Pull rudder stick and adjust throttle

3: Keep pulling rudder stick

4: Keep altitude

5: Remain attacking pose

9: (Knife-edge spin)




1: Flying up vertically 2: Decrease throttle

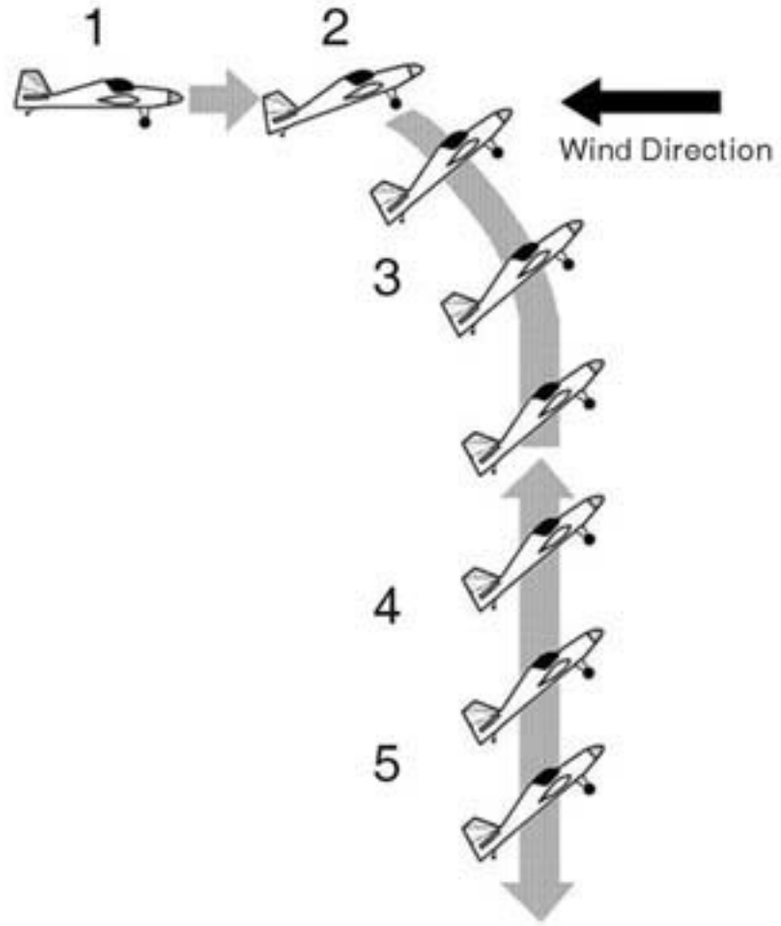
3: Make full trim on right side and stop throttle 4: Go forward without speed

5: Full throttle, push up stick completely and keep full trim on left side

6: Keep rotating speed via throttle

7: Rotating quickly and dropping

10：(Elevator)



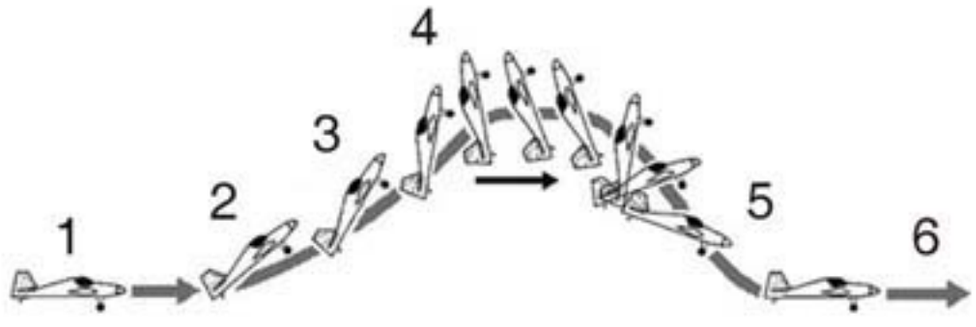

1: Keep a certain speed and enter in the movement

2: Push rudder stick and stop throttle to make the head of plane look up

3: Keep position of attacking

4: Adjusting throttle and keep state of attacking

11：(Cobra)




1: Keep a certain speed and ready to the movement

2: Full throttle and pull stick

3: Make the plane look up

4: Adjust throttle quickly and keep the head of plane look back a little

5: Increase throttle and push stick

6: Pull stick and remain position