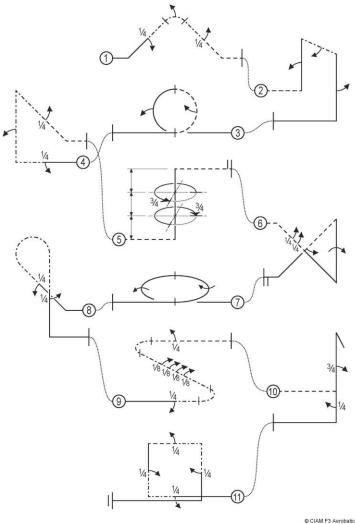
### Class F3P Radio Control Indoor Aerobatic Model Aircraft



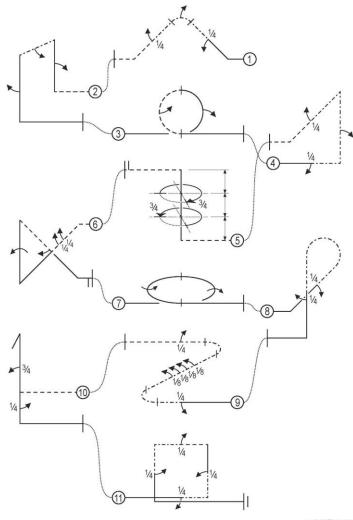
Preliminary Schedule F3P-AP 23 (2022-2023)

#### PRELIMINARY SCHEDULE AP-23 (2022-2023)



CIAM F3 Aerobatics Drawings by Ken Hirose Oct. 2020

#### PRELIMINARY SCHEDULE AP-23 (2022-2023)

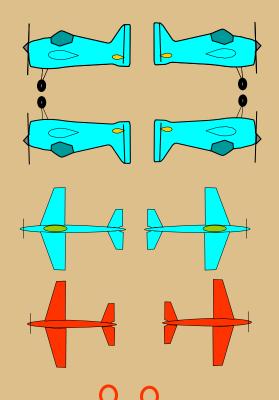


CIAM F3 Aerobatics Drawings by Ken Hirose Oct. 2020

#### **Take-off procedure**

( not judged, not scored )

### **Explanations:**



Aircraft upright

Aircraft inverted

Aircraft in Knife Edge View from Top

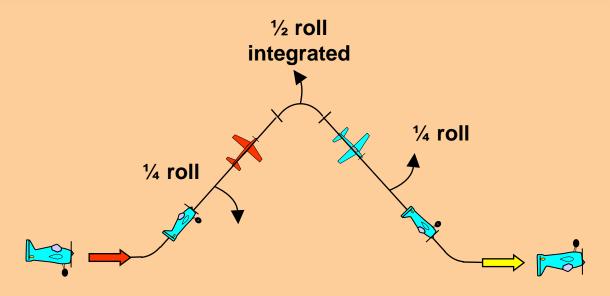
Aircraft in Knife Edge View from Below

Reference points

#### Safety line



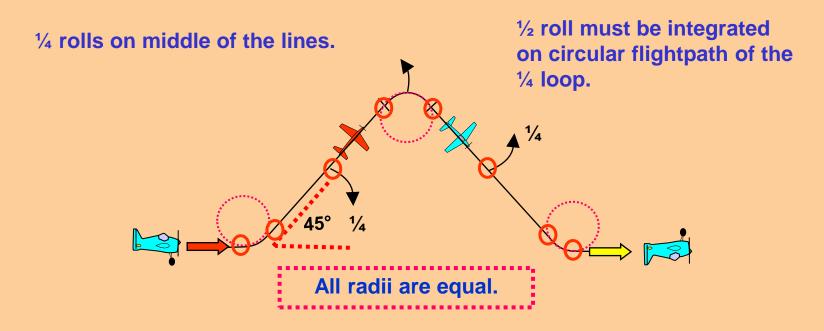
## AP 23.01 Pyramid with quarter roll, half roll integrated, quarter roll



From upright, pull though a one eighth loop into a forty-five degree upline, perform a quarter roll, perform a quarter knife-edge loop with integrated half roll into a forty-five-degree knife-edge downline, perform a quarter roll, push through a one eighth loop, exit inverted.



## AP 23.01 Pyramid with quarter roll, half roll integrated, quarter roll

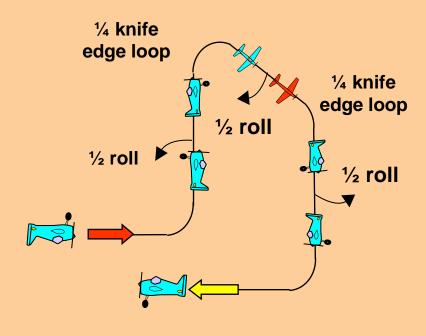


Entry and exit must be at the same altitude.

During the knife edge the wing must be in the vertical plane.



#### AP 23.02 Crossbox Top Hat with half roll, half roll



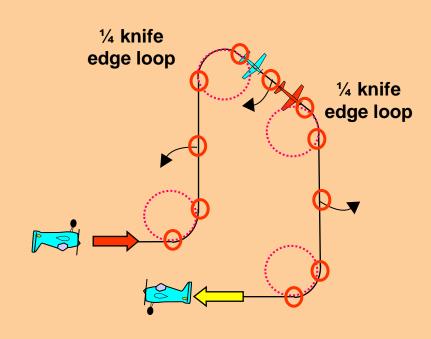
From inverted, push through a quarter loop into a vertical upline, perform a half roll, perform a quarter knife-edge loop into a crossbox knife-edge flight, perform a half roll, perform a quarter knife-edge loop into a vertical downline, perform a half roll, pull through a quarter loop, exit upright.



### AP 23.02 Crossbox Top Hat with half roll, half roll

½ rolls on middle of the lines.

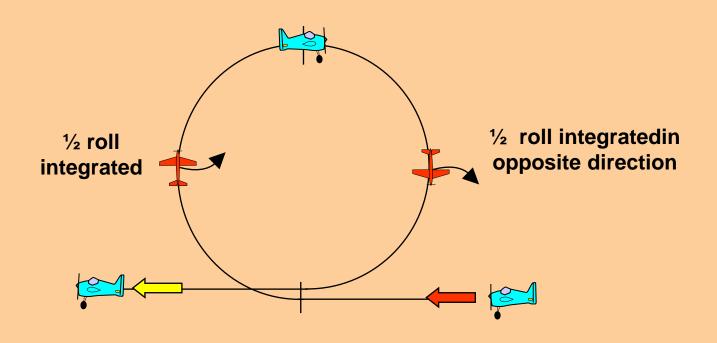
During the knife edge the wing must be in the vertical plane.



All radii are equal.



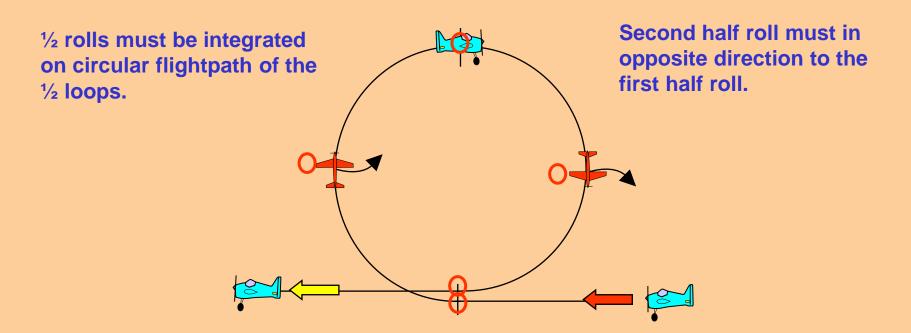
## AP-23.03 Loop with half roll integrated, half roll in opposite direction integrated



From upright, pull through a loop while integrating a half roll into the first 180 degrees of the loop and a half roll in opposite direction to the first half roll into the second 180 degrees of the loop, exit upright.



## AP-23.03 Loop with half roll integrated, half roll in opposite direction integrated

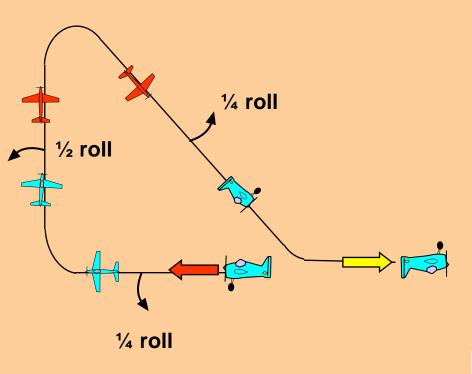


Entry and exit must be at the same altitude.

Loop must be round.



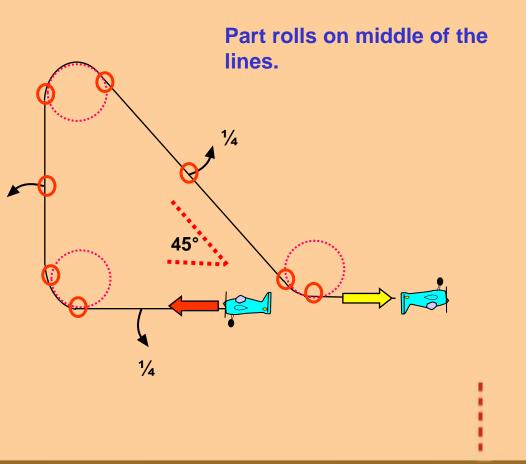
### AP-23.04 Shark Fin with quarter roll, half roll, quarter roll



From upright, perform a quarter roll into knifeedge flight, perform a quarter knife-edge loop into a vertical upline, perform a half roll, perform a three eighths knife-edge loop into a forty-five degree downline, perform a quarter roll, push through a one eighth loop, exit inverted.



### AP-23.04 Shark Fin with quarter roll, half roll, quarter roll

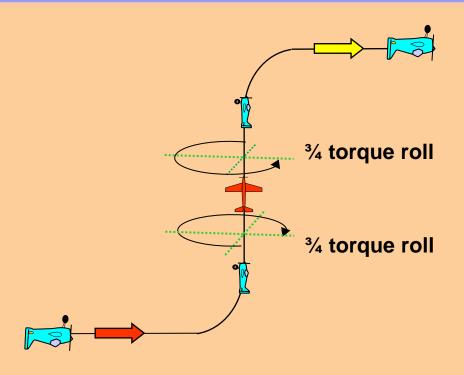


During the knife edge the wing must be in the vertical plane.

All radii are equal.



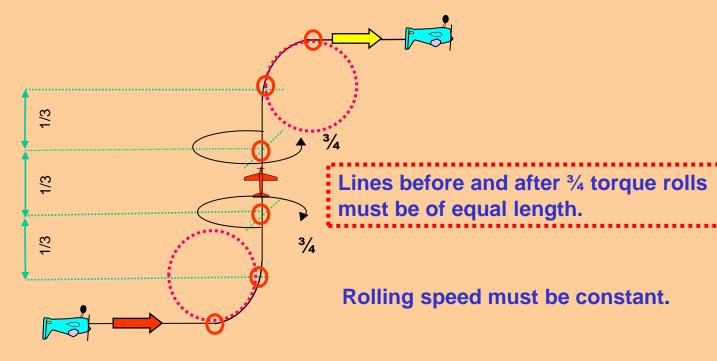
### AP-23.05 Three quarter Torque Roll, Upline, three Quarter Torque Roll in opposite direction



From inverted, push through a quarter loop into a vertical upline, perform a three quarter torque roll, followed by a vertical upline, perform a three quarter torque roll in opposite direction to the first torque roll, pull through a quarter loop, exit inverted



## AP-23.05 Three quarter Torque Roll, Upline, three Quarter Torque Roll in opposite direction

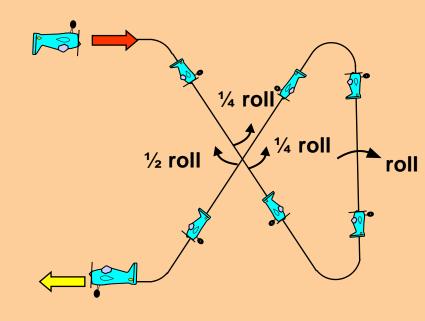


Absence of a hover = zero.

All radii are equal.



# AP-23.06 Half Hourglass with two consecutive quarter rolls, roll, half roll



From inverted, pull though a one eighth loop into a forty-five-degree downline, perform consecutively two quarter rolls, pull through a three eighths loop into a vertical upline, perform a roll, pull through a three eighths loop into a forty-five-degree downline, perform a half roll, pull through a one eighth loop, exit upright.

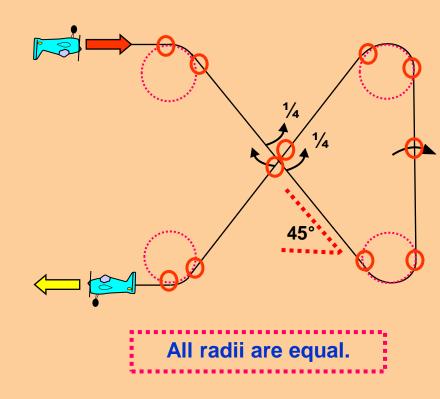


# AP-23.06 Half Hourglass with two consecutive quarter rolls, roll, half roll

1/4 rolls centered on middle of the line.

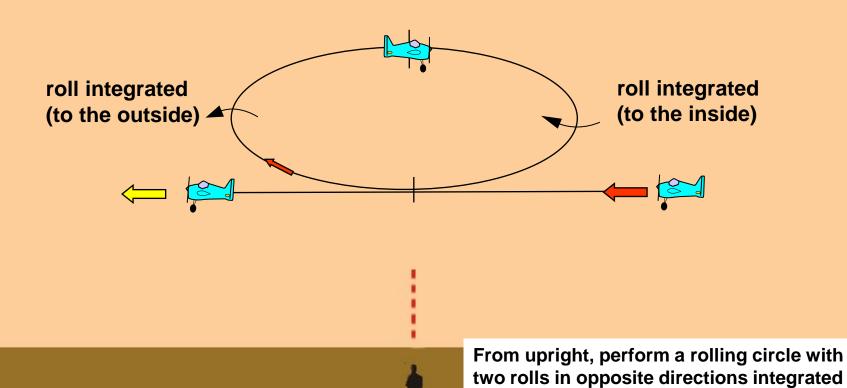
Roll on middle of the line.

½ roll on middle of the line.





#### AP-23.07 Rolling Circle with two rolls in opposite directions

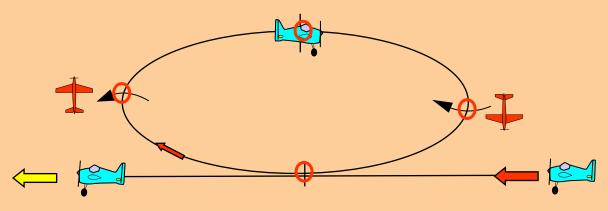


(first roll to the outside), exit upright.

### AP-23.07 Rolling Circle with two rolls in opposite directions

Roll rate must be constant.

Roll reversal must be immediate.



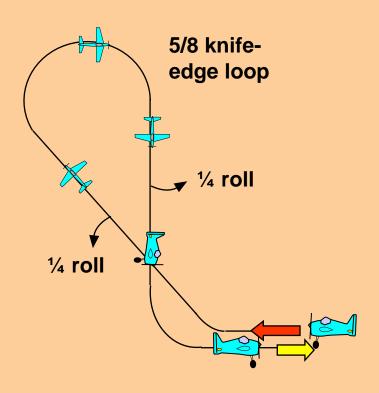
First roll must be to the outside.

Rolls are integrated on circular flightpath and must be in opposite direction.

Circle must be of equal and constant radius and must be flown at the same altitude.

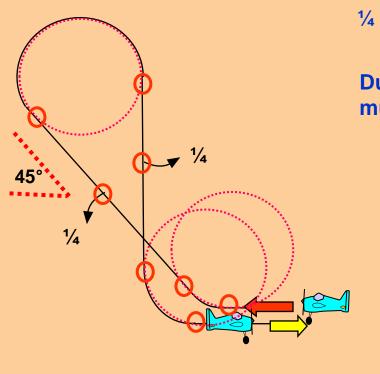


#### AP-2308 Figure ET with quarter roll, quarter roll



From upright, pull through a one eighth loop into a forty-five degree upline, perform a quarter roll, perform a five eighths knife-edge loop into a vertical downline, perform a quarter roll, pull through a quarter loop, exit upright.

#### AP-23.08 Figure ET with quarter roll, quarter roll



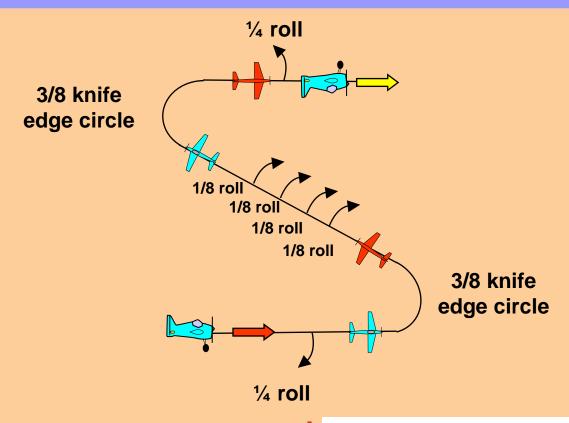
1/4 rolls on middle of the lines.

During the knife edge the wing must be in the vertical plane.

All radii are equal.



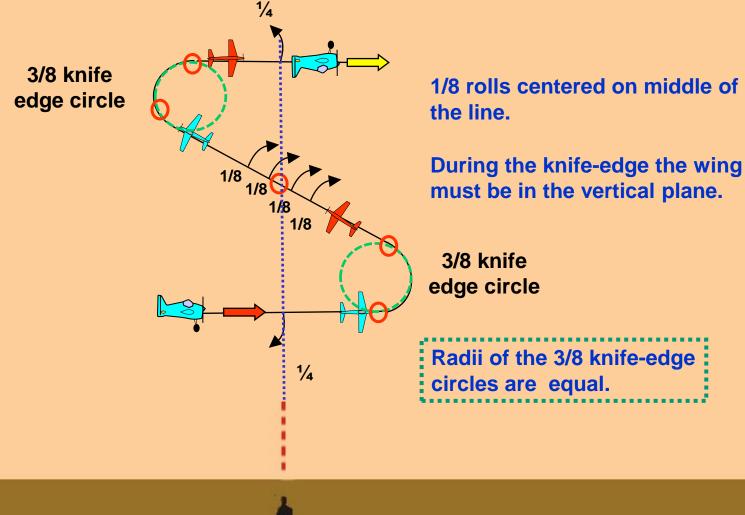
## AP-23.09 Crossbox Figure Z with quarter roll, four consecutive one eighth rolls, quarter roll



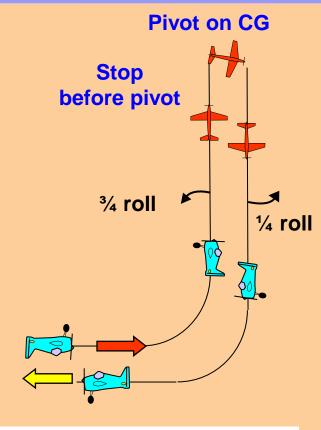
From upright, in the center perform a quarter roll into knife-edge flight, push through a three eighths knife-edge circle into a forty-five degree cross box line, perform consecutively four one eighth rolls, push through a three eighths knife-edge circle, perform a quarter roll, exit inverted.



## AP-23.09 Crossbox Figure Z with quarter roll, four consecutive one eighth rolls, quarter roll



### AP-23.10 Stall Turn with three quarter roll, quarter roll



From inverted push through a quarter loop into a vertical upline, perform a three quarter roll, perform a stall turn into a vertical downline, perform a quarter roll, pull through a quarter loop exit upright.

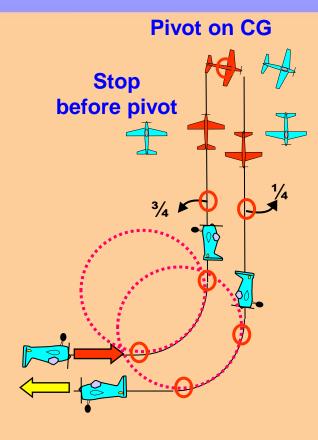


### AP-23.10 Stall Turn with three quarter roll, quarter roll

34 roll and 14 roll on middle of the line.

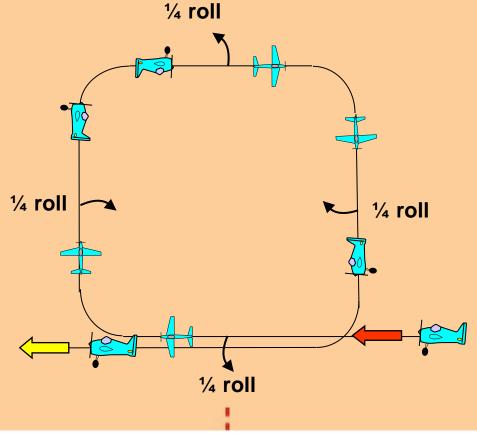
Two wing spans or more – zero points!

All radii are equal.





## AP-23.11 Square Loop with quarter roll, quarter roll, quarter roll

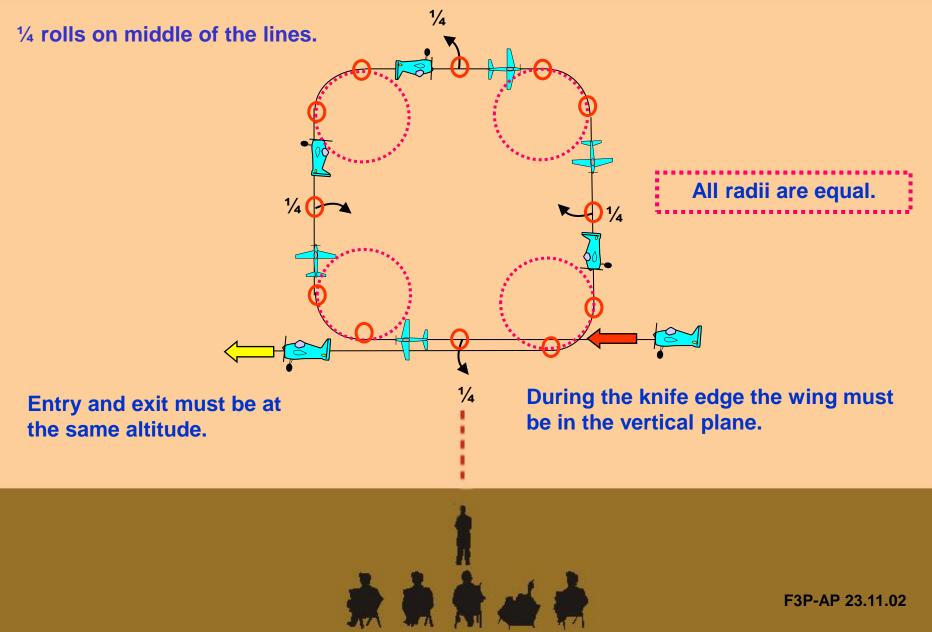


From upright, in the center perform a quarter roll into knife-edge flight, perform a quarter knife-edge loop into a vertical upline, perform a quarter roll, pull through a quarter loop, perform a quarter roll, perform a quarter knife-edge loop into a vertical downline, perform a quarter roll, pull through a quarter loop, exit upright.

(Note: The manoeuvre is finished when the aircraft has crossed the center line.)



# AP-23.11 Square Loop with quarter roll, quarter roll, quarter roll



### Landing sequence ( not judged, not scored )

### Forget WHO is flying

(friend, rival, countryman, flier from other nation)

### Forget WHAT is flying

### LOOK ONLY AT LINES DESCRIBED ....

(and the precision, smoothness, positioning, and size)

#### **Bob Skinner**



© Peter Uhlig, October 2021