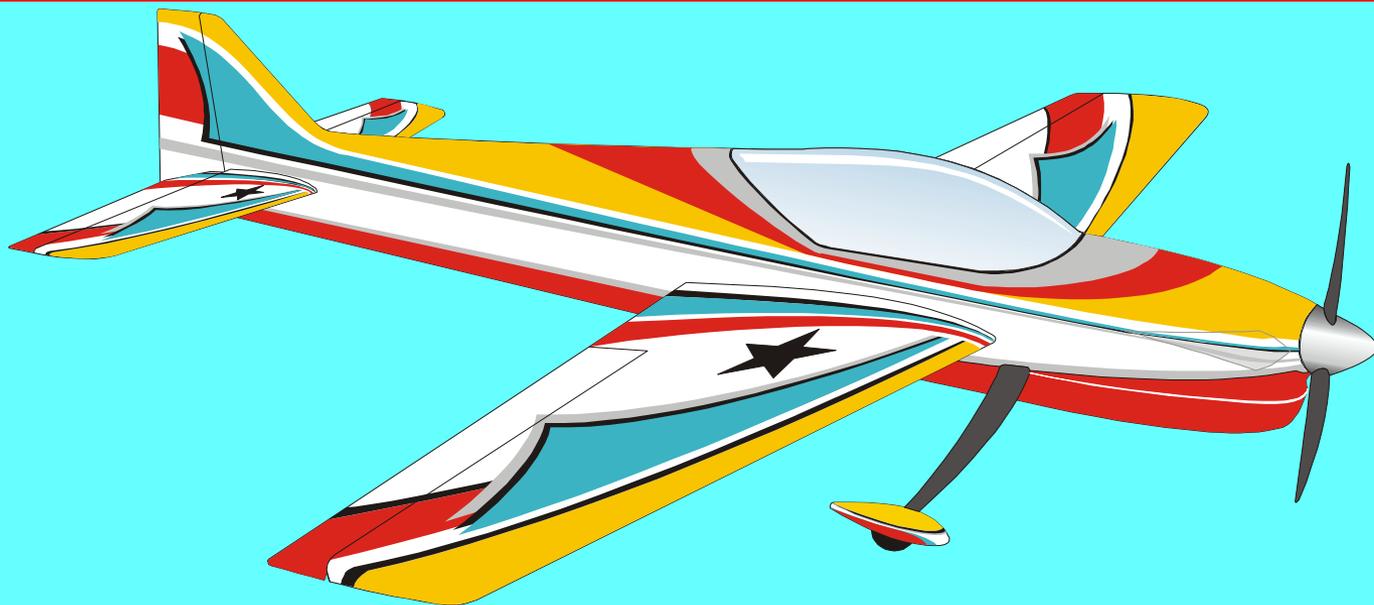


# Flying and Judging F3A

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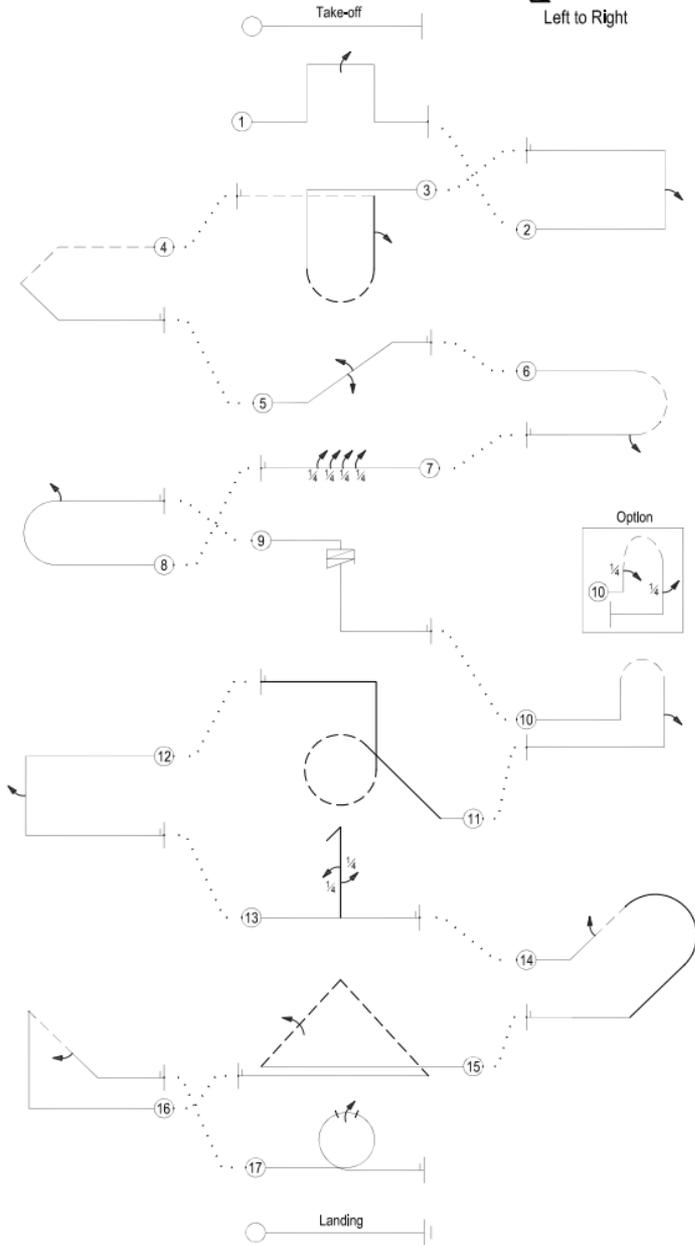


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**SCHEMATIC MANOEUVRE ILLUSTRATIONS**  
**SCHEDULE - ADVANCED**

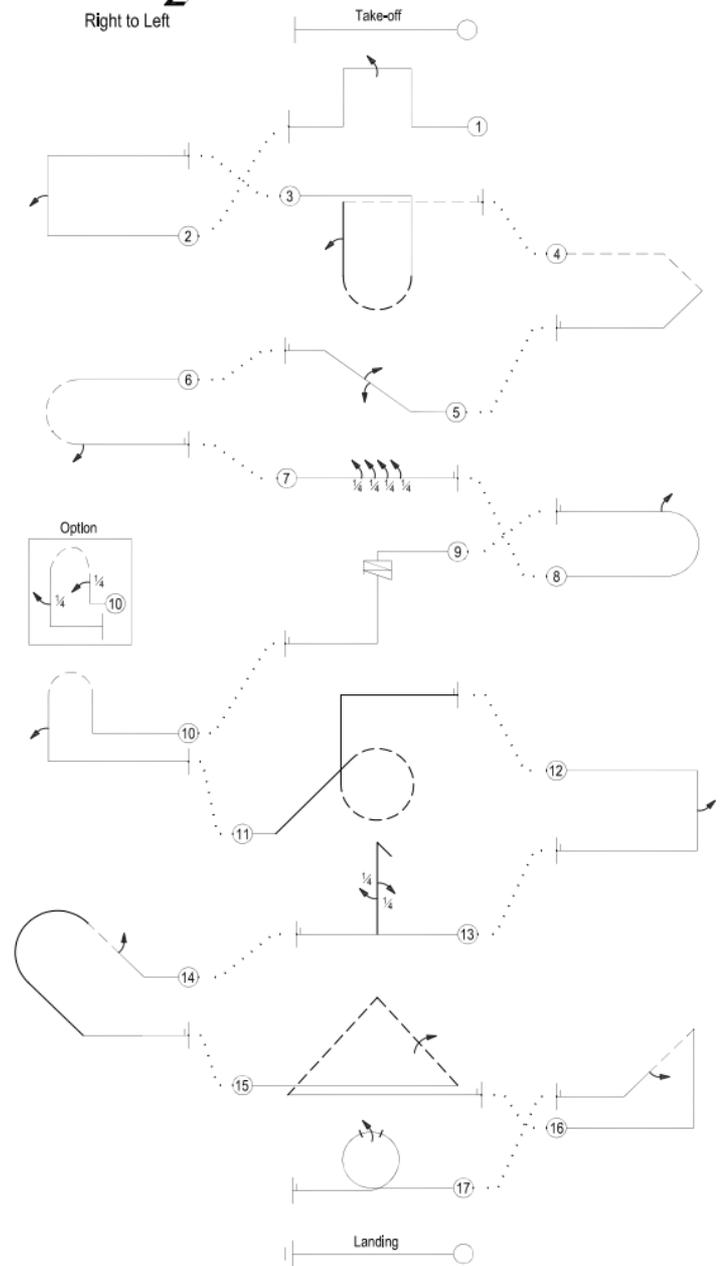
ADVANCED SCHEDULE  
(2021-2023)

Direction of wind  
Left to Right



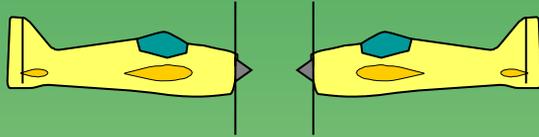
ADVANCED SCHEDULE  
(2021-2023)

Direction of wind  
Right to Left

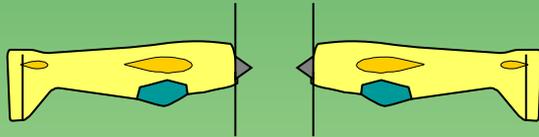




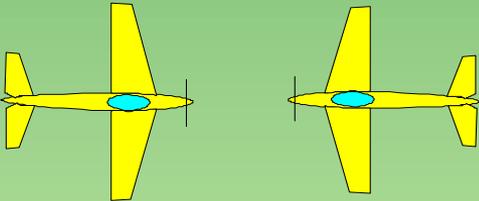
# Explanations:



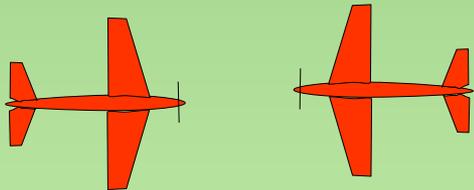
**Aircraft upright**



**Aircraft inverted**



**Aircraft in Knife-Edge  
View from Top**

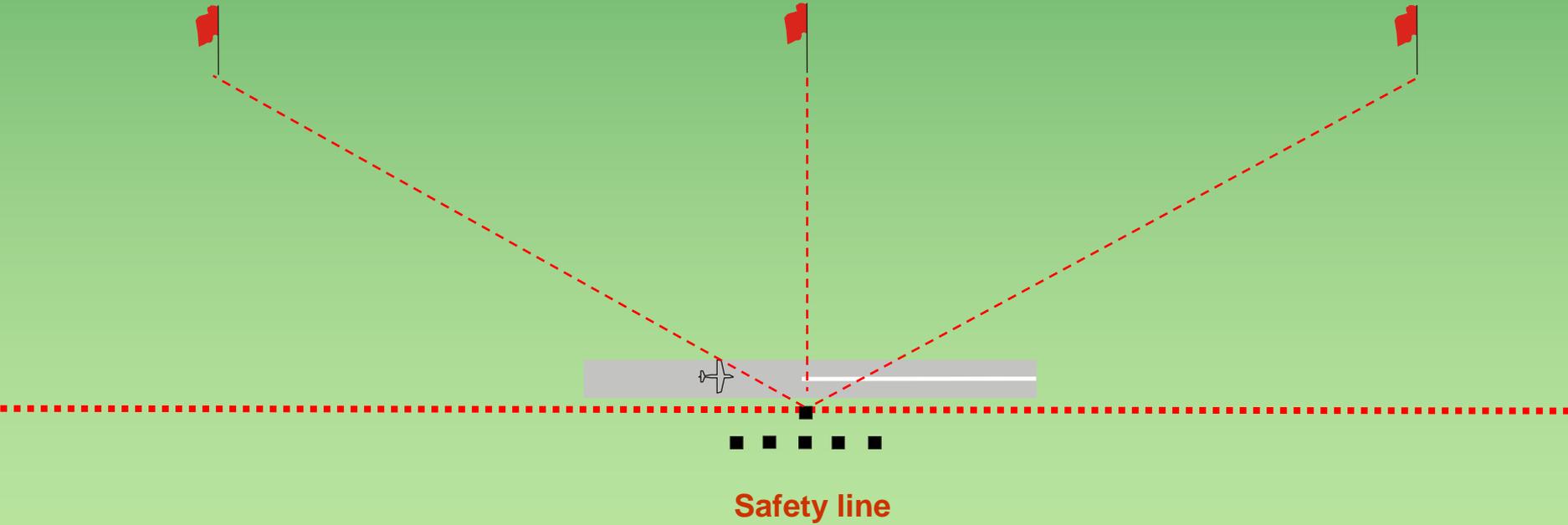


**Aircraft in Knife-Edge  
View from Below**



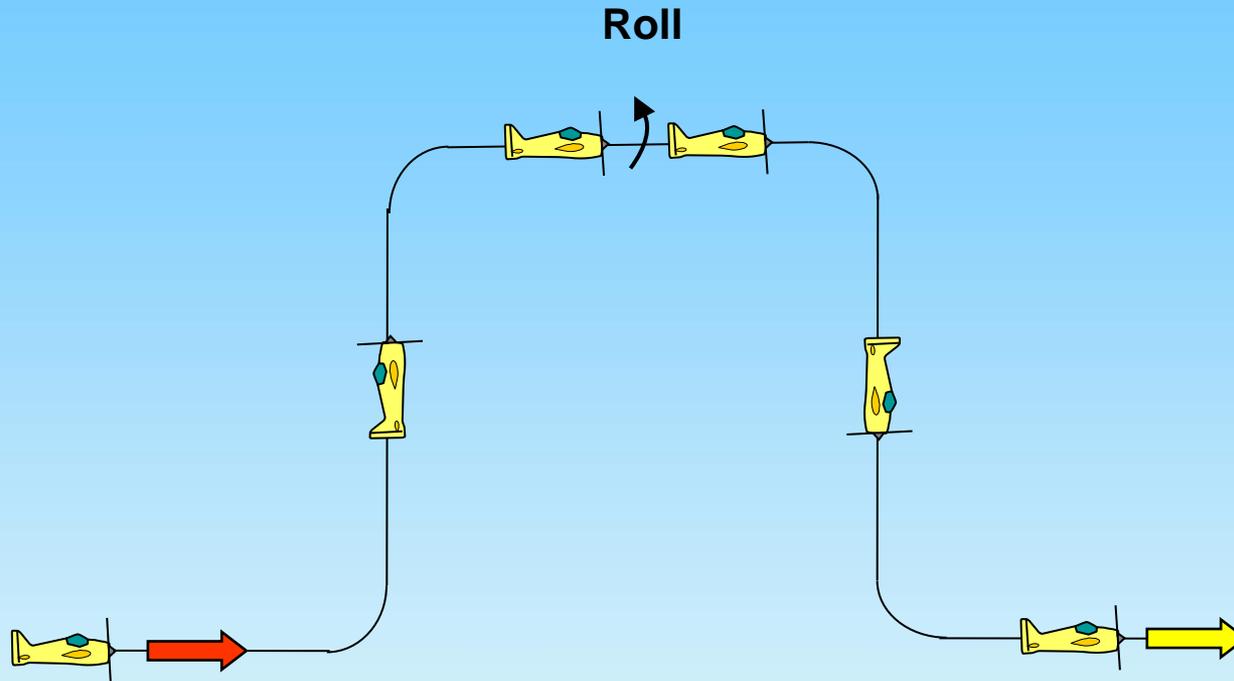
# Take-off procedure ( not judged, not scored )

← wind





## ADV.01 Top Hat with full roll on top



From upright, pull through a quarter loop into a vertical upline, push through a quarter loop, perform a full roll, push through a quarter loop into a vertical downline, pull through a quarter loop, exit upright.

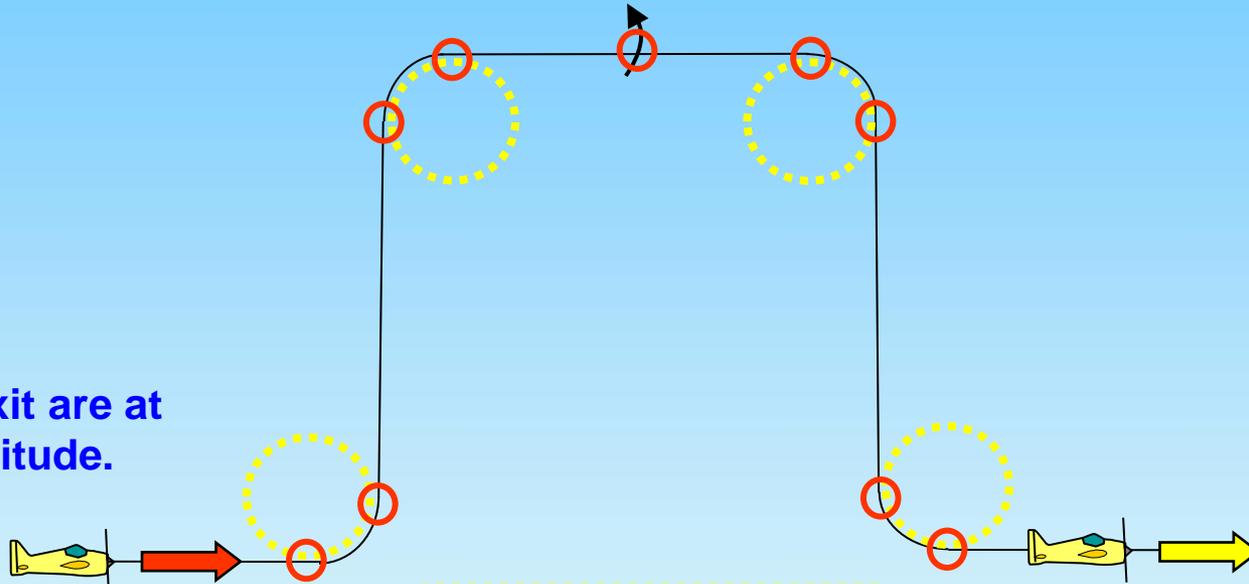


# ADV.01 Top Hat with full roll on top

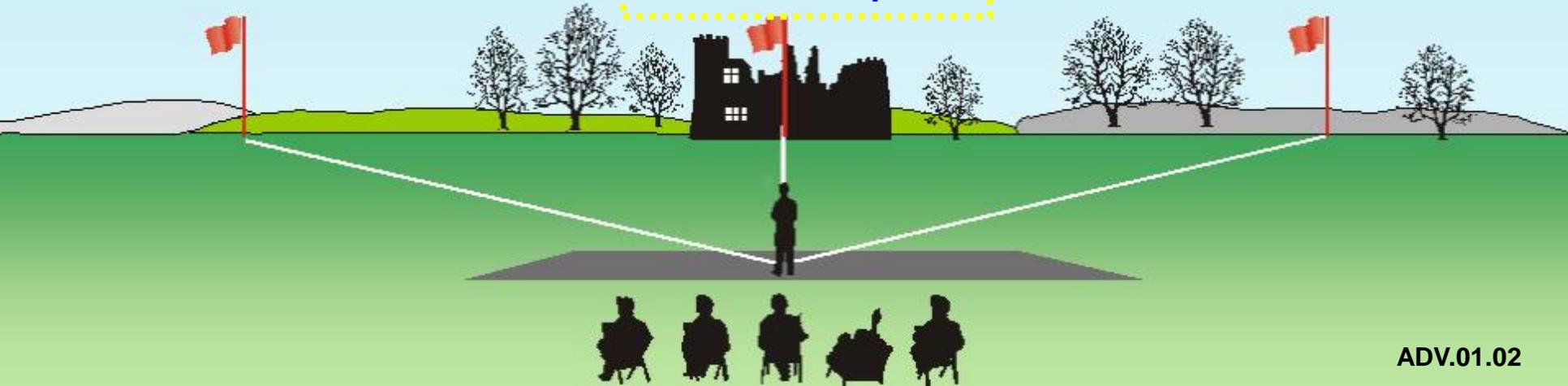
Roll on middle of the line.

Top line must be equal length to the sides – (Square).

Entry and exit are at the same altitude.

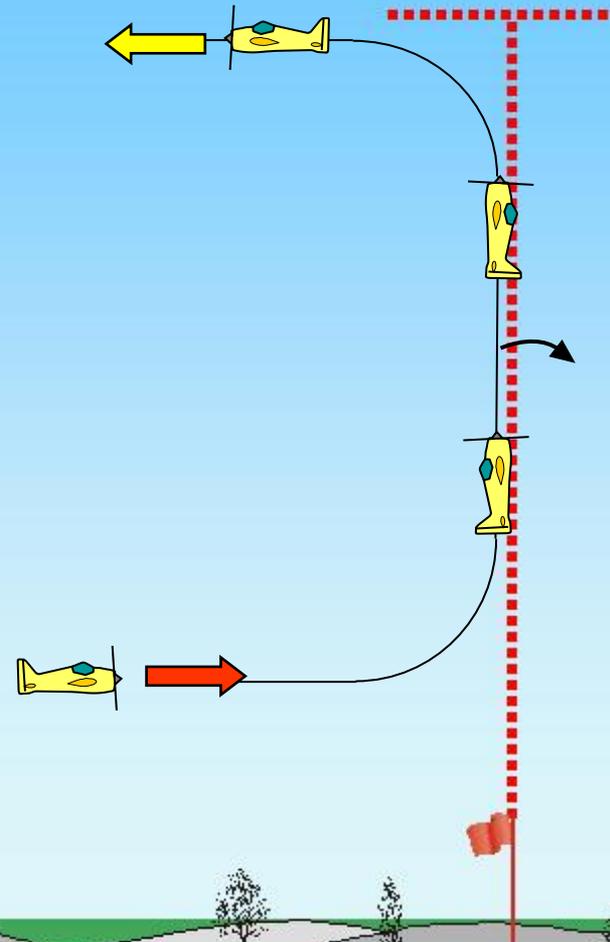


All radii are equal.





## ADV.02 Half Square Loop with half roll



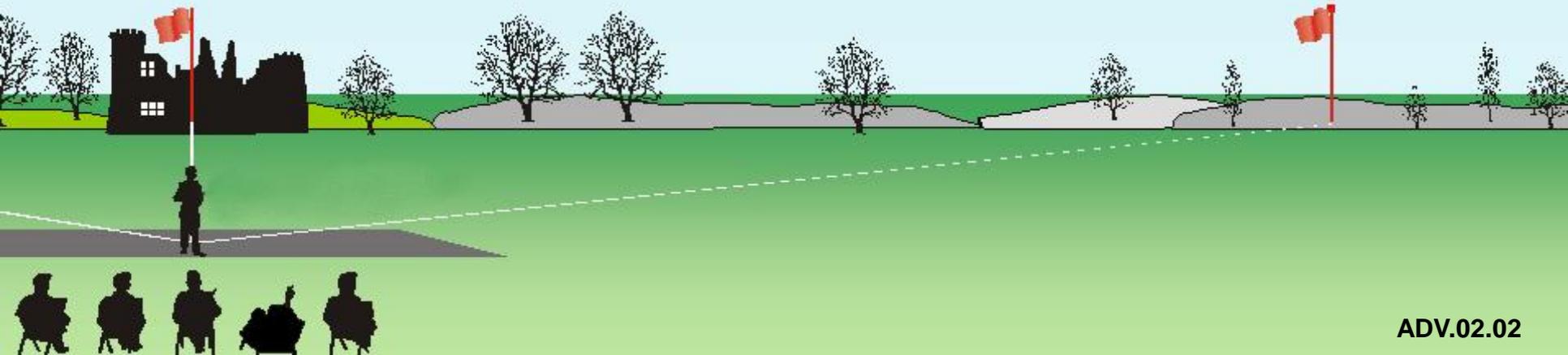
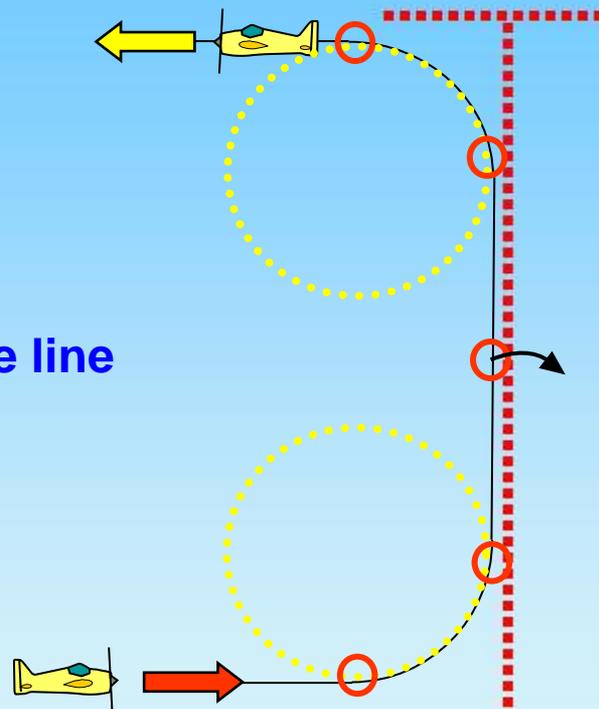
From upright, pull through a quarter loop into a vertical upline, perform a half roll, push through a quarter loop, exit upright.



# ADV.02 Half Square Loop with half roll

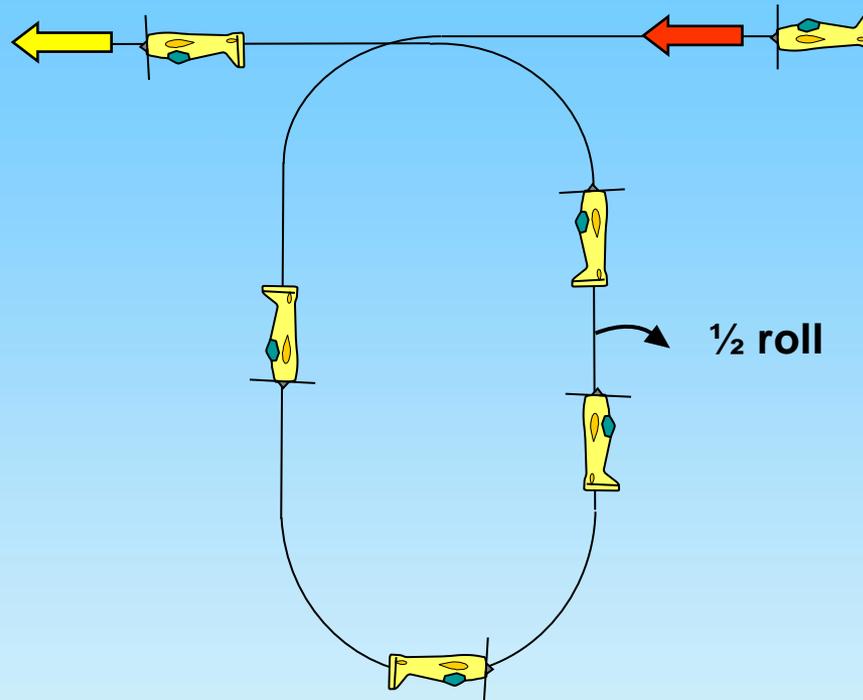
$\frac{1}{2}$  roll on middle of the line

All radii are equal.





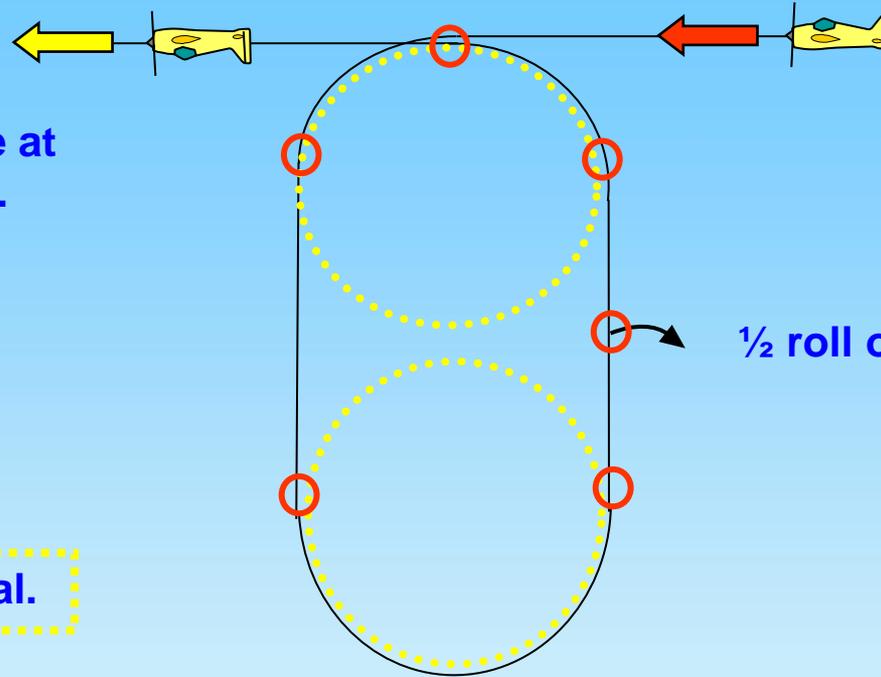
## ADV.03 Push-Push-Pull Humpty-Bump with half roll



From upright, fly past center, push through a quarter loop into a vertical downline, push through a half loop into a vertical upline, perform a half roll, pull through a quarter loop, exit inverted.



# ADV.03 Push-Push-Pull Humpty-Bump with half



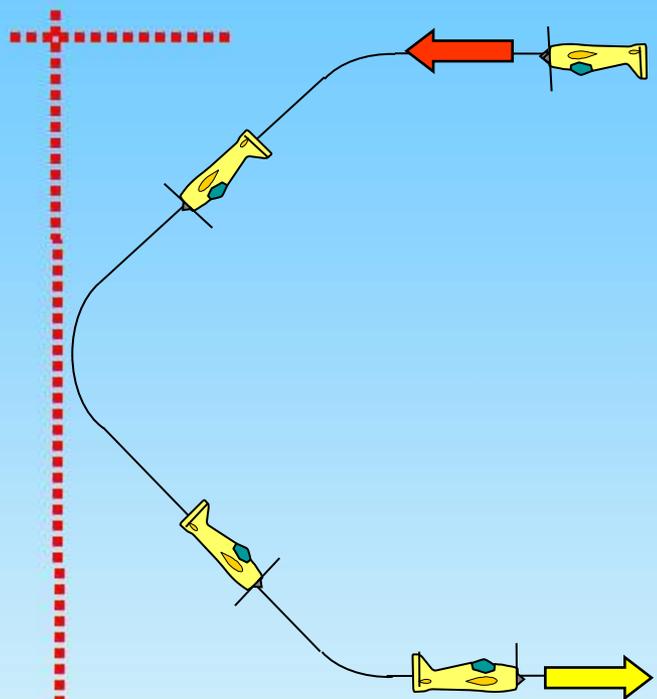
Entry and exit are at the same altitude.

1/2 roll on middle of the line.

All radii are equal.



# ADV.04 Half Square Loop on Corner

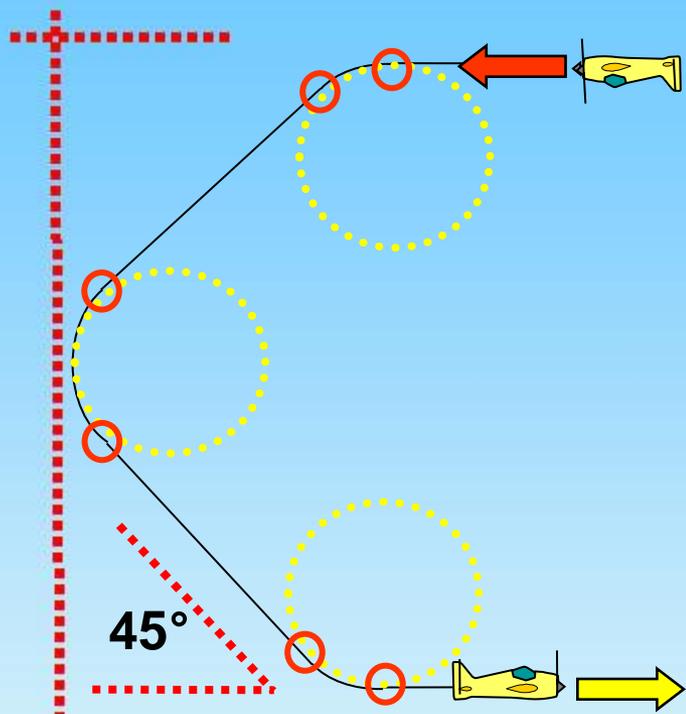


From inverted, pull through a one eighth loop into a forty five degree downline, pull through a quarter loop into a forty five degree downline, pull through a one eighth loop, exit upright.

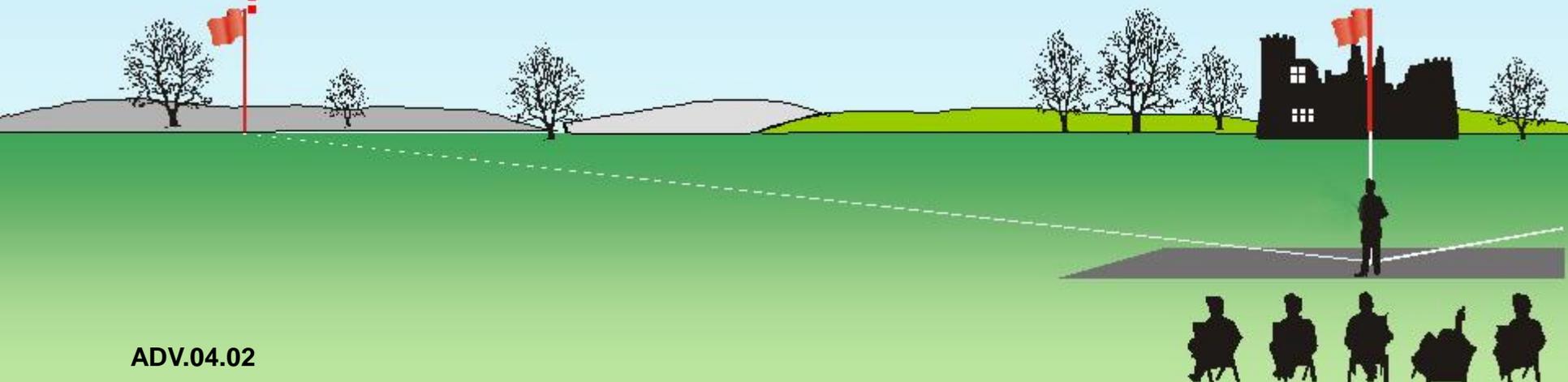




# ADV.04 Half Square Loop on Corner

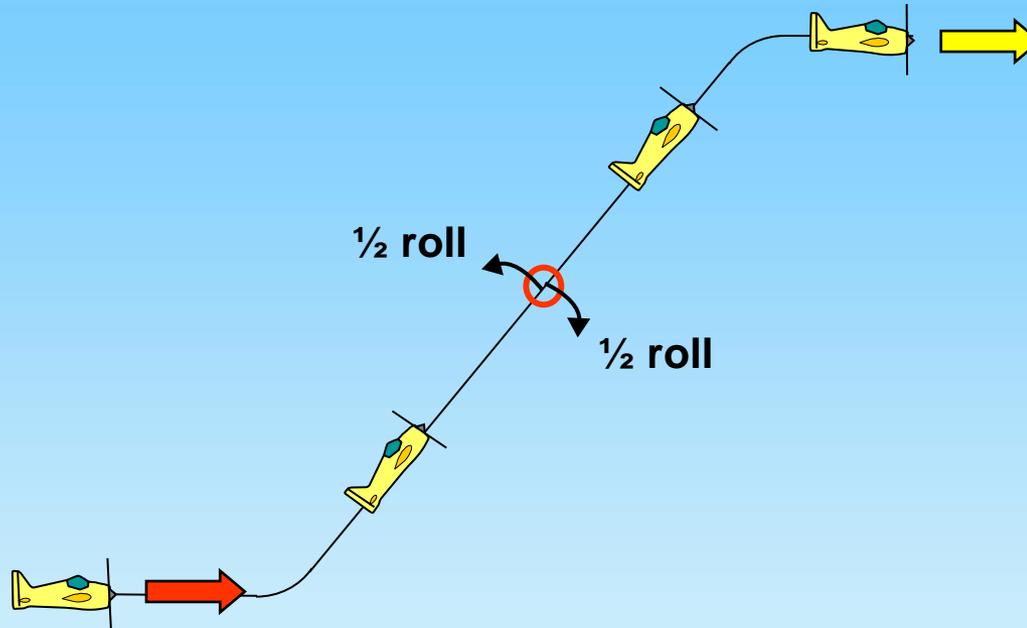


All radii are equal.





## ADV.05 Forty Five degree Upline, with two half rolls in opposite direction

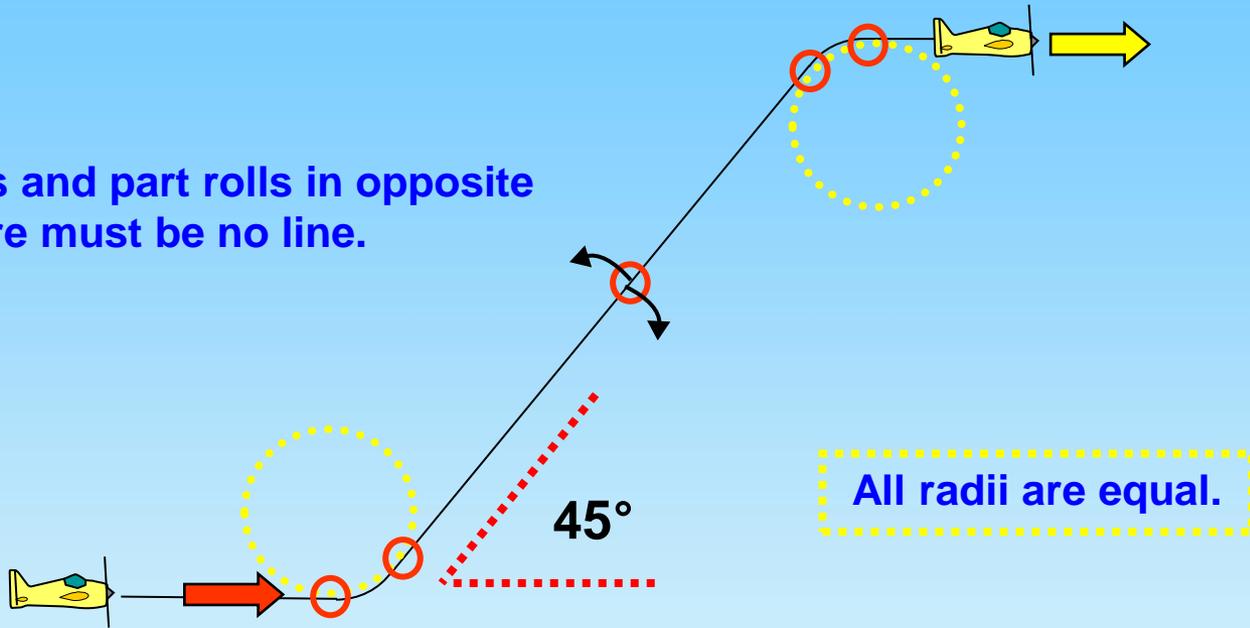


From upright, pull through a one eighth loop into a forty five degree upline, perform a half roll, immediately perform a half roll in opposite direction, push through a one eighth loop, exit upright.



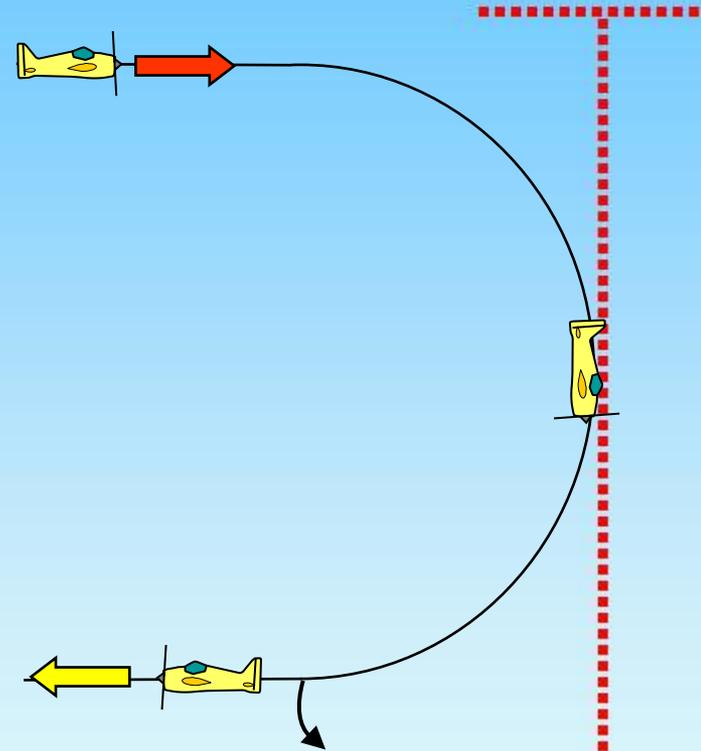
# ADV.05 Forty Five degree Upline, with two half rolls in opposite direction

Between rolls and part rolls in opposite direction there must be no line.





## ADV.06 Reverse Split S with half roll

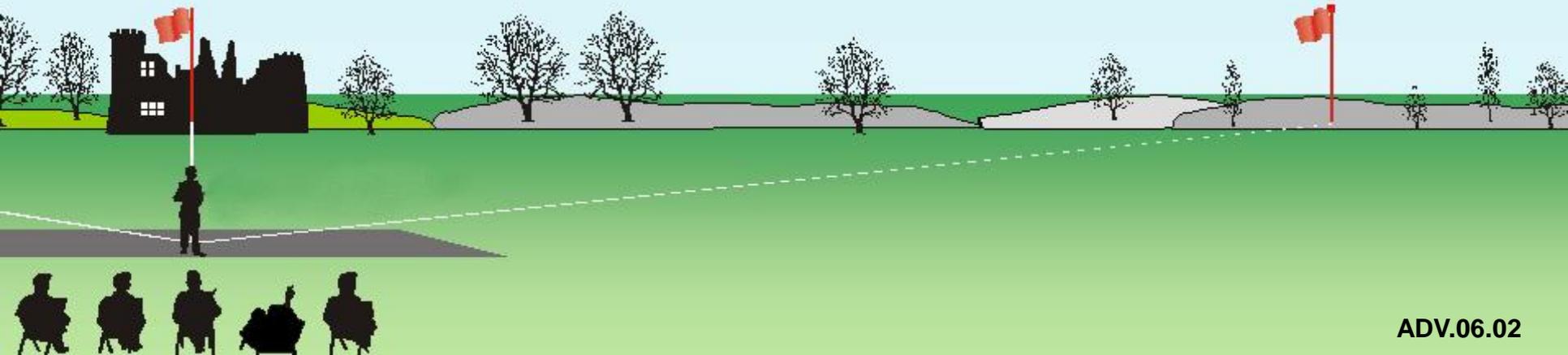
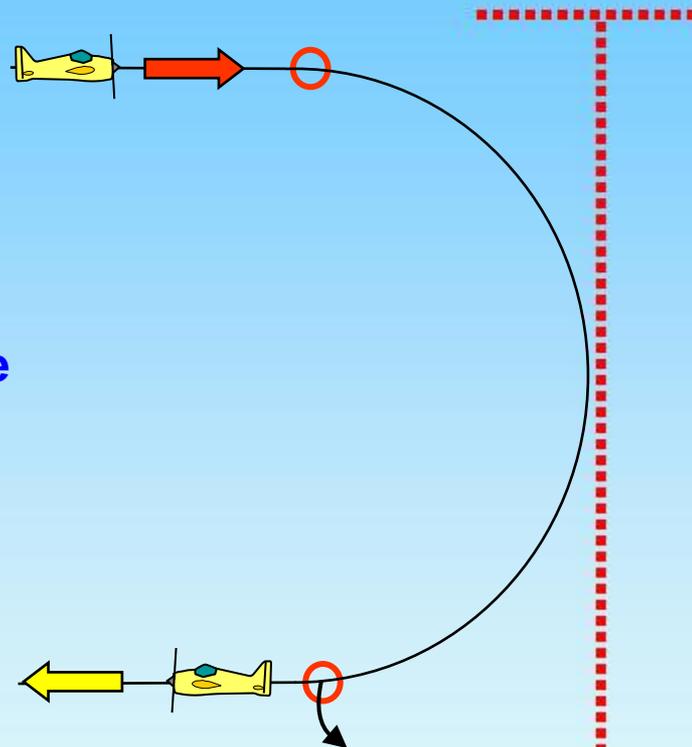


**From upright, push through a half loop, immediately perform a half roll, exit upright.**



## ADV.06 Reverse Split S with half roll

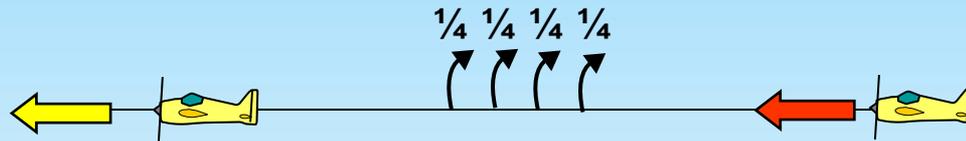
There is no line between the  
 $\frac{1}{2}$  loop and the  $\frac{1}{2}$  roll.





# ADV.07 Roll Combination with four consecutive one quarter rolls

## Four consecutive 1/4 rolls



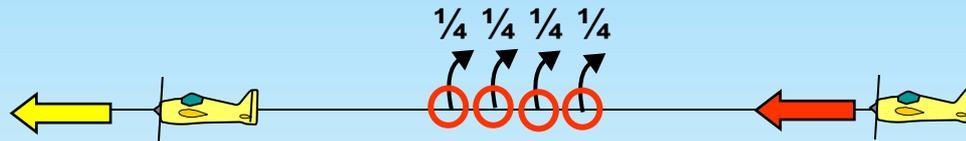
From upright, perform consecutively four one quarter rolls, exit upright.



# ADV.07 Roll Combination with four consecutive one quarter rolls

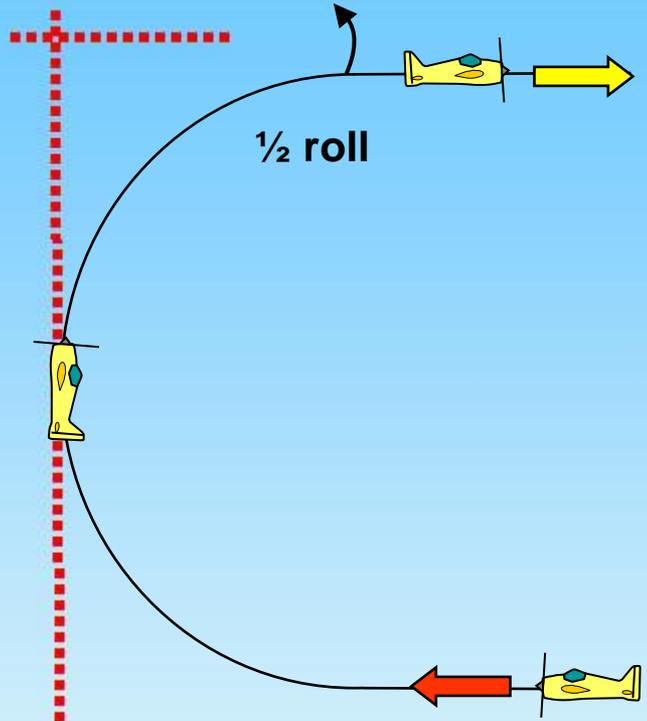
Flight must be straight and level.

Lines between part rolls must be short and of equal length.





# ADV.08 Immelman Turn with half roll



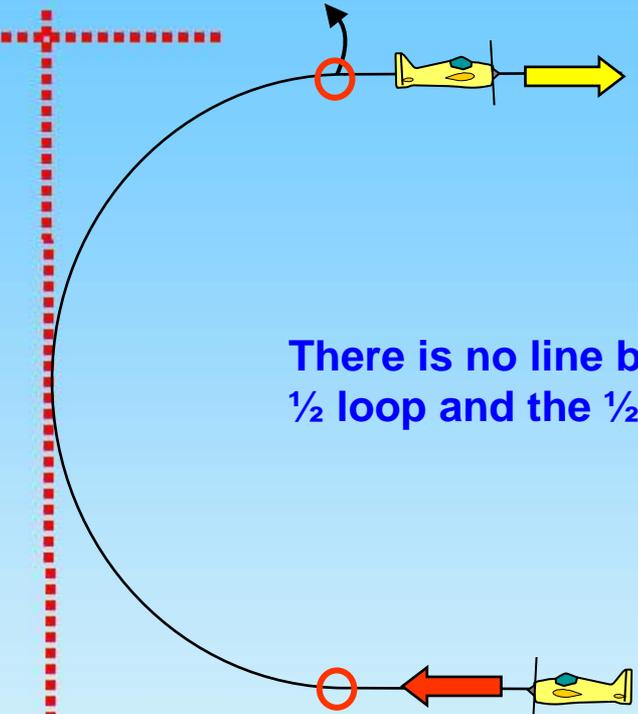
From upright, pull through a half loop, immediately perform a half roll, exit upright.

ADV.08.01

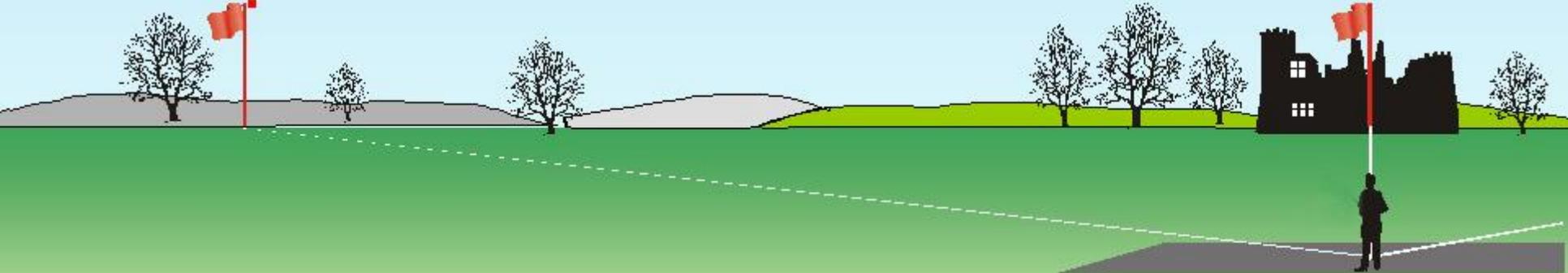




# ADV.08 Immelman Turn with half roll

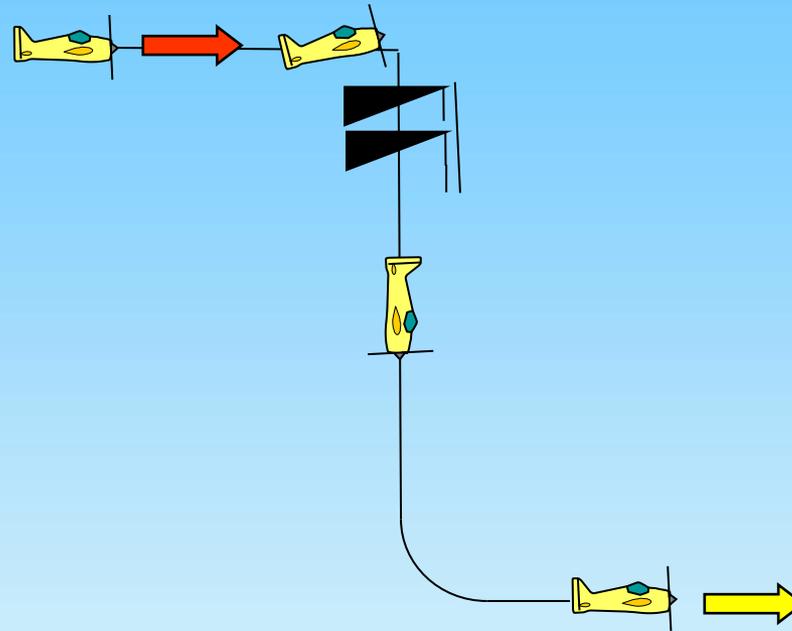


There is no line between the 1/2 loop and the 1/2 roll.





## ADV.09 Spins with two turns

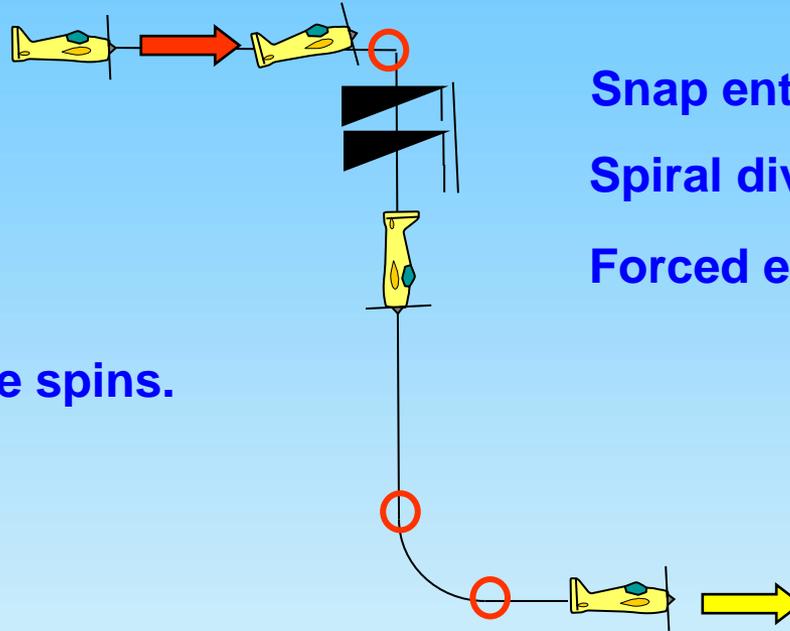


**From upright, perform spins with two turns to a vertical downline, pull through a quarter loop, exit upright.**





## ADV.09 Spins with two turns



Snap entry - 0 points!

Spiral dive - 0 points!

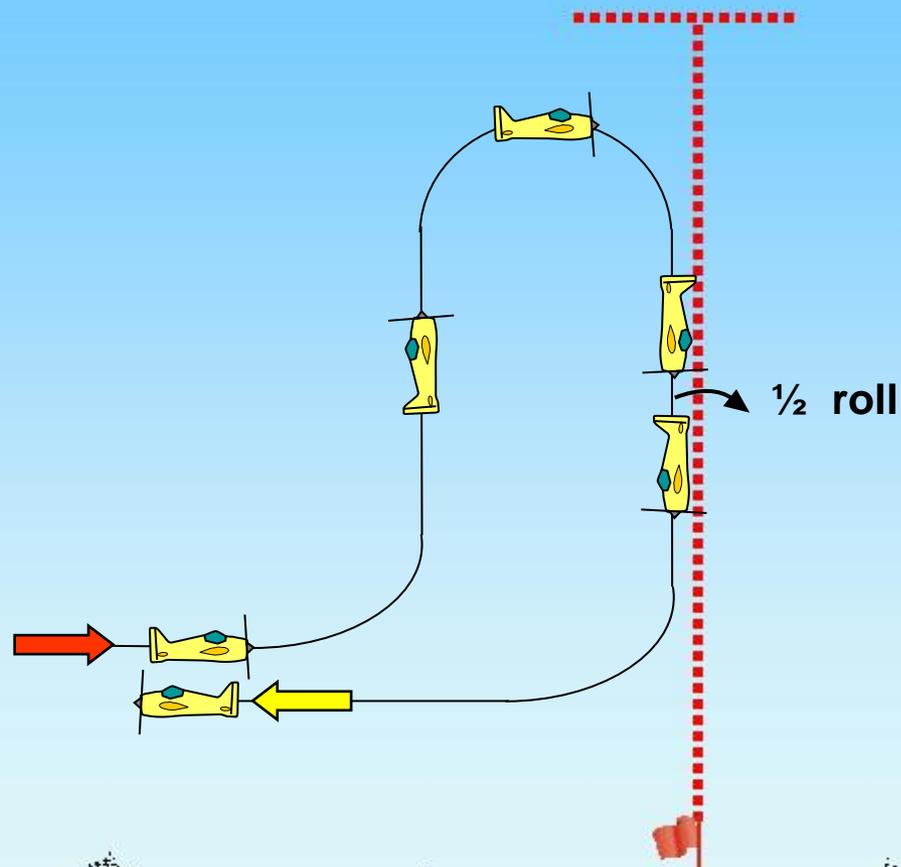
Forced entry: downgrade.

Line after the spins.





## ADV.10 Pull-Push-Pull Humpty-Bump, with half roll. Option: (quarter roll, quarter roll)



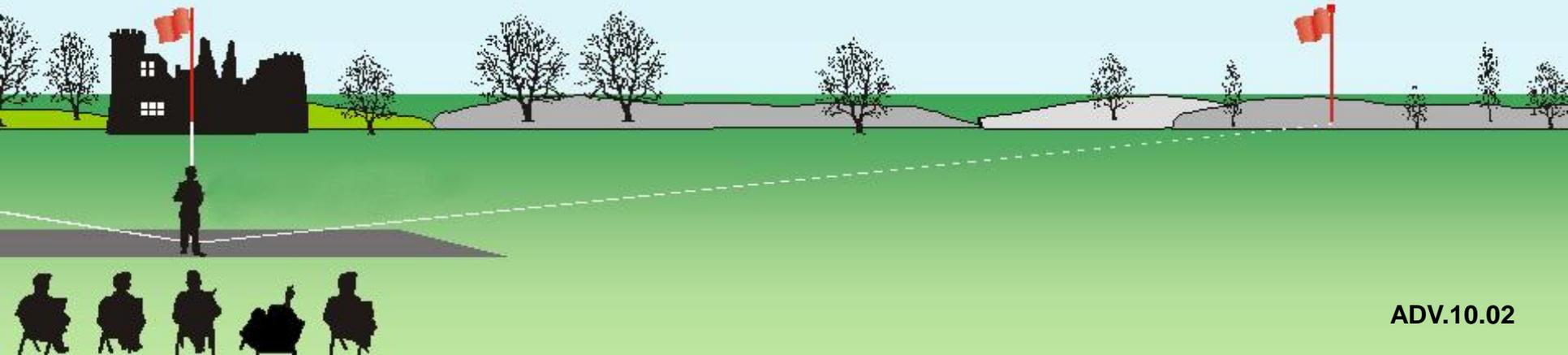
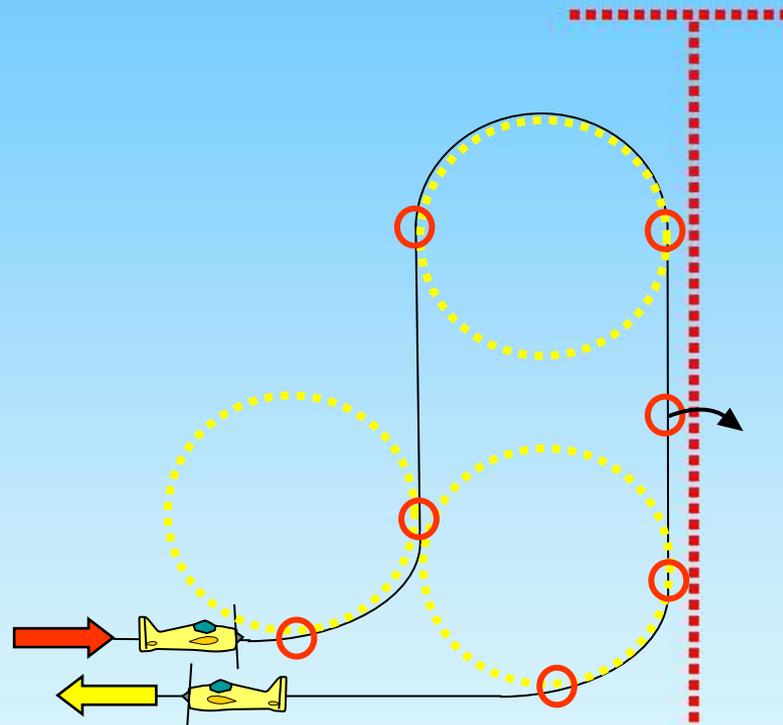
From upright, pull through a quarter loop into a vertical upline, push through a half loop into a vertical downline, perform a half roll, pull through a quarter loop, exit upright.



# ADV.10 Pull-Pu-Pull Humpty-Bump, with half roll. Option: (quarter roll, quarter roll)

½ roll on middle of the line.

All radii are equal.

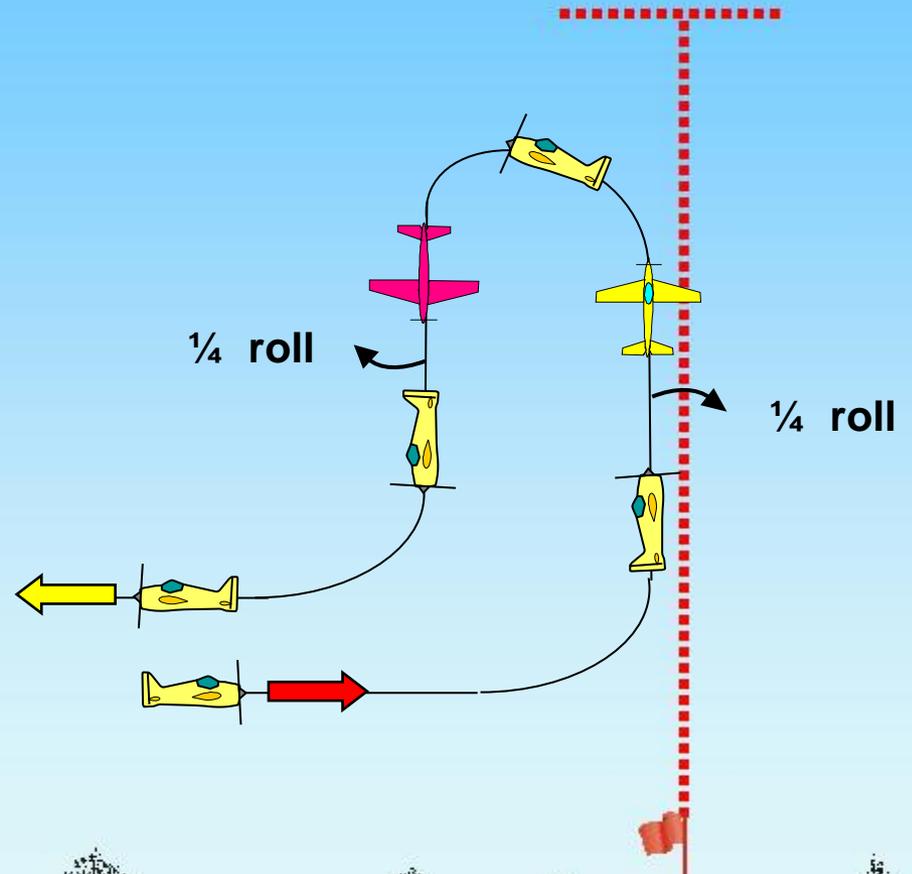




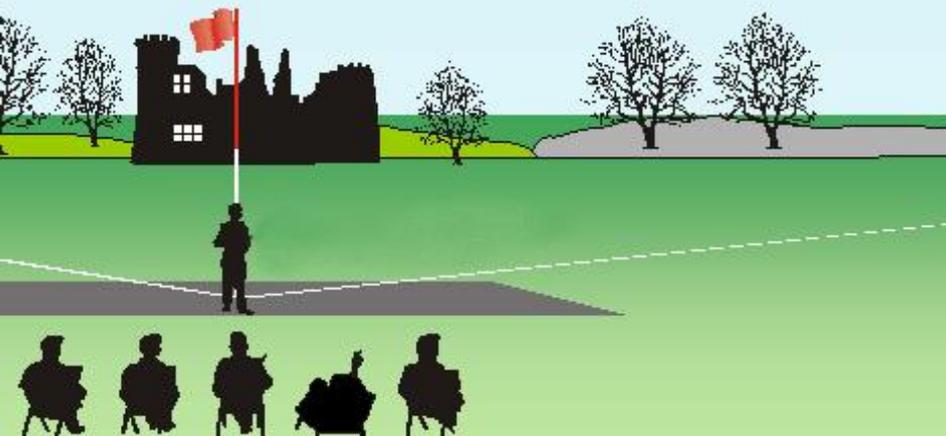
# ADV.10 Pull-Push-Pull Humpty-Bump, with half roll.

Option: (quarter roll, quarter roll)

Option



From upright, pull through a quarter loop into a vertical upline, perform a quarter roll, push through a half loop into a vertical downline, perform a quarter roll, pull through a quarter loop, exit upright.



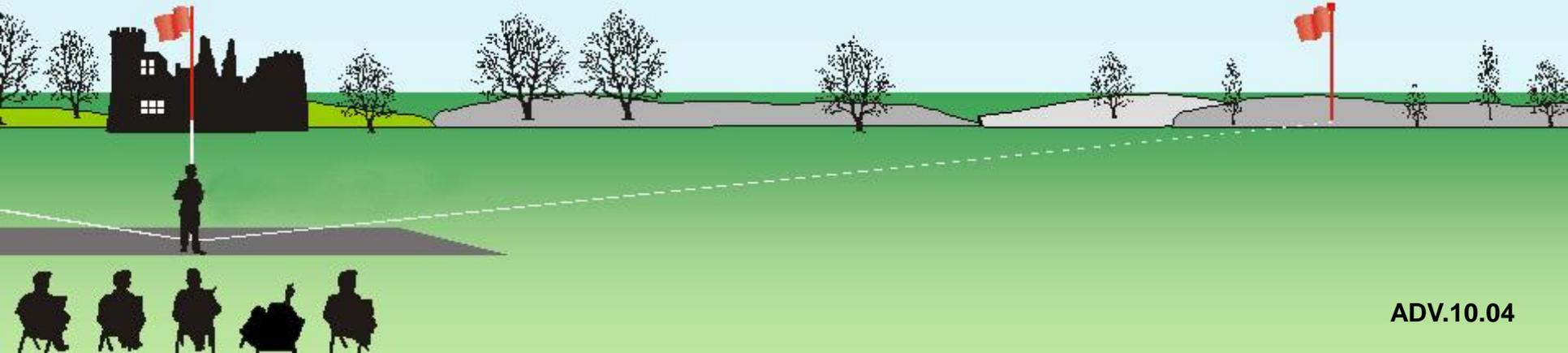
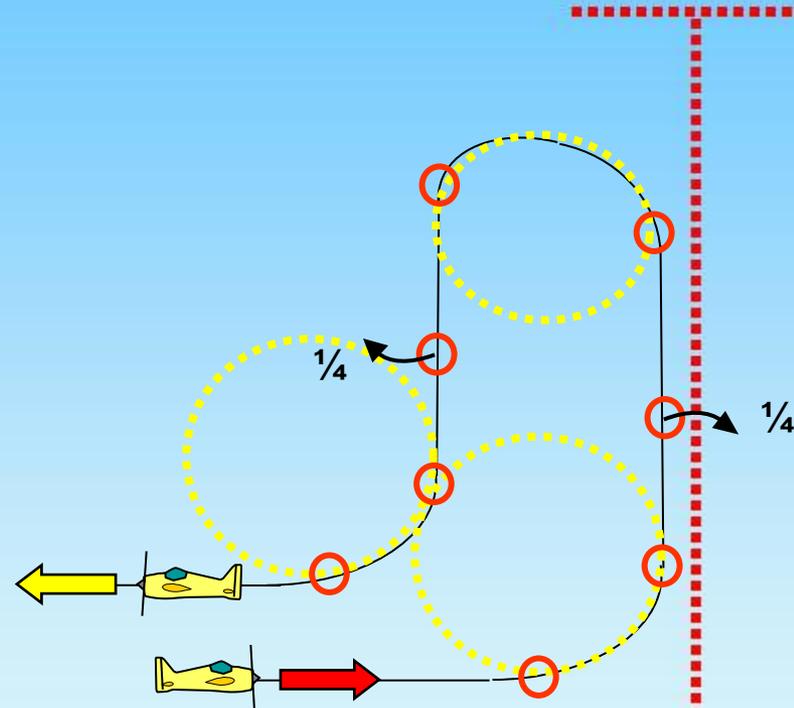


# ADV.10 Pull-Push-Pull Humpty-Bump, with half roll. Option: (quarter roll, quarter roll)

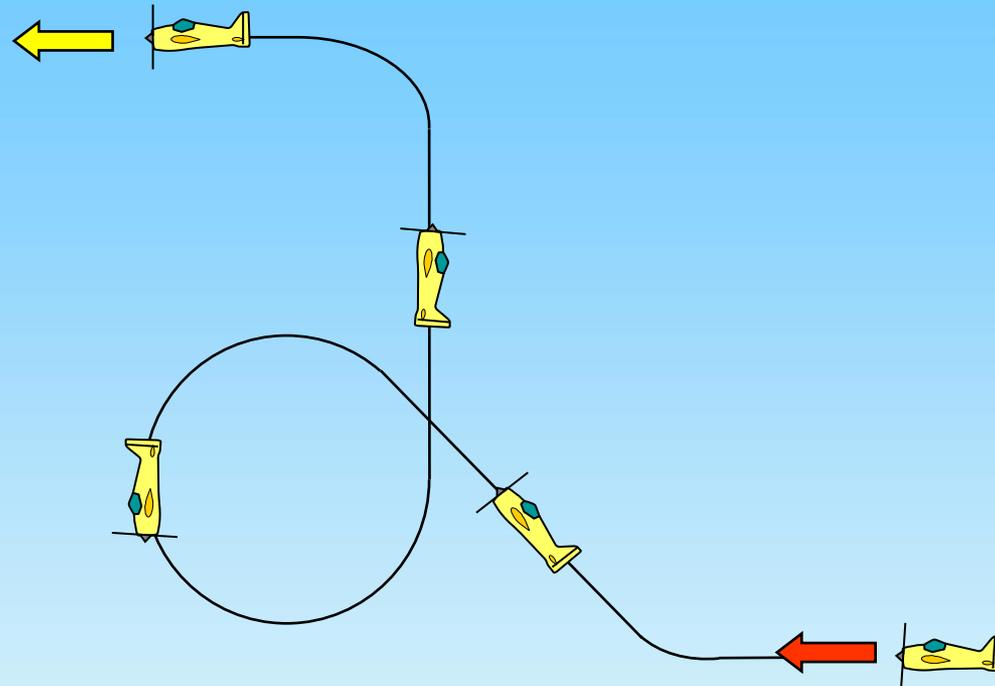
Option

Rolls on middle of the line.

All radii are equal.



# ADV.11 Reverse Figure ET

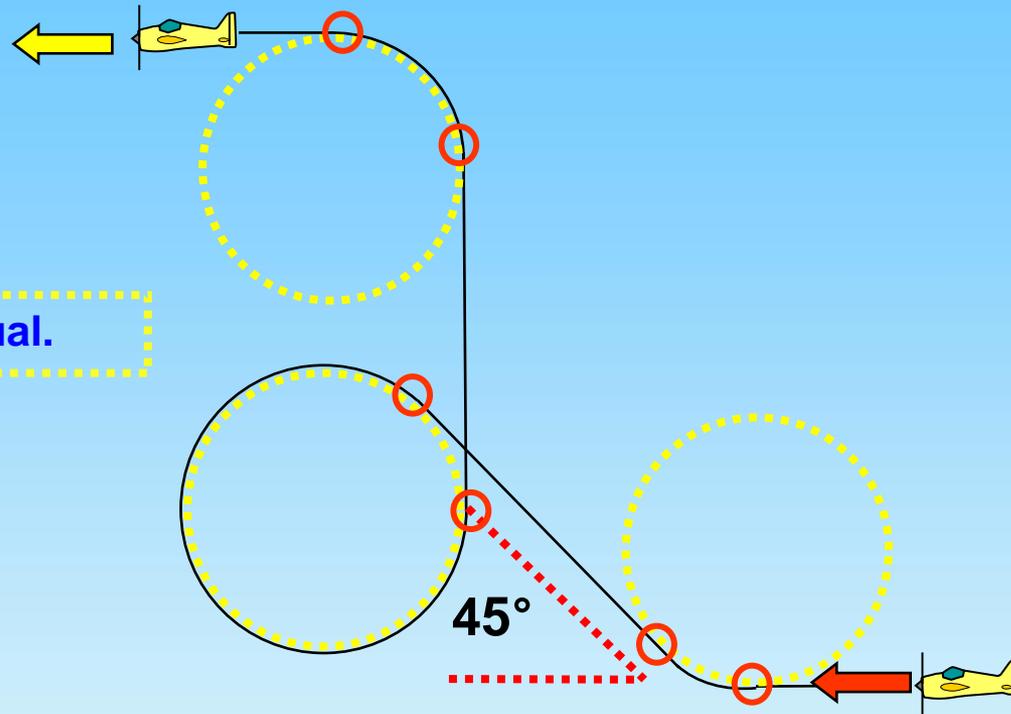


From upright, pull through a one eighth loop into a forty five degree upline, push through a seven eighths loop into a vertical upline, push through a quarter loop , exit upright.

*(Note: The vertical line must be in the center.)*

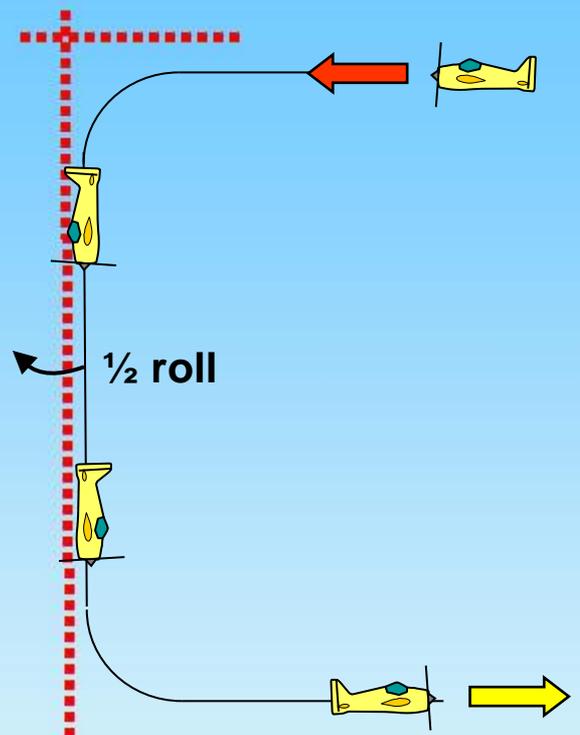


# ADV.11 Reverse Figure ET





# ADV.12 Half Square Loop with half roll

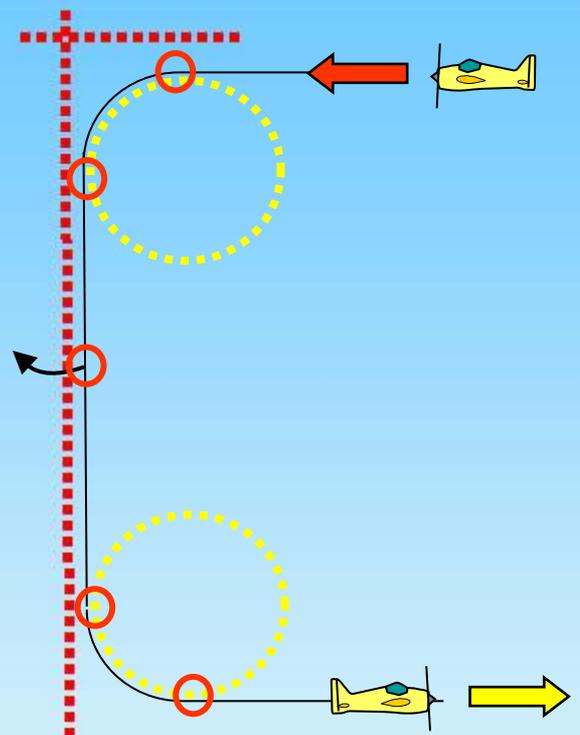


From upright, push through a quarter loop into a vertical downline, perform a half roll, pull through a quarter loop, exit upright.



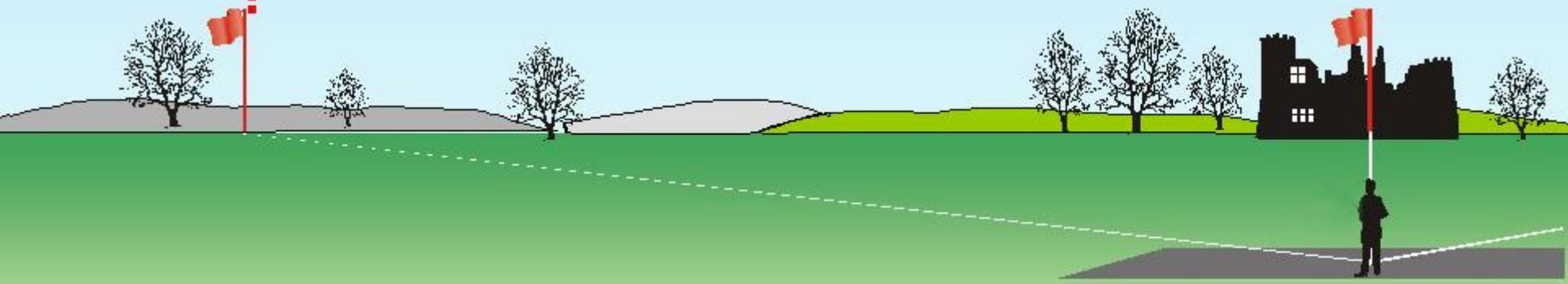


# ADV.12 Half Square Loop with half roll



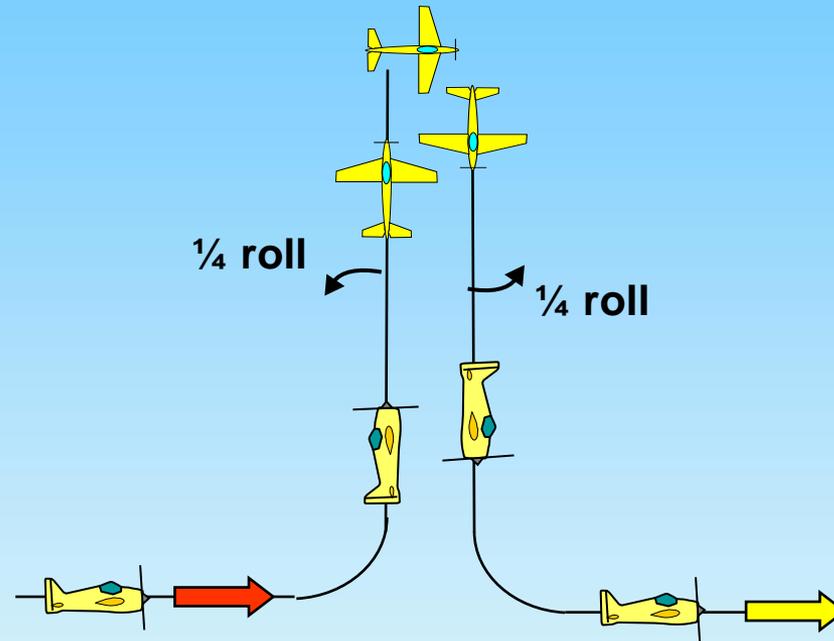
1/2 roll on middle of the line.

All radii are equal.





## ADV.13 Stall Turn



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



# ADV.13 Stall Turn

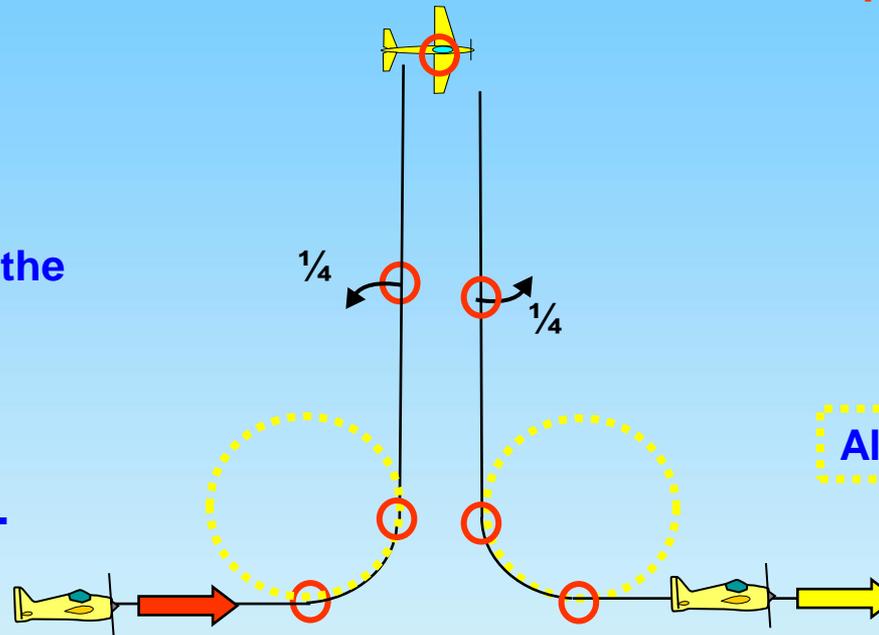
Stop before pivot

Pivot on CG

Two wing spans or more  
– zero points!

$\frac{1}{4}$  rolls on middle of the lines.

Entry and exit must be the same altitude.

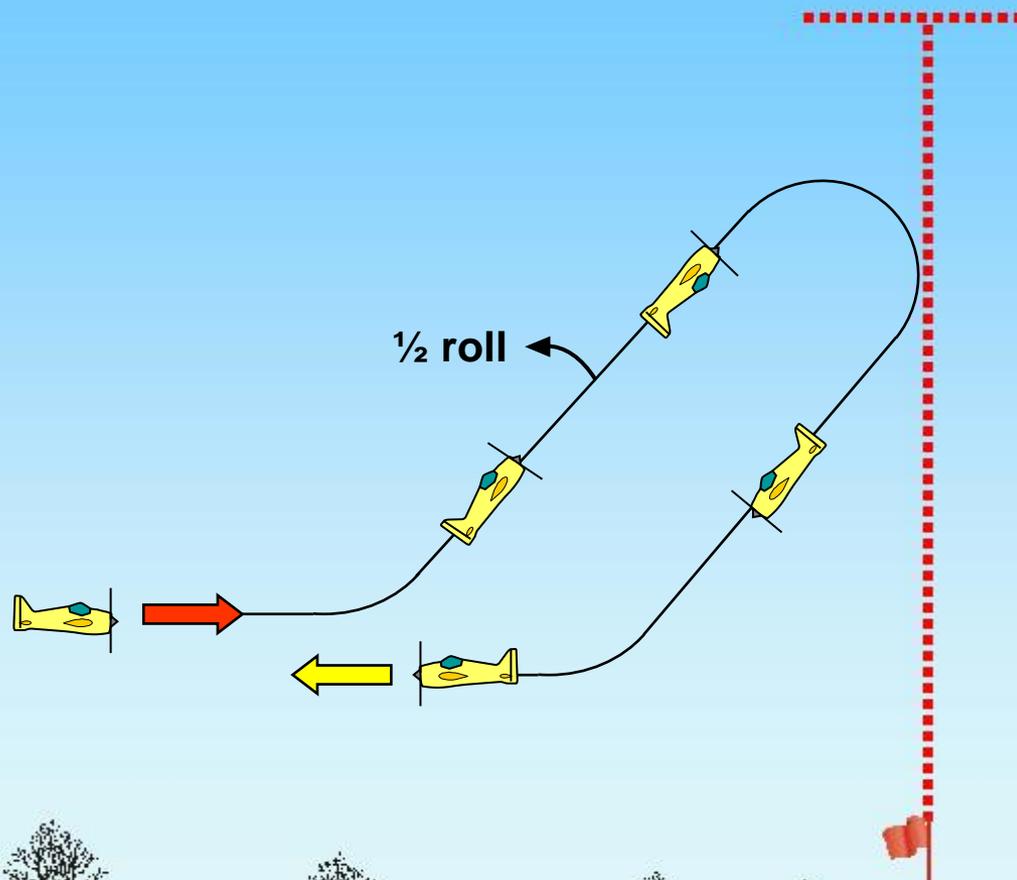


All radii are equal.





## ADV.14 Trombone



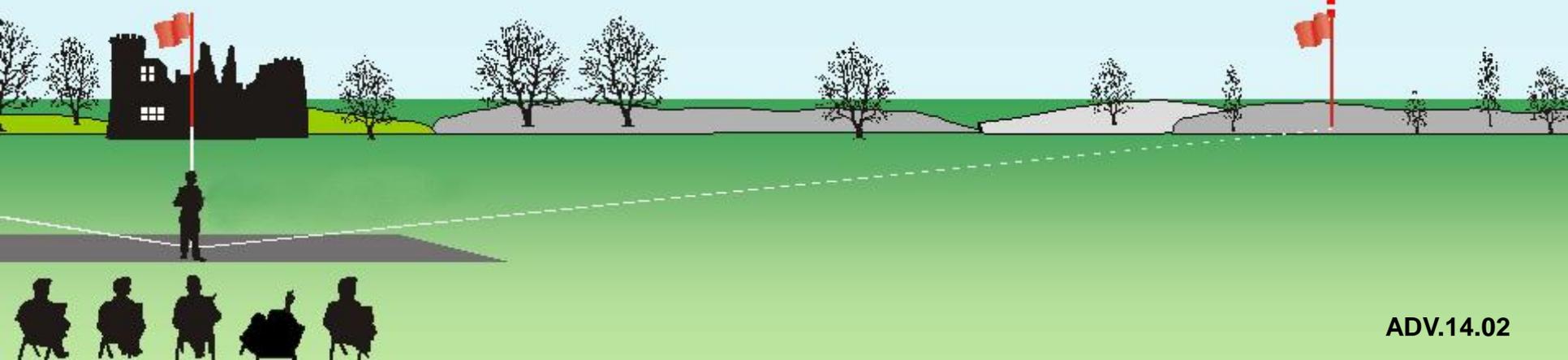
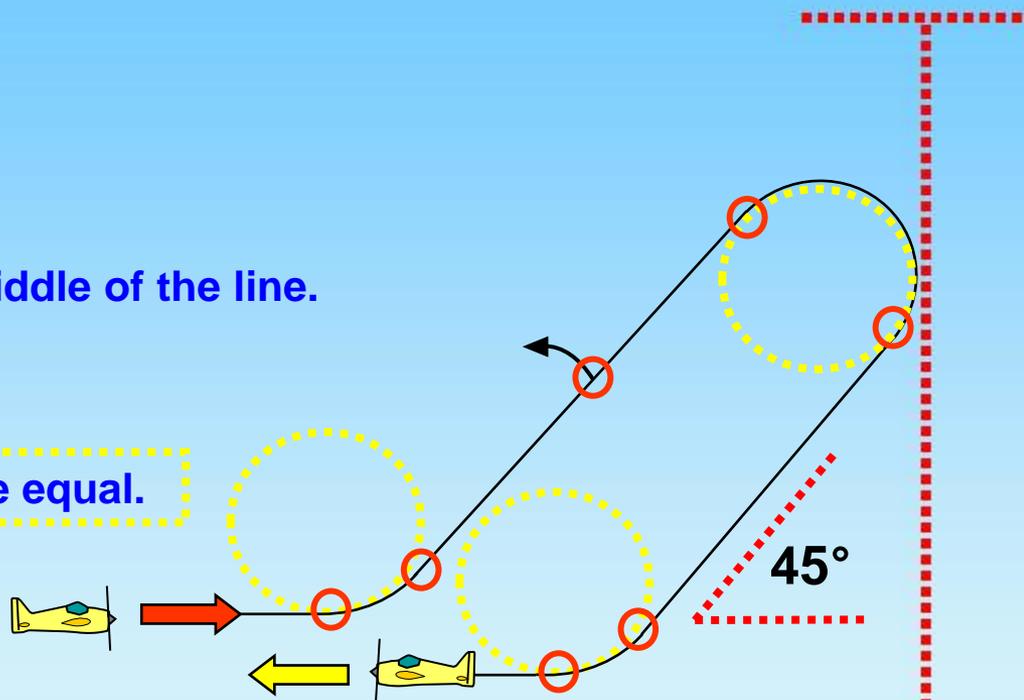
From upright, pull through a one eighth loop into a forty five degree upline, perform a half roll, pull through a half loop into a forty five degree downline, pull through a one eighth loop, exit upright.



# ADV.14 Trombone

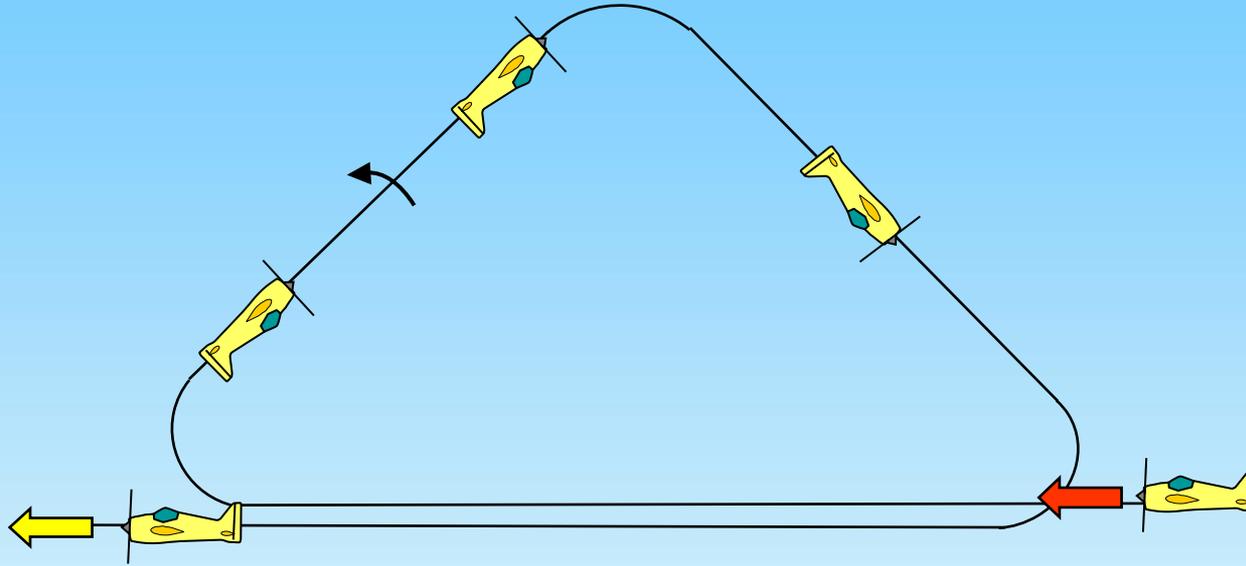
½ roll on middle of the line.

All radii are equal.





## ADV.15 Triangle with one roll



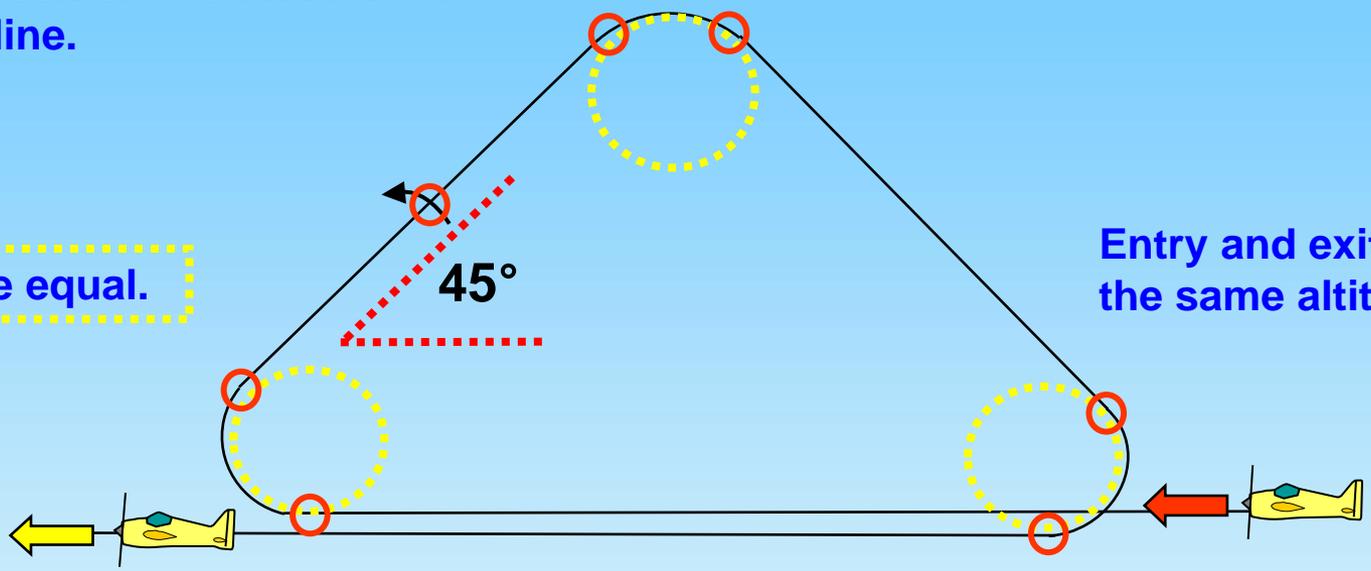
From upright, pull through a three eighths loop into a forty five degree upline, perform a full roll, pull through a quarter loop into a forty five degree downline, pull through a three eighths loop, exit upright.

# ADV.15 Triangle with roll

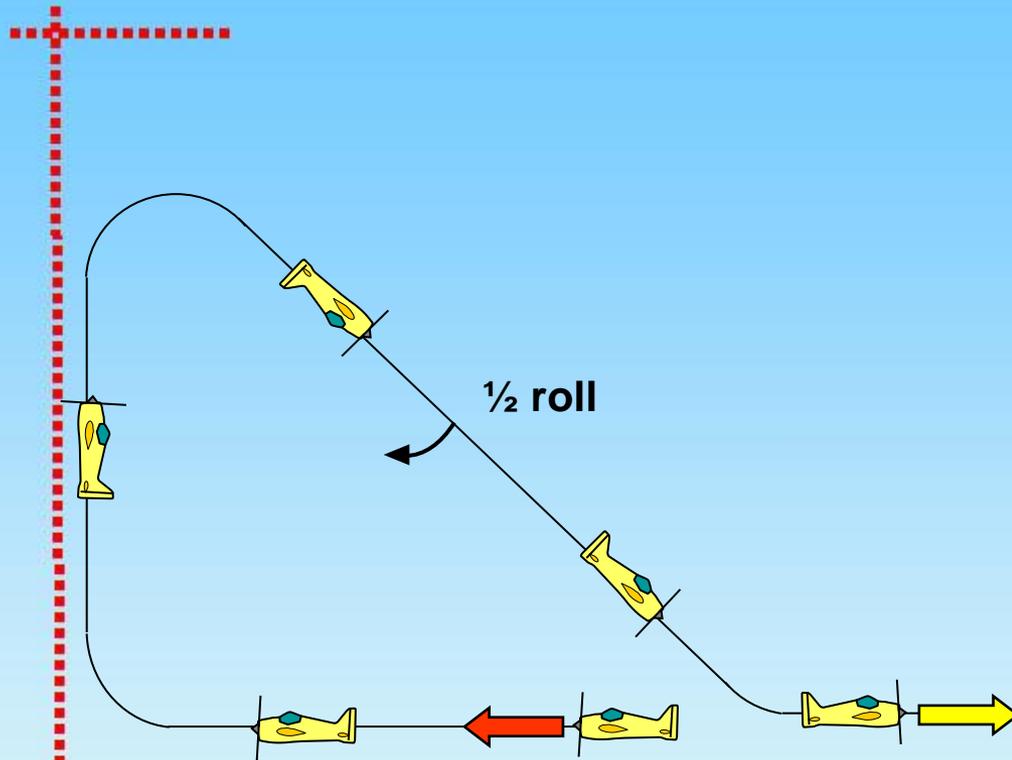


Roll centered on middle of the line.

All radii are equal.



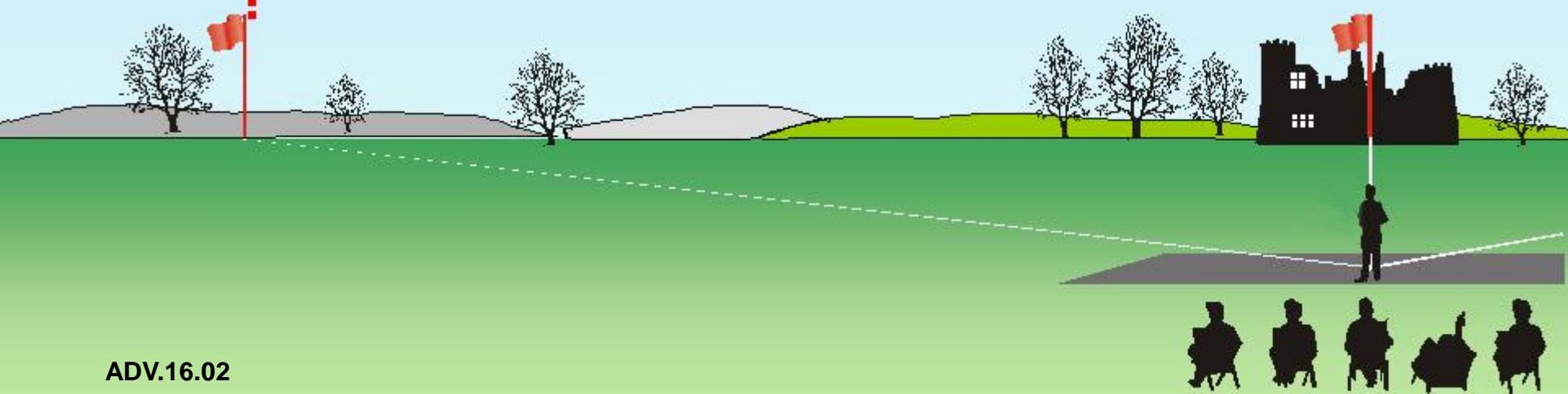
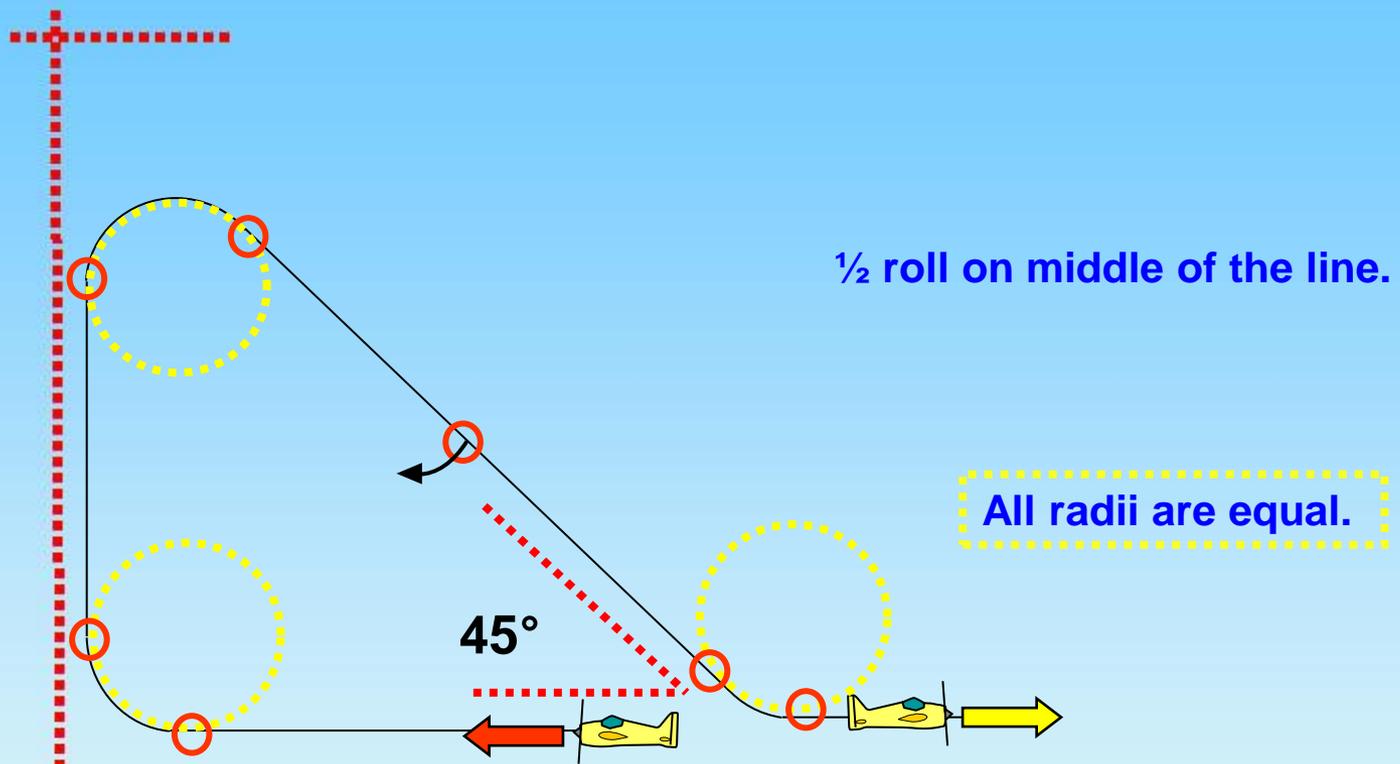
# ADV.16 Shark Fin with half roll



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

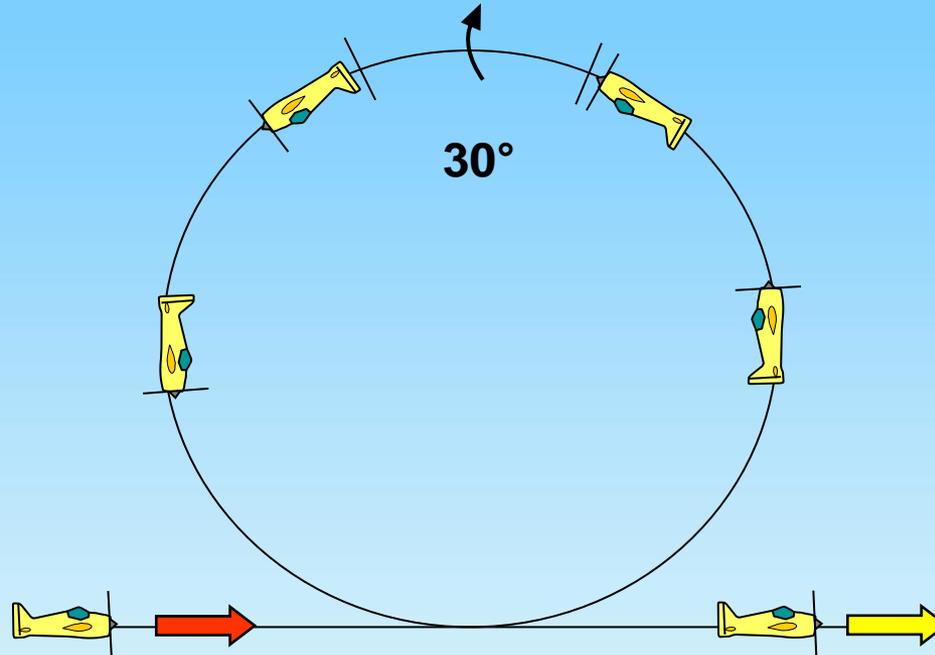


# ADV.16 Shark Fin with half roll





## ADV.17 Loop with roll



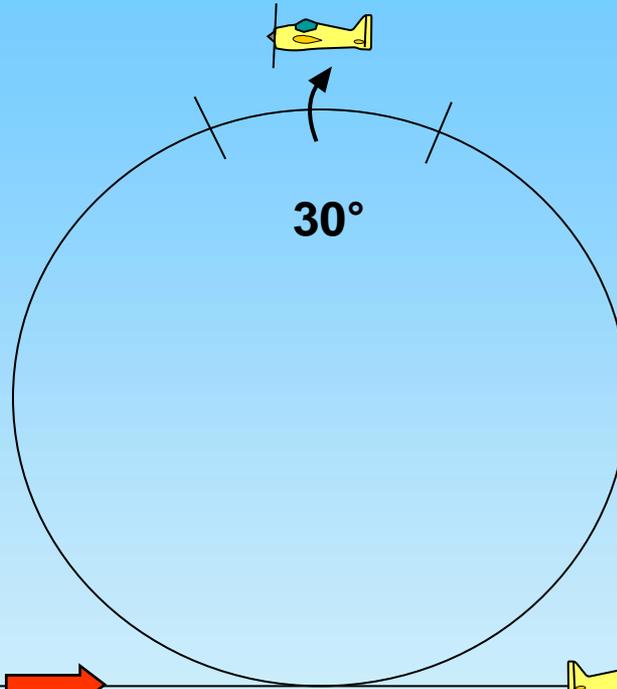
**From upright, pull through a loop, perform a roll over the top 30 degrees, exit upright.**



# ADV.17 Loop with roll

Loop must be round.

The roll must be on the circular flightpath of the top 30° of the loop.



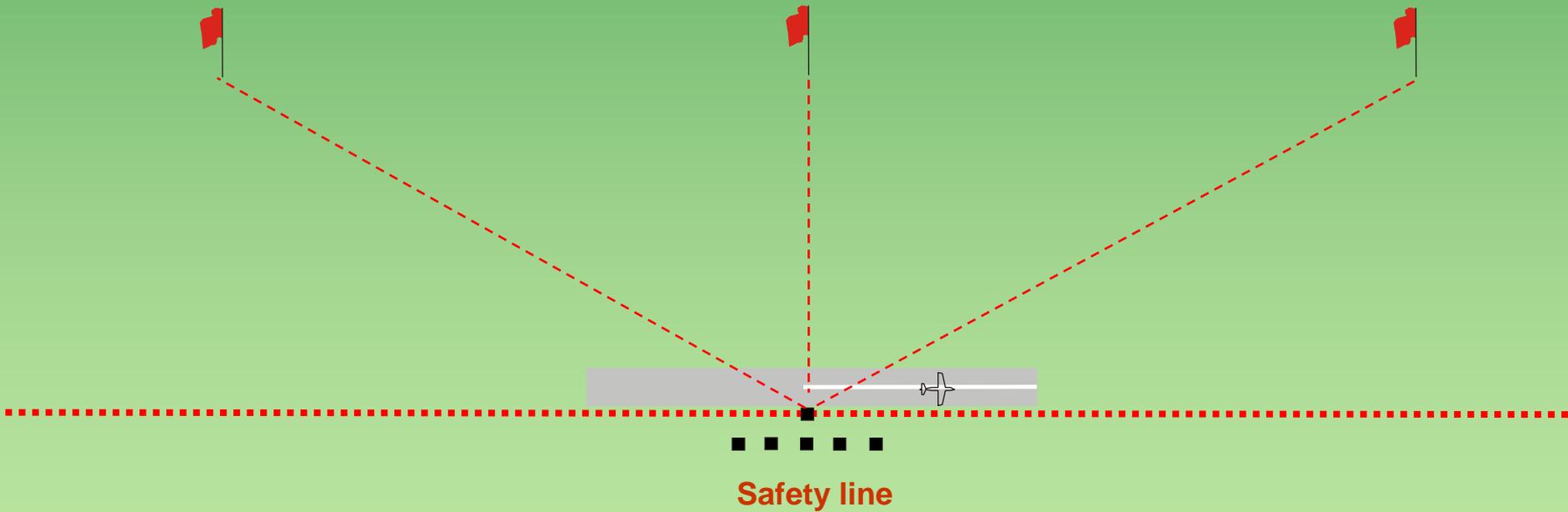
Entry and exit must be the same altitude.





# Landing procedure ( not judged, not scored )

The direction of the landing may be different to the take off.



Forget **WHO** is flying  
(friend, rival, countryman, flier from other nation)

Forget **WHAT** is flying  
(2-stroke, 4-stroke, electric)

**LOOK ONLY AT LINES DESCRIBED IN THE SKY!**  
(and the precision, smoothness, positioning, and size)

Bob Skinner



**Thank you!**

© Peter Uhlig, March 2020