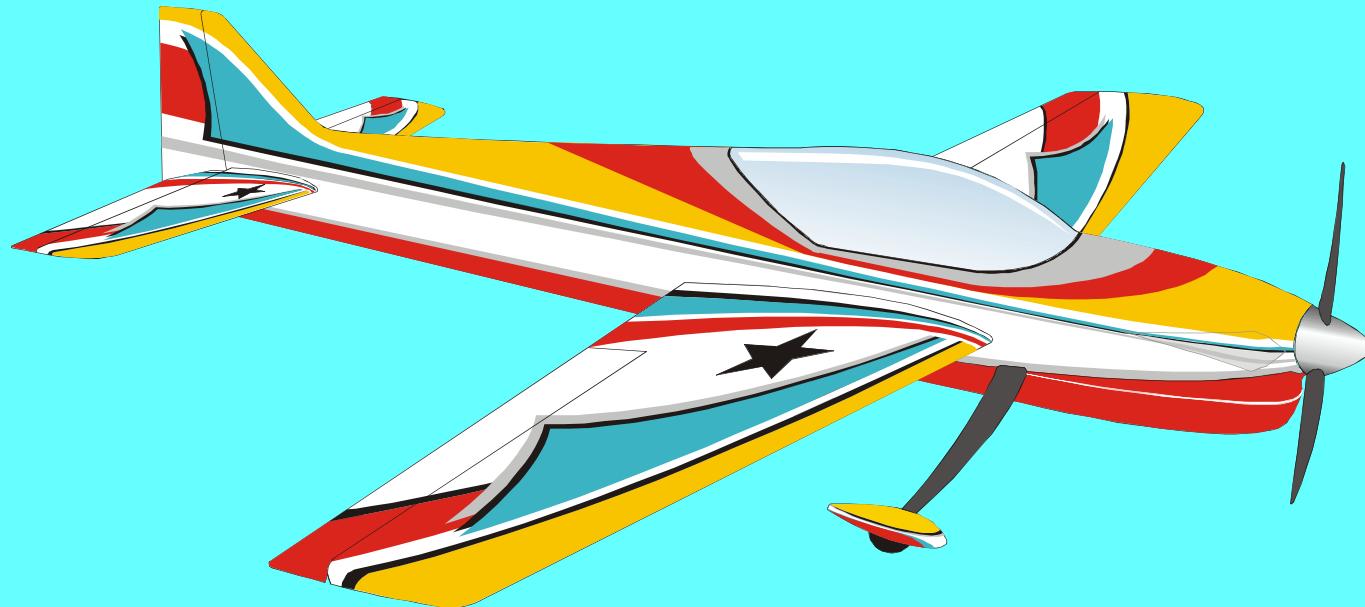
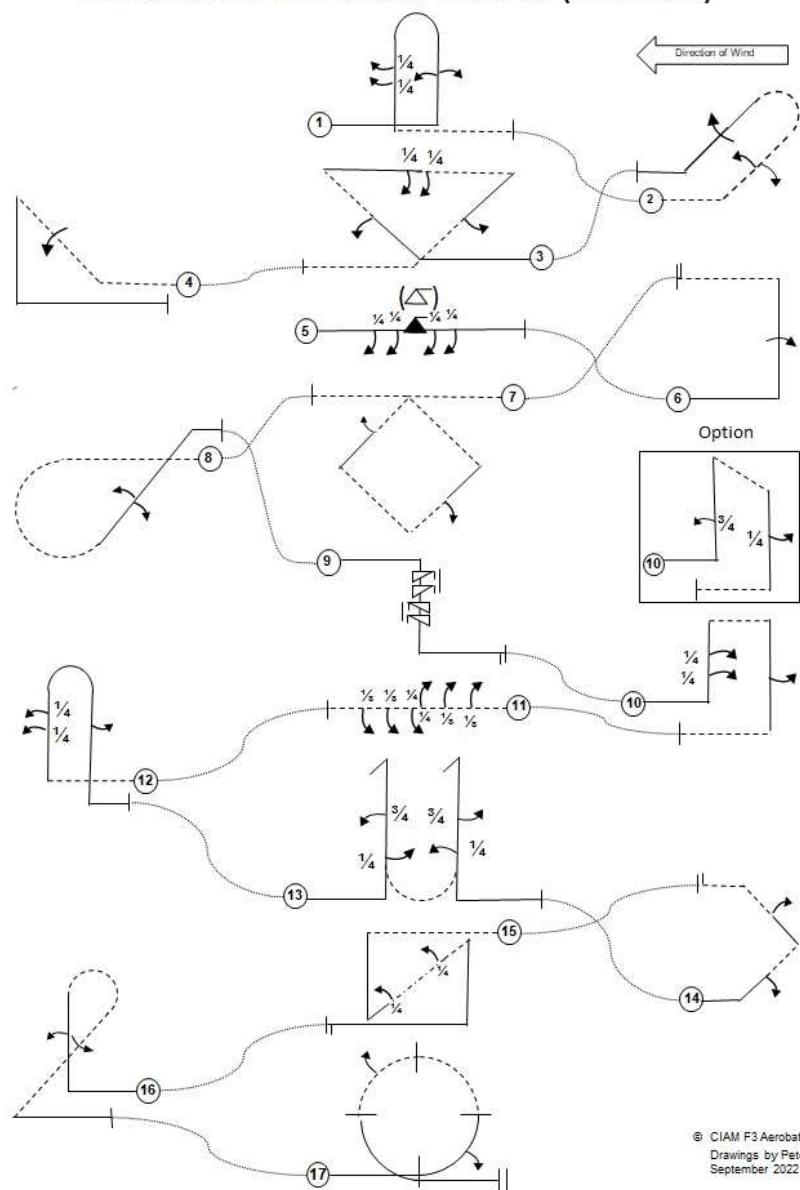


Flying and Judging F3A



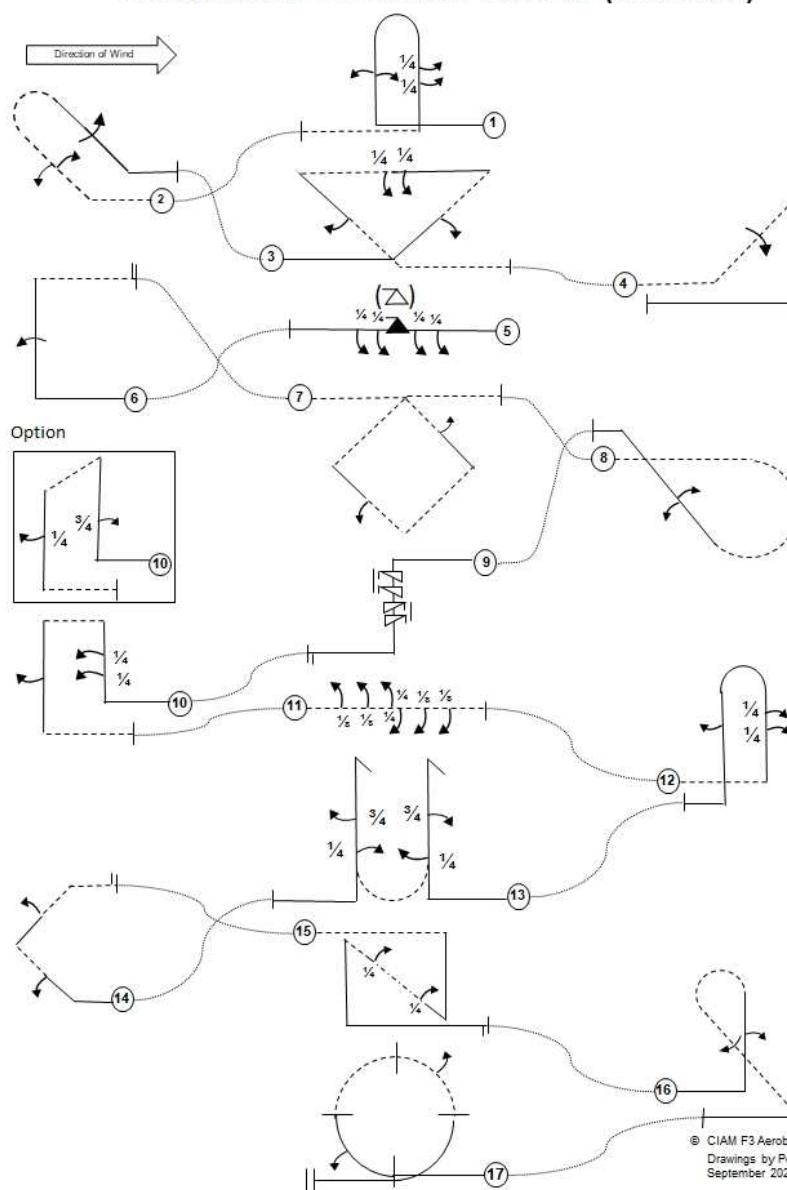
SCHEMATIC MANOEUVRE ILLUSTRATIONS
SCHEDULE P-27

PRELIMINARY SCHEDULE F3A P-27 (2026-2027)



© CIAM F3 Aerobatics
Drawings by Peter Uhlig
September 2022

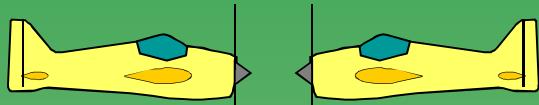
PRELIMINARY SCHEDULE F3A P-27 (2026-2027)



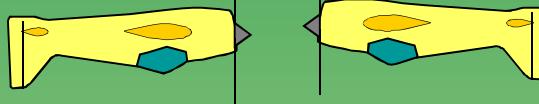
© CIAM F3 Aerobatics
Drawings by Peter Uhlig
September 2022



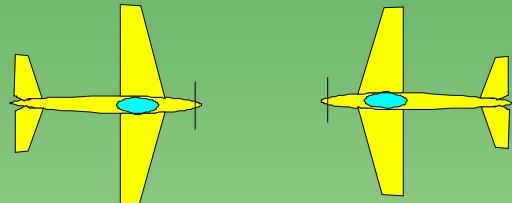
Explanations:



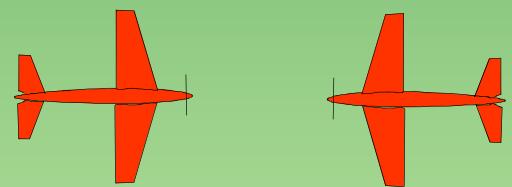
Aircraft upright



Aircraft inverted



Aircraft in Knife-Edge
View from Top



Aircraft in Knife-Edge
View from Below



$\frac{1}{4}$ part roll



half roll



roll



pos. spin



neg. spin



pos.



neg.



snap rolls

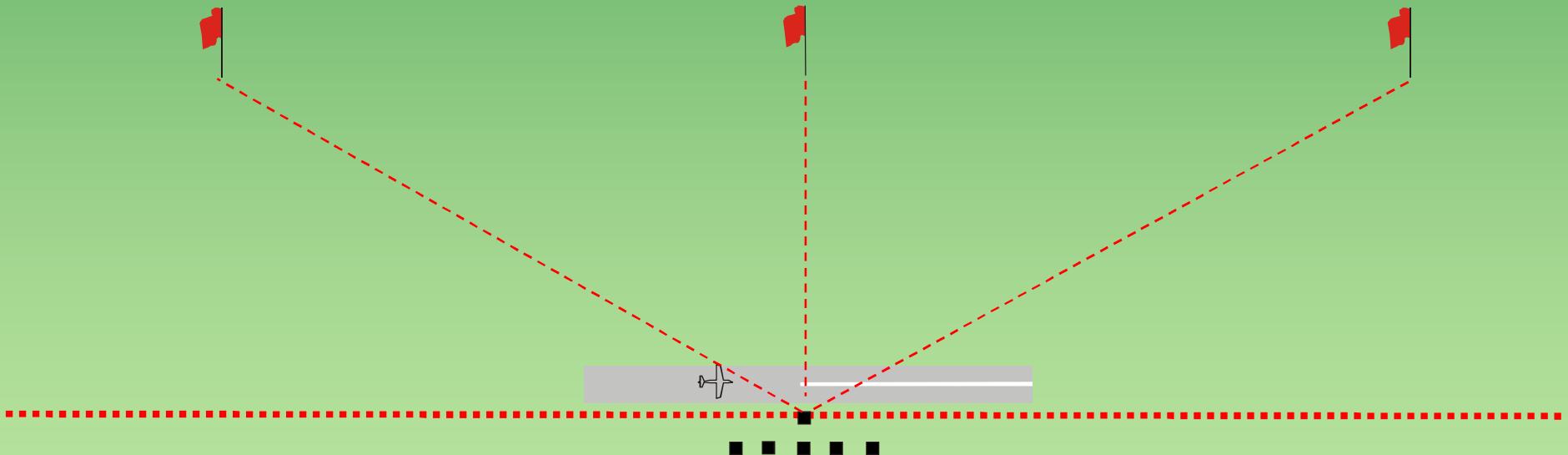
reference points



Take-off procedure

(not judged, not scored)

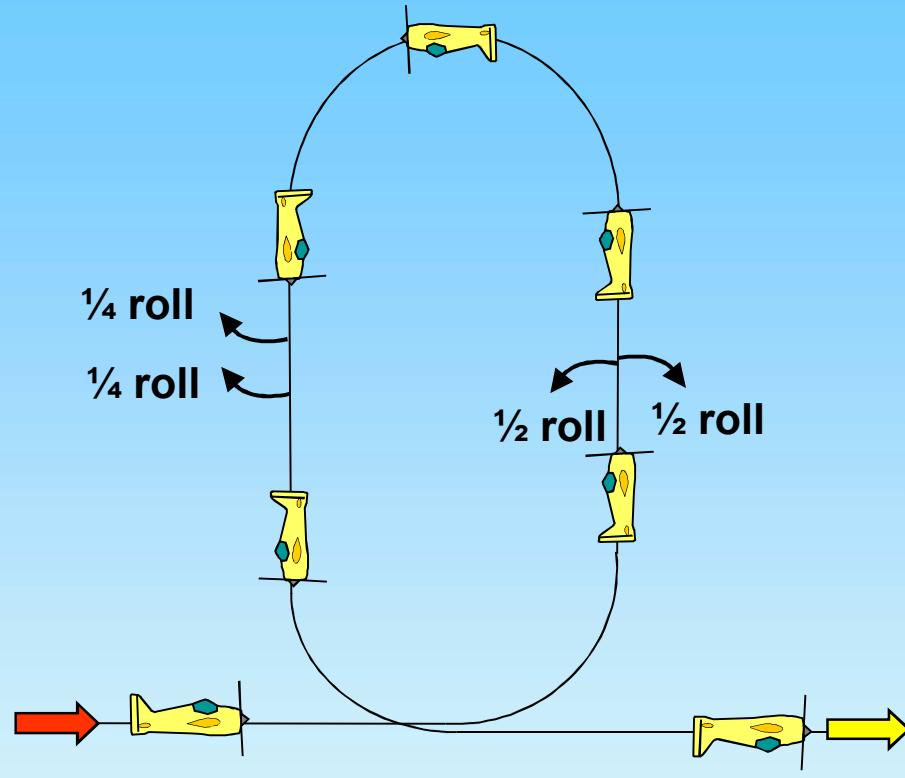
← **wind**



Safety line



P-27.01 Pull-Pull-Push Humpty Bump with two half rolls, two quarter rolls



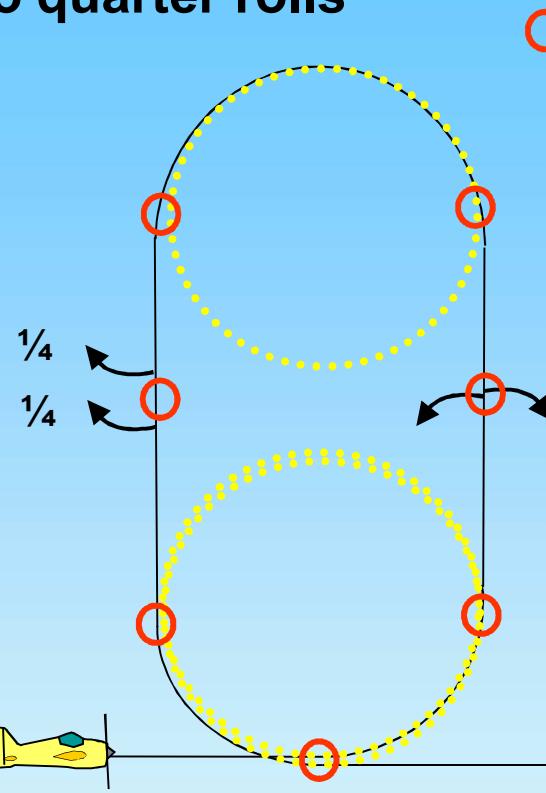
From upright, at centre, pull through a $\frac{1}{4}$ loop into a vertical upline, perform consecutively two $\frac{1}{2}$ rolls in opposite direction, pull through a half loop into a vertical downline, perform consecutively two $\frac{1}{4}$ rolls, push through a $\frac{1}{4}$ loop, exit inverted.



P-27.01.01



P-27.01 Pull-Pull-Push Humpty Bump with two half rolls, two quarter rolls



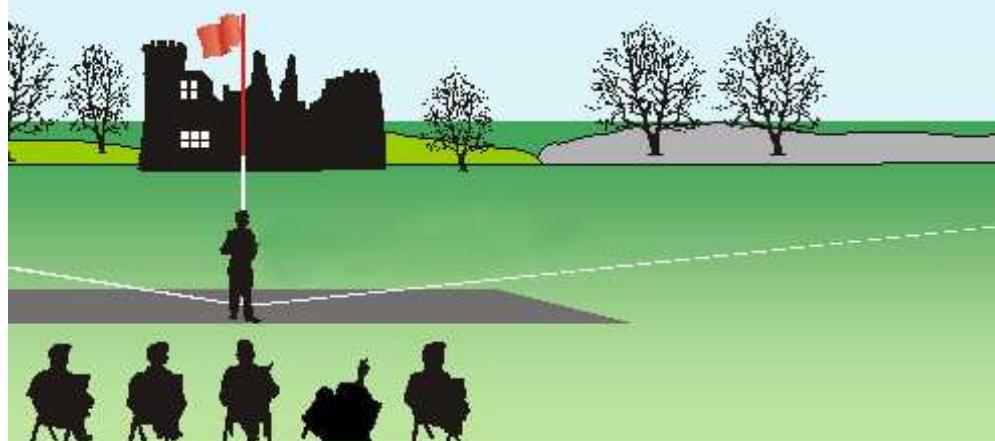
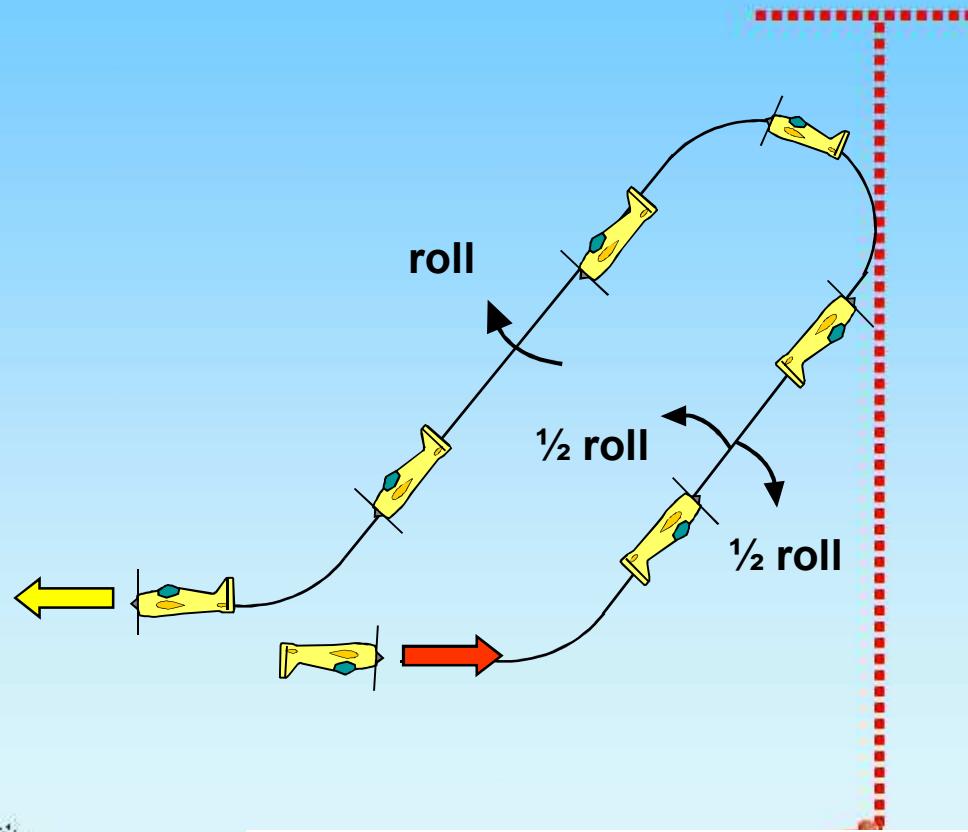
Part rolls centered on middle of the line.

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





P-27.02 Trombone with two half rolls, roll



From inverted, push through a $\frac{1}{8}$ loop into a 45° upline, perform consecutively two $\frac{1}{2}$ rolls in opposite direction, push through a half loop into a 45° downline, perform a roll, pull through a $\frac{1}{8}$ loop, exit upright.

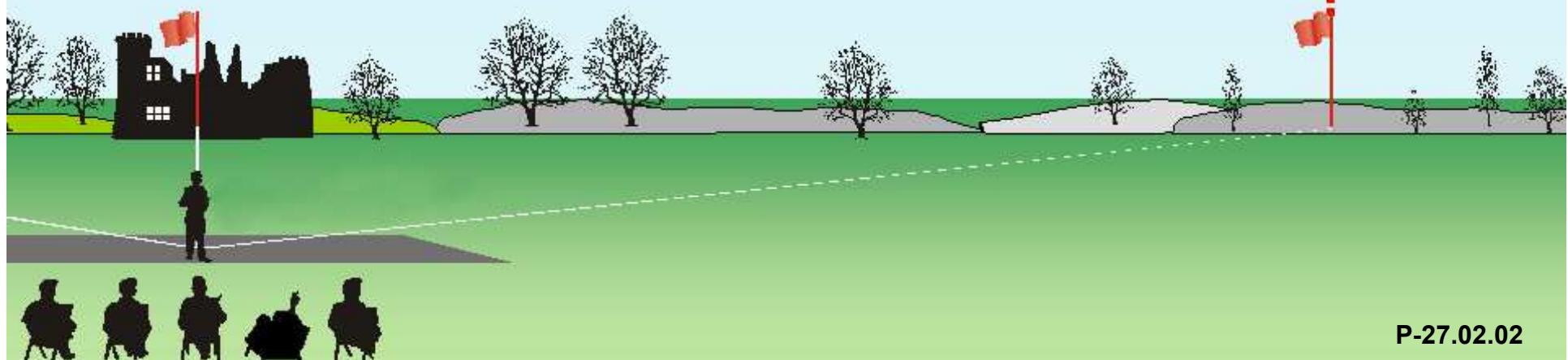
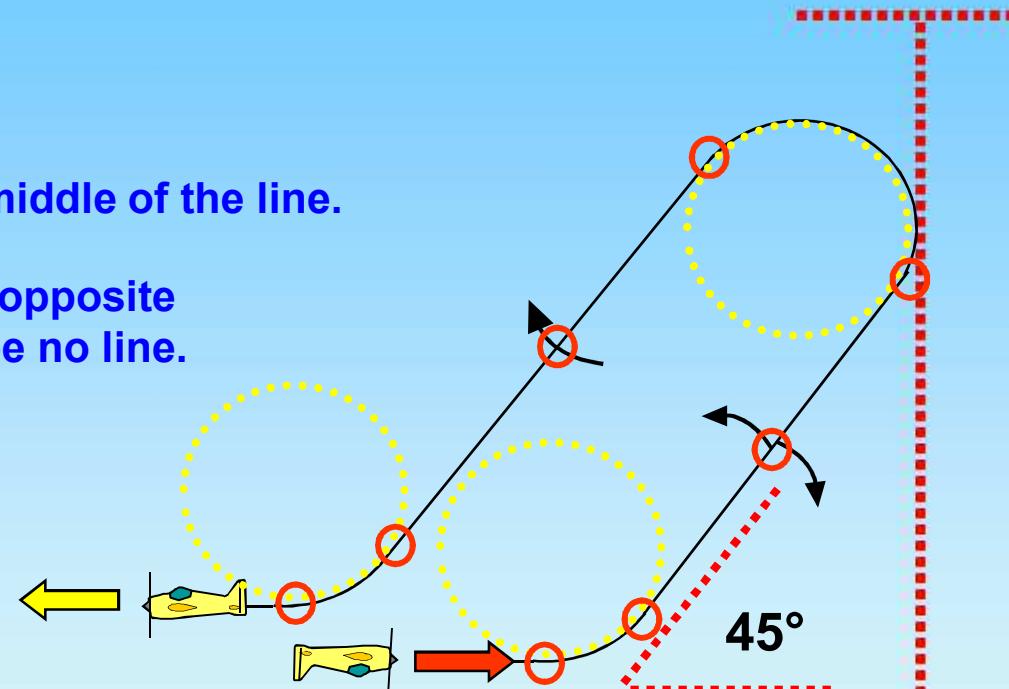


P-27.02 Trombone with two half rolls, roll

Part rolls and roll on middle of the line.

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

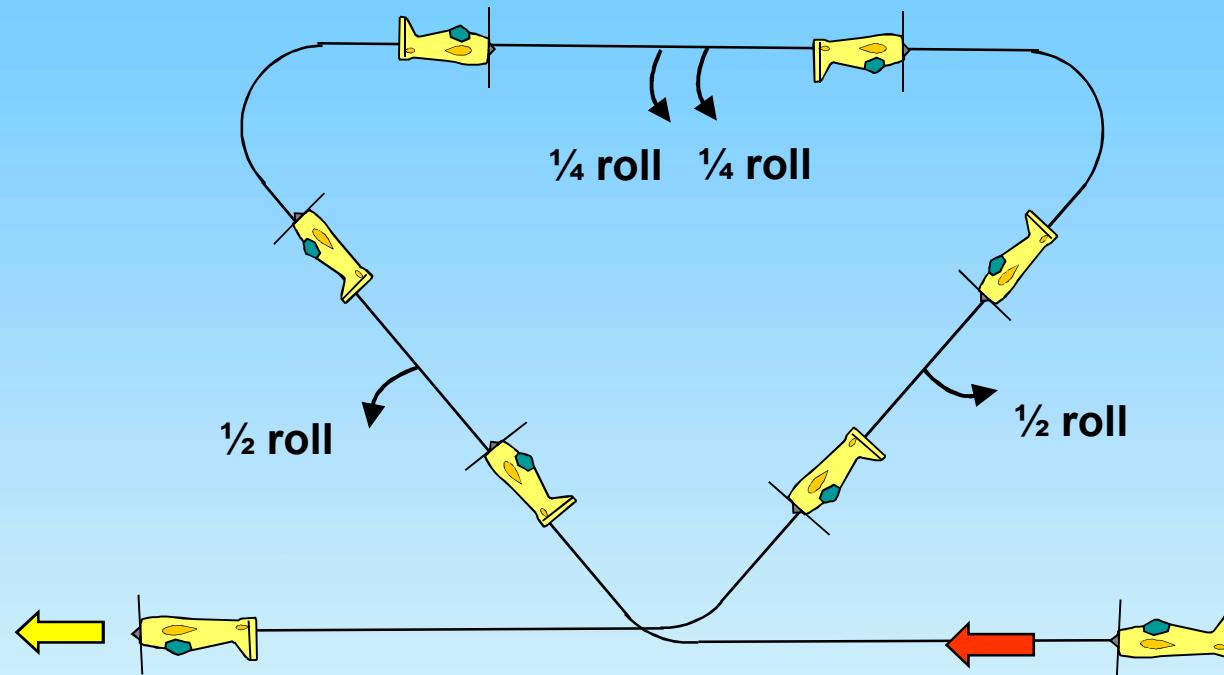
All radii are equal.



P-27.02.02



P-27.03 Triangle with half roll quarter roll, quarter roll, half roll



From upright, at centre, pull through a $\frac{1}{8}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, push through a $\frac{3}{8}$ loop, perform consecutively two $\frac{1}{4}$ rolls, pull through a $\frac{3}{8}$ loop into a 45° downline, perform a $\frac{1}{2}$ roll, push through $\frac{1}{8}$ loop, exit inverted.

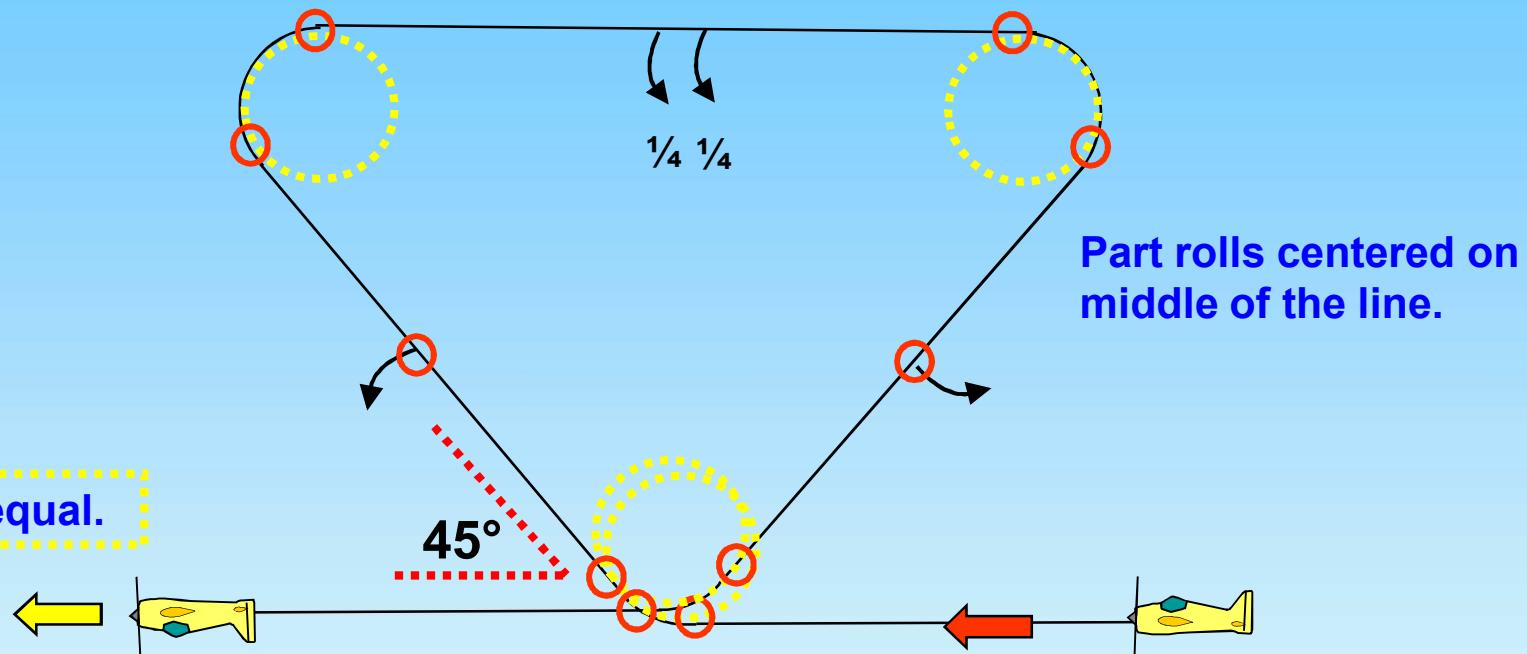


P-27.03.01



P-27.03 Triangle with half roll quarter roll, quarter roll, half roll Lines between part rolls must be short and

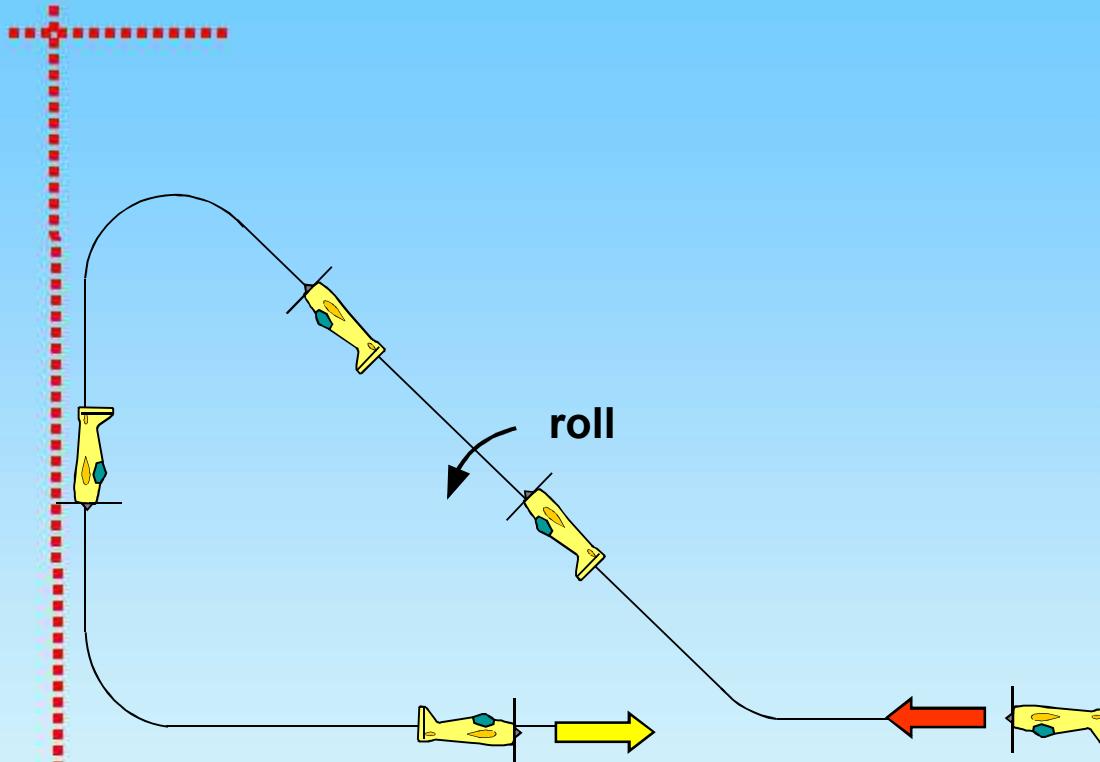
Lines between part rolls must be short and of recognisable length.



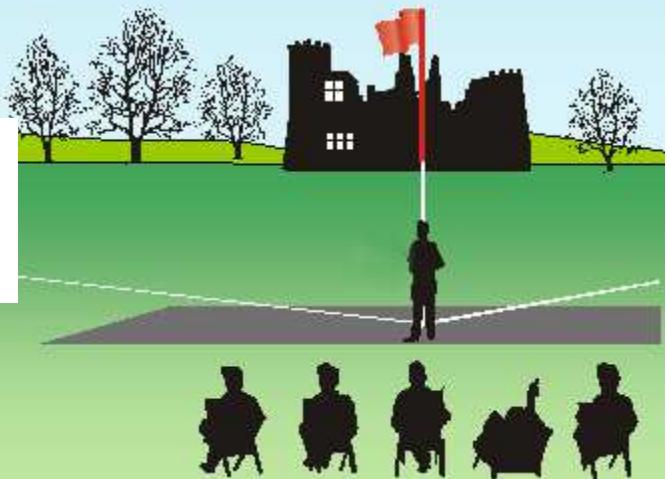
P-27.03.02



P-27.04 Reverse Shark Fin with roll

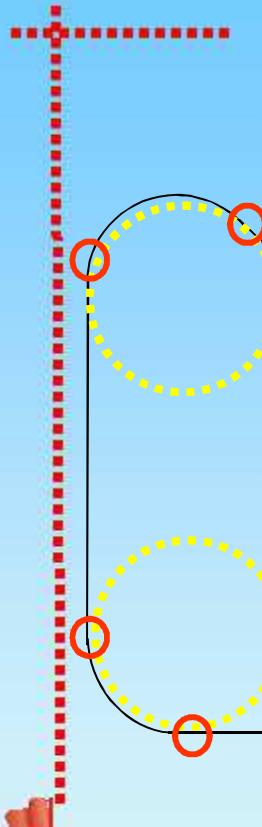


From inverted, push through a $\frac{1}{8}$ loop into a 45° upline, perform a roll, pull through a $\frac{3}{8}$ loop into a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.



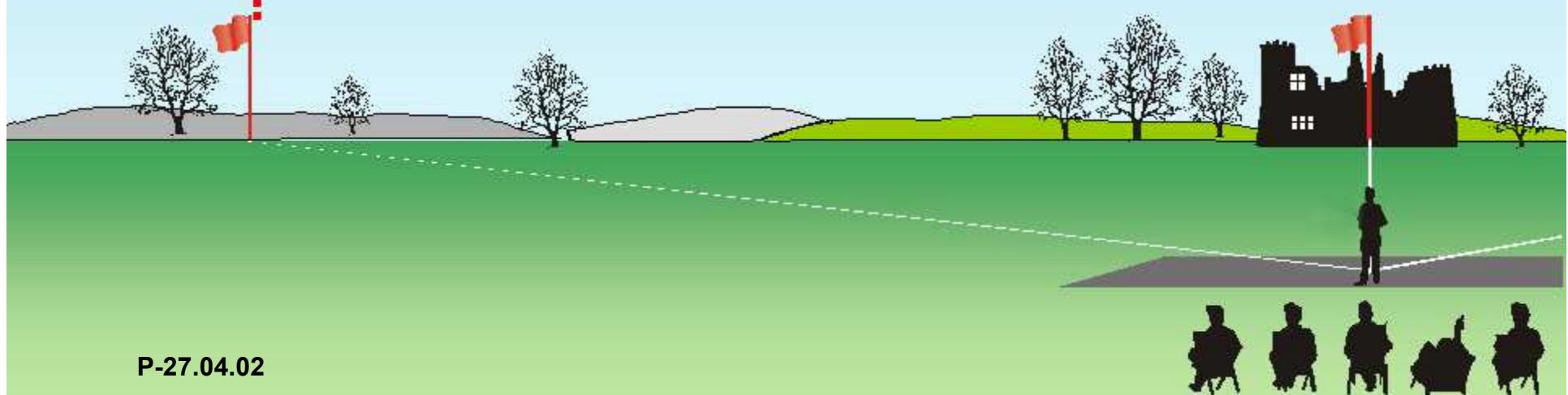


P-27.04 Reverse Shark Fin with roll



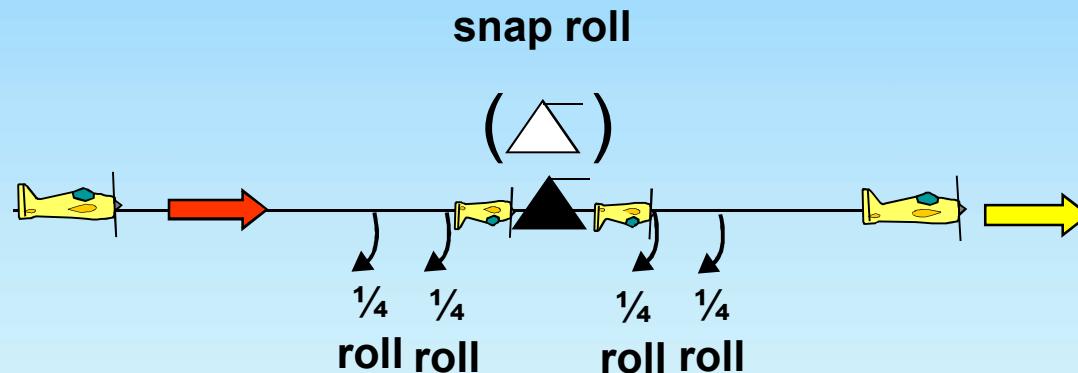
Roll on middle of the line.

All radii are equal.





P-27.05 Roll Combination with two quarter rolls, snap roll, two quarter rolls



From upright, perform consecutively two $\frac{1}{4}$ rolls, followed by a snap roll in opposite direction, followed by two consecutive $\frac{1}{4}$ rolls in opposite direction to the snap roll, exit upright.



P-27.05.01

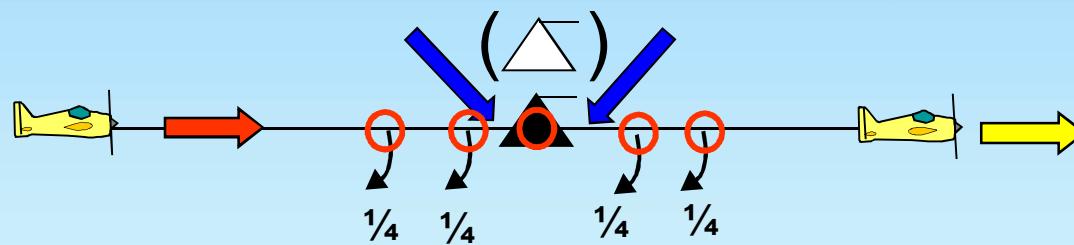


P-27.05 Roll Combination with two quarter rolls, snap roll, two quarter rolls

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

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

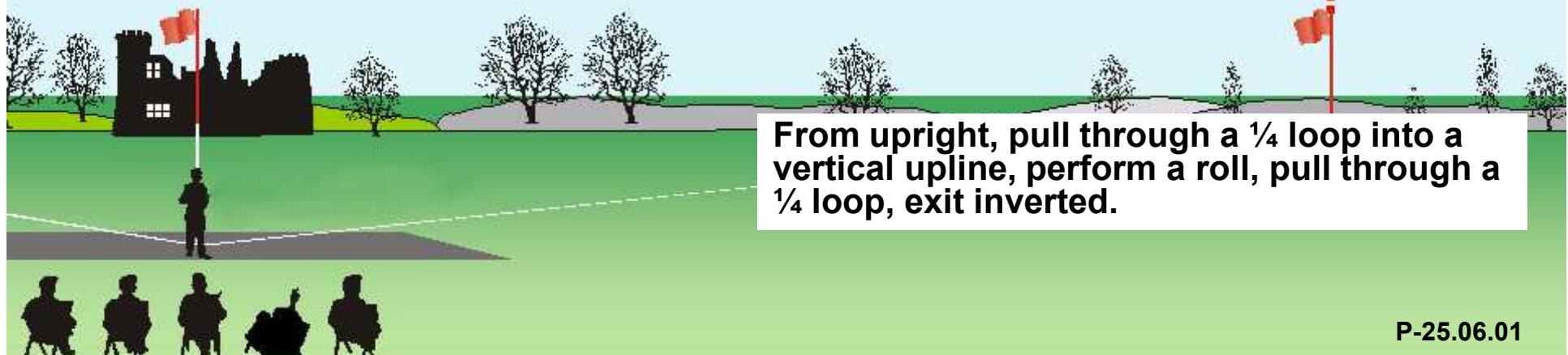
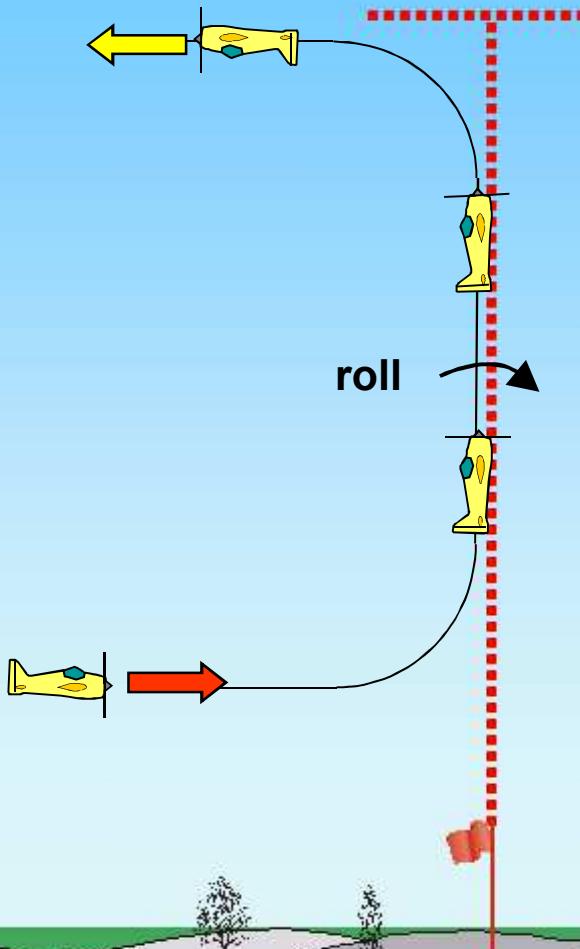
snap roll



P-27.05.02



P-27.06 Half Square Loop with roll



From upright, pull through a $\frac{1}{4}$ loop into a vertical upline, perform a roll, pull through a $\frac{1}{4}$ loop, exit inverted.

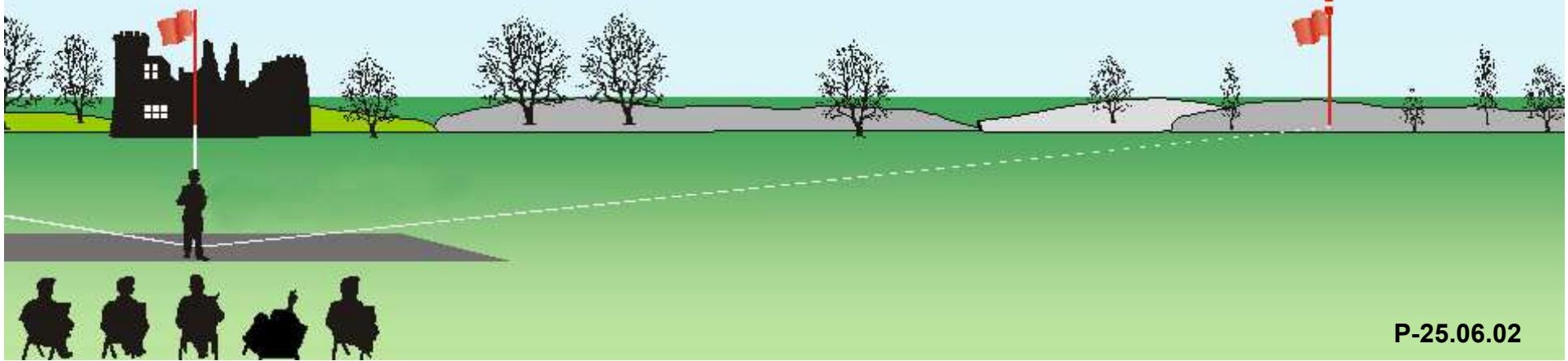
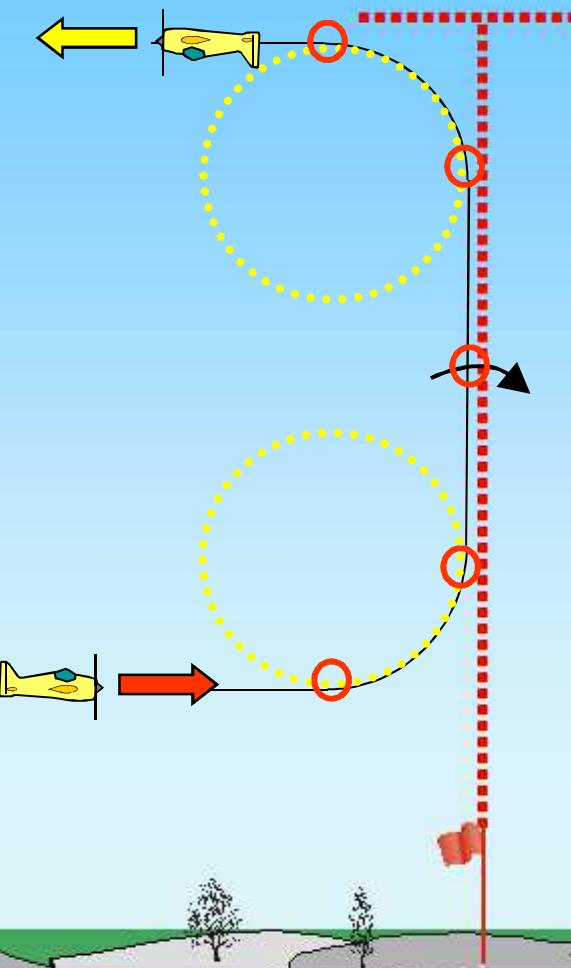
P-25.06.01



P-27.06 Half Square Loop with roll

Roll on middle of the line.

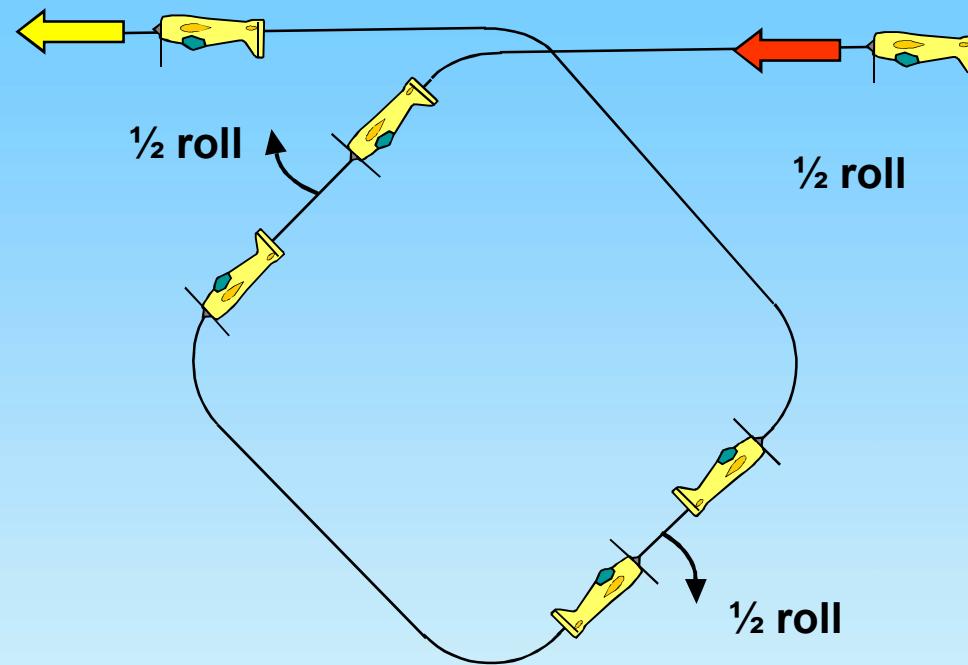
All radii are equal.



P-25.06.02



P-27.07 Square Loop on corner from Top with half roll, half roll



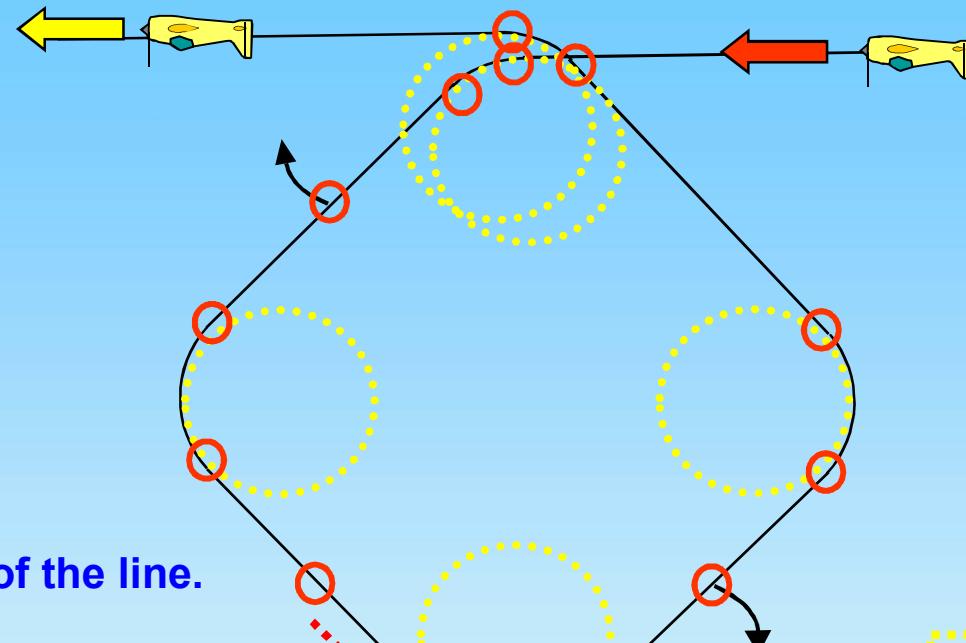
From inverted, pull through a $\frac{1}{8}$ loop into a 45° downline, perform a $\frac{1}{2}$ roll, push through a $\frac{1}{4}$ loop into a 45° downline, push through a $\frac{1}{4}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, pull through a $\frac{1}{4}$ loop into a 45° upline, pull through a $\frac{1}{8}$ loop, exit inverted.



P-27.07.01

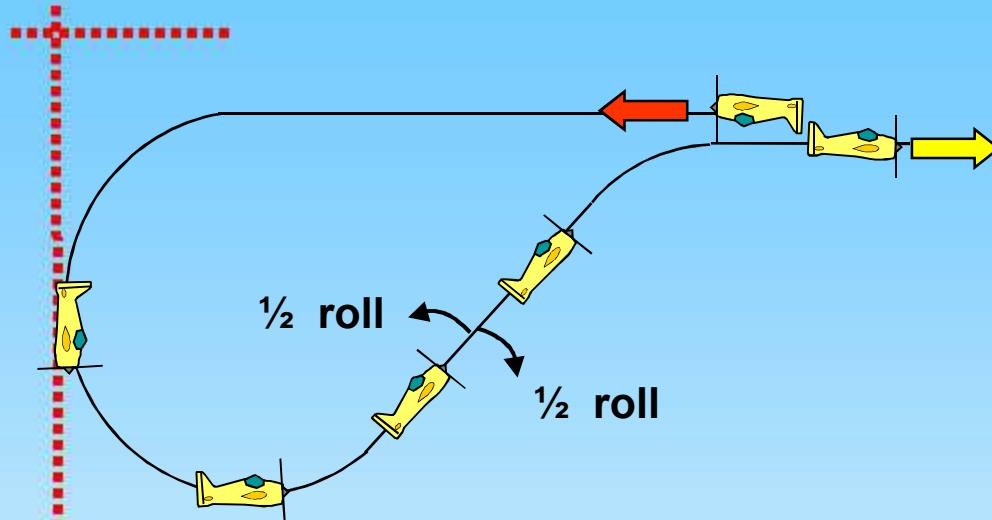


P-27.07 Square Loop on corner from Top with half roll, half roll

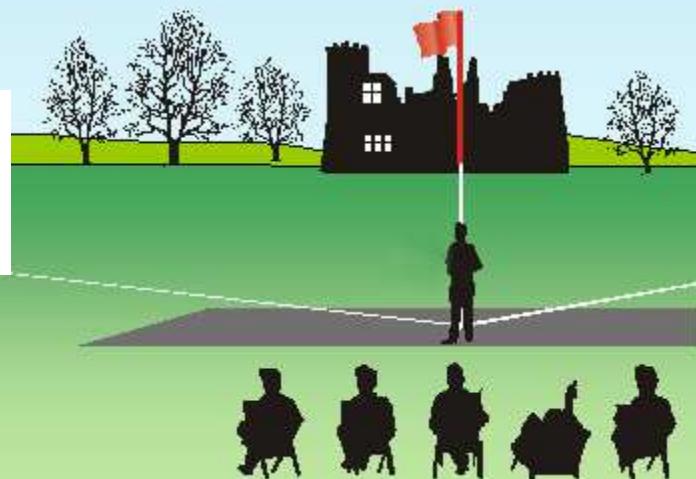




P-27.08 Half Cuban Eight from Top with two half rolls



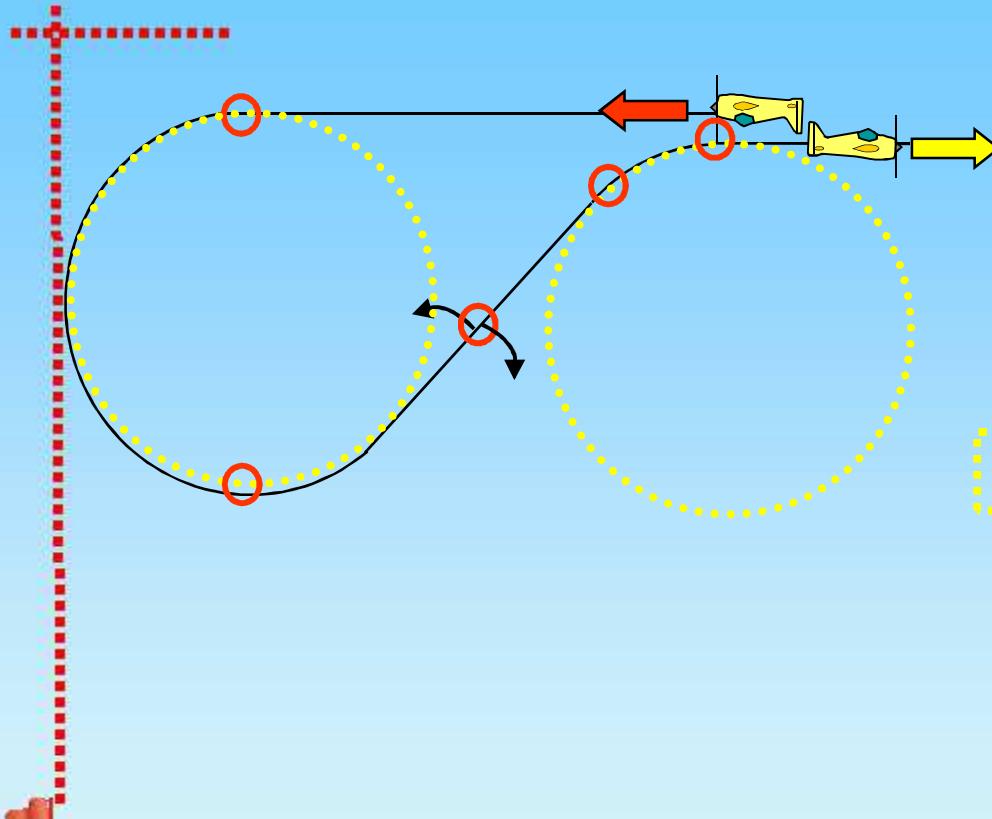
From inverted, pull through a $\frac{5}{8}$ loop into a 45° upline, perform consecutively two $\frac{1}{2}$ rolls in opposite direction, push through a $\frac{1}{8}$ loop, exit upright.



P-27.08.01



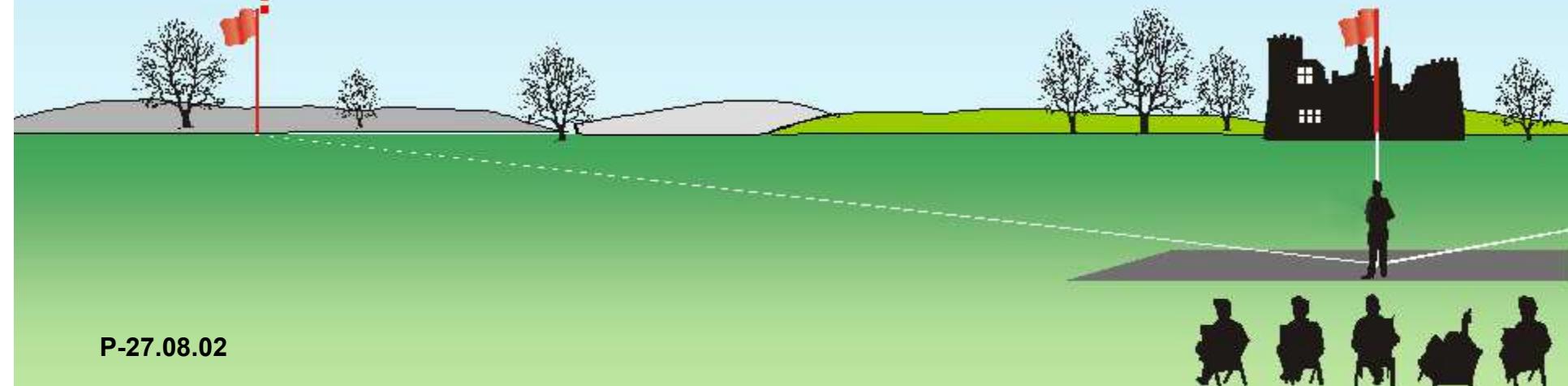
P-27.08 Half Cuban Eight from Top with two half rolls



½ rolls on middle of the line.

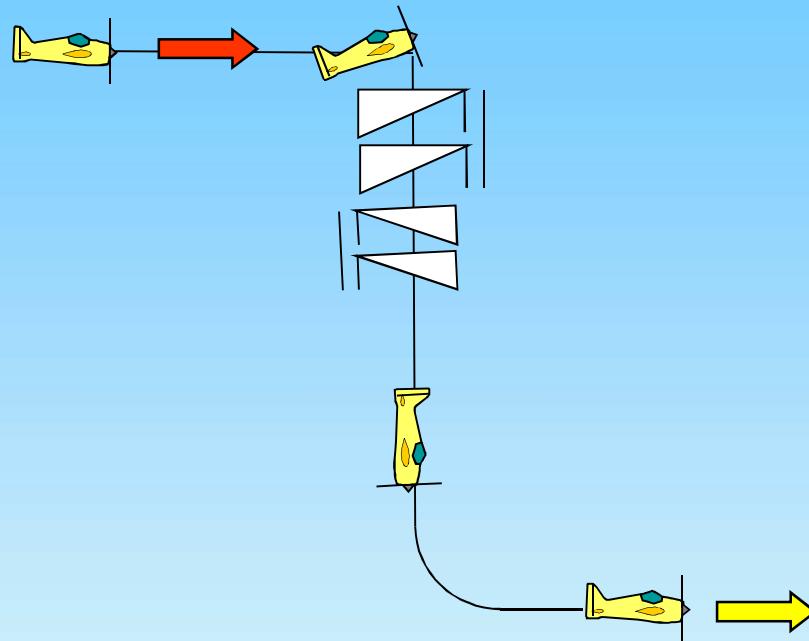
Between part rolls in opposite direction there must be no line.

All radii are equal.





P-27.09 Spin with two turns, two turns in opposite direction



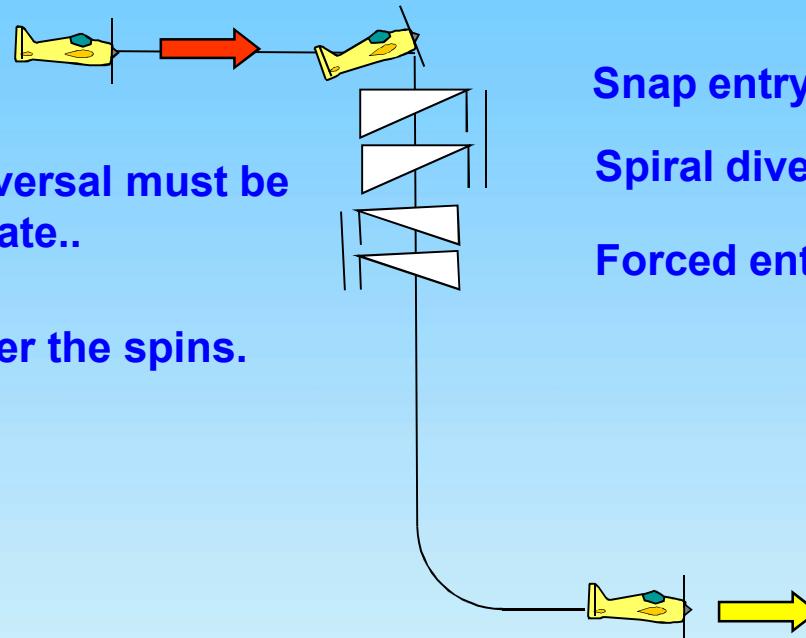
From upright, perform a two turn spin, perform immediately another two turn spin in the opposite direction, perform a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.



P-27.09.01



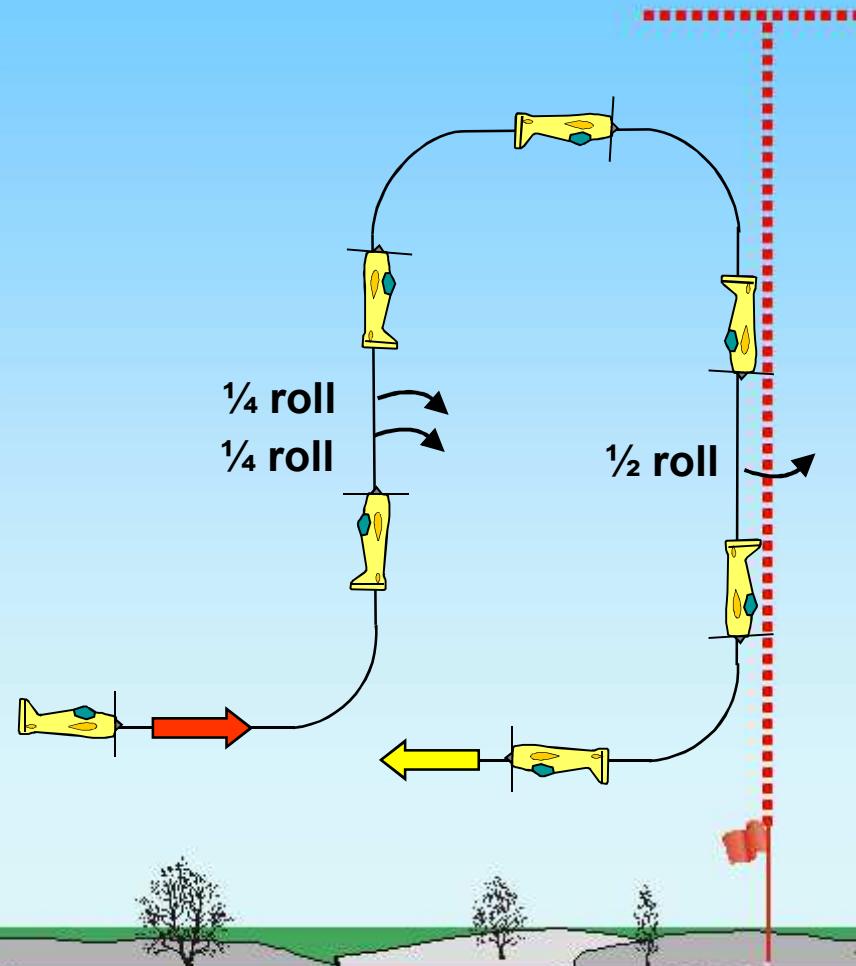
P-27.09 Spin with two turns, two turns in opposite direction



P-27.09.02



P-27.10 Top Hat with two quarter rolls, half roll. Option: Top Hat with $\frac{3}{4}$ roll, $\frac{1}{4}$ roll



From upright, pull through a $\frac{1}{4}$ loop into a vertical upline, perform consecutively two $\frac{1}{4}$ rolls, pull through a $\frac{1}{4}$ loop, pull through a $\frac{1}{4}$ loop into a vertical downline, perform a $\frac{1}{2}$ roll, push through $\frac{1}{4}$ loop, exit inverted.



P-27.10.01

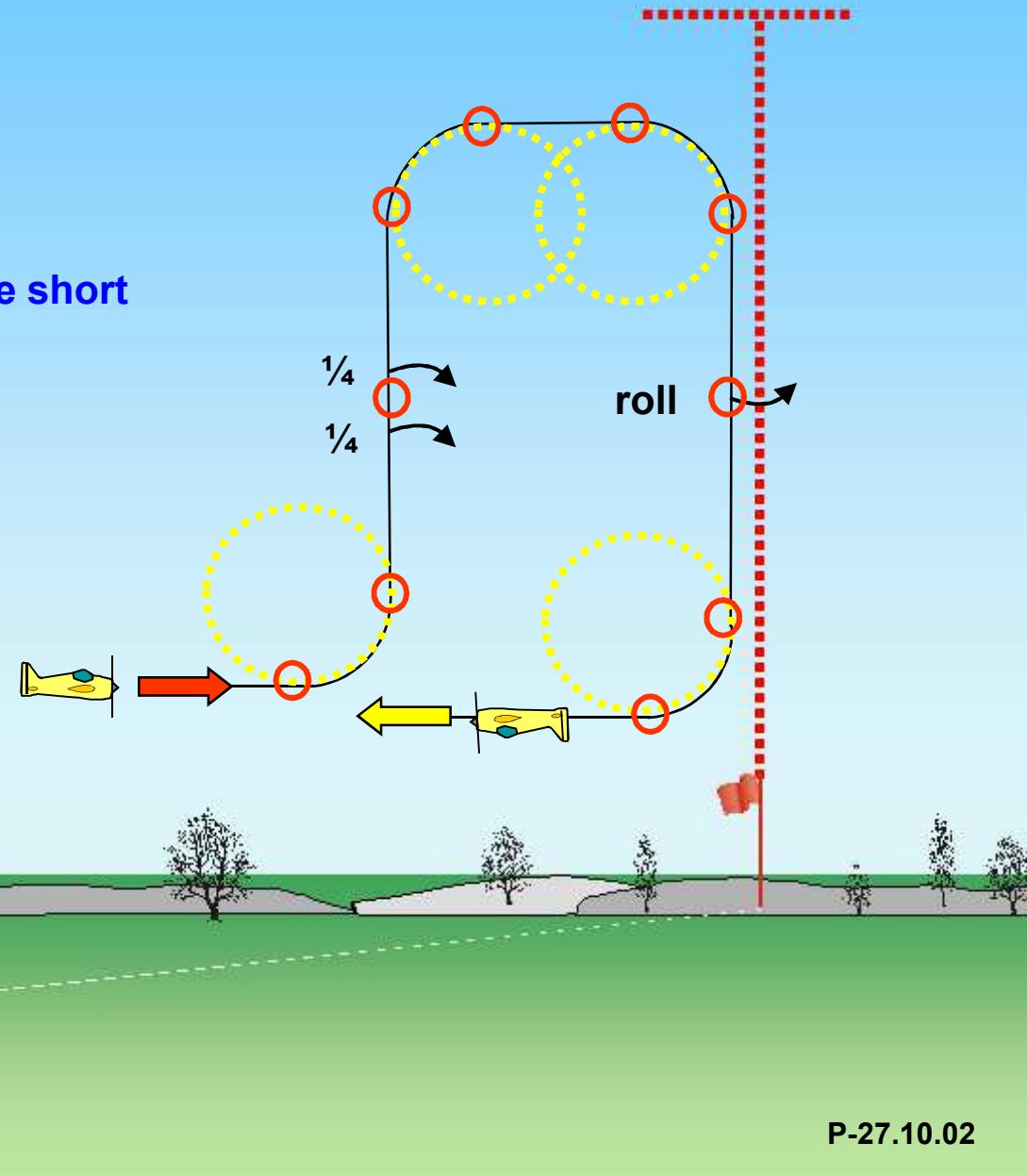


P-27.10 Top Hat with two quarter rolls, half roll. Option: Top Hat with $\frac{3}{4}$ roll, $\frac{1}{4}$ roll

Part rolls centered on middle of the line.

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

All radii are equal.

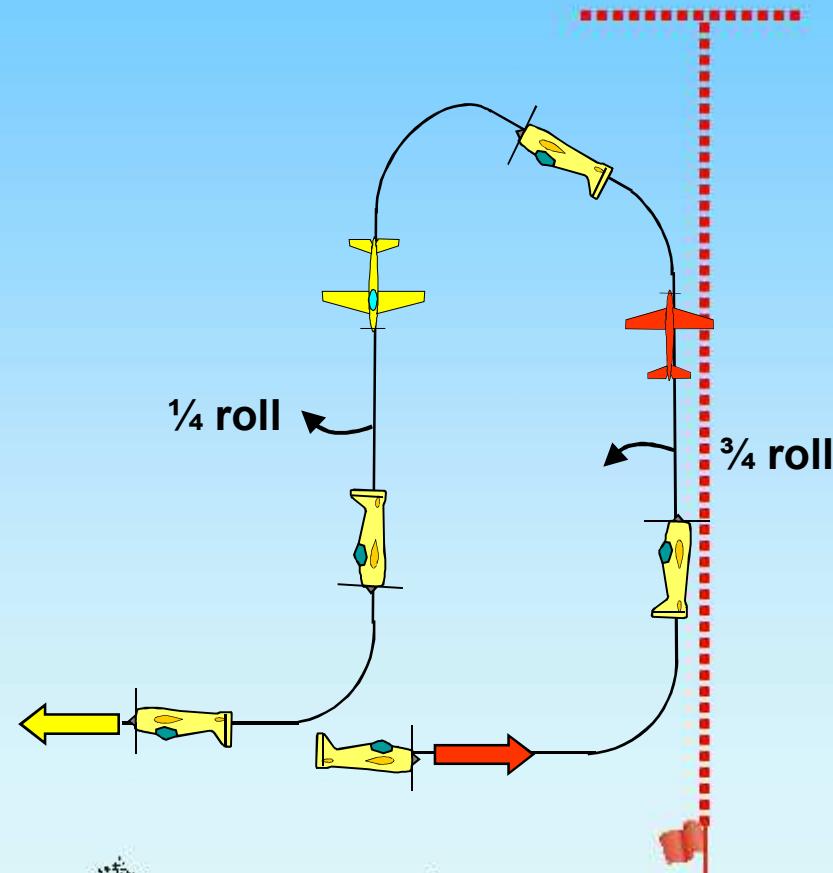


P-27.10.02



P-27.10 Top Hat with two quarter rolls, half roll. Option: Top Hat with $\frac{3}{4}$ roll, $\frac{1}{4}$ roll

Option



Option: From upright, pull through a $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{3}{4}$ roll, pull through a $\frac{1}{4}$ loop into a cross box line, pull through a $\frac{1}{4}$ loop into a vertical downline, perform a $\frac{1}{4}$ roll, push through $\frac{1}{4}$ loop, exit inverted.



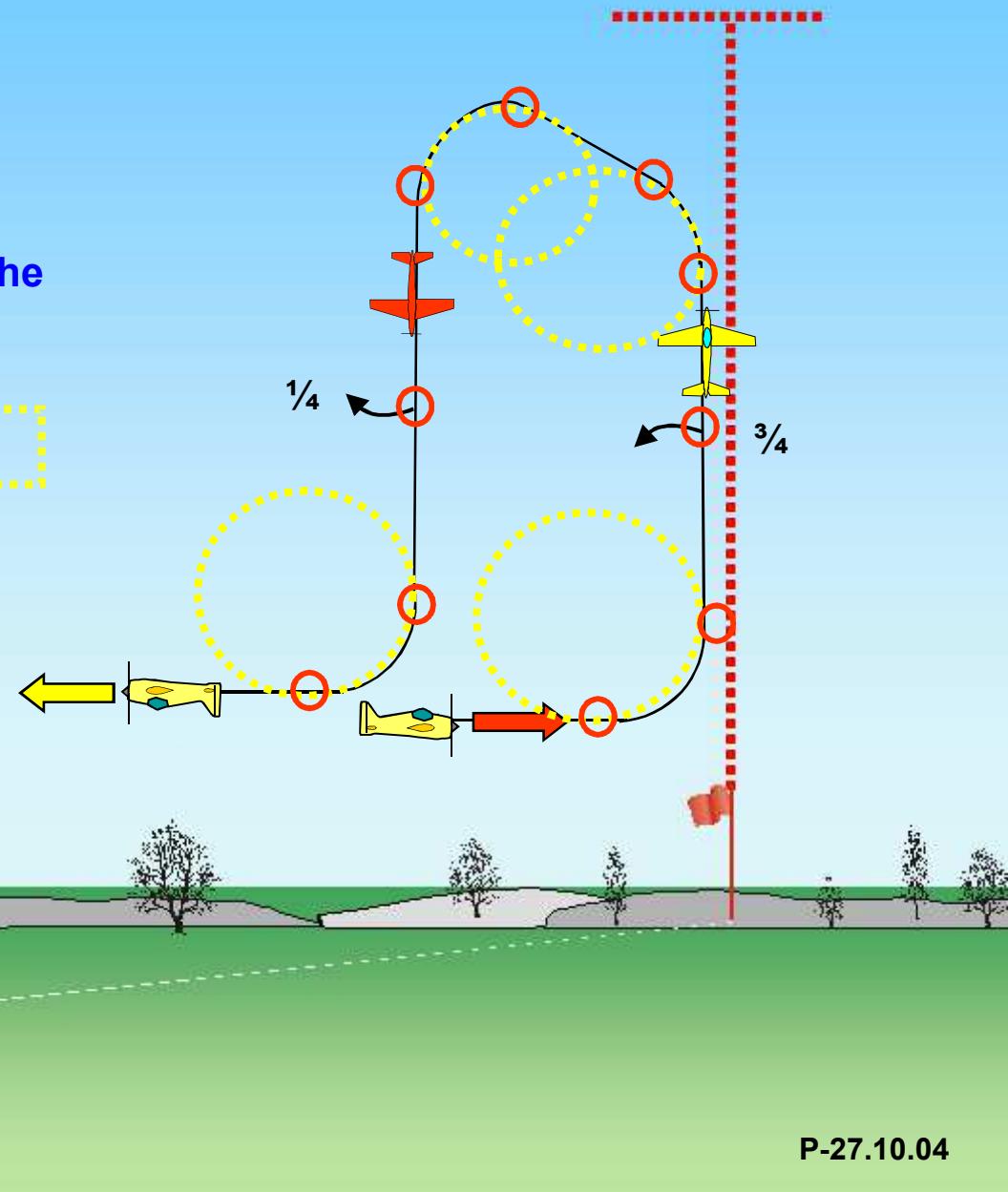
P-27.10 Top Hat with two quarter rolls, half roll.

Option: Top Hat with $\frac{3}{4}$ roll, $\frac{1}{4}$ roll

Option

Part rolls on middle of the line.

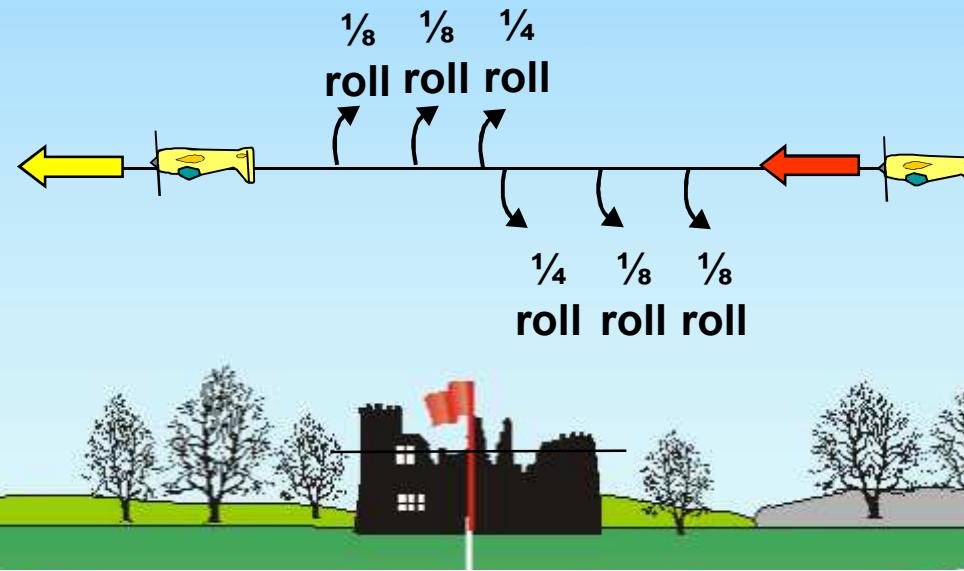
All radii are equal.



P-27.10.04



P-27.11 Roll Combination with two one eighth rolls, two quarter rolls, two one eighth rolls



From inverted, perform consecutively two $\frac{1}{8}$ rolls and one $\frac{1}{4}$ roll followed consecutively by one $\frac{1}{4}$ roll and two $\frac{1}{8}$ rolls in opposite direction to the first three part rolls, exit inverted.



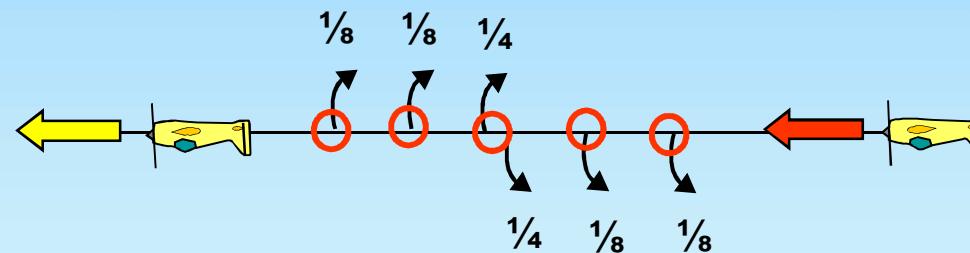
P-27.11.01



P-27.11 Roll Combination with two one eighth rolls, two quarter rolls, two one eighth rolls

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

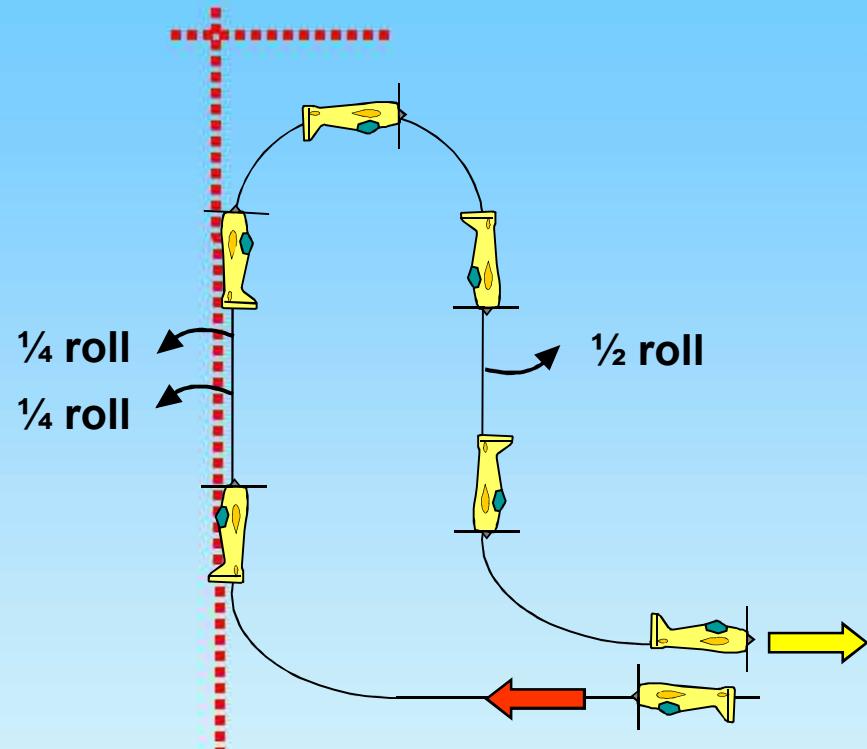
Between rolls and part rolls in opposite direction there must be no line.



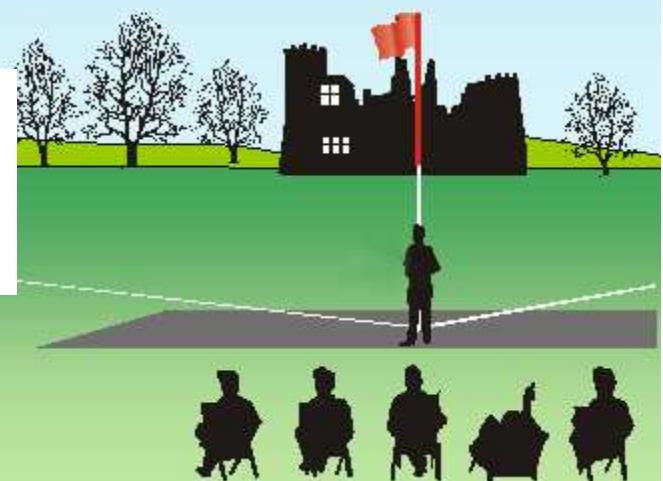
P-27.11.02



P-27.12 Push-Pull-Pull Humpty Bump with two quarter rolls, half roll

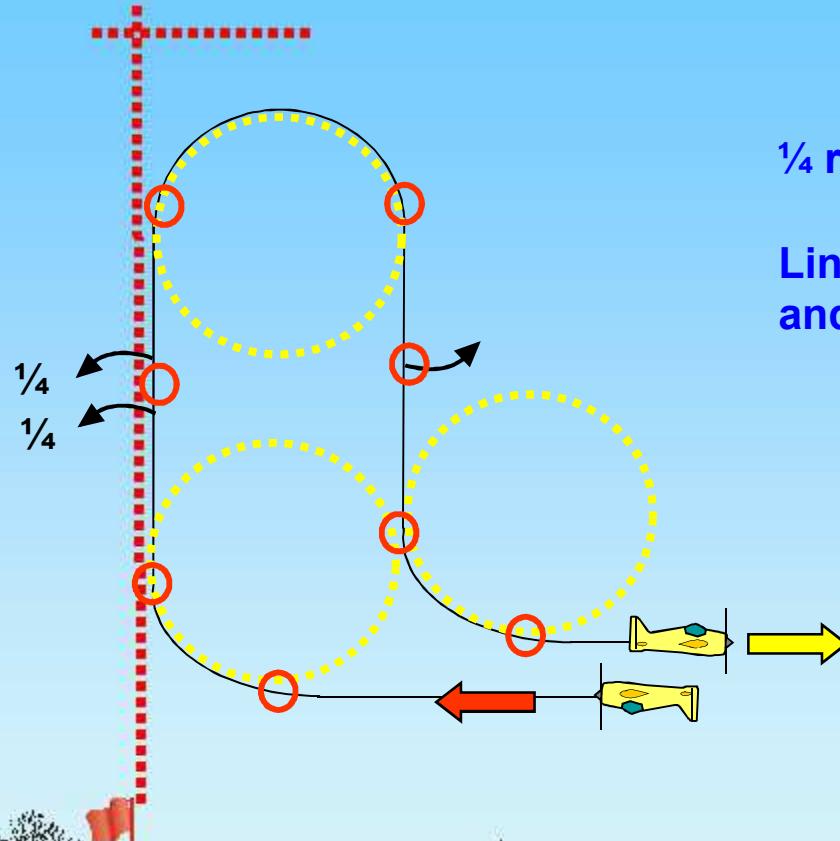


From inverted, push through a $\frac{1}{4}$ loop into a vertical upline, perform consecutively two $\frac{1}{4}$ rolls, pull through a half loop into a vertical downline, perform a $\frac{1}{2}$ roll, pull through a $\frac{1}{4}$ loop, exit upright.





P-27.12 Push-Pull-Pull Humpty Bump with two quarter rolls, half roll



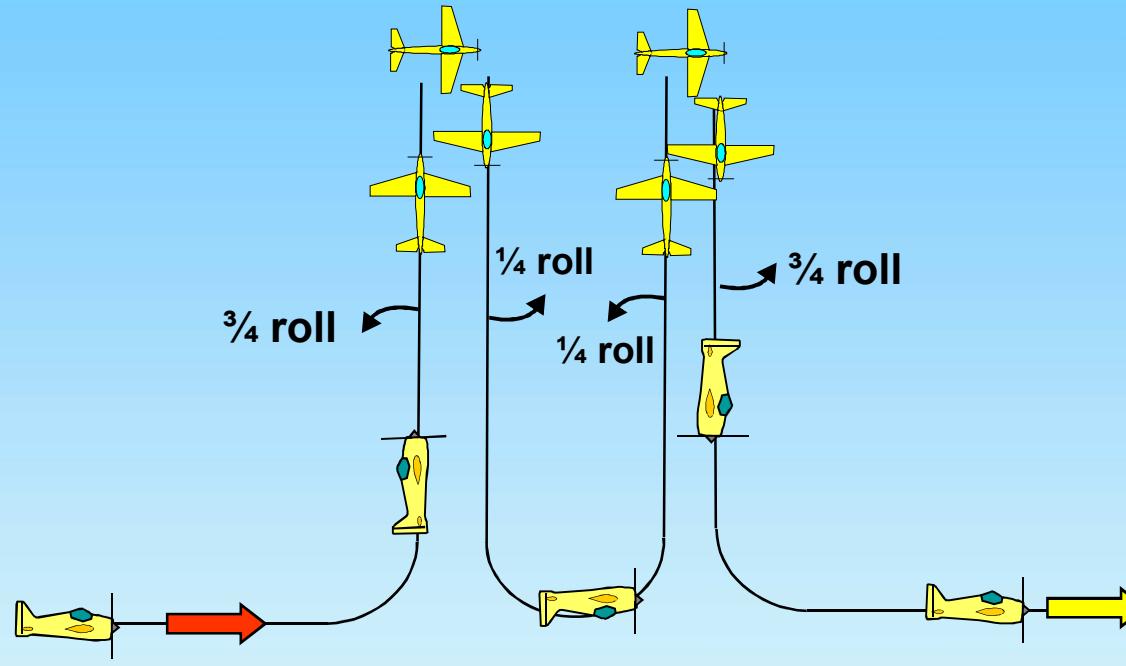
$\frac{1}{4}$ rolls centered on middle of the line.

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

All radii are equal.



P-27.13 Figure M with three quarter roll, quarter roll, quarter roll, three quarter roll



From upright, before centre, pull through a $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{3}{4}$ roll, perform a stall turn into a vertical downline, perform a $\frac{1}{4}$ roll, push through a half loop into a vertical upline, perform a $\frac{1}{4}$ roll, perform a stall turn into a vertical downline, perform a $\frac{3}{4}$ roll, pull through a quarter loop, exit upright.





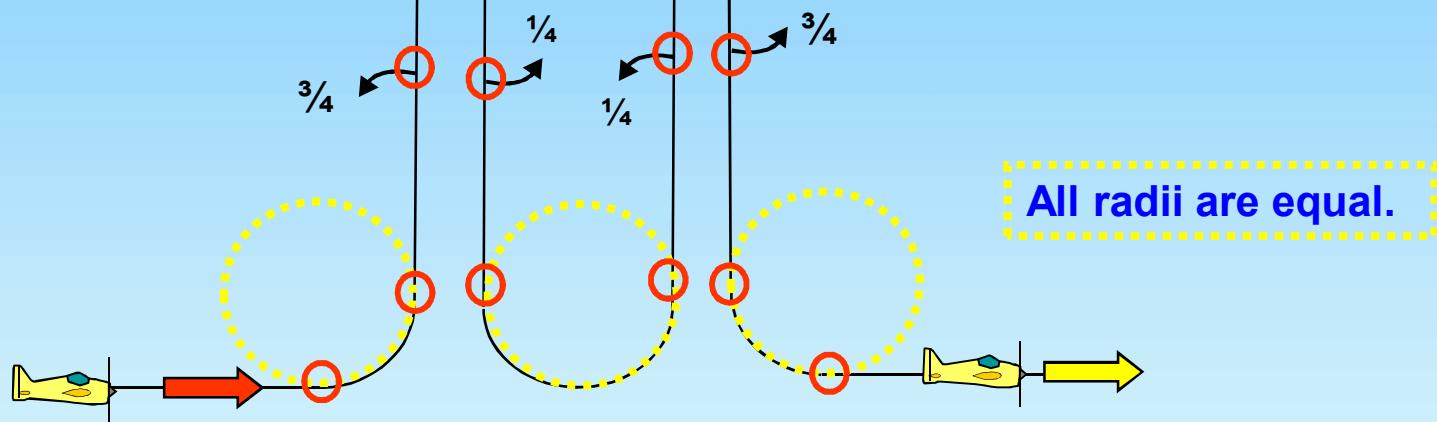
P-27.13 Figure M with three quarter roll, quarter roll, quarter roll, three quarter roll

Stop before pivot

Part rolls on middle of the lines.

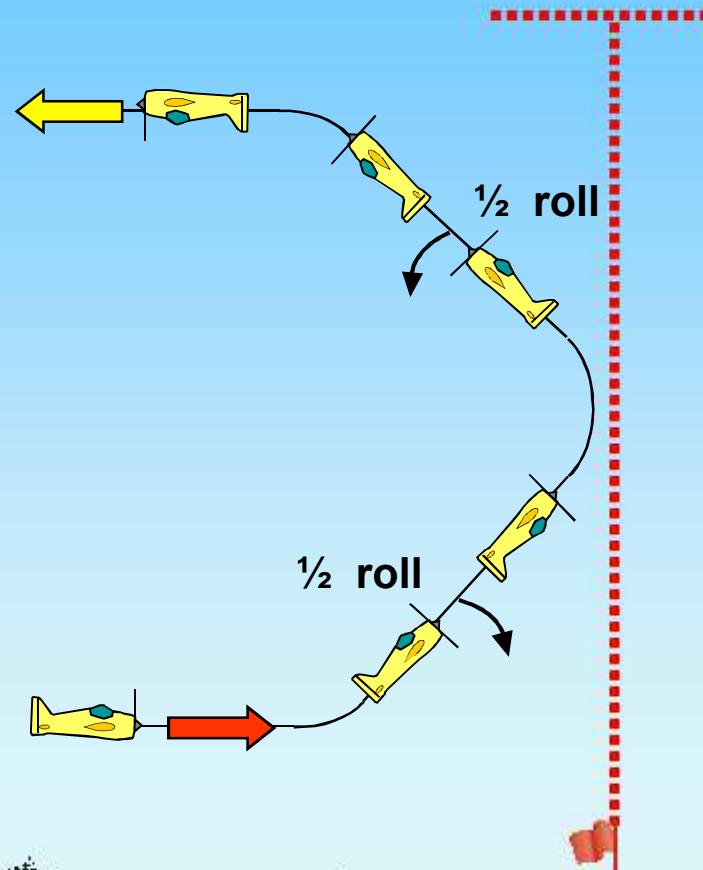


Two wing spans or more
- zero points!





P-27.14 Half square Loop on Corner with half roll, half roll



From upright, pull through a $\frac{1}{8}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, push through a $\frac{1}{4}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, pull through a $\frac{1}{8}$ loop, exit inverted.

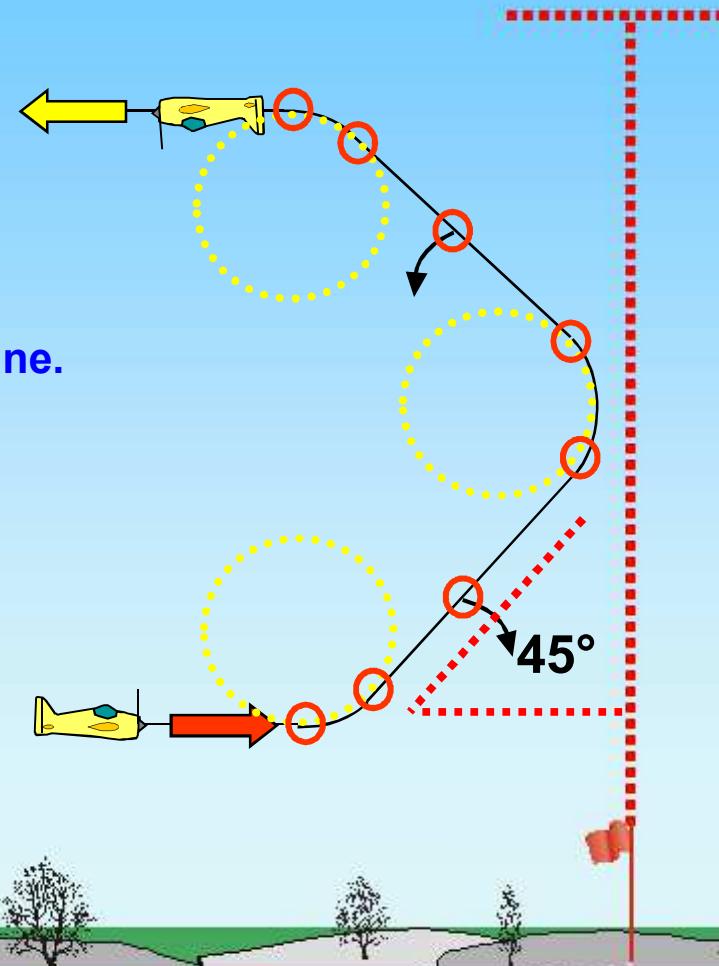
P-27.14.01



P-27.14 Half Square Loop on Corner with half roll, half roll

½ rolls on middle of the line.

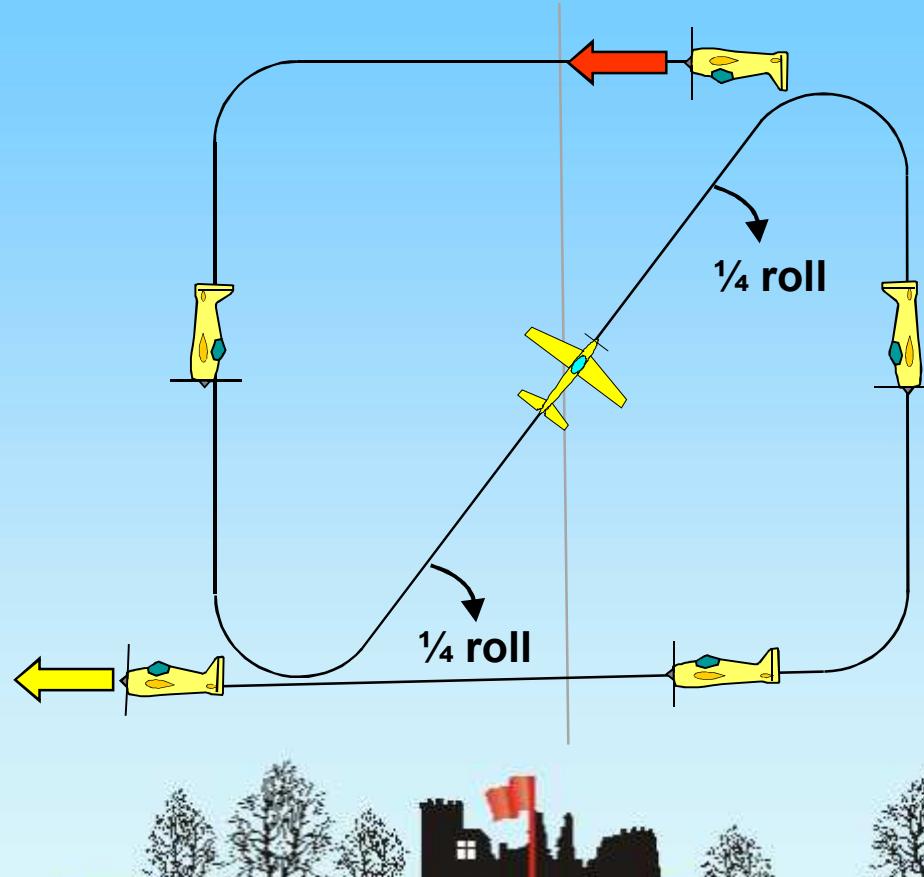
All radii are equal.



P-27.14.02



P-27.15 Square from Top with quarter roll, knife-edge flight, quarter roll



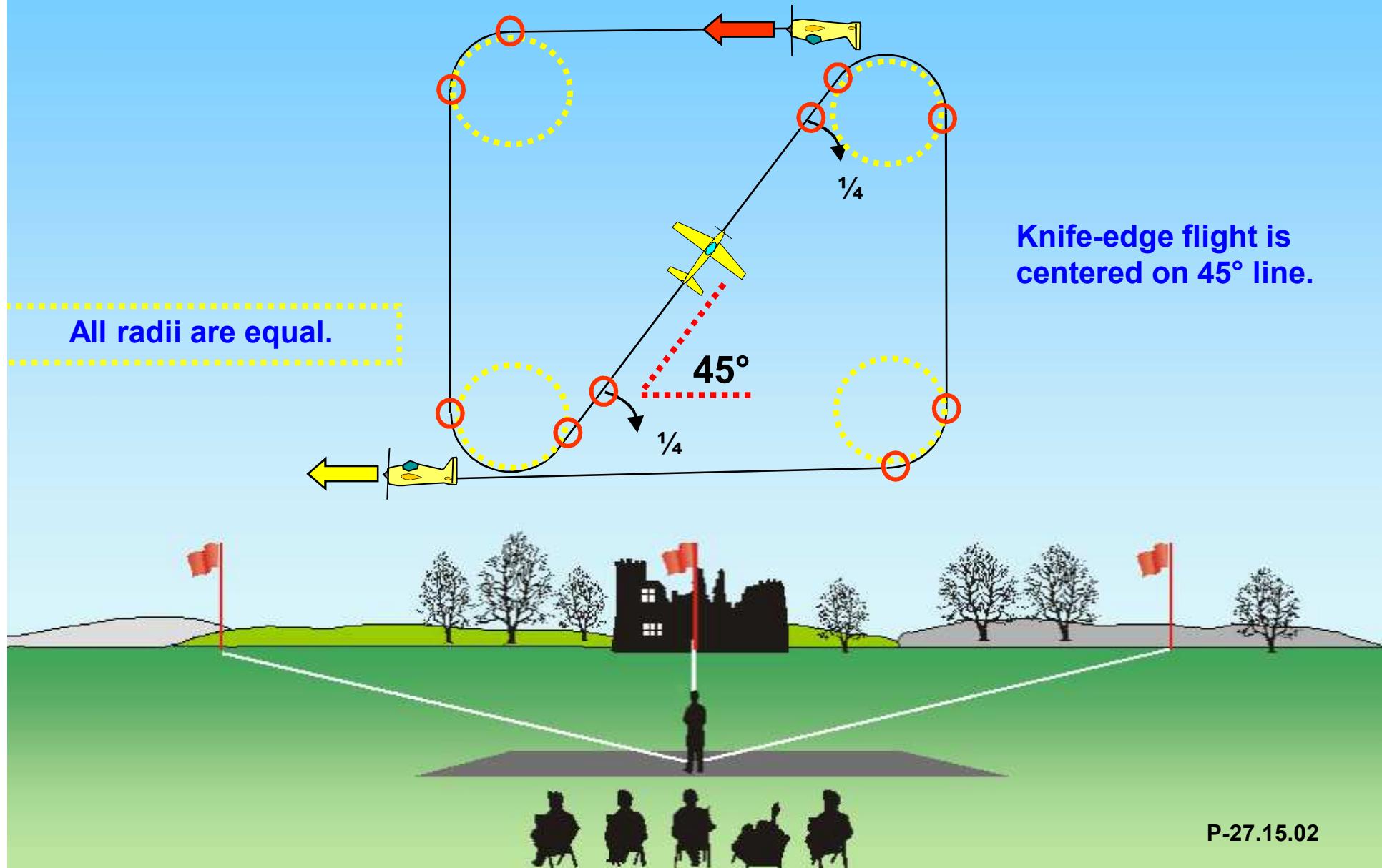
From inverted, fly past centre, pull through a $\frac{1}{4}$ loop into a vertical downline, pull through a $\frac{3}{8}$ loop into a 45° upline, perform a $\frac{1}{4}$ roll into knife edge-flight, perform a $\frac{1}{4}$ roll, pull through a $\frac{3}{8}$ loop into a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.



P-27.15.01



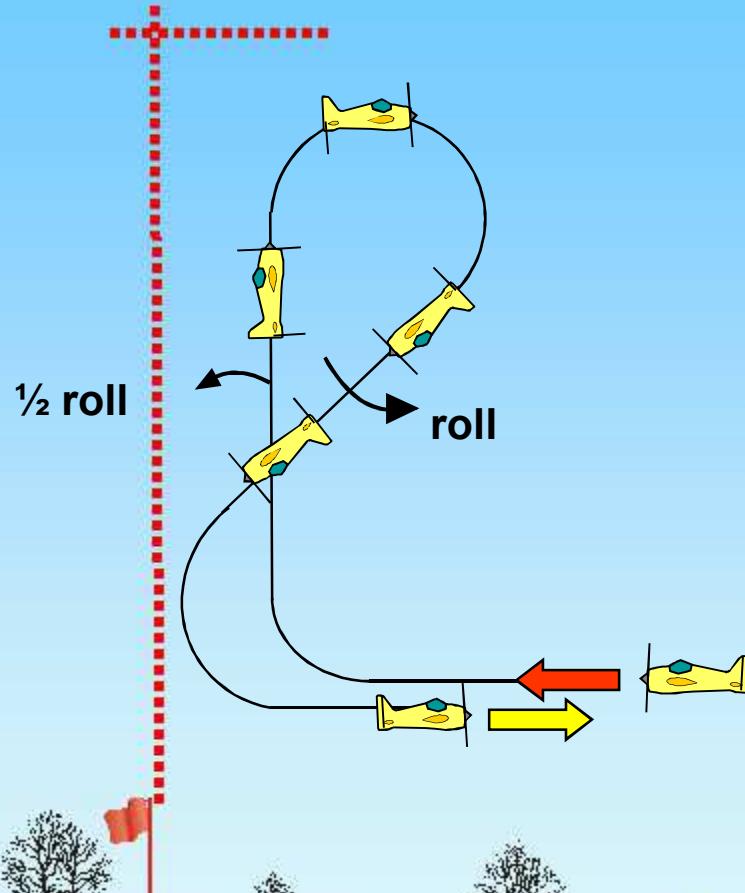
P-27.15 Square from Top with quarter roll, knife-edge flight, quarter roll



P-27.15.02



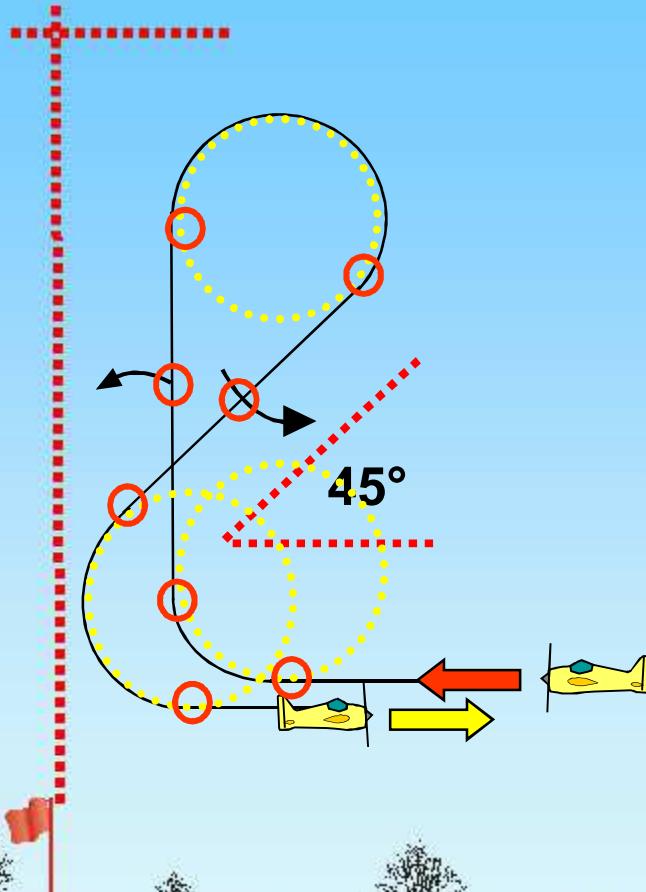
P-27.16 Reverse Figure ET with half roll, roll



From upright, pull through $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{1}{2}$ roll, push through a $\frac{5}{8}$ loop into a 45° downline, perform a roll, pull through a $\frac{3}{8}$ loop, exit upright.



P-27.16 Reverse Figure ET with half roll, roll



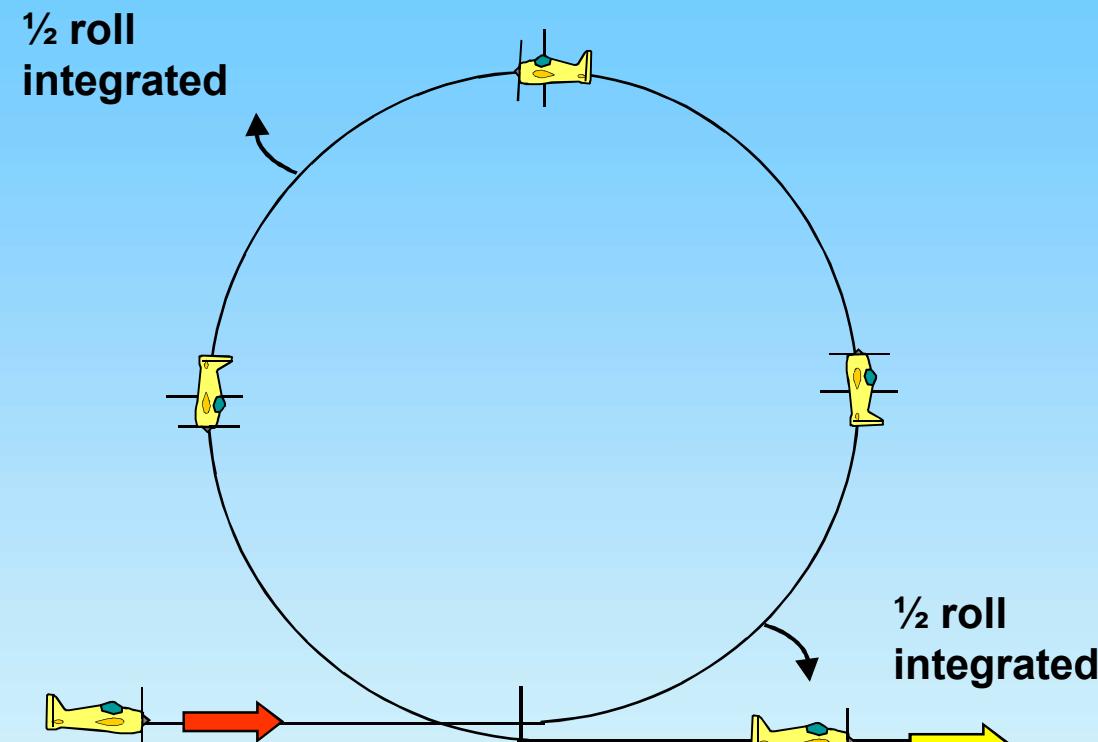
½ roll and roll on middle of the line.

From upright, pull through $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{1}{2}$ roll, push through a $\frac{5}{8}$ loop into a 45° downline, perform a roll, pull through a $\frac{3}{8}$ loop, exit upright.





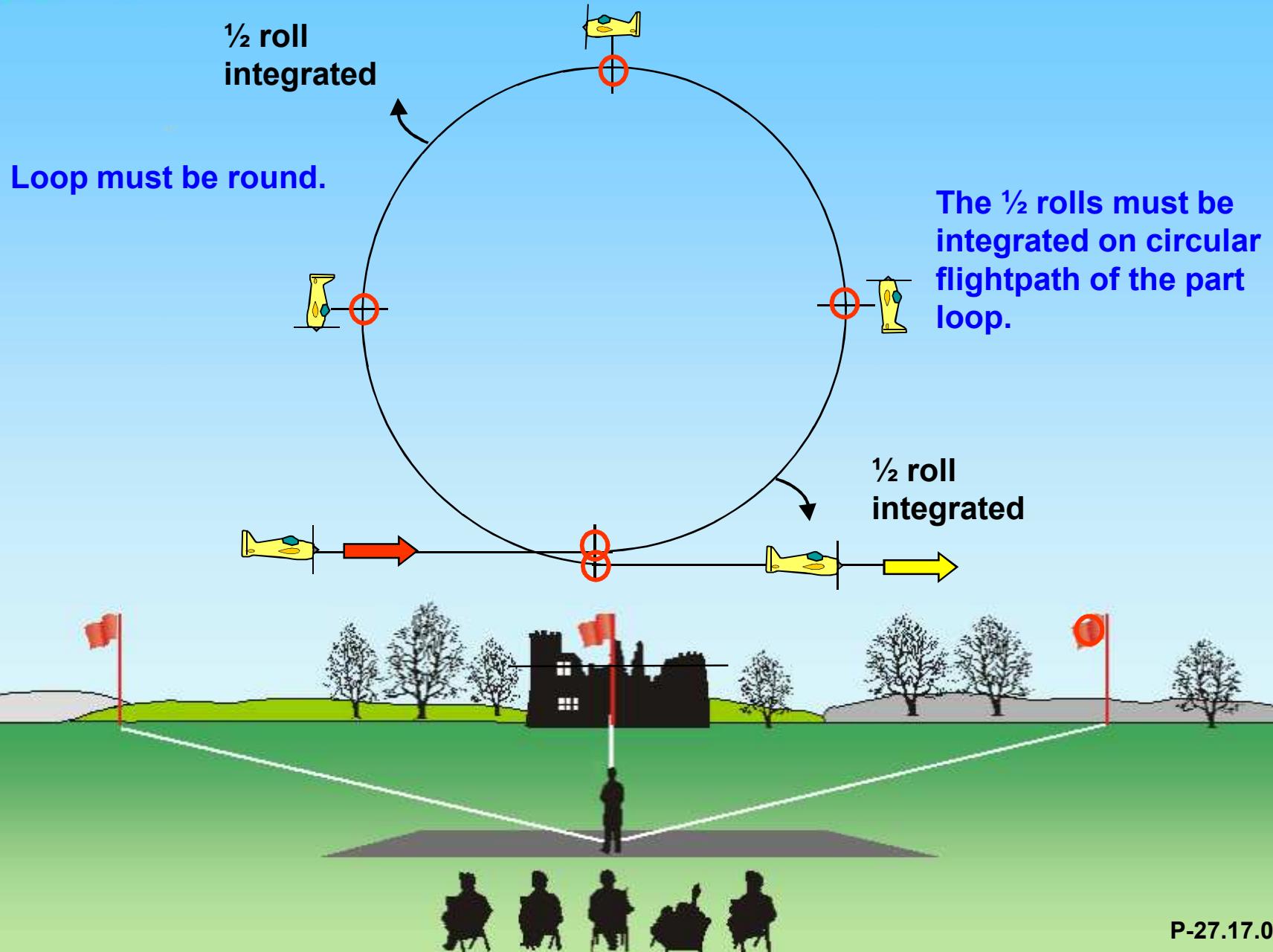
P-27.17 Loop with two half rolls integrated



From upright, perform a loop while integrating a $\frac{1}{2}$ roll in the first 90° and another $\frac{1}{2}$ roll in the third 90° , exit upright.



P-27.17 Loop with two half rolls integrated

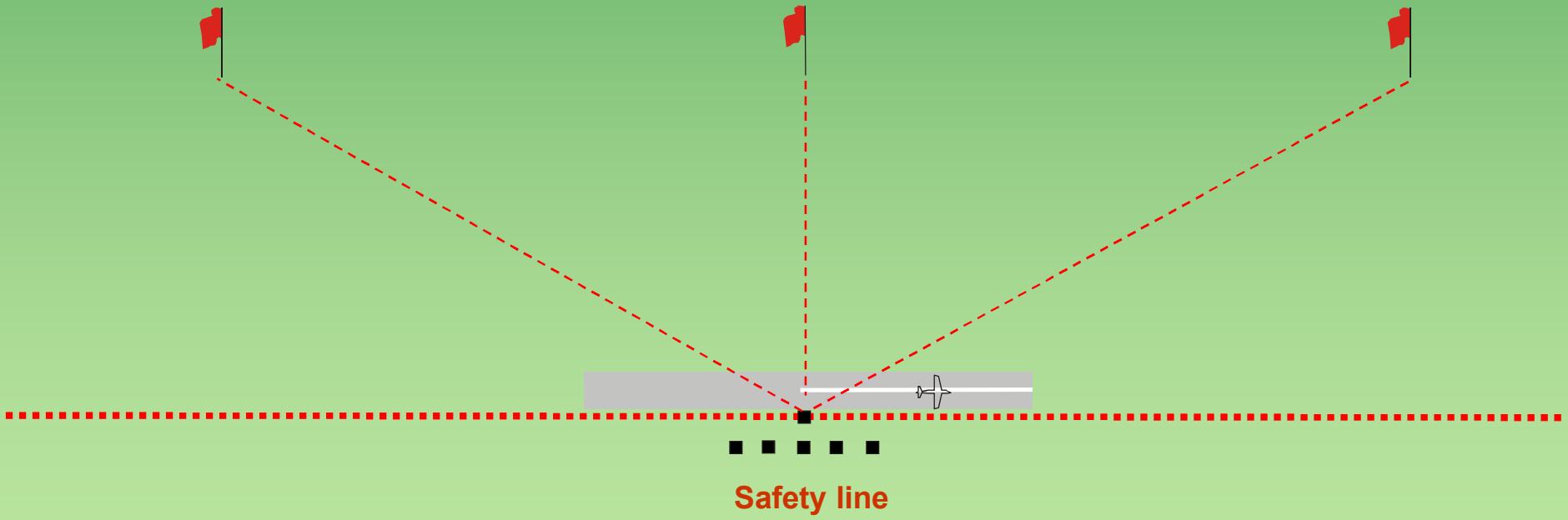




Landing procedure (not judged, not scored)

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

 **wind**



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!**

Bob Skinner



Thank you!

© Peter Uhlig, December
2024