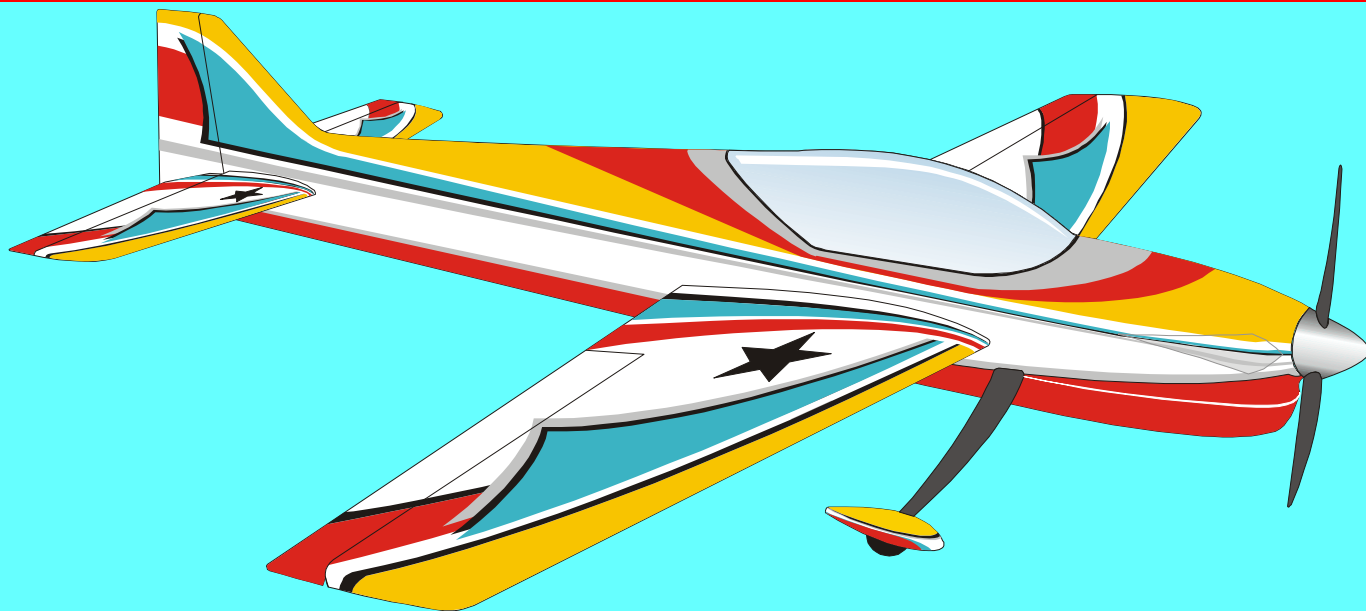
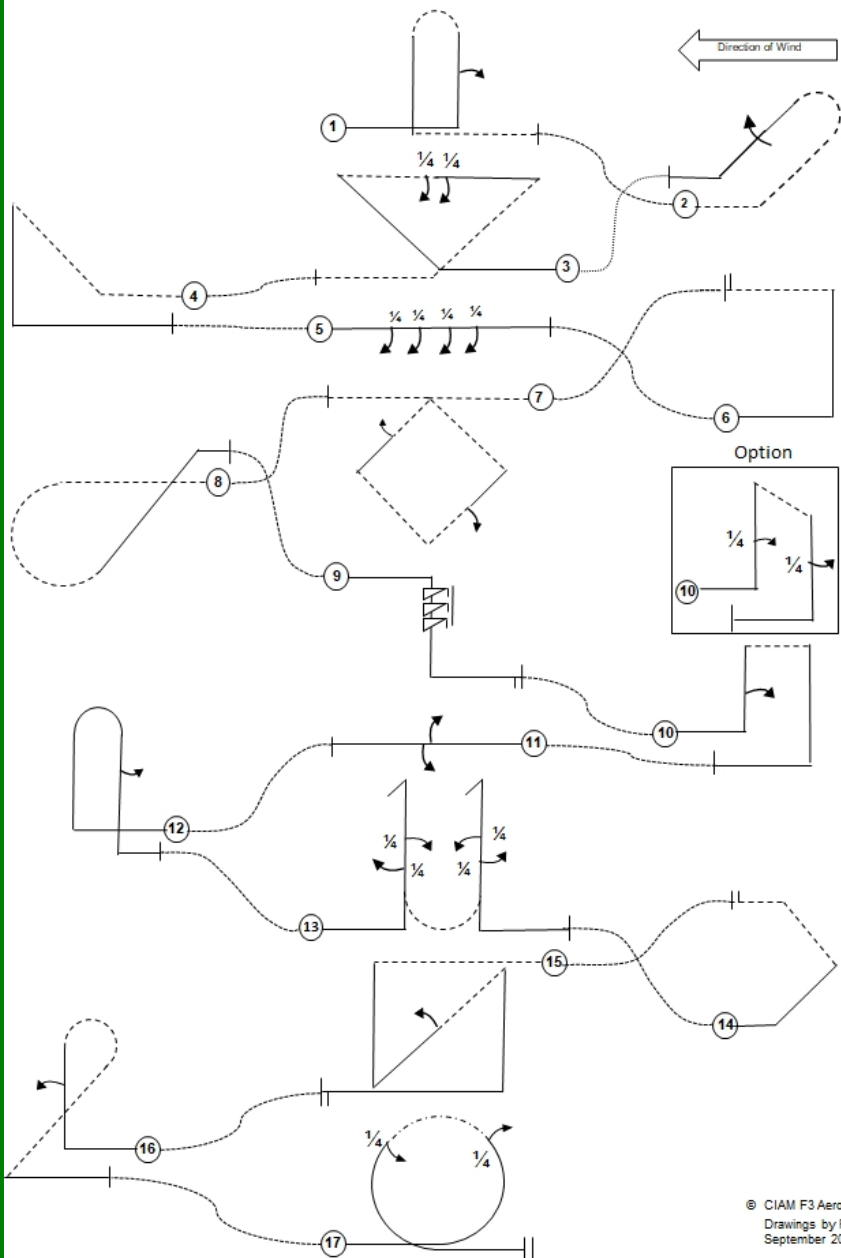


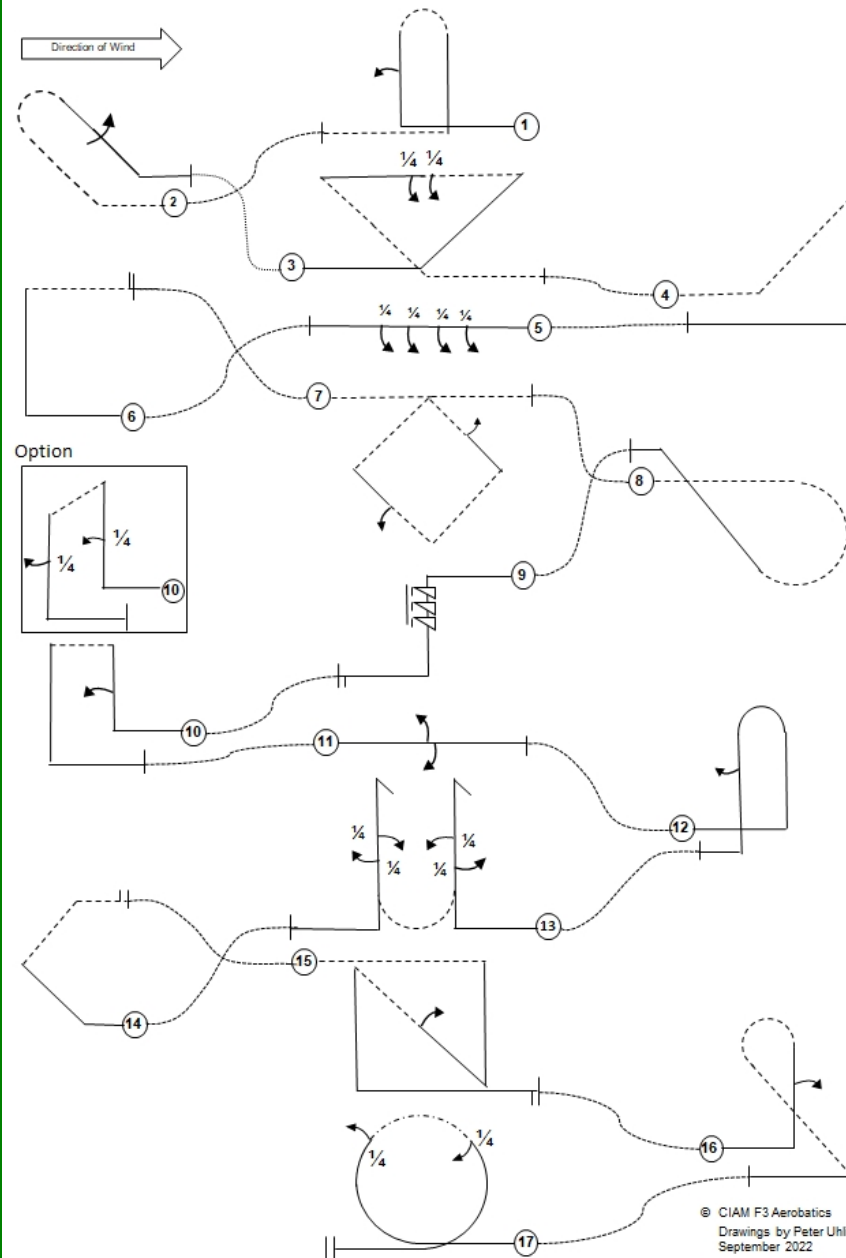
Flying and Judging F3A



SCHEMATIC MANOEUVRE ILLUSTRATIONS
SCHEDULE A-27

ADVANCED SCHEDULE F3A A-27 (2026 – 2027)

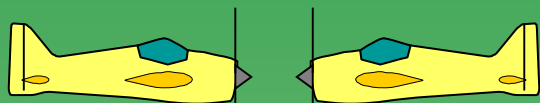
© CIAM F3 Aerobatics
Drawings by Peter Uhlig
September 2022

ADVANCED SCHEDULE F3A A-27 (2026 – 2027)

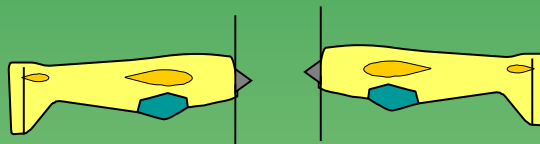
© CIAM F3 Aerobatics
Drawings by Peter Uhlig
September 2022



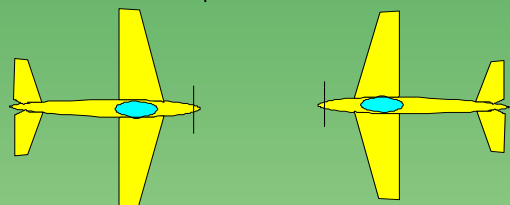
Explanations:



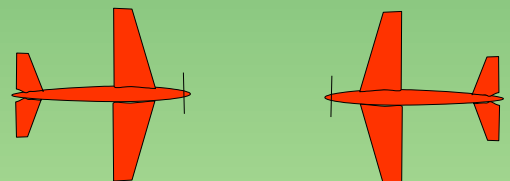
Aircraft upright



Aircraft inverted



Aircraft in Knife-Edge
View from Top



Aircraft in Knife-Edge
View from Below



part roll



half roll



roll



pos. spin



neg. spin



pos.



neg.

snap rolls



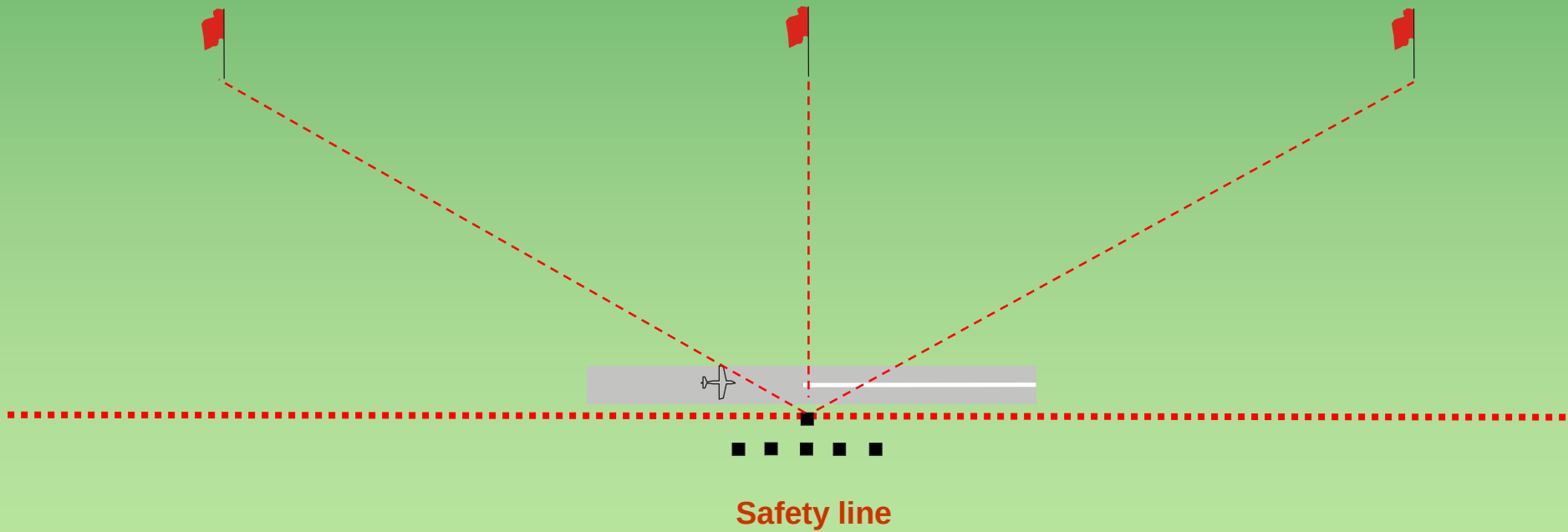
reference points



Take-off procedure (not judged, not scored)

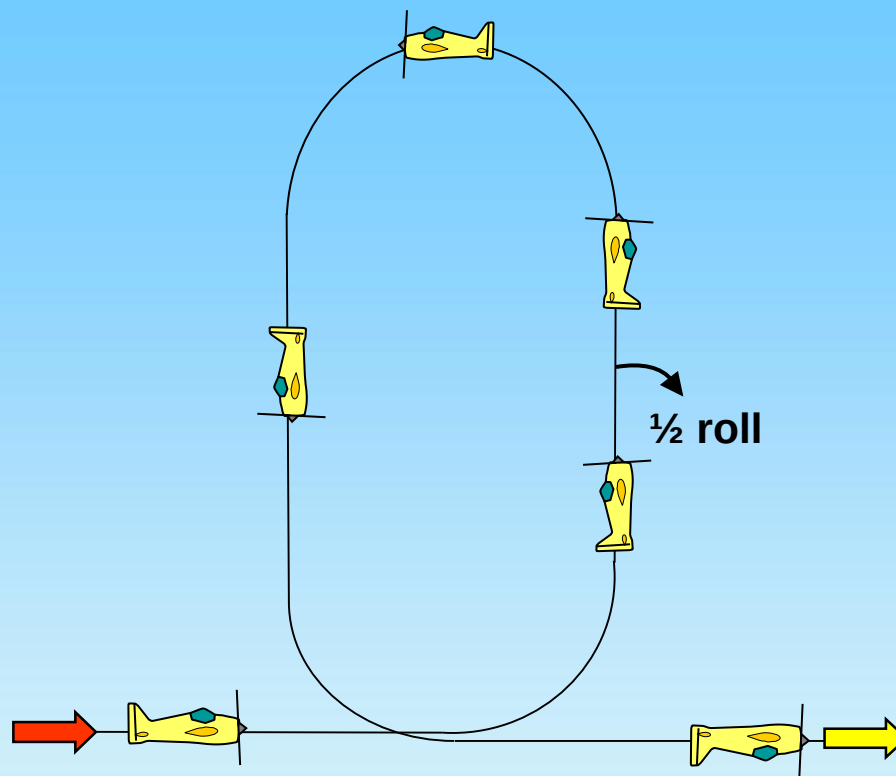


wind





A-27.01 Pull-Push-Push Humpty Bump with half roll

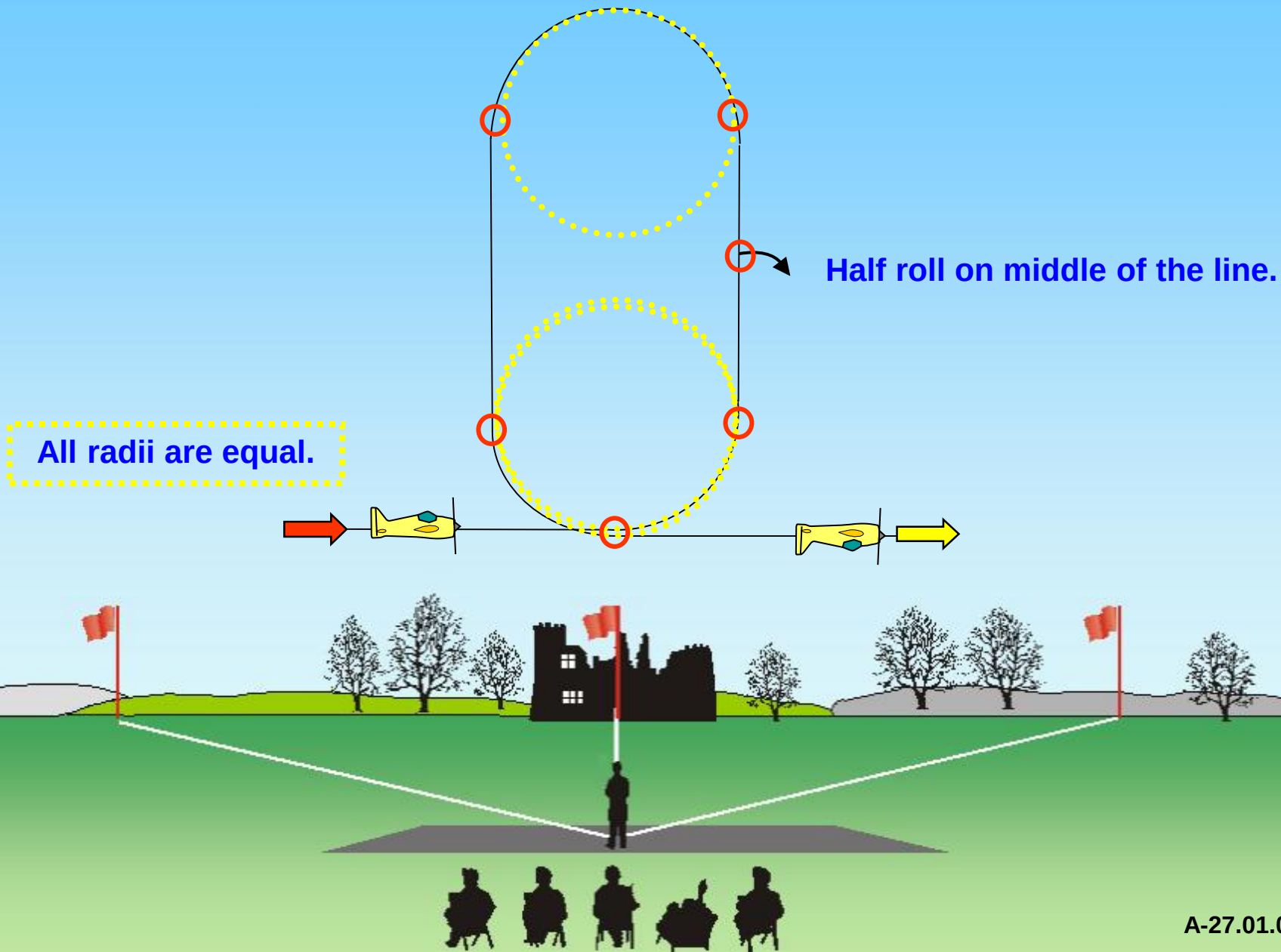


From upright, at centre, pull through a quarter loop into a vertical upline, perform a $\frac{1}{2}$ roll, push through a half loop into a vertical downline, push through a $\frac{1}{4}$ loop, exit inverted



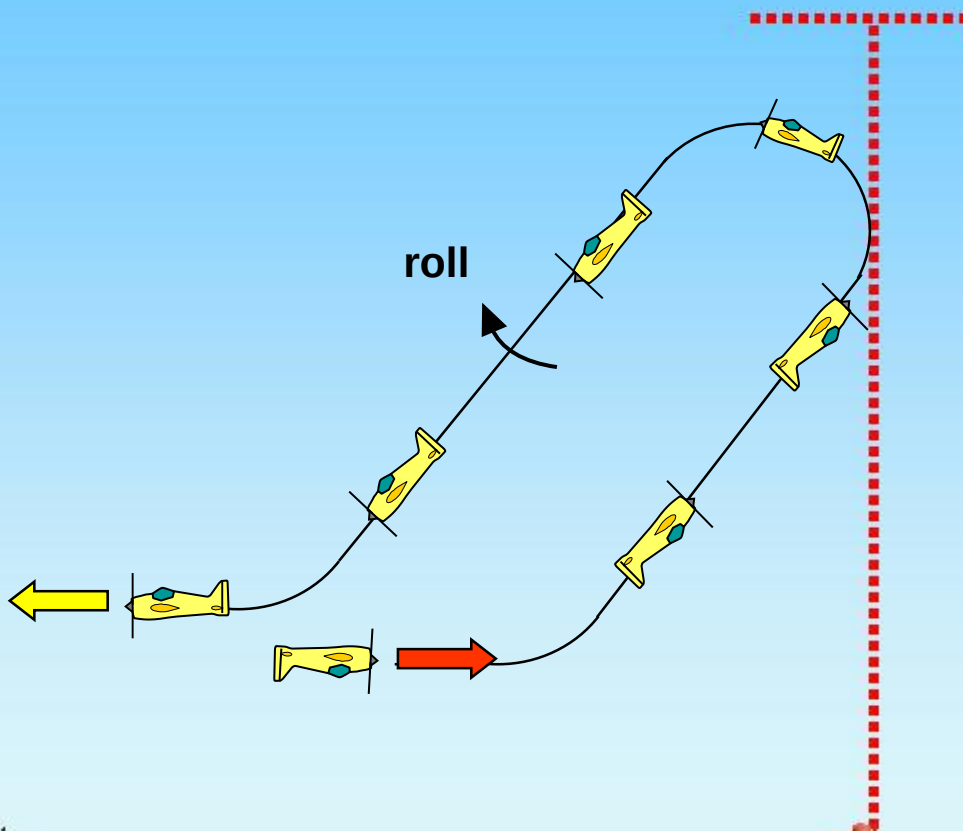


A-27.01 Pull-Push-Push Humpty Bump with half roll





A-27.02 Trombone with roll



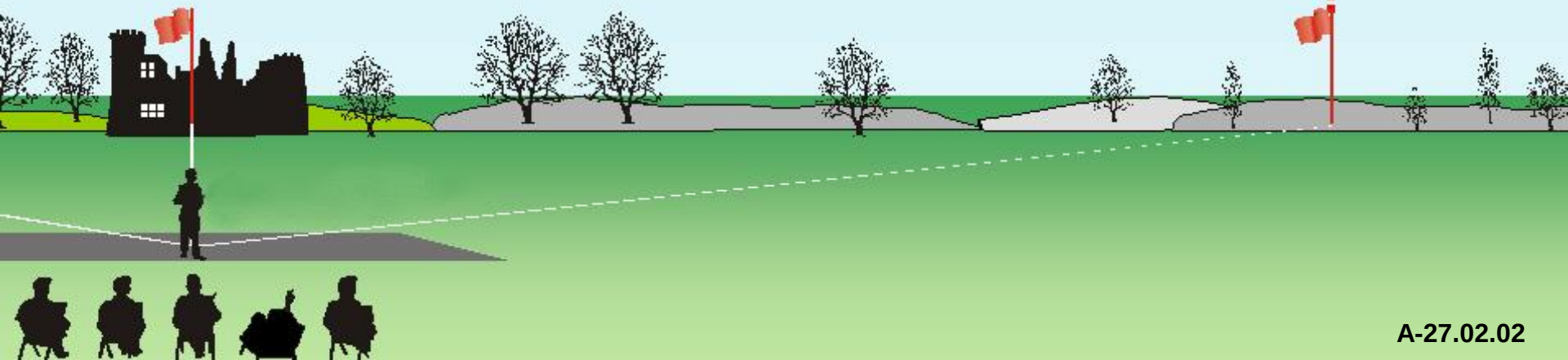
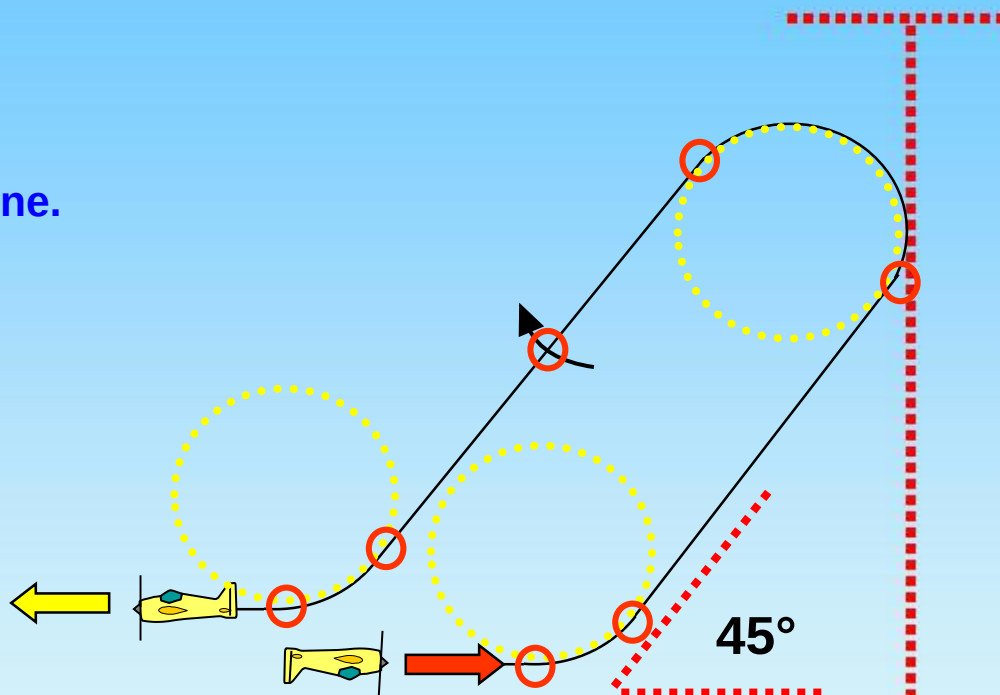
From inverted, push through a $\frac{1}{8}$ loop into a 45° upline, push through a half loop into a 45° downline, perform a roll, pull through a $\frac{1}{8}$ loop, exit upright.



A-27.02 Trombone with roll

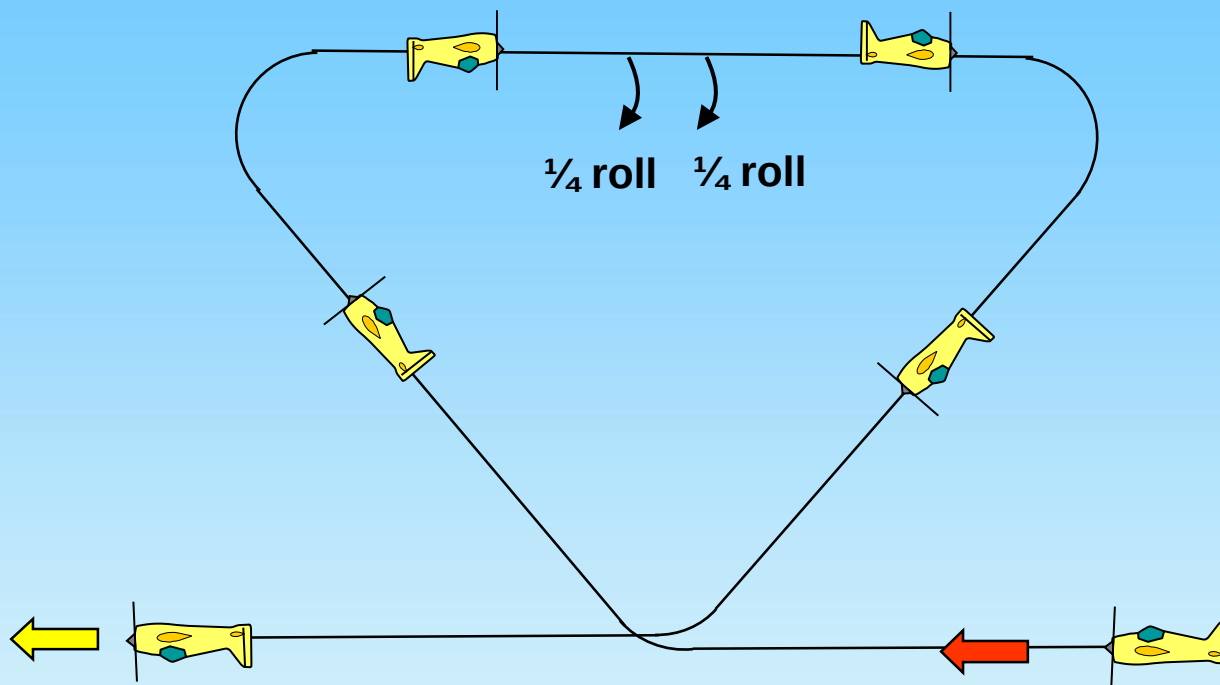
Roll on middle of the line.

All radii are equal.





A-27.03 Triangle with quarter roll, quarter roll



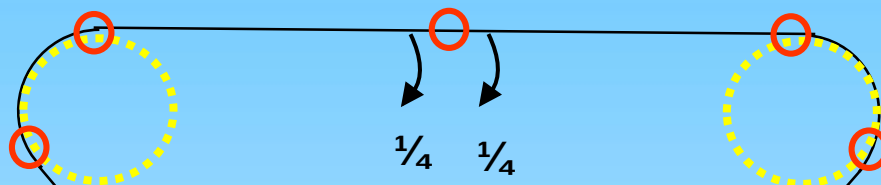
From upright, at centre, pull through a $\frac{1}{8}$ loop into a 45° upline, pull through a $\frac{3}{8}$ loop, perform consecutively two $\frac{1}{4}$ rolls, push through a $\frac{3}{8}$ loop into a 45° downline, push through $\frac{1}{8}$ loop, exit inverted.





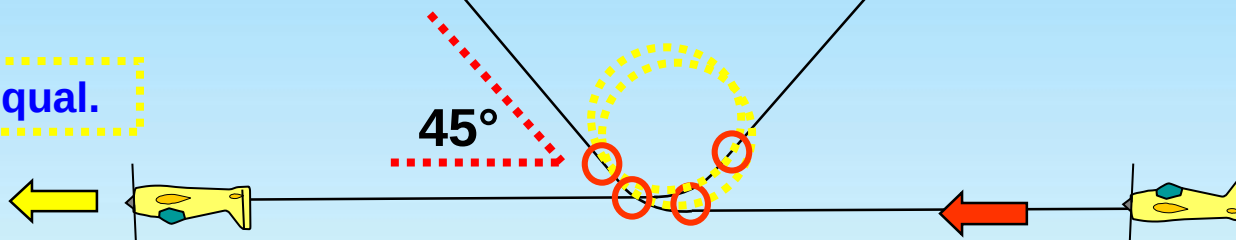
A-27.03 Triangle with quarter roll, quarter roll

Part rolls centered on middle of the line.



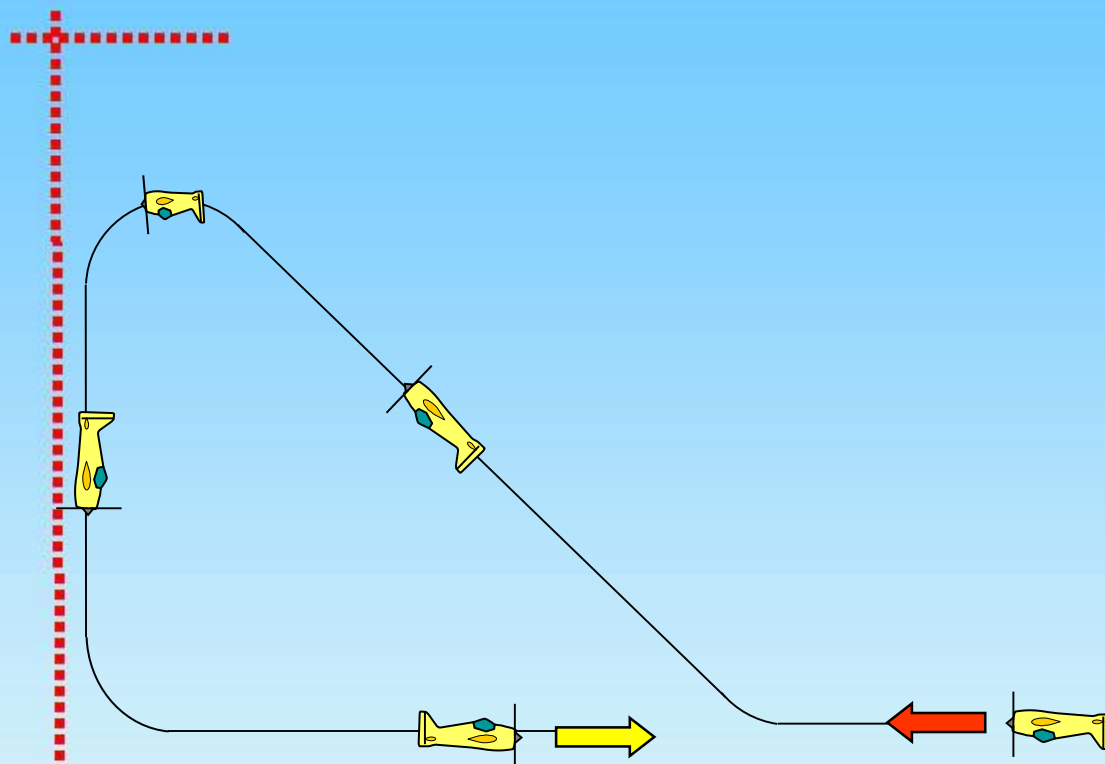
Lines between part rolls must be short and of recognisable length.

All radii are equal.





A-27.04 Reverse Shark Fin

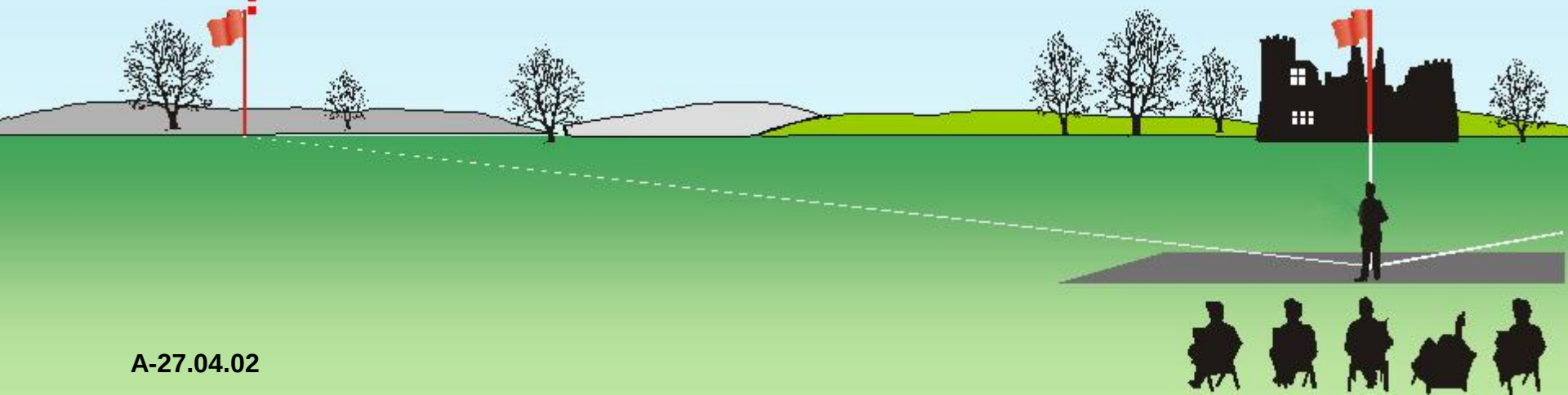
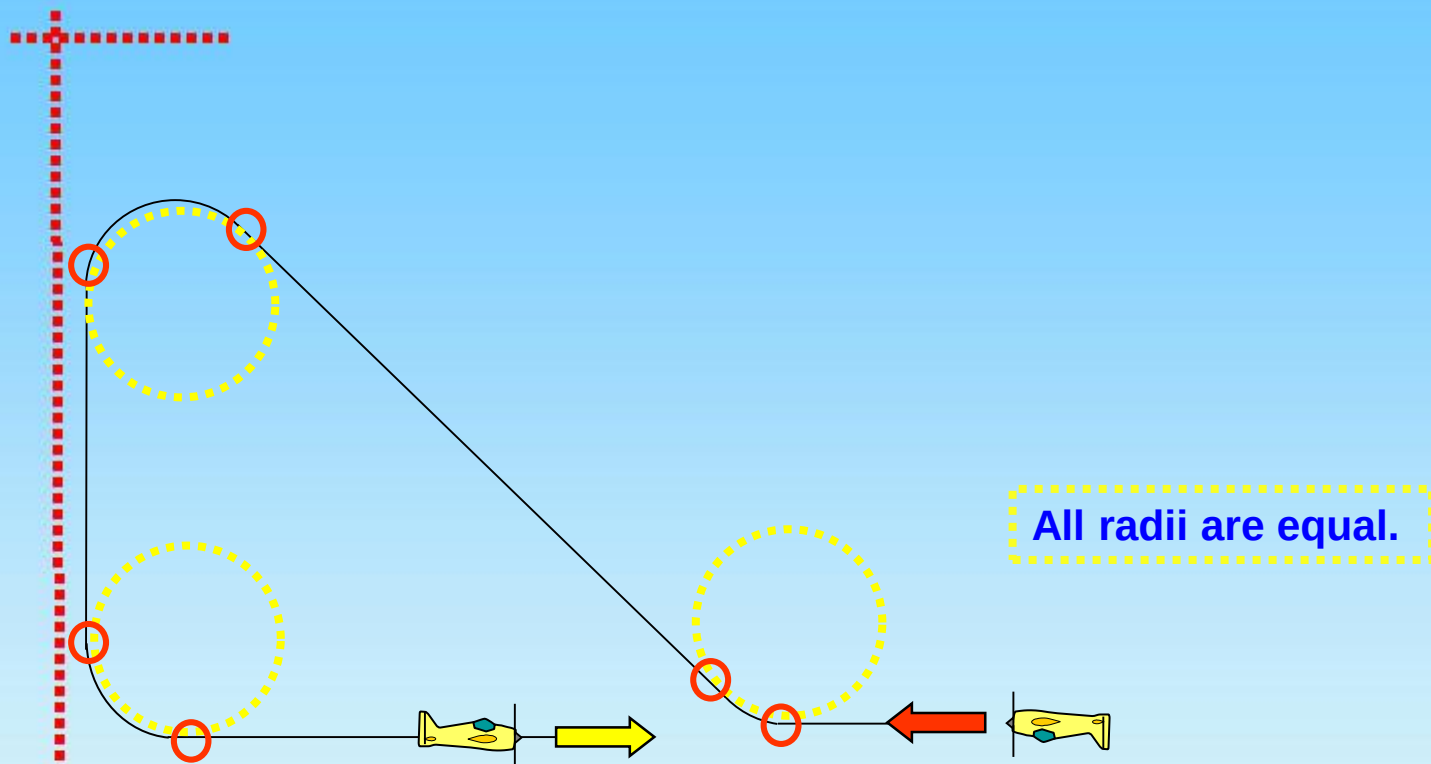


From inverted, push through a $\frac{1}{8}$ loop into a 45° upline, pull through a $\frac{3}{8}$ loop into a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.



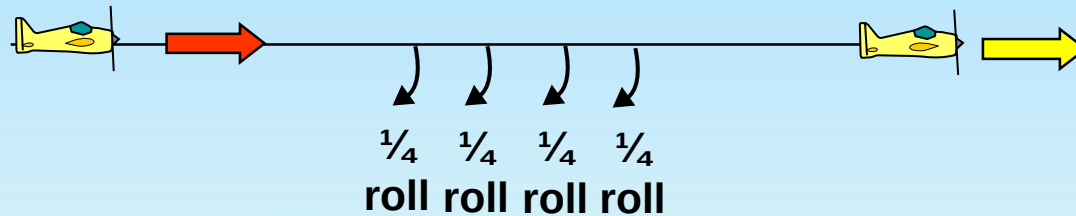


A-27.04 Reverse Shark Fin





A-27.05 Four consecutive quarter rolls



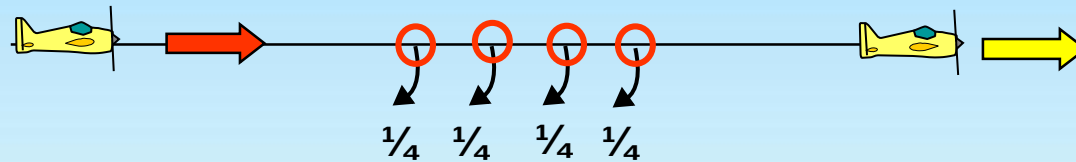
From upright, perform consecutively four $\frac{1}{4}$ rolls, exit upright.





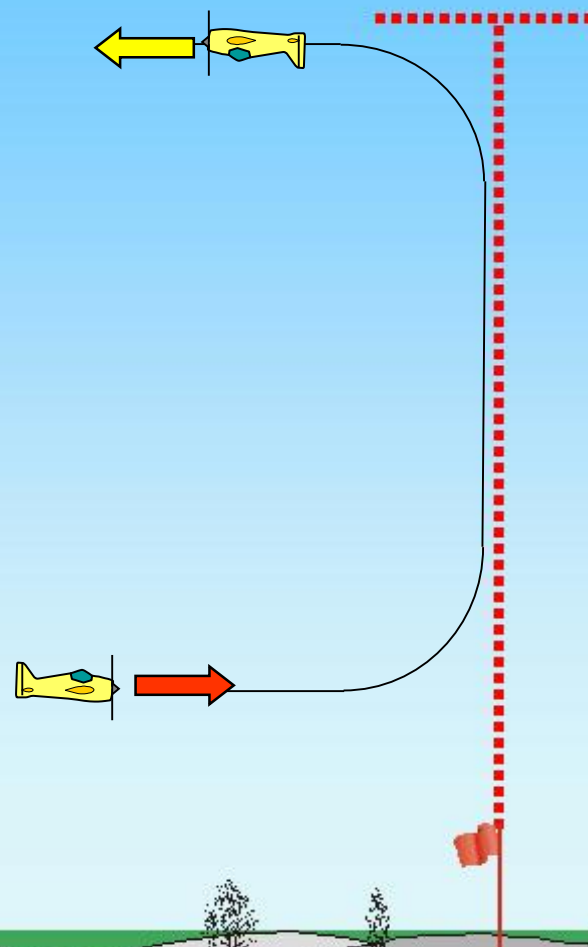
A-27.05 Four consecutive quarter rolls

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





A-27.06 Half Square Loop

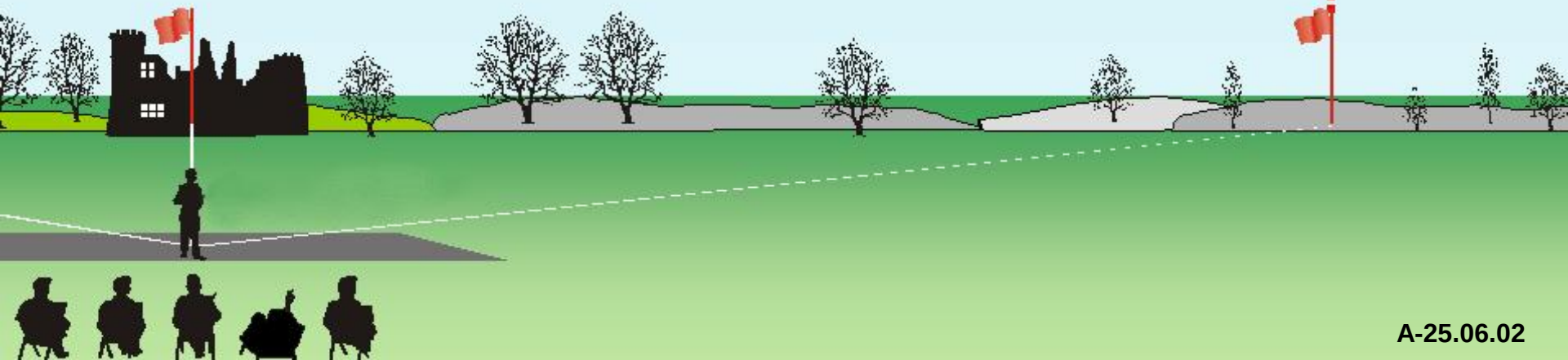
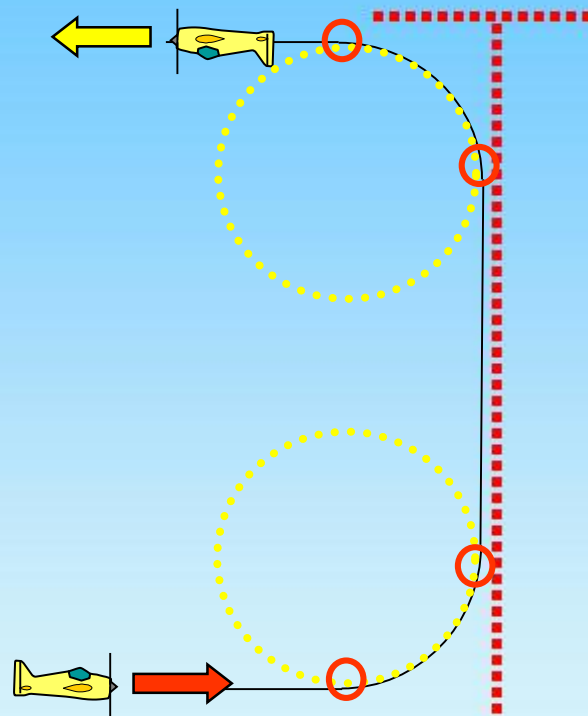


From upright, pull through a quarter loop into a vertical upline, pull through a quarter loop, exit inverted.



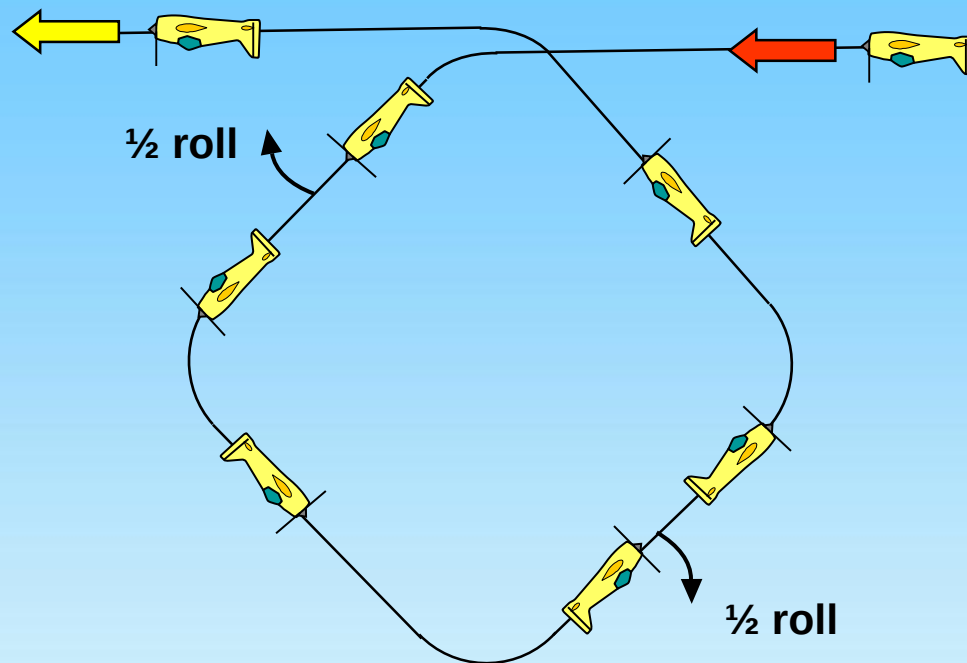
A-27.06 Half Square Loop

All radii are equal.





A-27.07 Square Loop on Corner from Top with half roll, half roll

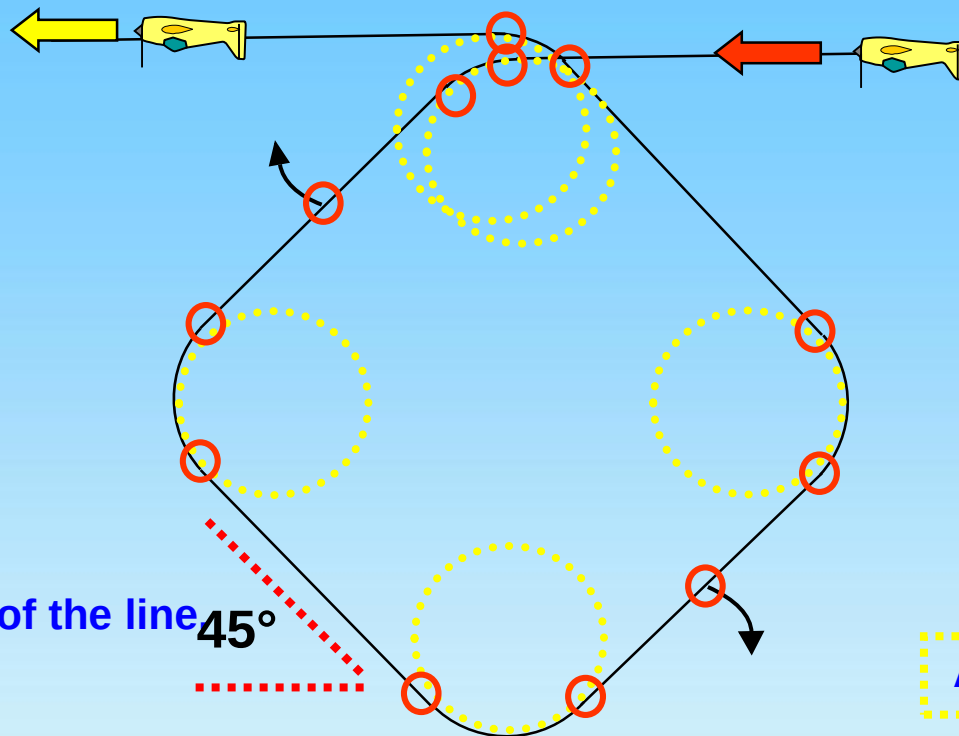


From inverted, pull through a $\frac{1}{8}$ loop into a 45° downline, perform a $\frac{1}{2}$ roll, push through a $\frac{1}{4}$ loop into a 45° downline, push through a $\frac{1}{4}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, pull through a $\frac{1}{4}$ loop into a 45° upline, pull through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





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



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

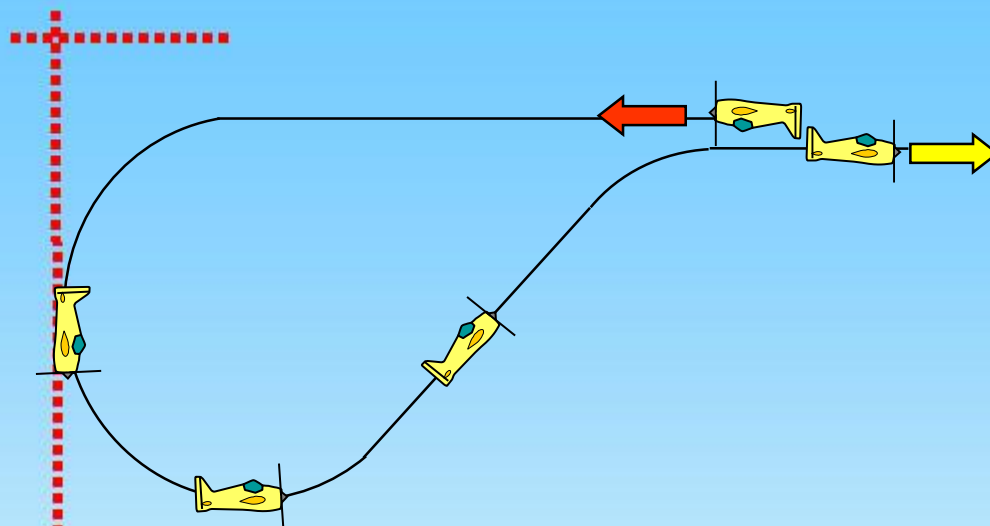
45°

All radii are equal.





A-27.08 Half Cuban Eight from Top

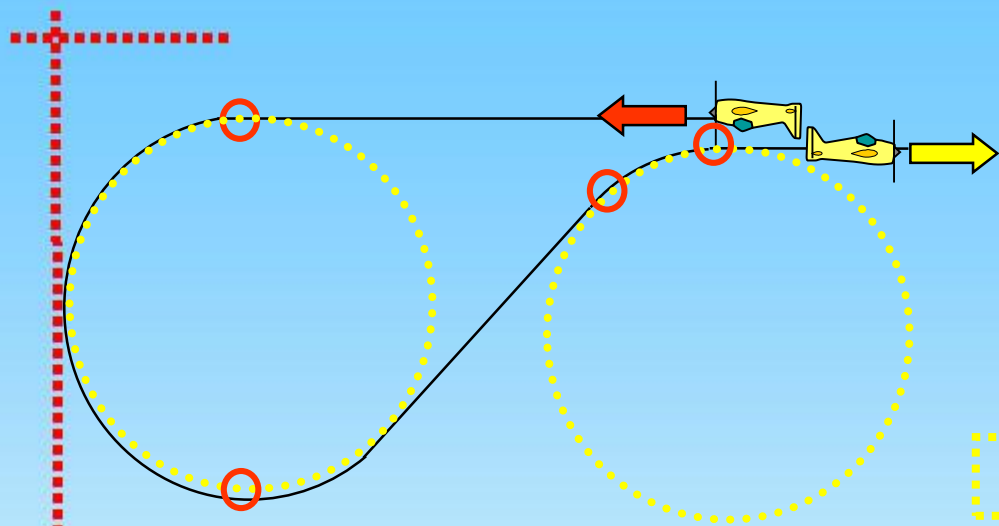


From inverted, pull through a $\frac{5}{8}$ loop into a 45° upline, push through a $\frac{1}{8}$ loop, exit upright.

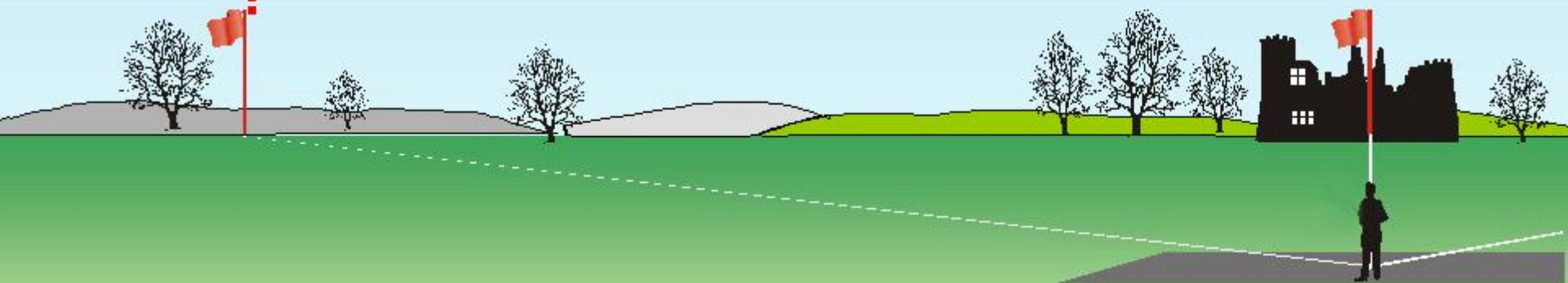




A-27.08 Half Cuban Eight from Top

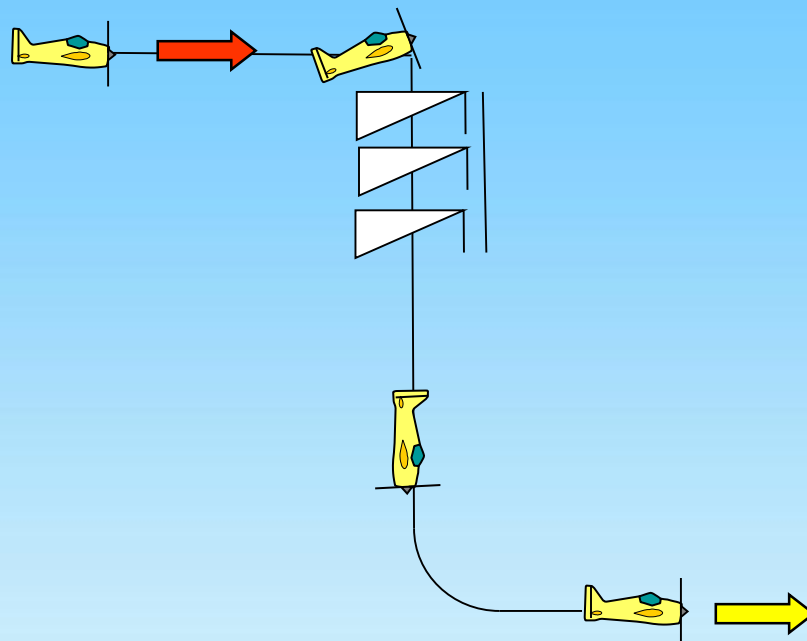


All radii are equal.





A-27.09 Spin with three turns

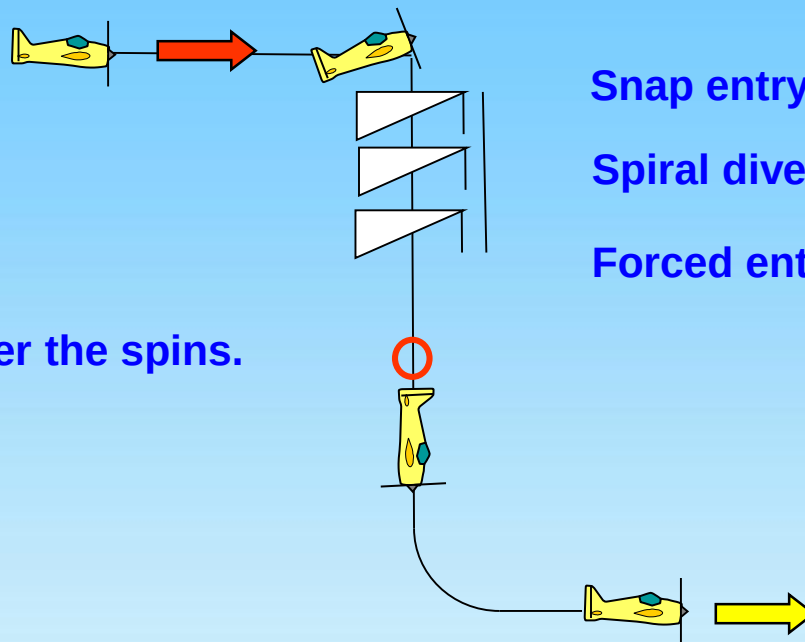


From upright, perform a spin with three turns, perform a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.





A-27.09 Spin with three turns



Snap entry - 0 points!

Spiral dive - 0 points!

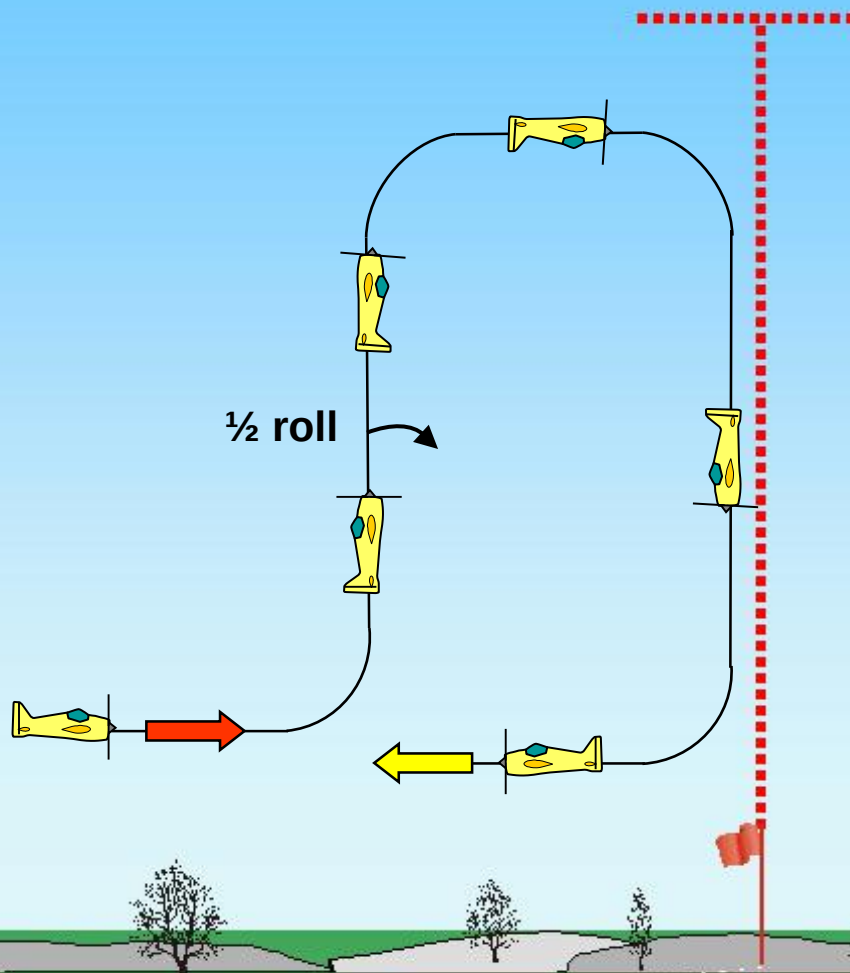
Forced entry: downgrade.

Line after the spins.





A-27.10 Top Hat with half roll. Option: Top Hat with quarter roll, quarter roll



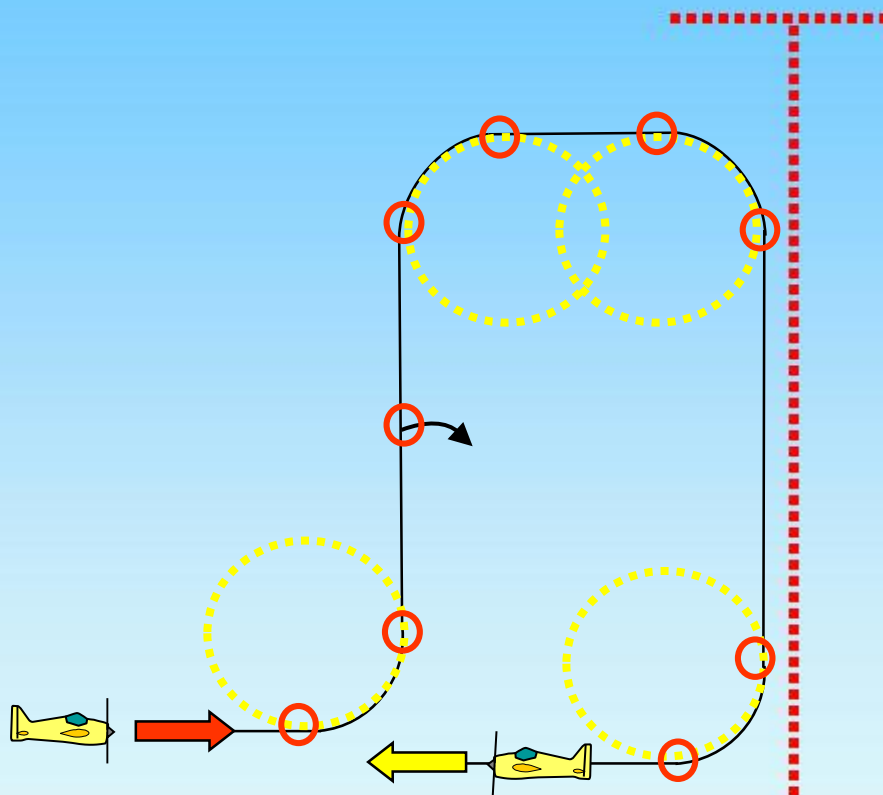
From upright, pull through a $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{1}{2}$ roll, pull through a $\frac{1}{4}$ loop, pull through a $\frac{1}{4}$ loop into a vertical downline, pull through $\frac{1}{4}$ loop, exit upright.



A-27.10 Top Hat with half roll. Option: Top Hat with quarter roll, quarter roll

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

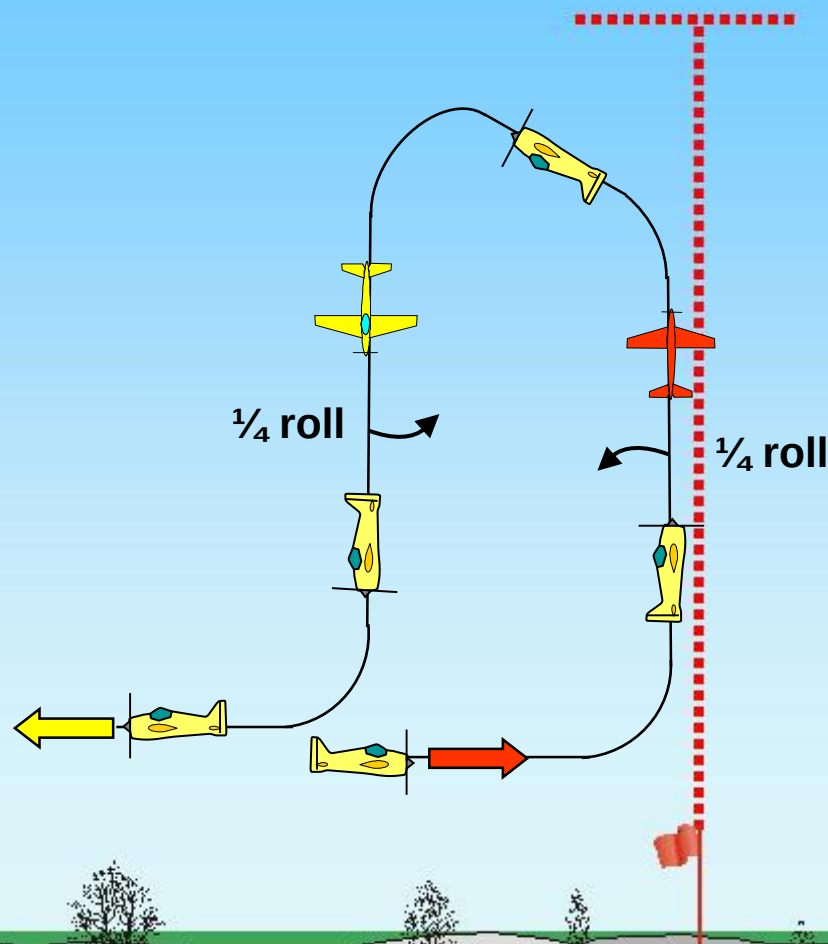
All radii are equal.





A-27.10 Top Hat with half roll. Option: Top Hat with quarter roll, quarter roll

Option



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

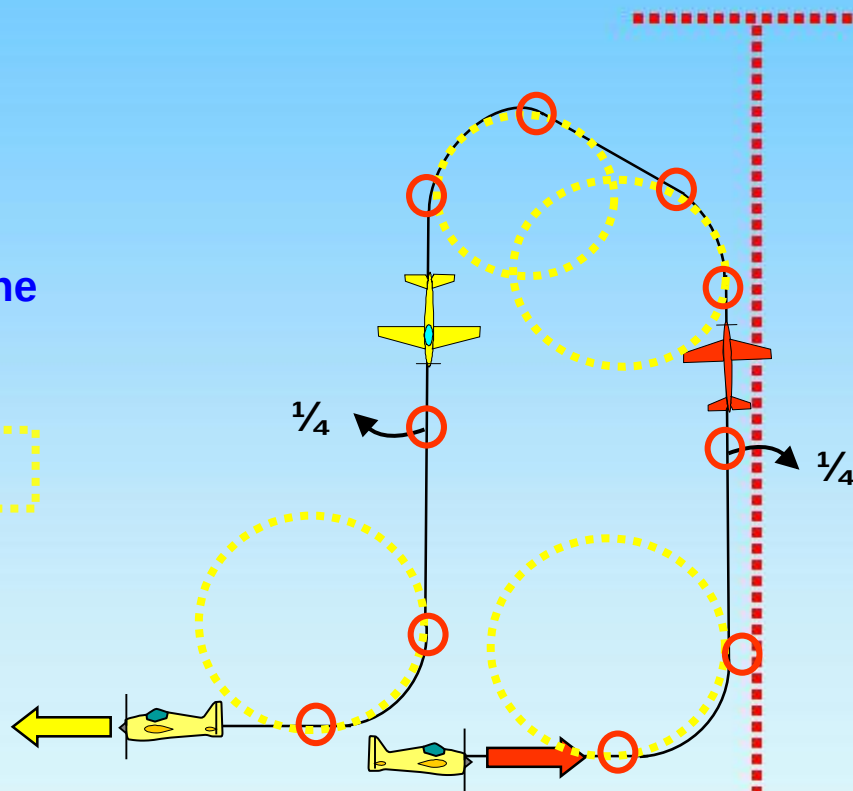


A-27.10 Top Hat with half roll. Option: Top Hat with quarter roll, quarter roll

Option

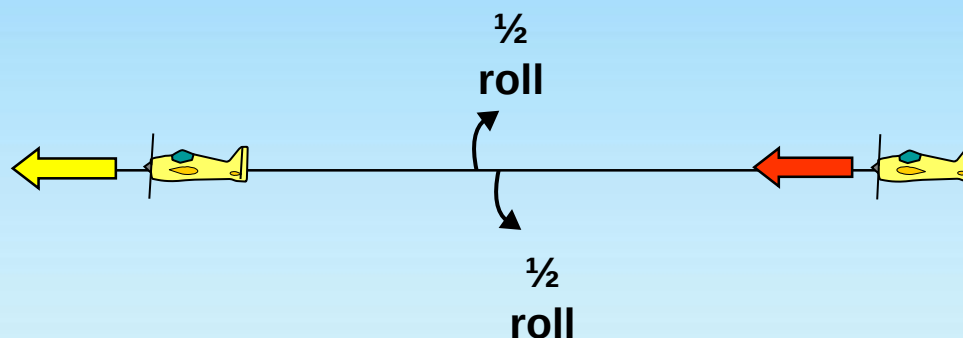
Part rolls on middle of the line.

All radii are equal.





A-27.11 Two consecutive half rolls



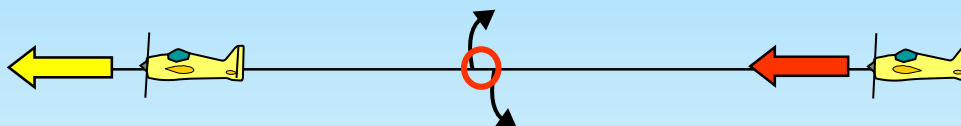
From upright perform consecutively two $\frac{1}{2}$ rolls in opposite direction, exit upright.





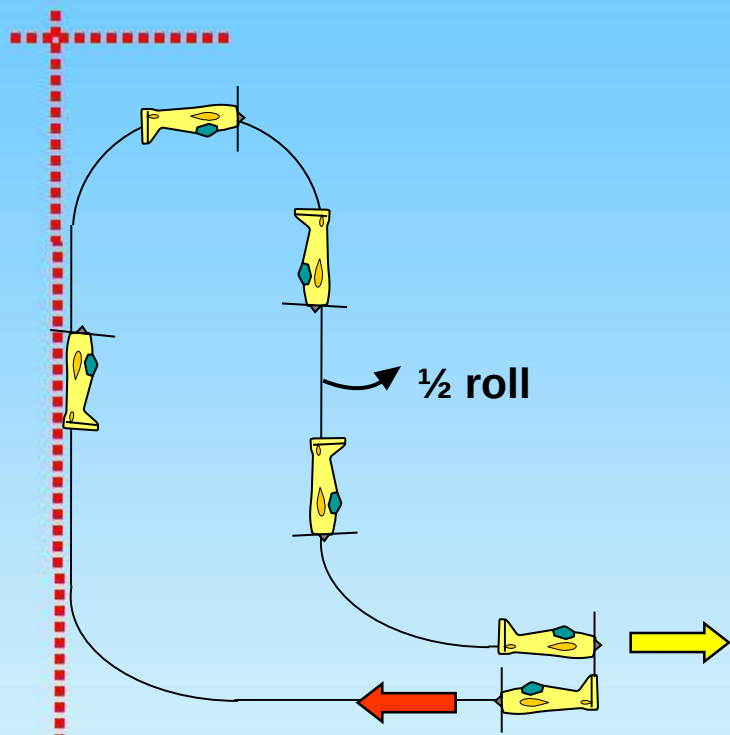
A-27.11 Two consecutive half rolls

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





A-27.12 Pull-Pull-Pull Humpty Bump with half roll

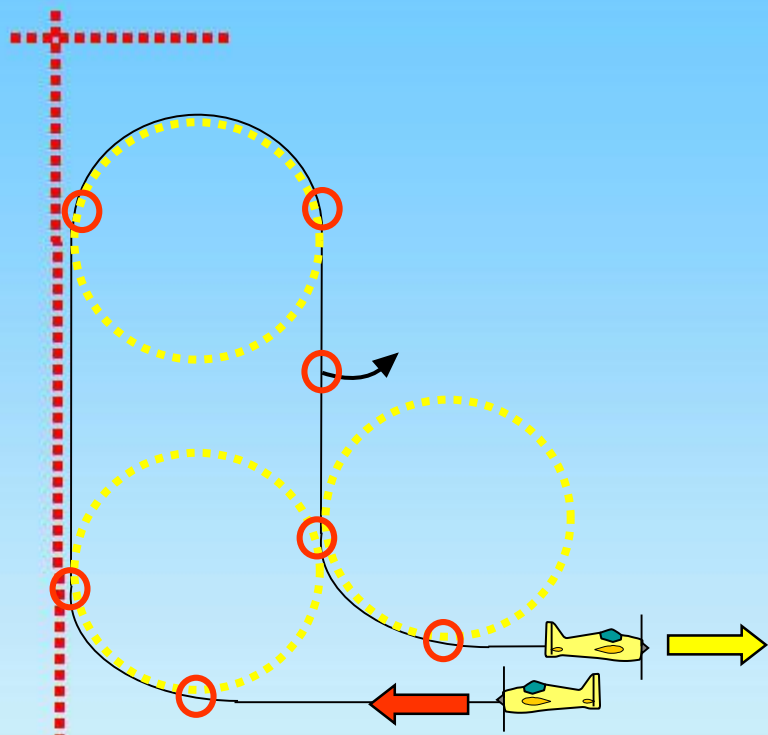


From upright, pull through a $\frac{1}{4}$ loop into a vertical upline, pull through a half loop into a vertical downline, perform a half roll, pull through a $\frac{1}{4}$ loop, exit upright.



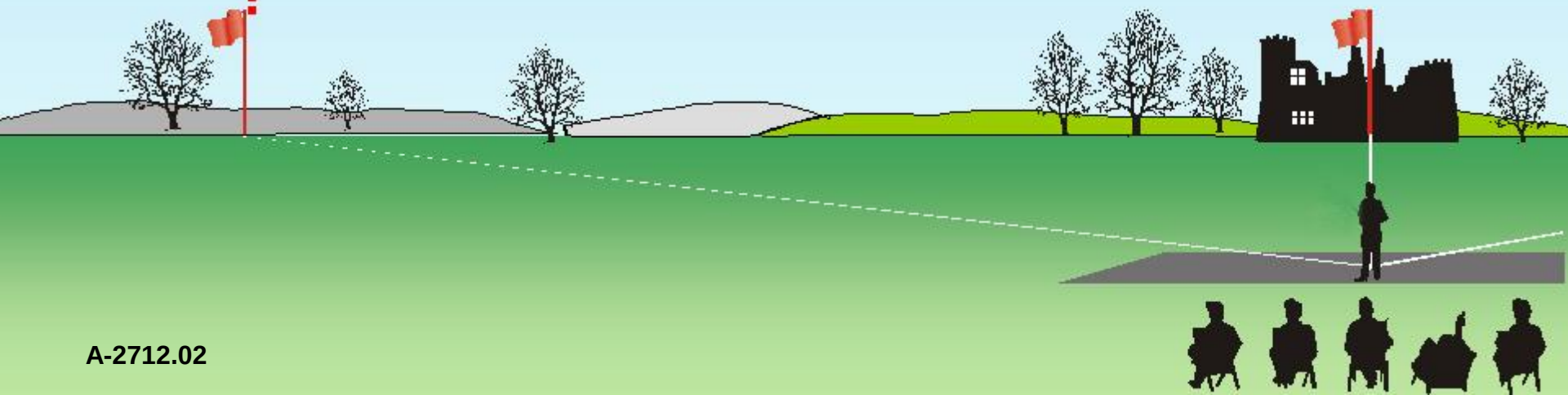


A-27.12 Pull-Pull-Pull Humpty Bump with half roll



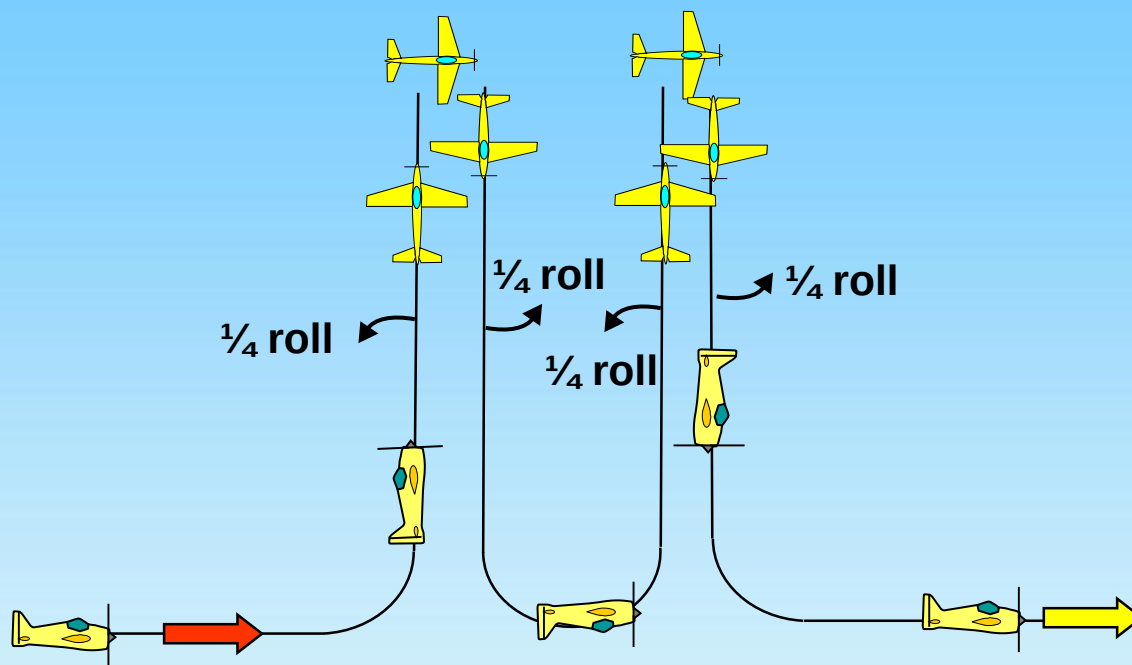
$\frac{1}{2}$ roll on middle of the line.

All radii are equal.





A-27.13 Figure M with quarter roll, quarter roll, quarter roll, quarter roll



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



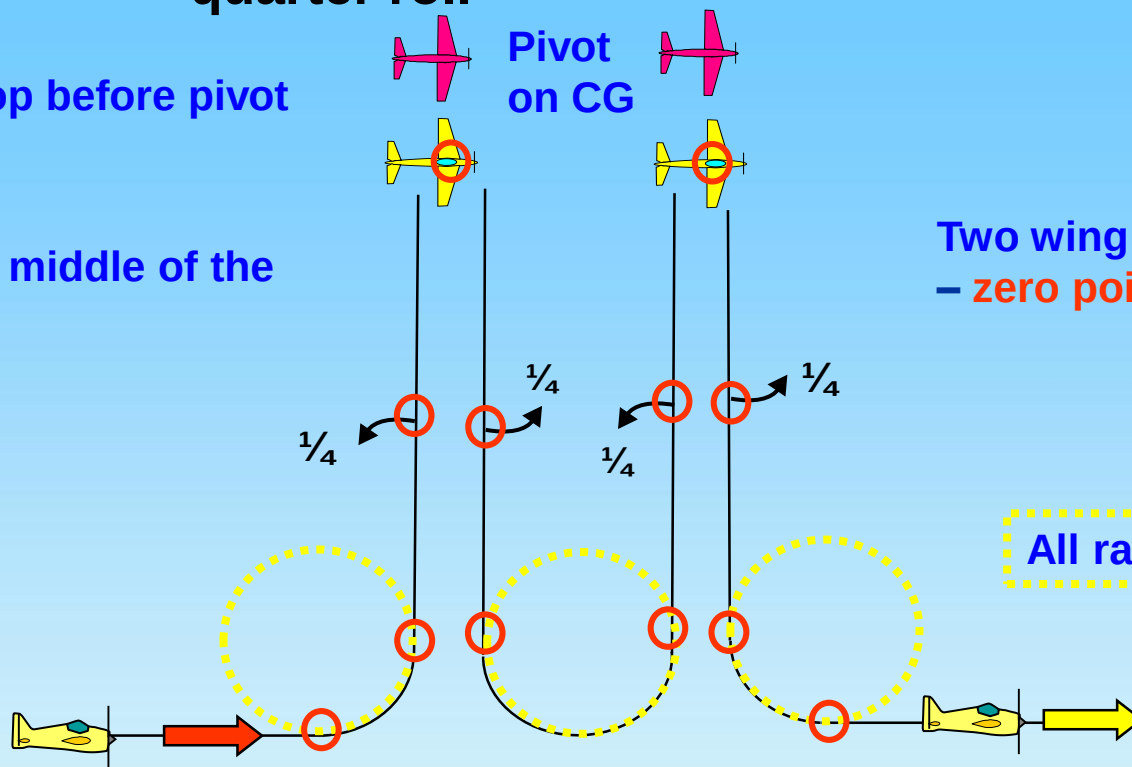
A-27.13 Figure M with quarter roll, quarter roll, quarter roll, quarter roll

Stop before pivot

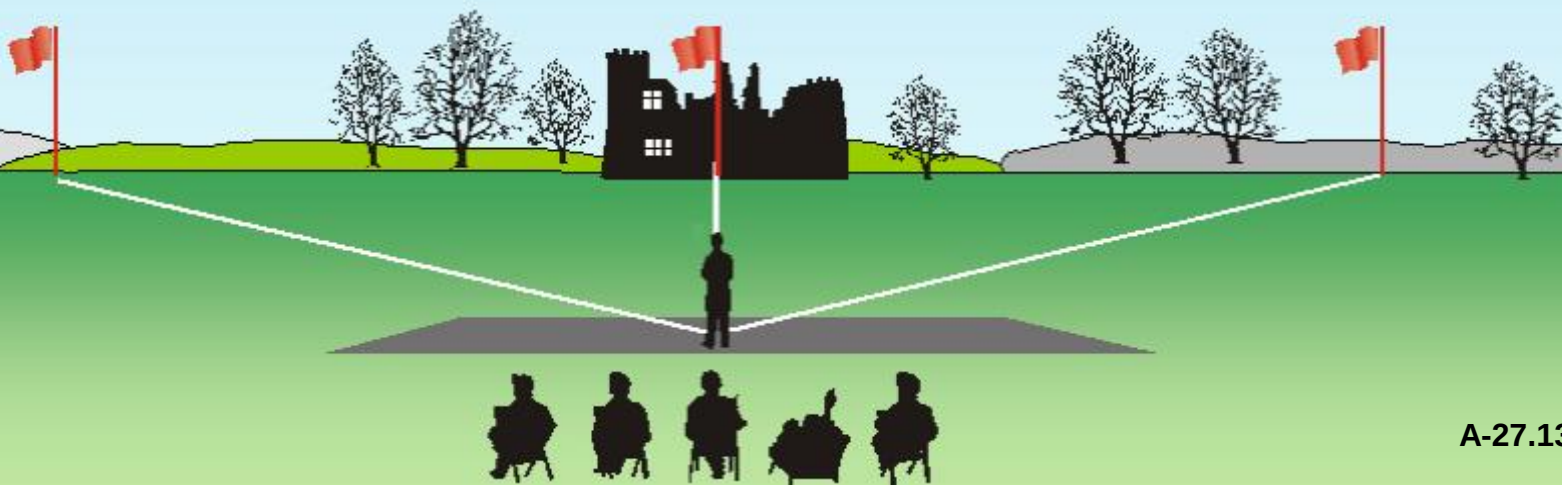
Pivot
on CG

Part rolls on middle of the
lines.

Two wing spans or more
— **zero points!**

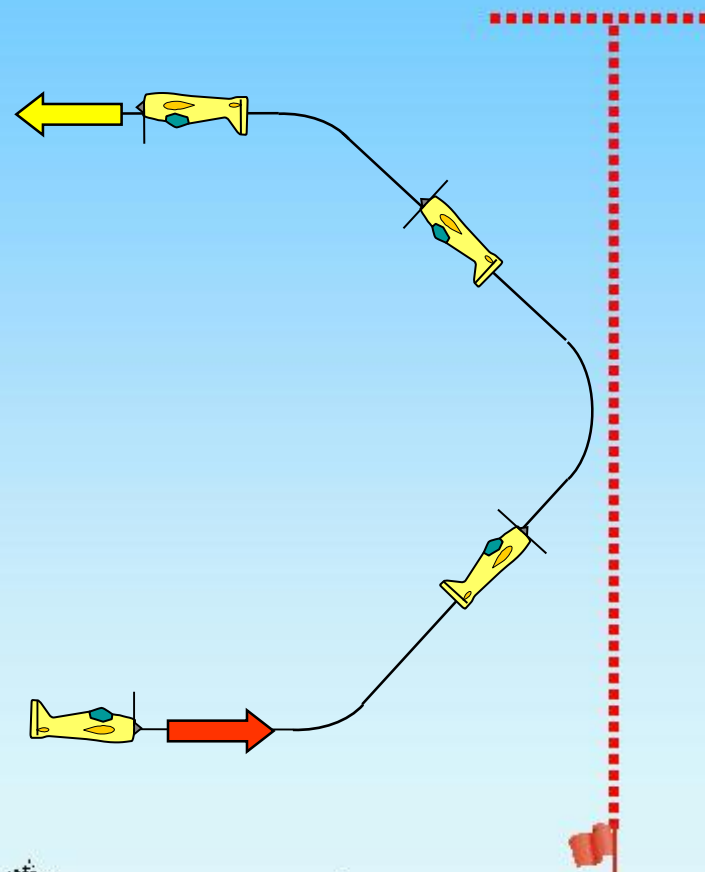


All radii are equal.





A-27.14 Half Square Loop on Corner



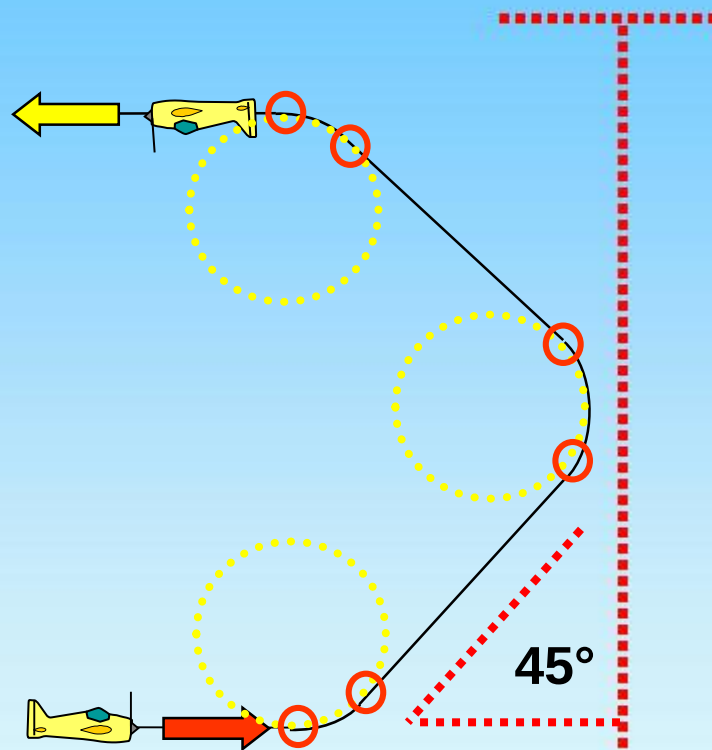
From upright, pull through a $\frac{1}{8}$ loop into a 45° upline, pull through a $\frac{1}{4}$ loop into a 45° upline, pull through a $\frac{1}{8}$ loop, exit inverted.





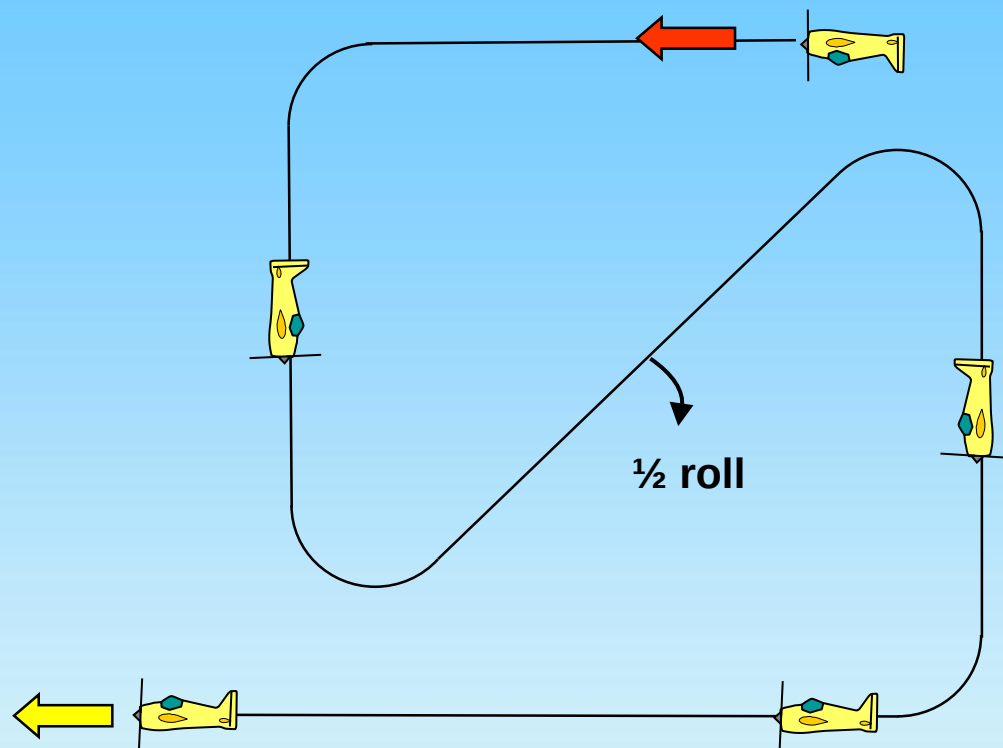
A-27.14 Half Square Loop on Corner

All radii are equal.





A-27.15 Square from Top with half roll

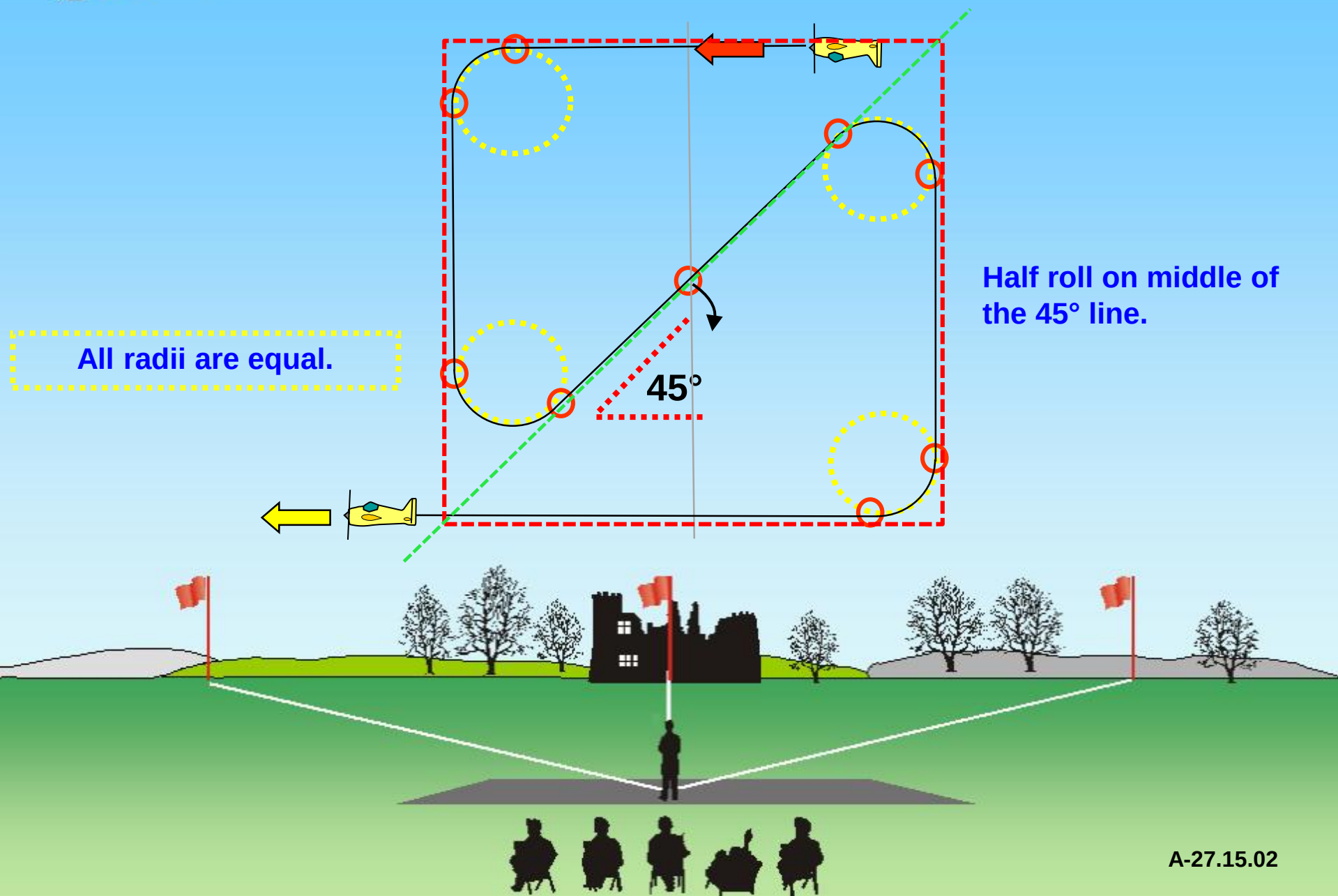


From inverted, fly past centre, pull through a $\frac{1}{4}$ loop into a vertical downline, pull through a $\frac{3}{8}$ loop into a 45° upline, perform a $\frac{1}{2}$ roll, pull through a $\frac{3}{8}$ loop into a vertical downline, pull through a $\frac{1}{4}$ loop, exit upright.



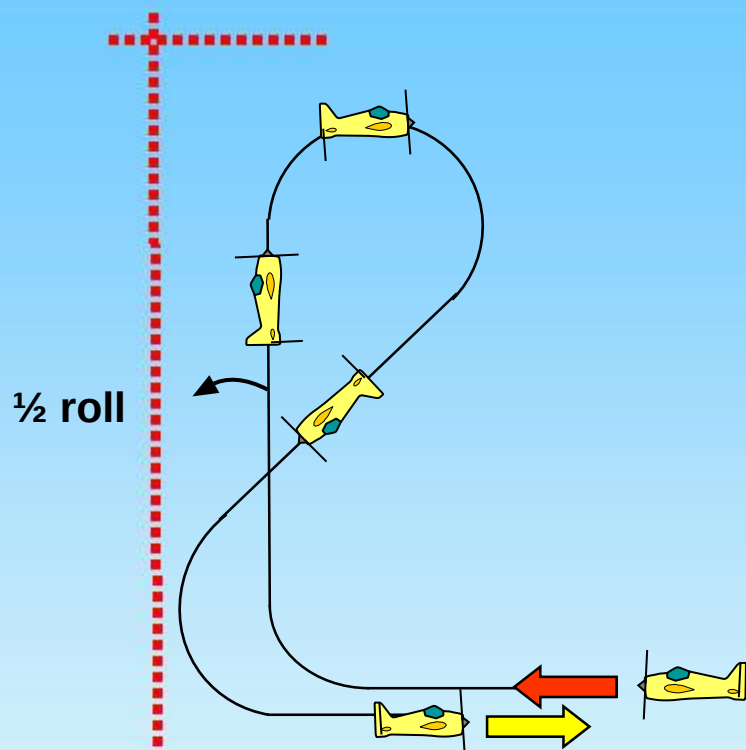


A-27.15 Square from Top with half roll





A-27.16 Reverse Figure ET with half roll

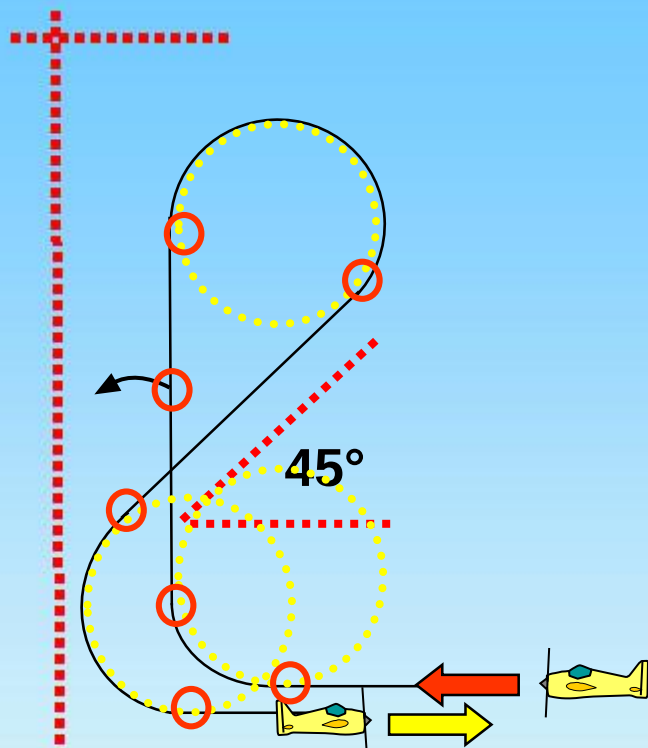


From upright, pull through $\frac{1}{4}$ loop into a vertical upline, perform a $\frac{1}{2}$ roll, push through a $\frac{5}{8}$ loop into a 45° downline, pull through a $\frac{3}{8}$ loop, exit upright.





A-27.16 Reverse Figure ET with half roll



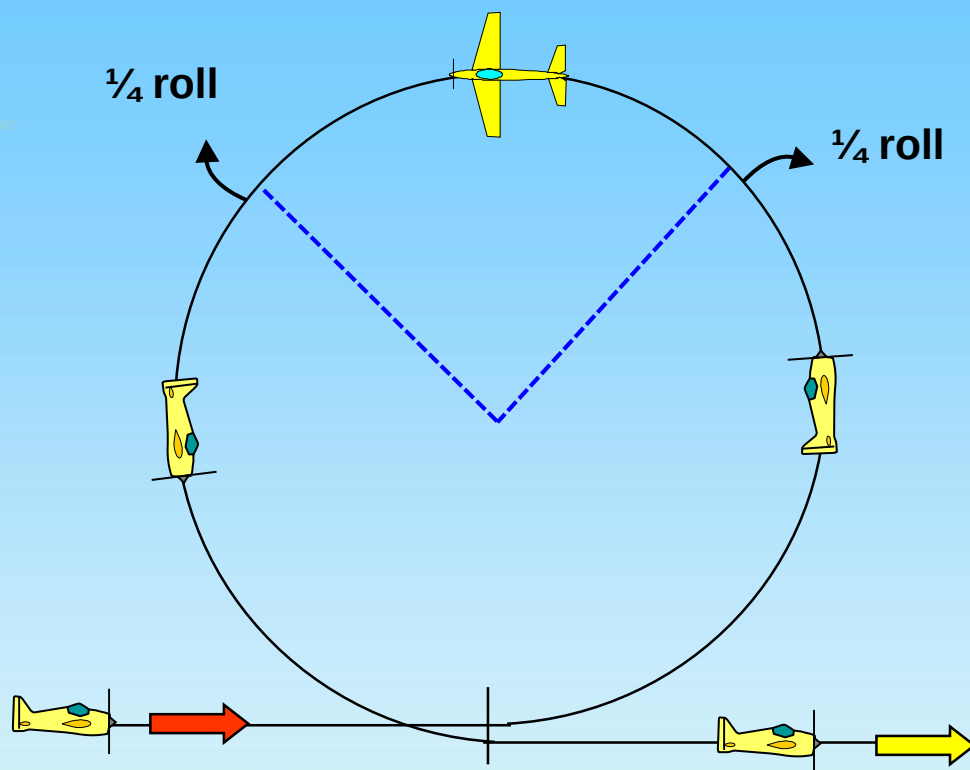
$\frac{1}{2}$ roll on middle of the line.

All radii are equal.





A-27.17 Loop with knife-edge flight



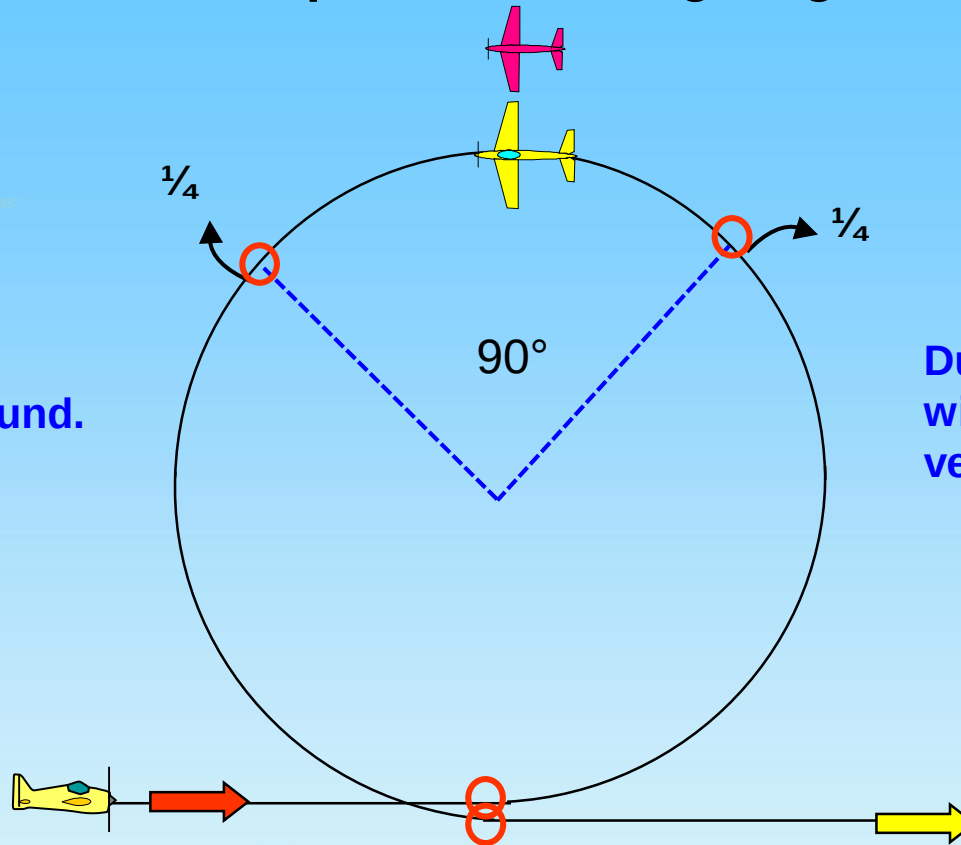
From upright, pull through a loop, perform a $\frac{1}{4}$ roll into a knife-edge flight over top 90° of the loop, perform a $\frac{1}{4}$ roll, exit upright.





A-27.17 Loop with knife-edge flight

Loop must be round.



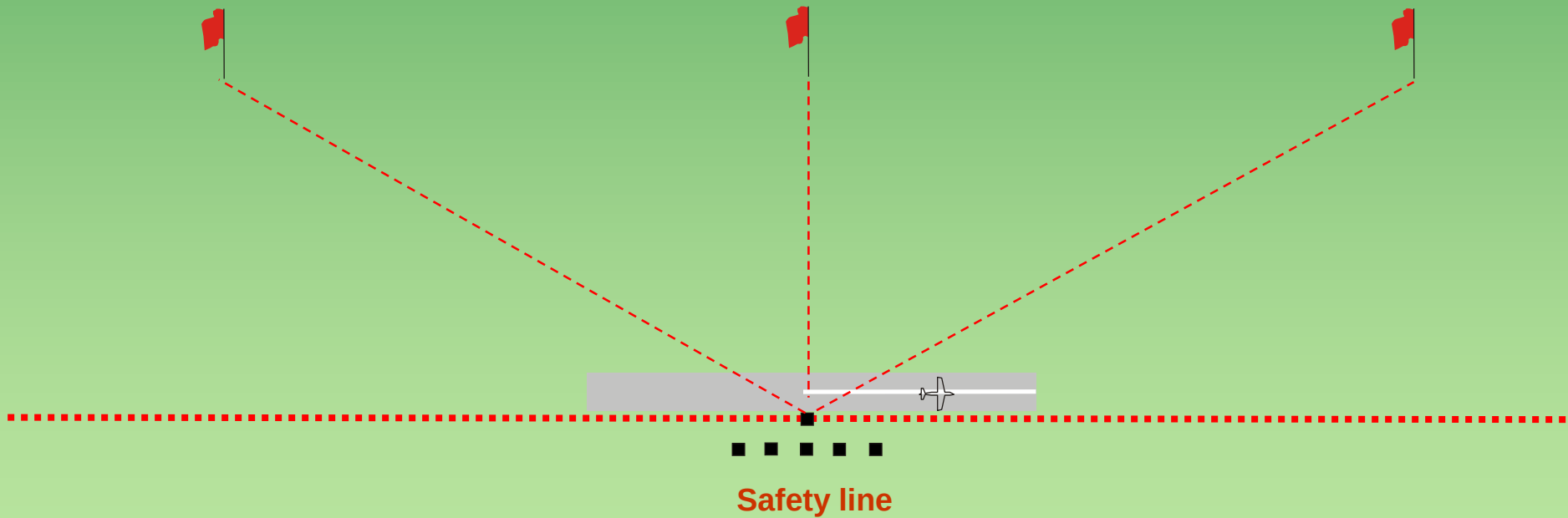
During knife.edge
wing must be in the
vertical plane





Landing procedure (not judged, not scored)

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

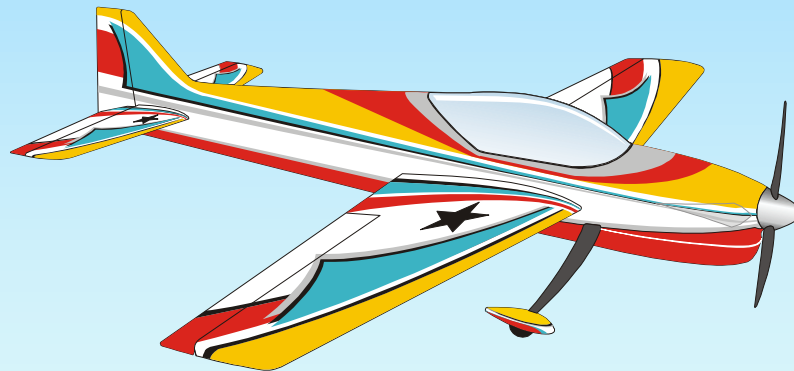


Forget **WHO** is flying
(friend, rival, countryman, flier from other nation)

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

LOOK ONLY AT LINES DESCRIBED IN THE SKY!

Bob Skinner



Thank you!

© Peter Uhlig, September 2025