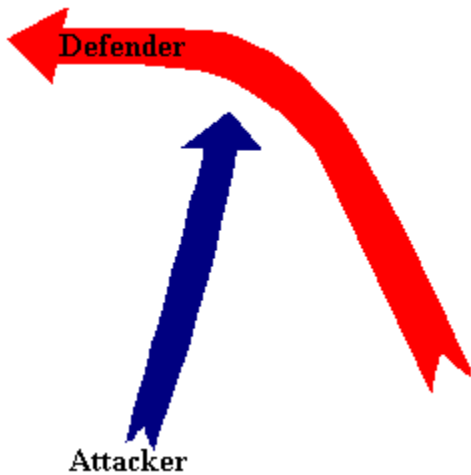


Combat Maneuvers

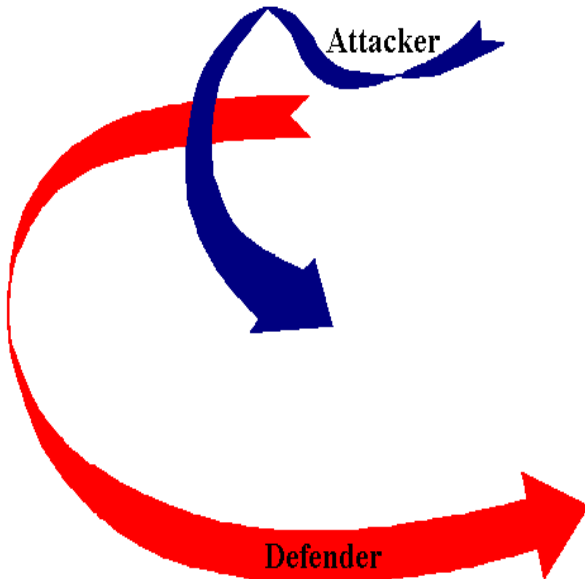
Click the images with frames to see a diagram of the counter to that maneuver



The Break

The break is most likely the simplest combat maneuver. In this maneuver the defender turns until the aircraft is sideways then applies rudder to make the aircraft quickly turn. If the attacker does not turn with the defender then the defender has broken away from behind the attacker and therefore has a greater possibility to gain the advantage in a later maneuver.

[Return to top.](#)

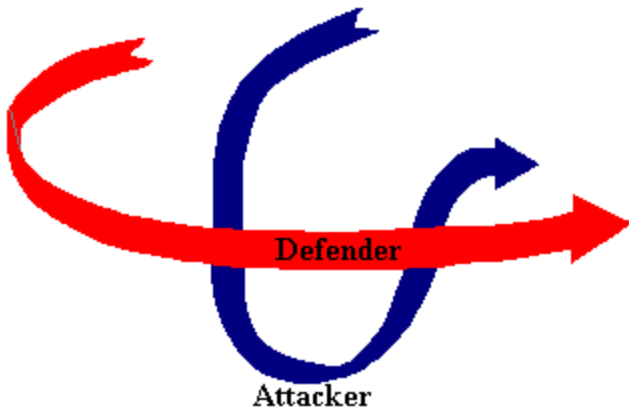


The High Yo-Yo

The High Yo-Yo was invented by a Chinese pilot named Yo-Yo. This maneuver is used to improve a pilots offensive position and to prevent the pilot from overshooting. Overshooting is when the attacking aircraft is chasing the defender from behind and either the attacker is going too fast and passes the defender or the attacker turns inside of the defender during a bank. The result in either case is that the attacking aircraft passes the defender and their roles reverse. Thus the attacker becomes the defender while the defending plane switches to the attacker.

The Yo-Yo works by causing the attacker to gain altitude therefore losing speed and decreasing the closure on the defender. This prevents the attacker from overshooting it's target. Then the attacker dives downward while turning with the enemy aircraft. The attacking aircraft thus gains back the speed it lost from the climb and gains a better offensive position almost directly behind the enemy aircraft.

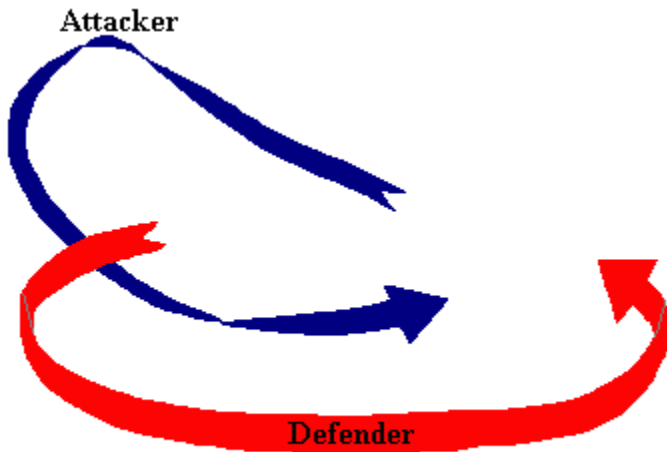
[Return to top.](#)



The Low Yo-Yo

The Low Yo-Yo accomplishes the same objective as the High Yo-Yo except does it by causing the attacker to dive instead of climb to decrease the closing speed and prevent an overshoot.

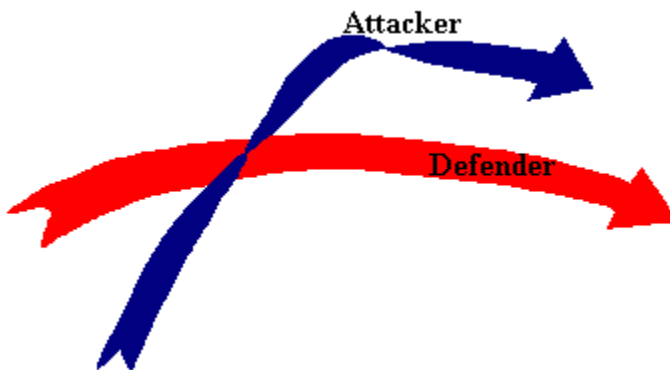
[Return to top.](#)



The Rollaway

This maneuver is accomplished the same basic task as the High Yo-Yo which is to improve the attacker's offensive position and prevent the attacker from overshooting the defender. The Rollaway does this by causing the attacking plane to climb therefore decreasing closing speed much like the High Yo-Yo except after the climb the attacker dives off to the outside of the defender's turn and then comes in behind the defender.

[Return to top.](#)

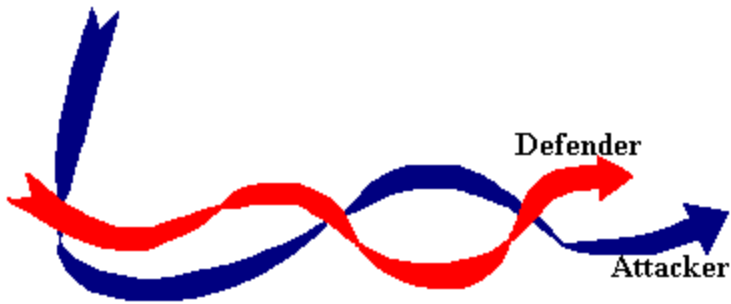


The Barrel Roll Attack

This is another maneuver that improves the attacker's offensive position and prevents the attacker from overshooting. In this maneuver the defender breaks one direction and so the attacker rolls the opposite direction from the defender's break then climbs to reduce closing speed. Finally the attacker completes the roll so he is level again and turns in behind the defender

[Return to top.](#)

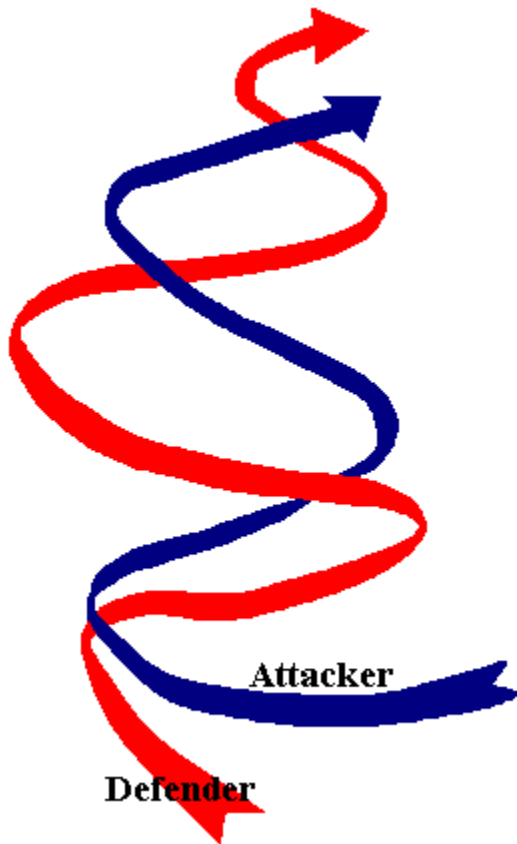
The Scissors



This maneuver is used to get the defender behind the attacker by slowing its speed as fast as possible by flying in a zigzagging flight path. This slows the plane because it is traveling a longer distance instead of in a straight line, which is the fastest path. The attacker is also going to be doing this to remain in the offensive position behind the defender.

The aircraft that executes this maneuver best is going to end up in the better offensive position.

[Return to top.](#)



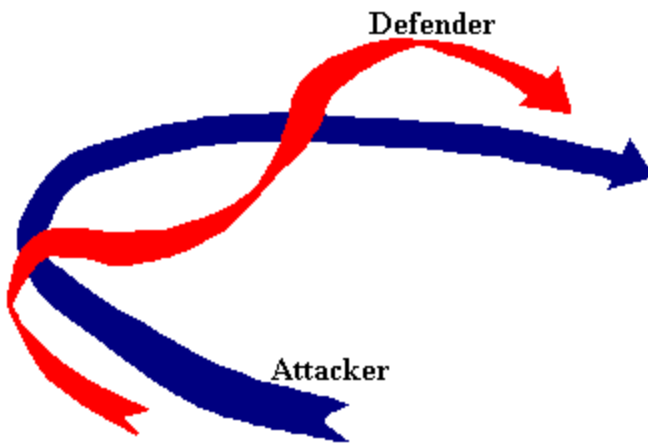
The Vertical Scissors

Vertical Scissors is really just like the Scissors maneuver except it is done while climbing or diving aircraft fighting to gain the better offensive position. In this maneuver the defender most likely enters this maneuver because he has a disadvantage in that the other aircraft has more speed. This maneuver causes the speed advantage to be canceled due to the pull of gravity slowing both aircraft.

If the defender executes this maneuver with better timing and technique the defender will end up behind the attacker therefore allowing the defender to become the attacker and placing the aircraft in a good offensive position.

[Return to top.](#)

The High G Barrel Roll



This is a maneuver that should be executed by the defender when the attacker overshoots the defender. This maneuver takes advantage of this change by placing the defender behind the attacker. This is accomplished by calling for the defender to turn into the attacker's break and then do a barrel roll parallel to his course. At the top of the barrel roll the defender should be directly behind the attacker

[Return to top.](#)

Changes in maneuvers over time

As you can see most of the World War II maneuvers appeared to be less drastic and involved much less climbing than more recent maneuvers. There are many reasons for this. The biggest one is probably that the prop planes of World War II did not have enough speed to sustain long climbing maneuvers like the jet engines powering more recent aircraft. Also military aviation back then was more recent than it is now so there was less time to develop the more complicated maneuvers of present day.

Also the maneuvers during World War II did not need to be as complicated because of the weapons in use at that time. For example the only air-to-air weapons being used during that time was machine guns and occasionally unguided rockets. Because of this maneuvers like the skid were effective while such a maneuver during present times with a guided missile flying at you would prove fatal.



[Return to main page](#)