

# *Single Fighter Defence*

by Bonger

## **A Plan for Defence as a Single Fighter**

- As I enter the combat area I quickly check the map for the closest friendly territory with the most friendly planes and decide on an egress route in advance, "OK if jumped I immediately bug ENE".
- If jumped I try to make a nose low maneuver which results in my plane heading in my egress route with a good amount of speed.
- I locate the attacker and determine plane type, performance characteristics and energy comparison relative to mine.
- If I can drag to a friend this is my first option.

Otherwise

If he is slower than me in a slower aircraft I extend and grab.

If he is slower than me in a faster but poorer turning aircraft (example. 190) I drag him out of the enemy area so that I can entice him into a turning fight without his friends bouncing me.

If he is a better turning aircraft and is faster (spit, zeke etc...) my goal is to get him to waist his E on futile guns passes until I can outrun him. ALWAYS STAYING FAST IN A SHALLOW DIVE my first move is the Hartmann Escape (detailed explanation below). This is a sucker move and will say a lot about my adversary as well as provide me with safe horizontal separation for my egress, if it works.

If the attacker goes high to preserve his energy advantage he is smart and will be harder to shake. On his second pass if he is still significantly faster I may try a split S to try and even up our energy differential if I am getting into friendly territory and among friends. If I am still all alone I barrel roll (see below) to break guns solutions until I can outrun him or get to friends. If I am still unable to shake him I then go for broke with some sort of a negative G pushover.

The whole point of all of these maneuvers is mostly to get to friendly territory or to friends that will help you while you foil the attackers shots. Fighting a better turning adversary in a turn fight is not what I want to do. Your advantage in the stang is its E retention and high dive and level speeds. Gentle turns and low E maneuvers will bleed most aircrafts energy faster than yours. Use this advantage to gain horizontal separation and escape to safety.

## **Maneuver Explanations**

### **Hartmann Escape**

The goal of this maneuver is to get the attacker to take a guns pass which he needs to lead you by placing your aircraft under his nose temporarily thus put you out of his sight. During this small out of sight window you have the opportunity to escape while he cant see you by entering a shallow dive in a direction of choice.

#### Discription:

The attacker should be somewhat faster than you on his attack run. As he gets close, just out of guns range (d6 to d10 depending on his rate of closure), make a gentle roll to the right or left and start what looks like a break turn (Sick starts his maneuver by adding a fake to one side first then a low E break turn in the other direction). Continue your low E break turn until he rolls and pulls to lead you for his shot. If you have timed it right, he must put you under his nose and out of sight for a second to lead you enough to get his guns on you. He believes you will continue your break and reappear in his gunsight at about d1-3. You dont! As you disappear from his sight you push the nose over, pushing some negative G's and enter a shallow dive in slightly a different direction. Continue this shallow dive to gain your needed horizontal separation. Your attacker usually continues to pull lead in anticipation of you popping out in front of him in his sights. After a while he realizes that you are not where he thinks you are.

Its actually quite a riot watching your attacker continue to pull when your not there. I usually chuckle as I watch him rolling and turning. I know he's saying "Where did he go?" Meanwhile you are long gone.

#### Advantages:

- You can stay fast throughout the maneuver.
- Even if he see what you are doing hitting an airplane pushing negative G's is very hard.
- It is a nose low maneuver, even if the attacker counters perfectly you are not a sitting duck just back where you were in the first place.

#### Disadvantages:

- It is purely defensive and offers you no shot, just escape.
- You yourself lose sight of the attacker as you push negative G's to escape.

#### Counter:

The attacker abandons his guns pass and climbs to perch for the next pass (lag displacement roll).

### **Defensive Barrel Roll**

The goal of this maneuver to spoil the shot of an attacker on your 6 while maintaining the same heading with low energy loss.

### Discription:

The key to a defensive barrel roll is to have some vertical and horizontal movement in respect to your attacker. This is done by adding a LITTLE back pressure (pull on stick) as you roll. An aileron roll is easy to hit since the fuselage of your airplane stays in roughly in the same place. With the added vertical and horizontal movement the attacker must accurately roll and pitch his airplane with yours constantly calculating the appropriate lead angle and firing, this is VERY hard to do for the attacker. Dont keep the exact same roll going. Change it up with varying the roll rate, back pressure and even change the roll direction back and forth. You can even change your stick pressure as you roll from back pressure to forward pressure with a roll. This produces a very weird kind of roll, real tough to hit!

Stay fast if you are trying to escape or accelerate away by not pulling back or pushing forward to hard. If you pull very hard you will lose E and become slow and vulnerable. The other side of this is if your attacker is getting real close (-d2) you can pull hard while rolling to try and force the overshoot. Be careful not to snap roll when doing this.

### Advantages:

- You can stay reasonably fast.
- You keep your same heading (egressing to friendlies) while you spoil your attackers shot.
- Great defensive maneuver when dragging. It keeps the con rolling but mostly straight while your friend lines up the shot.
- Allows you a visual on the con as you perform the defensive maneuver.

### Disadvantages:

- It does cost some energy.
- Allows no shot unless you try and force the overshoot.

### Counter:

Attacker can again abandon a guns shot to perch while you finish your roll and thus gain more energy advantage, then resume the attack. Attacker can also lag roll to keep his relative 6 position while trying to pick away at you.

## **Split-S with extension**

The goal of the split S is to force a bouncing enemy with a higher speed to abandon his guns pass and change directions.

### Discription:

As the attacker quickly approaches the defenders rear quarter for his shot the defender rolls inverted and performs a half loop to be traveling at a faster speed in the opposite direction. The faster airplane with a much greater turn radius cannot follow. If he does he will grossly

overshoot and quickly become the defender. The attacker must either save his energy by converting it into altitude by using a nose high maneuver or chop throttle to reduce his speed and turn radius if he wishes to follow.

This maneuver can be a great way of reducing the energy advantage between you and the attacker. After you perform the maneuver extend until the attacker has either fallen behind or caught up you minutes later. You will notice each time that his energy advantage will be less after each pass. Split S until approximately co-E then fight with a co E state if desired (planes with similar wing loads) or split S until you have the speed to escape if in a faster aircraft.

Advantages:

- Almost impossible for a faster attacker to follow.
- If you are close to the ground it is a maneuver that will drive him into the ground if he follows.
- At fast speeds some planes will compress if they try and follow.
- Allows you to extend and stay fast.

Disadvantages:

- Sometimes you dont want to reverse your direction (if egressing to friendlies).
- You need some altitude to do it.

Counter:

To maintain his energy advantage the attacker needs to reverse with a chandelle or imelleman. This displaces him quite a bit horizontally and allows the defender a great chance to run but is the best "E" saving maneuver. To maintain his angle advantage the attacker would need to climb a bit and chop throttle before performing his own split S. He will however lose his E advantage but will keep his angle advantage.

Hope to see you all at training!

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