



VAQ-562

Wild Weasel Techniques in SF2

In Strike Fighters 2, the role of Ironhand, or Wild Weasel is limited. However, it can be sometimes fun and sometimes a pain in the ass. The first thing is that you need an aircraft that can fire Shrike, Standard ARM, or HARM missiles. The Russians have their Kh-31p antiradar missiles but overall, they all operate the same. The first thing is of course loading up the missiles for your mission. The dedicated role in the game is Air Defense Suppression and you of course must make sure you select an aircraft that performs that role. Your target may be a SAM battery or AAA, you don't know until you hit the objective of the mission and it has to be a certain percentage to be killed in order to win the mission. It all depends on the map and what is around. Usually, if you fail to bring the right ordnance you can just simply reflly the mission and accomplish the mission. However, most of the time your aircraft may or not be suitable for most missions. The A-7 is a good plane to fly as you can perform this role and still "sanitize" the area and kill the site and win the mission. However, the game may consider killing the radar to accomplish the mission and therefore you'll succeed.

Basic Antiradar Missile Use

Using an antiradar missile is simple. All you must do is align the TEWS (Tactical Electronic Warfare System) to the threat radar, and fire. The missile does all of the rest:



Aligning the TEWS to the threat radar

Once aligned fire your missile:



Firing a HARM

Once released, the missile will generally hit the target. However, depending on the settings of the missile, it may miss or simply get confused and miss the target. Usually, the older missiles, such as the AGM-45 Shrike, or AGM-78 Standard ARM will miss more and not guarantee a kill against the targeted radar. Game logic keeps the radar on when you fire, so you don't have to worry about real-world tactics of turning the radar off to confuse the missile. It should be noted that there is of course a certain time period in which the missile is in flight. If you're in danger of getting shot at by a SAM, simply fly away and hope that your missile kills the system. Some SAM systems

are also designed to be harder to hit than others, so be aware that you may need to use other ordnance to kill the radar. If you have the Mission Editor DLC or SF2 Complete you can simply create a mission where you can practice shooting at various radars in your install to gain insight on which SAM systems are easier to kill.

Basic TEWS Symbolology



TEWS symbolology is easy to understand. The diamond-selected target (in the above image it is a SAM radar) is considered the highest threat radar relative to the aircraft. Note that this system notes airborne and ground radars. It's only necessary to update your RWR file located with the downloaded aircraft so that it displays correctly. In this above image, the current threat radar is "U", or Unknown. Again, I need to update my threat library to let me know what kind of system it is. "CV" is the home carrier and isn't a diamond. It should be noted that the game will only highlight one system and will switch depending on its own logic that the game uses. It reflects the real-world system as well. Friendly systems won't be highlighted either. Also, when the system is firing at you, a circle will appear and will flash letting you know who is firing at you.

To update your TEWS list you need to go to your desired aircraft that has a TEWS system installed in the Avionics file. This will tell you where the mod author put the RWR list. The RWR.lst is a simple file in that you list the radar and associate it with a .tga file to be displayed on the TEWS display. Here is a sample listing:

```
SA-10A=RWR_SA-10.tga
```

To figure out what to put, look at the "RadarFamilyName=" line in the _data entry of the ground object/aircraft that you are listing. The .tga file goes into the Flight folder of your mod folder so the game recognizes it and displays it correctly. GIMP and Photoshop, or any image file editor will suffice to create a custom image. Also don't forget to use another one to make one if

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you want a custom file done for that system. But generally, save the files and when you play the game, it will display on the TEWS RWR display.



The other type of RWR is the Vector system. Unlike TEWS it shows a line to the emitter or radar. Signal strength is measured in length and when it's locking you up. The longer line shows that the radar is putting its strength into you and therefore a long flashing line. This can be found on Vietnam-era jets, and it is somewhat less useful than TEWS because with TEWS you can tell what is around you more clearly, unlike the Vector RWR which just shows an anonymous line.

ECM Jamming

As of July 2013, the game has a bug where the podded ECM Jammers do not work. So, for you to have a jammer on your chosen aircraft you have to open the _data.ini of your plane and add it to the particular aircraft. First, you have to go to the [Fuselage] entry and add the ECM system to the next line as far as the system is concerned for the game to recognize it has a jammer, such as this:

```
SystemName[xxx]=ECM
```

Once that is added the system has to be added, such as this:

```
[ECM]
ReferenceName=ALQ-99
SystemType=ECM_JAMMER
JammerType=NOISE_JAMMER
JammerStrength=150.0
MinFreq=2.0
MaxFreq=20.0
CanJamCW=TRUE
MinExtentPosition=-0.404,-2.859,0.608
MaxExtentPosition=0.404,-0.824,1.018
```

This must be placed within the Countermeasures portion of the `_data.ini` of the aircraft. Once you add that you now have an ECM jammer that may or not be effective, depending on your settings. `JammerType=` is limited to `NOISE_JAMMER`, `DUAL_MODE`, and `DECEPTIVE_JAMMER` only. Each mode has some effectiveness against other systems. Most US Navy jets already have internal ECM so you can just tweak it to your preferences and see how it works against aircraft and SAMs/AAA. `ReferenceName=` is the name of the system and just for notation's sake for the game. `SystemType` is obvious and `JammerStrength` is the amount of power that the system puts out to jam systems. `Min` and `MaxFreq=` are the game's frequencies that the system will jam. So far nothing is made over 20 so for this one to simulate high and low frequency pods I put the `MinFreq` at 2.0. `CanJamCW=` is continuous wave and is `TRUE` or `FALSE`. The minimum is 0 but usually SAM systems are in-between these frequencies. `MinExtentPosition` and `MaxExtentPosition` seem to be the physical location on the 3D model for the system.

When enabled the jammer does its job in jamming both airborne and ground threats. Its power and type determine how effective it is. `NOISE_JAMMER` and `DECEPTIVE_JAMMER` seem to be the best modes for some systems. However, `DUAL_MODE` does work and can be effective against some radars. Burn-through is when the radar can overpower the jammer and allow the system to lock you up. There are a lot of factors for this and frankly don't know all of them to reliably tell you all of them. The best thing to do is create a mission and test the effectiveness of the jammer versus the aircraft/ground object to get an idea of what works and doesn't. If you have the Mission Editor DLC or the Complete Edition this task is easy.

To create a mission for testing you simply go to Create Mission and click on the edit button at the bottom right of the screen. From there you will be taken to the mission screen where you can edit the mission to your liking, regardless of what map it is. I recommend staying away from the Range map (and Red Range), as well as the stock Iceland map as it's too buggy for simple test flights against radars. Remove all the enemy and friendly flights (when you select Air Defense Suppression you don't have any requirement to shoot down enemy flights, as they are there for threats against you) and edit your flight as you see fit. Find a good area where you can remember where you put the SAM radar and place it on the map. For Enemy Air Defenses (and Friendly if you prefer) to `NONE` and save it as you see fit. This will give you a Mission Accomplishment when you start the mission, but will record flight time and kills, just like a regular mission. Also, if you need you can fly around and see what the terrain looks like for a free-flight mission, though I prefer to make separate missions for that.

Once you have your mission saved you can edit as much as you like of course, and test radar performance, or use it for SAM evasion training, though I think that you do enough given threat SAM systems anyways on the map or other maps that feature nations systems.

Mission Editor

If you have the Mission Editor DLC or the Complete Edition, then you can make some adjustments to the mission that you fly. For the most part, the SAM systems are of course tough. With SF2:NA comes the "Escort_Jamming" role that you can use to help your flight out. What this does is that you can add an additional flight. Be aware that the Growler and Prowler can perform this mission (You can find my Super Hornet pack and HomeFries's Prowler Superpack in the Download section of CombatAce). For the EF-111A you have to add that role to it. Creating a flight is just like adding another flight to the mission. The only difference is that the flight will

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support one flight only. It should be noted that the mission is AI aircraft only. Select the flight it will escort, either yours or an AI flight. Then it will use its jammers to degrade enemy SAMs. It does work depending on the capability of the jamming flight. This flight cannot carry any anti-radar weapons as it will not use them when flying. Its main focus is jamming threats.



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