

The January 2020 meeting was the seventh meeting of our 2019-2020 fiscal year. This was our first meeting in room 109 at the South County Community Center. We still have the large dining room for our use but since attendance has dropped so much it's easier to use the smaller room. I wish attendance would increase to where using the larger room would make sense but that would be up to more of our membership attending meetings.

Remember our meetings for 2020 will be on the third Tuesday of every month. Currently, the South County Community Center is unavailable for our February meeting due to election requirements. We will hold our February 2020 meeting with the auxiliary on Thursday, February 20 at Sts. Simon & Jude Catholic Church on Glen Loch Drive in The Woodlands. At that meeting we will have our annual chili cook-off competition and conduct the Four Chaplains ceremony. We are looking forward to a good turn-out.

One of the topics I am interested in is news about our MIAs. Below is a link to a website that documents recovery of MIAs:

<https://www.dpaa.mil/News-Stories/Recent-News-Stories/>

This is an impressive listing that showcases the diligence of our Defense POW/MIA Accounting Agency.

Once again I ask you to make an effort to come to our meetings and join us in our activities. We are always looking for more participation from our current membership as well as finding new members to join. We need you to help us provide service to veterans and the community.

It's been a relatively quiet month after all the hectic activities of the holiday season; I've enjoyed the respite.

Some interesting military news:

The Hilarious and Totally Real Reason the F-22 Can't Be Hacked

28 Jan 2020

We Are The Mighty | By Blake Stilwell

“Star Trek” would be a lot less interesting if we found out the Enterprise didn't run on an advanced iso-linear computing system but instead ran on something like MS-DOS. We might laugh at how incredulous that work of science fiction would be. But in today's U.S. Air Force, the F-22 – one of the most advanced fighters ever made – runs on a similar disparity.

But of course, the Air Force will remind you that it isn't science fiction, it's what they do every day.

The F-22 program was killed at the height of the wars in Iraq and Afghanistan in an effort to reshape the U.S. military. The F-22 was designed as an air superiority fighter to take on advance fighters from China and Russia in air combat, not support troops on the ground. At the time,

American troops were focused on insurgencies and ground combat. Until the terrorists started flying F-14s, there was little perceived need for such a fighter. Now that the U.S. military is refocused on great power wars, the need for such a program is becoming more apparent.

The F-22 is one of the fastest combat aircraft in the U.S. Air Force, even after the development of the F-35. It can detect and attack enemy aircraft from miles away, even if the enemy isn't yet able to detect the incoming Raptor. In one instance, a Raptor was able to pop up from underneath two Iranian F-4 Phantoms and tell them to go home, which they promptly did, presumably to change their shorts.

Just the presence of a Raptor in a battle space is enough to clear the skies of enemy aircraft. In a great power war with a country like China, the Raptor would be an indispensable part of the Air Force order of battle. Raptors will quickly disperse in order to keep China from targeting them with ballistic missiles. Their stealth and air combat abilities would then be used to escort C-17s and frustrate Chinese fighters, as well as any Chinese efforts to jam their communications. That's due in large part to the pilots' advanced training and the advanced stealth technology aboard the airframe. But the reason Chinese hackers couldn't hack their computers is something different altogether.

The technology is more than 35 years old.

When the \$65 billion fighter was cut from the Pentagon budget, there was a lot of joking surrounding the fighter, that the United States had developed a weapon it would never use in combat – after all, until that point the F-22 hadn't flown a combat mission over either of the two wars the U.S. was actually fighting. Former Navy Secretary John Lehman, found a silver lining, telling the Wall Street Journal that at the very least, the plane's computer technology was safe from Chinese hackers.

"No one in China knows how to program the '83 vintage IBM software that runs them," he said.

Ten years later, the F-22 has definitely flown combat sorties over Syria and the rise of China and Russia, and their fifth-generation fighters, some of the technology stolen from the United States, might have the Pentagon wishing they had more Raptors.

The F-22 is getting an awesome avionics upgrade.

The Air Force is vigorously pursuing new avionics, radar, targeting sensors, weapons, glass cockpit displays and Artificial Intelligence for its F-22 stealth fighter to try to sustain air supremacy amid Russian and Chinese 5th-generation stealth fighter technical modernization, service officials said.

The service has an ambitious, wide-ranging set of objectives woven into this initiative; the Air Force aims to enable the F-22 to ID targets at longer ranges, respond more efficiently to sensor input, sustain an air-to-air combat superiority over near-peer rivals and lay down a technical foundation such that the aircraft can quickly embrace new weapons, technologies, sensors and software as they emerge – all so that the F-22 can serve all the way out to 2060.

The multi-pronged effort is inherently connected to early iterations of increased computer automation and AI, as a mechanism to integrate otherwise disparate elements of F-22 avionics, sensors and mission systems. Common IP protocol standards, including both software and hardware, are engineered to provide a technical backbone enabling upgrades and integration of a variety of interconnected systems—to include radar warning receivers, AESA radar, LINK 16 connectivity, improved weapons, emerging sensor and targeting configurations and new transponders, able to identify friend or foe.

"The Air Force has made progress with efforts to upgrade sensors on the F-22. The Air Force continuously looks for ways to upgrade and enhance capabilities based on threats around the world, to include the F-22 sensors," Capt. Emily Grabowski, Air Force spokeswoman, told Warrior Maven.

In concept and application, AI can lower a hardware footprint and increasingly use advanced algorithms to perform processes without requiring as much human intervention. For instance, a more integrated computer processor is better-equipped to potentially perform real-time analytics during a mission to make adjustments as maintenance and combat circumstances may require. Faster analytics, relying on newer forms of computer automation, can more quickly identify problems, recognize threats and streamline various cockpit functions.

I find these kinds of reports tremendously interesting but sometimes wonder if we would be better off to be silent.