

Men's Group, November 11, 2014

A financial advisor for Edward Jones [2990 Cahill Main, Suite 102, Fitchburg (608) 271-5100], Lieutenant Colonel Todd Berge retired after 20 years in the Air Force. While on active duty as a pilot, he flew mainly two planes: The B-2 Stealth Bomber and the A10 Warthog. Also, he has been a Flying Tiger.

Todd shared some his experiences with the Fitchburg Senior Center's Men's Group at its regularly scheduled meeting on November 11, 2014. There were 18 present.

The Lieutenant Colonel began with a picture of the Stealth Bomber with what appeared to be a halo around it. The phenomenon is not caused by the plane passing through the sound barrier since it does not fly faster than the speed of sound. It is caused by moisture in the air and a pressure wave that condenses the moisture. "While in the cockpit, you are not aware of the halo effect," he said. "It is difficult to see out of the air plane; you are mostly 'heads down.' You can even miss a thunderstorm until you are in it."

Todd said that the plane is easy to fly. "What is difficult," he said, "is how fast the time goes because you are buried in electronics." He flew the B-2 Stealth Bomber for 10 years.



He explained that the B-2 is aerodynamically unstable. It is 69 feet long with a 179-foot wingspan. "It basically is a flying wing."

Cruising speed is 560 mph, and the plane has a 6,000 nautical mile range without refueling. There are 20 bombers in the fleet with 19 of them located at Missouri's Whiteman Air Force Base located about 70 miles southeast of Kansas City (www.whiteman.af.mil/). There are about 100 pilots for the 19 B-2s. The plane is 25 years old. It made its first flight in 1989. Everything about the design is to avoid radar detection. The basic design dates back to the late 1940s and was offered by Jack Northrup.

The B-2 can carry 80 bombs and can drop all 80 in 5 seconds. In addition, it was built to carry a nuclear bomb. Cost per plane is \$2.2 billion (that's a "b"). There are two parts to stealth: tactics

and low observability. “The idea is to go around high threat areas and reduce the enemy’s ability to detect,” Todd said. “When you open the bomber’s doors, you are no long stealth.”

Todd grew up in Colfax, Wis. He attended the University of Wisconsin - Madison and was a history major and in Air Force Reserve Officer Training Corps all four years. He joined the Air Force full time upon graduation.

Upon finishing pilot school, Todd had his choice of aircraft. Initially he chose the A10 Warthog. “The plane literally was built around a 30 millimeter Gatlin gun,” he said. “It is heavy armor, and the gun itself is larger than a VW bug.” There are seven barrels, and the gun can shoot 2,100 to



2,400 rounds a minute. Part of shell is made from spent uranium and is heavy, heavy metal. When it hits the target, it turns into molten metal that can penetrate steel. The shell casing Todd passed around was about as long as a ball point pen but four to six times larger around. Casings are saved in the plane and recycled.

“The Warthog is perfect for the type of combat being conducted in the Middle East,” Todd said. Its maximum speed is 350 knots, about 375 mph. “The Air Force has been trying to get rid of the plane for 30 years,” he continued. “The newest one was made in 1982.” Why called Warthog? “It’s slow, it’s maneuverable, it’s ugly,” he continued.