The ThunderWord

Thunderbird Field EAA Chapter 1217 July 2012 Scottsdale, Arizona

PRESIDENT'S CORNER

Greetings from my corner of the hangar! Last month's meeting was great! We enjoyed John Washington taking a trip down memory lane with a really interesting plane from the past. The plane was Laminar Magic, and it was designed and built by Dr. Alex Stronik, an ASU physicist. John assisted with the finishing of the plane, and was the pilot when it set its speed records many years ago. It was interesting to learn about the design work that went into the plane. Makes you wonder what the plane would do with one of today's modern engines. John also wants everyone to remember his name as he is running for Mayor of Scottsdale this fall.

We also got to enjoy some birthday cake to celebrate our EAA Chapter's 14th birthday. Everyone must have been hungry because there wasn't a scrap of food left over. Thanks to Terry Emig for bringing up a giant sized cooler full of ice cold drinks.

In the year 2020, the FAA is going to require planes operating in certain types of airspace to be equipped with a new device to increase safety. This month's meeting is going to be on a subject we are all going to have to learn about – Automatic Dependent Surveillance-Broadcast (ADS-B). It is a surveillance technology for tracking aircraft as part of the Next Generation Air Transportation System (NextGen).

At first I was completely opposed to the idea, but after talking with Chapter member Bill Unternaehrer about it, he walked me in off the hangar ledge. After getting some hands-on tutorial from Bill, I learned it actually is a simple device that will give you a huge amount of information when you are flying. It rolls charts, terrain, weather, traffic and ESPN together into a really user-friendly device. One really cool thing is that it is portable and has its own battery, meaning it could be used in my Cub without having to go through a bunch of hoops for STC's and overpriced certified radios. It also has the capability to be moved from plane to plane. After seeing how easy it was to convince me about how it's not such a bad thing, he said "why don't I put together a presentation for the Chapter?" So this month's meeting will have some very interesting information, and you will go home smarter and more informed.

For those of you saying that 2020 is so far down the road, you will be living underground, do the math. It is only eight years away and you will still have a half done project in your shop – hopefully not the one you are currently working on!

Curtis

JULY CHAPTER MEETING

The July meeting of Thunderbird Field EAA Chapter 1217 will be held on Thursday, July 21, in the Scottsdale Airport Terminal Building. The time is 7pm. Bill Unternaehrer is going to help us understand what the ADS-B system is and what the future of general aviation looks like. Hopefully he will be able to link up our PowerPoint projector to Foreflight / ADS-B live on his iPad. Terry Emig is stepping up to run this month's meeting since I will be on my way to Wisconsin for AirVenture.

Remember, guests are always welcome!

AIRVENTURE HAPPY HOUR

It has now been a 14-year tradition of Chapter 1217 members attending the Oshkosh AirVenture Fly-In to get together one evening and compare sightings and stories. This year on the first day of the Fly-In, we will have our annual AIRVENTURE HAPPY HOUR AND FISH FRY at WENDT'S ON THE LAKE. Come and join us for some traditional Wisconsin food and libations.

If you want to plug it into your GPS the address is N9699 Lake Shore Road, Van Dyne, WI 54979-9703; (920) 688-5231 www.wendtsonthelake.com. They are located 3.8 miles south of the seaplane base.

AUGUST MEETING SPEAKER

It looks like Dean Gilderoy has landed a great program for our August meeting. Mark Kusbel, president of Wamore Incorporated, will fill us in on the projects his company is working on. When you get some free time check out www.wamore.com to learn about his projects. Thanks Dean!

ME-262 LEAVES CASA GRANDE

For the past decade the Gosshawk Unlimited Company at Casa Grande Airport has done some amazing restorations. At the request of its clients, the company has a self-imposed high level of security surrounding its projects. When you are charging by the hour to restore these rare planes the cost of giving tours is not in the budget.

The latest restoration project has been an original Messerschmitt Me-262 that was being restored to flying status for Paul Allen's Fighter Heritage Collection at Paine Field in Washington www.flyingheritage.com.

Unfortunately the bean counters at FHC decided to take a different tack with this ultra-rare warbird, and the project was moved to an undisclosed location. While being dismantled and loaded onto a semi-truck the veil of security was down and it was a chance to see the plane as it left Casa Grande. Michael Friedrich was on hand and took the pictures.

ME-262 Being Prepared to Leave Casa Grande

Picture by Michael Friedrich

SECOND WORLD WAR STATISTICS

No matter how one looks at it, these are incredible statistics. Aside from the figures on aircraft, consider this statement from an article: "On average 6,600 American service men died per MONTH, during WWII (about 220 a day)". Most Americans who were not adults during WWII have no understanding of

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the magnitude of it. This listing of some of the aircraft facts gives a bit of insight into it: 276,000 aircraft manufactured in the US; 43,000 planes lost overseas, including 23,000 in combat &14,000 lost in the continental U.S.

The US civilian population maintained a dedicated effort for four years, many working long hours seven days per week and often also volunteering for other work. WWII was the largest human effort in history.

THE COST of DOING BUSINESS

The price of victory (cost of an aircraft in WWII dollars):

B-17	$204,370.	P-40	$44,892.
B-24	$215,516.	P-47	$85,578.
B-25	$142,194.	P-51	$51,572.
B-26	$192,426.	C-47	$88,574.
B-29	$605,360.	PT-17	$15,052.
P-38	$97,147.	AT-6	$22,952.

PLANES A DAY WORLDWIDE

From Germany's invasion of Poland, Sept. 1, 1939 and ending with Japan's surrender Sept. 2, 1945 --- 2,433 days. From 1942 onward, America averaged 170 planes lost a day. How many is 1,000 planes? B-17 production (12,731) wingtip to wingtip would extend 250 miles. 1,000 B-17s carried 2.5 million gallons of high-octane fuel and required 10,000 airmen to fly and fight them.

THE NUMBERS GAME

9.7 billion gallons of gasoline consumed, 1942-1945.
107.8 million hours flown, 1943-1945.
459.7 billion rounds of aircraft ammo fired overseas, 1942-1945.
7.9 million bombs dropped overseas, 1943-1945.
2.3 million combat sorties, 1941-1945 (one sortie = one takeoff).
299,230 aircraft accepted, 1940-1945.
808,471 aircraft engines accepted, 1940-1945.
799,972 propellers accepted, 1940-1945.

According to the AAF Statistical Digest, in less than four years (December 1941- August 1945), the US Army Air Forces lost 14,903 pilots, aircrew and assorted personnel plus 13,873 airplanes --- inside the continental United States. They were the result of 52,651 aircraft accidents (6,039 involving fatalities) in 45 months. Think about those numbers. They average 1,170 aircraft accidents per month---- nearly 40 a day. (Less than one accident in four resulted in totaled aircraft, however.) It gets worse. Almost 1,000 Army planes disappeared en route from the US to foreign climes. But an eye-watering 43,581 aircraft were lost overseas including 22,948 on combat missions (18,418 against the Western Axis) and 20,633 attributed to non-combat causes overseas.

In a single 376-plane raid in August 1943, sixty B-17s were shot down. That was a 16 percent loss rate and meant 600 empty bunks in England. In 1942-43 it was statistically impossible for bomber crews to complete a 25-mission tour in Europe.

Pacific theatre losses were far less (4,530 in combat) owing to smaller forces committed. The worst B-29 mission, against Tokyo on May 25, 1945, cost 26 Superfortresses, 5.6 percent of the 464 dispatched from the Marianas.

On average, 6,600 American servicemen died per month during WWII, about 220 a day. By the end of the war, over 40,000 airmen were killed in combat theatres and another 18,000 wounded. Some 12,000 missing men were declared dead, including a number "liberated" by the Soviets but never returned. More than 41,000 were captured, half of the 5,400 held by the Japanese died in captivity, compared with one-tenth in German hands. Total combat casualties were pegged at 121,867.

US manpower made up the deficit. The AAF's peak strength was reached in 1944 with 2,372,000 personnel, nearly twice the previous year's figure. The losses were huge---but so were production totals. From 1941 through 1945, American industry delivered more than 276,000 military aircraft. That number was enough not only for US Army, Navy and Marine Corps; but for allies as diverse as Britain, Australia, China and

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Russia. In fact, from 1943 onward, America produced more planes than Britain and Russia combined. And more than Germany and Japan together through 1941-45.

However, our enemies took massive losses. Through much of 1944, the Luftwaffe sustained uncontrolled hemorrhaging, reaching 25 percent of aircrews and 40 percent planes a month. And in late 1944 into 1945, nearly half the pilots in Japanese squadrons had flown fewer than 200 hours. The disparity of two years before had been completely reversed. Experience Level: Uncle Sam sent many of his sons to war with absolute minimums of training. Some fighter pilots entered combat in 1942 with less than one hour in their assigned aircraft. The 357th Fighter Group (often known as The Oxford Boys) went to England in late 1943 having trained on P-39s. The group never saw a Mustang until shortly before its first combat mission. A high-time P-51 pilot had 30 hours in type. Many had fewer than five hours. Some had one hour.

With arrival of new aircraft, many combat units transitioned in combat. The attitude was, "They all have a stick and a throttle. Go fly `em." When the famed 4th Fighter Group converted from P-47s to P-51s in February 1944, there was no time to stand down for an orderly transition. The Group commander, Col. Donald Blakeslee, said, "You can learn to fly `51s on the way to the target. A future P-47 ace said, "I was sent to England to die." He was not alone. Some fighter pilots tucked their wheels in the well on their first combat mission with one previous flight in the aircraft. Meanwhile, many bomber crews were still learning their trade. Of Jimmy Doolittle's 15 pilots on the April 1942 Tokyo raid, only five had won their wings before 1941. All but one of the 16 copilots were less than a year out of flight school.

In WWII flying safety took a back seat to combat. The AAF's worst accident rate was recorded by the A-36 Invader version of the P-51: a staggering 274 accidents per 100,000 flying hours. Next worst were the P-39 at 245, the P-40 at 188, and the P-38 at 139. All were Allison powered.

Bomber wrecks were fewer but more expensive. The B-17 and B-24 averaged 30 and 35 accidents per 100,000 flight hours, respectively -- a horrific figure considering that from 1980 to 2000 the Air Force's major mishap rate was less than 2 per 100,000 flight hours. The B-29 was even worse at 40; the world's most sophisticated, most capable and most expensive bomber was too urgently needed to stand down for mere safety reasons. The AAF set a reasonably high standard for B-29 pilots, but the desired figures were seldom attained. The original cadre of the 58th Bomb Wing was to have 400 hours of multi-engine time, but there were not enough experienced pilots to meet the criterion. Only ten percent had overseas experience. Conversely, when a $2.1 billion B-2 crashed in 2008, the Air Force initiated a two-month "safety pause" rather than declare a "stand down", let alone grounding. The B-29 was no better for maintenance. Though the R-3350 was known as a complicated, troublesome power-plant, no more than half the mechanics had previous experience with the Duplex Cyclone. But they made it work.

FACT:
At its height in mid-1944, the Army Air Forces had 2.6 million people and nearly 80,000 aircraft of all types. Today the US Air Force employs 327,000 active personnel (plus 170,000 civilians) with 5,500+ manned and perhaps 200 unmanned aircraft. These 2009 figures represent about 12 percent of the manpower and 7 percent of the airplanes of the WWII peak.

IN SUMMATION:
Whether there will ever be another war like that experienced in 1940-45 is doubtful, as fighters and bombers have given way to helicopters and remotely-controlled drones over Afghanistan and Iraq. But within living memory, men left the earth in 1,000-plane formations and fought major battles five miles high, leaving a legacy that remains timeless.

Scott Chesnut Preparing to Refuel His Cessna 182 at DVT

BRIAN RYCKMEN'S FLIGHT TO ALASKA

Brian Ryckmen has gone to Alaska for the summer and sent back some interesting pictures. He wrote: "Flew into Nanwalek on Thursday and took some pictures while we had a half hour wait. I've been in there many times already, but this is the first time I've taken any pictures.

This picture kind of shows the approach into runway 19, we clear the little blue house with the smokestack by about 20 feet and then have to pull the power and land on the curve; the runway is on the left and the beach on the right. You are looking South. The approach to the other end, runway 01 is pretty interesting, you have to fly right up to the mountain and then make a hard left in the decent and then land on the left wheel".

Runway 19 at Nanwalek, Alaska

Here's the house with the blue roof looking towards the North from the runway…….fun approach. One of the ladies in town told me a story of a Cherokee hitting the tree on the right on landing…….didn't crash.

A little more of Nanwalek looking to the South-Southeast

ThunderAds

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Comant Model CI 2480-201, Separate connectors for Comm and GPS. Never installed. See AS&S pg 616. Their price $568.75, sell for $250.00 Ron Kassik 480-948-0168 or ronkassik@cox.net

1956 CESSNA 172 TD CONVERSION
TT 2300, O-300B 350 SMOH. Imron, new interior, lots of STCs. Hangared DVT. Mike Straley 602-524-0333, m16straley@gmail.com", Asking $39k or possible trade for Baron or C-310.

PROJECTS FOR SALE
Protech, PT-2, folding wings & trailer, 82 hp Mosler engine. & Gere bi-plane, about 75% complete, built from magazine plans, circa 1932, completely rebuilt Model A engine. Pat Wall 928-851-2244.

THREE-BLADE PROP SHIPPING BOX
Previously used for a MT prop for a Velocity. Will fit most normal size 3-blade props. Available to anyone who needs to ship a prop. Matt Bucko
mbuc310@cox.net

1979 CESSNA 182Q
Arizona Airplane on SDL Tie Down K-137, TT 3500 hrs, Engine 1262 hrs SOH, recent interior upgrades & wing tip replacement. Bill Maxey 602-820-5722 maxeybill@hughes.net

GRENGA GN-1 AIRCAMPER PROJECT
Biplane conversion but can be switched to a parasol. Fuselage covered and Elizado Tigre engine installed. $6,000.00 Estate sale. Lesley Morgan 480-834-4831 or e-mail Curtis at EAAChapter1217@aol.com to receive a digital slideshow of the plane.

2009 LANCAIR 360
Superior IO-360 engine, TTAFE 20 hours, minerial oil, every thing new including paint, GPS, loaded must see. Fred 630-897-7706

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