

Granite City Flight Lines

EAA 551 OFFICERS:

November 17, 2011

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Bob Barrett, Newsletter Editor 320. 253. 8620 robertebar@msn.com Please submit articles to the e-mail address. The views expressed in this news letter do not necessarily reflect those of Chapter 551 or the EAA. Submission deadline is the second Monday of each month. Submissions for publication are strongly encouraged should be given to Bob Barrett. Preferred method is e-mail. Permission is hereby granted to other EAA Chapters to use the non-copyrighted portions of this publication.

MINUTES OF MEETING: EAA Chapter Board meeting Nov. 7th 2011. Meeting called to order by vice president Mark P.

Mark informed the board that Charlene Hayes had passed today.

Rob J. brought the scales that were purchased for board members to look at. John V. is going to make ramps for the scales. Discussed keeping the scales at the aero club hanger, Ken O. to check with his hanger partners if this is ok with them.

Discussed Young Eagle rally's for 2012. Chapter to hold one at the Little Falls Damn days on June 16th 2012 and one at the STC airport in the Fall. Young Eagles Coordinators' Tim Mahoney. and Wade Nelson. to work on securing a date for this.
Chapter to hold a fly-in on June 9th 2012 at Leaders

Nov. 21st chapter meeting to be held at the aero club hanger at 6:30pm. Program at the meeting is the teardown of a continental 0-200 engine courtesy of Mark Priglmeier.

April meeting program tentatively is aircraft wiring by Dennis Gapiniski.
Treasurer has a balance of \$4307.73 and the aviation memorial fund has \$950.93
Meeting adjourned at 8:07pm.

WORD WARR II Dec 7 1941 +70 years It cost a lot to win that war but I keep wondering what it would have cost to LOOSE it? These were aircraft losses, how many ships and sailors are still out there, all of the submarines "still on patrol", Army & Marines with all of their tanks & trucks? The United States went to war with 125 million population vers today with 310 million - would we do it again?

WW2 in the air: The Cost of Doing Business. The cost of doing business -- an amazing tale. Most Americans who were not adults during WWII have no understanding of the magnitude of it. This listing of some of the aircraft facts gives a bit of insight to it. 276,00 aircraft manufactured in the US. 43,000 planes lost overseas, including 23,000 in combat. 14,000 lost in the continental US.

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. Statistics from Flight Journal magazine.

THE COST of DOING BUSINESS ---- The staggering cost of war.

THE PRICE OF VICTORY

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

ON AVERAGE: 6600 American service men died **per MONTH**, during WWII (about 220 a day).

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. Nation Aircraft Average
USA 276,400 113
S Union 137,200 56
G Britain 108,500 45
Germany 109,000 45
Japan 76,300 31

How Many is a 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. Lifting 10,000 airmen to deliver 2,000 tons of bombs.

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.

WWII MOST-PRODUCED COMBAT AIRCRAFT

II-2 Stumovik 36,183	Avenger 9,837
Yak 1, 3, 7, 9 31,000+	P-39 9,584
Bf 109 30,480	Lancaster 7,377
Fw 190 29,001	LaGG-5 9,920
Mosquito 7,780	Oscar 5,919
Spit/Seafire 20,351	He 111 6,508
B-24/PB4Y 18,482	Halifax 6,176
Thunderbolt 15,686	Bf 110 6,150
Mustang 15,875	LaGG-7 5,753
Ju 88 15,000	B-29 3,970
Hurricane 14,533	Stirling 2,383
P-40 13,738	
B-17 12,731	
Corsair 12,571	
Hellcat 12,275	
Pe-2 11,400	
P-38 10,037	
Zero 10,449	
B-25 9,984	

Sources: Rene Francillon, Japanese Aircraft of the Pacific war; Cajus Bekker, The Luftwaffe Diaries; Ray Wagner, American Combat Planes; Wikipedia.

BALL PARK AVERAGE: Chief of Staff to General, “Hmmm; 331 men killed and 308 aircraft destroyed. That’s 11 people and 10 planes per day.” “Uh, yes, sir. It's still the ballpark average.” “I’d like to see an improvement in bomber losses, those really add up.” “Were working on it, General. But it's sad to think that 10 young men alive today will be dead tomorrow.” “You know that’s the price of doing business. Now then, what about the overseas and combat losses?”

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.)

Those colossal losses cost the Axis powers nothing; not as much as one 7.7 mm bullet.

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 August 1943, 60 B-17s were shot down among 376 losses. 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 Superfortress, 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 Russia. In fact, from 1943 onward, America produced more planes than Britain and Russia combined. And more than Germany and Japan together 1941-45. However, our enemies took massive losses. Through much of 1944, the Luftwaffe sustained uncontrolled hemorrhaging, reaching 25 percent of aircrews and 40 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 Yoxford 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. (Note: **Gone West HNL QB Brewster Morgan (Morgan's Corner up in Nuuanu off of Old Pali Road), a Honolulu boy and a member of the 4th Fighter Group, told me that they actually did stand down one day to transition from the P47 to the P51. They were pissed that the old groups still had the P47 [Brewster was with the Eagle Squadron in the Spitfire.....later in the P47 when the US got into it in '42] and the newer groups coming over from the US all had P-51s. Blakeslee finally convinced AF to let them convert by standing down just one day. An interesting side note.....Brewster was shot down over France in '44 and became a POW.....his roommate?.....Douglas Bader.....top English ace with two wooden legs...Bader lost one of his legs when he bailed out and was captured.....the Germans asked the Brits to send him another leg.....which**

they did....BD). 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. 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 R3350 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.

Navigators: Perhaps the greatest unsung success story of AAF training was Navigators. The Army graduated some 50,000 during the War. And many had never flown out of sight of land before leaving "Uncle Sugar" for a war zone. Yet the huge majority found their way across oceans and continents without getting lost or running out of fuel --- a stirring tribute to the AAF's educational establishments.

Cadet To Colonel: It was possible for a flying cadet at the time of Pearl Harbor to finish the war with eagles on his shoulders. That was the record of John D. Landers, a 21-year-old Texan, who was commissioned a second lieutenant on December 12, 1941. He joined his combat squadron with 209 hours total flight time, including 2 ½ in P-40s. He finished the war as a full colonel, commanding an 8th Air Force Group --- at age 24.

As the training pipeline filled up, however those low figures became exceptions. By early 1944, the average AAF fighter pilot entering combat had logged at least 450 hours, usually including 250 hours in training. At the same time, many captains and first lieutenants claimed over 600 hours.

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. The 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 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.

MEMBERSHIP INFORMATION:

Please submit membership inquires, enrollments and profile updates to Mark Priglmeier: notam@eaa551.org Or by calling: (320) 229-8563. If you do not wish to receive emails from EAA Chapter 551, email: notam@eaa551.org with a subject line "*Please unsubscribe from EAA Chapter 551email*".

EAA Chapter 551 membership dues are \$20.00 for email and \$25.00 for postal mail. Dues can be submitted/mailed to EAA 551's Treasurer Kenneth HT Olson CPA LTD, 2330 Troop Drive, Sartell MN 56377 kolson@khto.com (320) 253-5850

11/21/2011 EAA CHAPTER 551 MEETING: 6:30 PM Monday meeting at the St. Cloud Aero Club Hanger KSTC, St. Cloud. DAR & Technical Counselor Tim Mahoney will demonstrate the tear down of a Continental O-200 engine in preparation for a Major Overhaul. The engine owner is Mark Priglmeier who is suffering extreme withdrawal pains from not being able to fly every morning at 5:00 AM or earlier. Anyone that wants some time put on their airplane should contact Mark! Time permitting we may also have a demo of using the Chapter's new scales to do an aircraft weight and balance on an experimental aircraft.

Oshkosh Visit On 10/24/2011 Dick Schaefer and I flew to Oshkosh for Lunch in N 784TB. We left 8Y6 at about 08:30 AM and pulled up Basler Aviation for fuel at 10:36 AM. We were fortunate to have lunch with Chad Jensen the New EAA Homebuilders Community Manager. Chad's picture and a write up are on page 112 of the October, 2011 Sport Aviation. Chad has been an active EAA member of a number of years and has built an RV-7 and is now building a Whitman Tailwind. Chad has been a frequent poster on the Rivet Bangers web site. Rivet Bangers is a group of home builders who are building, want to build or have built a R V. A few other people building other aircraft also participate from time to time. Most likely to gain valuable insight from Chad and some of the other very talented posters.

Mike Jude has his Sidewinder flying and had about 19 hours on it the last time I talked to him. Mike has not fully opened the throttle on it yet waiting to make sure all of the systems are function properly. Mike has it at Leaders(8Y6).

NEXT BOARD MEETING: The next Board Meeting will be at 6:30 PM on Monday 12/5/2011. There will not be a December meeting on the third Monday.

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