



601<sup>st</sup>-615<sup>th</sup> ACW Association Newsletter - Vol 6 No. 2- Nov 2015

## Officers of the Association



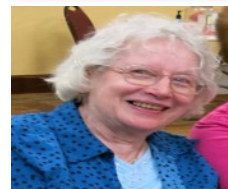
George Vitzhum,  
President



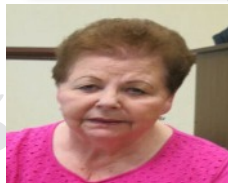
Dick Butler,  
Vice  
President



Terry Troy,  
Treasurer



LoAnne Zentner,  
Secretary



Fay Dickey  
Events  
Coordinator

**W**e are coming to the end of the year with Thanksgiving and Christmas around the corner. The holidays can be a special time for family gatherings, gift-giving and spiritual renewal!

This year, many things have happened to our Association. We elected new officers, increased our annual fees, and selected a place for the forthcoming annual reunion in 2016. We have witnessed more friends joining up the Association and the Association beginning to show positive changes everywhere!

This newsletter includes your invitation to the next Annual Reunion; The Reunion Agenda, as received from Fay Dickey, our Reunion Coordinator; A very interesting story by Dick Peiffer about the beginning of the US Airmail Service; Some old photos I was e-mailed by a member who thought it would be of interest to the membership; A story about Martin Cooper, an American visionary in wireless communications, who couldn't cash on his inventions; A fantastic story about the US Air Force written by General Ellen Pawlikowski, Commander of the Air Force Mobility Command (AFMC); A story about a successful love affair of Marita Douthit with animals; A very interesting story about our President, George Vitzhum; And, finally, a fantastic story about Alfred J. Gross, the father of the Amateur Radio Systems, whose inventions was introduced in the Dick Tracy's comic strip, but ignored by others!

Don't forget to keep on sending your stories, recipes, cartoons, photos, and all those items you would like to see highlighted in our next newsletter.

Wilfred R. Rodriguez, Newsletter Editor

New Dues are \$35.00 annually paid by December 31st to Terry Troy, 105 Huron Trail, Hertford, NC 27944

# *Invitation to the Association Reunion 2016*

**We will be staying at the Comfort Inn and Suites, Omaha, Nebraska for our reunion April 25-29, 2016.**

**Please make your own reservations as soon as you can, cut off date is April 15, 2016, then the block of rooms is returned to the hotel inventory.**

**Reunion Attendees should make their own reservations in the hotel under our umbrella of:**

**601st&615th AC&WS**

**The address for the Comfort Inn and Suites is:**

**7007 Grover Street, Omaha, NE**

**<https://www.choicehotels.com/nebraska/>**

**Our price is:**

- **\$89.00 per night, for one king or two queen beds with no refrigerator (all taxes included), or**
- **\$94.00, for one king bed and refrigerator (all taxes included)**

**Omaha is easily accessible by air: "Eppley Airfield".**

**Non-Stop flights from many major cities, such as Chicago, Atlanta Dallas, Denver, Detroit, Houston, Las Vegas, Minneapolis, Memphis, New York-Newark, Orlando, Phoenix, St. Louis, Washington, DC.**

**Airlines: Delta, US Airways, Southwest, American, United, Frontier, Delta - All fly into Omaha, NE.**

**The hotel shuttle will pick up passengers.**



**Your room price includes:**

**Hotel offers a FREE HOT Breakfast!**

**Hospitality Room**

**Questions:  
Call Fay Dickey at  
(218) 968.2376 ,  
cell (425) 422-5171.  
Or Email her at:  
[faydickey@gvtel.com](mailto:faydickey@gvtel.com)**

## 601st<sup>st</sup>&615<sup>th</sup> AC&WS Association- Reunion Week Agenda

### Monday, April 25<sup>th</sup>, 2016:

- 9:00 - 11:00 am      Registration in Hospitality Room of Comfort Inn and Suites
- 11:30 pm              Bus departs for the River City Star Riverboat
- 12:00 - 1:45 pm      Missouri River Luncheon Cruise on River City Star
- 2:00 - 4:30 pm        Omaha City Tour with guide.

Complimentary Welcome reception with cookies & coffee after Tour at Omaha Visitor Center.

- 6:30 pm                Welcome Reception in the Hospitality Room

### Tuesday, April 26, 2016:

- 9:30:00 AM          Bus departs for Father Flanagan's Boys Town
- 10:00 am - 1200 pm      Tour of Father Flanagan's Boys Town
- 12:00 - 1:00 pm      Luncheon your own at the Boys Town Cafe in Visitor Court. Cafeteria style!
- 1:15 pm                Departs for the Strategic Air and Space Museum

Note: Photographer takes group pictures

- 2:00 - 4:00 pm        Strategic Air & Space Museum
- 4:30:00 PM          Return to the Comfort Inn & Suites

Enjoy your Evening in the Hospitality Room or on your own!

### Wednesday, April 27, 2016:

- 8:15:00 AM            Hotel Shuttle will transport group to the Toilet Paper Factory
- 8:30 - 9:45 am        Tour of Outlook Nebraska Inc
- 10:00 am              Return to Comfort Inn
- 11:45 am              Bus departs for Bohemian Cafe
- 1:45 - 3:30            The Durham Museum ( Omaha's 1930 Train Station.
- 4:00:00 PM            Return to the Comfort Inn
- 6:00:00 PM            Bus departs for the German-American Society Dinner
- 6:30 - 8:30 pm        German Dinner and Entertainment
- 9:00:00 PM            Bus returns to Comfort Inn

### Thursday, April 28<sup>th</sup>, 2016:

- 10:00 am - 12:00 pm      Annual Meeting in the Hospitality Room
- 1:30 pm                Bus departs for the Lauritzen Botanic Gardens Conservatory
- 6:30:00 PM            Pizza Party in the Hospitality Room.

The agenda with bus transportation and gratuities is: \$250.00 per person. The agenda can be paid in three installments: November 30, 2015 – pay \$100.00 - December 30, 2015 – pay \$75.00 - January 28, 2016 – pay \$75.00

Please let me know, if you wish to eat Schnitzel or Rolladen at the "German Dinner" on Wednesday, April 27, 2016

Please make your hotel reservations as soon as possible.

The reservation number for the Comfort Inn and Suites is: **402-934-4900** . \$89.00 INCLUSIVE – make reservations under the umbrella of the 601<sup>st</sup>&615<sup>th</sup> AC&WS Association. If you wish to have a refrigerator in the room, it will cost \$5.00 more. Hope to see many of you in Omaha, NE, April 25-29, 2016.

# U. S. Airmail Service -The begining



Submitted by  
Dick Peiffer

**O**n May 15, 1918, the Post Office Department established the nation's first regularly scheduled airmail route. The route was between New York, NY and Washington, D.C. A distance of about 218 miles. Flown weekdays, Monday – Friday and included a stop in Philadelphia for fuel, mail or a change of airplane, if necessary. That was the era airplanes were mostly wood, canvas, and propelled by an engine that sometimes caught fire. It was to be a three-month experiment.

The Army Air Service offered to help in the effort. It would provide their pilots with needed cross-country experience. The Army would furnish pilots and airplanes, the Post Office would handle the mail.

Colonel **Hap Arnold**, a military aviator, appointed Major **Reuben Fleet** as the officer-in-charge. Fleet was executive officer of Army flight training. To start, he selected four Army pilots. However, the Post Office picked two recent



flight school graduates that had political ties. One was Lt George Boyle, whose fiancée was Margaret McChord the daughter of the Interstate Commerce Commissioner. The other, Lt James Edgerton, whose father was an official with the Post Office. Early the morning of the inaugural flights, Fleet delivered one of six modified Curtiss JN-4H "Jenny's" from New York. Arriving Washington, he learned of the pilot change, he gave Lt Boyle a map and briefed him to, "Turn left at the water tower and follow the railroad tracks north" to Bustleton Field, Philadelphia.

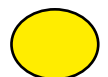
**President Woodrow Wilson** and a vast crowd of dignitaries were on hand to witness this historic first day of Airmail service. To the cheers from the VIPs, Lt Boyle took off from Potomac Park Polo field. Instead of north to Philadelphia, he went south and became lost. Disorientated he decided to land and ask directions. He attempted a landing in a field near Waldorf, MD about 20 miles south of where he took off. He made a hard landing; the plane flipped on its back and broke the prop. Therefore, Boyle became the first mail pilot to get lost and have an accident. Fleet learned where he was and sent a crew to bring the mail back and repair the airplane.

In the meantime, with little fanfare, Lt Torrey Webb departed Belmont Park, NY heading south. At Philly, he met Lt. Edgerton, who then flew the mail on the second leg to Washington. There a smaller but cheering crowd celebrated his arrival.

Saying nothing to the VIPs, about Boyle, they tried it again following day. Concerned about Boyle's flying skills, Fleet had Edgerton, lead Boyle to the railroad tracks and northbound. About 50 miles north where the tracks crossed the Susquehanna River, Edgerton confident Boyle could find his way to Bustleton Field in Philly waves Boyle on and turns back. Boyle got lost again. This time completely disoriented he meanders around for 3 hours and 15 minutes. Finally, he lands in a field at Cape Charles, on the Virginia Peninsula, 150 miles in the opposite direction. Boyle bought tractor gas and oil from a farmer, asked directions and took off. Fleet noted in his report, "Only the Atlantic Ocean and a lack of gas prevented him going further." Boyle found Philly but not Bustleton Field; he circled and circled then, ran out of gas and crashed on the Philadelphia Country Club only a couple miles from the field. Boyle was unhurt but he totaled the plane. Fleet denied his requests for a third try and sent him back to flight school.

Congress appropriated \$100K for the experiment and on June 4, the route was extended to Boston. Then after three months of success by the Army, on August 12, 1918, the Post Office hired civilian pilots and six specially built mail planes from Standard Aircraft Corp. and took over the entire operation. Four months later, on December 17, 1918, the first of the planned coast-to-coast service began between New York and Chicago.

Hap Arnold went on to become the first and only five-star General of the Air Force. Reuben Fleet left the Army in 1922, and founded Consolidated Aircraft in Buffalo, NY. The company built primary training planes that bore his name. Later he moved the aircraft manufacturing plant to San Diego, CA, and became famous for the PBY Catalina and the B-24 Liberator; both served exemplary service in WW II. →



# Old Photos!



The Statue of Liberty's torch is parked in front of the western side of Madison Square in 1876.



The first armed airplane of the Serbian army in 1915. (Editor's note: These were the first Serbian's Aces!

Directional sound finders used to detect incoming enemy planes in 1917.

(Editor's Note: Apparently, this was the beginning of those later called "Scope Dopes!"



# Martin Cooper

**M**artin "Marty" Cooper is an American engineer. He is a pioneer and visionary in the wireless communications industry. With eleven patents in the field, he is recognized as an innovator in radio spectrum management.

While at Motorola in the 1970's, Cooper conceived the first handheld mobile phone (distinct from the car phone) in 1973 and led the team that developed it and brought it to market in 1983. He is considered the "father of the cell phone" and is also cited as the first person in history to make a handheld cellular phone call in public.

Cooper is co-founder of numerous successful communications companies with his wife and business partner Arlene Harris; also known as the "first lady of wireless." He is co-founder and current Chairman of Dyna LLC, in Del Mar, California. Cooper also sits on committees supporting the U.S. Federal Communications Commission and the United States Department of Commerce.

Cooper graduated from Illinois Institute of Technology (IIT) in 1950. After graduating he enlisted in the United States Navy Reserve where he served as a submarine officer during the Korean War. [1] In 1957 Cooper went on to earn his Master's degree from IIT in electrical engineering and in 2004 IIT awarded Cooper an honorary doctorate degree. He serves on the University's Board of Trustees.

Cooper left his first job at Teletype Corporation in Chicago in 1954 and joined Motorola, Inc., as a senior development engineer in the mobile equipment group. He developed many products including the first cellular-like portable handheld police radio system, produced for the Chicago police department in 1967.



By the early 1970's, Cooper headed up Motorola's communications systems division. Here he conceived of the first portable cellular phone in 1973 and led the 10-year process of bringing it to market. Car phones had been in limited use in large U.S. cities since the 1930's but Cooper defied the industry's narrow vision of car phones and championed cellular telephony for personal, portable communications. Cooper knew that people needed the freedom of anytime, anywhere telephony. He knew the cellular phone should be a "personal telephone – something that would represent an individual so you could assign a number; not to a place, not to a desk, not to a home, but to a person." While it has been stated Cooper's vision for the handheld device was inspired by Captain James T. Kirk using his Communicator on the television show Star

Trek, Cooper himself later refuted this, stating that his actual inspiration was Dick Tracy's wrist radio.

Top management at Motorola was supportive of Cooper's mobile phone concept; investing \$100 million between 1973 and 1993 before any revenues were realized. Cooper assembled a team that designed and assembled a product that had never been built; a task they accomplished in less than 90 days. That original handset, called the DynaTAC 8000x, weighed 2.5 pounds, measured 10 inches long and was dubbed "the brick" or "the shoe" phone. A very substantial part of the DynaTAC was the battery which weighed four to five times more than a modern cell phone. The phone had only 20 minutes of talk time before requiring a 10-hour recharge but according to Cooper, "The battery lifetime wasn't really a problem because you couldn't hold that phone up for that long!" By 1983 and after four iterations, the handset was reduced to half its original weight.

Cooper is the lead inventor named on "radio telephone system" filed on October 17, 1973 with the U.S. Patent Office and later issued as U.S. Patent 3,906,166. John Francis Mitchell, Motorola's Chief of Portable Communication Products and the engineers who worked for Cooper and Mitchell are also named on the patent.

On April 3, 1973 Cooper and Mitchell demonstrated two working phones to the media and to passers-by prior to walking into a scheduled press conference at the New York Hilton in midtown Manhattan. Standing on Sixth Avenue near the Hilton, Cooper made the first handheld cellular phone call in public from the prototype DynaTAC. The call connected him to a base station Motorola had installed on the roof of the Burlingame House and into the AT&T land-line telephone system. Reporters and onlookers watched as Cooper dialed

the number of his chief competitor Dr. Joel S. Engel, who was head of Bell Labs. "Joel, this is Marty. I'm calling you from a cell phone, a real handheld portable cell phone." That public demonstration landed the DynaTAC on the July 1973 cover of Popular Science

Magazine. As Cooper recalls from the experience: "I made numerous calls, including one where I crossed the street while talking to a New York radio reporter – probably one of the more dangerous things I have ever done in my life."



That first cell phone began a fundamental technology and communications market shift to making phone calls to a person instead of to a place. Bell Labs had introduced the idea of cellular communications in 1947 but they wanted the first system limited to car phones which required roughly 30 pounds of equipment in the trunk. The technological breakthrough engineered by Cooper demonstrated the kind of creative innovation that competition could bring; resulting in a major achievement for Motorola. They gained Federal Communications Commission (FCC) approval for cellular licenses to be assigned to competing entities and prevented an AT&T monopoly on cellular service.

Cooper worked at Motorola for 29 years; building and managing both its paging and cellular businesses. He also led the creation of trunked mobile radio, quartz crystals, oscillators, liquid crystal displays, piezo-electric components, Motorola A. M. stereo technology and various mobile and portable two-way radio product lines.

Cooper rose through the ranks to become Vice-President and Corporate Director of Research and Development at Motorola. In addition to his ground-breaking work on the mobile cellular phone, Cooper was instrumental in significantly expanding the technology of pagers from use within a single building to use across multiple cities. He also fixed a flaw in quartz crystals used in Motorola's radios which encouraged the Company to mass-produce the first crystals used in wrist watches.

In 1983, the first commercial cellular phone service began operation in the United States and the DynaTAC phone became available to consumers at a list price of around \$4,000 (\$9,000 in 2011 dollars) but Cooper left Motorola before the launch. In that same year, he co-founded Cellular Business Systems, Inc. and helped lead it to dominate the cellular billing industry with 75 percent market share. In 1986, Cooper sold CBSI to Cincinnati Bell for \$23 million.

Cooper and his wife Arlene Harris founded Dyna LLC in 1986 as a home base for their various developmental and support activities surrounding the incubation of new ideas and new companies. Subscriber Computing Inc., Cellular Pay Phone, Inc. (CPPI), SOS Wireless Communications and Accessible Wireless; the later two of which together created the underpinning for the creation of GreatCall, were all launched from Dyna LLC.

From his Dyna headquarters Cooper continues to write and lecture around the world about wireless communications, technological innovation, the Internet and R&D management. He also serves on a variety of industry, civic and national governmental groups including the U.S. Department of Commerce Spectrum Advisory Committee that advises the Secretary of Commerce of the United States on spectrum policy and the Federal Communication Commission's (FCC) Technological Advisory Council.

In 1986 Cooper co-founded Cellular Payphone Inc. (CPPI), the parent company of GreatCall, Inc. – Innovator of the Jitterbug cell phone. GreatCall is the first complete end-to-end value-added service provider in the cellular industry to focus on simplicity with primary emphasis on boomers and senior citizens.

In 1992 Cooper co-founded Arraycomm a developer of software for mobile antenna technologies used for both mobile telephones and long-range wireless Internet. Under his leadership, the Company grew from a seed-funded startup in San Jose, California into the world leader in smart antenna technology with 400 patents issued or pending, worldwide.

Cooper found that the ability to transmit different radio communications simultaneously, thus changing the theory that was first established by Guglielmo Marconi's first transmissions in 1895. This led Cooper to formulate the Law of Spectral Efficiency, otherwise known as Cooper's Law. The Law states that the maximum number of voice conversations or equivalent data transactions that can be conducted in all of the useful radio spectrum over a given area doubles every 30 month's. Interactions.

## GUEST COLUMN: Our Air Force: 68 years of guts, skill, innovation!

By Gen. Ellen Pawlikowski, Commander, AFMC

As suggested by  
Dude Klutts

In 1911, a young Henry Arnold learned to fly at the Wright Brothers' aviation school on a dusty field in Ohio. A strong advocate of aviation research and development, "Hap" Arnold went on to become a five-star general.

He made history.

In 1918, Capt. Eddie Rickenbacker shot down 26 enemy aircraft over France during World War I. His skill and bravery earned him the congressional Medal of Honor and he went on to become an innovative aviation industry pioneer.

He made history.

In 1942, then-Lt. Col. Jimmy Doolittle led 16 B-25 bombers, flown by men who would become known as the Doolittle Raiders, on a secret mission to bomb the Japanese mainland just five months after the attack on Pearl Harbor. They modified their land-based Army Air Corps planes and learned to fly them from a Navy aircraft carrier.

They made history.

These pioneer airmen, like countless others, demonstrated the world-changing effects of aviation technology. They set high standards and relied on innovation and discipline to push the limits of their capabilities. Their guts, determination and skill were recognized Sept. 18, 1947, when the Air Force became a separate service following President Truman's signing of the National Security Act earlier that year.

This month, we celebrate the 68th birthday of our Air Force — 68 years of amazing technological advances, courageous human endeavors and an ever-evolving capability that protects our freedoms. From breaking the sound barrier to fielding stealth aircraft that are invisible to our adversaries, the Air Force has always been at the forefront of our national defense.

Our Air Force has evolved since 1947. Today, we patrol the domains of not just the air but space and cyberspace, too. We

are fielding the world's most advanced fighter aircraft, the F-35, while at the same time researching and developing ways to increase agility, flexibility, precision, lethality and persistence for our missions of the future.

This is what we do in Air Force Materiel Command: We deliver and support war-winning capabilities. When America calls on the Air Force, the Air Force turns to AFMC.



General Ellen Pawlikowski

But we must become better at what we do, for our world today is a complex mix of rogue states and radical groups bent on destroying basic freedoms that we and other nations hold dear. The best technologies don't develop and operate on their own. It is our people, military and civilian, who have made our Air Force the greatest air power in the world. Today, we rely on 660,000 people who come from diverse experiences, cultures and communities throughout the United States. They truly represent a cross-section of America, and it is their diversity that helps fuel our innovation and commitment.

Our Air Force heritage is a proud one, and air power remains an inherent part of our nation's history. The legacy of our air power pioneers — imaginative and

innovative airmen harnessing new technologies and strategies — set the course for future air, space and cyberspace capabilities.

As we celebrate the Air Force's 68th birthday, we realize our future is truly limitless. We must, and will, remain a force that provides global vigilance, global reach and global power.

And we will continue to make history.

Gen. Ellen Pawlikowski is commander, Air Force Materiel Command.

(Editor's note: As printed by and reprinted with permission from:



# Marita Douthit - A successful love story

If you drive East on Mountain Highway, Spanaway, Wa., after a few turns you will find a successful love store. When a person, such as Marita Douthit, tells you the story about her lifetime dream, you will listen for you know it is going to be a beautiful love story!



Marita was born in Germany in the 40s. She has known hunger, orphanages, destruction, and misery. She has worked hard all her life and overcame all the obstacles in front of her. As a kid, she lived in a destroyed, crowded factory with other relatives and other children.

When she was a toddler, she began to show interest and love for animals; any animal! As the her story goes, she hid kittens and other animals, as she was afraid for their welfare. But her true love for her beloved animals resulted in the fast development of gang of cats as they reproduced without control! Before anyone knew, there were cats all over the neighborhood seeking and stealing food which was not plentiful those days. Although she got many spankings for her cats, she continued to bring home stray animals, including goats and their kids, to play with. Her love for animals never ended and become stronger as times went by.

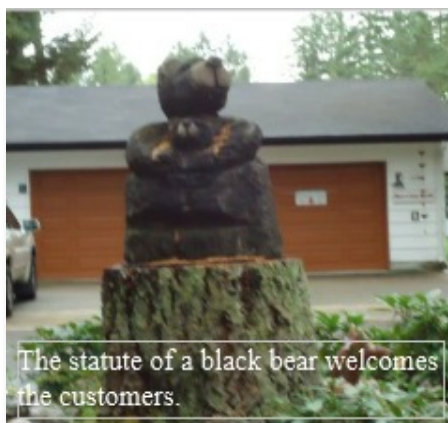
Marita grew up and became a waitress at her mother's gasthaus. She worked there for a while, but left for Switzerland to work as a waitress. Later on, she married a GI and came to the United States, where she continued her professional career as a waitress. She worked at the McChord AFB NCO and Officer's clubs in Tacoma, Washington, for many years, but never neglected her love affair with animals. She always managed to have at least one animal at her residence and

continued on feeding straight cats running wild around the neighborhood.

After twenty-one years working at the club, one day she faced a lay-off which terminated her career as a waitress. Notwithstanding her desperation looking for a job, with the



help of her husband, she decided to go forward and look for a job related with animals. She found a nice place and built a kennel facility which she called the Royal Pet Motel. Thus, becoming a waitress to serving animals, instead of humans! Her animal facility can provide shelter for 50 animals at any given time.



To commemorate her love for animals, Marita has decorated her yard all over with statues and decorations of all type of animals. Inside her home, there is not an exception! There you could find her rooms dedicated to a special type of animal!

Marita is now an Air Force widow dedicated to her kennel and her animals. Her life has been good and full of colorful memories which she is ready to tell anyone, anytime! She is involved with many state and local agencies focused in

the prevention of cruelty to animals.

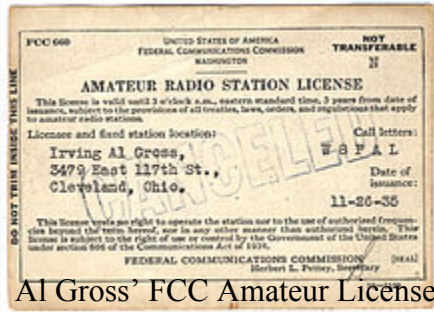
Her love for animals continues and will continue as long as she lives!

A great human being!



# Alfred J. Gross - the father of Amateur Radio Systems

**A**lfred J. Gross (February 22, 1918 – December 21, 2000), a.k.a. **Irving J. Gross** was a pioneer in mobile wireless communication. He created and patented many communications devices, specifically in relation to an early version of the walkie-talkie, Citizens' Band radio, the telephone pager and the cordless telephone. Despite the successes of these inventions, his patents expired too early to make any amount of money from them.



Al Gross' FCC Amateur License

Gross was born in Toronto, Ontario, Canada in 1918, the son of Romanian immigrants, he grew up in Cleveland, Ohio, in the United States. His lifelong enthusiasm for radio was sparked at age nine, when traveling on Lake Erie by a steamboat. While sneaking around the boat he ended up in the radio transmissions room. The ship's operator let him listen in on transmissions. Later, Gross turned the basement of his house into a radio station, built from scavenged junkyard parts.

At sixteen he earned his amateur radio license, and he used his call sign (W8PAL) his whole life.

His interest and knowledge in radio technology had grown considerably by the time he in 1936 entered the BSEE program at Cleveland's Case of Applied Sciences (now a part of Case Western Reserve University). He was determined to investigate the unexplored frequency region above 100 MHz. Between 1938 and 1941, soon after the invention of the walkie talkie in 1937 by Donald Hings, he created and patented his own version of the "walkie-talkie".

During World War II, not long after the Japanese bombed Pear Harbor, President Franklin Roosevelt asked William Donovan, head of the Office of Strategic Services (U.S. OSS) (forerunner of the CIA) to provide him with the same timely and accurate intelligence that Mr Winston Churchill was getting. The president insisted that Mr. Churchill was getting more accurate and faster information than him. Mr. Donovan replied that Mr Churchill was getting his information from spies behind enemy lines; therefore, the president was getting his intelligence from filtered-up information through the chain of command.

The president asked Mr Donovan to look into it and solve the problem. Although some gives Al Gross complete design and implementation of a two-way air-to-ground communications system for the U.S. OSS, named the Joan-Eleanor System for use in military operations. The Joan-Eleanor system. were ground people able to transmit radio signals from a light-weight, transceiver, named Joan and talk to another bulky transceiver in an aircraft, coded Eleanor. But the main developers on the project were Dewitt R. Goddard and Lt.. Cmdr. Stephen H. Simpson (Goddard's wife's name was Eleanor, and reportedly Joan was an acquaintance of Simpson). The system operated at frequencies above 250 MHz, which was at a much higher frequency than the enemy had thought conceivable. This allowed

operatives using "Joan" to communicate with high altitude bombers carrying "Eleanor" for times of 10 to 15 minutes without the use of code words, eliminating the need for decryption. It was developed beginning in late 1942, was highly successful and very difficult to detect behind enemy lines at the time. It was marked Top Secret by the U.S. military until it was declassified and made public in 1976.



After the war the FCC allocated the first frequencies for personal radio services; the Citizens' Radio Service Frequency Band (1946). Gross formed Gross Electronics Co to produce two-way communications system to utilize these frequencies, and his company was the first to receive FCC approval in 1948. He sold more than 100 thousand units of his system, mostly to farmers and the U.S. Coast Guard.

Another breakthrough came in 1949 when he adapted his two-way radios to one-way for cordless remote telephonic signaling. He had effectively invented the first telephone pager system. His intention for this system was to be used by medical doctors, but was met with skepticism by doctors who were afraid the system would upset patients and interrupt them during golf. This same technology is used in one-way radio signaling devices such as garage door openers.

In 1950 he tried in vain to interest telephone companies in mobile telephony. Bell Telephone was uninterested, and other companies were afraid of Bell's monopoly on transmission lines.



Chester Gould, creator of the Dick Tracy comic strip was about the only person who showed an early interest in Gross' work and had Dick Tracy wearing a wireless microphone that could be worn on the wrist. The following year, Dick Tracy began to wear his famous two-way wrist TV.

Gross continued inventing, and began working as a specialist in microwave and other communications systems for companies such as Sperry Corporation and General Electric. He continued working until his death at age 82. In an interview by the Arizona Republic Newspaper, he was asked about his many patents that expired too early for him to capitalize on them. He responded with a smile, saying: "I was born thirty-five years too soon. If I still had the patents on my inventions, Bill Gates would have to stand aside for me."

Gross has received much recognition for his work, including, but not limited to:

- 1992: Fred M. Link Award from the Radio Club of America
- 1984: IEEE Centennial Medal from the Institute of Electrical and Electronics Engineers, for his work in VHF and UHF mobile radio.
- 1997: Marconi Memorial Gold Medal of Achievement from the Veteran Wireless Operators Association
- 1998: Eta Kappa Nu's Vladimir Karapetoff Eminent Members' Award
- 1999: Edwin Howard Armstrong Achievement Award from the IEEE Communications Society
- 2000: IEEE Millennium Medal

# Building Named to Honor Vitzthum at Air Base

George Vitzthum, our Association President, said that “He thought someone had to be important to have their name etched across a building” which is now the position he found himself on October 15<sup>th</sup>, 2015. But friends, colleagues, and family



CMSgt George Vitzthum, addressing the attending crowd.

gathered at McGhee Tyson Air National Guard Base, Tennessee to name at building on his name.

Several dozen people were there to honor the former Chief Master Sergeant of the USAF, retired, to award him for his many accomplishments while stationed there.

“George has done a lot of things”, Carolyn Stapleton, who knows him from church, said. “He is a fine man. He is very fine man”.

Colonel Jessica Meyeraan, who commands the L. G. Brown Training and Education Center, said Vitzthum was brought to the air base in 1970 to help start the Air National Guard Airman Leadership School that continues this day. During an address to those gathered at the building dedication, Vitzthum said he was asked to put together 17 lesson plans and 75 test questions in a week’s time. With his wife Carole assisting him with the typing up with a portable typewriter the material needed, “We had one typewriter and we worked on them from 7 to 8 o’clock at night”, he said. “One week later we turned them all in.”

Vitzthum who spent nearly 38 years in the military, 15 of those years with the L. G. Brown center as curriculum developer, an instructor, and director

and as its second commandant from 1970 to 1985. He also completed an overseas assignment in the



The Vitzthum family in front of the dedicated building. From LR, Casey Lawson, Col Carmella Vitzthum Lawson, George Vitzthum, and his wife, Carole

1950's. He said he knew of plans to put his name on the dormitory, but he was surprised it happened.

“It was a surprised that this happened”, Vitzthum said to all the attendees. “Generally, you have got to be somebody for that to happen to you”.

Retired Colonel Larry Martin, the third commander of the center, said at the dedication ceremony that smart leaders realize the value of an experienced noncommissioned officer.

“Most officers can remember a senior NCO who helped them learn what it means to be an officer,” he said.

Congratulations to George Vitzthum for his award rewarding him for all his dedication and efforts to make the United States Air Force a bit better!