

June 2016



COMMUNICATOR



Official publication of the AF Comm & ATC Association



Knoxville!

2016

Convention

info

Pages 15-26

**Controller
recalls antics
of "Ajax", the**

Flying Ace

Pages 28-30

War Pigeons

... Tales of

Gallantry

Pages 31-32

**TACTICAL COMM
AT BAGRAM**



Since 1938

IMPORTANT!



Please update your membership information

Is your address up to date? Have you sent us your email address? Have you paid your dues? Let us know so we can keep in touch.



Recruit! Our future depends on you!

If every member recruited one new member we would have close to 3,000 members. It's up to us to recruit new members or be the last person standing.



Join us in Knoxville! See pages 15-26

Everything you need to sign up for the convention is in this issue. We hope to see you in Knoxville.

The AF Comm & ATC Association is a 501 (c) (19) tax-exempt organization. There are no paid employees. All work is done by volunteers.

Communicator gets new look

This is the first printed edition of the *Communicator* after its makeover last fall.

The original design was published and mailed twice a year. The November 2015 edition of the *Communicator* appeared online only, in its new format. This June edition was mailed as a printed product, as well as appearing online. The Board recently voted to resume mailing of both issues, as long as funds are available.

The new design is more contemporary. Our online version is a simple, slick, and easy to read format that is similar to a printed magazine. The software we are using provides a way to convert ordinary PDF files into Flash & HTML5 publications that run on all devices (iPad, iPhone, Android phone), with page flip animations and sound. We can also embed active hyperlinks.

The layout has been reorganized for easy reading and the cover has been redesigned. Of course, we are keep-

ing the most important aspect of the magazine in mind. That is to serve our members and continue to offer relevant and interesting stories and information.

We invite you to tell us what you think. Send an email, letter, or click on “contacts” on our web site and let Lori Manske know. Based on input we will continue to refine and improve.

One of the new features is “Meet a Member”. If you are interested in being featured, please send information and good quality photos about your Air Force career, special memories, anecdotes, etc., to the editor.

We will continue to mail the magazine unless you notify Walt McLain (aacsmbship@comcast.net) or Lori Manske (manske5@charter.net) to remove your name from the mailing list.

– *Lori Manske, Editor*



Don't forget to visit our web site on a regular basis for the latest information.

www.afcommatc.org

You will no longer need a password to access the members-only area of our web site. You can access the current *Communicator* magazine from our home page. Back issues will appear under the “Home/Communicator” tab. Our membership roster and “how-to” documents will be in our Member Library tab.

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Exec Dir

Editor

Membership

Content

Air Force Communicators and Air Traffic Controllers Association

AF Communicators, Data Automation, Information/Cyber, Space Operations, Air Traffic Controllers, Air Field Managers, Maintenance, Engineering and Installation, and related support personnel, active duty and retired.



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by Gene Anderson**



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—CWO Francis Herbert**



HALL OF FAME 44-45

On the cover

TSgt Chris Jachimiec performs an operational test on a PRC-117F tactical radio at Bagram Air Field, Afghanistan, in 2014. Jachimiec was deployed with the 455th Expeditionary Communications Squadron. He served as NCO in charge of radio frequency transmission systems and led a five-member team responsible for the installation, configuration and maintenance of a command and control system integral to base defense and sortie generation. (Air Force photo by SMSgt Gary J. Rihn)



History of the ATC Badge

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The Communicator is the official publication of the **Air Force Communicators and Air Traffic Controllers Association**.

Send photos and stories to Lori Manske, 665 N 11th St, Breese IL 62230, manske5@charter.net.

Communicator is published twice a year, June and November. They are also available online at www.afcommatc.org.

Find us on **Facebook**

<https://www.facebook.com/Air-Force-Communicators-and-Air-Traffic-Controllers-Association-AFCOMMATC-157860650935840/>



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Vice Director, Ray French
Executive Secretary, Bill Hammett
Treasurer, Jim Weber
Membership Director, Walt McLain
Editor, Print/Online Media, Lori Manske

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Sgt-at-Arms, Robert Read
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Information Officer, Gerald Prather
PX/BX Manager, Bill Cassatt

Historian, Ken Reiff
Chaplain, Ed Broestl
Judge Advocate, John Milano

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Jim Weber

Convention Committee:

Jim Weber (chair), Rafael Quezada, Bob
Read, Hank Sauer

Honors and Awards Committee:

Walt McLain (chair), Hank Sauer, Chuck
Teston

Recruiting Committee:

Ken Reiff (chair)

Members wishing to nominate individuals or volunteer for Board of Director positions must submit their names to the Executive Director with justification based on experience no later than June 30 of each year. See Bylaws (on our web site) for more info.

Report From the Executive Director Ken Reiff

Our 40th anniversary convention in Knoxville, Oct 4-9, has been exquisitely planned by our hosts: Hank Sauer, Walt McLain and Bob Akard.

Our approach this year has changed with fewer planned events and more free time for our members to explore this great Smoky Mountain venue. Personally, I have toured the Oak Ridge museum and its history is a must-see for all of us.

We have scheduled the Prayer Dinner so that we do not have a conflict with other events, and the River Cruise was well attended during our last convention in Knoxville. Our banquet on Saturday night as usual will be the highlight of our convention. **Mark your calendar now!**

Your Board of Directors has undertaken some significant steps in regard to our association. To point out just a few:

1. We have completed a total bottom-up review of all of the association documents and made changes to streamline our business practices. Those documents are now filed online at Dropbox.

2. Thanks to your vote, we have changed the Constitution and Bylaws to reflect more current processes to manage the association.

3. We have instituted a stringent budget process to manage our revenue and expenses. We implemented a Fiscal Management Policy Directive and formed a Financial Management and Budget Policy Committee to ensure expense control.

4. Due to the outstanding work of our Membership Director, Walt McLain, our membership rolls are more current than any time in recent years. This extensive effort will result in less expense in mailing our June *Communicator* and facilitate communication with our members. During this process, I was privileged to help Walt out a bit. I thoroughly enjoyed the



Contd on next page

Executive director
... from previous page

phone conversations with members across our country from Hawaii to Maine—Alaska to Florida. Loved the stories and the dedication of our members for their service from AACS to the present.

5. Our convention chairman, Jim Weber, has started engaging our hosts, Jim and Becky Roberts, for our convention in Oklahoma City, OK for 2017.

I am pleased to report that two of our members have been selected by the Air Force for induction into the Cyberspace Operations and Support Hall of Fame. Congratulations to Colonel (retired) Dave Martinson and CMSgt (retired) Robert “Duke” Snyder. (See page 45.)

With all of the good news I believe it is important to comment on a major problem facing us, **RECRUITING!** Based on Walt’s work, our corrected membership has declined from 1,451 to 1,278. That’s a loss of 173 members. Just a few years ago, we had roughly 3,000 members. A considerable number of our members have gracefully aged into the late 70s/80s/90s.

Unless **each of us** makes a major effort to recruit and sign up new members we will be required to make tough decisions regarding the perpetuity of our association. In that regard, I have taken action to form a Recruiting Committee. Their first effort was to publish a White Paper to offer ideas on expanding our recruiting efforts. Unfortunately, that did not go well. Additionally, our Chairman, Rich Griffiss, had to withdraw due to health issues.

Your Board of Directors will continue to work hard to find a solution to the recruiting problem. I’m asking you to do your part.

I am open to your ideas. Drop me an e-mail at afcommatcdir@gmail.com or send me snail mail at 1102 Lorien Court, O’Fallon, IL 62269-3131.

Ken Reiff

From the Chaplain

Ed Broestl



I consistently return to the word “rhythm” when considering what to share in this edition of the *Communicator*. It begins with my fascination with the lyrics of the song “Turn, Turn, Turn” by the Byrds taken directly from Ecclesiastes 3:1-8. I’m reasonably certain you remember the words, if not from the book more than likely from the song:

A Time for Everything

¹To everything there is a season, and a time for every purpose under heaven: ²a time to be born, and a time to die; a time to plant, and a time to pluck up that which is planted; ³A time to kill, and a time to heal; a time to break down, and a time to build up; ⁴A time to weep, and a time to laugh; a time to mourn, and a time to dance; ⁵A time to cast away stones, and a time to gather stones together; a time to embrace, and a time to refrain from embracing; ⁶A time to get, and a time to lose; a time to keep, and a time to cast away; ⁷a time to rend, and a time to sew; a time to keep silent, and a time to speak; ⁸A time to love, and a time to hate; a time of war, and a time of peace.

Speaking of time, take some time, probably just a couple of seconds, to recall the song’s rhythm and its opening notes. “Unique” accurately describes it. Next, take some time to recall the rhythm of the time you spent in service to our country. That too was certainly unique no matter the length or location(s) of your service. Yet, there **was** a rhythm to each assignment: the

Contd on next page

From previous page

mission, the ones we served, predicted how it all played out. If you haven't recently reflected on that time, consider how it shaped you. What were those "seasons?"

With this as a preface, how is the current rhythm of your life? Do you have one? Would it be interesting to chart? Or, is it just a day at a time doing what seems appropriate? Personally, I'm not sure I would want anyone to chart my rhythm and often-times I find myself doing what seems appropriate.

I invite you to take a step back and consider life as we know it if there wasn't at least some rhythm to the world, to the universe. How do you react to an Indian Summer? *Happy Day – winter isn't here just yet!* How about what happened here in Colorado where we had both a White Christmas and a

White Easter. It was just plain weird. It just ain't right!

The thing I find most revealing in all this is there is a rhythm, a cadence, not only to our universe but to our lives. Pause for a time and consider the things in your life that may be disquieting...that "just ain't right!"

There are few that can pinpoint a specific cause for our White Easter and set it right. However, in each of our lives the cause for a lack of rhythm may be discoverable. Modifications can be made to bring it 'round. We just need to take time to reflect. May each of you in and through this time of reflection discover God's peace.

Shalom...Ed

flashback ... to the '80s



AFCC Song lyrics

Communications – Reins of Command

To hear the audio file, visit
our web site:

[http://www.afcommatc.org/
afcc-song.html](http://www.afcommatc.org/afcc-song.html)

Sung by MSgt Bob
Ellison,
with Air Force Academy
Band (early 1980s)

From the sky to the land with the reins of command for the Air Force –
communications

Anytime anyplace we'll be first in the race for the Air Force –
communications

We'll push the speed of light to sound out the warning
when it's time to fight

CHORUS

We're AFCC serving the Air Force all over the world,
we're AFCC taking freedom's message everywhere our flag's unfurled
Now for many proud years we're the eyes and the ears for the Air Force –
communications

When the last plane has flown we'll bring victory home for the Air Force –
communications

We'll tell the world the news the days never done that's ever seen us lose

CHORUS

We're AFCC serving the Air Force all over the world,
we're AFCC taking freedom's message everywhere our flag's unfurled
From the tower's watchful eye to computers inside for the Air Force –
communications

Cause it takes more to fly than what first meets the sky for the Air Force –
communications

We've got the reins in hand, we'll head for tomorrow
with a strong command

CHORUS

We're AFCC serving the Air Force all over the world,
we're AFCC taking freedom's message everywhere our flag's unfurled

ENDING

Everywhere our flag's unfurled

Reports



Membership director

Walt McLain



Editor, Print/Online Media

Lori Manske

Spread the word!

Declining membership continues to be a concern.

Please try to recruit at least one new member each year and encourage former members to return.

Members must pay attention to membership expiration dates and renew on time. Renew each year by April 1 to ensure you receive your Communicator.

Thanks for your support.

We have gained 8 new members since Oct 15, 2015. Our current active membership stands at 1,212. We have 1,014 Life Members. Since Oct 15, 2015, 25 members have renewed. 64 members' dues expired in 2015. To see when your dues expire check the address label on your latest *Communicator* or the expiration date on your membership card. ***We did a full review of the membership roster and corrected the roster status to reveal a more accurate active member number.*** (Information is as of April 1, 2016)

Please refer all membership questions to Walt McLain, 865 690-0479 or email aacsmbrship@comcast.net

New members and renewals: Make checks payable to AF Comm ATC Assn. Mail to: AF Comm ATC Assn, 4514 Haverty Drive, Knoxville, TN 37931-3657

Applications are available in each *Communicator* (page 48), on our web site, and from Walt McLain.

Dues are: \$15 per year, payable in 2-year increments or Life Membership varies by age: to 50 \$165; 51-60 \$145; 61-70 \$115; 70+ \$75.

Cost of the November 2015 *Communicator*:

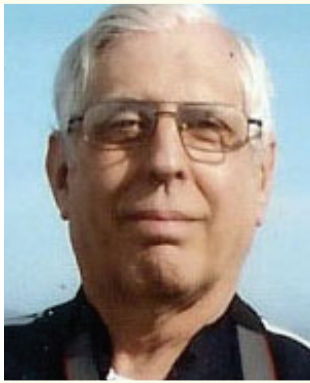
There were no costs associated with printing or mailing the November edition. Layout and design is a volunteer effort and the November edition appeared online only. Cost savings for not printing and mailing the November edition are estimated at \$3,800.

The *web site* averages **30 visits** per day. It is our biggest recruiter of new members, along with efforts of our current members and board of directors.

Please visit the web site guest book and send a reply to people who sign, thanking them for taking the time to visit. It might encourage people to join.

FYI: Monthly reports for the Editor's Bank Account are submitted to the Treasurer and audited by the chair of the Fiscal Management and Budget Committee.

Send stories/photos to Lori Manske, 665 N 11th St, Breese IL 62230, or manske5@charter.net, or call 618-210-9573.



PX/BX Manager

Bill Cassatt

**PX/BX Sales Report
(Oct 2015 – April 2016)**

Items Sold

Hats	6
AACS Lapel Pins	2
Original Patches	1
Plaques	1
Challenge Coins	3

Total Sales: \$144

Expenses

Stock	
Replenishment:	\$2022.83
Plaque	\$30.00
Postage	\$19.14

**Total Expenses:
\$2,071.97**

**See page 49 to
order items.**



Treasurer

Jim Weber

Cash in Banks:

AFCOMMATC	
Checking Acct	\$19,099.54
Publisher's Account	\$ 490.96

Cash Totals: \$ 19,590.50

Equipment Book Value:	\$ 887.49
Equipment Totals:	\$ 887.49

Certificates of Deposit:

50-12 \$5,025.02 (Maturity Date 07/02/16)
50-24 \$10,070.12 (Maturity Date 07/02/17)
50-36 \$20,179.14 (Maturity Date 07/02/18)

CD Totals (3): \$35,274.28
Grand Totals: \$55,752.27

The ENT Federal Credit Union continues to be an excellent choice for this organization, because there are no account maintenance fees and transactions are unlimited.

My goal for the immediate future is to continue to grow the membership funds. I want to thank those who have continued to donate through the mail and during the 2015 Reunion. As your Treasurer, my standing goals are: (1) Stable growth and (2) Security of Funds.

At a glance...



To those who make periodic or regular donations, we appreciate your continued support. You can be assured that your donations are critical to the continued operation of this great organization.

Thank you for your support.

Note: All Communicators since June 2006 are available on the web site www.afcommatc.org

Missed Roll Call

Since November 2015

Communicator:

David B. Whitney
Maj Gen Robert L. Edge
Robert W. McDow
Richard Chappell
San Juan Romero
Fred A. Duran Jr.
Walter James (Walt) McMahon II
Edward Buckles
Brig Gen Robert O. (Bob) Petty



Member renewals since October 2015

Edgard W. Aagesen, Huntsville, AL
Melvin I. Aldridge, Fort Wayne, IN
Raymond B. Allen, Charlotte Hall, MD
Robert E. Auvil, Spokane, WA
Jeffrey K. Beil, Mohnton, PA
Maj Gen Phillip E. Bracher, Annandale, VA
Edward W. Buckles, Trenton, IL
Robert M. Chaplin, Colorado Springs, CO
Larry B. Coleman Sr., Cheltenham, MD
Clyde R. Dodd, Fairmont, WV
Frank W. Fischer, Kreuzlingen
Martin J. Kellner, Roaring River, NC
Raymond A. Kinney, Colorado Springs, CO
Larry J. Koerber, Troy, IL
Donald Limoges, Claremont, NH
John A. Milano, Bayside, NY
Janet Moreiko-Gagen, Swansea, IL
Carol Musick, Bristol, VA
Victor O. Musick Jr., Aldelphi, MD
Ernest L. Raper, Midwest City, OK
David B. Reese, Maricopa, AZ
Stanley A. Schnell, Jasper, IN
Don W. Sherlock, Boulder, MT
Tony P. Spagnolia, Ewing, NJ
Richard Steffen, Depew, NY
Paul L. Trexler, Strongsville, OH

New members since October 2015

James Barnhart, Oklahoma City, OK
Richard Baker, O'Fallon, IL
Guy Cooley, Caseyville, IL
John Price, Greer, SC
Thomas Sullivan, O'Fallon, IL
Paul Dorfman, Santa Fe, NM
Calvin Betz, Brooks, GA
Clarence Schillings, Goldthwaite, TX

Donations (since November Communicator)

Clifford Gilbert
Stancil Dilda
B & J Valentine
Homer Felknor
Henry Konat



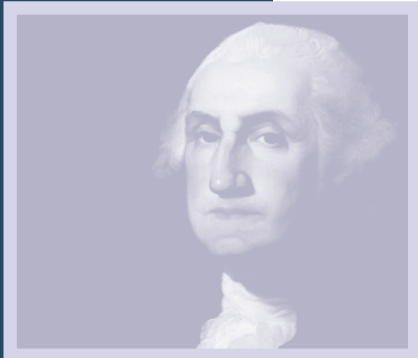
By Hans Petersen
VA Staff Writer

A majority of America's presidents came to office as veterans. Twenty-six of our 44 Presidents served in the military. Until World War II, a majority of our presidents had served in the Army. Since then, most have served in the Navy.

The Civil War produced seven Veteran presidents in the postwar period, all of them having served in the Union Army.

The First and Second World Wars ushered in another series of Veteran Presidents, starting with Harry Truman and West Point graduate General Dwight Eisenhower.

The evolution of warfare has introduced many new tactical and technical dynamics to the U.S. military, but the core qualities of decision-making and inspiring leadership remain.



Presidents who were veterans

George Washington, General and Commander in Chief, Continental Army, 1775-1783

Thomas Jefferson, Colonel, Virginia Militia, 1770-1779

James Madison, Colonel, Virginia Militia, 1775-1781

James Monroe, Major, Continental Army, 1775-1778

Andrew Jackson, Major General, U.S. Army, 1814-1821

William Henry Harrison, Major General, Kentucky Militia, 1812-1814

John Tyler, Captain, Virginia Militia, 1812

James K. Polk, Colonel, Tennessee Militia, 1821

Zachary Taylor, Major General, U.S. Army, 1805-1815, 1816-1849

Millard Fillmore, Major, Union Continentals (home guard), 1861

Franklin Pierce, Brigadier General, New Hampshire Militia, 1846-1848

James Buchanan, Private, Pennsylvania Militia, 1814

Abraham Lincoln, Captain, Illinois Militia, 1832

Andrew Johnson, Brigadier General, U.S. Army (Volunteers), 1862-1865

Ulysses S. Grant, General, U.S. Army, 1866-1869

Rutherford B. Hayes, Major General, U.S. Army (Volunteers), 1861-1865

James A. Garfield, Major General, U.S. Army (Volunteers), 1861-1863

Chester A. Arthur, Brigadier General, New York Militia, 1858-1863

Benjamin Harrison, Brevet Brigadier General, U.S. Army (Volunteers), 1862-1865

William McKinley, Brevet Major, U.S. Army (Volunteers), 1861-1865

Theodore Roosevelt, Colonel, U.S. Army (Volunteers), 1898

Harry S. Truman, Colonel, Army Officer Reserve Corps, 1919-1945

Dwight D. Eisenhower, General of the Army, U.S. Army, 1915-1948, 1951-1952

John F. Kennedy, Lieutenant, U.S. Naval Reserve, 1941-1945

Lyndon B. Johnson, Commander, U.S. Naval Reserve, 1940-1964

Richard M. Nixon, Commander, U.S. Naval Reserve, 1942-1966

Gerald R. Ford, Jr., Lieutenant Commander, U.S. Naval Reserve, 1942-1946

Jimmy Carter, Lieutenant, U.S. Navy, 1946-1953

Ronald Reagan, Captain, U.S. Army, 1942-1945

George Bush, Lieutenant (junior grade), U.S. Navy, 1942-1945

George W. Bush, First Lieutenant, Texas Air National Guard, 1968-1973

No comm, no bomb



Deployed comm airmen enable warfighters

By TSgt Nicholas Rau
BAGRAM AIRFIELD, Afghanistan

Facing an expeditionary communications infrastructure and unique hurdles, Airmen in the last Air Force communications squadron in Afghanistan use hard work, resourcefulness, and teamwork to overcome the challenges in a deployed environment.

“We enable the warfighter in the fifth domain,” said Lt. Col. Heath Frye, 455th Expeditionary Communications Squadron commander. “We already have ground, sea, air, and space domains; cyberspace is the newest one. Just like with F-16s, you have pilots, maintenance, intelligence, weapons and a variety of other Air Force specialties to accomplish the air domain mission. In communications, we have the same structure to accomplish the cyberspace mission and be 100 percent in synch with the rest of the wing.”

Bagram communications Airmen carve out “cyber key terrain areas” in cyberspace. Much like when a ground force takes a hill to gain a defendable vantage point, the 455th ECS establishes cyber base defense around operating systems like Secret Internet Protocol Router and Nonclassified Internet Protocol Router Networks. These systems allow for secure and rapid information transfers that enable mission success.

“We have a saying in Air Force communications, ‘No Comm, No Bomb,’” said Frye. “Without the comm that the 455th ECS enables, leaders would not have the command and control they require. We would be forced to deliver all messages face-to-face. We would be stuck fighting like it was the 1700s.”

The unit blends a workforce made up of Airmen and DoD contractors. Airmen bring technically-trained skills during every 6-month rotation, while contractors provide continuity. The unit has earned “Best Small Communications Squadron” in both Air Forces Central Command and Air Combat Command.

By connecting each of the main four comm sections: **Cable, Network Management, Client Systems Technicians, and Network Operations**; the squadron’s Airmen swiftly address issues and keep the combined network up and running.

The Cable section handles the infrastructure of the comm enterprise. They route and install cable lines for networking and telecommunications, and build the comm closets that house the hardware. Network Management installs and maintains the hardware inside the buildings that the cyber systems operate.

Once a computer is ready to be connected to a government network, it has to be baselined and formatted with the current operating system and programs. This is where Client Systems Technicians come in.

Finally, once the system is on the comm enterprise, it is managed and monitored by Network Operations. They push the patches that keep the computer up to date and functioning properly.

In addition to these major functions, the squadron relies on smaller teams to support the unit and the base as a whole.

The Communications Focal Point is the first step for users who need assistance. These Airmen and contractors triage every computer, network or phone problem reported to them. They direct the task to the specialized 455th ECS sections.

The Administration and Knowledge Operations section ensures the unit can maintain internal websites as well as protect privacy and support the Freedom of Information Act through accurate record keeping.

Lastly, the 455th ECS manages one of the greatest morale items of a deployment — mail from home. With Airmen receiving packages every day, the job of a postal clerk adds up. Mail is a huge morale item and a legal right, so with the help of volunteers, the job gets done. *(See next page)*



The 455th ECS manages the entire AF cyber and telecommunications network at Bagram Airfield. With more than 1,700 AF network accounts, the comm squadron uses 4 main functions to secure the cyber domain: Cable, Network Maintenance, Client Systems Technicians, and Network Operations.



No comm, no bomb

Squadron teams keep network running

Cable and Network Management

A cyber network is much like a human body. It needs bones to stand up, arteries to transmit information, and veins to relay information. It's the job of the Cable and Network Management sections of the 455th ECS to build the cyber body that the expeditionary network will operate.

The Airmen of these two sections establish the hardware a building will need to function. The Cable section is responsible for the infrastructure from outside the building up to the wall. The Network Management section installs and maintains the physical assets inside the building.

"This is a total team effort on the squadron's part," said SSgt Patrick Little, 455th ECS cyber transport supervisor. "It all starts with Cable," he said. "They come in, lay the wiring, build the communications closet, and connect the building to the distribution node. Then Network Management comes in and connects everything in the building. We all build on top of each other's efforts."

The Airmen in the Cable section are required to build their own comm closets and other hardware housing set-ups. They complete a lot of engineer-style projects to ensure that the infrastructure is in place before the next section can come in and do their job.

The other part of this network foundation is the technology that keeps it operating. The Network Management section fixes and sustains the old hardware, while upgrading to new devices.

The other function is near and dear to every deployed Airmen's heart — the morale wireless network. With more than 120 requests for Wi-Fi access a day during a military rotation, the section is busy setting up accounts so that Airmen can contact their families back home.

The Cable and Network Management sections build the 455th ECS cyber network body from the ground up; and it is something that the base cannot live without.



SrA Andrew Dawson, Client Systems technician, updates a computer system before it is returned to the cyber network at Bagram.

Network Operations and Client Systems

With hundreds of thousands of megabytes of data whizzing along miles of fiber optic wire, only stopping briefly to be digested by a network computer before blazing off to its next destination, managing this cyber domain requires expertly trained individuals. In the case of a deployed network, it takes two teams.

Airmen from the 455th ECS Network Operations and Client Systems sections have the critical responsibility of ensuring that the systems required for command and control, accountability, and more are functioning properly and are adequately protected from cyber threats.

"We manage the \$21 million Network Control Center, the brain of the \$84 million network," said MSgt Ernest Dinolfo, Network Operations section chief. "Today, everyone relies on the network and it's a vital piece of the mission. We use it for everything from email to mission planning."

Monitoring the fidelity of more than 200 specialized servers that facilitate the use of nearly 6,000 unique individual and organizational accounts keeps Network Operations manned almost all hours of the day. They make sure the systems are up to date with the newest protection and operating software.

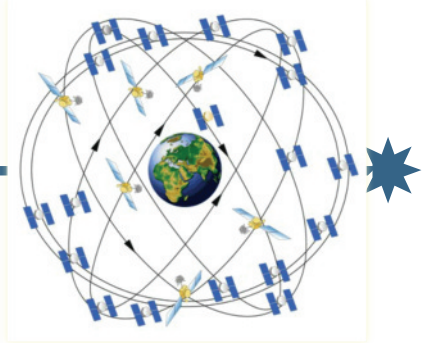
"We are kind of like Geek Squad," joked SrA Andrew Dawson, 455th ECS Client Systems technician. "We are responsible for keeping everything from the desk to the wall working. We install all the software and make sure it runs properly."

Client Systems technicians also fix telecommunication devices, printers, and other hardware accessories.



SSgt. Patrick Little, cyber transport supervisor, removes a back-up power supply from a darkened storage area at Bagram Air Field.
(AF photos by TSgt Nicholas Rau)

The evolution of GPS



LOS ANGELES AFB, CA. -- In a desert, it's easy to get lost. There are no roads nor signposts to give location clues. That situation faced U.S. and coalition forces during the 1990-1991 crisis in the Persian Gulf.

Sometimes called the first space war by historians due to the extensive use of space-based satellites to command and control military forces, Desert Storm marked a major test of GPS (Global Positioning System) during combat.

Navigation proved to be a crucial capability for desert warfare. GPS signals enabled coalition forces to navigate and out-manuever the enemy, and they could fire with unprecedented accuracy in the vast desert terrain despite difficult conditions.

However, the GPS constellation was still several years from full operational capability. In 1991, there were only 19 GPS satellites in orbit, spanning three generations of GPS satellite -- GPS I, II, and IIA -- which provided up to 20 hours of 3-D coverage. While 24 operational satellites are needed to provide 100 percent global, 3-D coverage with acceptable performance, GPS usefulness was proven before the constellation reached initial operational capability in 1993.

Meanwhile, for deployed forces in the desert, it became critical to procure small lightweight GPS receivers often pronounced "sluggers" by the troops. By today's standards, these GPS ground units are considered primitive. The handheld version of GPS back then weighed several pounds. Most units had a backpack-sized device called "manpacks" to interpret the signals.

The Small Lightweight GPS Receiver program began in 1987 with a competitive non-development item acquisition process by the Space and Missile Systems Center, which awarded a contract in 1989 for more than 1,000 sets. By the time Desert Storm began one year later, it became apparent there would be an immediate need for additional navigation equipment.

Although each U.S. Army unit had at least one GPS receiver for maneuvering, the demand was so great that special approval from the Pentagon was obtained for the Army to acquire commercial units. The GPS Joint Program Office at SMC awarded contracts for 8,000+ more receivers.

At what is now Schriever AFB, CO, airmen and civilian workers with the 2nd Space Operations Squadron helped turn the partially functional GPS constellation into a battlefield asset in 1991, making the Persian Gulf War the first conflict where space-based navigation was used. Operators from the 2nd Space Control Squadron maneuvered satellites so that more GPS spacecraft would be overhead for troops using the sluggers and manpacks.

Other operations enabled or enhanced by GPS included precision bombing, artillery fire support, the precise positioning of maneuvering troop formations, and certain special forces operations.

Since the Gulf War, the US has employed GPS in several peacekeeping and military operations. During Operation Restore Hope in 1993, GPS enabled the airdrop of food and supplies to remote areas of Somalia. U.S. forces

entering Haiti in 1994 also relied on GPS. During the Balkan crisis, GPS assisted delivery of aid to the Bosnians by guiding U.S. Air Force transport planes at night to drop food and medicine in designated drop zones.

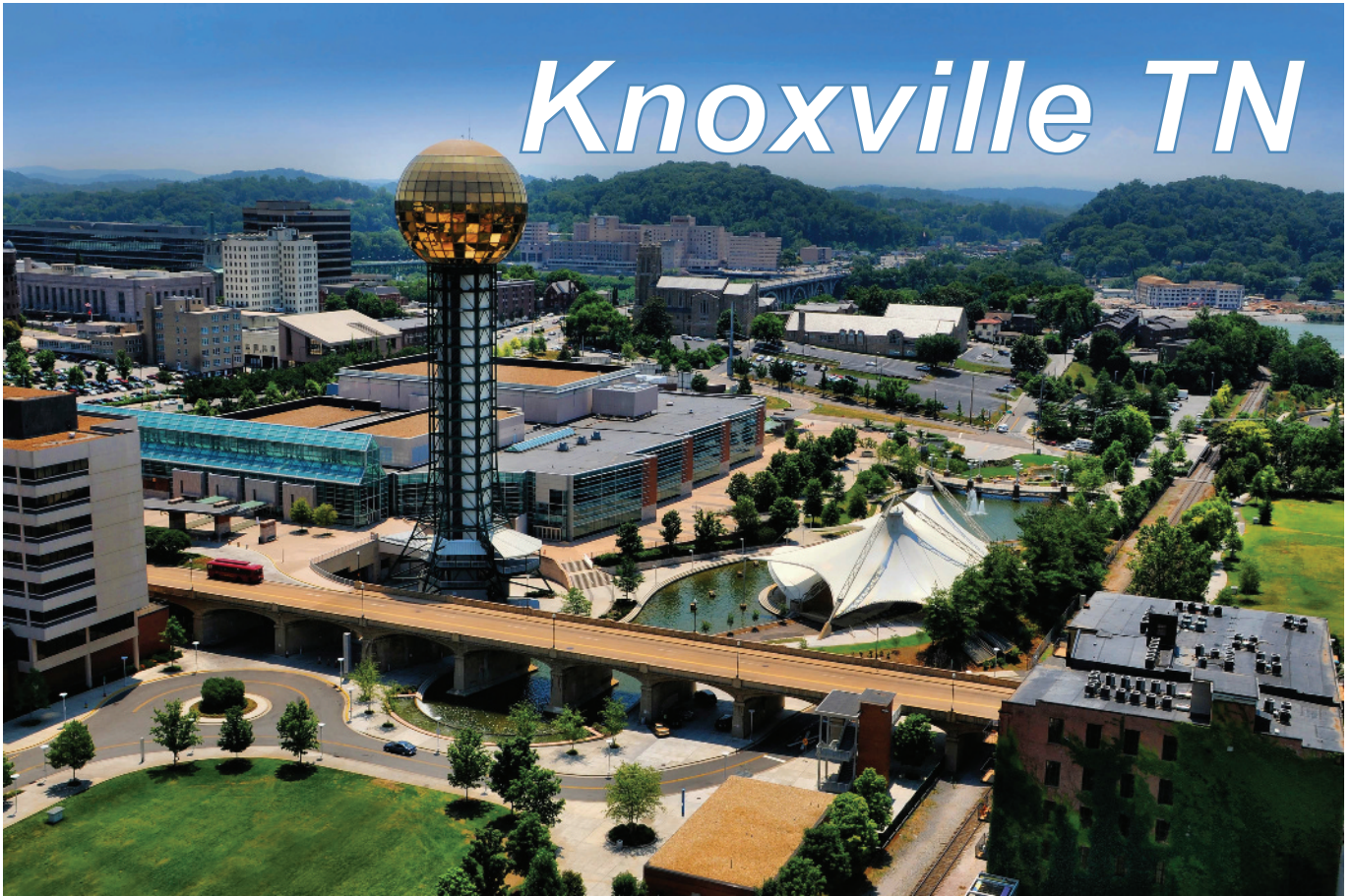
It was the military's success in the Persian Gulf that gave the commercial GPS market its biggest boost, sparking a surge in a growing multi-million-dollar market that barely existed a few years before the war.

GPS was always a dual-use military and civil system, but a policy directive announced by President Bill Clinton in 1996 reiterated this and established an Interagency GPS Executive Board to manage it as a national asset. Plans to upgrade GPS with two new civilian signals for enhanced user accuracy and reliability, particularly with respect to aviation safety, were announced in 1998.

In May 2000, the discontinuance of the selective availability function, which added error to the signal so non-military users got less accuracy on GPS, made the GPS signals in space a global utility more responsive to civil and commercial users worldwide.

The capabilities of GPS systems are used worldwide by billions of people in their consumer, professional and military devices. Whether paying at the gas pump, withdrawing money from an ATM, precision farming, international banking or international shipping, GPS enables our modern way of life. It is also a critical component of delivering precise combat power. (*Space & Missile Systems Center and SMC History Office*)

Knoxville TN



2016 AF COMM & ATC CONVENTION

Oct 5–9, 2016

Holiday Inn World's
Fair Park,
Knoxville TN

Located in the heart of downtown Knoxville, the Holiday Inn World's Fair Park is walking distance to everywhere you want to be including the Museum of Art, Market Square and the Knoxville Convention Center. Windows on the Park Lounge boasts fantastic views of World's Fair Park and the Sunsphere. The hotel offers a courtesy shuttle within a three-mile radius of the hotel. During your stay at the Holiday Inn Knoxville Downtown World's Fair Park, you can enjoy great amenities, such as an indoor pool.

Information and forms on the following pages

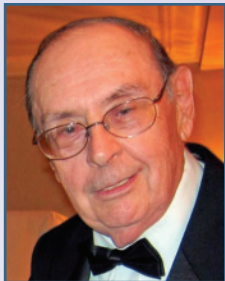
**2016
convention**

40TH AF COMM & ATC ASSOCIATION CONVENTION

**Holiday Inn World's Fair Park Downtown,
Knoxville, TN**

October 5 – 9, 2016

**Wednesday Early Check-In – Sunday Get-away
Breakfast**



Hosts, Hank Sauer and Walt McLain

WHO: Current and former Air Force Communicators, Data Automation, Cyber, Space Operations, Air Traffic Controllers, Air Field Managers, Maintenance, Engineering and Installation and related support personnel

WHAT: Annual convention. Renew and make new friendships.

WHEN: Oct 5-9, 2016

WHERE: Holiday Inn World's Fair Park, 525 Henley St, Knoxville, TN 37902

RESERVATIONS: Book early!

• Call-in: 800-264-1579 Group Reservation Code: **AFC**

• Online Reservation Link:

<http://www.ihg.com/holidayinn/hotels/gb/en/knoxville/tysec/hoteldetail>

Group room rate is \$99 per night, plus tax. To get the special rate, you must reserve a hotel room for the 2016 Convention by Sept 5.



All rooms should be booked as late arrivals. Members are responsible for making their own hotel reservations. Cancellations must be made 72 hours before booked arrival time.

Check-in time: 3 PM Check-out time: Noon. Hospitality Rooms are the **Dogwood & Mountain Laurel Rooms**

All Banquet Seating will be assigned by table (max of 8). If you want to sit with someone (or a couple), make sure they are coming. Complete the Registration Form.

PLEASE NOTE: Checks for the Convention must be made out to the AF Comm & ATC Assoc 2016. Mail with forms to Hank Sauer, 111 Carson Lane, Oak Ridge, TN 37830-7626 not later than Sept 2.

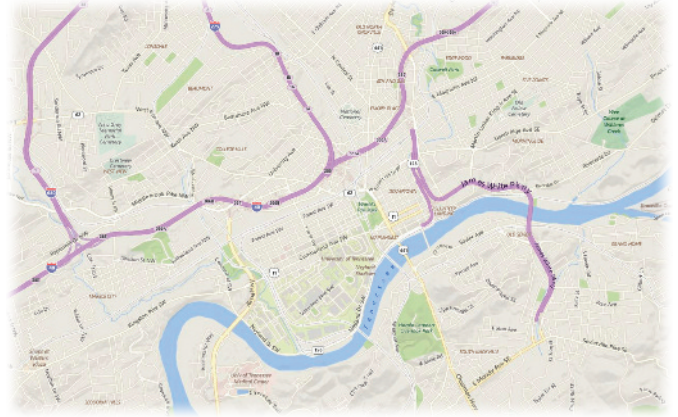
Directions to hotel

Maps and directions also provided on hotel web site:
Holiday Inn Knoxville Downtown

The Knoxville Airport (McGhee Tyson) is 13.5 miles from hotel. Drive time is normally about 30-40 minutes.

AIRPORT SHUTTLE SERVICE IS NOT AVAILABLE TO AND FROM HOTEL

**TAXI one-way: Approximately \$30 for 2 passengers
CHECK AT AIRPORT & HOTEL FOR PHONE NUMBERS**



- **DRIVING DIRECTIONS from the Airport:**

If renting an airport rental car, get directions from rental car company (routes may differ based on time of day). (Knoxville Airport to 525 Henley St, Knoxville, TN is approx 13.5 miles). Leaving airport turn left on TN-115N/US-129N/ALCOA HWY, keep right at fork and follow signs to I-40E/I-275N/ Asheville/Lexington, keep left at the fork and merge onto I-40 East. See instructions going East below.

There is limited hotel parking space (no hook-ups) for motor coaches or RVs (Check with hotel before arrival on available parking spaces).

THERE IS NO CHARGE FOR MEMBER PARKING. Check final bill to ensure that parking charges are not listed.

- **DRIVING DIRECTIONS:**

Northbound on I-75 (from Atlanta/Chattanooga): Take I-75 North to junction with I-40 East; take I-40 East to Exit 388 (Downtown) and follow signs to Henley Street (US 441). After exiting the tunnel onto Henley Street, turn right at first traffic light (Clinch Avenue). Parking lot entrance gate is immediately on the right

Southbound on I-75 (from Lexington-Cincinnati): Take I-75 South to I-275 South; take I-40/US 441 Exit and follow signs to Henley Street (US 441). After exiting the tunnel onto Henley Street, turn right at first traffic light (Clinch Avenue). Parking lot entrance gate is immediately on the right.

Eastbound on I-40 (from Nashville): Take I-40 East to Exit 388 (downtown) and follow signs to Henley Street (US 441). After exiting the tunnel onto Henley Street, turn right at first traffic light (Clinch Avenue). Parking lot entrance gate is immediately on the right.

Westbound on I-40 (from Asheville): Going West on I-40, exit right at Exit 387 to Western Ave/17th Street, merge onto Ailor Avenue, at second light; slight right turn onto Western Avenue, .8 mile turn right on Henley St (on Henley carefully merge to far right lane); .2 mile turn right onto Clinch Ave, hard right into Holiday Inn. Hotel Parking area for checking-in and garage parking.

THURSDAY TOURS/EVENTS, OCT 6

American Museum of Science and Energy, Oak Ridge

Time: Meet in hotel lobby at 8:15 AM for bus departure at 8:30 AM

Return to hotel: Approximately 3:30 PM

Cost: \$39 per person, includes lunch at famous Calhoun's on the River (Barbeque Lunch Buffet)

(BBQ bone-in chicken, hickory smoked BBQ pulled pork w/bun, creamy country coleslaw, homemade potato salad, Smoky Mountain baked beans, fresh buttermilk biscuits & corn muffins, chocolate chip cookies, coffee & tea)



Exhibits: The Story of Oak Ridge: This panorama of historical photographs, documents and artifacts explains the Manhattan Project and the construction of Oak Ridge, TN. A 20-minute video presentation extends the explanations. Exploration Station: This popular area offers self-directed activities which explore light and color, sound, problem-solving, static electricity, robotics, vision and more. Y-12 and National Defense: models of weapons, protective clothing and tools along with video and hands-on activities demonstrate processes, safety features and careers at the Y-12 plant in Oak Ridge. Earth's Energy Resources: maps, tools, models and audiovisual materials are used in the exhibits to explore the variety of energy sources, such as coal, oil, geothermal, hydropower and natural gas, found on Earth. World of the Atom: a cross section model of a nuclear reactor and a simulated underground nuclear waste storage area highlight this area that also covers pioneering atomic scientists, natural radiation, fusion, and nuclear energy in space.

World of the Atom: a cross section model of a nuclear reactor and a simulated underground nuclear waste storage area highlight this area that also covers pioneering atomic scientists, natural radiation, fusion, and nuclear energy in space.



Annual Prayer Dinner

Chaplain: Ed Broestl

Menu: World's Fair Buffet Dinner

Time: 6:30 PM – 9 PM

Cost: \$42 per person

Location: Hotel's Lower Level (Cumberland Room)

Buffet: Traditional chef's seasonal salad, Pan-Asian Grilled Chicken and Apple Stuffed Pork Loin, with rolls and butter, assorted desserts, freshly brewed regular and decaffeinated coffee and iced tea with lemon.



Chaplain Ed Broestl

FRIDAY TOURS/EVENTS, OCT 7

40th Annual General Farman Golf Tournament Dead Horse Lake Golf Course, Knoxville



At Dead Horse Lake Golf Course the mission is simple: Provide East Tennessee golfers with the best public golfing experience possible. Its recently renovated golf course offers a relaxed environment where golfers of every age and skill level can enjoy their game to the fullest. Golf is a game meant to be enjoyed for a lifetime. Your eyes will never tire of the gently rolling landscape, the majestic groves of trees, and the carefully manicured course of Dead Horse Lake. The par 72 course and 4 sets of tees is truly a treat to play with yardages from 6,300 to 4,600. The rolling landscape ensures that you never know what to expect on the next hole while Dead Horse Lake appears throughout our 18 holes, keeping you on your toes. Every year the family-owned and operated golf course works toward its mission through the dedication of its staff and the professionalism of its services. If you have never played at Dead Horse Lake, then you are missing a great round of golf.

Cost per player: \$50 (includes green fee and cart; light lunch is included).

Golf club rental available for \$10-\$20.

Car pools will leave the Hotel lobby at 7:15 AM. First tee time is 8 - 8:30 AM. If you are willing to drive/carpool, indicate on Golf Registration form. Steve Manske is Golf Director.

Rules of Play

- The format will be medal play (each golfer plays their ball from the tee to the cup on each hole). Callaway system will be used for scoring.
- To speed up play no score over double par for a hole will be counted so if you reach double par pick up and start play again at the next hole.
- One, no-cost mulligan may be used for the front nine and one for the back nine (but NOT for holes designated for closest to the pin and longest drive).
- Once you finish play, give your score card to Steve Manske.

FRIDAY TOURS/EVENTS, OCT 7 (CONTD)

Friday afternoon On-your-own

On-your-own visit to Market Square and Gay Street, downtown Knoxville.

Visit the central city's most attractive and interesting sites. Starting just out the door of our hotel is the World's Fair Park and a memorial to fallen service men and women of all wars from Knox and surrounding counties.

From the hotel you can use the hotel shuttle to visit Market Square with great restaurants and shops, as well as Gay Street. Gay Street, with its mix of history, rebirth and pedestrian friendliness, was named one of 10 Great Streets by the American Planning Association in 2012.

No cost. Check with front desk for times shuttle is available.

Note: You should plan to return before 4 PM in time to make the riverboat dinner cruise at 5:30 PM



Friday evening Knoxville Riverboat Dinner Cruise

The Star of Knoxville is an authentic paddle-wheeler with a capacity of 285 passengers. The main deck seats 144 passengers and is fully enclosed, air-conditioned, and heated for year-round comfort. The vessel is equipped with two (2) bars, a dance floor and band stage. This is a casual clothes type of event for our AF Communicators and Air Traffic Controllers.

Get ready to dance the night away on our deluxe dinner cruise. Entertainment consists of jazz and/or contemporary music. This deluxe dinner cruise will feature a delicious slow-roasted prime rib buffet, with baked breast of chicken, tossed garden salad, baked potato, fresh garden vegetables, green beans, fresh baked rolls, coffee, tea and a delicious dessert. There is a pay-as-you-go bar for beverages.

Cost per person: \$62

Times: Bus will leave hotel by 5:30 PM, board by 6 PM, cruise 7 to 9 PM and return to hotel by 9:30 PM.



SATURDAY TOURS/EVENTS, OCT 8

On-your-own visit to Market Square and/or Gay Street

NO COST – ENJOY GREAT STORES & EATERIES

The Market Square Farmers' Market (MSFM) is an open-air farmers' market located on Market Square in the heart of downtown Knoxville. Everything at the MSFM is grown or made by the vendor in the East Tennessee region. Products vary by the seasons and include produce, eggs, honey, herbs, free-range meat, bread, baked goods, salsas, coffee and artisan crafts.

There are unique shops in the square and on nearby Gay Street (Mast Store, Museum of the Historical Society and breweries). With interactive fountains, delicious local food and entertainment, the MSFM is a perfect family destination. Knoxville's Market Square area is host to an eclectic blend of culinary delights, has a variety of stores to suit your shopping needs with friendly merchants ready to assist you, and features two water play fountains for the kids. Market Square is adjacent to the scenic Krutch Park.



Saturday Night Banquet

Be seated 6:30 PM; dinner 7 PM, Cumberland/LeConte Room (Formal/semi-formal attire)

Plated Meal with choice of:

Roast chicken breast saltimbocca, stuffed with fresh sage and aged Benton's country ham & roasted garlic sauce, seasonal vegetables and mashed potatoes

or

Angus sirloin, slow roasted to perfection with bleu cheese & scallion butter, served with seasonal vegetables and potato gratin

or

Vegetable – portobello with seasonal vegetables

Served with house salad, rolls and butter, dessert, regular & decaf coffee, iced tea with lemon

Hospitality Room will be OPEN from noon – 4 PM and will reopen after the annual Association banquet until midnight.



GENERAL BUSINESS MEETING

Saturday, Oct 8, 2016

Cumberland/Le Conte Rooms

7:30 AM - Breakfast (line closes at 8:30 AM)

EVENTS & TIMES ARE ESTIMATES

7:30 AM - Breakfast (30 min later than usual)

8:00 AM - ED calls Meeting to Order
(Logistics, emergency exits, announcements, welcome guests and VIPs)
- Invocation/Pledge of Allegiance

8:10 AM - ELECTION OF OFFICERS
(Vice Director, Director of Information, Protocol Officer)

8:20 AM - BOD Reports (not more than 5 minutes for each report)
- Executive Secretary (approval of 2015 minutes)

- Membership, Treasurer, Director for Information, Media Manager, Protocol Officer, PX/BX Officer, Sgt-at-Arms

- Any committee report
- Executive Director's comments
(Any major decisions from board meeting)

8:50 AM - Presentation of Annual Recruiting Award; Thomas Buckley Award for Service; Golf Event Winners

9:00 AM - Recognize 1st time Convention Attendees

9:20 AM - AF Comm & ATC Association Memorial Service

9:35 AM - Overview of 2017 Convention/Reunion

9:45 AM - State of AF ATC Presentation

10:15 AM - Announcements, reserved seating and reminder to be seated at 6:30 PM for banquet

10:30 AM - Call 2016 General Meeting to a close.



CONVENTION MENUS

Prayer Dinner – Buffet

(Thursday – 6:30 PM – 9 PM)

(Cumberland Room)

“The World’s Fair Buffet”

Chef’s Soup of the Day

Salad of Mixed Baby Greens, Tomato, Cucumber & Assorted Dressings

Pasta Salad Provencal

Grilled Marinated Vegetable Salad

Pan-Asian Grilled Chicken & Apple Stuffed Pork Loin

Freshly Brewed Regular & Decaffeinated Coffee, Iced Tea with Lemon

Saturday Buffet Breakfast

(7:30 AM – 8:30 AM)

(Cumberland/LeConte)

“The American”

Fluffy Scrambled Eggs

Fresh Baked Biscuits & Gravy

Thick cut Bacon & Sausage Links

Country Breakfast Potatoes

Fresh Melon and Berries

Freshly Baked Muffins, Danish & Croissants

Chilled Juice, 2% & Skim Milk

Coffee (Reg-Decaf) & Assorted Teas

Saturday Night Banquet

(Be seated 6:30 PM - Dinner 7 PM)

(Cumberland/LeConte)

Plated Meal with Choice of:

Roast Chicken Breast Saltimbocca

Stuffed with Fresh Sage & Aged Benton’s Country Ham & Roasted Garlic Sauce, Seasonal Vegetables and Mashed Potatoes

or

Angus Sirloin

Slow Roasted to Perfection with Bleu Cheese & Scallion Butter

Served with Seasonal Vegetables & Potato Gratin

or

Vegetable – Portobello

With Seasonal Vegetables

Served with House Salad, Rolls & Butter, Dessert & Reg & Decaf Coffee, Iced Tea with Lemon

Sunday Get-Away Breakfast

(7 AM – 10 AM – will be restocked once)

(Cumberland/LeConte)

“The Classic Continental”

Fresh Melon & Seasonal Berries

Fresh Baked Danish & Croissants

Fresh Muffins & Breakfast Cakes with

Sweet Butter & Preserves

Assorted Bagels with Flavored Cream Cheeses

Chilled Juices, 2% & Skim Milk

Freshly Brewed Regular & Decaffeinated Coffee

THE 40th ANNUAL AF COMM & ATC CONVENTION
Holiday Inn World's Fair Park, Knoxville, TN
SCHEDULE OF EVENTS - 2016



WEDNESDAY, October 5, 2016

EVENT	FEE	TIMES	LOCATION
EARLY CHECK-IN	\$95 per person if not previously paid	Noon to 5 PM	Conference Room on the right as you enter the hotel
HOSPITALITY ROOM	INCLUDED WITH FULL REGISTRATION	12:00 PM - Midnight	Dogwood & Mountain Laurel Rooms 2 nd floor (1 room is for Beer & BX, the other is for wine and liquor)

THURSDAY, October 6, 2016

EVENT	FEE	TIMES	LOCATION
REGISTRATION CHECK-IN	\$95 per person if not previously paid	9 AM – 5 PM	Conference Room on the right as you enter the hotel
HOSPITALITY ROOM	INCLUDED WITH FULL REGISTRATION	Noon to Midnight	Dogwood & Mountain Laurel Rooms 2 nd floor (1 room is for Beer & BX, the other is for wine and liquor)
ANNUAL BOD MEETING		1 PM – 4 PM	Private Room to be announced. (beverages only; eat lunch before attending)
Tour of Museum of Science & Energy & lunch at Calhoun's	\$39 per person Great Buffet	8:30 AM - 3:30 PM	BBQ Bone-In Chicken, Hickory Smoked BBQ Pulled Pork, Creamy Country Cole Slaw, Smoky Mountain Baked Beans, Fresh Baked Buttermilk Biscuits & Corn Muffins, Plus drinks
ANNUAL PRAYER DINNER	\$42 per person	6:30 PM – 9 PM	In hotel Cumberland Room "Great World's Fair Buffet"

FRIDAY, October 7, 2016

EVENT	FEE	TIMES	LOCATION
REGISTRATION CHECK-IN	\$95 per person if not previously paid	Noon to 5 PM	Conference Room on the right as you enter the hotel
HOSPITALITY ROOM	INCLUDED WITH FULL REGISTRATION	Noon to Midnight	Dogwood & Mountain Laurel Rooms 2 nd floor (1 room is for Beer & BX, the other is for wine and liquor)

General Farman Golf Tournament	\$50 per person Includes Green Fees, Light Lunch & Cart	7:15 AM carpool 1 st tee time 8-8:30 AM RETURN 4 PM	Dead Horse Lake Golf Course Steve Manske, Golf Chairman 25-30 minute drive
Star of Knoxville Friday Deluxe Dinner Cruise	\$62 per person	Leave hotel 5:30 PM Board 6 PM Return by 9:30 PM	Great Buffet (prime rib, chicken, more) Music, dancing and sights. This has been big hit in past years

SATURDAY, October 8, 2016

EVENT	FEE	TIMES	LOCATION
BREAKFAST BUFFET/ ANNUAL GEN'L BUSINESS MTG	INCLUDED WITH FULL REGISTRATION	7:30 AM – 11 AM	Cumberland/LeConte Rooms (Breakfast 7:30 – 8:30 AM ONLY)
HOSPITALITY ROOM	INCLUDED WITH FULL REGISTRATION	Noon to 4 PM Get ready for banquet	Dogwood & Mountain Laurel Rooms 2 nd floor (1 room is for Beer & BX, the other is for wine and liquor)
On-your-own visit to downtown Knoxville	NO COST	Noon to 3 PM	Hotel shuttle available to Market Square & Gay Street, or a 9-minute walk
CASH BAR AT ANNUAL BANQUET	PAY-AS-YOU-GO BAR	5:45 PM	Outside of Cumberland /LeConte Ballrooms
ANNUAL ASSOCIATION BANQUET	INCLUDED IN REGISTRATION or \$45 for Banquet Only	Be seated at 6:30 PM SHARP	Cumberland/LeConte Ballrooms Remember to bring Entrée Meal Choice Ticket to Ballroom and place on plate.
HOSPITALITY ROOM	INCLUDED WITH FULL REGISTRATION	REOPENS AFTER BANQUET	Dogwood & Mountain Laurel Rooms 2 nd floor (1 room is for Beer & BX, the other is for wine and liquor)

SUNDAY, October 9, 2016

EVENT	FEE	TIMES	LOCATION
FAREWELL BUFFET BREAKFAST	INCLUDED WITH FULL REGISTRATION	7 AM – 10 AM	Cumberland/LeConte Ball Rooms

HOTEL CHECKOUT TIME IS Noon

Have a safe journey home! Hope to see you next year in Oklahoma City

Fellowship in the Company of Equals

MEMBER REGISTRATION FORM - 2016

YOUR REGISTRATION SHOULD BE MAILED NO LATER THAN **September 5, 2016.**
(COMPLETE THIS FORM EVEN IF YOU ARE ONLY GOING TO THE BANQUET)
Make hotel reservations for the Holiday Inn World's Fair Park: **1-800-264-1579**
Say 'Air Force Comm & ATC Assoc Reunion' or Code AFC

Member Last Name: _____ Member First Name: _____ Banquet Only _____
Spouse Last Name: _____ Spouse First Name: _____ Banquet Only _____
1st Guest Last Name: _____ 1st Guest First Name: _____ Banquet Only _____
2nd Guest Last Name _____ 2nd Guest First Name _____ Banquet Only _____

If additional space needed for guests, add separate page. **Who would you like to sit with at BANQUET:** _____
_____ (Make sure they are attending.) If you list names who don't attend you may lose preferred seating (8 chairs per table). Register early; seating plan can't be changed at last minute.

Member Address: _____ City: _____ State: _____ ZIP _____

E-Mail: _____ Phone Number: _____ - _____ - _____

First Convention? YES _____ Mode of Travel: Air _____ Auto _____ RV _____ Other _____

of hotel rooms booked (including guests) _____ Date of arrival: 10/05/16 _____ 10/06/16 _____ 10/07/16 _____ 10/08/16 _____ Other _____

Below find registration fee info and all dinner, golf and tour costs. Enter the number of people who will be participating in each event and total that amount. Enter the grand total due for all events, including donations and the registration fee.

Registration Fee Number of people _____ @ \$95 per person = \$ _____

Banquet Only Fee** Number of people _____ @ \$45 per person = \$ _____

**For members or guests attending only the Banquet and who did not pay a registration fee.

Thursday, Oct 6, 2016 8:30 AM – 3:30 PM Number _____ @ \$39 per person = \$ _____

- ♦ Museum of Science & Energy (Oak Ridge); includes BBQ chicken/pork lunch at Calhoun's on the River. Limited to first 90 registrations.

Thursday, Oct 6, 2016 6:30 to 8:30 PM Number _____ @ \$42 per person = \$ _____

- ♦ Prayer Dinner buffet – in hotel. Pan-Asian chicken & apple stuffed pork loin

Friday, Oct 7, 2016 7:15 AM – 3:30 PM Number _____ @ \$50 per person = \$ _____

- ♦ Gen Farman Golf Tournament at Dead Horse Lake Golf Course (includes cart and green fees and light lunch)

Friday, Oct 7, 2016

- ♦ On-your-own. 10 AM – 3 PM No cost

See Market Square & Gay Street, 3.5 blocks from hotel. Lots of eateries/shops.

Friday, Oct 7, 2016 5:30 PM – 9:30 PM Number _____ @ \$62 per person = \$ _____

- ♦ Riverboat Dinner Cruise. Deluxe buffet: Prime rib, chicken, plus music and dancing on the Star of Knoxville

Saturday, Oct 8, 2016

Noon – 3 PM No cost

- ♦ On your own. Walking tour of Market Square and other attractions (3.5 blocks from hotel, less than 9-minute walk or use complimentary hotel shuttle.)

● **DONATIONS TO HELP DEFRAY THE COST OF THE CONVENTION:** \$ _____

GRAND TOTAL = \$ _____

Saturday Oct 8, 2016 Seated by 6:30 PM sharp, Cumberland/LeConte Ballrooms

- ♦ **ANNUAL BANQUET** **MENU SELECTIONS (Indicate quantity for all attending banquet):**

_____ Angus Sirloin _____ Chicken Saltimbocca _____ Vegetable Portabello _____ Special diet (explain)

Make check payable to: AF Comm & ATC Assoc - 2016. Mail with all forms to: Hank Sauer, 111 Carson Lane, Oak Ridge TN 37830-7626. Cell: 865-705-0829, E-mail: DirAACs@comcast.net NLT Sept 5, 2016

Name & phone number of emergency contact while you're at convention: _____

Name Tag Form

How do you want your name(s) to appear?

Member's name: _____

Spouse or Guest name(s): _____

State of residence: _____ Is this your first convention? Yes ___ No ___

Specialty: _____

(Commander, Tower, GCA, Crypto, Comm/Maint/Staff, Radar/Radio Maintenance, Personnel, etc. or OTHER)

Ham Call sign: _____ Comm unit: _____ Command: _____

Favorite Location _____

Sample



2016 GOLF REGISTRATION INFORMATION FORM

Your name: _____ **Handicap:** _____ **Male or Female** _____

Name of Player(s) you would like to play with:

Name of player: _____ Handicap: _____ Male or Female _____

Name of player: _____ Handicap: _____ Male or Female _____

Name of player: _____ Handicap: _____ Male or Female _____

Dead Horse Lake Golf Course

Club rentals are available at the course (\$10-\$20, depending on clubs)

Cost per player: \$50 (includes green fee, cart and **light lunch**)

Total amount of golfing dollars included on your convention registration form \$ _____

Car pools will leave hotel lobby at 7:15 AM. First tee time: Approx. 8 – 8:30 AM

Will you be willing to drive a carpool vehicle? Yes ___ No ___ Drive time is about 30 minutes from hotel.

Golf Chairman is Steve Manske

**Meet a
member**

Walt McLain

Meet retired CMSgt Walt McLain. Walt joined our Association in 2003 and became Membership Director in 2007. He lends his vast experience and leadership skills to our Association and is actively committed to helping the organization grow and succeed.

Chief McLain was born in Jefferson City, TN, and entered the Air Force in Knoxville, Sept 9, 1962. He completed basic training at Lackland AFB, TX, and Air Traffic Control School at Keesler AFB, MS. He began his ATC career at Randolph AFB Control Tower in 1963. He was promoted to CMSgt Jan 1, 1981.

During his career he completed an associate's degree in Air Traffic Control, Community College of the Air Force; bachelor's degree, University of Nebraska at Omaha, 1972; AFCC NCO Academy 1973, Richards-Gebaur AFB, MO; AF Senior NCO Academy 1978, Gunter AFS, AL.

He was the AFCC and Air Traffic Control Association Air Traffic Controller of the Year in 1972, the AFCC NCO of the Year in 1973, NCA Radar Controller of the Year in 1976, Alaska Air Traffic Control Manager of the Year, 1980, and the SCD Air Traffic Control Manager of the Year in 1981.

He was inducted into the Air Force Communications and Information Hall of Fame in April 2008. Awards and decorations include the AF Achievement Medal, AF Commendation Medal (5), Meritorious Service Medal (5) and the Legion of Merit.

He retired from the Air Force on Oct 1, 1991. He is married to the former Carolyn Hackworth and they have two daughters, Kelly and Shannon. Walt and Carolyn reside in Knoxville, TN.

Assignments/Honors:

- Randolph AFB, TX, 1963, Control Tower
- Ernest Harmon AFB, Newfoundland, 1965, Control Tower and Rapcon
- Webb AFB, TX, 1966, Rapcon, Watch Supervisor and Training NCO
- Binh Thuy AB, RVN, 1968, Air Traffic Regulation Center, Watch Supervisor and Training NCO
- Myrtle Beach AFB, SC, 1969, Rapcon, Watch Supervisor and Public Information NCO
- Shemya AFB, AK, 1974, Tower and GCA Chief Controller
- Loring AFB, ME, 1975, Rapcon, Chief Controller, TERPs Specialist
- Griffiss AFB, NY, Northern Comm Area, 1976, TERPs and TRACALS
- King Salmon AFS, AK, 1979, Rapcon, Chief Controller (1931st CG, Elmendorf AFB, AK, Air Traffic Control Facility of the Year)
- Grissom AFB, IN, 1980, Rapcon, Chief Controller; in conjunction with Indianapolis Center (FAA) implemented Tower Enroute Control Operations during FAA Controller Strike of 1981
- Offutt AFB, NE 1982, Strategic Comm Division, Senior Enlisted Advisor
- Keesler AFB, MS, 1985, AFCC NCO Academy and Leadership School Commandant.
- Scott AFB, IL, 1987, HQ Air Force Communications Command Senior Enlisted Advisor; 1990, assigned to Airlift Comm Division, Air Traffic Control, TERPs and Special Projects

Awarded 4 Aircraft Saves while assigned at Myrtle Beach AFB

Awarded Master Air Traffic Controller Badge

First Air Traffic Controller to be Commandant of Command NCO Academy and Leadership School and then a MAJCOM Senior Enlisted Advisor.

A pillar of the AFCOMMATC Association.



Controller recalls antics of former Flying Tiger

AJAX, THE FLYING ACE

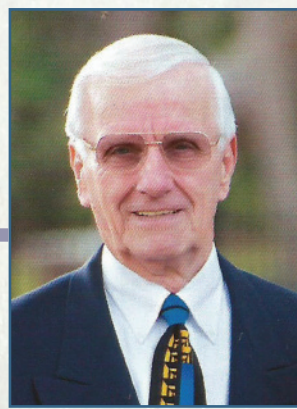
Ex-pilot worked as controller in Kimpo GCA in 1953



Photo from <http://www.aviationhistory.com/airmen/tigers.htm>

P-40E marked with the emblem of the China Air Task Force. The emblem consisted of the original American Volunteer Group tiger emblem (minus the seldom-used 'V for victory' component) adorned with an 'Uncle Sam' top hat, jumping through a Chinese nationalist star and clawing a Japanese flag to shreds. Pilots John Alison and "Tex" Hill on the left and Albert "Ajax" Baumler, and Mack Mitchell on the right at Kunming Airfield.

"We spent many hours in the flightline coffee shop listening to his war stories."



By Gene Anderson

I enlisted in the Air Force in June 1952. Basic training was at Lackland AFB, TX, and then on to Keesler AFB, MS, for control tower and Advanced Air Traffic Control school. In January 1953 I was assigned to Maxwell AFB control tower in Montgome-

ry, AL, a great assignment which lasted five weeks. I was told by my tower chief, TSgt Nettie Hopkins, that I was going to Korea.

I arrived in Korea in late March 1953 assigned to the 1993rd AACS Squadron Air Traffic Control Center at Kimpo AFB (K-14). The war was still going on. I soon learned that we had an ex-Flying Tiger pilot as a controller in the Ground Controlled Approach unit. This was my first contact with A2C Baumler (Ajax). He had made Ace (5 victories) with the Tigers in China and held the rank of Major then. He went through the RIF after World War II and was made a MSgt.

Then and now, Gene Anderson, AF Controller and member of AF Comm & ATC Association



Gene Anderson, Keesler AFB, 1952.

While at Mitchell AFB on Long Island, NY, in 1948 he was involved in a situation that resulted in losing all his rank. He was working his way back up as a GCA controller and he was a very good one. I heard there were pilots who requested that he be the final approach controller for them when the weather was at minimums.

After the war was over in July 1953, a new control center was being built in Taegu, Korea, 150 miles south of Kimpo. In October 1953 Kimpo Control Center and Taegu Control were combined in Taegu near 5th Air Force headquarters (Rear) controlling all of South Korea. We became part of the 1973rd AACS Squadron.

In March 1954 I returned to the U.S. assigned to Hunter AFB in Savannah awaiting completion of a new TRACON being built. After a few months of working in the mobile GCA unit it was decided that the FAA would take over the TRACON. We were declared surplus and had a choice of several bases for our next assignment. I chose Perrin AFB control tower in Sherman, TX. That choice would, unknown at the time, reunite me with Ajax Baumler.

By now Ajax was an A1C and still a GCA controller but a fighter pilot without a war. His war now was allegedly with the bottle. A sober Ajax was the most interesting man I ever met. We spent many hours in the flightline coffee shop listening to his war stories. His after-hours escapades and antics were something else. He lived off base but

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Albert J. "Ajax" Baumler

A simple internet search offers a wealth of interesting stories about Albert J. "Ajax" Baumler. All make it clear that he was an unconventional military man. He was born in New Jersey in 1914 and joined the Army Air Corps as a radio operator in 1933. After completing training in 1934, he worked as a radio code interceptor. He later got his wings, was discharged, and worked briefly



as a commercial co-pilot before signing a contract in 1936 with the Spanish government to fly for the Republic after a Nazi-backed revolt started the civil war there. His contract was for \$1,500 a month plus \$1,000 for each aircraft shot down.

After he proved his abilities, he was assigned to fighter squadrons flying some of the very last biplane fighters, I-15s and the first monoplane fighter with retractable wheels, the Russian-built I-16. He and Frank Tinker were the most accomplished Americans to fly for the Spanish. In 1937 they participated in some of that year's most important battles.

By mid 1937, Spain no longer needed the Americans' services. Baumler rejoined the US Army Air Corps and had signed up with the Flying Tigers but the Passport Office gave him trouble and delayed his departure for Asia. Fellow fliers were already in Burma, but he was on his way to China when the Japanese shot up his passenger plane at Wake Island on Pearl Harbor day. He escaped injury and had to fly to China in the other direction, via the Atlantic, Africa and India.

In his first victory over a Japanese plane, he simultaneously became an Ace (with 5 victories) and the first American pilot to down a plane from each of the three Axis enemies (Germany, Italy, and Japan.) He ended the war as Major Ajax Baumler.

After the war Baumler was turned down for a regular commission for past indiscretions. He accepted a permanent rank of Master Sergeant to stay in the service. Just after the war he served at Gander AFB, Newfoundland. During the Korean War, he served as a Ground Controlled Approach operator and was selected to direct the landing of General Dwight D. Eisenhower's plane when he made his famous visit to Korea. His final station was Perrin AFB, TX in 1965. He was placed on the retired list at his reserve rank of Major based on combat decorations.

In retirement, Baumler and his wife (whom he met and married while at Perrin) settled in Denison. He died in 1973.

One account states that Baumler was at Goose Bay, Labrador, in 1947 or 1948 in the 135th AACS Squadron (765th AACS Group) and was in charge of the GCA unit. Baumler was then a MSgt, though he apparently later served at a lower grade: "... at Perrin AFB he was a Staff Sergeant (E-5), assigned to Base Operations.... he never bragged about his flying career, although one could clearly see the pilot wings on his uniform..."

From previous page

whatever his condition was his late night destination was the enlisted AACS barracks. One night after I came off my shift after midnight I found Ajax asleep in my bunk. When I woke him to find another place to sleep, I realized all he had on was the blanket covering him. His uniform was soaking wet and muddy hanging on a chair. As I walked this somewhat tipsy, almost nude Flying Tiger Ace to another bunk, I thought no one is going to believe this.

Ajax and I made SSgt on the same orders. He with 20 years and me with 3 years, 9 months.

Ajax married a local lady and straightened out his life living on a small farm near the base.

I reenlisted in 1956 and after three years at Perrin I was transferred to England AFB, LA, to open a new TRACON in September 1957.

In July 1958 it was time for another overseas assignment which turned out to be Kindley AFB, Bermuda. This was a three-year accompanied tour with my family. The Air Force controlled 150-mile radius of the island handling all of the civil and military air traffic. The 1934th AACS Squadron was my favorite duty. We had the chance to work the control tower, GCA, Center and approach control all in the same building. In 1961 we returned to the U.S. and I was discharged July 15 at Charleston AFB, SC.

I went directly into the FAA retiring in 1987 from Jacksonville Tower, Jacksonville FL.



**Kindley AFB
Tower/
RAPCON,
Bermuda,
1960.**



Perrin AFB, TX Tower 1956 (Sherman, TX).

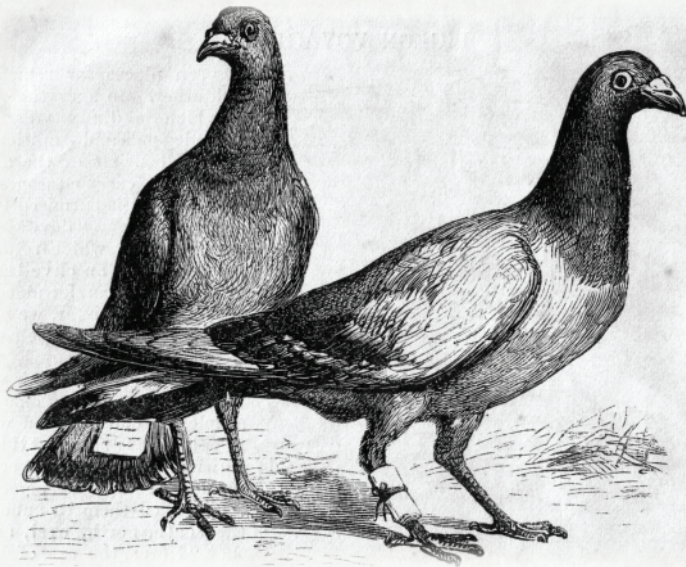
Have any other members crossed paths with Ajax? Share your stories with us.

**1993rd AACS Squadron,
Kimpo AFB, Korea. Kimpo
ATC is behind sandbags.**



War Pigeons

Tales of gallantry during wartime



By Ken Reiff
AFCOMMATC Historian

Pigeons were a remarkable species used very successfully during WW II. Take for example, perhaps the most famous pigeon of all, the blue-checked (and appropriately named) GI Joe. On Oct 18, 1943 an American infantry division called for aerial bombing on German-held Colvi Vecchia, Italy. When the Germans withdrew unexpectedly, thousands of British soldiers marched in, unaware of the impending attack, according to the account told by the Royal Pigeon Racing Association in England.

The Americans finally saw the disaster in the making, but radio contact had been broken. Instead, GI Joe was let loose with a message to abort the bombing. He reportedly made the 20-mile trip in 20 minutes, arriving just as the bombers were about to take off. He later became the only American pigeon to be awarded the Dickin Medal, Britain's highest honor given to an animal.

“... the RAF estimated that one of every seven crewmen who were rescued at sea owed his life to a pigeon.”

Of course if you want a real four-hanky story, you have to hear the tale of Blackie Harrington, who had been assigned to Guadalcanal near a place called the Catcher's Mitt because so many bombs were dropped there.

Blackie was sent off to headquarters with details of the location of 300 Japanese troops. He delivered the vital information, but part of his neck and chest was blown away by shrapnel en-route. He was so badly hurt that the soldiers reported water draining out of his chest when he was given a drink.

Still, he was patched up and spent the rest of his life breeding with Madame Murphy and the rest of her feathered harem, according to a story in the Aug 2007 edition of the magazine *America in WW II*.

There are many such stories that have been common place since the birds' first documented use by the Romans more than 2,000 years ago. They can return to their loft from 1,000 miles out and literally can fly a mile a minute over short distances.

Contd on next page

From previous page

In 1917, against all predictions that the birds were superseded by wireless telegraph systems, General of the Armies John Pershing urged the establishment of a pigeon service in the U.S. Army Signal Corps. So it was with little surprise that just one month after the Japanese bombed Pearl Harbor, the Signal Corps announced that it would pay \$5 for young, healthy birds of either sex. Donated birds arrived by the hundreds.

At its peak the pigeon service boasted 150 officers and 3,000 enlisted men and 54,000 pigeons. The British used another quarter million pigeons and the Germans used them too. To counteract the use of pigeons all sides used falcons to chase after the pigeons until they realized the falcons didn't care which nation's pigeon they attacked and abandoned the practice, according to a 2008 New York Times story.

The breeding took place at four bases—Fort Monmouth, Fort Sam Houston, Fort Benning and Camp Crowder. Training took about two months. When a bird was about four weeks old, it was taken from its nest and placed in a mobile loft. The lofts were moved daily for about two or three weeks as the birds flew short flights in the morning, noon and evening so they could get aerial bearings. After proving it could fly 60 miles, it was ready for a real mission.

At the front, handlers reportedly coaxed more speed from the birds by withholding food or introducing another male to the bird's mate. Hunger and jealousy produced faster returns.

Delivery systems became more sophisticated too. In addition to those small tubes on their legs, small

pouches could be looped over their backs. Paratroopers would jump out of airplanes with pigeons in the pockets of a vest designed by the Maidenform Brasiere Co. Eventually the Army developed a cage that could be dropped successfully to give isolated troops a means of communication. These were used by the thousands during the Normandy invasion so French civilians could send back information about German installations and troop movements.

It's their individual tales of gallantry that remain so amazing. In October 1943, a Royal Air Force Catalina flying boat was forced to ditch in the Hebrides. Weather conditions made a search impossible, so the victims let Night Vision fly off with their coordinates. The bird battled 25 mph headwinds and visibility reduced to 100 yards at times, but he made it to a base 60 miles away and the crew was saved. In all, the RAF estimated that one of every seven crewmen who were rescued at sea owed his life to a pigeon.

Of the 53 Dickin medals presented during World War II, 32 went to pigeons. It wasn't until 1957 when Col Clifford A. Poutre, who was the chief pigeoneer from 1936 to 1943, let free the final bird when the Signal Corps Pigeon Service was closed.

You can see Poutre, who died in 2008 at age 103, in film clips of "The Pigeoneers" at www.pigeonsincombat.com.

Historian's note: Our thanks to Roger Schlueter, Belleville News Democrat, for his article published Wednesday, Sept 23, 2015, which we have liberally used for this article.

CHER AMI

Identification: N.U.R.P. #615, Black Hen

War Record: Delivered 12 important messages from the Verdun front to loft at Rampont. Average distance 30 kilometers. Average time, 24 minutes. Returned on last occasion with leg shot away, message tube containing important document hanging by tendon. Missile which carried away leg also passed through breast. Wonderful vitality of bird enabled it to recover quickly. In this seriously wounded condition, "Cher Ami" flew 40 kilometers in 25 minutes, being liberated at 2:30 PM, arriving at loft at 3 PM. Point of liberation was Grand Pre.

General Information: "Cher Ami" was returned to the United States with other distinguished pigeons on the transport "Ohioan" on April 16, 1919. She lived only a short time after her historic flight, dying at Camp Alfred Vail, NJ,

on June 13, 1919. Her body was mounted and placed in the Smithsonian Institution, U.S. National Museum, Washington, DC, on exhibition.

The French "Croix de Guerre" was bestowed upon very few pigeons during World War I, 1914-1918. "Cher Ami" received this Croix de Guerre with palm (citation a l'orde de l'Armee) for playing an important part in the communications between the Forts of Verdun, surrounded by the Germans during several months service. (<http://cecom.army.mil/historian/updates/19.htm>)



The Way We Were ...

Images from the Heritage Hall at Scott AFB, home of AFCC's successor, the Air Force Network Integration Center.

The Enigma machine, on loan to AFNIC from the National Cryptologic Museum, is an encryption device developed in the 1920s. It was originally intended for use in the banking industry for secure communications but the concept never caught on. The German military, on the other hand, saw the Enigma as an undecipherable machine and used it to encrypt and decrypt communications during WWII.

The machine used about 380-bit encryption (about 10^{114} possible combinations) which is more than what is used in many e-commerce websites or even Department of Defense Common Access Cards. Depending on the machine, three to five electro-mechanical rotors substituted cipher letters for plain text letters.

One of the most significant aspects of the Enigma is not its security, but its vulnerabilities. The Germans were confident they were sending undecipherable messages. However, Allies regularly broke the Germans' code, intercepted, and deciphered their messages, which provided a critical advantage in the Allies' victory.

Today, as the nation's reliance on cyberspace contin-

ues to grow, information assurance is more important than ever.

"The Germans' Enigma code was cracked in part due to human carelessness," said Warren Neary, AFNIC Historian. "Allied mathematicians were able to solve the puzzle because some German military personnel did not follow security measures, allowing Allies access to Enigmas and classified documents."

The device on display at AFNIC is a four-rotor Enigma typically used on German U-boats during WWII, and is a welcome piece to the Heritage Hall's extensive collection of military communications and information artifacts.

(Air Force Network Integration Center, Scott AFB, IL)



In theory, the Enigma was very secure. With three rotors in use, the machine could step 17,575 times without repeating. By rearranging the rotors, 105,456 (17,576 X 6) settings were possible without repetition. Other Enigma variations—plug boards, additional rotors, etc.—could increase the permutations to astronomical figures. *(Courtesy photos/AF ISR Agency History Office)*



For each depression of the keyboard, an electric "signal" is sent through the stecker board, passes through the rotors, then through the reflector disc, and is reversed back to the stecker board and displayed on the light board. The rotors work like an odometer. For every letter pressed, one turn. After 26 letters are pressed, the second rotor turns, and so on. Because the machine did not "send" messages, a second person was required to write down which letter was lighted. The encoded message would then be sent via Morse code or voice.

War tested responsiveness of comm operations

VIETNAM 50th

The Air Force, along with more than 9,000 organizations across the country, is a Commemorative Partner to help Americans honor our nation's Vietnam Veterans and commemorate the 50th anniversary of the Vietnam War.

Authorized by Congress, established under the Secretary of Defense, and launched by the President in May 2012, the Vietnam War Commemoration recognizes all men and women who served on active duty in the U.S. Armed Forces from Nov 1, 1955 to May 15, 1975.

Nine million Americans, approximately 7 million living today, served during that period, and the Commemoration makes no distinction between Veterans who served in-coun-

try, in-theater, or were stationed elsewhere during those 20 years. All answered the call of duty.

By presidential proclamation issued on May 25, 2012, the Commemoration extends from its inaugural event on Memorial Day 2012 through Veterans Day 2025.

Commemorative Partners – local, state and national organizations, businesses, corporations and governmental agencies – have committed to publicly thank and honor Vietnam Veterans and their families on behalf of the nation and have pledged to host a minimum of two events annually.

To learn more about the Vietnam War Commemoration, go to: www.vietnamwar50th.com



A C-141 rolls past the radar approach control vans between the two runways at Da Nang AB, South Vietnam. Inside the vans, air traffic controllers of the 1972nd CS directed all aircraft in the Da Nang area 24 hours a day.

The following is taken from the AFCC intercom, Feb. 5, 1987. See image "Signal clear" on next page.

When the headlines were about air strikes over Hanoi, AFCS communicators and air traffic controllers were there. The war in Vietnam dramatically tested the responsiveness of communications operations to the varied demands of tactical combat operations and counterinsurgency.

One of the most important functions performed by the Allied air control system was air traffic control. The first U.S. Air Force team to go to Southeast Asia for this support was a detachment of the

The teletype centers at Tan Son Nhut handled 1,775,000 messages during 1963.

1st Mobile Communications Group which arrived in Thailand Feb 15, 1961. The 1st MCG assisted the Thai air force by providing air route traffic control. Later, other AFCS units deployed to the area to support the 2nd Air Division, the Vietnamese air force and other Allied forces.

At the end of 1961, the Pacific Air Forces directed that a tactical air control system be installed and operational in South Vietnam in

two weeks. Modern comm systems on mainland Southeast Asia were scarce. Airfields and comm facilities, left from the French when they fought in Vietnam, were outdated and difficult to maintain.

The 1st MCG's mission was to provide voice and teletype service at Tan Son Nhut, Pleiku, Da Nang, and Nha Trang Air Bases, South Vietnam. This represented the beginning of a lengthy and heavy involvement for AFCS in Vietnam.

AFCS went to work. After the first aircraft landed without benefit of navigational aids, the AFCS people immediately unloaded equipment and prepared for the installation of facilities which

Signal clear:
AFCS communicators in Vietnam did the job

By Suzanne Henny
AFCS Public Affairs
Signal AB, Va.

During the 1960s, communication became involved in a conflict that was to split public opinion in the United States and other countries. When some people say it should have never happened, while others say the United States was trying to force peace in a country which had no responsibility to remain peaceful. One thing is true: the people of the Air Force Communications Center were there behind the scenes using every piece of communications equipment available.

Communications tested

When the hostilities were about air traffic control, AFCS communicators and air traffic controllers were the first to be tested. The air in Vietnam dramatically tested the communications of communications equipment in the world's demands of tactical operations and maneuverability.

One of the most important functions performed by the AFCS in Vietnam was air traffic control. The first 11 Air Force units to go to Vietnam were for traffic support as a detachment of the 1st Mobile Communications Group which arrived in Thailand Feb. 15, 1962. The rest of the AFCS units followed in waves. The first AFCS units arrived in the area to support the 3rd Air Division, the Vietnam Air Force and other AFCS units.

By the end of 1962, the Pacific Air Forces directed that a tactical air control system be installed and operated in Vietnam. This system was to be a tactical air control system on an individual aircraft basis. It was to be a tactical air control system on an individual aircraft basis. It was to be a tactical air control system on an individual aircraft basis.

When a soldier gets a letter from home, he's happy. When he gets down the MARS telephone receiver, he's ready to scan a soldier's wife.

1,180. The operations of the commander of the 204th CG as deputy commander of the Southeast Asia Region means the 1960s and the 1970s had a MARS receiver. When a soldier gets a letter from home, he's happy. When he gets down the MARS telephone receiver, he's ready to scan a soldier's wife.

AFCS people immediately realized equipment and procedures for the operations of facilities which would provide communications between operating locations. They used portable equipment at the beginning and many times the location was remote and hard to get to, which made it more difficult to maintain.

AFCS also had to be flexible in its communications. The AFCS units in Vietnam were not only to provide communications for the AFCS, but also for the other units in the area. This meant that the AFCS units had to be able to communicate with the other units in the area.

Climate a problem

Just as our sophisticated equipment didn't fire well in the jungle during World War II, the same equipment in Vietnam had to be air conditioned or heat sensitive equipment. Many times, the equipment was not air conditioned, but that didn't matter. The AFCS units in Vietnam were not only to provide communications for the AFCS, but also for the other units in the area.

MARS boosts morale

The Military Air Force System is a vital part of the AFCS in Vietnam. It provides a means of communication for the AFCS units in Vietnam. It provides a means of communication for the AFCS units in Vietnam.

Reduction in force

By the late 1960s, AFCS was planning to reduce the size of the AFCS in Vietnam. This was done to reduce the size of the AFCS in Vietnam.

Incoming troops increase

The mid-1960s was a period of dramatic growth for United States participation in the Vietnam War. The most dramatic increase occurred from May 1965 to July 1969, when the number of incoming troops rose from 60,000 to 550,000.

AFCS provided direct during Vietnam throughout

U.S. Air Force photo shows AFCS provided direct during Vietnam throughout the 1960s.

the same happened in Vietnam. Teletype centers had to be air conditioned or heat-sensitive equipment wouldn't operate. Conditions didn't stop the 1964th CG. The centers at Tan Son Nhut handled 1,775,000 messages during 1963.

AFCS also played a role in engineering, procuring and installing a tropospheric scatter system to handle long-haul comm throughout Southeast Asia. By September 1962 a 72-cchannel trunking system had been completed and provided the heart of fixed comm for the area.

AFCS established a weather relay center at Tan Son Nhut AB in 1964. AFCS also installed a wideband comm system with 60 voice channels between Nha Trang and Clark AB using under-water cables and microwave systems.

Flight checking by AFCS' 1867th Facility Checking Squadron became more dangerous because they had to approach the runways at higher altitudes since Viet Cong were often sitting off the ends of the runways. Flight checking aircraft were hit by hostile fire 22 times by mid-1969.

The most dramatic increase in growth for U.S. participation occurred during 1965 when the number of incoming troops rose from 60,000 in July to 250,000 by the end of the year.

The buildup strained the AUTODIN network when traffic at Clark AB increased from 500,000 to 950,000 messages per month in

1965. AFCS responded by deploying parts of several of its mobile comm groups, as well as assigning many of its communicators to combat zones.

The buildup also created a need for a new organization, the 1974th CG at Korat AB, Thailand, Nov 1, 1965.

Another change came when two C-140s assigned to the 1868th FCS at Wiesbaden AB, Germany, were sent to Vietnam in the mid-1960s to assist the 1867th FCS, which had only two C-140As.

AFCS suffered its first casualty in 1967 when SSgt. David Fasnacht was killed during a mortar attack on Da Nang AB.

The control towers at Da Nang and Bien Hoa averaged more than 71,000 and 67,000 combined operations per month during 1967. By May 1968, air traffic operations reached 80,459, the greatest count of aircraft operations known to occur at any airport in the world.

Contd on next page

AFCS: Its Action In Southeast Asia

Over 3 Million Aircraft Operations Handled By 1964th During 1970

Telephone Poles Go Into Water

14

AFCS provided direct during Vietnam throughout the 1960s.

U.S. Air Force photo shows AFCS provided direct during Vietnam throughout the 1960s.



Teletype equipment, shown in this photo of the communications center at Tan Son Nhut AB, South Vietnam, required increased air conditioning and supply support.

From previous page

The Military Affiliate Radio System played a great role by improving the morale of service people with phone patches and MARSgrams. When troops tried to call home in 1965, only 30 calls per day could be handled at a cost of \$12 for three minutes. The MARS chief had portable MARS radio stations airlifted to Vietnam so the military members could call home through a phone patch or MARSgram. It was almost free (the caller sometimes paid a dollar or two) and a boost to homesick airmen.

By the first six months of 1968, MARS operators handled more than 80,000 phone patches. During the next 12 months, they handled 210,000 patches.

By the late 1960s, AFCS began planning to reduce the size of the 1st MCG as the US considered withdrawing its troops.

The Vietnam War showed how capable AFCS was of providing communications wherever, whenever needed.

(Basic source: "AFCC: Providing the Reins of Command, 1938-1986," AFCC History office)



As military operations increased in Southeast Asia, AFCA controllers often worked under fire to maintain control of aircraft traffic.

Transportable facilities, such as this mobile control tower operated by two members of the 1st Mobile Comm Gp, gradually gave way to permanent facilities.



AFCS controllers used a variety of radar equipment to control aircraft. Here, a C-123 passes a radar approach control unit at Cam Ranh Bay AB, South Vietnam.



**1877th Comm Sq
Bien Hoa, RVN**

1877th Communications Squadron emblem, sent to us by Don Cobb.

The 1877th CS was Base Comm on Bien Hoa. It was designated and organized on Nov 1, 1965. Redesignated as 1877th Information Systems Squadron on July 1, 1984; 1877th Communications Squadron on Nov 1, 1986; 49th Communications Squadron on Nov 15, 1991.

Sentinel of space found in wilderness

By Dave Smith
1st Space Wing Public Affairs

CLEAR AFS, Alaska -- Among bears, moose, wolves and wolverines of Alaska's interior is a silent sentinel of space--Clear Air Force Station. Its personnel keep an eye on things above for the sake of tactical warning of ballistic missile attacks against the U.S. and Canada and space situational awareness.

The 11,500-acre installation sits about 80 miles southwest of Fairbanks. It is one of more than 20 geographically separated units within the 21st Space Wing, headquartered at Peterson AFB, CO. Clear AFS is home to the Air Force's 13th Space Warning Squadron and is the oldest missile warning site in North America.

The station is part of the Ballistic Missile Early Warning System, providing early warning of inter-continental ballistic missiles and sea-launched ballistic missiles to North American Aerospace Defense Command. Clear AFS also provides surveillance data to the U.S. Strategic Command concerning objects orbiting in space.

To carry out those missions, the 13th SWS is equipped with a Solid State Phased Array Radar System, an 11-story tall, flat-topped triangular structure with two radiating faces composed of nearly 2,000 active elements each. The system peers about 3,000 miles into space and covers a vast stretch of real estate from the Arctic to the Pacific oceans including the west coast of the continental U.S.

Mission timing is critical. Within 60 seconds personnel are required to respond to potential threats, passing information to the Missile Warning Center in Colorado Springs, CO, for threat assessment.

To pull off such a detailed mission with that degree of precision takes a high level of teamwork and skill. At Clear AFS that means a blended group of active-duty Airmen and members of the Alaska Air National Guard from the 213th Space Warning Squadron.

The Air Force owns the mission and installation and the Air National Guard is the force provider for 85 percent of space operators and 100 percent of security forces.

Temperatures can range from -50 degrees in winter to 90 degrees in summer. The dry and hot climate provides optimal conditions for fires on or near base during summer months, said 1st Lt. Steven Havens, the 213th SWS chief of operations support.

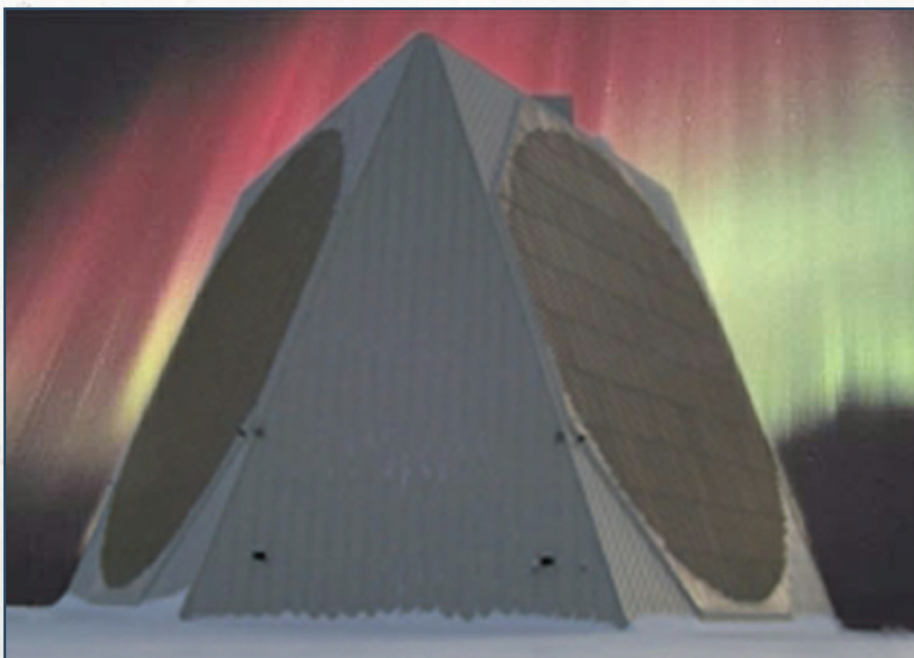
In the coldest times of winter, Havens said there are interesting situations personnel must deal with.

"Tires develop flat spots from sitting on pavement and take several miles of a jarring ride to smooth back out and become round," he said. In the winter, vehicles must be plugged into outlets to prevent engine blocks, batteries, and oil from freezing solid.

Wildlife thrives in such remote locations. Both black and grizzly bears frequent the area and special public announcements are broadcast, warning people away from the sighting areas. Base personnel regularly see moose, eagles, fox, coyote, wolverines, lynx, and the occasional caribou on the drive home.

Not many people live at the station full time. About 300 of them have dorms where they live during their duty days, but most people working at the base drive long distances to their jobs each week. Many drive 300 miles one way each week while others drive the 150-mile roundtrip to Fairbanks daily.

No matter the challenge, the Airmen and Guard members of Clear AFS continue to thrive and provide protection and space situational awareness for America and its allies on the North American continent.



The Solid State Phased Array Radar System at Clear AFS stands under the Aurora Borealis. The system rises more than 100 feet from the Alaskan interior to provide early warning of ballistic missile attacks. (Courtesy photo)

History of ATC badge



Air Traffic Control was last one 'in the flying loop' to get occupational badge

By **Bill Malec**



When I was a kid

I was a big DRAGNET TV show fan. Each episode would open with the image of a police badge followed by the main character, Detective Joe Friday, saying "I carry a badge."

Occupational badges, of which ATC is one of many in the current Air Force inventory, have been around since long before Joe Friday or the Air Force.

General George Washington awarded the Badge of Military Merit to deserving Continental Army troops in 1782 for valor on the battlefield and extraordinary loyalty to the unit.

Military chaplains have had distinguishing devices to identify them since the 1880s.

When the Air Force emerged from under the Army in 1947 it brought some existing badges with it. Those were predominantly pilot and related aeronautical badges, like navigator. There were also badges for aerial gunners and bombardiers, as well as aviation technicians, like mechanics and turret specialists.

According to Col (ret) Norman Smedes, a Headquarters Air Force Communications Service senior staff officer at Richards-Gebaur AFB, MO, the ATC lead-

ership was long perplexed that ATC was the only career field on the operational side without a badge. He made trips to the Pentagon to advocate for a proposal to fill that square. His efforts and those of his staff finally generated success but he retired before the official badge was issued.

In 1975 the AF Uniform Board approved the ATC badge, culminating five years of effort by AFCS officials.

The front page of the April 4, 1975 edition of AFCS' *intercom* newspaper proclaimed, "New badge to recognize air traffic controllers." The article spelled out all the details of the design, wear instructions and criteria for the award of the basic, senior, and master badges.

According to the article, "The badge was to recognize and identify those personnel who by virtue of job assignment, special training, and attainment of unique skills, have a direct distinctive role in support of the USAF flying mission."

The article stated that ATC was the last one "in the flying loop" not authorized a distinctive badge.

The AFCS ATC business was pretty brisk at the time, with 5,700 enlisted controllers and 450 officers handling more than 41,000 operations per day at 271 facilities worldwide. That's more than 15 million operations annually.

One thing the badge did not do was replace the proficiency pay that controllers were previously enjoying. The timing of the loss of pro pay and the authorization of

the badge left many wondering. CMSgt Walt McLain, a career controller and former AFCC senior enlisted advisor, said, “Funny how many old controllers still believe the badge cost us pro-pay. That was and is still a myth.”

Some controllers vetoed wear of the badge, which was optional, as a silent protest. This was much to the chagrin of the leadership who had worked hard to get it approved.

The badge was also later authorized for wear by the AFCS and later AFCC commander and vice commander while occupying these senior leader jobs. That didn’t go over so well with some controllers, but according to Col Derrel Dempsey, who was on the headquarters AFCC staff at the time, the additional exposure the badge received increased awareness and enhanced the prestige of the ATC business.

In the early 1990s Gen Merrill McPeak took the Air Force helm when he became chief of staff. He took action which opened the badge flood gates and allowed every Air Force career field to have one of their own.

Fast forward to today. The career field and the badge that represents it continue to be held in high regard by those in the ATC business, operators who use the services day-to-day, the Air Force population at large, and those in the civil sector.

Like the old Smith-Barney investment firm TV commercial, where John Houseman proclaims, “They make money the old fashioned way...they earn it!

ATC badge wearers can proudly proclaim the same.

The career field is not for the faint of heart. Like the Good Book says, “Many are called, few are chosen.” The washout rate is high. The 334th Student Squadron commander at the ATC schoolhouse at Keesler AFB, MS, Lt Col Steve “Mully” Mullins, reports that almost 25 percent of aspiring controllers who start the basic ATC course don’t finish.

Once ATC trainees reach the field they begin on-the-job qualification training. It takes between 6 and 15 months to get initially certified, depending on the complexity of the facility and traffic availability to support live training. Another 25-35 percent of hopefuls aren’t successful at this stop and are forced to find other employment.

Ultimate success is well earned and warrants recognition. This comes in the form of a traditional pin-on ceremony. These are sometimes formal, sometimes informal affairs held in front of peers, family, friends or squadron leadership.

It is a milestone event in a young controller’s early career. It is said that his/her first duty day after being rated is the most challenging. Absent their trainer plugged in and monitoring in the background, they have no one to depend on but themselves as they “Tell pilots where to go!” Joe Friday would be proud!

(Col Bill Malec is a member of the AF Comm and ATC Association)



Flight Check Reunion

BELLEVILLE, IL – One weekend before the rainy Myrtle Beach gathering of the Comm & ATC Association last fall, the USAF Flight Checkers enjoyed fine weather at Our Lady of the Snows Shrine near Scott AFB. They gathered by "Waxy 59", beloved C-140 JetStar, tail number 59959, on display at the Scott Heritage Air Park outside the base's Shiloh Gate. The reunion included a tour at AMC Headquarters where they were briefed by the 618th Air Operations Center, also known as the Tanker Airlift Control Center (TACC). They were driven down flag-lined Heritage Drive where one might get a peek at old P40, (AFCC Hq building) and on to the flightline for a tour of a current

Flight Check Canadair 604 aircraft flown in from Oklahoma City by a mixed AF Reserve/Det 1/375th AW crew. During an afternoon business meeting, there was discussion about the 2017 reunion. Oklahoma City, Colorado Springs, and Biloxi/Keesler received the most favorable comments. The Friday night banquet was attended by 100 members and guests. (Roger Bacchieri)

AFSPC announces cyber winners

JBSA-LACKLAND, San Antonio - The Gen John P. Jumper Awards honor the former Chief of Staff of the Air Force, who institutionalized warfighting integration as a Deputy Chief of Staff function.

The award recognizes individuals for sustained superior performance and outstanding contributions to the integration of Air Force or DOD warfighting and/or operations support capabilities. Below are the 24th AF cyber award winners in warfighting excellence.

- AFSPC Cyberspace Outstanding

Company Grade Officer–Capt Brian A. Belongia, 90th Information Operations Squadron, Joint Base San Antonio-Lackland, TX

- Cyberspace Outstanding Field Grade Officer–Lt Col Matthew C. Hensley, 5th Combat Communications Group, Robins AFB, GA

- Outstanding Civilian Category II –Terry A. Tutt, 83rd Network Operations Squadron, Joint Base Langley-Eustis, VA

- Outstanding Civilian Category III–Charles G. Heaton, 90th IOS, Joint Base San Antonio-Lackland

- Outstanding Cyber Warfare NCO–SSgt Alan R. Griffin, 92nd IOS, Joint Base San Antonio-Lackland

- Outstanding Cyber Warfare Senior NCO – MSgt Stuart C. Wilson, 624th Operations Center, Joint Base San Antonio-Lackland

- Outstanding Cyber Operations Airman–SrA Lee S. Watkins, 26th NOS, Maxwell AFB, Gunter Annex

- Outstanding Cyberspace Support Senior NCO–SMSgt Brian W. Yelton, 5th CCSS, Robins AFB

- Gen Edwin W. Rawlings Team Award–Cyber Protection Team/Standup Team, 38th Cyberspace Readiness Squadron, Scott AFB, IL
- Maj Gen Harold M. McClelland Award–5th CCG, Robins AFB

- Lt Gen Harold W. Grant Award–315th Cyber Operations Squadron, Fort George Meade, MD

- Gen John P. Jumper Award For Excellence In Warfighting Integration, Officer– Capt Christopher H. Chin, 83rd NOS, Joint Base Langley-Eustis

- Gen John P. Jumper Award For Excellence In Warfighting Integration, Enlisted–MSgt Kodi D. Bailey, 91st COS, Joint Base San Antonio-Lackland



Flight Check Reunion

Front row, right side, Jim Smith and Gene Miller, both active in setting up the reunion, are third and second from right, wearing the older blue flight check shirts, while Mike Ball is 4th from right in that row and wearing this year's new white flight check shirt. Second row, right side,

LeGault, who kept our organization going for many years, is behind Mike Ball; just to his right is "DY" Dempsey. Both DY and Marlin are wearing ball caps. DY was instrumental in getting the JetStar included in the Heritage Park at Scott AFB. (Jim Smith)

Cyberspace Wing activates group

JBSA-LACKLAND, San Antonio -- The 688th Cyberspace Wing activated a new group and two squadrons Dec. 1, 2015, at Scott AFB, IL, and three additional squadrons at Joint Base San Antonio-Lackland Dec. 3.

Col. Michelle Hayworth, 688th Cyberspace Wing commander, presided over the group activation, and Col. Roger Vrooman, 688th Cyberspace Operations Group commander, presided over the activation of the group's squadrons.

The lineage of the 688th COG goes back to Dec. 1, 1952, with the designation and activation of the 1913th Airways and Air Communications Service Squadron at Joint Base Langley-Eustis, VA.

The 1913th held many different names until its deactivation in 1991. Sixty-three years later, it was reactivated as a cyberspace operations group to provide mission assurance for National, Joint and Service-level mission partners.

All of the cyberspace operations squadrons will be comprised of 3 Cyber Protection Teams tasked with defending DOD networks and mission systems.

Col Vrooman will lead more than 500 cyberspace professionals conducting operations to protect Air Force and DOD cyber assets.

The group's five squadrons will fall under 24th Air Force.

Co-located with the group, the 835th COS is the descendent of the 835th CS at Ramstein AB, Germany. The 835th and its three Cyber-space Protection Teams are responsible for defensive cyberspace operations.

The 837th COS is a new squadron responsible for defensive cyberspace operations supporting DOD and Combatant missions.

The three remaining squadrons activated under the group at JBSA-Lackland Dec 3.



Juniper Cobra: Comm check, 1, 2, 3

A mass communications center was set up by three combat comm units in support of exercise Juniper Cobra 16, in Israel Feb 25 - March 3. This is the first time Airmen from the 1st Combat Comm Squadron, 52nd CBCS, and soldiers from the 44th Expeditionary Signals Battalion worked together in a single exercise. The airmen and soldiers worked together to maintain communication for more than 1,700 Total Force service members and civilians who participated. Juniper Cobra used ballistic missile defense computer simulations to train U.S. and Israeli service members. (Air Force photo by SSgt. Stephanie Longoria)

The 833rd COS is responsible for national defensive cyberspace operations.

The 834th COS traces its lineage to the 2068th CS under the Air Force Communications Service organized Jan. 1, 1963 at Eglin Air Force Auxiliary Field, FL. It was redesignated twice before it was deactivated March 24, 1993. The 834th is responsible for defensive cyberspace operations supporting Combatant Command missions.

The 836th COS traces its lineage to the 185th Airways and Air Communications Service Squadron organized June 1, 1948 at Williams AFB, AZ. It was redesignated three more times before it was deactivated May 1, 1992. The 836th is responsible for national defensive cyberspace operations.

Cyber units reorganize

SCOTT AFB, IL -- The Cyber Support Squadron, or CYSS, at Scott AFB provides AF Space Command with the expertise needed to manage cyberspace lead programs.

AF Network Integration Center divided into different squadrons in December 2015. CYSS previously was part of AFNIC and not long ago was redesignated as its own squadron. During its transition, CYSS took on a big part of AFNIC. "Virtually every organization in the Air Force is dependent on cyberspace to accomplish its mission," said Lt. Col. Robert Biggers, CYSS commander.

CYSS' support goes as far as providing field support to the Air Force, defining enterprise requirements for the new cyber systems, managing the sustainment of existing systems, and assisting Headquarters AFSPC with planning, programming, budgeting and execution activities.

CYSS is also involved with the development of new requirements, system sustainment for programs like the Presidential Global Communications System, weapon system modifications, Air Force Cyber Defense, Secret Internet Protocol Router DoD-Enterprise Email (SIPR DEE), and many more.



At left, retired CWO 4 Francis Herbert and his wife, Helen, view memorabilia in the tower lab room at Cody Hall. At right, Mr. Herbert delivers remarks during a room dedication ceremony in his honor. (U.S. Air Force photos by Marie Floyd)



Keesler honors 50 years' service with room dedication

By Brian Lamar
81st Training Wing Public Affairs
Keesler AFB, MS

Civilian employees and military leaders filled Cody Hall on Keesler AFB, April 26, to honor the career accomplishments of retired **Chief Warrant Officer 4 Francis Herbert** by renaming and dedicating the Flight Control Tower simulator room to the CWO-4 Francis Herbert Air Traffic Control Tower Lab.

To commemorate 50 years of service in peacetime and wartime, including time as an instructor here, the 334th Training Squadron held a ribbon-cutting to officially reopen the doors to the lab bearing the new name and an art exhibit with pictures from Herbert's career.

"Mr. Herbert is the finest example of leadership I've ever known," said Kevin Smart, 334th TRS air traffic control master instructor and Herbert's co-worker for nine years. "His work ethic and expectations of our conduct, appearance and work in the classroom were beyond reproach. Everyone here wanted to work with Mr. Herbert and it is a privilege and honor to be here today."

The room dedication ceremony was filled with the Herbert family, civilian and military staff from Keesler and air traffic controllers who were in town for a three-day air traffic control conference hosted by the 334th TRS staff.

"Chief Warrant Francis Herbert is an air traffic control pioneer and we are proud to celebrate our heritage with this ceremony," said Lt. Col. Steve Mullins, 334th TRS commander.

During the ceremony, a letter from Maj. Gen. Mark Brown, 2nd Air Force commander, who couldn't attend, was read to Mr. Herbert. "Without question you are deserving of this honor and many more," Brown's letter read. "From World War II to Morocco in the Cuban Missile Crisis to Vietnam, you continue to make us so proud to be in service. My sincere thanks and salute for service worthy of the awards."

While touring the newly-opened lab, Mr. Herbert, who is affectionately known as "Mr. Air Traffic Control," said he was honored to be a permanent part of the air traffic control training here at Keesler. "I would like to say thank you; I am honored," Herbert said.

CWO Herbert served in the US Army, Army Air Corps, and Air Force from 1942-1972. He was a fully certified air traffic controller in the control tower, radar approach control, and air route traffic control center achieving the rank of Master Sergeant (E-7) in only eight years. Mr. Herbert served in numerous leadership roles as an ATC chief controller, flight facilities officer and liaison officer. In March 1952, he was appointed as a Warrant Officer and in 1968 while on assignment in Pleiku AB, Vietnam, he used the Ground Position Navigation 14 mobile radar system for the first time ever to detect and track enemy missile activity. His efforts resulted in him receiving the Legion of Merit.

After retirement in 1972 as the last Air Force ATC Warrant Officer, Mr. Herbert continued working in Civil Service at Keesler. He served in the ATC Apprentice Course as an air traffic control instructor and instructor supervisor. In all, he served over 50 years of combined military / civilian service.

PHOTO GALLERY



TERPS specialists ensure safety

SSgt. Darrell Prior, a Command Terminal Instrument Procedures specialist with Air Mobility Command, examines a map of Colombia at MacDill AFB, FL, in February. Although they report to AMC headquarters at Scott AFB, IL, the team is housed at MacDill to be near the countries in their Areas of Responsibility. The MacDill TERPS office ensures all DOD aircraft safely land in Central America, South America, the Caribbean and Mexico by evaluating the host nation's procedures and applying Air Force criteria. By enhancing partnerships with host nations, TERPS specialists help ensure the Air Force can safely execute rapid global mobility. (U.S. Air Force photo illustration by SrA Danielle Quilla)



Mobile ATC supports relief efforts

An Air Force four-person team sets up a mobile Air Traffic Control Tower at Manta, Ecuador's Eloy Alfaro International Airport April 26 to help local controllers increase the flow of humanitarian aid entering the country. The United States, in coordination with the Government of Ecuador, deployed 12 Air Force airmen to Ecuador to support international relief efforts for victims of the 7.8-magnitude earthquake that struck the South American country April 16. (Photo courtesy U.S. Embassy Quito)



Secure comm for warfighters

The Modernized Enterprise Terminal sits inside a radome at Al Udeid AB, Qatar, January 2016. The 379th Expeditionary Communications Squadron completed an upgrade to its Army, Navy Ground Satellite Communications System, which will enable better communications for warfighters. The terminal, which cost \$15 million, provides secure communication capabilities including voice, video and data services, linking service members in the U.S. Central Command area of responsibility with military leaders around the world. The system also features anti-jamming software and uses the most current technology. The program's goal is to install new terminals around the world to enable U.S. military forces to take advantage of increased data capabilities of its constellation of Ka-band wideband global communications satellites. The MET will simultaneously handle both X and Ka-band signals which use WGCS. The previous Defense Satellite Communications System could only handle X-band and one WGCS satellite is equal to about 10 DSCS satellites in terms of bandwidth it provides. (U.S. Air Force photo by MSgt. Joshua Strang)

HALL OF FAME

Cyberspace Operations and Support

In 1999 the Air Force established the Communications and Information Hall of Fame to honor individuals who made significant contributions, both to the Air Force and our career field, while serving in the public and private sectors. These leaders began the tradition of excellence which led to critical communications and information capabilities for today's and

tomorrow's Air Force. Each year new members are inducted into the Hall of Fame--visionaries who guided the Air Force toward a technological and information-enabled future. Their dedication, vision, patriotism, and honor established a proud legacy on which we continue to build today's information superiority.

Class of 1999

*Lt Gen Lee M. Paschall

Class of 2000

Lt Gen Winston D. Powers
Maj Gen Robert Edge
*Brig Gen Ivan L. Farman
*Col Glenn Giddings

Class of 2001

*Lt Gen James S. Cassity
*Lt Gen Robert H. Ludwig
*CMSgt Richard P. "Hank" Sauer

Class of 2002

*Lt Gen Richard Klocko
Lt Gen Gordon Gould
Maj Gen Paul Stoney

Class of 2003

Gen Robert T. Herres
Lt Gen Gordon A. Blake
Maj Gen Daniel C. Doubleday
*Maj Gen Jack B. Robbins
Brig Gen Haskell E. "Hack" Neal

Class of 2004

*Lt Gen John S. Fairfield
Maj Gen John Paul Hyde

Class of 2005

*Lt Gen Albert Edmonds
*Lt Gen Carl O'Berry
*Mr. Tom Yium

Class of 2006

Maj Gen Francis L. Ankenbrandt
Maj Gen John Bestic
*Maj Gen Rupert H. Burris
*Col Derrel L. Dempsey
*CMSgt William Bethea

Class of 2007

Maj Gen John T. Randerson
*Col James R. Lauducci
*CMSgt Charles E. Teston

Class of 2008

*Maj Gen Van C. Doubleday
Maj Gen Alvin L. Pachynski
*CMSgt Walter D. McLain

Class of 2009

*Lt Gen William J. Donahue
*Maj Gen George P. Lampe
*Maj Gen John T. Stihl
Brig Gen Charles B. Jiggetts
*Lt Gen John L. Woodward
*Maj Gen Gerald L. Prather
*Brig Gen Duncan W. Campbell
*Col Gil Sentimore



Class of 2010

Col Jess Guthrie
*Col Paul Patton
Lt Col Michael Anderson
*Mr. Lloyd Mosemann II
*MSgt Joseph Duffy

Class of 2011

*Lt Gen Harry D. Raduege
Col Lloyd Watnee
*CMSgt William M. Mosley
CMSgt Richard Etchberger
Mr. Cecil Harvey

Class of 2012

*Maj Gen Dale Meyerrose
*Brig Gen Bruce Bohn
Brig Gen Avon James
Lt Col Grace Barth
CMSAF Eric Benken
Mr. Timothy Long

Class of 2013

Gen William "Tom" Hobbins
*Brig Gen Buford "Randy" Witt
*Col Jack Stratford
*CMSgt Laurence M. Patrick
*Robert L. Feik

Class of 2014

*Lt Gen Charles E. Croom
Brig Gen Wallace Smith
*Col David J. Kovach

Class of 2015

*Maj Gen John Maluda
*Col Ken Reiff
*Col Gerald Gleckel
CMSgt Larry Holifield

Class of 2016

Mr. John Gilligan
*Col David Martinson
Col Gary McAlum
*CMSgt Robert "Duke" Snyder

**Was or is a member of our Association.*

Foundation Setters: Brig Gen Billy Mitchell, Gen Edwin W. Rawlings, Lt Gen Harold W. Grant, Lt Gen Lee Paschall, Maj Gen Harold M. McClelland, Maj Gen Robert Sadler

Visit the Hall of Fame site at <http://www.afnic.af.mil/library/halloffame/index.asp>

CLASS OF 2016

John Gilligan



Mr. Gilligan had a major impact in cyber & C4 within the DOD, US Air Force, US Government civilian agencies and industries. His career progressed through basic engineering and computer science positions to key leadership positions with the Air Force, civilian government positions and industry where Mr. Gilligan provided specific and lasting contributions to the government IT and cyber communities by laying groundwork for organizational and technical innovations.

Col David Martinson



Col Martinson served a successful and varied career at all leadership and management levels over 30 years. From his first assignment to his last, he distinguished himself as an air traffic controller and in several assignments as a communications-electronics officer. In each assignment his tenacious dedication to accomplish the Air Force mission earned the trust of senior leadership. His career culminated at USEUCOM HQ, where he was representative to the NATO Air Communications Council, working interoperability issues at the highest international levels.

Col Gary McAlum



Colonel McAlum is a pioneer in cyberspace operations and support during his 25 years on active duty. His career included software engineer, MAJCOM C4 staff officer, information security, unified command satellite communications staff officer, 4-time commander, and executive officer. His career culminated as Chief of Staff, JTF-GNO, where he was instrumental in securing DoD networks from emerging cyber threats. After retirement, he continued to serve military members and families as the Senior Vice President and Chief Security Officer for United Services Automobile Association.

CMSgt Robert "Duke" Snyder



Chief Snyder was a hands-on leader and mentor of young airmen and officers. He was identified early in his career for management positions. Chief Snyder always felt more at home at the unit level where he could have more impact and interface with the troops. He was selected for the team that created the first AF-wide tests for the 291X0 AFSC 3, 5 & 7 level skill sets (Communications Operations). He earned his reputation as an innovator and as an NCO who always got the job done. He was a leader in Resource Management and a Hall of Famer from the get-go.

Congratulations to these outstanding individuals and their families. Their service and dedication to the Air Force and to our country are much appreciated.

Hall of Honor

Class of 2001

*CMSgt Richard P. "Hank" Sauer

Class of 2002

*Col Robert M. Brewer

*MSgt. Joseph J. Duffy

*Mr. Thomas S. Snyder

Class of 2003

*Larry Camp

*Maj Gen Gerald L. Prather

Class of 2004

*Garland B. Hilton

Class of 2005

*Lt Gen Harry Raduege

*Col David Kovach

*Col P.C. Brown (Past Chaplain)

*CMSgt Bill Bethea

*Rocco Sansone

Class of 2006

*Col Derrel Dempsey

*CMSgt Walt McLain

Class of 2007

*Col James R. Lauducci

*CMSgt Charles E. Teston

Class of 2008

*Maj Gen Van C. Doubleday

*CMSgt William Mosley

Class of 2009

*Lt Gen William J. Donahue

*Lt Gen John L. Woodward

*Maj Gen George P. Lampe

*Maj Gen John T. Stihl

*Brig Gen Duncan W. Campbell

*Col William Malec

*Col Gil Sentimore

*CMSgt James Sutton

Class of 2010

*Col Paul Patton

*CMSgt Robert "Duke" Snyder

*Mr. Lloyd Mosemann

Class of 2011

*General William "Tom" Hobbins

*Colonel David J. Martinson

Class of 2012

*Maj General Dale Meyerrose

*Brig General Bruce Bohn

*Brig General Stancil Dilda

Class of 2013

*Brig Gen Randy Witt

*Colonel Jack Stratford

*CMSgt Laurence Patrick

Class of 2014

*Lt Gen Charles E. Croom

*Col Ken Reiff

Class of 2015

Maj Gen Robert McCarthy

*Maj Gen John Maluda

*Col Gerard Gleckel



Life Achievement Award

Class of 2001

Colonel Ted V. Carlson

Class of 2002

Colonel Bernard U. Glettler

CMSgt Richard P. "Hank" Sauer

Class of 2003

Claire Lofchie

John A. Milano

Lt Gen Lee Paschall

Maj Gen Gerald L. Prather

CMSgt Jim Van Dyne

Class of 2004

Major C.B. Maginnis

Mrs. Nancy Donnell

Class of 2005

Lt. Col. Richard W. "Dick" Frye

George Villa

Class of 2006

"Smitty" McClellan

Shirley Beachum

Mary Lou Brewer

Class of 2007

CMSgt Robert "Duke" Snyder

Class of 2008

Dr. Larry Morrison

Class of 2009

Maj David Moore

Class of 2011

Stanley J. Phillips

Class of 2013

Bob Akard

Bill Bethea

Lori Manske

Class of 2014

CMSgt Robert Read

Thomas F. Buckley Service Award

Class of 2003

Monica Buckley

Class of 2004

James J. Duffy

Class of 2005

CMSgt Richard Gillis

Class of 2006

Robert Akard

Class of 2007

Maj Gen Gerald L. Prather

Class of 2008

MSgt Joseph J. Duffy

Class of 2009

TSgt Gene Sheridan

Class of 2010

SMSgt Ray Sharpless

Class of 2011

Erika VanDyne

Class of 2012

John Flaherty & Julie Braun

Class of 2013

Michael Hunter

Class of 2015

Bill Cassatt



Board of Directors

Executive Director
Ken Reiff



Day-to-day management, direction and oversight.

Vice Director
Ray French



Assists in management, development, and growth.

Membership
Walt McLain



Maintains member roster; receives/records dues

Editor, Print/Online Media
Lori Manske



Creates Communicator; maintains web site

Executive Secretary
Bill Hammett



Recorder of business; curator of documents

Treasurer
Jim Weber



Manages Association funds.

Directors at Large

Board Advisory Officer



Hank Sauer

Information Officer



Gerald Prather

Protocol



Rafael Quezada

Sgt-at-Arms



Robert Read

PX/BX Manager



Bill Cassatt

Executive Director Appointments

Historian
Ken Reiff

Chaplain
Ed Broestl

Judge Advocate
John Milano

Executive Director Committees

Financial Management & Budget Policy

Ray French (chair)
Jim Weber
Bill Hammett

Convention Committee

Jim Weber (chair)
Rafael Quezada
Bob Read
Hank Sauer

Honors and Awards

Walt McLain (chair)
Hank Sauer
Chuck Teston

Recruiting

Ken Reiff (chair)

AF Communicators and Air Traffic Controllers Association
(Formerly the AACCS Alumni Association)

Membership Application

MAIL TO: Mr. Walt McLain, 4514 Haverty Dr, Knoxville, TN 37931-3657

Types of Membership

Life & Regular Membership is based on service (men and women) as a commissioned officer, warrant officer, noncommissioned officer, enlisted or civilian, who served or is serving in any communications/information or air traffic control unit or holds or held a MOS, AFSC or other skill identifier as a communicator/information, air traffic controller or support skill in any Air Force Major Air Command (AACCS, ACS, AFCS, AFCC, AFC4A, AFCA, AFNIC, AFFSA, SAC, TAC, ADC, USAFSS, MAC, etc., or the Air Force current commands). Spouses of a surviving member are also eligible for regular membership. The Life Membership of a deceased member will transfer to the surviving spouse unless he/she requests otherwise. Associate Membership is subject to the approval of the Alumni Associations Executive Board for individuals who actively supported any communications/information or air traffic control activity, but otherwise does not meet the criteria for Life or Regular Membership. Associate Members are not eligible to vote or to hold office in the Association, but are treated like all other members.

Regular and Associate Membership dues are \$15 per year, payable in two-year increments.

Life Memberships are based on age: To – 50 years = \$165; 51 – 60 years = \$145; 61 – 70 years = \$115; 71 - ? Years = \$75

Renewal _____ New Membership _____ Life Membership _____ Regular _____ Associate _____

Amount enclosed: \$ _____ (make check out to AF Communicators and Air Traffic Controllers Association)
PRINT CLEARLY

Date: ___/___/___ First Name _____ MI ___ Last Name _____

Spouse Name _____ Year of Birth _____ Dates Served _____ (e.g. 50-54, etc.)

Street Address: _____ City _____ State _____

Zip code _____ - _____ e-Mail Address _____

Units and Commands _____

Eras Served _____ WWII, Korea, RVN, Gulf, etc.)

Phone Number (____) _____ - _____ Service Status: General Officer _____ Officer _____

Warrant _____ Enlisted _____ NCO _____ Civilian _____ Tech Rep _____ Other _____

Combat Area or Base: _____

Additional Comm/ATC units _____

What did you do in the AF: _____ (Career field, MOS, Specialty)

How were you recruited: _____ (Member's name, magazine, website, etc)

If you have any questions contact Walt McLain at 865-690-0479 or Cell 865-740-4127
PLEASE COMPLETE ALL INFORMATION



Command patch



Original patch



Challenge coin



AACS pin



Old E9 Pin
3/4" x 3/8"



Special order item
Wood carved
plaque



AF Comm/ATC
hat



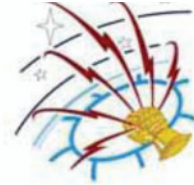
AF Comm & ATC
embroidered logo golf shirts



Zippered
jacket

See next page

AF Communicators & Air Traffic Controllers Association PX/BX Order Form



Name _____ Phone Nbr: () _____

Address: _____

Email: _____

Quantity	Description	Cost
_____	AACS Logo Patch with AFCS & AFCC embroidered @ \$4	_____
_____	Old blue original AACS patch @ \$6	_____
_____	Deluxe Embroidered AFCOMMATC Logo Hat (blue) @ \$12	_____
_____	AFCOMMATC Challenge Coin @ \$7	_____
_____	Old E9 Pin @ \$5	_____
_____	Original AACS Lapel Pin @ \$5	_____
_____	AFCOMMATC Embroidered Ladies Golf Shirt (white) S___ M___ L___ @ \$26	_____
_____	AFCOMMATC Embroidered Ladies Golf Shirt (blue) S___ M___ L___ @ \$26	_____
_____	AFCOMMATC Embroidered Logo Golf Shirt BLUE.....	_____
_____	AFCOMMATC Embroidered Logo Golf Shirt WHITE..... S___ M___ L___ XL___ \$30 2X___ \$32	_____
_____	AFCOMMATC Jacket (zipper) S___ M___ L___ XL___ \$42	_____
_____	Jacket 2XL \$45	_____

AACS items are gone except for the patches and pins.

DONATIONS: (Tax deductible within limits of the law): Receipt: Yes___ No___

TOTAL _____ \$ _____

POSTAGE AND HANDLING ARE INCLUDED IN ALL PRICES.

SOME PRICES HAVE INCREASED DUE TO POSTAL RATE INCREASES.

MAKE CHECKS OUT TO 'AF COMM & ATC ASSOC' and MAIL TO:

Bill Cassatt, 612 W Hardy St, St James MO 65559, 573-265-5788, wcassatt71@gmail.com

AACS, AFCS & AFCC Wood-Carved Wall Plaques



Cost (including shipping) is \$35 each

Make checks out to "AF Comm & ATC Assoc" and mail to Bill Cassatt, 612 W Hardy St., St James MO 65559.

These wood-carved plaques are special order and will take approximately 2-3 weeks for delivery.

Size 10 1/2 inches



Command: AACS _____ AFCS _____ AFCC _____ (Number of plaques)

Total cost: \$ _____ (check attached)

Mail to: _____



Many in this association saw air traffic control take a technological leap forward with the introduction of radar in the 1950s. Some saw air and ground radio stations transform from continuous wave Morse Code to radio telephone. Many witnessed the advent of the computer. They all helped the military increase the quantity and quality of communications, data automation, and air traffic controls systems to meet changing needs.

Formerly called AACS Alumni Association (1977 to 2008), AACS stood for both the Army Airways Communications System and the Airways and Air Communications Service. Because missions were basically the same, the AACS Alumni Association expanded membership to include AFCS, AF Communications Command, AF Command, Control, Communications & Computer Agency, AF Communications Agency, AF Flight Standards Agency, and other major commands up to and including today's organizational structure.

TAX STATUS

The AF Communicators and Air Traffic Controllers Association is an **IRS Code 501(c)(19)** organization. Donations to the Association are tax deductible when filing IRS Form 1040.

ALUMNI ASSOCIATION HISTORY

The AACS Alumni Association was formed on Sept. 30, 1977. Larry and Doris Camp were visiting Dux and Pearl LeDoux in Eunice, LA in 1976 when the subject of old military friends came up. Larry and Dux were assigned to the 5th AACS Wing in Europe. What began as an invite to a poker weekend in Columbus, OH (Larry and Dux were part of a London, England, poker group for AACS detachment commanders) to be hosted by the Camps, turned out to be the first annual reunion.

The couples contacted old friends, who in turn contacted others, and so on. A large number of

former AACS troops and spouses made their way to Columbus and the result was what is now one of the strongest AF Alumni Associations. AACS Alumni Association was adopted as the official title, derived from Army Airways Communications System and Airways and Air Communications Service.

Individuals who were part of the first reunion had been assigned to AACS units before, during and after World War II, the Korean Conflict, and up to 1961 when AACS became a MAJCOM and was renamed the AF Communications Service (AFCS).

An annual convention is held in different cities each year. They usually begin on the last Thursday of September and end the following Sunday. The Association operates on membership dues and donations. Association dues are minimal, \$15 per year, payable in two-year increments of \$30.

ABOUT AACS

In 1938 the Army Airways Communications System (AACS) was formed. During World War II, for a short time it was renamed the Army Airways Communications Wing and then the Air Communications Service, but that only lasted 9 months. When the clamor reached the halls of the Pentagon to retain the AACS designation, it was renamed the Airways and Air Communications Service (AACS) in 1946. This new designation was also a better fit due to the high volume of airplanes flying through U.S. and U.S.-controlled airspace and the need to control airways.

In 1961 AACS was elevated to Major Air Command status and it was renamed the Air Force Communications Service (AFCS).

This designation remained until 1979 when it was renamed the Air Force Communications Command (AFCC). The old blue original AACS logo is our official Association logo.



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Air Force Communicators and Air Traffic Controllers Association

Who we are

Our association is comprised of about 2,000 members (Communicators, Data Automation, Information/Cyber, Space Operations, Air Traffic Controllers, Air Field Managers, Maintenance, Engineering and Installation and related support personnel) who have served or are serving in any communications or air traffic control unit.

The term Communicators includes ALL operational, maintenance, administrative skills and other skills in the U.S. Army Air Corps and the U.S. Air Force (including Reserve and Air National Guard) communications, data automation, or air traffic control units.

We were formerly called the "AACCS Alumni Association" from 1977 until Sept 27, 2008.

We changed our name because the Airways and Air Communications Service (AACCS) was elevated to Major Air Command status and redesignated the Air Force Communications Service in 1961.

Mission

*** Foster continued awareness of the Air Force communications, data automation, and air traffic control missions previously accomplished by AACCS, AFCS, AFCC, AFC4A, AFCA, AFFSA, other past and current major air commands.**

***Provide a forum for educational and humanitarian services, renew and make new friendships, and exchange ideas of common interest concerning communications and air traffic control.**

***Fully support goals and missions of the Air Force and honor the ATC Enlisted Manager and Communications/Information Professionals of the Year**

***Make charitable contributions to worthy veteran organizations or related causes.**

***Manage our Association to be viable for those airmen/officers/civilians serving today.**