

**HISTORY OF
OHIO WING
Civil Air Patrol**

Auxiliary of the United States Air Force



1 JANUARY 2012 – 31 DECEMBER 2012

VOLUME 2 - SOURCE DOCUMENTS

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U.S. AIR FORCE AUXILIARY

OHIO WING

CIVIL AIR PATROL

Members support CAP's primary missions in 2012

The Ohio Wing supported each of Civil Air Patrol's primary missions — emergency services, cadet programs and aerospace education — in 2012. Here are some highlights for the year:

Emergency services – Members contributed hundreds of volunteer hours performing aerial photography recording Hurricane Sandy's impact along the Atlantic Coast. Earlier in the year, Ohio Wing volunteers performed a similar photography mission for the Federal Emergency Management Agency, documenting storm damage to areas stricken in southeastern Ohio during the March tornado outbreak.



The Ohio Wing's Hurricane Sandy aerial photography team consisted of Maj. Jerry Pearsall, observer; Capt. Curtis Rowe, mission pilot; and 2nd Lt. Jerry Marshall, photographer.

Cadet programs – The Ohio Wing hosted CAP's 2012 National Cadet Competition from June 20- 24 at Wright

Patterson Air Force Base in Dayton. In addition, for the second straight year a cadet team from the Youngstown ARS Composite Squadron is headed to the Washington, D.C., area in March as a finalist in the national championship round of CyberPatriot V, the national high school cyber defense competition.

provided communications, parking coordination and general support for the event.

Aerospace education – The wing participated in several support functions for the 2012 Dayton Air Show, held July 6-8 at Wright Patterson AFB. Members

2012 Statistics

Volunteer Members:

739 adult members
711 cadets
810 voting-age members
153 aircrew personnel
806 emergency responders

Vehicles:

17 vehicles

Cadet Flying:

844 cadets flown

Interoperable Communications:

14 VHF/FM repeaters
176 VHF/FM stations
18 HF stations

Total Hours Flown:

1,571

Squadrons:

50 locations statewide

Missions:

11 search and rescue missions
10 finds
1 counterdrug mission
14 other state support missions

Financial:

\$3.3M value of wing's volunteer hours

Aircraft:

8 single engine
1 glider

- **Wing Commander** Col. Gregory L. Mathews (gregory.mathews@ohwg.cap.gov)
- **Government Relations Advisor** Lt. Col. Paul E. Bronsdon (paul.bronsdon@ohwg.cap.gov)
- **National Commander** Maj. Gen. Charles L. Carr Jr. (ccarr@cap.gov)
- **Region Commander** Col. Robert M. Karton (rkarton@cap.gov)

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Ohio Wing Calendar

Jan 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
New Year's Day						
8	9	10	11	12	13	14
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Training Leaders of						
10am - OHWG Staff 12:30pm - Operation						
15	16	17	18	19	20	21
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Ohio Wing Form 17's Martin Luther King						
22	23	24	25	26	27	28
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
GREAT LAKES REGION ES CONFERENCE @						
29	30	31	1	2	3	4
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
GREAT LAKES						
Groundhog Day						
Wing SAREX/TREX @ Clever Field in New						

Ohio Wing Calendar

Feb 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
GREAT LAKES						
5	6	7	8	9	10	11
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Wing SAREX/TREX @						
12	13	14	15	16	17	18
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Lincoln's Birthday						
Valentine's Day						
19	20	21	22	23	24	25
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Wing SAREX/TREX -						
President's Day						
Washington's						
Orides OH-115 KLCK						
Orides OH-165 168						
26	27	28	29	1	2	3
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
7 pm - GTE						
7 pm - Legislative						
CAP Winter National Boards @ Crystal City Marriott, DC						
Annual ORM						
National Legislative						
Orides OH-219						
Orides OH 115						
Orides OH 282						
Orides OH-05						
Orides OH-051						
Orides OH-56						

Ohio Wing Calendar

Mar 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	1	2	3
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
	7 pm - GTE		7 pm - Legislative	CAP Winter National Boards @ Crystal City Marriott, DC Annual ORM National Legislative Orides OH-219		Orides OH 115 Orides OH 282 Orides OH-05 Orides OH-051 Orides OH-56
4	5	6	7	8	9	10
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Orides OH-115	Orides OH- 219					Orides OH 115 Orides OH 139 Orides OH 284 Orides OH-156 7 am - 2012 Ohio 10am - OHWG Staff 12:30pm - Operation
11	12	13	14	15	16	17
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Daylight Savings						Orides Group 4 Orides OH-03 at St. Patrick's Day
18	19	20	21	22	23	24
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
Orides OH-03 at			Orides OH 196			GTE Tabletop
25	26	27	28	29	30	31
All Units Must Conduct a Safety Down Day between 1/1 and 3/31 @ Local Unit						
	2:30pm - Orides for			6:30pm - DDR Visit		

Ohio Wing Calendar

Apr 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat	7
1 Annual ORM April Fool's Day	2	3	4	5	6	Orides 056	
8 Easter	9	10	11	12 Orides OH 096	13	14 10am - OHWG Staff 12:30pm - Operation	
15 Tax Day	16	17	18	19 DDR Visit to Ross P	20	21 Orides OH 139	
22 Earth Day Orides 282 ORides OH 156	23	24 Orides OH 157 7 pm - DDR Visit to	25	26 2012 Guided Training Exercise (GTE) with IN, KY and OH. @ TBD Orides OH 070	27	28	
29 2012 Guided GLR Cadet	30	1 Annual ORM	2	3	4	5 Cinco de Mayo Spring PDO	

Ohio Wing Calendar

May 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29 2012 Guided GLR Cadet	30	1 Annual ORM	2	3	4	5 Cinco de Mayo Spring PDO
6 Spring PDO Orides OH 139	7	8	9	10	11	12 Orides OH 231
13 Mother's Day	14	15 Orides OH 157	16	17	18	19 Orides OH 234 10am - OHWG Staff 12:30pm - Operation
20 Orides OH 234	21	22	23	24	25	26 Orides for OH 296 Orides OH 188 Orides OH-261
27 Memorial Day	28	29 John F. Kennedy's	30	31	1 Annual ORM	2

Ohio Wing Calendar Jul 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat	7
Scanner/Observer Training (OHWG South) @ Ohio State University Annual ORM			Independence Day		OHWG CP Dayton Air Show OHWG CDEX		
OHWG CP Dayton OHWG CDEX							10am - OHWG Staff 12:30pm - Operation 1pm - All
OHWG CP Law Enforcement Program					IACE - Ohio Wing Hosting		
IACE - Ohio Wing Hosting							
IACE - Ohio Wing Hosting			Annual ORM				OHWG NCPSC @ I40 6am - Group III CAC /

Ohio Wing Calendar

Aug 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29 IACE - Ohio Wing Hosting	30	31	1 Annual ORM	2	3	4 OHWG NCPSC @ I40 6am - Group III CAC /
5	6	7	8	9	10	11
12	13	14	15	16	17 DREX (North and South) - State EMA	18
19 DREX (North and	20	21 Summer National Boards @ Baltimore, MD	22	23	24	25
26 DREX (North and	27	28	29	30	31	1 Annual ORM

Great Lakes Region - Aerospace Education Officer (AEO) School @ U.S. Air Force Museum -

10am - OHWG Staff
12:30pm - Operation

Summer National Boards @ Baltimore, MD

DREX (North and South) - State EMA - (Rain date)

Annual ORM

Ohio Wing Calendar

Sep 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26 DREX (North and	27	28	29	30	31	1 Annual ORM
2	3 Labor Day	4	5	6	7	8 SAREX @ TBD 10am - OHWG 11am - OHWG Staff 12:30pm - Operation
9 SAREX @ TBD	10	11	12	13	14	15
16 WACO FLY-in @	17	18	19	20	21 6pm - WACO FLY-in @ WACO Field in Troy,	22 OHWG - GROUP III
23	24	25	26	27	28	29
30	1 Safety Surveys Due Annual ORM	2	3	4	5	6

Ohio Wing Calendar

Oct 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	1	2	3	4	5	6
	Safety Surveys Due Annual ORM					
7	8	9	10	11	12	13
Safety Surveys Due	Columbus Day					OHWG CP - National 10am - OHWG Staff 12:30pm - Operation
14	15	16	17	18	19	20
Safety Surveys Due						OHWG - Professional
21	22	23	24	25	26	27
Safety Surveys Due OHWG - Professional					OHWG - SAREX/EVAL	
28	29	30	31	1	2	3
Safety Surveys Due OHWG - SAREX/EVAL		Halloween		Annual ORM		Group III - Cadet

Ohio Wing Calendar

Dec 2012 (Eastern Time)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
Safety Surveys Due						
2	3	4	5	6	7	8
Safety Surveys Due						
9	10	11	12	13	14	15
Safety Surveys Due						
16	17	18	19	20	21	22
Safety Surveys Due						
23	24	25	26	27	28	29
Safety Surveys Due						
30	31	1	2	3	4	5
Safety Surveys Due						

Annual ORM

10am - OHWG Staff
12:30pm - Operation

3pm - OHWG

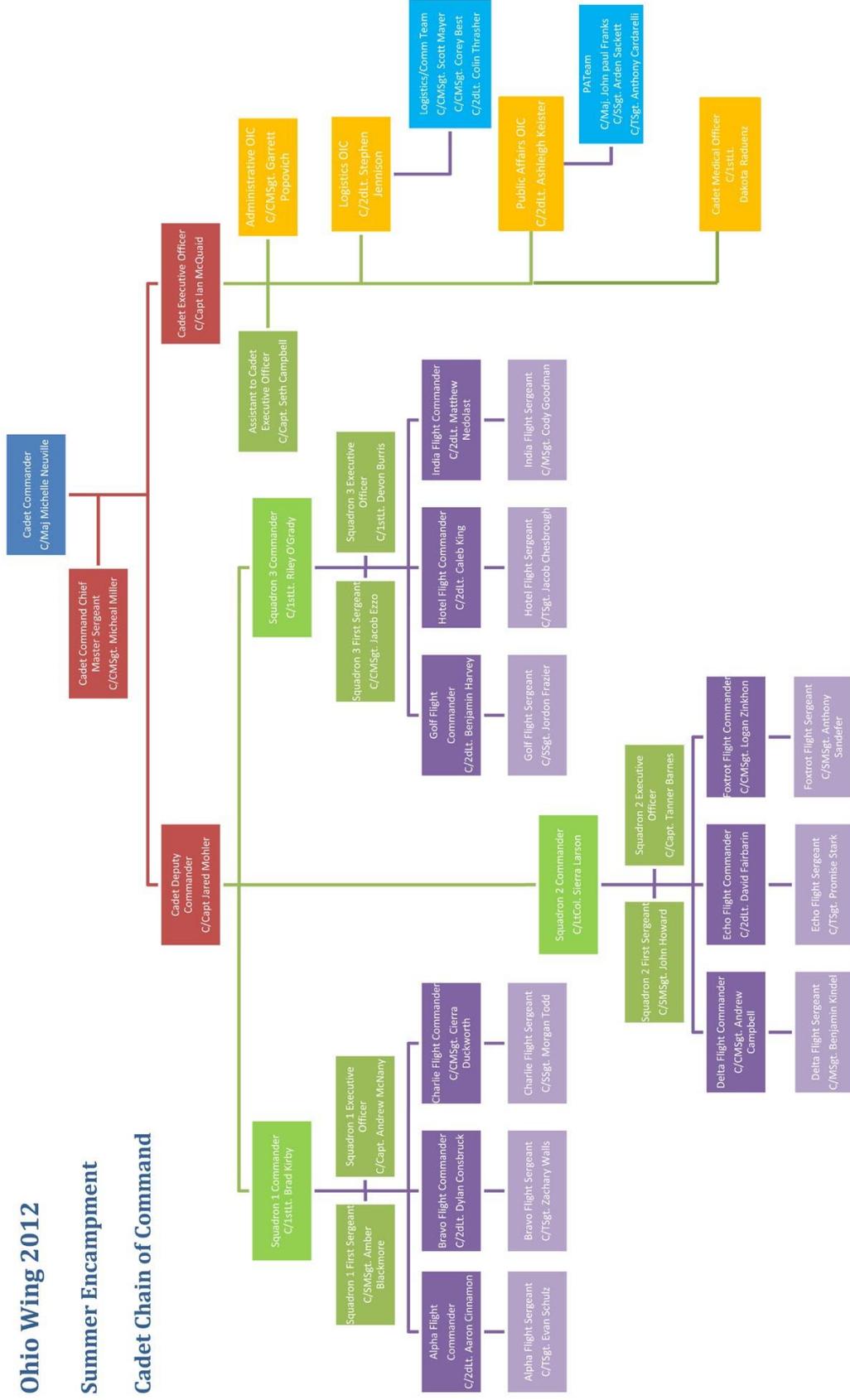
Christmas

Annual ORM
New Year's Day

Ohio Wing 2012

Summer Encampment

Cadet Chain of Command





▶ GET READY TO MOVE OUT OF YOUR COMFORT ZONE



▶ GET READY TO PUSH YOURSELF TO THE LIMIT



Get Ready For

Encampment 2012

Day 1 | Welcome | 2012

"IT IS THE RESPONSIBILITY OF LEADERSHIP TO PROVIDE OPPORTUNITY, AND THE RESPONSIBILITY OF INDIVIDUALS TO CONTRIBUTE."
-WILLIAM POLLARD

Encampment is more than feeling the pressure and stress from your leaders in the moment; it is the feeling of pride and success that you go home with at the end of it all.

Welcome to Basic Encampment 2012!

As a cadet in the Civil Air Patrol, it is required that you attend a Basic Encampment in order to become an officer and attend any National Cadet Special Activities (NCSAs) down the road in your CAP career.

This year's encampment staff is beyond prepared to teach you everything that you will need to know and practice in order to be successful in this organization. This Encampment is based solely on the cadets' interests and well as their well being, so having a staff that keeps all of their cadets in mind is vital. Rest assured, young basics, that your leaders are not going to eat

you alive, nor will they hurt you in any way, shape, or form. This year's cadet staff—seen and unseen—are here to develop good character and leadership traits in...YOU.

Keep focused.
Stay motivated.
Remain strong.

These are the things that you need to remember as you start to feel like you don't belong at Basic Encampment. Say to yourself every single day, "This is for me. I'm proving myself to everyone that I can, IN FACT, do this!" and you will make it!



Your Cadet Commander

The Cadet Commander of the Ohio Wing Encampment 2012 is a young lady from the state of Michigan. C/Lt Col Michelle Neuville has been in CAP for 8 years and has attended several NCSAs and staffed numerous Encampments. C/Lt Col Neuville is looking forward to seeing all of the basics graduate with a firm understanding of what is expected of them, as well as the readiness to become a better follower in order to become a great leader. C/Lt Col has worked extremely hard to make this Encampment the best that it can be for the staff, but more importantly...our cadets.

THE ENCAMPMENT ELEMENT

"HE WHO HAS NEVER LEARNED TO OBEY CANNOT BE A GOOD COMMANDER."

DRUNK DRIVING IN CAP!!

Fatal Vision! Cadets today had the opportunity to see and feel a little of what it would be like to drive while under the influence of alcohol. By using special "Fatal Vision" goggles which are designed to simulate a blood alcohol level of 0.25%, they both "saw" and "felt" what driving would be like while under the influence. Along with driving under the influence, they got to experience the effect that alcohol and drugs have on everyday motor skills.



OHIO ENCAMPMENT 2012

DAY 2



HYDRATION

Cadets, please be sure that you are getting enough water! We cannot stress to you how important it is that you are constantly drinking water. We would much rather take you to the bathroom ever 10 minutes than rush you to the medic every 10 minutes. You chose which trip you want to take.

MAIL CALL

Mail Call was a hit! Basics and Staff alike had a blast passing out and receiving the letters that were carefully written to their friends, far and few between. The Encampment is already forming a bond that is unshakable and will be hard to replace once the week is over. Keep up the mail call! Try to send a letter to ALL of your friends, including your leaders. Trust us, these letters of encouragement and silly little jokes make everyone's day brighter, and gives us something to talk about at the in our rooms. Keep up the work, guys (and gals)! We're looking forward to sending more happy mail your way!



**WHAT IS
"RANDOM PHOTO
GOODNESS"?**

This is the section of the Encampment Element where you can look for your and your friends! See what the PAO Team of Encampment 2012 catches on camera while you aren't watching! You'll be surprised at what you find!

Check out all Encampment pictures on Facebook



Team sports help to enhance leadership, as well!

RANDOM PHOTO GOODNESS



NCO LEADERSHIP ACADEMY

While you basics are happily going through your basic training, the NCOs of the wing are training to become tomorrow's leaders.

What does NCOLA do for you as a cadet? This program will thoroughly teach you how to handle situations appropriately, help you decipher between the many different leadership styles and identify yours, learn the harms of hazing, and how to effectively motivate your cadets. After graduating from Basic Encampment, we highly recommend attending NCOLA in order to further enhance your leadership skills and to hopefully become Encampment staff.



THE ENCAMPMENT ELEMENT

"A LEADER IS A DEALER IN HOPE."



WORLD GLP

Imagine a world with only four nations and each nation is run entirely by cadets. In this world, difficult diplomatic problems such as spies, sunk ships, and chemical leaks are faced and overcome or in some cases cause war and chaos. Through these scenarios, the cadets learn public speaking, working together, attention to details, and leadership skills that will last a lifetime. As each country faces conflict, it has to utilize its assets and keep its weaknesses from being exploited while trying to keep peace at the same time or get the upper hand over some other country as the case may be.



OHIO ENCAMPMENT 2012

Real Talk!

Cadets had the opportunity to talk to their staff about what is available in the cadet program. Stations' topics ranged from CAC to SAR Academies such as NESAs and Hawk Mountain. As these engaging conversations carried on, the

DAY 3

cadets grew more and more interested in all of the available programs in CAP.



LET THE O-FLIGHTS BEGIN



Some cadets got to ride in four of CAP's powered aircraft for the first time! As they banked, pitched, dove and yawed, the cadets got to take their aerospace education from the books and put it into action in the air. This exciting moment allowed them to expand their knowledge of aerospace drastically, and give them a taste of what Civil Air Patrol is all about.

THE ENCAMPMENT ELEMENT

“WHERE THERE IS NO VISION, THE PEOPLE PERISH.”

LET'S TALK AVIATION (GUEST SPEAKER)

Cadets listened attentively to a B-2 pilot in the air force as he talked about his life story. He managed to keep the cadets attention with his humor and pilot gear that was passed around. He told the cadets that he had been exactly where they were because he was also a former Civil Air Patrol cadet and that they too could become pilots for the Air Force. He talked about and shared videos of his past A-10 flights as well as a few of his favorite quotes from a book written by Chuck Norris which he put in a power point. His presentation gave the cadets a fun, relaxed environment and motivated the cadets to work for the goals that they want to accomplish in life.

Currently, he is about to fly more B-2s for the U.S Air Force. Flying the B-2 requires much training including going to an altitude chamber, a room where all the oxygen is sucked out, and going to a centrifuge which applies an excess amount of G's on the human body. Becoming a pilot requires much dedication and hard work, but if you continue to strive towards your goal and keep in the right mind set, then it is all possible.



OHIO ENCAMPMENT 2012

Congratulations to the honor flight of the day, the Bravo Bears from squadron one! To win honor flight is truly a great accomplishment and should be strived for by all the flights. It requires great scores on inspections and evaluations.

Keep up the good work!

DAY 4



SEARCH AND RESCUE TIPS AND STRATEGIES

Building a shelter, working a compass, finding an ELT, and executing searches. All of these actions are vital when carrying out a mission whether it be practice or the real thing. As the cadets practiced these skills in the park, they got to get a feel of what the Emergency Services mission of CAP was like. Cadets were timed while setting up shelters, searched for a moving ELT, and got to search for missing people. Did this spark an interest in Emergency Services for any of you?



TEAMWORK

Teamwork is one of the most important things that you need when at Encampment or really any activity that requires a group of people together. The only way that you will successfully complete encampment is if you work together. Everyone needs support to get through encampment and that is where you cadets come together as a flight, whether it be helping each other with uniforms, SOP, or just helping push through the week.



Random Photo Goodness



NCOLA

The Non-Commissioned Officer Leadership Academy (NCOLA) had the opportunity today to go the Athletes in Action low ropes course today to be challenged and learn valuable leadership skills.



The NCOLA cadets also got the chance to try their hands at being pilots. They got to fly a CAP Cessna 172 on Wright Patterson Cadet Squadron's flight simulator



THE ENCAMPMENT ELEMENT

"A BOLD ONSET IS HALF THE BATTLE."

TAKING A STEP THROUGH HISTORY



Traveling out of Encampment cantonment is always a big deal for cadets and staff alike. So where were we taken to get a breath of fresh air? Nowhere else but the Air Force Museum, of course. Ohio Wing Encampment 2012 had the opportunity to tour the hangars of the museum and roam the building without the restrictions that Encampment has put on them for the past five days. Cadets were exposed to the history of aviation, starting with the Wright Flyer, and flying through time to the most recent aircraft of today's day and age.

To end conclude the visit, C/Lt Col Michelle Neuville was recognized for achieving the Ira C. Eaker Award showing that she has completed all 16 achievements in CAP. Getting this far in CAP is quite the rigorous task, and not to mention a very long and drawn out one. In order to obtain this achievement, you must attend numerous officer training schools, as well as pass a rigorous physical fitness test, write a 300-500 word essay, and give a 5-7 minute speech.

Cadets, keep up the work as did C/Lt Col Neuville, you too could be one of the few Eaker cadets in the nation! Will you accept the challenge?



RANDOM PHOTO GOODNESS



NCOLA

Today NCOLA cadets attended a presentation by an Air Force officer to teach them important leadership techniques. Words of wisdom were shared to improve their overall selves. Along with that they did short speeches over randomly chosen topics to improve their public presentation skills.

MIDNIGHT RUN!

GOOD MORNING!!

By rude awakening, basics and NCOLA cadets were waken up at 2300 for an unexpected pt session and run. Little did they know that it was the middle of the night, thanks to the numerous "good morning cadets!" from the staff.





BUCKEYE AIRSPACE

The Ohio Wing Aerospace Newsletter



Volume 2, Issue 1

Spring-Summer 2012

Welcome!

The mission of the Wing AE Newsletter is: To inform members of Ohio Wing about AE activities that have occurred or will occur within the Wing while increasing the knowledge and belief in the strategic importance of one of the three primary missions of Civil Air Patrol resulting in all members taking a more active role in Aerospace Education applied both internally to the CAP membership and externally to the uninformed general public.

One of the highlights of this issue is the second in a series of articles discussing the transfers of space technology to the private sector from NASA Spin-offs.

Please feel free to submit articles and squadron AE news! With your help, this newsletter will grow! ✈️

The DAEs Desk

By Capt Victor Hammond, CAP

Summertime is a busy time for most people not to mention those who are involved in CAP! In addition to vacations, little league, and soccer schedules we have encampments, schools and SAREXs to participate in. Please remember that fall will soon be here and with it the need to prepare a unit plan of action for aerospace as well as the AE activity report. This is required of every group, squadron, and flight. CAPP215 is of great help in preparing these reports as well as attendance at the GLR Aerospace Education Officer School held each year at the National Museum of the United States Air Force at Wright Patterson AFB, Dayton, Ohio. I have attended this school several times and find it very helpful. I



(Continued on page 2)

New Ohio Wing Deputy DAE

By Capt Victor Hammond, CAP

It is with great pleasure that I announce the addition of Capt Louis Adams to the position of Ohio Wing Deputy Director of Aerospace Education. Capt Adams has been serving the past two years as the Aerospace Education Officer for OH-032 Blue Ash Cadet Squadron where he will continue in that position as well. He holds the Yeager Award and is rated at the Senior Level in the Aerospace Education Specialty Track.

Capt Adams is a Navy and a Marine veteran and served on the U.S.S. Tarawa and additionally served as a staff member of Peace Corps in Morocco.

Capt Adams also was a faculty member at the University of Cincinnati where he instructed and performed research in immunology for thirty years.

After retirement Capt Adams wrote three books. In addition to over 200 scientific papers and textbook chapters he has authored, he contributes to the Ohio Wing Aerospace Newsletter "Buckeye Airspace" ✈️

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Ohio Wing Calendar & Events

8-11 AUG	GLR AEO School, NMUSAF
19 AUG	National Aviation Day
1-2 SEP	Cleveland National Air Show
11 SEP	Patriot Day
30 SEP	Cyberpatriot coach registration closes
1 OCT	Registration opens for 2012-2013 AEX
20-21 OCT	PDO Weekend
26 OCT	Cyberpatriot student registration closes
11 NOV	Veteran's Day
31 DEC	Deadline for Unit AFA Grant



Citizens Serving Communities
Above and Beyond

The Goodyear Airship Dock is Steeped in Aviation History

By Jim Pryor, AEM

From the Guggenheim Institute to The Goodyear Aircraft Corporation Akron, Ohio is home to many great moments in aviation history. Perhaps the longest and most enduring monument to those bygone days is the Goodyear Airship Dock located at the southern end of Akron Fulton International Airport.

Completed on November 25th 1929 The Airship Dock was to serve as the hangar for the large rigid U.S Navy airship U.S.S. Akron. The Airship Dock is every bit as interesting however as its famous tenant. As a technological achievement this large dome is an engineering marvel.



Photo # N81 8933 USS Akron leaving the Goodyear Airship dock, at Akron, Ohio 1931

Goodyear's Dr. Karl Arnstein, Chief Airship Engineer, and his staff were responsible for the design and construction of the facility. The first challenge in its design and construction was how to reduce or eliminate the effects of a cross wind or wind currents from the building itself when taking an airship in and out of the dock. To conquer this problem an elaborate series of wind tunnel tests were conducted at the Guggenheim Institute in New York. These tests proved the need for a semi-paraboloid structure.

At each end of the hangar are two 600 ton doors that when open and closed follow the contour of the building. These orange peel shaped doors are mounted on a single 6 foot pin and roll on 40 wheels assembled on 4 wheel trucks riding on a circular track.

This monolithic monument to American ingenuity is 1,175 ft long, 325 ft

wide and 211 feet high. To provide examples of its size ten football games could be played under its roof. The World War II aircraft carriers Lexington and Saratoga could be docked inside or, the Washington monument could be laid lengthwise inside with room to spare.

A total of 7200 tons of steel make up the complete structure. To combat the effects of temperature on the superstructure the arches of the building are placed on rollers to allow for the expansion and contraction of the steel. This design feature allows the building to "breathe".

To work on the Airships and maintain the building several work platforms are lowered from the ceiling and a series of catwalks are located in the lower reaches of the curving roof. To access these platforms a counter balanced inclined railway is used!

The "Air Dock" as it was dubbed was born at the beginning of the great depression. She constructed and housed the 725 ft long rigid U.S. Navy Airships U.S.S. Akron ZRS-4 and U.S.S. Macon ZRS-5. When these flying leviathans met their tragic ends resulting in the elimination of the Navy's rigid Airship program the "Air Dock" continued to serve in a wide variety of depression era activities. Perhaps most notably the "Air Dock" housed the production of aluminum pots and pans, refrigerators and bicycles as Goodyear's Aircraft

The DAEs Desk

(Continued from page 1)

would recommend it to anyone interested in aerospace education. Commanders, AEMs, and especially AE Officers should come. It is a great way to network and meet others involved in this important mission of CAP! In addition, when working on the AE specialty track you can use this school as one of your items to complete the goal of master, senior or technician level. EVERY AEO needs to advance in the specialty track. I know some of you may be unfamiliar with how to advance. Please call or email my staff or attend this school to improve in your profession. We need to strive for excellence and to place Ohio Wing in the preeminent place as a leader in aerospace as well as the missions of emergency services and cadet programs.

Division struggled to survive during the years 1935 to 1941.

On December 8, 1941 the United States entered into World War II. In support of the War the Airship Dock provided facilities for the production of over 100 airship gondolas for use on the famous "K" ships. Serving her country proudly from 1941 to present day the "Air Dock" has born witness to a wide array of aviation innovations ranging from the giant U.S Navy ZPG Airships of the 1950s to the one man helicopter and the all rubber inflatoplane.



The "Air Dock" today. Photo courtesy Jim Pryor

In 2012 the 83 year old Airship Dock continues to serve as a Lockheed Martin facility and still providing housing for a litany of aviation firsts. Although no public tours can be taken the Airship Dock can be viewed clearly from the Akron Fulton International Airport. The sight of this engineering achievement is awe inspiring and can provide a valuable living history teaching experience to all young CAP cadets.

Buckeye Airspace

Newsletter for the Ohio Wing Civil Air Patrol

Published bi-annually

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1st LT Don Thomas

Layout & Design

1st LT Don Thomas

Photographer

1st LT Don Thomas

Article contributions are welcomed!
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Some Spin-offs and Benefits from the STS Programs: Part Two

Two

By Cadet Drew Moseley & Shane Warren
Submitted by Capt Louis E. Adams, CAP

This edition of the Newsletter attempts to highlight some of NASA's most significant non-medical research and development activities over the past 35 years and to identify a few of the practical benefits that have come back down to Earth in the form of tangible products that have made our lives better. Throughout its short history—whether enabling stunning accomplishments' or responding to heartbreaking tragedies—the STS Program⁽¹⁾ has proven a fertile source for innovations that have moved beyond NASA and into the public sphere. Through fruitful partnerships, NASA has transferred multiple technologies with origins in the program for the benefit of our Nation. Though the Shuttle era has ended, the spinoffs from the program will continue to save lives, support jobs, conserve energy, improve the environment, enhance national security, and more, for years to come⁽¹⁾.

First we must clarify some misconceptions about a few products that have been around several years before the Space Program began. One such product is Tang⁽²⁾. Tang a fruit-flavored drink that was originally formulated by General Foods Corporation food scientist William A. Mitchell in 1957. When NASA used it on John Glenn's Mercury flight and subsequent during the Gemini missions sales of the product soared. Since it was so closely associated with the U.S. manned spaceflight program, the general public has had the mistaken belief that Tang was invented for the space program.

A second product used routinely is Velcro⁽³⁾. Velcro, the first commercially marketed fabric hook-and-loop fastener, was invented in 1948 by the Swiss electrical engineer George de Mestral who patented it in 1955. Subsequently, other engineers made improvements and NASA has made sig-

nificant use of Velcro. Each space shuttle had ten thousand inches of a special Velcro made of Teflon loops, polyester hooks, and glass backing. It was used everywhere, from the astronauts' suits, to anchoring equipment. In the near weightless conditions in orbit, Velcro was used to hold objects and keep them from floating away. A Velcro



patch was used inside astronauts' helmets where it serves as a nose scratcher. During mealtimes astronauts used trays that attach to their thighs using Velcro fasteners.

Over the years, the U.S. Military has used Velcro fasteners on combat uniforms to attach name tapes, rank insignia, on shoulder pockets for unit patches, skill tabs, and recognition devices, such as the infrared (IR) feedback American flag. They also have a silent version of Velcro developed for use with uniforms, as the ripping sound could be overheard by the potential enemy and thereby betraying a soldier's position. A new version has been created which reduces the noise by over 95% and the manufacturing process remains a military secret.

Battery powered tools: have been used routinely by astronauts during space walks throughout the STS projects. However, the first cordless tool was actually invented by Robert Ridley, Jr. while working at Black & Decker⁽⁴⁾. Ridley was trying to solve problems at worksites where AC power was not available and he focused on battery technology for drills and he filed a patent application was in 1961. Black and Decker introduced the first cordless drill to the market in 1961, and Martin Marietta contracted with Black and Decker in the mid-to late 1960's to develop a range of cordless tools for the space program. The first such tool developed by Ridley for NASA was a cordless wrench for use in Project Gemini in 1963. By 1968, Black & Decker developed a unique power head for the Apollo Lunar Surface Drill to remove core samples from the moon.

Barcodes⁽⁵⁾: used for Inventory: Bernard Silver & Norman Joseph Woodland, graduate students at Drexel Institute of Technology in Philadelphia,

came up with the first working system using ultraviolet ink, but this proved too easy to fade and was fairly expensive. They continued to work on the system and a patent was issued on 7 October 1952. NASA developed an improved and special type of barcode for use to keep track of inventory, but this should not be mistaken for the original one.

Magnetic Resonance Imaging (MRI)⁽⁶⁾: MRI is based on a physics phenomenon discovered in the 1930s, called nuclear magnetic resonance or NMR, in which magnetic fields and radio waves cause atoms to give off tiny radio signals. Felix Bloch, working at Stanford University, and Edward Purcell, from Harvard University, discovered NMR, but NASA has contributed to its advances over the years. In the mid-1960s, as a prelude to NASA's Apollo Lunar Landing Program, the Jet Propulsion Laboratory (JPL) developed the technology known as digital image processing to allow computer enhancement of Moon pictures.

Quartz clocks: The quartz clock dates back to 1927. However in the late 1960s, NASA partnered with a company to make a quartz clock that was on the market for a few years.

More recently, traffic to and from the International Space Station (ISS) via STS or the launching of space exploration satellites has produced technology that has been commercialized through NASA funding, research, licensing, facilities, or other assistance. The following are just a few examples of products that were first used by NASA and represent some of benefits that are Spin-Offs from STS:



Space Shuttle Endeavour in orbit
Photo courtesy NASA

1). Software Calculates Measurements from Photographs: As part of the investigation following the Space Shuttle Columbia disaster, a Kennedy

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Space Center scientist developed a program to calculate the dimensions of objects in photographs. In 2008, Digi-Contractor Corp. of Tarzana, CA, licensed the technology and incorporated it into online technology that can calculate measurements from photos for applications from construction and remodeling to landscaping to crime scenes and auto accidents.

2). Insulating Against Extreme

Temperatures: The Space Shuttle requires more than a half million gallons of liquid oxygen and liquid hydrogen fuel, which must remain at about -423 °F and -297 °F respectively. Aspen Aerogels of Northborough, MA, worked with Kennedy Space Center through the Small Business Innovation Research (SBIR) program to develop a robust, flexible form of aerogel for cryogenic insulation in Space Shuttle launch applications. Aerogels, which has the lowest thermal conductivity of any known solid, now provides insulation for everything from houses to extreme-weather clothing to insoles for footwear.

3). Clean Energy Technology:

Proven to be the most efficient rocket engine of its time, the Space Shuttle main engine (SSME) was developed in the 1970s under contract to NASA by Pratt & Whitney Rocketdyne (PWR), East Hartford, CN. After engineering the unprecedented SSME, PWR used its rocket engine expertise to make clean energy gasification technology with 10–20 percent lower capital costs and a 10-percent reduction in carbon dioxide emissions compared to conventional gasification plants. Each system deployed is equivalent to removing 50,000 cars from the road.

4). Protecting Machines and the Environment:

Since first used in 1965, NASA's two massive tank-treaded crawlers, have traveled more than 3,500 miles transporting the Shuttle between Vehicle Assembly Building and the launch pad about 3.4 miles away. In 1994, NASA and Lockheed Martin Space Operations commissioned Sun Coast Chemicals of Daytona Inc. to develop a new lubricant that would be safe for the environment and help "grease the wheels" for the crawlers. The company produced the

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Dayton Air Show

By Capt Tina Lowe, CAP

Members of the Ohio Wing volunteered their services in Dayton Ohio July 6-8 2012 at the Dayton Air Show. Under the direction of the Air Show Commander Capt James Goodman and the Cadet Commander C/Lt. Col Sara Fishbein; with thirty one Senior Members and seventy one Cadets the Air Show was a success.

All three of the Civil Air Patrol missions were represented at the Air Show.



Aerospace Education; members could meet and talk to Aviation Specialists tour and view different aircraft.

Emergency Services; there was a qualified ground team ready for action if the Air Force needed one.

Cadet Programs; there were two Cadet Squadrons with nine flights helping at the air show being led by cadets for cadets giving them the chance to practice their leadership skills.



Honor Awards go to the following members for their outstanding service at the Air Show:

Alpha- C/2d Lt Scott Mayer
Bravo- C/SrA Dane Johnson
Charlie- C/Amn Alex Miller
Delta- C/MSgt Drew Bogle
Echo- C/Amn Tyler Hirsch
Foxtrot- C/TSgt Joseph Batchelor

Golf- C/Kramer

Hotel- C/TSgt Cipriano Apolinario

India- C/SrA Bryce Beckner

Flight Sergeant- C/MSgt Arden Sackett

Flight Commander- C/2d Lt Nathaniel Turner

TAC- 1st Lt Edward "Jim" Cox

To see more photos from the Air Show please check out the *Ohio Wing Dayton Air Show* Facebook page. 📷



Aviation Fast Facts

By Lt Don Thomas, CAP

- Even if you strapped on giant wings, you could never fly because the human heart can't pump blood quick enough to satisfy the enormous strain of flapping. When flying, a sparrow's heart pumps more than 450 times each minute!
- A Boeing 737 weighing 150,000 pounds (68,000 kg) must deflect about 88,000 pounds (40,000 kg) of air - over a million cubic feet (31,500 cubic meters) down by 55 feet (16.75 m) each second while in flight.
- Airplanes often cruise at around 35,000 feet. That sounds pretty far up, but compare this to the size of the earth itself. If the Earth were shrunk to the size of a typical desk-top globe, the airplane would be cruising at only one - tenth of an inch (2.5 mm) off the surface.
- The larger the airplane, the slower it is flying, the more powerful its wingtip vortices. If you stand below a jumbo jet when it lands, you may even hear a flapping sound and see ribbons of water vapor, both created by the wingtip vortex. 📷

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biodegradable, high-performance X-1R Crawler Track Lube and introduced a range of commercial lubricant products—for everything from motorsports to fishing tackle.

5). Taking Shuttle Aerodynamics on the Road: During the 1970s, researchers at Dryden Flight Research Center used expertise gained from designing the Space Shuttle to alter the shape of large vehicles like trucks—rounding corners and edges and adding fixtures known as “fairings” to improve aerodynamic efficiency, which led to marked improvement in gas mileage. Virtually all tractor-trailer big rigs and recreational vehicles on the highway today bear physical evidence of the project.

6). Monitoring Water Quality: Originally designed as hydroponic solutions for growing plants in space, the Chem-Scan analyzer, produced by Analytics Inc. of Waukesha, WI, now monitors treatment processes at water and wastewater facilities around the world. The company has experienced a compound annual growth rate of 40 percent over its 15-year history as a direct result of the technology’s success.

7). Small Solutions to Big Problems: With the aid of SBIR contracts with Marshall Space Flight Center, Micro-Bac International Inc. of Round Rock, TX, developed a phototrophic cell for water purification on the ISS. The microbial formulation is now used for the remediation of wastewater systems and waste from livestock farms damaging oil spills and food manufacturers.

8). Beginning Dinner from the Laptop: Engineers who designed the ISS electric grid system have also embedded a similar computer-web controlled system that regulates refrigeration and cooking temperatures within the same device from your office and the food is cooked and held at a preset temperature until consumed.

9). Clean and Bacteria-free Water: Water filter technology had existed since the early 1950s, but NASA wanted to convert contaminated water to pure water and keep it free of bacteria for long periods of time. So charcoal was activated with silver ions that neu-

tralized pathogens and prevented further bacterial growth. Venture companies have borrowed this same technology to bring us water filter systems for household use.

10). Right foot forward: in the mid-1980s, shoe company KangaROOS USA applied the principles and materials in moon boots that were worn by Neil Armstrong when he first took that giant leap for mankind on the moon. With help from NASA, KangaROOS patented a Dynacoil three-dimensional polyurethane foam fabric that re-distributes and absorbs the energy from your foot hitting the ground.

11). Are those your Foster-Grants? Starting in 1972, the FDA required the use of plastic rather than glass to make lenses. Plastics are cheaper to use, better at absorbing ultraviolet radiation, lighter and not prone to shattering. However, uncoated plastic lens were prone to scratch, and scuffed lenses could impair someone’s sight. Because of dirt and particles found in space environments, NASA needed a special coating to protect space equipment, particularly astronaut helmet visors. Recognizing an opportunity, the Foster-Grant sunglasses manufacturer licensed the NASA technology for its products. The special plastics coating made its sunglasses ten times more scratch-resistant than uncoated plastics.

12). Where there’s smoke, there’s fire: NASA engineers knew that simple

fact when they were designing Skylab, the first U.S. space station, in the 1970s. Astronauts needed to know if a fire had started or if noxious gases were loose in the vehicle, so NASA teamed up with Honeywell Corporation, and they invented a smoke detector using americium-241 with variable sensitivity levels to prevent false alarms. If foreign smoke particles enter the smoke detector along with oxygen and nitrogen, the americium-241 ionizes them, creating an electrical current and that interaction, triggering the alarm.

13). Why Do I Have to Wear Braces? Getting one’s teeth into alignment used to mean enduring a mouth full of metal, but not so anymore. Invisible braces hit the market in 1987, and now there are multiple brands. Invisible braces are made of translucent polycrystalline alumina (TPA). A company called Ceradyne developed TPA in conjunction with NASA Advanced Ceramics Research to protect the infrared antennae of heat-seeking missile trackers. Unitek was working on a new design for dental braces -- a design more aesthetically pleasing and would not have the shiny metallic factor. It discovered that TPA would be strong enough to withstand use and is translucent, making it a prime material for invisible braces; the most successful products in the orthodontic industry.

14). Cameras Improve Navigation for Pilots, Drivers: Advanced Scientific Concepts Inc. (ASC), of Santa Barbara,

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What is it? Name the Aircraft

By Lt Don Thomas, CAP

HINT: Think transformer.



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CA, received SBIR awards and other funding from the JPL, Johnson Space Center, and Langley Research Center to develop and refine its 3D flash LIDAR technologies for space applications. Today, ASC's NASA-derived technology is sold to assist with collision avoidance, navigation, and object tracking.

15. Advisory Systems Save Time, Fuel for Airlines: Heinz Erzberger led a team at Ames Research Center to develop a suite of automated tools to improve air traffic control operations. Chicago-based Boeing licensed one of the tools and incorporated it into a product called Direct Routes, which can save tens of thousands of flight minutes—and millions in fuel costs and thousands of tons of carbon emissions—for commercial airlines.

16. Modeling Programs Increase Aircraft Design Safety: Partnering with Dryden Flight Research Center through the SBIR program, ZONA Technology Inc. of Scottsdale, AZ, developed innovative tools for addressing a key safety concern during aircraft design. The company is also working on a cost-effective alternative to wind tunnel testing through another Dryden SBIR project.



Photo courtesy NASA

17. Fly-by-Wire Systems Enable Safer, More Efficient Flight: Using the ultra-reliable Apollo Guidance Computer that enabled the Apollo Moon missions, Dryden Flight Research Center engineers, in partnership with industry leaders such as Cambridge, MA-based Draper Laboratory, demonstrated that digital computers could be used to fly aircraft. Digital fly-by-wire systems have been incorporated into large airliners, military jets, new aircraft, and even cars and submarines.

18. Modified Fittings Enhance Industrial Safety: Concerned with the safety of the connections on pressurized air hoses, engineers at Kennedy

Space Center modified a fitting to control the air supply hose in the event of an accidental release. An Enid, OK-based business, PT Coupling Company, licensed the technology and incorporated it into a new line of products to automatically prevent rapid separation of the fittings, enhancing worker safety.

19. Simulation Tools Model Icing for Aircraft Design: Glenn Research Center developed the LEWICE software for simulating how ice builds up on aircraft surfaces, a potential detriment to safety and performance. American Kestrel Company LLC of Ithaca, NY, partnered with Glenn through a Space Act Agreement and now distributes LEWICE with an improved interface to aircraft manufacturers worldwide, saving clients hundreds of thousands of dollars in testing and design costs.

20. Information Systems Coordinate Emergency Management: NVision Solutions Inc., based in Bay St. Louis, MS, partnered with Stennis Space Center through multiple channels, including SBIR contracts. Among the results is a comprehensive emergency management system in use by municipal governments, national security organizations, and every NASA center—earning the company more than \$2 million in revenue.

21. Imaging Systems Provide Maps for U.S. Soldiers: Goddard Space Flight Center worked with Flight Landata Inc., based in North Andover, MA, to develop a spectral imaging instrument for airborne applications. Through SBIR funding, Flight Landata demonstrated the operational capability of the instruments. Today, the company provides unclassified high-resolution geospatial data for tactical military missions.

22. High-Pressure Systems Suppress Fires in Seconds: By applying principles from a new kind of rocket engine—developed by Orbital Technologies Corporation of Madison, WI, under SBIR contracts with Marshall Space Flight Center—to fire hose nozzles, company subsidiary HMA Fire improved the performance of its ultra-high pressure fire suppression systems, which extinguish many fires in significantly less time and using less water

than traditional systems.

23. Alloy-Enhanced Fans Maintain Fresh Air in Tunnels: Marshall Space Flight Center developed a high-strength aluminum alloy three to four times stronger than conventional aluminum alloys at high temperatures. Twin City Fan Companies Ltd. in Minneapolis, MN, licensed the alloy and is currently employing technology to make impellers for safety ventilation fans in rail and road tunnels.

24. Control Algorithms Charge Batteries Faster: Advanced Power Electronics Corporation of Orlando, FL, partnered with Glenn Research Center through the SBIR program to develop an advanced power converter for space systems. The company incorporated control algorithms created through the partnership into a solar charger that charges batteries 30 percent faster than comparative devices.



TransWarp 9 electric motor
Photo courtesy NetGain Technologies

25. Retrofits Convert Gas Vehicles into Hybrids: Working with Glenn Research Center through the NASA IL Commercialization Center, NetGain Technologies LLC of Lockport, IL, developed a retrofit system for converting gas-powered vehicles to gas-electric hybrids. The partnership also resulted in a line of electric motors for vehicles marketed by NetGain Motors Inc., the production of which supports over 100 jobs at the company's manufacturing facility.

26. NASA Missions Inspire Online Video Games: Goddard Space Flight Center and other NASA groups provided funding for Army Game Studio, of Redstone Arsenal, AL, and Virtual Heroes of Applied Research Associates, in Raleigh, NC, to develop an online video game to help inspire the next generation of scientists, engineers, and explorers. The game has been downloaded nearly 300,000 times, and an expanded version is in the works.

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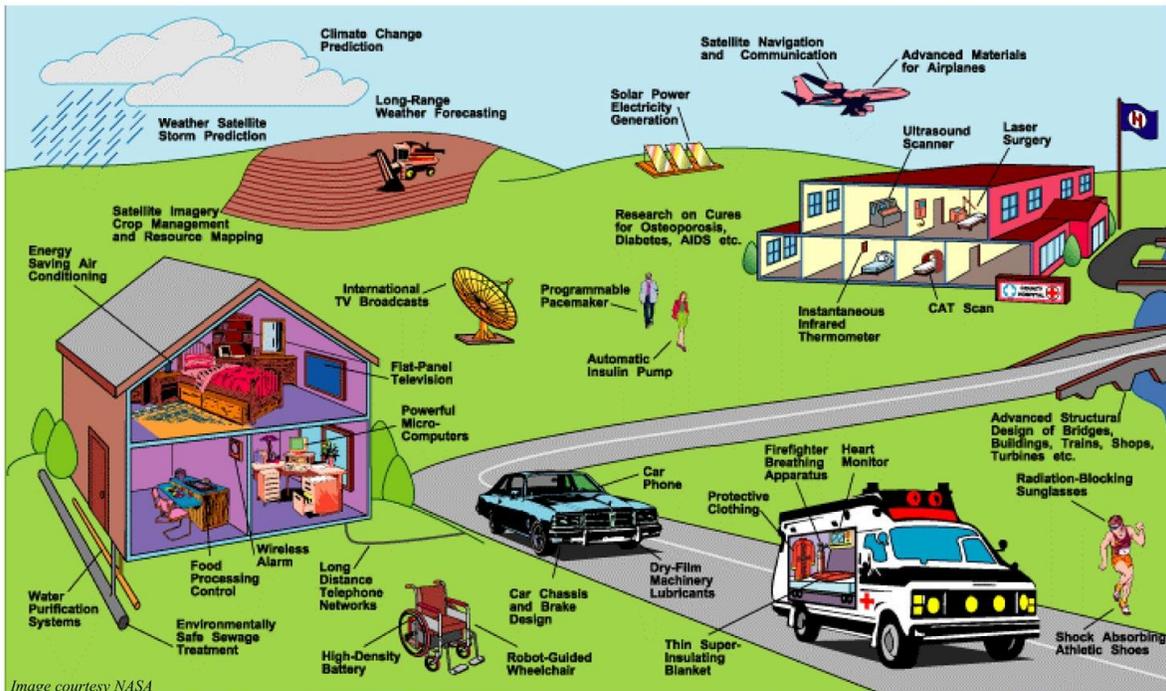


Image courtesy NASA

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27). Monitors Track Vital Signs for Fitness and Safety: Through a Space Act Agreement with Ames Research Center, Zephyr Technology of Annapolis, MD, worked with NASA physiology experts on motion sickness experiments, resulting in improvements to the company's wearable vital-sign monitors. Zephyr's monitors are now used to monitor the health and fitness of soldiers, first responders, pro athletes, and average consumers looking to get in shape. The company sells thousands of its NASA-enhanced products each month.

28). Thermal Components Boost Performance of HVAC Systems: A Rockledge, FL-based company, Mainstream Engineering Corporation, works with NASA to develop advanced thermal control technology for spacecraft. Most recently, Mainstream developed new products, based on SBIR work with Johnson Space Center, that improve air conditioner performance and filtration—a boon for allergy and asthma sufferers.

29). Wind Tools And Environmental Change: Originally developed under NASA's Learning Technologies

program as a tool to engage and inspire students, World Wind software was released under the NASA Open Source Agreement license. Honolulu, HA-based Intelesense Technologies is one of the companies currently making use of the technology for environmental, public health, and other monitoring applications for nonprofit organizations and Government agencies. The company saved about \$1 million in development costs by using the NASA software.

30). Analyzers Measure Greenhouse Gasses, Airborne Pollutants: Los Gatos Research Inc. of Mountain View, CA, partnered with Ames Research Center to develop instrumentation for detecting signs of life in deep sea and deep space environments. This led the company to commercialize a range of highly accurate and sensitive analyzers for detecting pollutants and greenhouse gasses. Los Gatos plans to grow from 30 to nearly 50 full-time employees by the end of 2011.

31). Remediation Technologies Eliminate Contaminants: Kennedy Space Center scientists developed a technology called the Activated Metal Treatment System (AMTS) that safely

absorbs and breaks down an environmentally hazardous chemical commonly found in older paints. Bio Blend Technologies, based in Cantonment, FL, licensed AMTS as well as Kennedy's Emulsified Zero Valent Iron technology, acquiring the capability to remediate the toughest cases of environmental contamination.

32). Receivers Gather Data for Climate Research, Weather Prediction: A technology developed at NASA's JPL uses a technique to help scientists improve weather forecasts, monitor climate change, and enhance space weather research. JPL turned to Tempe, AZ-based Broad Reach Engineering Company to produce the receivers. The company licensed the technology and then commercialized it for Earth science use by NASA and international organizations.

33). Coating Processes Boost Performance of Solar Cells: While working on Glenn Research Center-funded projects, scientist Maria Faur invented a process for coating solar cells that both significantly reduces production costs and increases cell efficiency. Faur's company, North Olmstead, Ohio

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-based SPECMAT Inc., has licensed the process to a company that believes it could revolutionize the solar energy industry.

34). Catalyst Substrates Remove Contaminants, Produce Fuel: A North Haven, Connecticut-based company, Precision Combustion Inc. (PCI) worked with Glenn Research Center to prove the viability of its technology for catalytic reduction of emissions from combustion. Also enhanced through Marshall Space Flight Center SBIR program funding, PCI's NASA-improved air filtration devices can be coated with a variety of materials to promote chemical reactions and remove environmental contaminants.

35). Technologies Render Views of Earth for Virtual Navigation: SBIR contracts with Langley Research Center and satellite data from Stennis Space Center allowed Littleton, Colorado-based TerraMetrics Inc. to develop a satellite imagery and terrain data product line that features in Google Earth, as well as a 3D terrain-rendering engine that enables synthetic vision solutions for aircraft, enhancing the pilot's situational awareness during flight.

36). Content Platforms Meet Data Storage, Retrieval Needs: Archivas

Inc. partnered with Goddard Space Flight Center through the SBIR program to advance technology for archiving and accessing immense amounts of data. Hitachi Data Systems Corporation of Santa Clara, CA, acquired the company and now offers the NASA-derived technology to provide powerful content management and cloud computing tools for multiple businesses and healthcare providers.

37). Electronic Handbooks Simplify Process Management: REI Systems, a Herndon, VA-based small business, received a Goddard Space Flight Center SBIR award to build a framework for storage, retrieval, and update of heterogeneous data objects. Today, the company applies the approach to managing information in every one of their custom software applications for various Federal agencies and has more than 60,000 users for its NASA-derived model, with over \$6 billion in financial transactions per year.

38). Software Innovations Speed Scientific Computing: To help reduce the time needed to analyze data from missions like those studying the Sun, Goddard Space Flight Center awarded SBIR funding to Tech-X Corporation of Boulder, CO. That work led to commercial technologies that help scientists accelerate their data analysis tasks. Thanks to its NASA work, the company

doubled its number of headquarters employees to 70 and generated about \$190,000 in revenue from its NASA-derived products.

39). Controller Chips Preserve Microprocessor Function: To develop controller technology for a variety of missions, Marshall Space Flight Center partnered with a San Diego-based company, Space Micro Inc., through the SBIR program. Today, the technology is embedded in the company's entire series of high-performance, radiation-hardened computers for space. The company has expanded from 4 employees at the beginning of its NASA partnership to 43 today, growing from a \$1 million to an \$8 million company.

40). Nanotube Production Devices Expand Research Capabilities: To assist in research on how to improve solar cells, scientists at Glenn Research Center devised a new way to grow high-quality carbon nanotubes. Glenn released the technology to the inventors, one of whom founded Nanotech Innovations in Oberlin, Ohio. Today, the technology is supporting the incorporation of carbon nanotubes into education curricula, research, and product development endeavors.

41). Custom Machines Advance Composite Manufacturing: Through

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What is it? Name the Aircraft

Answer: MV-22B Osprey

The MV-22 Osprey is a multi-engine, dual-piloted, self-deployable, medium lift, vertical takeoff and landing (VTOL) tilt-rotor aircraft designed for combat, combat support, combat service support, and Special Operations missions worldwide. The MV-22 combines the functionality of a helicopter with the long-range, high-speed cruise performance of a turboprop aircraft. It is built with composite materials, has fly-by-wire light controls and digital cockpits.*

*www.marines.mil



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the SBIR program, Accudyne Systems Inc. of Newark, Delaware, developed a device for creating thermoplastic composite structures without the use of an expensive autoclave. The partnership yielded technology for the company's commercial, custom-built composite manufacturing machines, helping advance composite part fabrication.

42). Polyimide Foams Offer Superior Insulation: Pennville, IN-based GFT LLC licensed the TEEK polyimide foams from Langley Research Center. The company now offers the foams in a variety of forms to provide safe, high-performance, environmentally friendly insulation for pipes on marine vessels and other applications. The company recently completed a deal that will keep it manufacturing its NASA-developed foams for the next 10–15 years.

43). Beam Steering Devices Reduce Payload Weight: Through SBIR contracts with both Johnson Space Center and Langley Research Center, Boulder Nonlinear Systems Inc., of Lafayette, CO, developed a solution to mechanical laser beam steering problems. The company's advanced optical phase array chips now have applications across fields as varied as scientific research, aeronautics, defense, telecommunications, and biomedical engineering.

44). Models Support Energy-Saving Microwave Technologies: Kennedy awarded SBIR funding to Troy, New York-based Ceralink Inc., to demonstrate a microwave system that could heat lunar soil to over 2,000 °F, temperatures to solidify the surface. Ceralink also examined the feasibility of using computer modeling software to simulate microwave heating on a larger scale. As a result, the team advanced a computer modeling capability that is now incorporated into Ceralink's commercial services.

45). Materials Advance Chemical Propulsion Technology: Glenn Research Center partnered with Marshall Space Flight Center and Aerojet through a NASA Research Announcement to work on the Advanced Materials Bipropellant Rocket. Aerojet subcontracted a company in Huntsville, AL called Plasma Processes Inc. (PPI) to modify a state-of-the-art engine design

so the chamber wall materials could operate at very high temperatures. The project validated PPI's process for making high-temperature materials for other applications, such as satellite and rocket propulsion for the commercial aerospace industry.

46). High-Temperature Coatings Offer Energy Savings: As a result of its research and development efforts for a new thermal protection material to test on the X-33 and X-34 supersonic aircraft, Ames Research Center invented the Protective Ceramic Coating Material (PCCM). Emisshield Inc. in Blacksburg, VA, licensed the technology and now provides more than 20 different products for hydrocarbon and chemical processing, power generation, metal production, glass making, and baking.

As illustrated here, NASA has recorded about 1,600 new technologies or *Spin-off* applications each year for the past several decades, but according to NASA officials far fewer become commercial products. It may be fair to say that NASA may not claim credit for computers and the digital revolution that has followed, but it did create a pool of talent that perhaps contributed to that transformation of modern life. For further reading, NASA publishes an annual journal titled *Spinoff* which features products whose development can be linked to the agency.

Routine Space Travel in New-generation Launch Vehicles: With the end of the STS Program, one may ask what is next for NASA. Well, with the high cost of space transportation coupled with unreliability currently discourages access to space as an everyday environment. When space transportation becomes safe and affordable for ordinary people numerous possibilities and opportunities can be envisioned. The vision is guided by possibilities such as living and working in space, exploring new worlds, and vacationing off the Earth. In a similar context opportunities for business and pleasure are added multiples.

Scientists are using lessons learned from the STS Program to guide upcoming missions within our solar system. As has been reported by Abbasi¹⁷ and others, Mars is receiving the most attention. Being only 35 million miles from

Earth, this planet seems to be at the margins of the sun's habitable zone at which water is present on its surface. Later in 2018, NASA will join the European Space Agency to launch a rover to excavate core samples from its surface and the samples will be returned to Earth for analysis in 2025.

But let's not forget that the twin Voyager 1 and 2⁽⁸⁾ spacecraft are out there and continue exploring where nothing from Earth has flown before. In the 33rd year after their 1977 launches, they each are much farther away from Earth and the Sun than Pluto. Voyager 1 and 2 are now in the "*Heliosheath*" - the outermost layer of the heliosphere where the solar wind is slowed by the pressure of interstellar gas. Both spacecraft are still sending scientific information about their surroundings through the Deep Space Network (DSN).

The primary mission was the exploration of Jupiter and Saturn. After making a string of discoveries there -- such as active volcanoes on Jupiter's moon and the intricacies of Saturn's rings -- the mission was extended. Voyager 2 went on to explore Uranus and Neptune, and is still the only spacecraft to have visited those outer planets. The adventurers' current mission, the Voyager Interstellar Mission (VIM), is exploring the outermost edge of the Sun's domain⁽⁸⁾ and beyond! Who knows, it may be in contact with ET any day now!

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Local Students Prepare for CyberPatriot National Finals Competition

Vienna, OH. – A local team of Civil Air Patrol cadets from Youngstown's ARS Composite Squadron, named "Team Hercules" is headed to the Washington, D.C. area March 22 – March 24, 2012, as a finalist in the national championship round of CyberPatriot IV—The National High School Cyber Defense Competition.

CyberPatriot is a unique competition geared toward teenagers that replicates real life cyber security situations faced by computer administrators. Created in 2008 by the Air Force Association, CyberPatriot provides students hands-on learning about cyber security while exciting, educating, and motivating them to be the nation's next cyber defenders.

Led by Captain Paul Creed III, Team Hercules is one of 12 finalists for the competition's All Service Division. The team (with their nicknames) consists of Jacci "Mints" Acierno (Warren), Sean "Wise Man" Beatty (Austintown), Austen "FLOPS" Peters (Poland), and team captain Andrew "Bones" Stoneburner (Lake Milton). Captain Creed has been coaching the team since summer with the help of mentor 2d Lt. Brian "Loopback" Stoneburner. This year's two-track competition had public, private and home schools registered in the Open Division, while Junior ROTC units and Civil Air Patrol squadrons filled the All Service Division. In all, more than 1,000 teams registered to participate, representing all 50 states, U.S. Department of Defense Dependent Schools in Europe and the Pacific, and Canada.

"Each year this competition draws in very determined students who demonstrate great energy, motivation and excitement in their involvement with CyberPatriot," said Bernie Skoch, CyberPatriot Commissioner. "We have to congratulate all the students for their hard work, and we look forward to the great amount of enthusiasm they will bring with them to the National Finals Competition in March."

The All Service Division began with more than 600 teams registered. After two spirited rounds of competition, 40 teams advanced to Round 3. Now, the group has been narrowed to 12, and each team will receive all-expenses-paid trips to the CyberPatriot National Finals Competition at the Gaylord National Hotel and Convention Center, in National Harbor, Maryland, where teams will compete face to face and defend virtual networks from a professional aggressor team.

Round 3 of the Open Division competition will be held January 27-28. It will select the 12 teams from that division who will advance to the National Finals Competition as well. The top team from each division will be announced at an awards banquet concluding this year's competition.

CyberPatriot is presented by the Northrop Grumman Foundation, with founding partners SAIC and the CIAS at the University of Texas-San Antonio. CyberPatriot is also a member of the U.S. Cyber Challenge (USCC), a national coalition of public-private sector entities collaborating to enhance the workforce with the next generation of cyber security professionals.

**Ohio Wing Report
International Air Cadet Exchange 2012**

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Pre-Planning

1. The IACE Program took an immense amount of pre-planning and communication.
2. Special thanks are given to the Barnes Family for making a wonderful home for our IACE cadets. Capt Tanda Lainhart for assistance with transportation. Lt Col Steve Jones for advice from a former IACE participant.
3. The staff for the project comprised of Ohio Wing Project Officer: Nathaniel Spehr, Capt, CAP and Cadet Project Officer C/Maj Tanner Barnes, CAP.
 - a. Pre-planning took months to line up host families, figure out transportation, line up tours, arrange an O-Flight, and organize a ten day fun event.
4. Our international guests consisted of Or Zabłudowski and Julie Koichu from Israel, and DuKwant Kang and Sohyoun Park from South Korea. Each was an outstanding representative of their country. Our bond that developed over those days embodies the strength of diplomacy. I still miss them and cherish the time we all had together and the outstanding memories we created to last a lifetime.

Activities

Friday

After touring Washington D.C. with National CAP the cadets arrived in Ohio for an unforgettable ten days. Friday when the cadets first arrived everyone was nervous. Were the plans made going to be good enough? What haven't I accounted for? When the International Cadets arrived we had a welcoming committee of cadets and seniors to meet them at the airport. We helped get their luggage and took them to the host families to get acquainted. Having the cadets spend time that evening getting to know who they were going to spend a lot of time with was productive and allowed questions to be asked. After dinner they heard about the tractor pull at the county fair that evening, they were interested in going, so we hopped in the CAP van and went to see the tractor pull at the county fair. They asked many questions about the origination of the event. We also went into one of the animal buildings and one of the cadets made a comment about one of the rabbits being fat but cute. Which lead to he needed to find a stuffed bunny to give to his girlfriend back home that lasted the whole week.



Saturday

We went to a local military museum. I had my doubts about taking them there as it was originally a backup. Yet when the SAREX was cancelled we had extra time. The cadets enjoyed the Motts Military Museum. They they met with an older gentleman who unofficially trained commandos who went on the Entebbe Raid. Also one of the Korean items in the museum was upside down and the escort brought it to me. The project officer took it to the museum and they corrected it. The cadets also met the museum director himself. After, we went to the Ohio Historical Society who was having a Civil War Reenactment. The international cadets saw the civil war band and people dress and act as if they were in the 1860's. Next, we went to the Jazz and Rib fest. The cadets enjoyed the ribs and cool jazz. After went home and relaxed for a few minutes. Then we went to the Crew (soccer game). The cadets had a good time and we got to see the only goal of the game and winning point (downside-traffic after the game was bad).





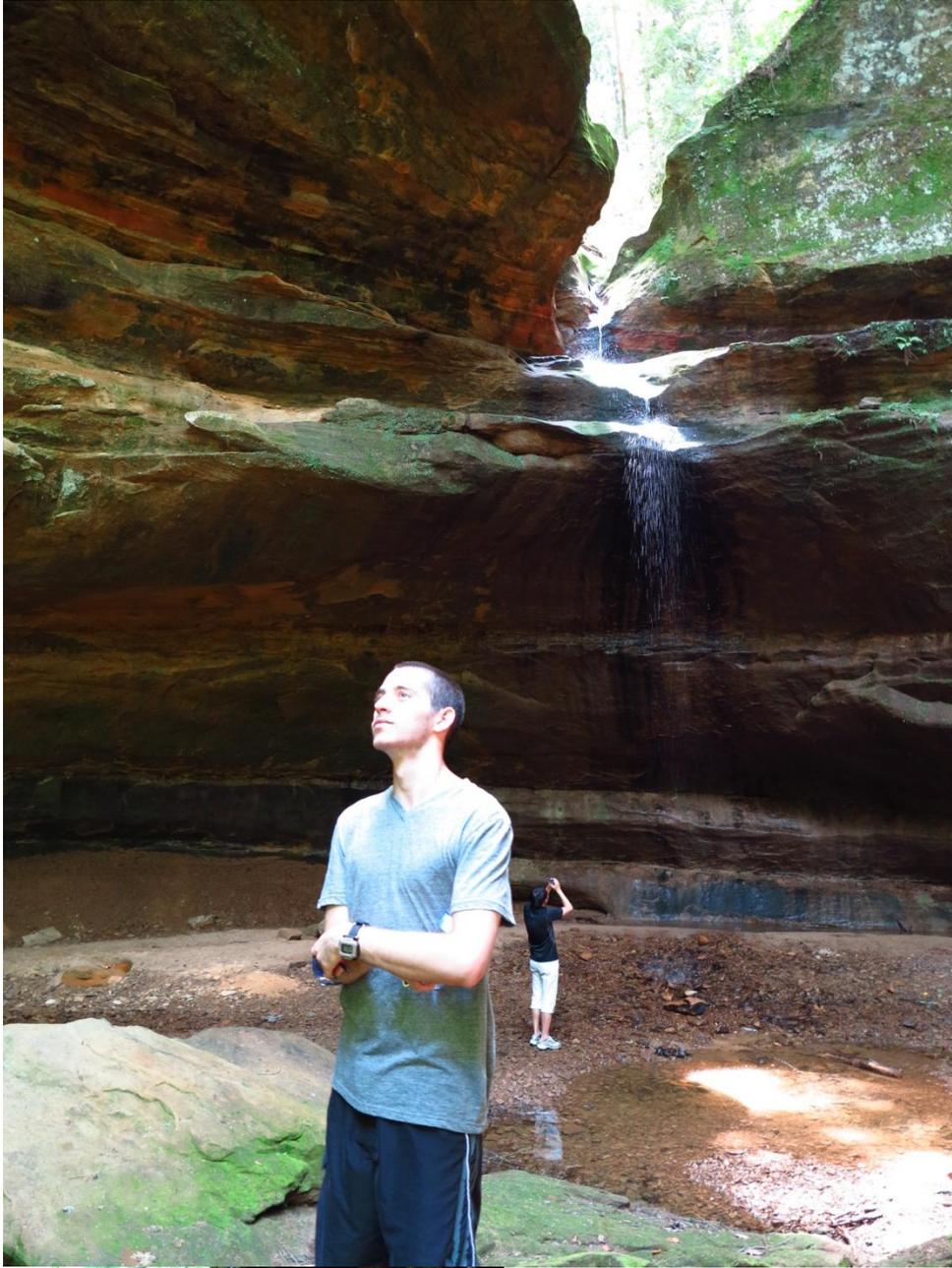
Sunday

We went to the Hocking Hills of Ohio! I was thinking we were going to spend a few hours at the hills; however, we ended up spending most of the day. We spent time exploring Old Man's Cave then took the trail over to the Ash cave area. We had a picnic lunch in the park. The cadets liked the walk on the trail as they got to see a lot of nature. (There was no cell reception down there). We were going to also go kayaking/canoeing; however, command debated it was a high adventure activity. In the end we didn't go kayaking/canoeing. Yet, we still made it fun! The cadets were tired so we went home that evening and had dinner there. What started out as playing air hockey in the basement quickly turned into ping pong then a full blown Nerf War with splitting up Korea and Israel and US on one team and the other members on the other. To Israel vs. Korea and sudden death duels, it really made the evening for them. One of the most memorable events for them was not a tour, who they met, but the fun they had.









Monday

We toured Net Jets a worldwide executive jet aviation business. They did give the cadets a briefing of all types of different aircraft they had. The cadets got to see the newest aircraft they had in their fleet (which was going to be unveiled the next day) and the CEO of NetJets. We went over to flight safety. The cadets got to be in a pilot training simulator and they also got to do the flight attendant training simulator. After that we went to lunch and then went to Airport Maintenance. Pete Bricker gave an outstanding tour to the cadets. I was at first hesitant on taking the cadets because I was not sure it was going to be interesting enough. Yet, there were Boeing 737's that the cadets got to walk in and around while they were being worked on. While Mr. Bricker explained and answered many of their questions about the aircraft and their parts. Then we went to the Franklin Park Conservatory. After that we went to Easton Town Center mall to do some shopping. We had dinner at Max and Erma's and had a great time joking around. That evening we also watched Back to the Future as well as the Ohio Wing Encampment 2012 video.





Tuesday

We traveled out to the Armstrong Air and Space Museum through some strong thunderstorms. We then went to Bob Evans (a restaurant started in Ohio) and had a good lunch. From there we went to the Air Force Museum. After, we went to Huffman Prairie and overlook of WPAFB. Then we went to America's largest comic book store. As we had gotten to know them and their interests we added and subtracted things from the schedule. The cadets liked it and purchased a few comic books. That evening we visited the Wright Patterson Cadet Squadron. The cadets thoroughly enjoyed the visit and even did questions and answers with the CAP cadets. The cadets also received squadron t-shirts from the Wright Patterson Cadet Squadron. Also, they gave the cadets a huge bag of candy which we called the decision bag the rest of the week. Before a decision was made everyone had to have a piece of candy.

Wednesday

The cadets were tired from the day before so we decided to do a late start day and also give them any extra time if needed. We then went to the Chiller and did mid-day ice skating. The cadets really enjoyed the activity. Then we went to tour the state house, the cadets were interested in the building and the process of government at the state level. Then we went to the Santa Maria a replica of the ship, and landmark in Columbus. After, we went to the Spaghetti Warehouse and had a great dinner with the cadets. (In the future it may be better to do this at lunch since it would be a little cheaper). Then, we went to the clippers baseball game, the cadets enjoyed the game and we got their names to be displayed on the scoreboard. They really liked that personal touch and that we went above and beyond for them.





Thursday

We took a trip up to Cleveland, Ohio and had cadets meet us up there. We went to a park on the lake for an overlook of the lighthouse. Then we went to the USS Cod (an old World War Two submarine) the cadets enjoyed it. Then we went over and got a quick guided tour of the Women's Air and Space Museum right next door to the Cod. Then we went out to lunch in the historic tower of Cleveland- sadly we were unable to get to the top floor to do the overlook. Then we took the cadets over to the Rock and Roll hall of fame. The last project officer's AAR stated not to take the cadets to the Rock and Roll hall of fame. This year I almost considered not taking them to the hall of fame. Yet, through spending time with the cadets on the car rides they liked

rock music. So I took them up to the hall of fame and we were there until it closed. We only got through a few floors in 3 hours. We also took the cadets around the Cleveland browns stadium (and told them how bad the team was) and also the Cleveland Indians. Initially we could have stopped at the Pro-Football hall of fame as well since they stay open late; however, the cadets



wanted to go home.



Friday

We took a tour of the Ohio State University. We also got into the stadium and took pictures of the field. Then we went to the Park of Roses. From there we went to the Columbus Zoo and got through many of the exhibits and got ice cream too, including Buckeye (chocolate and peanut butter in the ice cream). Afterwards we headed over to the water park for some heat relief. We went back home and watched the opening ceremonies of the Olympics after a great dinner.



Saturday

We were able to arrange CAP O-flights, which was very hard to get scheduled. The cadets loved flying! Then we were going to go to the Lancaster festival; however, the cadets did not want to go so, we went to magic mountain fun center and did putt putt golf, go karts, and the batting cages.





Sunday

We spent the day at the Ohio State Fair where we explored many different exhibits and vendors. Sunday evening we presented the cadets with symbolic challenge coins, buckeyes, and pins.



Monday

We sadly had to say our goodbyes. After sorting out an issue with airport security the cadets were on their way back to Washington D.C. Yet, they had many memorable experiences in Ohio.

Afterwards

When the cadets went back to Washington D.C. they had to make a video of their host state. This was a fun video.

<https://www.facebook.com/photo.php?v=10151168458539670&set=vb.545684669&type=2&theater>

Afterwards, we have maintained contact over facebook and have even made a few international phone calls.

Items in Process for OHWG Continuity

International Air Cadet Exchange DEADLINES!

1. An arrival and departure airport is due by 1 Feb
2. Confirmed electronic programs are due to NHQ by 31 March
3. Within 30 days an After Action Report is due to NHQ

Suggested Timeline

1. Pre-Planning panel convenes to decide to host or not, review Standard Operating Procedure (October)
2. Send scouting email to wing about project officer and host families for IACE cadets (October)
3. Pick Project Officer (November)
4. Review host family houses/option with visiting homes (December)
 - a. Select 2 primary homes per area and select backups
5. Comprise a project team (December)
 - a. Hold first planning meeting with topics about the schedule and a packing list
6. Comprise a draft schedule (January) with backups as well as:
 - a. Budget
 - b. ORM
7. Create a packing list (January)
8. Call and tentatively schedule with politicians and tours (January)
 - a. Reconfirm in March, May, and early July, and two days before arrival.
9. Ask for extra funding if needed (February)
10. Line up transportation (March)
11. Invite Cadets to events (May)
 - a. Deadline to register June 30th (for group rates)

IACE Host Family Questionnaire

Name:

Grade:

CAPID#:

1. Have you hosted foreign cadets before? If so from where?
2. Where in the state are you located?
3. How many rooms do you have available for them to use?
 - a. How many regular beds do you have available?
 - b. How many bathrooms do you have available?
 - c. How many showers do you have available?
4. How many cadets are you willing to host?
5. Are you willing to cook and do laundry for the cadets?
6. How many members in your immediate family are CAP members?
 - a. What are their ages?
7. How many days are you willing to host the cadets?
8. Are you able to take off work?
9. Are you able to transport the cadets?
10. What events are around your area to keep cadets entertained?
11. What skills do you have to make our guests feel comfortable while here?
12. How often do you watch or read the news?

Project Officer Questionnaire

1. How much time do you have to devote to IACE planning?
2. Have you assisted in hosting or hosted foreign exchange cadets before?
3. Are you able to take time off work and transport cadets?
4. Have you managed any CAP or other special projects before?

A scenario based interview should be conducted, sample questions follow.

1. If a cadet does not enjoy one of the events, while the others are enjoying it, what do you do?
2. Two cadets talk in their own language in front of everyone; however, you can read their body language. They are upset and frustrated with each other. How do you handle resolving the situation?
3. As you are with the cadets touring them around, a civilian makes a racist comment about the group. How do you handle this situation?
4. You can tell one of the host families is overwhelmed after day 2 of 5 they said they would host. How do you aid the family in feeling better?
5. Due to unexpected expense by higher gas prices and cadets eating more food than planned, you are running low on money. You still have two days left with the cadets. If you do everything you want to do you know you will be over budget. What decision do you make?

Collage of Ohio IACE





Encampment Staff Training

March 17, 2012

91 Days until Encampment!!

Encampment Training; Day Two

Quotables:

"You are the staff; you are held to a higher standard and waiting until the last minute to reply to an e-mail will not cut it."

-Lt Goodman

"Does anyone else's chair rock back and forth? It's pretty comfy"

-C/1st Lt Burris

"There's no one taking pictures!"

-C/Capt McQuaid

"Can I be Yoda?!"

-C/1st Lt O'Grady

"That diaphragm thing is a hoax"

-ANONYMOUS

"Is there a nap time in the schedule?"

-C/SSgt Sacket

Dedicated Committed. Determined. These are the words that begin to describe this year's Encampment Staff. As day two of the STW began to unfold, new faces of the staff were introduced. Squadron Two Commander C/Lt Col Sierra Larson from North Carolina, and Public Affairs OIC C/2nd Lt Ashleigh Keister from Kentucky were some of the new cadets in attendance for today's training. These cadets show that no matter how far away you live, if you have a job to carry out, you will do anything and everything to get it done.

The day began out with an Inspection and then segued into Drill and Ceremonies. This covered everything from the basics to complex marching movements. The staff grasped the teaching concept fairly well, giving way to an ensured easy teaching meth-

od for the basics at Encampment. Squadron time consisted of coming up with flight names and jodies, along with some bonding time with the staff.

A much needed break for lunch allowed the staff time to bond even further with one another over tasty burritos from Chipotle, burgers from McDonalds, and subs from Jimmy Johns. Jokes were cracked and stories were told of where they came from and how they got to where they are today in CAP and life in general.

Flight Staff continued their bonding and training as they repeatedly practiced Pass and Review, as well as guidon drill.

PT

"It's that 'AHA' moment in the middle of the week that the one struggling flight finally gets it and everything is just phenomenal. That is the most rewarding part of being on staff."

-C/Maj Neuville



Smiling + Executive Staff = HAPPY ENCAMPMENT STAFF

Proper Class Teaching Pointers with C/1st Lt O'Grady

- * Be animated
- * NO MONTONE
- * Know what you're going to talk about
- * Confidence and competence
- * Eye contact
- * Engaging your audience



Classes of Encampment

- ◆ Air Force Fundamentals
 - Model Rocketry
 - Tour of Tower
 - O-Flight
 - Ground
 - Air Craft Recognition
 - Air Craft Maneuvers
 - Flight Line Maneuvers
- ◆ Emergency Services
 - Land Navigation
 - Survival
 - Direction Finding
 - 24 Hour pack
 - Experiences in Field

- Shelters
- Search Techniques
- BCUT

- ◆ Cadet Programs
 - NCSA
 - Drill & Ceremonies
 - Higher Education
 - C&C
 - Scholarships
 - Honor Guard
 - Color Guard
 - Character Development
 - Boot Class
 - Hair (females)

Activities

- Working Dogs
- Blanks—YAY
- Rock wall? Rappel-ling Tower
- Fire Department
- Honor Guard
- Air Force Museum
- Obstacle Course?
- Military Air Craft
- Combat Controller, PJ
- AF Colonels
- Midnight Run!!!
- Real Morning PT
- Drill
- Mail Call
- Honor Flight
- Think of Classes!!



No more boring Senior Member Classes!! Look at your staff; THESE ARE THE INSTRUCTORS OF ENCAMPMENT

Areas to Improve

“Communication outside of the STWs needs to be improved,” says C/Capt Mohler.



The communication during the STWs is beyond what is expected. However, communication outside of the STWs is lagging much of what our Executive staff is asking of us.

Everyone has room for improvement. Communications, however, is the one that needs the most.



Drill and Ceremonies

The cadet staff gathered around C/Capt. McQuaid as he covered the basics of drill and ceremonies that should be covered during this encampment. These commands included Counter March, Column of Files, Column of Twos, Column of Fours, and basic facing movements. As the staff watched these movements and made corrections together, the cadets began to get a better

understanding of what they were really going to face at the 2012 encampment. Although the drill came naturally to the staff, teaching the basics will be quite a challenge if the concept is not grasped correctly at the training. Questions were asked by the numbers and many commands and executions were double checked during the teaching process ensuring that every staff mem-

ber got all of the correct information to pass on to the basics.



Command Voice

The Executive Staff stressed to the Flight Staff that your command voice is KEY. "We are not the Army," C/Lt Col Larson mentioned. "Yes, you have to announce your commands, but do not slur your words together."

Larson comes from an JROTC unit in North Carolina and has a vast history of drill and ceremonies, so she brings much to the table for this encampment. The expectations are high for Squadron Two as she stresses the importance of command voice, and with that comes command presence.



C/Maj Neuville made a clear statement that was sure to alleviate pressure from the Flight Sergeants. "Flight Commanders, even though your Flight Sergeants will be in charge of the cadets 98.999999 percent of the time, it is okay for you to march your flights from point A to point B. You don't want to abuse your Flight Sergeants' voices because trust me, it will not end well for them."



Motivation

What is an Encampment without a motivated staff member? Encampment is a time for learning, but remember, Encampment should be fun as well. These cadets are not in the actual military, so you can't expect them to take your yelling and criticism very much. Keep in mind, when you were a basic, you wanted to be motivated to get through the week, right?

Motivating your cadets to push beyond what they think they can do really shows that they have leaders that genuinely care about them and their success. It's okay to be friendly and goofy with the cadets. Just be sure that it is the correct time and place for your silly motivation strategies.



It's not always about how hard a cadet is to motivate; it's about how much of an effort you put into it!

Establishing Flight Names and Jodies

The squadron staff worked together to come up with the names and jodies for their flights. They wanted to come up with unique names that had never been heard before that would properly display the flight's individuality. This was a comical process that kept everyone on their feet and was also very important in the team building process.

As for the jodies, Star Wars and Rocking Chairs were a few mentionable themes that would definitely appease the basics.

In Ohio, jodies are the foundation of just about everything. They reflect upon a flight's confidence and team-work as they continue to make fun of and call out other flights.





Encampment Staff Training 3 Overview

56 days until encampment!

Brought to you by your PA team

A cold drizzle and a soft pitter patter of rain drops surrounded the staff members in the Beightler Armory on April 21



during the third official STW. However, the puddles of water did not stand in the way of the vigorous work of our staff.

The mops and buckets were broken out in a rush to clean up and catch the mess of the dripping ceilings.



Activities

C/Capt. Barnes lead the flight staff in an activity that encouraged them to expand their communication skills beyond words alone. The staff had to create shapes and symbols that were recognizable to the senior members and PAO Team using chairs as their only medium.

Can you guess these shapes?



Down time is crucial when it comes to bonding with your fellow staff members. So what better way to bond than to play ninja?! The staff "oohed" and "aahed" as people were chopped out of the game. Even C/Maj. Nueville took part in this exciting game! Staff was also introduced to a new game called "tiger tails" and it was a hit with everyone!



DRILL, DRILL, DRILL!

Today at the third encampment staff training, over an hour was spent on drill alone! Everyone is giving 110% to better the quality of drill that attending cadets will be taught. Even though it was raining, and quite cold, the staff members decided to go outside anyway. *Squadron 2 drilling in front of the American and Ohio State flags.*



Say hello to your Logistics and Communication team!

These staff members are vital to keeping encampment flowing well. They have already made an efficient cadet check in system, along with some long lists containing the material items that staff need.

Thank the Medic!

Only two injuries happened today, but luckily medic C/Capt Raduenz was there to help. He was somewhat pleased that he "finally had something to do!" and that nothing was serious.



Trumpet Time!

1st Lt Thomas demonstrates his trumpet skills!



PT!

Staff has a great time doing PT and fun games! Everyone is giving their best in PT in order to set good examples for encampment cadets. PT doesn't have to be all exercise; who says you can't have a good time?!





STW on the War Training Zone @ WPAFB

5/25-5/27

Ohio Wing Encampment 2012

Final STW



Preparing for Encampment: The Home Stretch

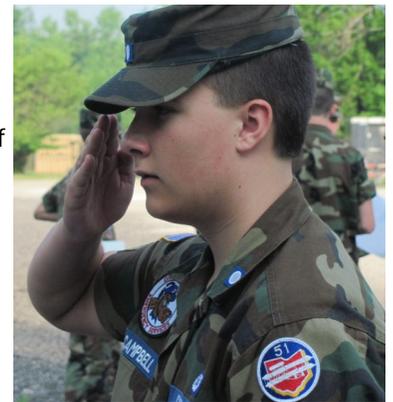
As the cadet staff began arriving from Michigan, Kentucky, Indiana, and all over Ohio, the final STW gave way to final ideas and bonding. C/LtCol Neuville hand-picked a staff of 41 cadets to help her serve at Encampment this year and she couldn't be any happier with the turn out. All of the staff members have bonded and formed relationships that will make working at Encampment much more enjoyable.

The pressure of Encampment began to fall upon the staff, but preparation for the cadets has yet to slow. Every member that participated in the STW was moving the entire time and rarely had time to sit down

and rest. From the flight staff to the support staff, everyone was moving. Flight Sergeants and commanders met and developed plans to effectively teach cadets. Squadron Commanders mentored the flight staff in order to better their plans, as well as coming up with plans for their squadrons as a whole. T

The Public Affairs team was one step ahead of the rest of staff in order to get the perfect shot for the best memories. Logistics was right there with the PA team as they provided gallon after gallon of water to the thirsty staff. Executive staff members continued to work in the final touches to the Encampment in order to

provide the best possible experience for both cadets and staff members. Finally, our TACs: without them, none of this would have happened. Dare we say more?



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17 Days Until Encampment 2012



Nom Nom Nom

“My mail box is hungry!”

“Mail Call” is something that C/LtCol Neville is bringing to Ohio from Michigan. This concept is an opportunity for the staff members to write letters to one another throughout the week and just be silly teenagers. C/LtCol Neville wants to make sure that her staff stays sane during the week, so mail call (as well as her many other tactics) will do the job in keeping the walking-dead alive.



Of course, the LtCol herself will need some help in remaining in her silly state of mind, so these activities will not only benefit the flight staff, but her, too.

So let’s take “mail call” with an open mind because we all know that our commander only wants the very best for us!



Sometimes you just need time to goof around and break away from Encampment.

NCOLA

Along with basic cadet training at encampment, NCOLA (Non-Commissioned Officer Leadership Academy) will also be hard at work. The purpose of NCOS is to train NCOs to be better leaders and to prepare them to become officers. So far, 15 cadets have signed up, however they are hoping to reach 17. Maj. Schoettelkotte is the cadet commander and has many great things in store for the week. Each day, the flight will be lead by one of the NCO’s that applied for the school in order to further their leadership skills. Throughout the week, the NCOS will be listening to multiple guest speakers, doing leadership projects, and going on special trips. All of these will reflect on the primary goal of the school, which is creating better leaders. The special guests that they will be listening to have had great leadership experience and will be sharing all their tips and stories to the NCOs. The training that the applicants will be further benefit them both in

going through at NCOS will and outside of CAP.

Team

Team sports were the time that the staff could unwind, let loose, and have fun with one another. Team sports were also the time where the squadrons could bond, work on communication skills, and build an ever firmer relationship with one another.



Sports

These are the times that we will remember because this is where we all found ourselves and our friends. OHWG Encampment 2012 will be something that we will cherish forever.

Soccer

Ninja

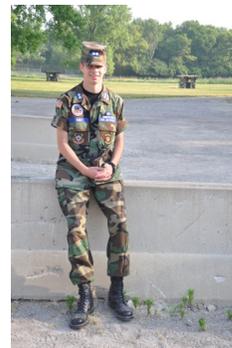
Ultimate Hackie Sack

Extreme Hide and Seek



C/Maj. Schoettelkotte

Game Pictures



C/1st Lt Kirby
Squadron 1



C/Capt Barnes
Squadron 2

What Squadron Commanders are Expecting

Squadron One: 1st Lt. Kirby

Lt. Kirby is looking forward to seeing the upcoming generation of cadets at this years encampment. He and his squadron staff have come up with goals that they will strive to achieve throughout the week. Two of their biggest goals are receiving top scores at encampment and giving cadets a good impression of CAP. The staff have been training hard in order to achieve these goals and are looking forward to encampment.

Squadron Two: Capt. Barnes

Capt. Barnes has high hopes for his squadron. He is really hoping to see that how his staff prepared is really benefiting the cadets. One key thing they are working on is motivation for the cadets to want to stay at encampment the whole week. This is important to their squadron goal of achieving 100% graduation, which is harder than it sounds. Capt. Barnes is very happy with how the staff is doing.

Squadron Three: 1st Lt. O'Grady

"Servant Leaders", Confident but Competent". These are just a few of the goals that are being stressed by Squadron three commander Lt. O'Grady. Squadron three has made great progress and are constantly motivating each other in preparation for encampment. Lt. O'Grady is looking forward to the arrival of the cadets and seeing her staff in action.



C/1st Lt O'Grady
Squadron 3

Midnight PT!



Cadet staff must be ready for everything! If cadets want to go home, the staff needs to strive to convince the cadet that Basic Encampment is beneficial to their CAP career if they choose to go to various encampments or become an officer.

How will the cadets be prepared to face Encampment if the staff isn't?

PT

Physical Training!

Gets the staff prepared for the cadets, as well as builds confidence in themselves and their staff. Because everyone has different backgrounds from their squadrons, pt practice is essential in order to put them in uniform styles of training.

As the squadrons push their way toward Encampment, motivation is key in order to keep them focused on the prize: Honor Flight. Honor Flight is an achievement that everyone is striving for and will do anything to get there. However, the achievement is not reachable if the staff themselves aren't ready to motivate and push their cadets. During the final STW, staff members became closer than ever as they discovered the deeper meanings of teamwork and motivation. What exactly did they find in those two words? Ask them yourselves because you may be surprised to hear what they discovered.

**Inspection**

The final STW inspections ensured that flight staff and support staff alike were prepared to present themselves to the cadets.

Lead by Example!

C/LtCol Neuville could not stress enough that the cadets will follow whatever example we set for the cadets to follow. If staff uniforms are slacking, then so will the cadets' uniforms because they will think that it is acceptable.

The inspections were lead by Squadron Commanders in order to observe and review their staff's progress, as well as seeing what areas need improvement before placing themselves in front of the cadets. How will your uniforms look at Encampment?

**Pass in Review**

"Column of flights, right flight, column right, march"

This command is the called by each squadron commander right at the start of the pass in review portion of the graduation ceremony. The pass in review is a time where both cadets and staff get to shine. They get to show off how much they have grown during the encampment week to wing and region staff, their proud parents, and friends. The purpose of a ceremony like this is to display proficiency and the state of training of the cadets at the encampment, promote teamwork and pride in the Civil Air Patrol organization, and accord distinctive honors to distinguished individuals and our national symbols such as the United States Flag .



**Lead
By
Example**

Required Staff Training (RST)

In order for us to stay with CAP during Encampment, all of staff—including Seniors—had to take part in a 75 minute class covering everything **not** to do as a member on staff.

The goal [of leadership] is to get your followers to take direction from you not because you enforce the rules or because you have power over them, but because they feel inclined to do so.

One of the slides in the presentation consisted a quote along these lines and truly touched all of the leaders in the room because it spoke to us and said “yes, show them who is in charge, but gain their trust and respect so that they **want** to carry out their tasks.



Planning for Cadets



C/LtCol Neville made clear to the staff that while at chow, if the cadets are silent, we are silent.

“We aren’t here to socialize or gossip.”

Although talking amongst each other about the “lazy” or “progressing” cadets is very tempting at chow, professionalism is key. In order for the cadets to understand that we truly mean business, we must look the part. Every guideline in the BCTM (Basic Cadet Training Manual) that the cadets are expected to follow, the staff must parallel these standards. This includes drill, sleeping arrangements, and talking privileges.

REMEMBER: LEAD BY EXAMPLE

Squadron Pictures



Squadron 1—The Thinkers



Squadron 2—The Avengers



Squadron 3—The Jedi

Wise Words from C/Chief Michael Miller

I look forward to working with all of you at Encampment and I know it will go well. Remember, we must strive to be our absolute best!

“The truth of the matter is that you always know the right thing to do. The hard part is doing it.”

-Gen Herbert Norman Schwarzkopf, U.S. Army Ret.

**Like us on Facebook
& check out the PT
video**



Random Picture Goodness



EAGLE SQUADRON NEWS

DECEMBER 2011

VOLUME 1, ISSUE 1



Cadet 2Lt. Gregory Jenkins Receives Billy Mitchell



CADET JENKINS PRESENTED WITH THE BILLY MITCHELL PLAQUE BY BRUCE JOHNSTONE, MAJ. USAF

Second Lieutenant Gregory Jenkins received the General Billy Mitchell Award during a promotion ceremony on November 7, 2011. He is a senior at West Geauga High School. Cadet 2Lt Jenkins was promoted by Bruce Johnstone, Maj. USAF and Theodore L. Shaffer, Lt. Col, CAP and John Porter, Lt. Col, CAP.

The General Billy Mitchell Award is earned by Civil Air Patrol cadets who have successfully completed the second phase of the cadet program. It marks the end of the enlisted phase of the cadet program; cadets are promoted to Cadet Second Lieutenants upon receipt and, by extension, Cadet Officers. The award is given in honor of Maj Gen William "Billy"

Mitchell, former Deputy Chief of the Army Air Service and military aviation visionary.

In order to earn this award, cadets must pass a series of leadership, aerospace and physical fitness tests and attend character development training for each achievement from Cadet Airman Basic through Cadet Chief Master Sergeant. Cadets must pass a comprehensive exam covering aerospace topics and leadership theory. In addition, they must complete staff duty reports, mentor other cadets in aerospace training, pass a physical fitness exam, and lead moral leadership discussions. In addition, cadets must attend a military-style encampment before this award is made, and have maintained active membership in the Civil Air Patrol for at least 18 months since joining. 15% of Civil Air Patrol cadets achieve the Mitchell Award.

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Eagle Composite Squadron is pleased to announce that Cadet Member, Cadet

Squadron Honored to Present Colors at Hockey Game

Our Squadron was invited to and presented the colors during the national anthem at the Lake Erie Monsters Hockey game on Saturday November 19th. 47 Cadets family and friends attended and over 10,000 were in attendance at the Quicken Loans Arena which made it an excellent opportunity for exposure for our squadron and CAP in general. Thanks to all for their participation.



Left to right C/SSgt Queisser, C/SMSgt Best, C/Amn Jenkins, C/SrA Gulden

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Welcome New Cadets to our Team



On behalf of 004 Eagle Composite squadron we would like to welcome the following Cadets:

- Reginald D Clark*
- Luke A. DiPidova*
- William C Hammond*
- Emily M Jenkins*
- Ashley N Jenkins*
- Daniel Kiec*
- Paul W Turnage*
- Geoffrey Battenfield*

Kristen M Urasek

As a CAP member, you are part of a long, proud history of selfless service. I hope you know how much we value the donation of your most valuable asset – your personal time. We can't thank you enough for your dedication to our organization.

Please spread the word to your friends and classmates on the great things CAP is doing. Why not invite them to a meeting?

YOUR MEMBERSHIP

IN CAP WILL

ALLOW US TO

FULLY EXECUTE

OUR MISSIONS OF

EMERGENCY

SERVICES, CADET

PROGRAMS AND

AEROSPACE

EDUCATION

Continuing the Mission of Volunteerism

In the spirit of the Civil Air Patrol, Cadets and Senior Members from 004 volunteered our services to help those less fortunate. Our Members assisted in packing and distributing food as part of the Mayor's Holiday Basket Give-Away Program. After the program ended the squadron was able to spend a few

minutes with volunteers from many different organizations discussing the important missions of Civil Air Patrol as well as taking a few group photographs. This is an excellent annual volunteer opportunity for our squadron to participate in.



C/Amn Kristen Urasek

A Look Back at 2011

We had a fantastic educational and fun year:

- ⇒ Lost Nation Air Show
- ⇒ Airport Marker & Flight Chart Course
- ⇒ Model Aircraft Build
- ⇒ Aerospace Academic Challenge competition
- ⇒ Solon Gun Club
- ⇒ Color Guard– Fairport Harbor Parade, Lyndhurst Home Days Parade and Lake Erie Monsters Hockey Game
- ⇒ ELT Mission Practice
- ⇒ SAREX Mission
- ⇒ Certified Radio Operator Course

- ◇ Invaluable Moral Leadership briefings conducted by Lt. Sadler as well as informative Safety Briefings conducted by Col Bream.
- ◇ Many thanks go out to C/SSgt Cassandra Espenschied for providing her leadership as Cadet Commander.

...And A look Forward to 2012

2012 will be a year for 004 Eagle Composite Squadron to soar. We are planning aggressive cadet recruitment, community outreach and fund raising activities to ensure that we are the premier CAP squadron in NE Ohio.

We are planning another very exciting year consisting of the "usual" events as well as some new adventures.

We will be visiting the National Museum of the U.S.

Air Force April 17-20 as the Doolittle Tokyo Raiders fly in for their 70th anniversary reunion. This aviation event will be the largest gathering of 25 B-25's since WWII. The reunion will include autograph sessions, memorial services at the museum as well as a public lunch and banquet.

Congratulations to Cadet 2Lt. Gregory Jenkins for being selected as current Cadet Commander as well as Capt. Dennis Silvia being selected as Squadron

Commander.

Thanks go to outgoing Squadron Commander Maj. Jody Slingluff for the leadership you provided in 2011.

Tell us what events you would like to do in 2012. Cadet input is invaluable and welcome. Please reach out to 1 Lt. Prhne Squadron Scheduling Officer. Have a wonderful 2012.

Cadet Profile—C/AB Chase Hammond

This episode we feature the newest member to our squadron C/AB Chase Hammond, Chase is a 17 year old Sophomore attending University School. Chase, his parents and sister Hayley moved to Chagrin Falls 2 years ago

from Charlotte, NC.

Most of Chase's free time is occupied by currently building a home made fully functional hovercraft, can't wait to take a ride in that machine.

Chase joined CAP to learn to become a leader which

should benefit him greatly since his next goal is to attend the US Air Force Academy and study Aeronautical Engineering.

Fun fact about Chase is that he was born in Sydney Australia and has lived in Bangkok Thailand as well

as Hong Kong.

On behalf of 004 Eagle Composite Squadron, Welcome to the Team and continued success in achieving your goals.

Commanders Corner - Jody Slingluff, Maj., CAP

As your commander for over the past two years I wanted to thank my senior staff, for all their support, dedication and hard work. As volunteers, they all have busy lives and work schedules but always find the time to make our squadron run smoothly.

I want to also acknowledge our cadets. I am very proud of this group of young men

and women. They are all hard working dedicated individuals, who are busy with school, sports and other activities, but find the extra time to participate in CAP. Anytime our squadron has had an outside function with the public, I have had nothing but outstanding reports on their performance, respect and professionalism.

I want to also thank the parents, who without their support we could not have these cadets participating in the CAP program. It takes their dedication to show interest in their children's activities, motivate and to simply get them to our weekly meetings and outside activities.

We look forward to an exciting, busy 2012 year for

our squadron.

There are many activities and outside events planned for next year.

Let's make 2012 another successful and fun year for the squadron.

004 Eagle Composite Squadron
Woods King Green Road Armory
4303 Green Rd
Highland Hills, Ohio 44128

Meeting Monday's 7p-9p
Contact Squadron Commander
Jody Slingluff, Maj., CAP

**WERE ON THE WEB
GOCIVILAIRPATROL.
COM**

**OH004.OHWG.CAP.
GOV**

**FACEBOOK: CIVIL
AIR PATROL-GLR-
004**

Civil Air Patrol, the official auxiliary of the U.S. Air Force, is a nonprofit organization with more than 60,000 members nationwide. CAP, in its Air Force auxiliary role, performs 90 percent of continental U.S. inland search and rescue missions as tasked by the Air Force Rescue Coordination Center. Its volunteers also perform homeland security, disaster relief and counterdrug missions at the request of federal, state and local agencies. The members play a leading role in aerospace education and serve as mentors to over 25,000 young people currently participating in CAP cadet programs. CAP has been performing missions for America for more than 68 years. For more information on CAP, visit www.gocivilairpatrol.com.

Summer Encampment 2012 Details (Cadets & Staff)



Civil Air Patrol encampments are a truly unique opportunity for young adults

Excellence, and Respect. Successful completion of an encampment is required for the Billy Mitchell Award and opens up many new and exciting opportunities for CAP cadets, including numerous college and flight scholarships, National Cadet Special Activities, and the ability to return to encampment as cadet staff. The 2012 Ohio Wing Encampment will be held 16-24 June 2012 at Wright-Patterson Air Force Base in Dayton, Ohio. For more information regarding encampment, you may e-mail us at encampment@ohwg.cap.gov.

between the ages of 12-21 to expand their leadership skills and gain an early understanding of the military lifestyle. Over the course of a week, new cadets are introduced to a variety of mental and physical challenges designed to build and enforce the Civil Air Patrol Core Values: Integrity, Volunteer Service,





CIVIL AIR PATROL (CAP)
United States Air Force (USAF) Auxiliary
Ross P. Barrett Cadet Squadron 702 (GLR-OH-070)
 269th Communications Combat Squadron, Bldg 109
 Springfield ANG Base
 706 Regula Avenue; Springfield OH 45502



CAP Squadron
 Meetings:
 Every Thursday,
 1800 - 2000
 (Arrive by 1745)

Squadron Commander:
1st Lt Wendell D. Meade
wendell.meade@ohwg.cap.gov

www.gocivilairpatrol.com
 Members Directory:
www.capmembers.com
 ESERVICES
 Log in with CAP ID

SQUADRON 702 NEWSLETTER

JAN - MAR 2012 EDITION

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*For questions or comments, or to provide input, contact
 2d Lt Marsha Loges, marsha.loges@ohwg.cap.gov.*

EAKER CADET VISITS SQUADRON

For the past several weeks, Squadron 702 has had the pleasure of the company of a former active Squadron member, **CAP Eaker Cadet, C/Lt Col Alan R. Ehrle**. C/Lt Col Ehrle is among the top 2% of all CAP Cadets, having attained the rank of Cadet Lieutenant Colonel and earned the prestigious General Ira C. Eaker Award.



C/Lt Col Ehrle has participated with CAP Squadron 702 for six years. He was promoted to his current rank in December, 2009, and he is currently a member of Squadron 001 in Salina, KS. He joined CAP because of an interest in becoming a fighter pilot; he saw CAP as a good way to learn about the military, without making any formal commitment.

While Ehrle's long-term goals are still evolving, he is now very interested in veterinary medicine, and he hopes to open a Veterinary clinic, or work for the San Diego zoo, or travel world-wide as a Veterinarian. He also has an interest in helping with advancements in regenerative medicine.

C/Lt Col Ehrle is a graduate of Northwestern High School in Springfield, OH. The 20 year old college student is pursuing studies at Allen County Community College in Iola, KS, where he is a sophomore. In May he will have completed all requirements for an Associate Degree and he plans to transfer to San Diego State University, where he will pursue a Bachelor's Degree in Biology and Zoology.
(Continued on Page 3)

COMMANDER'S CORNER

*Squadron Commander,
 1st Lt Wendell D. Meade*



Welcome to the New Year – **2012** – a year in which we expect to see continued growth and improvement throughout **CAP Cadet Squadron 702**. Our CAP Cadets have experienced remarkable achievements over the past year, successfully completing training and posting several promotions and we are now positioned - **both as individuals and as a Team** - to undertake new challenges and to progress even further through the phases of the CAP Cadet Program.

Teamwork, Training, Recruitment, and Retention, are the watchwords for our renewed efforts as we advance with CAP Program activities, focusing on developing practical and leadership skills, self-discipline, and self-esteem in Cadets, while building on CAP Core Values.

We hope to strengthen the bond among all our CAP members through our **Wingman Program**, wherein our more advanced Cadets serve as mentors to our younger Cadets. This not only reinforces leadership abilities, but it also accelerates learning by providing guidance and support in each of the elements of the CAP Program - **Leadership, Aerospace Education, Physical Fitness, Character Development, and Activities**. The improved **Teamwork** serves to unite all members, driving them to work harder, together, to achieve their common goals. This increase in the active leadership roles of our Cadets also results in improved self-confidence, commitment, and personal responsibility.

Another important target outcome of all our Squadron undertakings is **Fun**. Through a mix of study, discussion, interaction, and hands-on activities, we create an environment where the CAP Program and its associated challenges are exciting and enjoyable, as well as educational. Whether we're focusing on military history, emergency services, citizenship, or any other subject, if CAP is a pleasant experience, our Cadets are likely to recruit other interested candidates to join our ranks.

I encourage **Parents** to visit our Squadron Meetings this year, and to become involved with us in the pursuit of sustained excellence and achievement in all our Cadets, as they grow into **Future Aerospace Leaders**.

CAP CORE VALUES: ★ INTEGRITY ★ EXCELLENCE ★ RESPECT ★ VOLUNTEER SERVICE

CADET ACHIEVEMENTS



In a **27 October 2011** formal Civil Air Patrol (CAP) promotion ceremony, a CAP Cadet from Ross P. Barrett Cadet Squadron 702/070 was recognized for his achievements. **Cadet Senior Airman Joseph I. Batchelor** was promoted to the rank of **Cadet Staff Sergeant**. Cadet Batchelor, who lives in Springfield, OH and is home-schooled through Dayton Christian Home School, had been a member of the CAP Cadet Program for 14 months at the time of promotion.



Pictured above (l to r) CAP Squadron 702/070 Squadron Commander 2d Lt Wendell Meade "pins on" the promotion rank insignia for CAP C/SSgt Joseph Batchelor.



In a **01 December 2011** formal Civil Air Patrol (CAP) promotion ceremony, a CAP Cadet from Ross P. Barrett Cadet Squadron 702/070 was recognized for his achievements. **Cadet Airman Grant W. Kramer** was promoted to the rank of **Cadet Airman First Class**. Cadet Kramer, who lives in Springfield, OH and attends Kenton Ridge High School, had been a member of the CAP Cadet Program for 5 months at the time of promotion.



Pictured above (l to r) CAP Squadron 702/070 Squadron Commander 1st Lt Wendell Meade "pins on" the promotion rank insignia for CAP C/A1C Grant W. Kramer.

In a **15 December 2011** formal Civil Air Patrol (CAP) promotion ceremony, a CAP Cadet from Ross P. Barrett Cadet Squadron 702/070 was recognized for her achievements. **Cadet Senior Airman Alexandra K. Shishoff** was promoted to the rank of **Cadet Staff Sergeant**. Cadet Shishoff, who lives in Beavercreek, OH and attends Beavercreek High School, had been a member of the CAP Cadet Program for 21 months at the time of promotion.



Pictured above (l to r) are CAP Squadron 702/070 Deputy Commander for Cadets 2d Lt Heather Fox, visiting C/Lt Col Alan Ehrle, and C/SSgt Alexandra K. Shishoff.



In a **15 December 2011** formal CAP Squadron 702 ceremony, Cadet Staff Sergeant Joseph Batchelor received the **Wright Brothers Award and Ribbon**. This milestone award marks the successful **completion of Phase I** of the Cadet Program and promotion to the rank of **Cadet Staff Sergeant**. It requires specific achievements in the areas of leadership, physical fitness, drill and ceremonies, and character.



Pictured above (l to r) CAP Squadron 702/070 Deputy Squadron Commander for Cadets 2d Lt Heather Fox and visiting C/Lt Col Alan Ehrle congratulate C/SSgt Joseph Batchelor. Cadet Sqdn Cmdr, C/2d Lt Joshua Cluney stands at attention.



WHAT'S BEEN GOING ON?



Wreaths Across America

In a **10 December 2011** ceremony at the Dayton Veterans Administration Center Cemetery, CAP Cadets representing several Squadrons in Southwest Ohio joined CAP members from across the nation in a formal wreath laying ceremony. The event was sponsored by **Wreaths Across America**, an organization whose mission is to **Remember, Honor, and Teach** the legacy of unbounded patriotism of military veterans who have given their lives for their country. During the ceremony, **Cadet Senior Airman Alexandra K. Shishoff**, of CAP Cadet Squadron 702/070, played Taps, paying homage to all fallen military.



Pictured above, accompanied by an honorary flag bearer, CAP Squadron 702/070 C/SRA Alexandra Shishoff plays Taps.



Aerospace Education Presentations

CAP Cadets enjoyed a trip to the National Museum of the United States Air Force, on **26 Nov 2011**. An assignment for that visit was for each Cadet to prepare a report on a selected aircraft. Those reports were presented on **15 Dec 2011**, and awards were given for the best works. 1st place went to **C/SSGT Joe Batchelor**, 2nd place to **Cadet Isaiah Kramer**, and 3rd place to **C/2d Lt Joshua Cluney**.



Pictured above (l to r), are the CAP Squadron 702/070 AE Presentation award winners, Cadet Isaiah Kramer, C/2d Lt Joshua Cluney, and C/SSgt Joseph Batchelor,



Christmas Party

On **15 Dec 2011** CAP Cadets enjoyed a Christmas Party, and were treated to surprise gifts.



Pictured above, the CAP Squadron 702/070 Cadets pose for a group photo during their Christmas Party.



Pictured above, the CAP Squadron 702/070 Cadets open their surprise gifts during their Christmas Party.



EAKER CADET (Continued from Page 1)

Speaking of the value he has gained from his CAP experience, C/Lt Col Ehrle said, "CAP has helped me become a positive influence on the world... by teaching me about followership, leadership, communication skills, respect, honor, and integrity". He praised his years in CAP, saying, "It has created an environment where a person can learn from his mistakes and continue to grow as he progresses through the program". He cited numerous benefits he has received from CAP, "...so many opportunities, from getting to see places that civilians don't get to see, getting to take Orientation flights, helping out with air shows, learning leadership skills through encampments and squadron activities, and even helping me to achieve scholarships".

Asked what words of advice he has for other CAP Cadets, C/Lt Col Ehrle said, "There are times when CAP gets tough but as long as you have teamwork, motivation, and enthusiasm and you are willing to work hard, you can achieve anything in the Cadet Program".

Considering his high level of accomplishments in CAP, C/Lt Col Ehrle serves as an inspirational role model for all of our young Squadron 702 Cadets.



CADET SPOTLIGHT

Each edition features a brief personal bio of a CAP Cadet, highlighting that Cadet's CAP activities, goals, and special interests.

Today's spotlight is on **C/SSgt Joseph Batchelor**, who, since becoming a member of the CAP Cadet Program about 1½ years ago, has risen to the CAP NCO rank and has earned the Wright Brothers Award. He is 13 years old, is in the seventh grade, and is home-schooled through the Dayton Christian Home School.

C/SSgt Batchelor's favorite CAP activities are the bivouacs, and he especially enjoyed the experience with other CAP Squadron Cadets during the weekend D-Day re-enactment. C/SSgt Batchelor says his favorite subject is History, and his personal hero is President Ronald Reagan. He states with pride that he is a "Reagan Conservative", and that even though he wasn't alive during Reagan's presidency, what he most admires about President Reagan is his courage.



C/SSgt Batchelor lives in Springfield with his parents and his six brothers and sisters. He has a number of family responsibilities, including yard work and mowing, and he already is learning how to cook. He likes music and plays the trumpet, and he especially enjoys spending time with his dog, Sophie, a black Labrador Retriever.

Kudos to C/SSgt Batchelor for his dedication and hard work as he continues to advance in the CAP program!



CAP SQUADRON 702 NAMESAKE

Written by CAP C/A1C Grant W. Kramer

Just who was Ross Paige Barrett? Ross P. Barrett was born in Cambridge, Ohio on May 25, 1922, which was an immensely turbulent time for African-Americans wanting an improved style of life. During his high school career, Barrett was an upright and moral student-athlete who excelled and stood above all others in his class. In particular, one of his favorite classes was industrial arts, which includes many things such as woodworking and machine repair.



Barrett graduated with a scholarship to attend courses and participate in football at Wilberforce University in 1940. While he was enrolled there, he was in the Army ROTC that was installed at Wilberforce. The Japanese attack on Pearl Harbor, which brought America into World War II, disrupted Barrett's typical college life. In 1943, the cadet corps was mobilized and Barrett was shipped off to fight in the European theater of the Second World War. He fought with the 371st Regiment of 24th Infantry Division against Fascist Italian forces and he won many medals, including the Purple Heart, Bronze Star Medal and Mediterranean Theater of

(Continued in next column)

MEET THE STAFF

Each edition features a brief personal bio of a Senior Member (SM), highlighting that SM's CAP background and experience.

Today's focus is on **Senior Member Paul R. Isaacs, Squadron Deputy Commander**, who has been associated with CAP for one year. He also is Aerospace Education Officer for the Squadron.

SM Isaacs served in the United States Air Force (USAF) from 1966 to 1997 where his career specialty area was Aircraft Maintenance and Logistics. He served in the Philippines, VietNam, Panama, Oman, and Saudi Arabia. He was promoted to the rank of Colonel in 1994 and retired from military service in 1997. SM Isaacs resides in Centerville, Ohio, and is employed as a USAF Foreign Military Sales Consultant, for Dynamics Research Corporation.



Speaking of his commitment to CAP service, SM Isaacs said, "My military experiences developed in me a personal sense of responsibility and commitment to others and to our country. Not a lot of our youth nowadays have the opportunity of military experience so where will they develop that sense of responsibility and commitment? Few of our schools, homes and other institutions provide that training. However, I do see it taking place in the service auxiliaries like CAP. It is enjoyable to see the change that takes place in our young people as they get more and more involved in CAP, developing into responsible young adults."

A heartfelt CAP Salute goes to SM Isaacs for his many years of esteemed service to our country, and his continued contributions to the CAP Cadet Program!



(Continued from previous column)

Operations Ribbons with two battle participation stars. In addition to all of these amazing achievements for combat, Barrett also managed to complete Army Officer Training. After WW II, he decided to endure combat again during the Korean War, serving with the 24th regiment of the 25th Infantry Division. Even after military life, Barrett continued to achieve in many different aspects of his life.

After Barrett left the military, Barrett decided to complete his studies and he earned a master's degree from Kent State University. During his career he became an instructor of Industrial Arts, and the first black principal of South High School in Springfield, OH. After he retired from both of those positions, he still did volunteer work and he gave back to his community in many ways. He was also an Ohio Civil Air Patrol (CAP) pilot who died while working for CAP.

In conclusion, Ross Paige Barrett was, indeed, a highly honorable and righteous American; someone after whom we are proud to name our CAP Squadron.

WHAT'S COMING UP?

January

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

Special Events:

See Squadron OIC for additional details.

<p>CAP Training Leaders of Cadets (TLC) Sat, Sun; 07-08 Jan Wright-Patterson AFB, Building 206 Sqdn OIC: 1st Lt Meade UOD: see OH WG web site TLC email info</p>
<p>CPR/First Aid Joint Training Sat, 14 Jan Squadron 706, Troy WACO Historical Field Sqdn OIC: 2d Lt Fox UOD: BDUs</p>
<p>Model Rocketry Sat, 21 Jan, 1000-1600 2d Lt Fox Residence, Xenia Sqdn OIC: 2d Lt Fox UOD: Civilian Attire</p>
<p>Ohio Wing Field Trip Sat, 18 Feb, 1000-1600 National Museum of the USAF Sqdn OIC: 1st Lt Meade UOD: Dress Blues see OH WG web site Calendar for more info</p>
<p>Ohio Wing Cadet Competition (Color Guard, Drill Team) Sat, 10 Mar, 0700-1700 Columbus Police Academy, Columbus Sqdn OIC: 2d Lt Fox UOD: see OH WG web site info</p>
<p>Bivouac Fri, Sat, Sun, 23-25 Mar Warfighter Camp, WPAFB Sqdn OIC: 2d Lt Fox UOD: see OH WG web site Calendar</p>
<p>CAP Professional Development Opportunity (PDO) Sat, Sun; 05-06 May Defense Supply Center, Columbus (DSCC) Sqdn OIC: 2d Lt Fox UOD: see OH WG PDO web site info</p>

GET WELL SOON!

Special thoughts, prayers, and get-well wishes go to CAP Squadron 702/070 Deputy Commander for Cadets, 2d Lt Heather M. Fox, who is ill and may undergo surgery. **Best wishes for a speedy recovery!**



CAP CALENDAR

March

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Squadron 702 meets every Thursday, 1800 - 2000
 (arrive by 1745), at Springfield ANG Base, Bldg. 109,
 unless indicated otherwise.

Refer to the latest OPLANS/OPORDS
 for the most current information.

Sqdn Meeting	Uniform of the Day (UOD)	Planned Activities
JAN		
05 Jan	BDUs	Drill Squadron Discussion
12 Jan	BDUs	Leadership Great Start Parents' Night
19 Jan	PT Gear	Safety Testing Character Development PT
26 Jan	BDUs	Aerospace Education Parents' Night
FEB		
02 Feb	BDUs	Leadership
09 Feb	BDUs	Aerospace Education
16 Feb	PT Gear	Safety Testing Character Development PT
23 Feb	BDUs	Communications Team Building Parents' Night
MAR		
01 Mar	BDUs	Leadership
08 Mar	BDUs	Aerospace Education
15 Mar	PT Gear	Testing Character Development PT
22 Mar	BDUs	Safety Professional Development Parents' Night
29 Mar	Civilian Attire	Squadron Facility Clean-up



Civil Air Patrol (CAP), the official auxiliary of the U.S. Air Force, is a nonprofit organization with more than 60,000 members nationwide. CAP, in its Air Force auxiliary role, performs 90 percent of continental U.S. inland search and rescue missions as tasked by the Air Force Rescue Coordination Center (AFRCC) and has been credited by the AFRCC with saving more than 100 lives this fiscal year. Its volunteers also perform homeland security, disaster relief and counterdrug missions at the request of federal, state and local agencies. The members play a leading role in aerospace education and serve as mentors to over 25,000 young people currently participating in CAP cadet programs. CAP has been performing missions for America for more than 68 years. For more information on CAP, visit www.gocivilairpatrol.com or www.capvolunteernow.com.



SEMPER VIGILANS

CIVIL AIR PATROL (CAP)
United States Air Force (USAF) Auxiliary
Ross P. Barrett Cadet Squadron 702 (GLR-OH-070)
269th Communications Combat Squadron, Bldg 109
Springfield ANG Base
706 Regula Avenue
Springfield OH 45502

Volume 1, Issue 1

February 2012



WRIGHT BROS. 282ND COMPOSITE SQUADRON, CAP

FLIGHT LINES



WRIGHT BROTHERS 282ND AERO COMPOSITE SQUADRON



Introducing “*FLIGHT LINES*”

The Mighty 282’s Official Newsletter

It has been sometime since we have published our last newsletter, and we have begun the process again!

Flight Lines will become the Official Newsletter of the Wright Bros. 282nd Composite Squadron and will be published on a monthly basis. This publication will be emailed out monthly and extra copies made available at squadron meetings.

This newsletter will contain information about our squadron activities, upcoming events, bivouacs, dates to remember,

promotions and awards and lots more about what is happening and what we will be doing!

things happening in the squadron. Please submit all articles or ideas to 1st Lt Chris Dix by email at chris.dix@squadron282.com.



The Mighty 282 and “future” 284 at a 2010 Bivouac

I would also appreciate any feedback, good or bad, on this newsletter and what you like and don't like about it. This is YOUR Newsletter and I would like it to be useful and informative to all members of the Squadron.

This months addition is just a sample of how the newsletter will be set up, however, if there is anything that you see and don't like, or don't see and

I will look to each of you to help with articles and news worthy information about



Our Squadron Patch

The history of squadron patches goes way back to WWI. A young American ambulance driver in France was exposed, for the first time, to a new form of art adorning the cowls of trucks and the sides of airplanes. This art form later became known as "nose art". This ambulance

driver was quick to realize the morale boosting effects of this art form among the troops, and it was an experience he kept in the back of his mind after he returned to the United States in 1918. Who was this Ambulance driver? His name was Walt Disney and he was first contracted by the US Navy

to create a mascot for a new ship. From there, all the armed forces wanted these “cartoons” and the Squadron patch was born.

Can you tell me what our patch symbolizes? The first 2 cadets to email me the correct answers will receive a free, brand new, Squadron Cap! Send your email to chris.dix@squadron282.com

Promotions & Awards

- SM K. Bowling to 2nd Lt
- 2nd Lt L. Fecher to 1st Lt
- 1st Lt C. Dix, 1st Lt T. Koeller, 1st Lt A. Sturgill awarded the Benjamin O Davis Award for Level II
- C/1st Lt D. Raduenz to Cadet Commander
- C/CMSgt B. Fecher to Cadet North Flight Commander
- C/TSgt C. Hookassian to NCO in charge of South Flight
- 1st Lt C. Dix Senior Rating Cadet Programs

February Events & Activities:

- Feb 4 & 5 OH SAREX
- Feb 14 Valentines Day
- Feb 18 & 19 OH SAREX Rain date
- February Activity TBA

The Mighty 282's Commanders Corner

Greetings members of the Mighty 282!

I can't express how proud and humble I am to have been selected to serve as commander of one of the most respected squadrons in Ohio Wing.

In my short time with the squadron, I have found that our senior members are motivated, enthusiastic, and willing to do what is needed to accomplish the missions of Civil Air Patrol. We have a young and eager cadet corps and I look forward to working with them to help them advance in the cadet program. There is nothing I enjoy more than promoting and presenting ribbons to cadets.

As you know, there has been a lot of tension, drama, and friction within our organization the past few months. We

cannot let this drive the squadron apart. If we do, this squadron will collapse and I know you certainly don't want to see that happen. So, I'm asking all of you to put your differences, hard feelings, and misgivings aside and perform your duties to ensure our squadron...YOUR squadron...is strong.

I will be presenting our annual awards, as well as other awards and promotions on either 7 or 8 February. I am trying to secure the VFW hall for the 7th so that our wing commander, Col Mathews, can attend and present some of our awards. I hope you can be there.

I'm still getting around to meeting all of you. I have an open door policy, so feel free to contact me. Sending a squadron e

-mail is the best way to contact me at mike.hood@squadron282.com or by my Wing email at the following address—michael.hood@ohwg.cap.gov.

Due to my work schedule, trying to reach me via telephone/cell phone is a "hit-or-miss" proposition.

That's all for this month.

Semper Vigilans!

MICHAEL K. HOOD, Lt Col, CAP
Commander



Cadet Spotlight— C/SrA Marissa Matassa

Marissa Matassa is a C/SrA in the Mighty 282 and has been a member since March 2011. She is in 7th grade at Ankeney Middle School. Her favorite subjects are band and English. In band she plays percussion. She hopes to become a drummer for the Beavercreek High School Marching Band. She loves going to the football games with all her friends and sometimes the band actually plays better than the football team.

Something you may not know about Marissa is that in 3rd & 4th grade she played football for Eager Beaver Football. Her favorite part of playing

football was that she got to tackle people. Oh – and she really loved conditioning! No – Really! She also played soccer and was in Cheerleading in 5th & 6th



grades. Another sport that Marissa enjoys is dance – street & hip hop are her

favorites.

Marissa also has two pets. A dog named Sasha and a cat named Toots (named after Tootsie Rolls – you don't want to know why.) Sasha was rescued from the Humane Society and is a Retriever/Greyhound mix. She – the dog – LOVES to play ball and go on hikes and swim at the Narrows with Marissa. Toots is just your average annoying cat. Marissa likes to carry Toots around the house on her shoulder – as if she were a monkey.

When Marissa grows up Marissa plans to join the Air Force and then to become a

Did You Know, Civil Air Patrol:

- Has the largest fleet of single-engine, piston aircraft in the world.
- Has a fleet of 1,000 emergency services vehicles maintained for training and mission support.
- Conducts 95% of all inland search and rescue in the United States, as tasked by the Air Force Reserve Coordination Center.
- Performs aerial reconnaissance for homeland security.
- Members in the 1940's were known as the "Sub-Chasers."
- Provides about 10% of each year's new classes entering military service academies.
- Provides college scholarships in several disciplines.



The Mighty 282!



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7:00pm to 9:15pm

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New Lebanon, Ohio 45345

Or

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7:00pm to 9:15pm

Veterans of Foreign Wars Post #3438

5441 Marina Drive

West Carrollton, Ohio 45449

For More Information or Membership Information Contact:

1st Lt Chris Dix

Phone: 937-985-2820

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For more information, please contact our Public Affairs Officer
1st Lt Chris Dix at 937-985-2820

or

Squadron Classifieds

Do you have CAP items that you are no longer in need of that you want to sell or donate to a fellow member?

Are you in need of any CAP related items such as:

- Uniforms / ribbons or devices
- Emergency Service Equipment
 - Radios
 - Aircrew items
- Backpacks or other Gear
 - Tents, Sleeping bags

If you do, then post your ad here! Forward your information to 1st Lt Chris Dix and he will post in our next edition!



The Mighty 282 off to Color Guard Competition!

It has been several years since the 282 has had a Color Guard available for events and competitions. However, under the diligence and hard work of Maj Spurling and Capt Mitchell, our Color Guard is back again!

Cadets Austin Koeller, David Mead, Marissa Matassa and Ethan Pitzer, have been working hard to bring back this important part of our Squadron. The amount of time they have put in is tremendous giving up evenings and Saturdays to practice from dusk till dawn.

Since early history, flags and

banners have been used by many armies in battle. They served several purposes: to identify units, for signaling and to be a common point of reference for the movements of the soldiers in the unit, enabling them to keep

formation.

The flag was also a symbol of the unit. The loss of a unit's flag was not only shameful, but losing this central point of reference could make the unit break up. To protect the flag, a detachment of soldiers was

assigned to guard it.

The first competition for these cadets will be March 10th, but due to limited space, Capt Mitchell tells us spectators are not permitted.

We wish the Mighty 282 Color Guard Good Luck and God Speed in this event!



Why are we called the "Mighty 282"

Lt Dix first coined the term the "Mighty 282" when he did the One Call Now meeting announcements a couple years ago.

The Merriam Webster dictionary defines "Mighty" as "possessing might, powerful accomplished or characterized

by might, great or imposing in size or extent, extraordinary."

Our Squadron has always been on the forefront in our Group and Wing in many areas. We have become to be known as the "go to" Squadron when something needs to be done. Whether it be in search &

rescue, training or organization, Squadron 282 is always on top. **We are a MIGHTY FORCE!**

Therefore, take pride in the heritage you now possess, show your "Mightiness" in all you do. Make your squadron and yourself proud of all we accomplish together!

Promotions & Awards

- C/1st Lt Raduenz Cadet Officer of the Year
- C/SrA Marissa Matassa Cadet of the Year
- 1st Lt T. Koeller Sr. Member of the Year
- Capt Hicks Commanders Commendation Award
- C/SrA Marissa Matassa Air Force Association Award
- Certificates of Appreciation to Lt Col Mitchell as well as to Olivet Church and VFW Post 3438 to allow us the use of their facilities for which we could not do without their help.

Events & Activities

- *March 10th—Ohio Wing Color Guard Competition.*
- *March 23-25—Multi Unit Group Bivouac.*
- *March 31—Stebbins High School AFJROTC volunteer activity.*

The Mighty 282's Commanders Corner

Members of the Mighty 282: Spring is fast approaching and a time when we'll want to spend more time outdoors! Now is the time we should start thinking about squadron activities we all can get involved in (both north and south flights).

With that in mind, I'm soliciting input from all of you for suggestions on what types of activities we should do. One thing I want to put together is an open house for the squadron that would include both flights.

We're our own best advertisers and we have a great product. We just need to get the word out about the great things we do.

So, let's put our heads together and come

up with ideas for an open house and other activities.

A meeting was held in February to discuss the results of the reunification survey and a proposed reorganization of the squadron. Nothing has been decided yet, but a decision will be coming from me soon, so be ready to press on once the decision is made.

Let's continue to work together and make our squadron strong and successful!

Lt Col Mike K. Hood, CAP
Commander



Show your Pride—CAP T-Shirt School Days & Recruiting Drive!

We are in the process of planning our next "Open House" for both flights and we need your help!

We will have a separate Open House at each flight, most likely in April, to get new Senior and Cadet members to join. We like to see our squadron grow so that we can accomplish more and allow our cadets to take on added responsibilities.

Do you know of anyone who may be interested? How do you spread the word? Well how about wearing your black squadron t-shirts to school on meeting days? When you are asked what it is you are wearing, tell them. Let them



know of all the things we are doing and what Civil Air Patrol is all about

Lt Dix is preparing business cards for each of you to hand out. It will have contact information and a place to put your name. When you find someone who is interested, give them a card and write your name on it. Each cadet who gets 2 new members to sign up will receive a recruiting ribbon to wear on their uniform. Sorry Senior Officers, you need to get 7 new members to get a ribbon!

So show your 282 pride and wear those shirts!

Did You Know, Civil Air Patrol

- July 1, 1946, President Harry S. Truman signed Public Law 476 of the 79th Congress, established CAP as a federally chartered benevolent civilian corporation.
- May 26, 1948, 80th Congress passed Public Law 557. This made Civil Air Patrol an Auxiliary of the United States Air Force.



- There are over 61,441 members and 1,700 units nation wide.
- There are Eight Regions: Northeast, Middle East, Great Lakes, Southeast, North Central, Southwest, Rocky Mountain, and Pacific. (Special Overseas Cadet Squadrons)
- There are a total of 52 wings in Civil Air Patrol, that is including all 50 states, Puerto Rico, and District of Columbia.

Civil Air Patrol—The Coastal Patrol

Originally, the Coastal Patrol was to be unarmed and strictly reconnaissance. The air crews of the patrol aircraft were to keep in touch with their bases and notify the Army Air Forces and Navy in the area when a U-boat was sighted, and to remain in the area until relieved. This policy was reviewed, however, when the Civil Air Patrol encountered a turkey shoot opportunity. In May 1942, a CAP crew consisting of pilot Thomas Manning and observer Marshall "Doc" Rinker were flying a coastal patrol mission off Cape Canaveral when they spotted a German U-boat. The U-boat crew also spotted the aircraft, but not knowing that it was unarmed, attempted to flee. The U-boat became stuck on a sandbar, and consequently became an easy target.



Rinker and Manning radioed to mission base the opportunity and circled the U-boat for more than half an hour. Unfortunately, by the time that Army Air Force bombers came to destroy the U-boat, the vessel had dislodged itself and had escaped to deep waters. As a result of this incident, CAP aircraft were authorized to be fitted with bombs and depth charges. Some of CAP's larger aircraft had the capability of carrying a single 300-pound (140 kg) depth charge, however, most light aircraft could only carry a 100-pound (50 kg) bomb. In some cases, the bomb's flight fins had to be partially removed so they would be able to fit underneath the wing of a light aircraft.

One squadron's insignia of the time was a cartoon drawing of a small plane sweating and straining to carry a large bomb. This insignia became popular throughout CAP.

The CAP's first kill was claimed by one of the larger aircraft. The Grumman G-44 Widgeon, armed with two depth charges and crewed by Captain Johnny Haggins and Major Wynant Farr, was scrambled when another CAP patrol radioed that they had encountered an enemy submarine but were returning to base due to low fuel. After scanning the area, Farr spotted the U-boat cruising beneath the surface of the waves. Unable to accurately determine the depth of the vessel, Haggins and Ferr radioed the situation back to base and followed the enemy in hopes that it would rise to periscope depth. For three hours, the crew shadowed the submarine. Just as Haggins was about to return to base, the U-boat rose to periscope depth, and Haggins swung the aircraft around, aligned with the submarine and dove to 100 feet (30 m). Farr released one of the two depth charges, blowing the submarine's front out of the water. As it left an oil slick, Farr made a second pass and released the other charge. Debris appeared on the ocean's surface, confirming the U-boat's demise and the Civil Air Patrol's first kill.



The sinking was perhaps the crowning achievement for CAP's Coastal Patrol, which continued to operate for about 18 months (from 5 March 1942 to 31 August 1943) before being officially retired. During this time, the Coastal Patrol reported 173 U-boats and attacked 57 of them with 83 ordnance pieces, resulting in two confirmed kills.

Overall, the Coastal Patrol flew 86,865 missions, logging over 244,600 hours. Coastal Patrol aircraft reported 91 ships in distress and played a key role in rescuing 363 survivors of U-boat attacks. 17 floating mines were reported and 5,684 convoy missions were flown for the Navy.

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Squadron Classifieds

Attention Parents, Volunteers and others. We are in great need of the following items for our cadets:

- BDU Boots
- Dress Shoes for Blues
- Dress uniforms to include, shirts, belts, pants caps
- Dress Blues Jackets
- Dress Blues raincoats, (trench coats)

Please check your local Goodwill and other stores as well as any donations you can get for military installations. Your donations are appreciated and can be a tax deduction for you. Used items do need to be in very good condition and all items need to meet CAP specifications.