Vigilant
The Journal of the 143rd

143rd Composite Squadron, Waterbury, CT — MARCH 2013

Squadron Schedule

02APR13 Squadron Meeting
ES/Safety/Character Dev.
Uniform: BDU/Polo

09APR13 Squadron Meeting
AE
Uniform: BDU/Polo

13APR13 RIWG Cadet Encampment
Camp Varnum, RI
Uniform: BDU/Polo

16APR13 Squadron Meeting
CPFT/Fitness Activity
Uniform: PT/BDU/Polo

23APR13 Squadron Meeting
Leadership
Uniform: Blues/Corporate

25APR13 Senior Member Meeting
Oxford Airport
Uniform: BDU/Polo

26APR13 NER Cadet Competition
Newport, RI
Uniform: Blues/Corporate

27APR13 Earth Day Fund Raising
Woodbury, CT
Uniform: BDU/Polo

30APR13 Squadron Open House
Uniform: Blues/Corporate

07MAY13 Squadron Meeting
ES/Safety/Character Dev.
Uniform: BDU/Polo

14MAY13 Squadron Meeting
AE
Uniform: BDU/Polo

18MAY13 Waterbury Parade
Drill Team to March
Uniform: Blues/Corporate

18MAY13 USAFR Training Support
Westover ARB
Uniform: BBDU/Polo

16APR13 Squadron Meeting
CPFT/Fitness Activity
Uniform: PT/BDU/Polo

143rd Drill Team Wins CTWG Competition

Cadets will now represent Connecticut Wing at the Northeast Region Competition

The 143rd's Cadet Drill Team won the 2013 CTWG Drill Competition held at New Fairfield High School. This year there were two drill teams competing, which marks the first time Connecticut had a wing drill competition in recent memory. The team will now represent the wing at the Northeast Region Cadet Competition to be held April 26-28 at the Naval War College in Newport, RI.

The drill team scored a four to three victory over the New Fairfield Cadet Squadron drill team. The 143rd won the Standard Drill, Innovative Drill, Aerospace Education and Leadership events and New Fairfield took the Uniform Inspection, Volleyball Match, and Mile Run events. Both teams put on an excellent show for the spectators in the drill events. While the 143rd did not win the Mile Run event, several team members recorded personal best times for the mile.

The New Fairfield Cadet Squadron Color Guard Team won the 2013 CTWG Color Guard Competition and will also travel to Newport to represent the wing at

The 143rd Composite Squadron Drill Team. Front Row l. to r.: C/CMSgt Aidan Moran, C/SrA Adam Young, C/A1C Matthew Hutzelman, C/Amn joshua Henriquez, C/TSgt Kristina Delp and C/B James Haggard. Back Row L. to r.: 2nd Lt George Garofalo (Team Escort), C/CMSgt Christian Tynan (Team Commander), C/SrA Xavier Jeffries, C/SSgt Matthew DiBlanda, C/A1C Francis Fahy, C/SrA Steven Garofalo, C/SSgt Daid Maciel, C/2nd Lt Cameron Foster, C/MSgt Carlos Aponte, and Capt Sarah Lange (Team Escort).

The 143rd Composite Squadron

Squadron Commander: Maj Timothy McCandless
Deputy Commander for Seniors: 1st Lt James Keaney
Deputy Commander for Cadets: 1st Lt Paul Beliveau
Cadet Commander: C/Lt Col Margaret Palys
Cadet First Sergeant: C/CMSgt Christian Tynan

Regular Meetings every Tuesday 7-9pm
Connecticut National Guard Armory
64 Field Street, Waterbury, Connecticut

www.ctwg.cap.gov/ct011 **www.gocivilairpatrol.com**

Drill Team (cont.)

the Northeast Region Color Guard Competition. The Color Guard Competition was also very close with teams from the Royal Charter Composite Squadron and the 399th Composite Squadron putting on solid performances.

C/MSgt Carlos Aponte is inspected by a judge.

The volleyball event tests the cadets' teamwork skills.

The 143rd Drill Team during the Standard Drill Event

The team's Innovative Drill routine included complicated circular drill manuevers.

Cadet Great Start Weekend

Cadets Learn Basic Skills at The Connecticut Army National Guard Training Facility

The 143rd Composite Squadron hosted a Cadet Great Start weekend at Camp Niantic in Niantic, CT in March. This has become an annual event that has gained a reputation as a fun learning experience.

Cadets learned about all aspects of the cadet program including drill and ceremonies, customs and courtesies, uniform wear, followership, and Aerospace Education.

Most of the classes were taught by the Cadet Officers and NCOs that volunteered to be on staff. C/Capt Adam Hocutt from the 103rd Composite Squadron was the Cadet Commander and C/MSgt Keith Trotochaud was the Fight Sergeant.

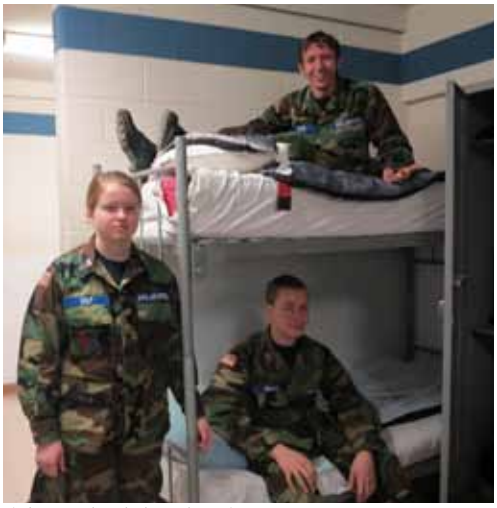
Maj Tim McCandless again took charge of the mess hall and with his crew of cadets provided excellent meals including a corned beef dinner on Saturday evening.

Since the squadron had reserved the barracks and classrooms at Camp Niantic there were several concurrent activities planned for this event. CTWG hosted an Squadron Leadership School, the 143rd's Drill Team was able to conduct several hours of practice and classes for cadets preparing to complete the Armstrong and Mitchell Achievements were held.

The Cadet Great Start Program was developed by CAP National Headquarters to help new cadets learn about CAP and succede at the cadet program.

C/Capt Adam Hocutt, of the 103rd Composite Squadron, shows cadets how to properly place grade insignia on a BDU shirt.

Cadets arrive at a classroom after breakfast.



Cadets stayed in the barracks at Camp Niantic.

Meals were served in the mess hall at the barracks.

Cadets worked together to solve classroom problems.

A life in flight for first woman 'Thunderbirds' pilot

Then-Maj. Nicole Malachowski is the first woman pilot on the U.S. Air Force Thunderbirds. The Thunderbirds are the Air Force's premier air demonstration team. (U.S. Air Force photo)

by Airman 1st Class Alexander W. Riedel
Air Force News Service

3/19/2013 - FT. GEORGE G. MEADE (AFNS) -- Since 1953, the Air Force's air demonstration team, the Thunderbirds, have captivated spectators across the world and showed its audiences what the Air Force's aircraft are capable of.

For two years, Lt.Col. Nicole Malachowski surprised audiences not just in the air, but especially when she stepped out of the cockpit of the fighter jet as the first woman to be accepted for a seat on the Air Force's premier show team.

Being on the crew took Malachowski full circle to the root of her career, she said. At just 5 years old, she visited an air show with her parents and was fascinated by the powerful roar and agility of the F-4 Phantom II. "I remember looking my father in the eye and saying 'I want to be a fighter pilot some day,'" Malachowski said.

Soon she began the journey to the cockpit by participating in the Civil Air Patrol at age 12 and took to the pilot's seat for her first solo flight at age 16 -- getting her pilot's before her driver's license. She continued on her path, by applying to the U.S. Air Force Academy, receiving her commission in May 1996.

Malachowski went on to serve in three operational F-15E Strike Eagle fighter squadrons, holding positions as a flight commander and instructor pilot. She quickly amassed more than 1,600 flying hours, including 185 hours of combat time in Operation Deliberate Forge and Operation Iraqi Freedom. On the ground, she also served alongside the U.S. Army's 2nd Infantry Division as an air liaison officer in South Korea.

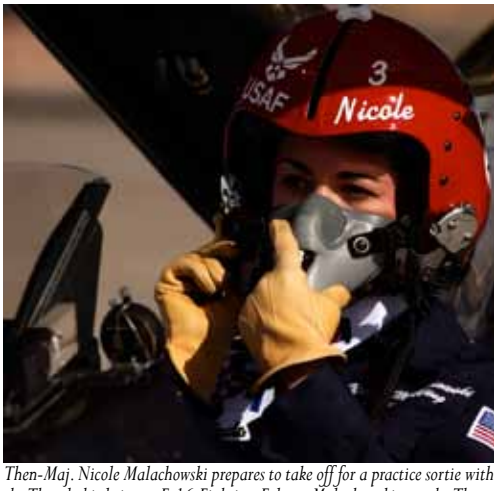
In every job, Malachowski excelled, and her flying talent and real-world experience eventually got her selected as the first female pilot in any American military air demonstration team. In interviews, however, Malachowski often repeated that she didn't think her gender set her apart.

"What we need to concentrate on is what we have in common, which is that warrior spirit that's in all of our hearts, that has created us the way we are -- to choose to be a part of something so much bigger than ourselves," Malachowski said during a speech at the Women in Military Service for America Memorial at Arlington National Cemetery in 2006. But her role as a pioneer in the team was not lost on the officer. "I never thought I would be a Thunderbird," she said in 2007. "I still don't have my arms around it. I don't think I have fully grasped the significance, and maybe it is something I will figure out in a few years." For her, the teamwork of all Airmen is what makes the Air Force mission possible.

"Women have been an integral part of the Thunderbird team for decades," Malachowski said in an Air Force press release; hinting at the enlisted women who served in support and maintenance roles with the thunderbirds since 1974. "The women of yesterday and today's Air Force maintain a tradition of excellence, and it is that heritage that has given me this exciting responsibility of being the first female Thunderbird pilot."

In late November 2007, Malachowski finished her tour with the thunderbirds and performed her last show in front her hometown crowd in Las Vegas, Nev. But Malachowski's career did not stop with her last airshow.

Leaving behind the stressful schedule of the show team, she took on new challenges from supporting senior government leaders as a White House fellow, to her current



Then-Maj. Nicole Malachowski prepares to take off for a practice sortie with the Thunderbirds in an F-16 Fighting Falcon. Malachowski was the Thunderbird #3 right wing pilot. (U.S. Air Force photo / Tech. Sgt. Justin Pyle)

position as the commander of the 333rd Fighter Squadron at Seymour Johnson Air Force Base, N.C. Malachowski said she hopes her service in the Thunderbirds was an example to young girls and to all children that they can achieve their dreams.

"The message to all young Americans is that it's great to have a dream; it's great to have goals," she said. "Pursue something that you are passionate about, and then pursue excellence in that. And surround yourself with a positive team. I hope that when they see the Air Force Thunderbirds, they realize they can achieve any dream, and that a great team to have is certainly the Air Force."

In the Thunderbirds' famous flying diamond formation, Malachowski flew in the F-16 Fighting Falcon No. 3, right wing jet -- a position again filled by a woman today. Maj. Caroline Jensen continues to inspire dreams at airshows across the country.

"Women have been involved in aviation since the time of hot air balloons," Malachowski said at the 19th Annual International Women in Aviation Conference in San Diego, March 14, 2008. "It's only normal to me that women are going to add their strength and skills to the effort of pushing aviation forward."

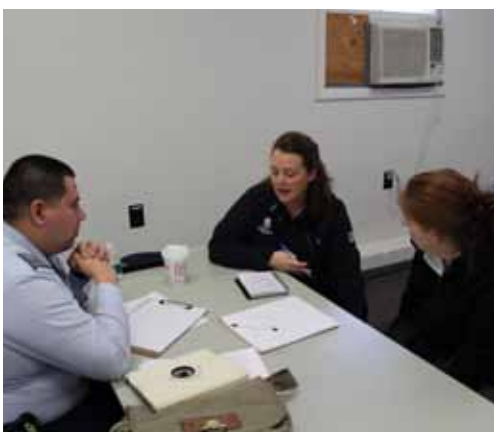
(Sourced from Air Force News Service articles and Air Force TV News)

Squadron Leadership School

CTWG hosted a Squadron Leadership School at Camp Niantic concurrent to the 143rd's Cadet Great Start Weekend. The course director was Maj Tom Litwinczyk with support from Maj Glen Dains, CTWG Professional Development Officer.

Ten students, including members of the Massachusetts and New York Wings, attended the class.

Students listen to a class on leadership.



Many of the classes involved small group discussions.

Kristina Delp is promoted to C/TSgt by C/Lt Col Palys (l.) and Maj McCandless (r.)

Francis Fahy is promoted to C/A1C by C/Lt Col Palys (l.) and Maj McCandless (r.)

Aidan Moran is promoted to C/CMSgt by his father.

Adam Young is promoted to C/SrA by C/Lt Col Palys (l.) and Maj McCandless (r.) Cadet Young earned his promotion in January.

Matthew DiBlanda (l.) displays his Wright Brothers certificate with Lt Col Palys (r.) after his parents promoted him to C/SSgt.

David Maciel is promoted to C/SSgt by his father, 2nd Lt Maciel (r.) and Maj McCandless (l.)

Karen Litwinczyk is promoted to C/CMSgt by her father, Maj Litwinczyk (l.) and C/Lt Col Palys (l.)

March Promotions

The following members of the 143rd Composite Squadron were promoted in March:

Karen Litwinczyk has completed the Dr Robert H Goddard Achievement and has been promoted to C/CMSgt.

Aidan Moran has completed the Dr Robert H Goddard Achievement and has been promoted to C/CMSgt.

Kristina Delp has completed the Capt Eddie Rickenbacker Achievement and has been promoted to C/TSgt.

Matthew DiBlanda has completed the Wright Brothers Achievement and has been promoted to C/SSgt.

David Maciel has completed the Wright Brothers Achievement and has been promoted to C/SSgt.

Francis Fahy has completed the Gen Hap Arnold Achievement and has been promoted to C/A1C.

Xavier Jeffries has completed the Gen Hap Arnold Achievement and has been promoted to C/A1C.

March Awards

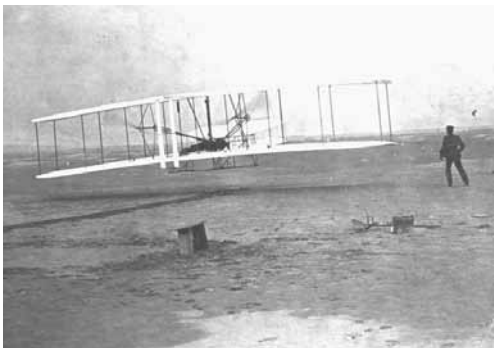
The following members of the 143rd Composite Squadron were earned awards in March:

David Maciel has been awarded the Community Service Ribbon with two clasps for 180 hours of service.

The Wright Brothers Award

The first milestone in the Cadet Program is the Wright Brothers Award. It is earned after completing the first three achievements and passing a challenging test of leadership knowledge and drill and ceremonies performance. The Wright Brothers Award was introduced in 2003, during the centennial of the Wright's historic flight.

This milestone award marks a cadet's transition to Non Commissioned Officer as they are promoted to the grade of Cadet Staff Sergeant.



The Wright Brothers first powered flight, December 17, 1903 at Kitty Hawk, NC. (U.S. Air Force photo)

Cadet Change of Command Ceremony

During the 26MAR13 Squadron Meeting C/Lt Col Matthew McCandless relinquished his position of Cadet Commander to C/Lt Col Margaret Palys. C/Lt Col McCandless has been the Cadet Commander since June, 2012.

The Change of Command ceremony is a simple, traditional event that runs deep in symbolism and heritage. The key to the Change of Command is the passing of the unit's colors. In many ways, the history, tradition, and accomplishments of the command are symbolized by the colors. Traditionally, the colors serve as the rallying point around which a unit's members are regrouped for motivation, strength, and mission accomplishment. The colors have always been at the front of the unit and have symbolized the continuity of the organization. Even though unit personnel come and go and commanders change, the colors remain. The transfer of the colors represents the transfer of responsibility for the accomplishment of the mission, and for providing for the welfare, order, and disciplined of the Airmen assigned.

The history of the Change of Command can be tracked back to the year 406 B.C. when Lysander took command of the Armies of Sparta. In the United States, there have been three Ceremonies that have influenced the ceremony that we have today. The first two involved George Washington – One when he assumed command of the Continental Army beneath "Washington Elm" in Cambridge, Massachusetts on 3 July 1775 – The other when Washington gave his personal farewell to his Officers on 4 December 1783 at Faunces Tavern In New York. At the conclusion of the ceremony Washington passed between the ranks of Guard of Honor to the wharf from which he departed.

C/Lt Col Matthew McCandless (l.) and C/Lt Col Margaret Palys (r.) review a performance by the cadet drill team.

C/Lt Col Matthew McCandless presents the Squadron Colors to C/Lt Col Margaret Palys.

A final event which influenced the Change of Command Ceremony occurred on November 10, 1862, when Major General George McClellan relinquished command of the Army of the Potomac to Major General Ambrose Burnside. These Ceremonies set the precedent for the modern day Change of Command Ceremony, which involves the traditional passing of the unit colors.

2013 National Cadet Special Activities

Selections for 2013 National Cadet Special Activities were made in March. The 143rd had seven cadets selected for activities this year. Cadets not selected are placed onto a waiting list, many of whom are later slotted to an activity as cadets drop out of activities due to other commitments.

Cadets attending National Cadet Special Activities have invested a year or more in CAP. Having progressed through a curriculum that has taught them fundamentals of leadership and the basics of aerospace science, they are ready to take the next step by investigating career opportunities. As high-achieving youth, cadets are disciplined, eager to learn, and serious about choosing good futures.

Civil Air Patrol's National Cadet Special Activities provide fabulous opportunities for young people to have fun while preparing for exciting careers.

143rd Cadets were slotted for the following activities in 2013:

Cadet Officer School

Cadet Officer School is patterned after the USAF Squadron Officer School and is an academically challenging course for cadets 16 and older.

Undergraduate Pilot Training Fam Course

In one week's time the CAP cadet will experience as much of what a prospective USAF pilot candidate experiences in 52 weeks of training.

Glider Centers of Excellence

At these glider flight academies, all the basic to advanced skills and ground instruction leading toward your private glider rating are included.

Space Command Fam Course

Air Force Space Command (AFSPC) sponsors two special activities at Patrick AFB and Peterson AFB to showcase AFSPC roles and missions to CAP cadets.

Hawk Mountain Ranger School

Hawk Mountain Ranger School has a proud history of providing outstanding SAR and emergency services training.

New Scholarship Opportunities

1) Aerospace States Association - $2,000 award

- for up to two students (must be U. S. citizens, full-time student entering sophomore or junior year) pursuing an Aerospace-related (physical sciences, engineering, aviation, or aerospace) degree. Deadline to apply is April 30, 2013! Additional information is available at this link:
http://aerostates.org/education/scholarships

2) Amelia Earhart Scholarship in Memory of Linda Olivo - $1,000 award

- open to females only who are pursuing an Aviation related, math, science or STEM degree. Applications are due May 1. Additional information is available at this link:
http://www.faa.gov/about/office_org/headquarters_offices/ang/offices/management/coe/

If you know of anyone that would qualify, please forward the information onto them.

The Chandra X-ray Observatory

The world's most powerful X-ray telescope. It has eight-times greater resolution and is able to detect sources more than 20-times fainter than any previous X-ray telescope.

This is the remnant of Kepler's supernova, the famous explosion that was discovered by Johannes Kepler in 1604. The red, green and blue colors show low, intermediate and high energy X-rays observed with NASA's Chandra X-ray Observatory, and the star field is from the Digitized Sky Survey.

As reported in our press release, a new study has used Chandra to identify what triggered this explosion. It had already been shown that the type of explosion was a so-called Type Ia supernova, the thermonuclear explosion of a white dwarf star. These supernovas are important cosmic distance markers for tracking the accelerated expansion of the Universe.

However, there is an ongoing controversy about Type Ia supernovas. Are they caused by a white dwarf pulling so much material from a companion star that it becomes unstable and explodes? Or do they result from the merger of two white dwarfs?

The new Chandra analysis shows that the Kepler supernova was triggered by an interaction between a white dwarf and a red giant star. The crucial evidence from Chandra was a disk-shaped structure near the center of the remnant. The researchers interpret this X-ray emission to be caused by the collision between supernova debris and disk-shaped material that the giant star expelled before the explosion. Another possibility was that the structure is just debris from the explosion.

The disk structure seen by Chandra in X-rays is very similar in both shape and location to one observed in the infrared by the Spitzer Space Telescope. This composite image shows Spitzer data in pink and Chandra data from iron emission in blue. The disk structure is identified with a label.

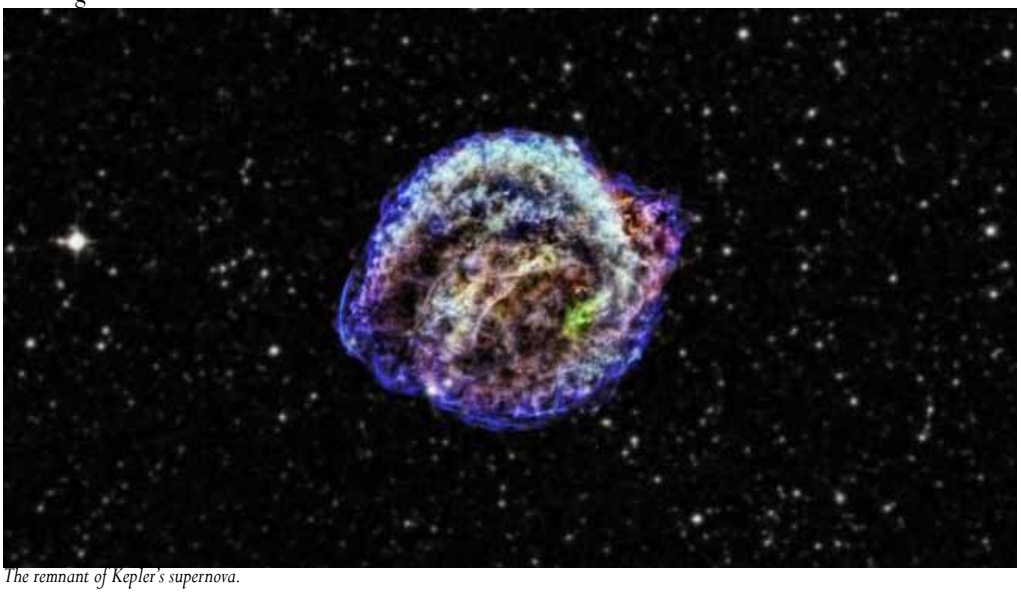
This composite figure also shows a remarkably large and puzzling concentration of iron on one side of the center of the remnant but not the other. The authors speculate that the cause of this asymmetry might be the "shadow" in iron that was cast by the companion star, which blocked the ejection of material. Previously, theoretical work has suggested this shadowing is possible for Type Ia supernova remnants.

The authors also produced a video showing a simulation of the supernova explosion as it interacts with material expelled by the giant star companion. It was assumed that the bulk of this material was expelled in a disk-like structure, with a gas density that is ten times higher at the equator, running from left to right, than at the poles. This simulation was performed in two dimensions and then projected into three dimensions to give an image that can be compared with observations. The good agreement with observations supports their interpretation of the data.

These results were published online and in the February 10th, 2013 issue of The Astrophysical Journal.

Credits: X-ray: NASA/CXC/NCSU/M.Burkey et al; Infrared: NASA/JPL-Caltech

-Taken from www.nasa.gov



The remnant of Kepler's supernova.

DOUGLAS C-39

Douglas C-39 (S/N 38-499). (U.S. Air Force photo)

The Douglas C-39 was basically the end result of a development process that began with the XC-32 in 1935. The XC-32 was a military version of the Douglas DC-2 civilian airliner. The XC-32 led to an order for 18 similar aircraft with the C-33 designation. The first C-33 built was held back at the Douglas factory and modified with a DC-3 tail assembly and designated C-38. The C-38 led to an order for 35 similar production versions which were designated C-39 by the Air Corps.

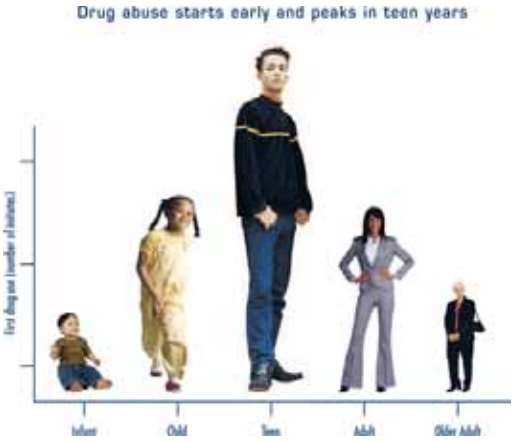
The C-39 was a mixture of DC-2, DC-3 and military specific parts and assemblies. The plane used a basic DC-2 forward and center fuselage section mated to a DC-3 style aft fuselage and tail. The wing consisted of a DC-3 center section and DC-2 outboard wings. The landing gear was based on the design developed for the Douglas B-18 bomber. Because the C-39 was essentially a hybrid of DC-2 and DC-3 assemblies, it was unofficially known as the DC-2½.

The C-39 interior was specifically designed for carrying cargo but could also be configured with 12 passenger seats (six rows of two). The floor of the cabin had numerous tie down points for securing cargo -- primarily with ropes. At maximum loading, the plane could carry nearly two tons of cargo.

The C-39 carried a crew of three -- the pilot, co-pilot and radio operator. Previous versions of the plane (C-32, -33 and -38) had just a pilot and co-pilot. The radio operator's station was at the rear of the cabin opposite the cargo loading door. In cases where the plane was carrying a maximum load, the aisle way to the cockpit could potentially be blocked with cargo so the radio operator could act as a load master to make sure the cargo did not shift in flight and open the cargo doors after landing and begin the unloading process while the flight crew finished its post flight checks and paperwork in the cockpit.

-Taken from www.nationalmuseum.af.mil

Douglas C-39 (S/N 38-499; the first C-39 built) on Dec. 27, 1938. (U.S. Air Force photo)



Drugs, Brains, and Behavior

The Science of Addiction

Why is adolescence a critical time for preventing drug addiction?

Early use of drugs increases a person's chances of more serious drug abuse and addiction. Remember, drugs change brains - and this can lead to addiction and other serious problems. So preventing early use of drugs or alcohol may reduce the risk of progressing to later abuse and addiction.

Risk of drug abuse increases greatly during times of transition, such as changing schools, moving, or divorce. If we can prevent drug abuse, we can prevent drug addiction. In early adolescence, when children advance from elementary through middle school, they face new and challenging social and academic situations. Often during this period, children are exposed to abusable substances such as cigarettes and alcohol for the first time. When they enter high school, teens may encounter greater availability of drugs, drug abuse by older teens, and social activities where drugs are used.

At the same time, many behaviors that are a normal aspect of their development, such as the desire to do something new or risky, may increase teen tendencies to experiment with drugs. Some teens may give in to the urging of drug-abusing friends to share the experience with them. Others may think that taking drugs (such as steroids) will improve their appearance or their athletic performance or that abusing substances such as alcohol or ecstasy (MDMA) will ease their anxiety in social situations.

Teens' still-developing judgment and decisionmaking skills may limit their ability to assess risks accurately and make sound decisions about using drugs. Drug and alcohol abuse can disrupt brain function in areas critical to motivation, memory, learning, judgment, and behavior control. So, it is not surprising that teens who abuse alcohol and other drugs often have family and school problems, poor academic performance, health-related problems (including mental health), and involvement with the juvenile justice system.

Can science-validated programs prevent drug addiction in youth?

Yes. The term "science-validated" means that these programs have been rationally designed based on current knowledge, rigorously tested, and shown to produce positive results. Scientists have developed a broad range of programs that positively alter the balance between risk and protective factors for drug abuse in families, schools, and communities. Research has shown that science-validated programs, such as those described in NIDA's Preventing Drug Use among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders, can significantly reduce early use of tobacco, alcohol, and illicit drugs.

How do science-validated prevention programs work?

These prevention programs work to boost protective factors and eliminate or reduce risk factors for drug use. The programs are designed for various ages and can be designed for individual or group settings, such as the school and home. There are three types of programs -

- Universal programs address risk and protective factors common to all children in a given setting, such as a school or community.
- Selective programs target groups of children and teens who have factors that further increase their risk of drug abuse.
- Indicated programs are designed for youth who have already begun abusing drugs.

Are all prevention programs effective in reducing drug abuse?

When science-validated substance abuse prevention programs are properly implemented by schools and communities, alcohol, tobacco, and illicit drug abuse are reduced. Such programs help teachers, parents, and healthcare professionals shape youths' perceptions about the risks of drug abuse. While many events and cultural factors affect drug abuse trends, when youths perceive drug abuse as harmful, they reduce their level of abuse.

-Taken from www.drugabuse.gov

Your Brain: Better Than Any Computer

Is your brain an organic computer? Your brain does a lot of things a computer does, like math, logic, analyzing input, creating output, and storing and retrieving information. Even at the cellular level, there are some striking similarities between brains and computers. Our brain has billions of neurons that convey and analyze electrical information. This information is binary, meaning a neuron either fires a burst of electricity or it does not fire at all. Likewise, computers transmit information electrically. And at the most basic level, computers work using bits of information that are also binary, where each bit of information is either a "1" or a "0," nothing in between.

But brains do a lot of things that computers cannot. Our brains feel emotions, worry about the future, enjoy music and a good joke, taste the flavor of an apple, are self-aware, and fall in and out of love. Albert Einstein's famous equation E=MC2 was not the result of a computer algorithm but, rather, of a brain making a great intellectual leap. If a brain is merely an organic computer, how can it do these things?

Part of the answer may be that whereas neurons process information like a computer, they are not the only type of brain cells processing information. Neurons only make up a small portion of your brain cells—about 15 percent.

Enter the All-Important Glia Cells

The vast majority of brain cells are called "glia" cells. For over 100 hundred years, most brain scientists saw glia as being relatively unimportant. Their function was believed to be mostly cleaning up "molecular trash" created by neurons. However, research is now showing that glia do much more than housecleaning. They are involved in learning and memory, and they help repair damaged brain areas. Glia can also communicate with neurons and with each other through "gap junctions" across large areas of the brain.

To illustrate how important glia are, almost every disease of the brain is partly or solely the result of glia malfunction. Scientists are now discovering that glia may also play a pivotal role in drug abuse, where changing glia activity may reduce drug abuse and addiction.

-By Dr. David Thomas, Program Officer in NIDA's Behavioral and Cognitive Science Research Branch www.teens,drugabuse.gov

Confessions of a text offender

by Kelly M. Lee, Contractor
Air Force Safety Center

3/18/2013 - Kirtland Air Force Base, N.M. -- As the emergency contact for my mother and sister, and because I'm a single mom, I'm never far from my phone. My reality is that I have to have my phone near me at all times. A side effect of this is that I have developed an obsessive compulsion with texting. If I receive a text message, I HAVE to grab the phone and respond almost immediately. And, I've gotten in the habit of having a thought and texting it - right

If I receive a text message, I HAVE to grab the phone and respond almost immediately. (Air Force graphic by Felicia Hall)

then, right there. If I need to remember something for work, I'll text it to my email. It's convenient, it's done, and it's effective.

Here's the clincher -- I don't have enough self-control to receive a text and ignore it. This means, while my phone sits in my passenger's seat and my kids are in their car seats, and I'm actively driving, I'll pick up that phone and read what it says. I am THAT person!

It gets worse … I work in safety! So here I sit, very aware of just how stupid I'm being and I can't stop. I've seen the video of the person swerving into traffic and being smashed into pieces. I've seen the billboards of the parents of the daughter whose last text while driving was "where r u?" So, what's a text addict to do? How do I work with my known compulsion to stop my texting and driving?

The only answer, for me, is to physically separate myself from the phone. I can leave it on. I know when I receive a text message. ALL text messages can wait. The school doesn't text. My mom doesn't text. My sister will call if there's an emergency. Repeat the phrase - ALL text messages can wait. So, I've separated myself from the phone, and all text messages can wait. Furthermore, I've asked friends not to text during my commute to and from work and I don't text anyone prior to driving. Yes - I'm pathetic, but that's been established!

So, that leaves phone calls. I'm separated from my phone, I receive a phone call, there is no message left - it can wait. I receive a phone call, there is a message. I can wait until I get to my destination or I can pull off the road, get the phone, and listen to the message - putting the phone back out of my reach afterwards.

I write this article because I feel like I can be the accident that never happened. I needed to be realistic about my lack of self-discipline. I needed to take steps to ensure I don't pick up that phone while driving. I needed to remove the temptation. I am that person who doesn't think it will ever happen to her. I am lucky - damn lucky - it hasn't happened to me already. I'm not writing this article from a wheelchair, at my kids' gravesites, or from jail. "I'd rather be lucky than good" just doesn't fit this scenario. I want to be safe! I want my kids to be safe! I want the innocent people on the roads with me to be safe! I challenge you all to make that extra effort to save yourself from you.

-Taken from www.af.mil

CAP Members Must Remain Current on Safety Training

CAPR 62-1, CIVIL AIR PATROL SAFETY RESPONSIBILITIES AND PROCEDURES, defines the CAP Program Goal as follows:

The overarching goal of any safety program is to mitigate risks, control hazards and prevent mishaps. The primary goal of the CAP Safety Program is to protect both the membership and its assets in the performance of their volunteer duties. To do this, CAP leadership and its safety program managers shall use both education and training to promote the culture of safety within the Civil Air Patrol.

a. Education is intended to infuse an individual with a broad base of knowledge.

b. Training is intended to bring an individual to a level of proficiency for a specific skill. Civil Air Patrol's Culture of Safety is a combination of both education and training.

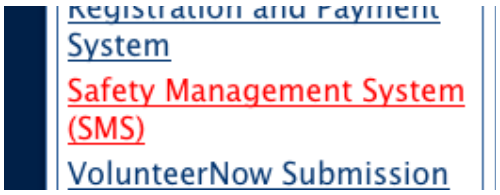
All active CAP members (seniors, cadets, cadet sponsors, 50 year and life members) must maintain monthly safety education briefing currency in order to participate in any CAP functions, with exception of meetings where members may attend for the purpose of completing the required safety education.

Members may attend any unit meeting for the purpose of completing the monthly safety education requirement; however, non-current members should not expect to receive this training at events that require current ES qualifications to participate unless the operations plan and/or the event leader specifies that safety education will be provided as an adjunct to the event.

Safety education shall only be completed in-person or through computer-based training.

To complete an online safety class complete the following steps:

1. Log into eServices.
2. Click the "Safety Management System" link



3. Click the "Online Safety Education" link.

4. Complete any of the online courses listed under the "Elective Monthly Education Courses" heading

Elective Monthly Education Courses
Downed Power Lines
Hurricane Preparedness and Awareness
Flooding
Winter Driving Safety
Wind Chill Index
Spatial Disorientation
Fundamental of Fire Extinguisher Training
Geotagging
Hydration
Lightning Safety
Bird Strikes
Axes, Knives, and Saws
FY11 Analysis and Recommendations
Fainting Safety
Survival Basics for Air and Ground Crews
Tire Familiarization and Safety
Passenger Van Safety Awareness Program