CIVIL AIR PATROL
SAN DIEGO CADET
SQUADRON 144

Squadron 144 News

VOLUME 2, ISSUE 2 SAN DIEGO CADET SQUADRON 144

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F/A-18 Hornet Simulator Training & Tour with Marine Fighter Attack Training Squadron

By: 1st Lt Sonya Petty

Major "Cowbell" Dickenson gives Squadron144 a tour of the VMFAT 101 Sharpshooters.

Miramar Marine Corps Air Station (MCAS), San Diego, CA On 4 January 2011 San Diego Cadet Squadron 144 descended upon MCAS Miramar for an exclusive behind the scenes tour of the F/A-18 Hornet multimillion dollar flight simulators used by active duty military for training and new pilots transitioning to the F/A-18 Hornet front line fighter/bomber. This is Marine Fighter Attack Training Squadron 101 (VMFAT 101) mission: To train and transfer them to the various fleet squadrons. Our host, Major Rob"Cowbell" Dickenson, USMC led the cadets through the doors of the Pilot Training Building taking them to where the pilots attend classes and train in their state-of-the-art simulators. Each cadet received approximately 5-10 minutes inside one of two simulators. Observers on the outside were able to watch their flight skills on monitors so they could join in on the fun! With the scenario loaded, cadets were able to cruise the San Diego Bay at their leisure, or as most of them chose, engage in combat with the cadet flying the other simulator.

C/A1C Bryce Duggan and C/SSgt Jacob Veta inspect the F/A-18 Hornet

After careful observation, it was noted that there may definitely be a future as pilots for many of these cadets. A particular comment made by the Marine running the simulators was that C/Capt Daniel Gorin landed successfully on an aircraft carrier on his first try—most trained pilots can't do that! Some of the other cadets performed the dreaded "ramp strike" hitting the back of the carrier, thus ending their short career as USMC/USN aviators.

After the cadets finished their taste of pilot training, "Cowbell" gave us a behind the scenes tour of the VMFAT 101's "Hornet's Nest." This was especially exciting since the tour occurred while the flight line was active for night operations and training missiles were being moved about in the hangar. It was loud, informative, and very enlightening. After the formal tour, cadets and guests were allowed to freely observe the aircraft. Squadron 144 extends a huge thank you to our host, Cowbell and his two wingmen: 1Lt Chris Bromley, USMC and Lt Leo Mendoza, USN for supporting this event!

C/Capt Joshua Flewellen discusses the importance of the radar in the nosecone with fellow cadets.

C/CMSgt Jesse O'Keefe discusses various aspects of the F/A-18 Hornet with a couple cadets.

Upcoming Events

⇒ February 4-6
Southern California Combined Squadron Winter Bivouac
Big Bear, CA
Cost: $25

⇒ February 12
100th Anniversary Parade of Flight
NASNI, Coronado,CA
Cost: FREE

⇒ March 11-13
CAWG Cadet Competition
Vandenberg AFB, CA

⇒ March 19
Titan Phase Rocket Launch
Time and Location TBD

⇒ March 25-27
Basic Cadet School (BCS)
Escondido, CA

⇒ March 26
Riverside Air Show
Riverside, CA

⇒ May 27-30
CAWG Cadet Programs Conference
Camp SLO
Cost TBD

⇒ July 14-23
CAWG Encampment
Camp Pendleton
Cost TBD

FEBRUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 Weekly Meeting	2	3	4 Winter Survival Bivouac	5
6 Winter Bivouac	7	8 Weekly Meeting	9	10	11	12 Parade of Flight
13	14	15 Weekly Meeting	16	17	18	19
20	21	22 Weekly Meeting	23	24	25	26
27	28					

MARCH 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 Weekly Meeting	2	3	4	5
6	7	8 Weekly Meeting	9	10	11 CAWG Cadet Competition	12
13	14	15 Weekly Meeting	16	17	18	19 Rocket Launch
20	21	22 Weekly Meeting	23	24	25 Basic Cadet School	26 Air Show
27 BCS	28	29 Weekly Meeting	30	31		

February Memory Work

By: 1st Lt Sonya Petty, Squadron Leadership Officer

It has come to my attention that many Cadets and Senior Members do not know some of the fundamentals of CAP. These were taught to cadets when they were in the BTF flight and should be reinforced on a regular basis. From now on, the Squadron 144 Newsletter will feature a Memory Work Section. All Cadets and Senior Members are expected to learn it and know it. You will be quizzed about this during inspections and review boards so BE PREPARED.

The CAP Core Values are:

- Integrity First
- Volunteer Service
- Excellence in All We Do
- Respect

CAP Core values are the price of admission to CAP. They are the guide to how we live and perform CAP missions.

Cadet Commander's Corner

Greetings Squadron 144 Cadets, Seniors, Sponsors, and Parents,

Thank you all for attending the annual Squadron 144 banquet. It is so great to see the progress of the squadron and the accomplishments made by our cadets. As of 29 January 2011, I am stepping in as the squadron's new Cadet Commander, and I am looking forward to the months ahead and the challenges that we face.

With the large number of visitors we've seen at the past few meetings, we have decided to establish a second basic training flight in order to minimize the wait time for the visitors to get started. No longer will they have to wait eight weeks, but now the flights will initiate their classes at four week intervals. In addition, the current Charlie flight will go back to being Alpha flight, and the two basic training flights will be Bravo and Charlie.

With the new changes, it is important to maintain the enthusiasm and motivation from each member that was so vividly displayed these past few months. Let's work together to accomplish our goals and grow as leaders in the program.

Keep up the good work,

DANIEL GORIN, C/Capt, CAP

Cadet Commander, Sq 144

Squadron Online Testing Policies

By: 1st Lt Sonya Petty, Squadron Leadership Officer

1. All cadets are allowed to begin taking tests online instead of at the squadron.
2. Cadets joining after 31 JUL 2010 are required to test online and are not eligible to test at the squadron.
3. Once a cadet starts taking the online tests, they are required to take all future tests online.
4. When cadets begin taking tests online, they must take both the Leadership and the Aerospace tests online.
5. If a cadet fails an online test they must wait 30-days before the test will be released to take again.
6. If a cadet does not finish a test, they will have one more opportunity to take it. If they do not finish the second time or fail the test, they must wait 30-days before the test will be released to take again.

All cadets are encouraged to take their tests online. This gives you more time for classroom instruction on testing material at the squadron.

If you have any questions, please contact 1st Lt Sonya Petty.

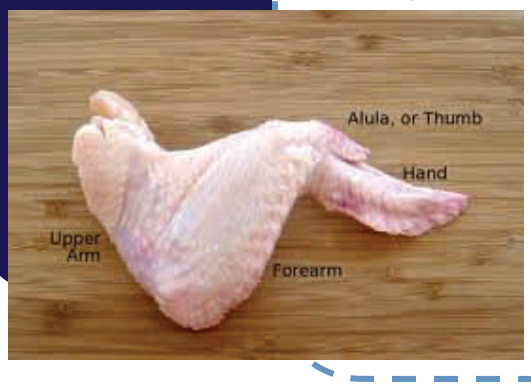
Look to the Sky

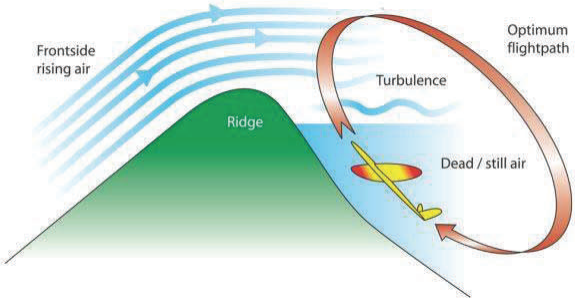
By: C/CMSgt Jesse O'Keefe

Last Summer, I went to a place called Hawk Mountain (not the ranger school) as a civilian birdwatcher.. The birds we saw were amazing. We saw Peregrine falcons whizzing by at average of 75 MPH cruising speed, Broad Winged hawks soaring hundreds of feet above us, Ospreys sitting in treetops above the creek, and the tiny Kestrels snatching lunch out of the air.

This was an enjoyable event, but I couldn't help but wonder how much birdwatching it took to progress aviation to where it is today. After all, didn't the Wright brothers get inspired to build and fly their own contraptions after watching the Red Tailed hawks outside Dayton Ohio for hours on end? Didn't Otto Lilienthal fill hundreds of pages in his notebook on bird flight? Before that, we find designs from Leonardo DaVinci that were based on the flight of birds. I think it is safe to assume that without the inspiration that comes from birds, we wouldn't be flying at all. Let's look further into this with a couple of specific examples.

The Wright brothers, in their original design, had no control system to guide their glider. Then they remembered their days spent watching birds. If the bird wanted to guide to the left, the back edge of the left wing would twist down, and the front edge of the right wing would twist up. This would roll the bird to the left. This "wing warping" system became the base for controlling the flight of all their original designs. The aileron had been around for a while, but at first the wing warping method was more effective. However, as soon as the aileron design caught up with the airframes, the aileron was proved to be the better design. The concept still came from the birds though.



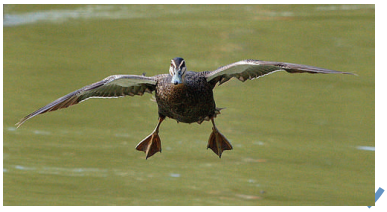


Now I'll talk about a feature that I noticed while I was preparing the thanksgiving turkey. It you have ever done this, you might have noticed a little spur on the leading edge of the turkey wing, just in front of the "elbow" joint. I had noticed similar features on some aircraft (slats) that are used during low speed maneuvering. Turns out the bird had it first. In the anatomy of a bird wing (see bottom right picture) the little "thumb" that appears on the wing is usually held flush against the leading edge, but during low speed maneuvering, the Alula is deployed as a mini wing that keeps the air flowing smoothly over the wing. This allows the birds wing to assume a higher angle of attack without stalling. The Alula deploys a little to the front and (depending on the flight situation) below the leading edge.

Another advancement that we can see from birds are flaps. Of course birds don't have movable flaps, but the whole wing warps to approximately the same shape that we get when we deploy the movable flaps. We see this in the bird world when a flock of ducks perform a landing on a body of water. It is clear to see that the birds have absolute control over the speed and angle of their approach pattern. As you watch an American Black Duck approaching a pond to land, the closer it gets, it will "deploy" the air brakes (feet), and slowly deform the trailing edge of both wings to drop down. Dropping the trailing edge of the wing does two things—makes more drag (more surface area means more drag) and makes more lift. Those two things allow the duck to fly slower without sacrificing lift during landing.

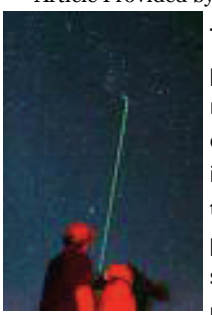
Setting aside physical characteristics, the simple flight patterns of Buteos, Accipters, and Falconiformes have provided groundbreaking research in the area of unpowered flight. In the last 10 to 15 years, the research of these birds has advanced unpowered flight farther than dreamed possible. Jim Maupin and Gary Osaba have been two of my favorite researchers in this area. They have developed and/or advanced techniques such as Slope Soaring, Wave Soaring, Microlift flight, and thermal Duration. Thermal duration has been around for nearly as long as airplanes, but slope soaring has taken the largest jump in development and use. This flight form comes from the long studied Accipters. Some birds in this group are, Sharp Shinned Hawks, Coopers Hawks, Goshawks, and Shikra's among many others. These birds practice overwhelmingly effective flight patterns, whose observance has been the driving force in unpowered flight duration.

In conclusion, these are only a few examples of countless times that looking at birds for the answer to all of our aviation problems has provided a solution. So next time you need to figure out what your wing design for a given environment should be, look to the sky.



Laser Incidents, Danger To Pilots, Increase

Article Provided by AVWebFlash at http://www.avweb.com/eletter/archives/avflash/1821-full.html#203991



The FAA's formal reporting system in 2010 recorded a sharp increase in laser-related incidents at the same time that much more powerful handheld lasers began entering the market at significantly lower price points. The FAA recorded 2,836 laser-related complaints in 2010, which almost doubles the 1,527 incidents reported in 2009. Meanwhile, Class 4 lasers have become more affordable and more portable. One review of a sub-$300 handheld laser that was first made available last year says the device is "capable of blinding and/or burning someone almost instantly." Shining a laser at a commercial aircraft is a federal crime that can earn an offender up to 20 years in jail per charge and a $250,000 fine. Based on the FAA's figures, that's not having the desired effect. And pilots reportedly may now be in danger of more than very temporary vision loss.

Pilots have reported not just temporary effects of laser-induced night blindness, but "damaged retinas after laser beams were aimed at them in flight" according to ABCnews.com. The new range of high-powered handheld lasers are generally green or blue and have the ability to interfere with flight crews at altitude. The FAA says it takes laser incidents very seriously and the FBI has been involved in tracking down suspects. FBI Special Agent Richard Kolko told ABC, "We've located some and they've been prosecuted."

Moral of the Story:

Do NOT shine lasers into the sky—especially when aircraft are present.

Do NOT shine lasers into your eyes or the eyes of others.

Classified Satellite Launched from California Base

Article Provided By: Copyright © 2011 The Associated Press.

VANDENBERG AIR FORCE BASE, Calif. (AP) — The largest rocket ever launched from the West Coast blasted off Thursday with a classified defense satellite on board.

The 235-foot-tall Delta IV Heavy Launch Vehicle lifted off at 1:10 p.m. carrying a payload for the National Reconnaissance Office.

The booster rose into the sky over California's central coast and arced over the Pacific Ocean, a spectacle visible over a wide area.

Initial reports from launch control indicated the flight was going well.

The launch was pushed back two minutes to avoid an object in space that could have been in the path of the rocket, said Michael J. Rein, spokesman for United Launch Alliance, the joint venture of rocket builders Lockheed Martin Corp. and Boeing Co.

No payload details were released. The NRO operates satellites that provide information to the Central Intelligence Agency and Department of Defense.

This was the fifth launch of a Delta IV but the first from the West Coast. The other four launches were at Cape Canaveral, Fla.

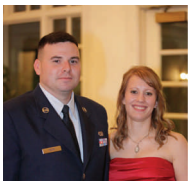
Capable of generating nearly 2 million pounds of thrust, the liquid-fuel rocket has a central core booster and two strap-on boosters that make the assembly 50 feet wide. An upper second stage takes over when the first stage is exhausted.

Preparing for the launch took three years and $100 million in infrastructure upgrades at Vandenberg, 130 miles northwest of Los Angeles.

The launch director, Lt. Col. Brady Hauboldt, said in a statement before the liftoff that the launch would mark a milestone by restoring heavy lift capability in the nation's western range. The last heavy lift Titan IV-B was launched at Vandenberg in 2005.

In its past, the launch complex was once configured for West Coast space shuttle launches, which were canceled after the 1986 Challenger disaster, and the Air Force's Manned Orbiting Laboratory program, which was canceled in 1969. It was last used in 2006.

SQUADRON 144 BANQUET



A Navy Pilot's version of the 23rd Psalm:

The LSO is my shepherd, I shall not crash

He maketh me land on grey runways:

He waveth me off rough waters, he restoreth my confidence

He leadeth me to safe landing for his name's sake

Yea, though I come stalling into the groove at sixty knots,

I shall fear no evil, for thou art with me - thy word and thy paddles, they comfort me.

Thou preparest a deck before me in the presence of mine enemies,

Thou attacheth my hook to a wire; my deckspace runneth over.

Surely, safety and caution shall follow me all my days in the fleet, and

I will dwell in a fool's paradise forever.

— John Olson Director of NASA's Exploration Systems Integration Office

Congratulations to Naval Aviation on your Centennial Celebration! Look for celebration events throughout 2011.

The Centennial of Naval Aviation Parade of Flight on 12 FEB 2011 will have a full day of fun. Events include:

- The Parade of Flight
- Carrier and other ship tours
- 75+ aircraft on display
- Leap Frogs parachute team
- Classic car show

And much more! Squadron 144 does plan to attend this event so pay attention for specific time and location meeting information. This will be conveyed through e-mail and Squadron meeting announcements. As a public event, this will be open to friends and family! For more information please contact Major Dennis Amman or 1stLt Sonya Petty.

SAFETY

New Safety Training Required

By: Capt Chris Natwick

Several months ago the National Executive Board (NEC) sent out an instruction the required that all CAP members' senior and cadet complete an online safety course titled: "Introduction to CAP Safety Program for New Members."

To access the course complete the following steps:

Go to the CAP eServices log in page and enter your CAP membership number and password.

On the eServices main page on the left hand side of the screen scroll down until you find the line item labeled: "Online Safety Education".

Click on Online Safety Education.

You will see a section labeled Educational Course and in that section you will be able to click on Introduction to CAP Safety Program for New Members.

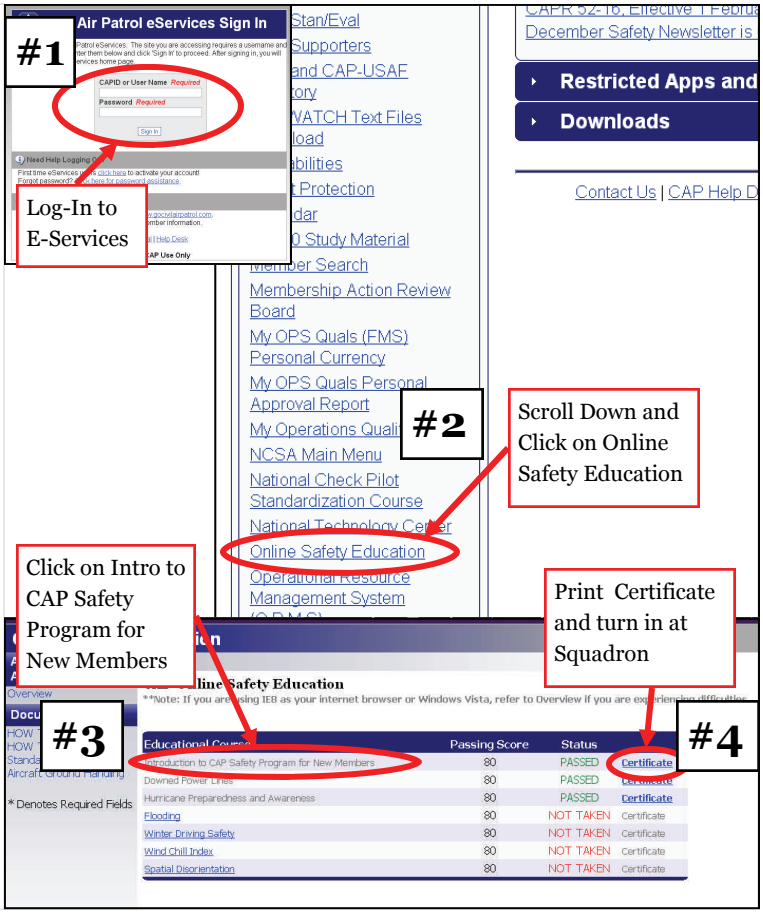
Once you click on the training you will have the opportunity to read through the material at your pace. Once you have reviewed the material there will be a link to take you to the online quiz.

Take the online quiz. There will be 10 questions presented to you and you must answer at least 8 of the 10 correctly to pass the quiz and receive credit for the training.

Click on the certificate button and print out your certificate. Bring to the squadron so it can be entered into your record.

The national deadline has been extended to March 31, 2011, however all CAWG
members participating in any operational activity must complete the course by January 31, 2011.

If you have any questions please contact Captain Natwick.



Citizens Serving Communities

Above and Beyond

Civil Air Patrol

San Diego Cadet Squadron 144

Direct questions, comments, and submissions to:

1st Lt Sonya Petty

Phone: 918-361-6730

E-mail: smmrinkrat@yahoo.com

For more information about CAP visit:

http://www.gocivilairpatrol.com

http://www.capmembers.com

http://capnhq.gov

Civil Air Patrol

Citizens Serving Communities: Above and Beyond

Civil Air Patrol was founded in December 1941, one week before the Japanese attack on Pearl Harbor, by more than 150,000 citizens who were concerned about the defense of America's coastline. Under the jurisdiction of the Army Air Forces, CAP pilots flew more than one-half million hours, were credited with sinking two enemy submarines and rescued hundreds of crash survivors during World War II. On July 1, 1946, President Harry Truman established CAP as a federally chartered benevolent civilian corporation, and Congress passed Public Law 557 on May 26, 1948. CAP was charged with three primary missions – aerospace education, cadet programs and emergency services. With the passage of Public Law 106-398 in October 2000, Congress provided that "The Civil Air Patrol is a volunteer civilian auxiliary of the Air Force when the services of the Civil Air Patrol are used by any department or agency in any branch of the federal government."

http://www.sq144.com/

Achievements & Accomplishments

January Promotions:

- Kaylin Munzenmaier was promoted C/Amn
- Bethany Vaughn was promoted to C/Amn

January Accomplishments:

- C/SSgt Everett Costello and C/SSgt Jacob Veta were awarded the Wright Brothers Achievement
- Cadets Sofia Horton and Peyton Jasso officially joined Squadron 144
- Senior Member Eric Petty officially joined Squadron 144
- Congratulations to all of the Squadron 144 Award winners for their accomplishments and efforts throughout 2010!

Special thanks to:

- Squadron 144 extends a huge thank you to our host, Cowbell and his two wingmen: 1Lt Chris Bromley, USMC and Lt Leo Mendoza, USN for supporting this event!

Did we miss a promotion, achievement, or accomplishment? Send submissions to 1stLt Sonya Petty no later than three days before the end of the month.