



Channel Islands Condors
July, 2007



AMA # 1343 - IMAA # 89 - EST. 1984

Next meeting:
Wednesday,
July 11, @ 7:PM
at the Condors
flying field

This is because the 1st Wednesday is on the 4th of July.

Bring your appetite..... for a BBQ of Hotdogs and Hamburgers by our own chef Chris Brashears at the grill.

July and August meetings will also be at the flying field.

Channel Islands Condors

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Field Phone: (805) 482-3034

Web Site: www.cicondors.com

Elected Officers

President John O'Brien 818-991-2139
Vice President Mark Sesma 805-659-0244
Treas. & Membership ... Bill Schatz 818-340-2180
Secretary Jeff Nemit 805-987-5075
Safety Officer Steve Davis 805-497-9670
Field maintenance ... Wesley Minear 805-373-1771
& Gene Norman 805-485-2622

Appointed Officers

Newsletter Editor Ron Scott 805-522-5455
Membership & Data Base Manager Bill Schatz
818-340-2180

Flight Instructors

Javier Garcia 805 488 4241
Chris Spangenberg 805 987 9859
Ron Scott 805 522-5455

Articles, coming events, or For Sale items should be mailed or E-Mailed to ronscott@dslextreme.com or, 805-522-5455 (leave message), 2848 Gardner St. Simi Valley, 93065

Newsletter articles or pictures should be sent in by the 20th of each month. "For Sale" ads will run for two months.

For membership info call Bill Shatz @818-340-2180.

Regular Meetings are held the first Wednesday of the month at 7:00 pm at the Camarillo Airport in the Educational Service Center Building, 570 Airport Way. Off Los Poses Road. The July, August and Sept. meetings are held at the Condor's field where we usually have fun-fly's and night flying.

President's Message

This month we will be meeting at the field a week later due to 4th of July coinciding with our meeting date. Chris Brashears will be dishing up a barbeque treat. So bring yourself and your hunger to the meeting. Our next meeting at the field mandates a little night flying. So bring your planes with the lights and have a go at flying in the darkness.



The weather is getting warm and summer is now with us. Please take care when retrieving lost airplanes. The snake population will be out in force and we don't want to hear about anyone getting bitten. So watch out for what can bite back and be careful.

The land that our field is on is still with the Parks and Rec. The lawyers are trying to figure a way to transfer the property to the college and it has not happened as of yet. I was on the phone with Elizabeth the other day setting up another meeting with Richard Rush, CSUCI's President. Hopefully I will have some news at the July meeting on the growing relationship with the College.

The club has just ordered an Indian Smokechaser Fire Pump. This is an apparatus that carries 5 gallons of water on your back that can be used to fight some brush fires. We will have a demonstration of its use at the meeting. Please remember it is fire season so be extra careful with your flying and any flammable items.

Hope to see you all at the meeting. Be safe and have fun.

Happy Flying
aeronca@roadrunner.com

John O'Brien

Vice President's Message

.Well the DX7 Spread Spectrum radio went to the lucky Rich Tejada! Congratulations Rich. I want to thank Crystal Morgan, Mike Osborne, and Kenny Osborne for their time helping with the Condor raffle each month, your help is greatly appreciated. Kenny Osborne regularly provides his audio system setup so speakers can be heard by all at the meetings, thanks for donating your equipment Kenny. The May speaker was Steve Johnson from Batteries Plus, who talked about Li Poly batteries, don't forget he can perform repair of all types of batteries, so if you have a broken connection, he has the right equipment to get you back in business. See Steve at the Ventura store in the Kmart shopping center. The June meeting will be at the field, there will be a good bunch of raffle prizes and night flying so come and join the fun. Due to July 4th on the first Wednesday, the Condors meeting will be Wednesday July 11th. See you there!

Mark Sesma

CHANNEL ISLANDS CONDORS

CIC Meeting June 6, 2007

Bill Schatz called the meeting to order at 7:05 PM with 38 members being present.

New Members and Guests

The treasurer reported that last month we gained five new members.

June Presentation

Steve Johnson from Batteries Plus gave a timely presentation on batteries. BP carries all the batteries that are available from Horizon Hobbies at the same discount price without the shipping charge. They also provide a free disposal service for all batteries from any source. He also discussed battery safety, a timely subject.

Old and New Business

Don't forget IMAC is coming upon us quickly as a July event. There was no one at the meeting to present the status of planes for the event.

A new site also needs to be selected for the meetings post the summer sessions at the field.

The membership requested the status of the meeting with the CSUCI president. John will report on this at the next meeting.

Phil Watt raised the issue of Lipo safety and questioned what actions were being taken to prevent fires. He suggested that the use of Lipo batteries be suspended until a proper plan was in place. Brian Hudson briefly presented what is done with electric powered planes for the armed services to absolutely prevent the occurrence of a fire. The BOD agreed to take up this issue at the next board meeting and respond back to the membership shortly.

SHOW AND TELL

Brian Hudson presented his testbed for resolving noise problems in large RC planes. It consisted of a plywood host with the approximate outline of his B-25 twin engine aircraft. All the electronics and wiring was then placed on the board with everything easily accessible for his test phase. His findings: the dual conversion receivers suffered much less range loss in the presence of other close by transmitters on different frequencies than single conversion high end receivers. (This is caused by the local oscillator in the receiver being overwhelmed by the other transmitter carriers that are within the front-end passband on the single conversion receivers but outside the passband in the dual conversion receivers.) The 2.4 GHz receivers presumably had no problems.

Crystal Morgan presented a scratch built scaled down Extra 260 made of balsa covered with a plastic film. The first flight was a little exciting since the plane was tail heavy, but the rough landing damage was minor and easily repaired. The next flight with the proper CG was successful.

Special Raffle:

Due to the popularity of this type of Raffle, the club initiated the special raffle again in April. The Lucky winner of the new generation Spectrum RC radio at the June meeting was Rich Tejada.

Raffle Results:

Mike Osborne- CIC hat, Servo
Mark Sesma- Receiver, propeller
Don Barrett- Plane
Tony Brown- Charger, plane stand
Ken Osborne- Servo controller
Jim Debay- Watt meter, receiver
Mike Bruegger- Crystal special plane
Jose Martinez- Tech Mount

Jeff Nemit

GUEST SPEAKERS for the night

Steve Johnson from Batteries Plus in Ventura gave a timely presentation on batteries. BP carries all the batteries that are available from Horizon Hobbies at the same discount price without the shipping charge.



SHOW & TELL PHOTOS

Brian Hudson presented his testbed for resolving noise problems in large RC planes



Crystal Morgan presented a scratch built scaled down Extra 300 made of balsa covered with a plastic film.



Safety

Getting Along!!!!

Just the other day, while getting setup to fly my airplanes, I was approached by one of our members and asked if I knew anything about the alcohol containers left in the garbage cans. Since I knew nothing about it, we talked about it a little longer. He then proceeded to blame all the giant scale flyers. I was offended by this and could not just walk away. I replied, in a stern – somewhat angry manner – to not try and divide the club. He was angered by my comment. The reason I am mentioning this is that there are a number of us who fly more than just giant scale aircraft, or electrics, or other types of model aircraft. I find it very offensive when someone blames just one group for every bad thing that happens at the field. And I was about ready to pack up and leave the field. Instead, I took the time to relax, and calm down. I even tried to apologize to the person.

We are all pilots of aircraft of various types, and no matter how they are powered, makes no difference. Yes, there are those who fly just electrics, those who fly gasoline, and those who fly glow, and even those who are glider pilots. Does one group deserve special consideration over another group? No. I would think that as long as a pilot is safe and is following the club's rules, that there would not be a problem, but evidently, there is a problem between some people who fly electrics, or glow and those who fly gas. We don't need to have this happen?

In closing, please try and get along both at the field and elsewhere.

Thank you for letting me rant!!!

Crystal Morgan

Editors note: The alcohol containers could have come from a non flyer such as a student from the college or ????????????

SNAP JOB By: Bob Noll

On Thursday, March 28, 1991 a group of “dedicated” Club members assembled on the field to erect the **Dave DeCamp Memorial Sun Shade** -- a snap job! After a gallon of coffee and two dozen doughnuts, Colwell says, “Where’s the auger?” I proceeded to rent a 5HP auger and returned to the field. After looking at the size of the auger, Colwell and Ray Hunt tell me they have to be home by 11:00 a.m. – so we get started.....

By the second hole, Colwell burns his hand on the muffler and bangs his other hand on the fence so I told him to put on gloves and quit bitching. About that time Hunt says he's tired – Jerry Webb jumps in and lasts half a hole – Dave DeCamp has a leg spasm and Hunt decides to continue. We're finally done digging the hole and Bob Grey says, "Everyone line up for a picture"! The rest of the rooting section jumps up from the logs and grabs some shovels and "smile"

Back to the auger.....The holes are finally dug – but not deep enough – the gorillas refuse to dig any deeper. Rich Tejada looks at the holes and says "I don't think it matters". While all the activity of post hole digging is going on, Volunteer Jim Johnson is making a movie short of his new Stinson RC-2 ad telling Car Reinisch how to scratch build models. Jim finally contributes by cleaning out a post hole.

Now to set up the roof posts – we set the first post and Tejada whips out some 1/4 inch spruce spars. I ask, "what is this stuff"? "To brace the posts" is his response..... "I don't think they will hold those 200lb posts". As we are discussing the post bracing a gust of wind comes up, knocks a ladder down and almost cuts off Orville Brixey's ear (casualty number 2).

Finally the posts are up and Carl Reinisch is pacing about muttering, "the damn thing is going to fall down". We stand back and decide it looks like hell – so out comes Tejada's jack and we get the thing lined up. It looks good, but Jerry Webb and D. K. Jones decide to put some final touches to the alignment and we're back to square one. So out comes the jack again and we are now re-aligning the thing! The concrete work went in with no problems, thanks to Todd Buck who didn't know how heavy the concrete he was carrying was.....

The End

Thanks to all the guys who participated!!!! (As for me, I think I'll go back to work to get a rest)!!!!

Bob Noll, Field Marshall (in 1991)

Random Pix

Richard Hodgson's new Vulcan



It took a few hours to get the engine happy and everything dialed in, but here it is after Bryan Hudson successfully test flew the Vulcan. I built it from Radio Control Model World plans. It has a 60 inch wingspan and weighs 12 lbs, and has a Tower .61 pusher engine. It's my first one from plans in many years and the first one I've fiber-glassed and painted. I took a few laps at altitude on the second flight and it handles great.

Richard.



Stolen truck fire in back of the Condors field on June 18.



The fire was responded to in 8 minutes and put out in about 10 minutes.

Dave Nelson's new Sonic 500 Quicki with OS 46 AX



FYI

Friends and family, in case you have not heard, the following new California laws will go into effect on July 1, 2007. Beware when driving...

New California Laws effective 7/1/07
New Driving Fines for 2007

1. Carpool lane - 1st time \$1068.50 starting 7/1/07 (The \$271 posted on the highway is old). Don't do it again because 2nd time is going to be double. 3rd time triple, and 4th time license suspended.
2. Incorrect lane change - \$380. Don't cross the lane on solid lines or intersections.
3. Block intersection - \$485
4. Driving on the shoulder - \$450
5. Cell phone use in the construction zone. - Double fine as of 07/01/07. Cell phone use must be 'hands free' while driving.
6. Passengers over 18 not in their seatbelts - both passengers and drivers get tickets .
7. Speeders can only drive 3 miles above the limit.

8. DUI = JAIL (Stays on your driving record for 10 years!)

9. As of 07/01/07 cell phone use must be 'hands free' while driving. Ticket is \$285. They will be looking for this like crazy - easy money for police

FOR SALE

Hobbico Hobbistar 60 Mk III - RTF just add your 60 size engine. Plane comes with Airtronics 6 ch FM receiver (ch 24), five standard Airtronics servos (dual aileron, engine, elevator, and rudder), 1400 mh NiCad battery, Dubro switch and charging jack. Plane is in fair condition. Great value to beginner to experienced pilot looking for a solid weekend trainer.

Will Sell \$95

Contact Dennis Ulick (818) 366-2011 or
dulick@socal.rr.com

If you would like to list something, Call or E-Mail me before the 20th of each month at the following:
RONSCOTT@DSLEXTREME.com or 805-522-5455

WANTED

Webmaster for our Club website
WWW.CICONDORS.COM

We need a person that can take over or redesign our website. Our present webmaster has dropped out of contact and we cannot find him.

Please contact Chris Brashears @ 805-647-3513 or John O'Brien 818-991-2139 for further information.

Riverside Spring IMAC 2007

The spring edition of the Riverside IMAC was held May 19 and 20 in Perris, CA. Condor members who flew in the event were Don Barrett, Frank Oliver, Andy Portman and Greg Young. There were 34 pilots participating, the youngest pilot was Jacob Ettensperger (age 10) and the oldest was Ray Fulks at 70+ years young. The Condors results were:

Frank 3rd in Intermediate
Andy flew in Sportsman but had radio problems
Greg 4th in Sportsman
Don 7th in Basic

Lt to Rt: Frank, Don, Greg, Andy



Aviation Week & Space Technology

Jefferson Morris 06/18/2007, page 110

AeroVironment's Raven leads small tactical UAVs from novelty to necessity in theater

'Flying Binoculars'

Although the typical operating altitude of the Defense Dept.'s hand-launched Raven unmanned aerial vehicle (UAV) is roughly 300 ft., if the mission demands it, soldiers and Marines flying the system in Iraq sometimes choose to cruise a little lower--or in some cases, a lot lower. Maj. Dave Bristol, the U.S. Army's Small Unmanned Aircraft Systems assistant product manager, tells the recent story of a soldier flying the Raven in central Baghdad. The soldier spied an insurgent with the UAV's nose-mounted camera and promptly reported this news to his commander, who said, "Show me again," according to Bristol.

To give his commander an appropriately detailed look, "he flew it right into the chest of the insurgent," Bristol says. "I'm not sure we got that one back."

Whether this tactic counts as "weaponizing" the 4-ft.-wingspan UAV can be debated. When flown a bit higher, but not high

enough for its engine noise to be drowned out, say, 125 ft., the Raven is sometimes used as a deterrent platform, letting insurgents know they're being watched and targeted. For the unit Bristol trained during his most recent trip to Iraq, this was in fact the most frequent mission on which the Raven was employed, until he showed them what else the system was capable of.

The unit Bristol supported also would pre-fly convoy routes with Raven, sometimes spotting insurgents emplacing improvised explosive devices--the number one killer of U.S. troops in Iraq--then fly the route again when the convoy actually traversed it.

Soldiers often go to significant lengths to recover the Raven, even if it means entering harm's way, according to Bristol. "Certainly, the commander makes the decision based on locality as well as the threat out there, if it's worth it to go out and get it," he says. But typically troops try to recover the aircraft right away, especially if it can be spied with a Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (Jlens) or other aircraft. "I actually found two other Raven aircraft using a Raven while I was in theater, which was incredible," Bristol says.



Specialist Joe Pizarro, A Company 2/136 Infantry Div., Combined Arms Battalion, is a Raven operator deployed in Iraq.

Credit: TARA HOLLINGSWORTH

Built by AeroVironment Inc. of Monrovia, Calif., the Raven is an evolved version of the Pointer aircraft developed by the company in the 1980s. It is stored in soldiers' rucksacks and can be assembled and launched by hand within a few minutes. The system features two modular payload nosecones that can be snapped on and off--an electro-optic (EO) camera with forward and side views allowing digital panning, tilting and zooming within the image, as well as an uncooled fixed-view infrared camera for the more common night missions.

Small UAVs such as Raven or the Marines' Dragon Eye have gained tremendous popularity among soldiers since the onset of the wars in Iraq and Afghanistan, officials say. "For the average grunts to be able to look over a building, look over a hill, to know what's going on, improve the situational awareness, has been phenomenal," says Douglas Thorp, close-range integrated product team lead at the Navy's UAV program office. "They don't want to go places without it right now."

This pair of "flying binoculars," as Thorp puts it, is designed as a company-level asset, although occasionally they are tasked from the brigade level. However, "that goes a little bit against the way they're intended to be employed," says Scott Newburn, AeroVironment's Raven program manager.

Raven B is the only handheld UAV program of record in the U.S. Army and has been in full-rate production since October 2006. The original A models were purchased in 2003 and 2004 under an urgent needs requirement. AeroVironment won the subsequent competition to build the system in October 2005. The B model featured a number of improvements, slimming the equipment the soldier must carry down to 25 lb. from 45 lb. The new EO camera is digital--the A model's is analog--and both the EO and IR cameras feature a 3X digital zoom.

As the acquisition authority for the system, the Army also buys Ravens for the Marine Corps and Special Operations Command (Socom). Through 2013, the Army plans to buy 748 Raven systems; the Marines, 400-450 systems to replace their current Dragon Eyes; and Socom, roughly 350. Each system includes three air vehicles, ground control equipment, assorted spare parts and support equipment. **AeroVironment is producing about 200 Ravens each month and could ramp up to 1,000 a month if required to do so, company officials say.**

The Army doesn't plan to let the Raven become a scarce asset like some of its larger, higher-flying UAV cousins. "We're proliferating as fast as we possibly can out there," says Bobby Ellis, the Army's product manager for small UAVs. **There are 353 Raven A and B systems in theater, and the aircraft have logged nearly 25,000 flying hours overseas, Ellis says.**

AeroVironment is by far the biggest industry player in the small tactical UAV market, having built the Raven and Dragon Eye as well as the U.S. Air Force's upcoming Batmav. Since the late 1980s, the company has produced over 6,000 small UAVs, although the business didn't really take off until the last

3-4 years, according to Newburn.



*Raven operator in Iraq holds the controller with one hand, while pulling data down to a laptop to get a better view.
Credit: U.S. ARMY*

AeroVironment supports the Raven through a Contractor Logistics Support (CLS) mechanism requiring the company to ensure at least 90% operational availability. Although minor repairs to the UAV's control surfaces can be performed by soldiers in the field with tape, officials say, repairs to the avionics or payload require the system to be shipped back either to the forward repair depot in Balad, Iraq, or back to AeroVironment facilities in Simi Valley, Calif. Each Raven is designed to perform 200 flights before some major repair is required.

Although Ravens have been known to come back with bullet holes, most damage occurs during routine recovery operations. Rather than gliding to a horizontal landing or being recovered with a net or parachute, the Raven employs a more precise deep-stall recovery maneuver, dubbed "auto-landing," in which it pulls up sharply at 100-200 ft. altitude, then drops nearly straight down.

Proficient soldiers are able to land the system within a few feet of their target point, Ellis says. The Raven is designed to break apart on impact to dissipate the energy of landing, but the damage incurred has proven to be a source of frustration to some operators in the field.

Ellis defends the design tradeoffs as far as the fuselage and structure are concerned: "Adding more structure to the aircraft . . . would add to the aircraft [weight], which would reduce endurance, which would reduce payload capability."

Nonetheless, the Army will be pushing for increased specs in future iterations of the system, Ellis says. **Warfighters would like an eventual "Raven C," which could stay aloft for 2-3 hr., versus its current 90-min. endurance, and gather video at higher resolution, allowing for stealthier operations at higher altitudes.**

The manufacturer is careful to temper the expectation that every performance parameter can be improved simultaneously. "The normal approach is to say let's make everything better--let's make it have more endurance, let's make it have longer range, let's make it have better cameras, let's make it more reliable," Newburn says. "But in this trade space, I guess, you kind of have to balance those things out a little more carefully."

One enhancement everyone agrees on is the need for a digital data link for the aircraft, which will alleviate a crucial limitation in theater. Although each of the Army's Brigade Combat Teams are authorized to fly 15 Ravens, right now no more than four can be flown in the same area at the same time because of frequency limitations. Raven is operated on only four uplink and downlink frequencies. "That's one of the weaknesses," Ellis says. The goal for the digital data link is to allow the operation of 16 UAVs in the same area.

AeroVironment is working on a digital data link that would not only enable more aircraft to be flown at once, but also enable other functions, such as communications relay.

"If you want a data link to work in the military, you've got to get the military behind it," Newburn says. The Pentagon's Networks and Information Integration (NII) office "and all the appropriate approval channels are involved in making sure what we're doing will be fieldable when we're done," he says.

Currently a line-of-sight-controlled system that maxes out at the range of 25 km. (16 mi.), Ravens could be operated out to 50 km. or more by relaying commands from one to the other. And the system also could relay data from platforms other than UAVs, Newburn points out. The communications relay function is being developed with company funding and sponsorship from the Army's Natick Soldier Systems Center in Massachusetts.

Impromptu kamikaze missions notwithstanding, the Army has no plans to put weapons on the Raven, according to Ellis. Socom, however, has begun a program to equip a Raven-sized UAV with a warhead capable of taking out light-skinned vehicles.

The major obstacle to weaponizing the Raven would not be the technology--a small shaped warhead would be a fairly simple addition--but rather determining the command authority under which such a capability could be employed. "At the company level, where you have some [Sergeant First Class] operating the system, he's not necessarily going to have the authority to use the weapon even if it is weaponized," Newburn points out.

The Marines plan to begin phasing out AeroVironment's Dragon Eye next year, so the company only expects to have to support it for another two years before the service transitions entirely over to the Raven. The Marines have 440 Dragon Eye systems in theater, each including three aircraft and a ground control station.

Newburn says it's "mainly a commonality issue" driving the phaseout, although the design specification for Dragon Eye was "a little more locked in," he admits. "The way it was put together didn't allow it to take advantage of new technologies as easily."

The U.S. Navy's UAV office, PMA 263, has inherited management of the Dragon Eye just in time for its retirement.

The switch to Raven allows "not only the commonality with the Army, but also some common ground control stations, taking advantage of joint logistics footprint, etc.," says Capt. Paul Morgan, the Navy's UAV program manager. "The Army has done a lot of great work in the handheld and Tier II-type UAVs, and the Marine Corps' 'desirement' was to take advantage of that commonality."



COMING EVENTS

- July, 4??** Robins night fly @ Robins Hobbies field in Sylmar
7-8 Electric Fun Fly – Valley Flyers
14 Warbird day & BBQ + Swap Meet @ Comets Field \$10
Entry fee includes lunch
14-15 IMAC @ Condors Field, Camarillo, CA check with
Andy Portman 805-388-719 or the web @ www.mini-iac.com/desktopdefault.aspx
17-21 AMA - RC Aerobatics @ Munci Indiana, see web at
www.modelaircraft.org/events/
22 T-6, Slow Quickie, Trainer Fun Fly – Valley Flyers
28-29 Chula Vista IMAC
28 Giant Scale Fun Fly – Canyon Crosswinds – Castaic
30 – 3 RC Electrics @ AMA Munci Indiana, See web site at
www.modelaircraft.org/events/

**Channel Islands Condors
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Stamp