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Counterpoise

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Number 7

From the President

By the time that you receive this *Counterpoise*, the convention will only be about three weeks away. For me, it has been an endless number of meetings, workshops and telephone contacts. But, all in all, the major work has been completed and it's just about time to rise the curtain. This year's convention will be held at the California Center for the Arts in Escondido. There are many reasons for this, but the best is that we will have the whole center to ourselves with plenty of free parking. The banquet speaker is none other than "Mr. Enforcement" himself, Riley Hollingsworth. He will speak at the banquet about mentoring **and** do a forum on enforcement Friday night. What could be better than that? How about loads and loads of prizes including **two Icom IC-706s and two Yaesu FT-100s!** On display will also be mountains of toys. We are in the midst of the pre-registration drive at only \$12.50 plus a \$1.50 for the pin if you want one. On August 1, the price will be the customary \$15 and, if you want a pin, that will be an additional \$3. Elsewhere in this *Counterpoise*, you will find the registration form to mail in. Do it now. A great many of the hotel rooms are sold out! It's not a wise time to wait on this one!!!

Continued on page 4

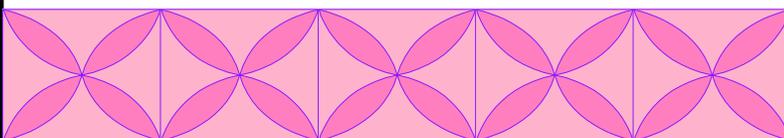


ATTENTION ALL HAMS!!!!

Southwest Division Convention
August 16-18, 2002
California Center for the Arts
Escondido, California

Registration can be made by downloading the registration form from the website at:
<http://sd2002.hamcon.net>
and mailing it in or, for even faster registration, register online using PayPal.

Hope to see you there!!!!



A huge THANK YOU! to Russ Bennett, K6AS, for going above and beyond the call of duty to rescue our revered member Tuck Miller, N6ZT, who was stranded in the desert during Field Day weekend.

General Membership Meeting



Wednesday, August 14th, 7:00 PM

La Mesa Masonic Lodge - 4731 Date Avenue, La Mesa

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The Counterpoise is a publication of the Amateur Radio Club of El Cajon (ARCEC). It is published once monthly and contributions are accepted from officers of the Club. We also encourage input from other El Cajon Amateur Radio Club Members. Opinions expressed are solely that of the author and do not necessarily reflect the opinions of the Amateur Radio Club of El Cajon (ARCEC). Articles may be submitted either by e-mail or mail to the editor:

Nancy Paine at:

**E-mail: npaine@earthlink.net OR
954 Sea Cliff Dr., Carlsbad, CA 92009**

Deadline is the Sunday after the General Meeting. For further information, please call (760) 929-2808.

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"Summer afternoon — summer afternoon; to me, those have always been the two most beautiful words in the English language." HENRY JAMES, d. 1916, quoted in Edith Wharton, *A Backward Glance*, 1934

MOVING?

Moving?? Do not miss an issue of **Counterpoise**. Change of address form from:

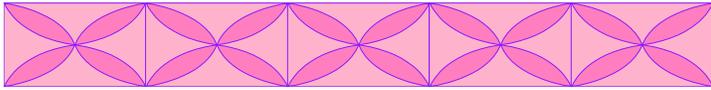
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 City _____ State _____ Zip _____

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A.R.C.E.C., P.O. Box 50, El Cajon, CA 92022

MINUTES FOR GENERAL MEMBERSHIP MEETING

July 10, 2002

[Minutes not received from Secretary in time for publication of this issue.]



Amateur Radio Hits the *Big* Screen

What's better than dreaming of seeing yourself on the silver screen? For many of us, it would be having your favorite hobby and service up there, with you proudly pointing it out to friends! Here's the story of how Amateur Radio got famous via the big screen — and *we do mean BIG*.

The new IMAXZ film, *Space Station*, had its world premier April 16 at the National Air and Space Museum in Washington, DC. If you've seen an IMAX film, you know the silver screen stretches as high as a six-story building. *Space Station* is the first 3D IMAX *space* movie. Actor Tom Cruise narrates the film, and a portion of the footage portrays an ARISS (Amateur Radio on the International Space Station) school contact with Space Station Commander William Shepherd, KD5GSL. More than 70 million people worldwide visit an IMAX theater every year, and we've heard from a lot of you have already enjoyed this one.

The original idea proposed and sold to IMAX producer Toni Myers for including a school QSO in *Space Station* was conceived byCarolynn Conley, KD5JSO, subcontractor at Johnson Space Center in Houston and stalwart ARISS supporter. Carolynn cited how families at museums and entertainment centers view IMAX films, yet they contain little footage specifically aimed at youth. The ARISS footage, she reasoned, would inspire children worldwide to follow technical studies! Toni bought the idea.

The audio of the QSO you will hear in *Space Station* is of Seabrook, Texas students simulating an ARISS

QSO that took place in January 2001 at George West (Texas) Elementary School. Bradley Henicke, KD5FAL, 13-year-old George West student, and back-up operator Alonzo Cuellar, KD5FAM, age 15, of Alice, Texas, had set up the ham equipment at the school, initiated the QSO and led students through it. ARISS school mentor Gene Chapline, K5YFL, said Commander Bill Shepherd's crewmates filmed him in space calling, "KD5FAL, this is NA1SS." That footage and more of Shepherd answering questions asked by George West students appears in the movie.

The invitation-only world premiere of *Space Station* was preceded by a news conference. There, a teacher eloquently communicated the tremendous positives the movie, in particular the ARISS scene, provides to students. [Frank] Bauer [KA3HDO] said, "It's good to see ham radio continue to provide a once-in-a-lifetime experience for students." Astronauts, cosmonauts, media types, IMAX representatives, NASA staff and other dignitaries stopped at a booth set up at the premier to showcase ARISS. These included ISS Commander Bill Shepherd, KD5OPQ; ISS crew member Susan Helms, KC7NHZ; future ISS crew member Koichi Wakata, KC5ZTA; and ISS Commander Yuri Usachev, RW3FU. Bauer thanked Susan for her outstanding 2001 Field Day effort. She retorted: "The only bad part was I couldn't operate the whole event because NASA requires that we get sleep and that was right in the middle of Field Day! It was a blast!...There were small signals calling out of nowhere, including Boy Scouts." Frank relayed that she had made a great impression on the whole international ham community. "It was quite obvious she was pleased," Frank reported. Astronaut Wakata expressed his excitement at the prospect of using the ARISS rig when he flies in 2004-2005.

At the public film debut the following day, April 17, ARISS volunteers set up the display again, this time orchestrating an ARISS QSO between Quogue (New York) School students and ISS crew member Dan Bursch, KD5PNU. Moviegoers listened to what they termed ham operators doing cool stuff. Bauer said, "We now have a permanent legacy in film."

(more on page 5)

From the President Continued

August Birthdays

Continued from page 1 –

Did you enjoy Field Day? I sure did. I was there Friday morning and left on Sunday afternoon. All of those who participated in set-up, operating and tear-down are entitled to an ARRL 2002 Field Day pin. However, due to budget constraints, we have to charge you the \$5 that we paid for them. At the last meeting, I had brought in 25 pins and have only five left. I believe that we had 37 people sign up for the pins. So, if you attended Field Day, let me know so that I will have your pin ready. The Club will be ordering the additional 13 or so for those attendees. By the way, Galen, N6YBK, our Field Day chairman, was not able to help out on Friday, so he asked if someone could be there to set-up and take over the duties of Field Day chairman in the future. No sooner had Galen stopped speaking, Jeff Davis, KG6JRM, volunteered for the post. And so Jeff did indeed supervise the set-up and tear-down as well as operate during Field Day. Hats off to Jeff. He will take over from Galen for the event. Sign up early next year. With Jeff at the helm, it will be a good one! Jeff will soon take a seat on the board of directors.

It is with great regret that we accept the resignation of Joe, N6SIX, from the board. Joe has just received a change in his work schedule and feels that he would not be able to handle all of the duties required of him. So we must bid him adieu. But I'm sure that once his schedule stabilizes, he will be back. Since the Bylaws require a positive vote of the board of directors, he will vacate his seat in August. One last departure is our vice-president, Rich, N5EV. He has gone to Washington D.C. to serve at the Pentagon. Rich is an Air Force Colonel and expects to be there for at least three years.

See you at the convention!!!
73's, Mike Maston, N6OPH

0771	KK6NF	Mike	Bailey	August	04
0205	WA6MHZ	Pat	Bunsold	August	04
1433	KF6POO	Roy	Stark, Sr.	August	07
1378	KF6JVF	Carolyn	Campbell	August	08
1262	N6SZO	Joe	Corones	August	10
1338	W6FF	George	Karavantes	August	10
0770	KK6NH	Leslie	Day	August	11
0913	WA6APN	Tom	Thomas	August	11
0985	KD6HVZ	Jim	Green	August	12
0481	N6HHU	Philip	Fish	August	12
0508	K6ICT	Ken	Harvey	August	14
0965	KD6FQV	Louise	Goodman	August	17
1310	N6EVE	Evelyn	Miller	August	17
0526	KF6YB	Oscar	Quintanilla	August	17
1108	KD6VKZ	Ed	Ebbert	August	19
0887	N6YJO	Chuck	Behnke	August	19
0590	N6DVJ	Johnny	Hart	August	22
0437	KC6NXZ	Tom	Caudle	August	23
1152	KE6BZD	Ron	Mahoney	August	24
1146	KO6AB	Jerry	Miller, Jr.	August	25
1314	KE6TAM	Gerald	Miller, Sr.	August	31



**Happy
Birthday!!!!**



ATTENTION AUGUST BIRTHDAYS!!!! If your birthday is not listed above, it is because I didn't get an updated list from the Membership Chairman in time for publication of this issue. Therefore, we say Happy Birthday!!! to you here.

Continued from page 3

Interview with Toni Myers, Producer of IMAX 3D film *Space Station*

By Frank Bauer, KA3HDO, ARISS Chairman

Bauer: I saw the new IMAX movie, *Space Station*, and I must say it was pretty awe-inspiring. In a nutshell, could you explain the differences between an IMAX film and standard movies?

Myers: The IMAX film is a completely different format. In order to see IMAX, which is a very large, six-story-high screen and a very bright, intense sharper-focused picture, we use a much larger film format. It is a 70-mm film that runs horizontally through the projector and camera, whereas the 35 mm, what most conventional Hollywood films are shot on, runs vertically through the camera and is one-tenth the size. The large format allows for a lot more light because of the speed the film runs at through the camera. The bright, steady picture immerses you in it.

Bauer: What were some of the technical challenges you and your team had to overcome to bring this film to fruition?

Myers: Our main challenge was that this was the first IMAX 3D picture shot in space. IMAX 3D is technically challenging in itself; you need a left eye and a right eye to result in a 3D effect. Our normal projectors for 3D on the ground use two strips of film for each of these eyes. Those cameras are too big to stow in a mid-deck locker for a shuttle launch. We had to completely re-design cameras, amazingly compressing them in size — one for inside the cabin, one for outside in the shuttle's cargo bay and one for training. We re-designed cameras to shoot the left and right eye *simultaneously* on a *single* strip of film. This means the film had to travel twice as fast as is conventional, resulting in half the yield of an IMAX 2D film. The roll of film, about the size of a large pizza, goes through the camera in about 108 seconds — this is about 3 shots per roll! When the film gets back on earth, it has to be optically re-separated to left eye and right eye. That was pretty technically challenging.

Bauer: Given that you can burn through a roll of film in 108 seconds, how did you ensure that the shots all worked on the first take?

Myers: There is no "take two" in space...we don't have the resources. Astronauts and cosmonauts are the best learners in the world. They are extremely smart people, and a joy to teach! Our training manager does a super job teaching them to be great cinematographers on-orbit. We also give them 70 mm film to play with on the training camera. They light their own scenes, use crewmates as actors and direct the scenes. We don't give them any input. Once the film is processed, we go to the nearest 3D IMAX theater, and critique it with the crews.

Bauer: The film shows a segment where students are talking via ham radio with astronaut Bill Shepherd on board ISS; hams worldwide will be appreciative of this film clip in the movie. Why did you decide to meld it in?

Myers: I think the ham radio program is extremely important. It is a very valuable link between all of us who are Earthbound, particularly children who are interested in space, and the crews on-orbit doing these incredible things. Ham radio is the opportunity for young people to talk directly to the space station crews; I think nothing can better inspire the next generation of explorers than that opportunity. When this sequence was proposed, I heard from the crews how much they enjoyed their ham radio contacts with kids and ham operators. When we asked Commander Shepherd if he was interested in shooting a scene — no problem; he was very interested in doing it! He felt it was an important thing to show.

Bauer: Tell us how you edited this ham radio contact.

Myers: To make a film sequence, you have a series of parts, a bit like a jigsaw puzzle. For efficiency or economy, you cannot always shoot movies in order of the script. What we did with the ham segment was ensure the Commander and crew shot the on-orbit scene first and got it back to Earth to make sure it was good. Once we had that, we planned the ground sequence to make it fit. An IMAX crew was at Johnson Space Center; they went to the Texas school to shoot the rest. Then we intercut the segments.

Bauer: Any other thoughts you want to give to Amateur Radio operators?

Myers: My comment to them is to congratulate all who support the ARISS program because I think it is a wonderful program. It is a fantastic way for everybody on the ground to have a special kind of contact with people who are in space in real time. It is a very important component for engendering and spreading interest in space exploration. We get updates on CNN and the news, but this doesn't convey in a personal way the marvelous things happening up there. The ham radio program does a particularly great job of this because it is such a good connector with the people on-orbit doing fantastically interesting things. So my comments are, carry on and spread the good word!

Excerpts reprinted from QST, July 2002

VEC Testing Sites

1st Saturday:	El Cajon	El Cajon Central Fire Station, 160 E. Lexington Avenue (in Rear), El Cajon, 10:00 a.m.
2nd Saturday:	Carlsbad	Carlsbad Safety Center, Orion Way, Carlsbad, 10:00 a.m.
3rd Saturday:	Normal Heights Methodist Church	4650 Mansfield Avenue (just off Adams Avenue), San Diego, 10:00 a.m.
4th Saturday:	Chula Vista	Salvation Army, 643 Third Avenue, Chula Vista, 9:00 a.m.
5th or last Saturday:	Escondido	Escondido Chamber of Commerce, 720 North Broadway, Escondido, 10:00 a.m.

To make advance reservations or to find out more info from the site captain, call 465-EXAM.

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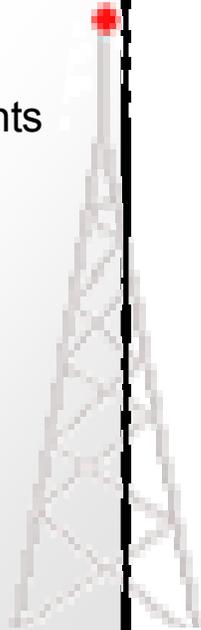
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- 6 – VEGETABLES
- 7 – OR ANY SUBJECT

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12. RACES Member <input type="checkbox"/> Yes <input type="checkbox"/> No	13. Other Interests
14. Family Membership with:	14. Sponsored by:
Return this form with check made payable to the Amateur Radio Club of El Cajon or ARCEC for new or renewal membership. Annual Dues \$12.00 for individual, \$20.00 for family. New members add \$5.00 per member. Mail to Membership Chairman, A.R.C.E.C., P.O. Box 50, El Cajon, CA 92022. <i>Please write your call on the check</i>	
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Also a big THANK YOU! to Alex Groza, WB6DTR, for the donation of a new 110-watt VHF Mitrek (in addition to installing an RX preamp) for the repeater station on Crest.

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