**TENERIFE WORKSHOP 1996: IMPORTANT NOTICE**

The following members have so far expressed interest in this:
Beth Avary
Mike Carroll
Dennis Davidson
Jocie Hagen
Bill & Gayle Hartmann
Betsy Smith

_and from Europe:
Jess Artem (of course!)
Michel Böhme
Dave Hardy
John Lewis
Andreas von Retty
Arthur Woods (who is actually American)

That’s 13 to date, which makes the workshop perfectly viable, and we are about to finalize dates. However, it would help if all the above can confirm ASAP. There is also plenty of room for YOU; just let us know your interest!

As mentioned last month, our on-site organiser, Jess Artem, says that we could easily fly over to the volcanic areas of Lanzarote, and also to La Palma – where in addition to the world’s largest volcanic crater there is the UK’s largest telescope, the William Herschel, which observes deep-space objects under perfect conditions, giving near-Hubble results.

Don’t forget, too, that there will be a major exhibition of IAAA space art in a beautiful new museum on the island. Almost certainly you will be able to exhibit even if you don’t attend the workshop. Details of how to do so will appear in future issues of Pulsar, so be sure to read every issue.

All in all this is an unmissable opportunity: to visit this unique volcanic island (which belongs to Spain); to sketch and photograph geological forms which will add to the authenticity of your future work; to meet other members, both from the USA and Europe and make new friends; to discuss ideas and exchange tips; and to ensure that your work is seen and enjoyed by a new international audience (the coastal regions of Tenerife are popular holiday resorts), with maximum publicity.

Do you want to be left out?

**HAVE YOU SEEN A SPRITE?**

Our President, Dennis Davidson, has found details of an interesting ‘alien’ phenomenon – on our own planet – on a NASA WWW Home Page, which included good images, and asks: “Has anyone witnessed these ‘sprites’ firsthand? Have any of our members incorporated sprites and jets in their art? How about some direct observation? Anyone with connections to the Earth Science people at NASA? Here is the release, just as it appeared:

Sender: NASANews@hq.nasa.gov

**SPRITES CONFIRMED OVER STORMS OUTSIDE U.S. FOR FIRST TIME**

NASA researchers have captured on videotape the first conclusive evidence that the mysterious flashes of red light called sprites – which extend up to 55 miles above electrical thunderstorms – are not limited to the United States.

The research team from the Geophysical Institute of the University of Alaska, Fairbanks, recorded the unusual flashes above thunderstorms near the equator in South America last February and March. Previously, they had seen the recently discovered sprites above storms only in the U.S., leading some scientists to question whether or not they occur in other parts of the world.

Geophysical Institute researchers Davis Sentman, Gene Wescott and Daniel Osborne used special low-light-level cameras aboard a Westwind-2 jet aircraft to record the brief flashes. The flights, part of a NASA-sponsored investigation into the phenomenon, were coordinated with the Peruvian Air Force. The researchers recently completed an analysis of the footage gained during their flights.

In form and in visual appearance, the sprites over South America look similar to flashes recorded by the team over storms in the central U.S. last summer. About 500 sprites were recorded last June and July, many on color video for the first time. None of the sprite groups seen this winter over South America were as large or as intense in color as some of the larger groups recorded over the U.S.
NEW ZEALAND REPORT

Last year Joel Hagen spent time in the fascinating country of New Zealand [a place I've always had a yen to visit], way down in the southern hemisphere. Here's his report:

I spent a couple of months in New Zealand from October through December 1994. This would be a great place for an IAAA workshop. I wandered around a lot of Kiwi real estate from subtropical beaches at the remote tip of North Island to the glaciers of South Island. In between was an amazing variety of landscape from Jurassic-looking jungle to mangrove swamp to mountain trout streams to surreal geothermal terrain. Along the way, I have never encountered friendlier people nor a saner society.

New Zealand is rigged to support travelers. Virtually everywhere one travels on both islands are inexpensive backpackers' accommodations. Similar to Youth Hostels but less structured, these provide both dorm and private rooms for around eight to twenty U.S. dollars per night. Good hitching plus reasonably priced buses and trains make it easy to move around.

A FUTURE IAAA WORKSHOP?

A two-week IAAA workshop might start on the North Island with 4-5 days in the Rotorua geothermal area. Geysers, mud pools, steam vents and related terrain make this a good resource for painting details. Rotorua is also one of New Zealand's richest Maori regions. A tour of the Maori Arts and Crafts Institute would be mutually interesting to both guests and hosts. There is also a wonderful museum in Rotorua, "The Bath House," which houses a unique collection of artwork stretching back into the 1800's representing the region's volcanoes and geysers. This could be an ideal venue for an IAAA show with a theme of vulcanism in the Solar System. And a perfect opportunity for John Perry to haul out some of the best historic works from the collection.

From Ice to Rain Forest

From Rotorua, an IAAA workshop could ferry to the South Island and settle into the village of Franz Josef. It is an hour's walk from town through lush rain forest to the foot of the Franz Josef glacier. This rugged, booming cascade of blue ice pours down a steep valley from the neves near Mt. Tasman and Mt. Cook. It is possible to hike up into the ice for detail studies. Another alternative is a helicopter lift to hike the higher elevations. When I was there, the glacier was advancing a meter a day with a chill wind flowing down from the snowfields thousands of meters above me. The shortsleeve accessibility of the glacier makes it ideal for painters refining details of snow and ice structure. This rough tongue of ice scours straight through the rain forest. At night the mossy recesses of this forest are an eerie fairy world of glow worms... tiny sapphire points of light in the ferns.

The contrast of the geothermal region and the glacier valley make a New Zealand workshop an attractive plan. Current airfares from California to New Zealand are around $1000 U.S. The remaining workshop expenses might be another $1000. Both Rotorua and Franz Josef have inexpensive accommodations with areas suitable for late night painting. Something we might think about.

We might indeed! Doesn't this make you drool? Let's get Arches over and the Tenerife Workshop organized first, and then in a year or two, who knows...

NASA: THE ORPHAN CHILD OF SCIENTIFIC RESEARCH
by Dennis Davidson

Once again NASA is under siege from the U.S. Congress, except this time it is the freshmen Republicans who are intent on severely trimming NASA's budget. Unfortunately the executive branch is all too willing to jump in there with major cuts. NASA must cut a billion dollars a year for the next 5 years from a $14 billion dollar annual budget. Since the $5 billion/year Space Station and the Shuttle programs are sacrosanct, this leaves science to once again take the brunt of the cuts.

A recent proposal under consideration within NASA is drastic and would consolidate or eliminate NASA field centers. The Ames Research Center in California would be privatized, with its aeronautical research transferred to Langley Research Center in Virginia, and its space station centrifuge research transferred to Johnson Space Center in Texas. NASA-Ames is the primary site for NASA's biological and human factors programs while 60% of its $602 million budget goes to aeronautical research.

By the Wayside

The Earth Observation System (EOS), the space component of Mission to Planet Earth (MTPE), is under attack again. EOS would gather the first comprehensive data set on the Earth's land, water, air, and biological systems. It would be the largest information gathering project in the history of the human race: a terabyte of data per day for fifteen years. EOS suffered a 50% budget reduction under the Bush administration, and is now in danger of being eliminated by partisan politics; perhaps the EOS is tainted with the label of environmentalism.

A host of other international scientific projects will undoubtedly go by the wayside. NASA's record ranges from dismal to appalling. Starting with the Ulysses program to study the Sun, the U.S. had reneged on their part of international research programs. The Ulysses program was to send two spacecraft which would simultaneously "overfly" the Sun's poles gathering an unprecedented data set of the most important environmental parameter of our existence. NASA bailed out to leave the European Space Agency (ESA) to build one spacecraft. This pattern is so consistent that the ESA and other national space agencies hesitate before entering joint space projects with the U.S. To be fair to NASA, it is the U.S. Congress which has control over the funding stream and thus bears primary responsibility for our shortsightedness when it comes to scientific research. What does this mean for space artists? As visualizers of future visions we are dependent upon a steady diet of new data and imagery from space. Planets and moons will go unexplored in our lifetime. Data will be left unprocessed because there will be no funding for analysis. In short, we are turning our backs on the opportunity to explore our celestial backyard for a microfracture of the U.S. federal budget.

Smaller, Faster, Cheaper

Under Dan Goldin, NASA is striving to promote smaller, faster, and cheaper programs. In the past most planetary programs such as Galileo or Magellan cost at least $1.5 billion and took 10 years to accomplish. Goldin wants to reduce the cost per mission to $75 million or less, and launch within 3 years. (Just think of what we could learn by not building one $2 billion dollar B-2 bomber!) Even though this new approach to space exploration is welcomed by many in the scientific community, it may be
Why are IAA Artists missing out on the prestige jobs?

I see that the US Post Office's 25th anniversary Moon Landing commemorative stamp and envelope has been designed by one Keith Birdsong. Now (being British) I don't know if Keith is a famous illustrator over there (perhaps someone will tell me?), but he is not an IAA member, nor is he known to me as a space artist.

I've nothing against Mr Birdsong personally, you understand, or his art (which includes what looks like a 'grubbed' photo of a Shuttle astronaut with a small reddish Sun and a large Moon in the background and a misty blue Earth below), but it does make me wonder if organizations like the Post Office are aware of the IAA, since it would seem obvious to use one of our established artists to produce really appropriate and authentic art for such projects. Or is that too logical?

D.A.H.

A TRIP TO OLANA
by Dennis Davidson

Frederic Church, arguably the most well-known American painter of the 19th century, needs no introduction in these pages. Olana, his home and studio, is located on a promontory overlooking the Hudson river in New York state. I visited Olana on a clear, bright day in early spring. The trees had not yet leafed out, so the intended drama of the approach to the house lacked the effect Church intended. Nevertheless, the site claims dramatic views of one of the few true fjords in eastern North America.

Church constructed Olana over several years in the early 1870s as a refuge from the clamor of New York City. If alive today, Church's fame would be comparable to a movie star. He could not go unrecognized on the streets of New York. For example, there are accounts of Church receiving standing ovations when attending the opera. However, as far as I know, the whole visit to Olana intact until her death at the age of 96 in 1964. Until this recent date, Olana was occupied just by two generations of the Church family. Due to Church's own attention to detail, hundreds of sketches, drawings, photographs, and financial records survive to give us a complete accounting of decades at Olana. This coupled with daughter-in-law Sally Good's preservation of Church's legacy, leaves generations of visitors with an unusually complete picture of an important landscape painter.

Olana is a New York State Historic Site administered by the New York State Office of Parks, recreation and Historic Preservation. Friends of Olana lead informative tours of the mansion from April to November.

Arches National Park 1995
by Michael Carroll

Video journalist Christie McNeill is considering doing a piece on the Arches shindig for the Sci-Fi channel. Keep your fingers crossed. Our workshop convenes soon, and we have two slots open as of this writing. If you are interested in coming to Arches in September, please CALL ME IMMEDIATELY (303) 935-1645 and I'll slip you in!

Final instructions: Please bring slides of work which can be critiqued. If you have a painting which you feel did not work well, bring a slide of it and we can all brainstorm ways out of your dilemma. If you need a ride from the airport in Grand Junction, call me so I can work out a driving schedule. The Lazy Lizard Hostel phone number is (801) 259-6057, but use it for emergencies. Hopefully, I can answer any questions from here.

To get to the house: From I-70, turn south on hwy 191 at Crescent Junction. Travel south through Moab. At the south end of town, turn right on Boulder. Take the next right (Jefferson) and go to the second house. The address is S49 Jefferson. PLEASE LET ME KNOW YOUR ETA SO I CAN MEET YOU THERE!

Books . . . books . . . books . .
also by Mike Carroll

Many of our members have been involved in book illustration lately. Carl Sagan's Pale Blue Dot is a visceral astronomical art gallery, most of which was done by IAA artists. The volume has a fine set of paintings by members Dave Hardy - who also did the cover - Jon Lomberg, Greg Mort, Don Davis, Ron Miller, Pat Rawlings, Bill Hartmann, and Michael Carroll.

Dennis Davidson recently illustrated a children's book about the first Moon landing, called MOONWALK: The First Trip to the Moon by Judy Donnelly (Random House 1989). He has also updated his illustrations in I Can Read About the Sun and Other Stars (Troll Associates), with the new version due out later this year.

Pamela Lee has done several covers recently, including Winds of Creation (Warner) and two Gregory Benford novels, Matter's End and Sailing Bright Eternity (Bantam). Don Dixon's paintings accompany the publication My First Book of Space by Rosanna Hansen and Robert Bell (Little Simon, 1985).

Arthur C. Clarke's definitive book on terraforming, The Snows of Olympus: A Garden on Mars (Victor Gollancz, London, 1994), is finally out with a beautiful cover by Dave Hardy, and interiors by Dave, Pat Rawlings and Michael Carroll. The book also contains some very nice Amiga computer art by Clarke and John Hinkley. Michael Carroll has been doing a set of covers for Moody press, and just completed his first draft of a children's book called Spinning Worlds (Victor books). The book will have many NASA, ESA, JPL, Venera and HST images in addition to his paintings, and will also showcase a photo of the Moon by Bob Kline.

And finally...

No EuroReport this time, but Arthur Gilbert asks whether any members know of astronomical poetry, and submits (from Durwin's first writings on Evolution; The Botanic Garden Part I Canto 11-20):

When high in ether, with explosion dire,
From the deep craters of his realm of fire,
The whirling Sun this ponderous planet hurl'd,
And gave the astonish'd void another world.
When from its vaporous air, condensed by cold,
Descending torrents into oceana roll'd;
And fierce attraction with relentless force
Bent the reluctant wanderer to its course.
THE CYBER SPACE ARTIST:
Photo CD by Kim Poor

In the great American tradition of big business succeeding despite themselves, Kodak introduced the Photo CD as the new way to view family pictures on your TV. They have only recently begun to realize the world-altering impact that this format is having on the artistic and publishing communities.

The TV/snapshot thing never did take off, but the artistic community seized upon this format as a new, cheaper way to archive high-quality, digital scans. Suddenly the cost of doing so has plummeted by a factor of fifty. The big plus is that they are also archived on a medium that is accessible by desktop computers for easy use, manipulation, and distribution. Photo CDs can be universally read on all PC readers, Macintosh, PC, Amiga, whatever.

Photo CD workstations are now in use in thousands of service bureaus, photo labs and authorized franchisers across the country. The workstations consist of a high-end slide negative and transparency scanner bundled with a Sun Unix workstation, and the associated software. There is also a proofing printer which produces small 1" thumbnails of the CD's contents which take the place of the regular CD sleeve, as a visual catalog of images on the disc.

How Many Images?

Photo CD is "multisession" meaning that you can go back and add images as many times as you like until the CD is full. The Photo CD can hold 100 or so images in the normal format. Each image is available in an "image pac" which contains five resolutions of each image. The two smallest resolutions are essentially thumbnails, for use in previewing or cataloging. The third resolution was meant for the typical TV, a hold-over from the TV snapshot idea originally conceived for the CD. Resolution number four is the one most often used for output or manipulation. It is about 4.5 Megabytes in size and is ideal for computer retouching, color work and publishing.

Resolution Five is essentially a digital negative. Although Kodak won't say, it is highly likely that the other four resolutions are merely "interpolations" of this highest-resolution image. It is about 18 meg, and can be opened and manipulated itself. ...providing you have enough RAM in your computer. Its size is the equivalent of a 16'x20" poster of the image (from a slide!) at high resolution.

There are also other "flavors" of Photo CD now coming into use. The one artists might be interested in is the "Pro Photo CD". Instead of slides, this CD uses 4x5s or 2 1/2 square transys (or nags) scanned in at SIX different resolutions. You can only fit 30 or so images on the disc in this format. Ideal for archiving your artwork in high, high resolution. There is also the "Portfolio Photo CD", which is designed to be a multimedia (sound, pictures, animation) format. I am currently working on an interactive Portfolio CD of all my works for distribution to freelance clients. It will take the place of the traditional slide sets we all try to put together and keep track of.

Where?

You can have a photo CD done almost anywhere, even Wal-Mart! The cost is surprisingly low: anywhere from .75 to $3 per image! You just take your slides or film into the photo lab or outlet, and tell them you want them put on a Photo CD. Bring your CD back as many times as you need to until it is full. [Yes, we do have similar facilities in the UK/Europe, if you can track them down.]

How Much?

If you were to ask a service bureau to scan an image to computer disk from their traditional drum scanner, it will cost you at least $40. Output that to color separation negatives and it will be $100 or so. Strip them into a standard page with text, and proofs, and you will spend $500 a page, EASY. With Photo CD, you can have complete control over placement, color, text, and all parameters of style, and a full page can be output in less than an hour, with as many color images as you can fit, for as little as $30/page. You can see why Photo CD has become a boon to the publishing industry.

Don't have a computer?

Even if you don't have a computer, you can still archive your images on Photo CD, and output more slides, color seps, or prints from this "master file" using a service bureau, or a buddy with a design firm.

If you DO have a computer, and good image-editing software, like Adobe Photoshop, you can scale, crop, mask, retouch, add to, subtract from, color correct, stretch, straighten, or tie it in a knot!

This just in: Kodak has decided to make its "image pac" format an open standard. That means that it will be possible for anyone to write to this format. The hope is that it will become the new standard format for image files. Big shots in the field such as Adobe have agreed to support the move.

So gather up all your slides, even if they aren't cropped, square, too dark, too light, or the color is not up to par, and take them down to the photo finisher and have them put on a photo CD or two. You can save publishers a step and some money, and you will have your works archived at a minimal cost and maximum potential.