

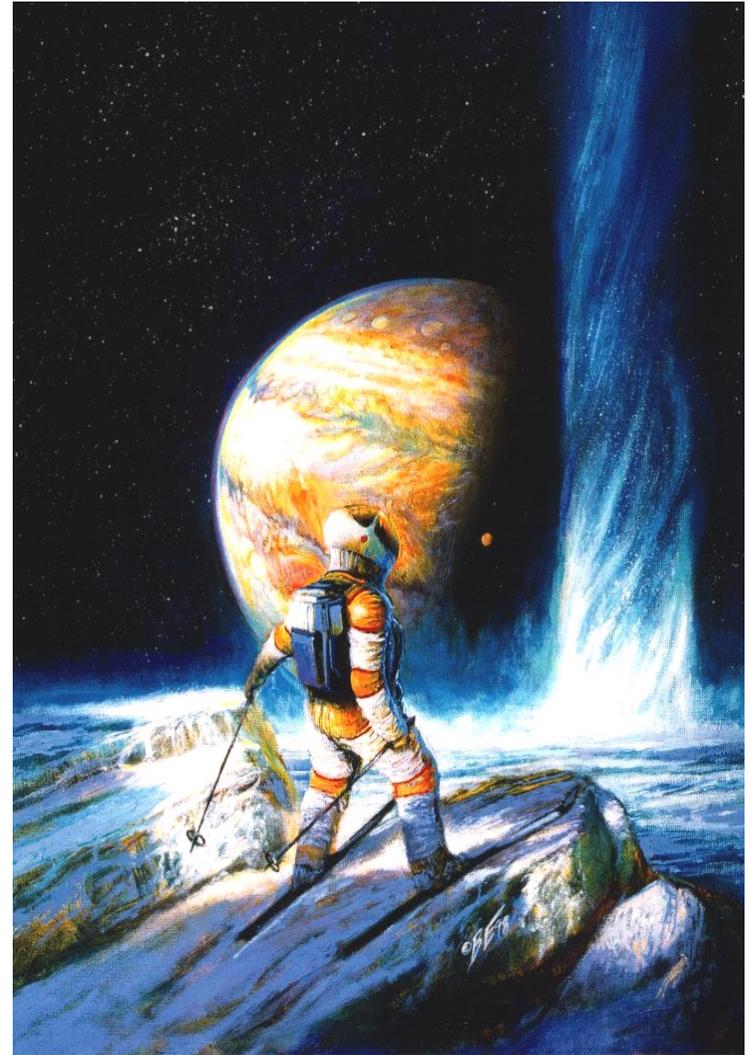


Dawn on Titan By Richard Bizley, pg 7

Rogue Planet and Galaxy By Sam Dietze, pg 6



PARALLAX 98



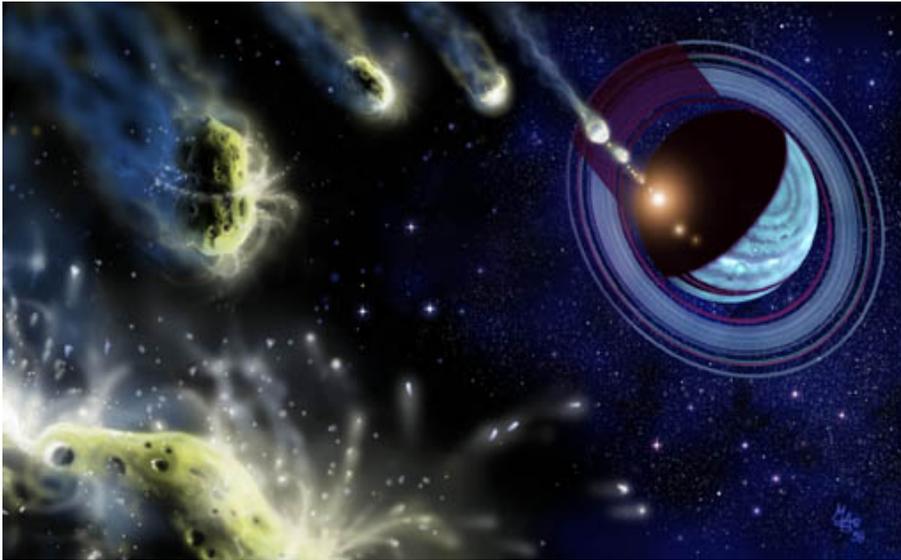
above: *Ice Dragon* By Bob Eggleton, pg 3

below: *Vega* By Steve Munsinger, pg 4



Editor : Jon
Ramer





above: *Death of a Comet* By Mark A. Garlick, pg 8

right: *Dawn of Life* By David A. Hardy, pg 5

From the Editor:

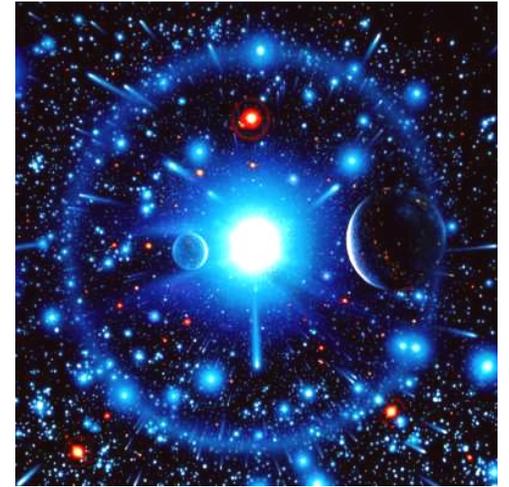
Well, Hi Gang! Here it is - our first COLOR production! A lot of work went into this, so I hope you like it. Each painting is fully described by the artist inside, detailing the techniques and methods used to create to the piece. We've got all types of work here, digital to traditional, airbrush to fan brush, oils to acrylics. Give some of the techniques described a try - and maybe we can do this again next year! *Jon!*



right: *Supernova Shockwaves* by Andrew Stewart, pg 6

below right: *Celestial Fires* by Lynette Cook, pg 10

below: *The Long Fall* by Jon Ramer, pg 9



CELESTIAL FIRES

BY LYNETTE COOK

This is a very straight-forward painting, I wanted to show some of the 'fiery' objects of our cosmos together in a group. I included the sun, a meteor shower, bolides, and a comet. I used my favorite method, materials, and techniques - acrylic, colored pencil, gouache, and acrylic gouache on a Strathmore 100% rag, cold-press illustration board. I like Strathmore because it has a splendid working surface. There is a bit of a tooth which helps the media to adhere, but it is fine enough that it doesn't lend much texture to the final art. The board takes all of the media I use equally well and the paper surface is durable and tolerates reworking better than many other boards. My first step was to work out the image as a contour line drawing. I worked on the composition until I was satisfied with it, then transferred the sketch to the board.

Even though much of the image was black, I still wanted to start on white board so I could use the brightness of the paper for the light areas in the painting. I began by masking off the background around the Sun with frisket film, then airbrushing the paint on the board in a transparent manner. After getting the main yellow and orange color on the sun's disk, I masked off the disk so I could work on the star field.

The black background came next. It took several coats of paint to completely cover the white board. I put on a couple extra layers even after the black seemed even to the eye. I wanted to make sure when the art was scanned or photographed there were no unintentional differences in value or density. Once the black background was finished, I painted the stars using the toothbrush and spatter technique. White stars went on first, then blue, red, and yellow. Then I airbrushed some small glows on some of the dots to make them larger and brighter.

The meteors and bolides were drawn using a ruler and very sharp colored pencil. The blue and yellow glows on the bolides were airbrushed first. Then I took white gouache on a small brush with a good tip and painted in the white lines. Next, I airbrushed some glows on top of these lines.

The comet was airbrushed too, using light blue for the ion tail and yellow-white for the dust tail. I also airbrushed an orange-red glow at the edge of the Sun's disk, to soften the transition between the disk and the black field.

Now the airbrushing was complete, but some areas still needed detail. I used pencils to add some structure to the comet and detail to the sun. I also used gouache and acrylic gouache, sometimes alone, dabbing acrylic gouache on the Sun with a sponge for added detail, while other times I washed and drybrushed the gouache over the pencil to smooth out the pencil's texture on the paper's tooth.

As a final step, I took a fine brush and a little gouache and put a dot in the center of each star that had an airbrushed glow. Stars tend to look fuzzy after airbrushing, adding clean dots on the top helps them sparkle again.

I find that working in several media at once goes faster than working in one alone. Some subjects are easier to paint, others are easier to draw.

¹⁰ Using drawing and painting together gives me the best of both worlds.

ICE DRAGON BY BOB EGGLETON

This is a painting for an ANALOG cover story by Bud Sparhawk. A real "gadget" story the editor Stan Schmidt made easy for me: he suggested a scene in which our character (in the suit) is skiing across a Europa being transformed artificially. These scientists have discovered "Ice Dragons"... giant tornado like geysers of gas and water crystals that shoot up like a giant spiral. They are unpredictable and can move like a tornado sweeping up everything in their path and shooting it into space.

Doing a Europa picture without Jupiter in sight is like a hot dog without brown mustard: it just ain't done. So I whipped up a sketch in 15 minutes and faxed it off. It was approved almost within an hour and away I started.

Since I've forsaken the airbrush, I figured for texture I would use a canvas board coated with a layer of gesso. I don't recommend canvas board for fine art, but this was a commercial assignment. My canvas was 16x20 inches and I was ordered by Dell Magazines to keep any "light colored and distracting elements" out of the type and logo gutter leaving me with essentially 50% less area to work within - I had to cram it all into the lower right. I messed about with my compass until I had a circle that "looked" about right for Jupiter. I figured I would eyeball the actual 70-degree ellipse when I painted it.

I began by coating the board with Quinicridone Gold as a base to lay the colors on. That having dried, I started wiping out (with alcohol) lighter bands on Jupiter and where the astronaut was to go. Next I worked in black space and mixing in lots of Thalo Blue. Then I started on the face of Jupiter, consulting a few photos and putting them down to see what I remembered as I painted. To begin, the colors were too intense and I feared they would overpower the foreground elements, so I took some Titanium White and mixed it with Matte Medium and toned it down. I also softened the planet's edge as I wanted Jupiter to recede and not be sharp.

Next I started on the foreground ice. I worked blue into the gold and it made a weird greenish color, then I splashed more water and alcohol into this and wiped it around and back down to the gesso. Then I troweled some light blue violet into the textures keeping in mind the skier needed something to be "standing" on. The bottom colors were a real sickly mess, but I figured it looked like Europa ice.

I realized late into the game that I wanted the scene partially in shadow, so I started kicking up the whites along the rock edges and had part of the guy's legs in shadow. The figure was easy. I used an action figure to get proportions right and fudged the cloth folds by using the canvas texture as the "cloth texture." Whether the shadow is correct I know not... like Wyeth said, "it has to LOOK right rather than BE right." It just looked really cool and 3-D so I didn't fix what wasn't broke.

The background geyser was easy too: I wiped the board back to white with alcohol, tinted it blue and pulled out some more whites. Ice Dragons are so strong they create an "ice crystal" atmosphere on Europa, accounting for the blue edge in the distance. I finished the whole piece in about 5 hours.

VEGA BY STEVE MUNSINGER

This painting is a view of the very bright, hot star Vega from its dusty/rocky/icy ring that recent photos seem to indicate. The ring is very large in size and may be the precursor of a planetary system in the making.

I've been intrigued by the visual image in my head since I read an article on new Vega findings. I started the painting by composing 30+ thumbnail sketches until the composition came to life. The first decision to make was the format. I decided to go with a panoramic view to include the large ring system. I cut a large illustration board and gessoed the surface. After drying I taped off the border. I then airbrushed the painting with ultramarine blue mixed with cerulean blue and titanium white. Next, I drew the composition on with a white prismacolor pencil.

Working from the edges inward I started coloring the planetoids, warmer colors for the closer objects, cooler colors for the further ones. After they were roughed in I began on Vega. I airbrushed the central core then used a plastic triangle to mask off the rays. I deliberately let the airbrushed rays cover the smaller planetoids around Vega to give the painting depth. I then went back to work on the planetoids working more detail as I went. The stars and ring system were hand painted to make a cohesive design. The last step was to again airbrush the rays and the ring system, further adding depth. Total time on the painting was four hours and another four hours or so on the design aspects. The painting measures 8.5 x 38.5 inches.

The painting is very simple in design, which fits in with my basic philosophy, "Keep it simple stupid." While the painting is probably not totally accurate as far as what a probe might show, I wanted to show what we as travelers to this system might see. Incidentally the large asteroid on the right is patterned after Gasptra or Ida. The potato shape seems to be quite common in our solar system so it follows that this shape is the norm rather than the exception.

THE LONG FALL BY JON RAMER

After the Mt St Helens workshop, I realized that trying to stick to being a "self-taught" artist was pretty much an exercise in stubbornness. Seeing the works of fellow artists and talking to them about painting techniques made me want to improve my style by a better method than trial and error. So, I broke down and took a lesson in painting translucent oils.

I've also noticed that most artists tend to stick to the "conventional" sized canvases like 16" by 20" or 18" by 24", with proportions of around two to three. I like the panoramic sizes better, either very tall or very wide. To me, the different shaped image stands out more. The trick is to make an image that utilizes the longer or wider shape effectively.

I got the idea for this painting from the recent deluge of "asteroid meets Earth" movies. I thought an image showing a view from just off the surface of a meteor as it starts to enter the atmosphere would be interesting. I began by sketching out ideas on paper and quickly found out that the image would be much more dynamic if there were two meteors and the viewer could see the other one burning up nearby. Happy with a sketch, I drew it out on a 15" by 30" canvas. Next I selected colors. Light blue fading to space black the atmosphere, and gray for the meteors. I chose a desert like red oxide/yellow ochre mix for the planet to contrast the blue sky.

First, I laid down a thin coat of blue-black at the top for the dark of space, using copal oil as a medium to help smooth the paint and speed drying. Then I layered thalo blue mixed with flake white for the atmosphere, getting lighter as I got closer to the surface. After the sky was done, I put down an undercoat of yellow ochre for the planet. Next came the mountains. I mixed red oxide and yellow ochre for the distant mountains and added alizarin crimson as I got closer to the viewer. The mountains were made by zig-zagging with a "cat's tongue" shaped brush then going back and adding some ridge lines. Once I was satisfied with the planet, I took a tiny dab of flake white and mixed it with a big dab of copal oil, then washed out the more distant mountains with a thin haze made by a fan brush.

Next came the two meteors. First I painted the basic shape in black, then I started mixing in different whites and grays and raised the details. For the final touch, I mixed in a dash of zinc yellow and yellow ochre for reflected light along the bottom, then added color to show heat from vaporizing. Next up was the meteor trails. They were produced by taking straight titanium white and "dry-brushing" it around the meteors with a flat stiff bristled brush.

After I "finished," I stepped back and didn't like what I saw. There wasn't enough action, so I added two more meteors to liven it up, then I was happy!

Most of the techniques used to produce this image I learned either from talking with fellow IAAers, list server discussions, or from art tips in the Pulsar. I have to say I've been very happy as a member, it's helped my

DEATH OF A COMET

BY MARK A. GARLICK

When comet Shoemaker-Levy 9 smashed into Jupiter in 1994, it sent shock waves through the planet and the astronomical community as well. Sun-diving comets had been seen before, but are hard to observe and obtain data from because of the Sun's brightness. For the first time, scientists were able to witness the truly spectacular event of a comet plunging to its death in some detail. As luck would have it - or not, as the case was - SL9 hit Jupiter just over the limb of the planet, not directly visible from the Earth at the time of impact. But the rapid spin of the planet meant that the affected regions soon rotated into our line of sight. Some speculated that nothing would be seen. They were wrong. The train of comet fragments left a series of clearly visible scars as, one by one, they plunged into the planet's atmosphere.

Many artists depicted the event. I decided to go one further and show a similar situation - but with a hypothetical planet in another solar system. "Death of a Comet" is the result. As happened with SL9, the comet here has been torn apart by immense tidal forces; but this time the target planet is an imaginary, ringed giant, sitting there like a bull's-eye in space.

More and more recently, I have begun to explore the many uses of digital art. This was one of my very first attempts at producing a complete image from scratch in Photoshop - no scanning or ulterior motives. I soon began to wish I had discovered Photoshop earlier! I find I can produce images that are at worst as good as my conventional art, or at best far better, in a shorter space of time. One thing that surprised me is how difficult it was for my friends to tell which of my works were painted and which were rendered in a 2-D application like Photoshop. Until I went into computer art, I was under the impression that no computer generated image could be mistaken for a painting. I've since realized that it is 3-D applications that produce pictures which look like CGIs. 2-D CGIs look more natural because they are produced in a similar way, I suppose, to a painting.

Photoshop is great for cheating and shortcuts. For example, a planetary ring-system seen from an oblique angle is, in my opinion, a nightmare to do with conventional paint. Drawing ellipses is hard. Drawing concentric ones is even worse. But here comes Photoshop! You draw several concentric circles, fill them with the colors you want, and then you simply squash the whole thing down: concentric ellipses in one easy move. Another way you can speed up your work is using copy and paste. I recently finished another digital image showing, again, comet fragments headed towards a planet - but the planet this time is Saturn and the observer sits just above the ring plane. Painting thousands of icy ring particles by hand would take an incredibly long time. But with a computer, you simply do maybe 20 or so in detail, then using copy and paste you end up with 40, 80, 160.... The number grows geometrically. Of course, you have to modify a lot of the foreground particles so that they are not obvious clones of one another - you can rotate them, invert them, distort them, etc. But this takes relatively little time.

8 I still like painting by hand, but I think that digital is the way to go...

DAWN OF LIFE BY DAVID A. HARDY

This image actually originated over 20 years ago. In 1974 I started writing as well as illustrating my own books, starting with a couple for children, *THE SOLAR SYSTEM* and *ROCKETS & SATELLITES*. I then branched into non-space books. My next two were *LIGHT & SIGHT* and *AIR & WEATHER*, published in 1977. It was for the *AIR & WEATHER* that I painted a scene on the early Earth, in which (as the caption says): "Scalding gases and water vapor belch forth from volcanic vents, forming Earth's primeval atmosphere; while in shallow pools the first oxygen-producing life appears."

The original painting was I think inspired by a black-and-white photo I had seen of a thermal area somewhere on Earth - probably Yellowstone (which I got to visit in 1995; when can I go back?). I noticed it appearing time and again on statements from a photo library that handles slides of my work. But I wasn't completely happy with a couple of aspects, so - with the advent of digital technology - I decided to scan the image and see if I could improve it. This is the result. I took the opportunity to add a large Moon in the sky, too.

I used an Umax Powerlook II scanner with a transparency hood and Binuscan software, then took the file into Photoshop 5 to adjust the gamma, brightness, contrast, color, etc., and to expand the slide size from 6 x 6 cm (2 1/4") to something like 15 x 20 cm. Final alterations and additions were made by 'hand,' using a circular marquee for the Moon, and airbrush. No special textures or filters were used - that was all in the original painting.

That's about all I can say about it. I would add, though, that looking back through some of my old books all these years later, I'm glad that I use my Mac nowadays. I'd hate to have to produce all those diagrams by hand and airbrush again today; all those circles and ellipses of Earth's orbit, air cells, curved arrows and the rotation of anti-cyclones... talk about time consuming! And who is that guy on the back flap with all the hair?

ROGUE PLANET AND GALAXY

BY SAM DIETZE

I begin by going to a building supply store and purchasing a four by eight foot sheet of eighth-inch, plain masonite, for six or seven dollars. One sheet can make a lot of paintings depending upon how large or small they are. You can get it cut however you want, to fit picture frames or by display size.

The first thing I do before starting is sand the masonite to give it some roughness. This makes it easier to work the paint, especially if you have to go over an area several times or paint something out and begin again. For space paintings I usually prime the surface with black, navy blue, blue-black, or blue-gray. Water based latex house paint, preferably flat and not semi-gloss, does nicely for this. I usually get quart-sized cans of black, white, and navy and four or five empty, small size coffee cans for mixing. After a couple of base coats, I'm ready to paint.

Next, I sketch my ideas out with a white pencil. I used to go through astronomy books and magazines looking for photos of nebulae, clusters, galaxies, planets, moonscapes, or whatever for inspiration, however, more recently I've been thinking it's better to just start painting and let the idea develop as you go along, just sort of winging it. This forces you to look at the painting and ask yourself what looks good here, what there, and so on. Perhaps the best approach is a combination of both.

In any case, I work with acrylics and paint by hand with brushes and literally too with fingers. I prefer liquitex acrylic, either the regular or basic artists series, in two or four ounce tubes. I've thought about using Grumbacher Hyplar, but it seems to be thicker and stiffer and harder to work with to me. I don't use an airbrush, though maybe someday I'll get one and experiment with it. I don't think I need one right now, but I am a firm believer that fine art can be created many different ways and in many varying styles. The methods described here work best with acrylics and the clean up with soap and water is easy.

SUPERNOVA SHOCKWAVES

BY ANDREW STEWART

I started by painting the canvas in jet black then I drew the design of the painting in white with three or four different airbrushes. Next I sprayed hundreds of dots all over the canvas with my A.B.L. airbrush. When that was completed, I then added color to the painting using acrylic inks. After the dots started to look like stars and solar debris, I next mapped in the deaths of the two worlds by cutting out two spheres using frisket film then painting in the details of the planets.

Next I put in the highlights and shadows. When satisfied, I finished off the work with a protective varnish, giving the painting a gloss finish.

I prefer to use acrylic inks and Liquitex paint as this gives a very high performance when working in the airbrush medium. The airbrushes I use are Parasche V/VV and VJR as they have greater flexibility in the regulation of color and air without work stoppage. I also use the Devilbiss, a light weight gravity feed spray gun suitable for production work. I use it

DAWN ON TITAN BY RICHARD BIZLEY

I was inspired to do this painting by three things:

1) Saturn. I think Saturn with its rings almost edge on is a glorious sight and is very satisfactory to paint.

2) Clouds. Ever since I was small, I have watched clouds. Whenever I was in an aircraft I always used to make sure I had a window seat so I could look at the cloudscapes with the horizon seeming to go on forever. One of my favorite cloud forms has to be the cumulo-nimbus. An anvil shaped cloud rising higher than a sea of clouds is a great sight. These types of clouds are probably not on Titan, but on the other hand, one cannot be too sure. Perhaps some unknown forces are at work or possibly small fragments of a comet have struck Titan forcing clouds to rise.

3) Sunrise. Sunrise is a good lighting subject to paint - lots of color, strong directional lighting, a feeling of a new beginning.

This painting worked because I was able to get what I loved together. It is a mixture of hand brush and airbrush work, all done in acrylics. First of all the sky was hand brushed, then the colorful sky airbrushed. Saturn was done freehand - it is not a perfect sphere, being flattened at the pole, Saturn is somewhat difficult to do. To work out how the shadows behave on the rings and planet, I had a ping pong ball with a ring made of card pinned to it and shone a light on it at an angle!

The clouds are a mixture of airbrush and hand brushwork starting with the distant ones first, working down towards the nearest clouds. The cumulo-nimbus clouds had to be carefully worked out first before airbrushing. With diluted paint I carefully painted a general outline as a guide for my airbrush. When airbrushing onto a "plain" background it needs to be done with care - spray in the wrong place and you're stuck with it!

I find clouds surprisingly difficult to paint. I have found it helps to draw in how the clouds should be and then just let the paintbrush paint freely.

The finishing touch was highlighting the clouds and spraying a final burst of yellow and white where the Sun is.

primarily for spraying giant canvases, however, I must mention a safety item here, always mask up when spraying a giant canvas.

I have found the best airbrush for my particular work is the A.B.L. Parasche Turbo left hand model. It offers what I consider to be the finest detail and control when all other airbrushes fail. This airbrush was the very first one I bought and is a very complex piece of precision engineering which will hopefully last me a lifetime.

When I want to paint an astronomical subject, I browse through the science journals and research magazine for inspiration. When I can find the time, I still stargaze through the old telescope my dad bought for me many years ago.

My favorite writers and others who have influenced my work are of course, Carl Sagan, Stephen Hawkins, and some science fiction stories by Mr. Arthur C. Clarke. I also read up on space artists and must mention Dave Hardy, Don Dixon, and the great Chesley Bonestell plus many more. ⁷