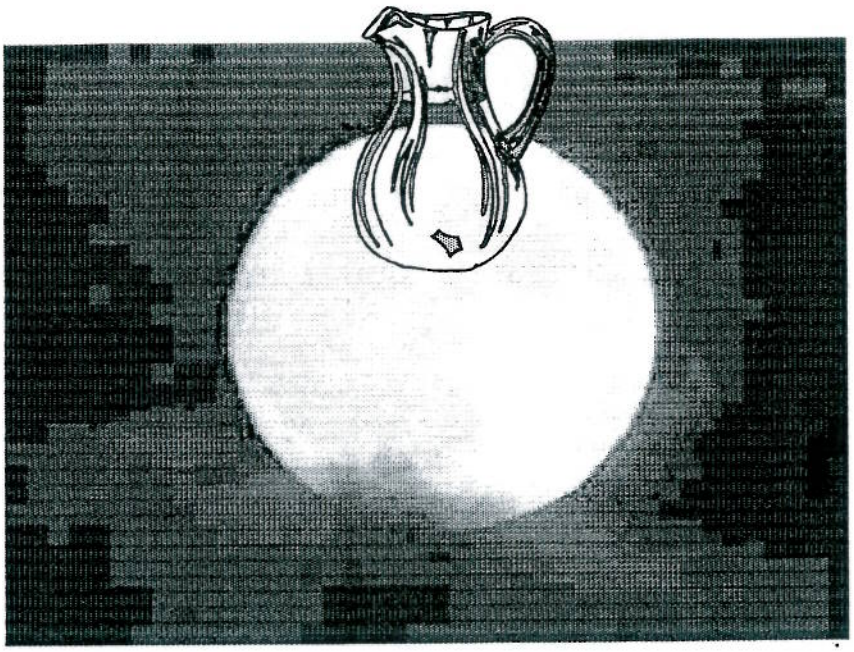
WATER FOUND ON THE MOON!



Orange County
Science Fiction Club
P.O. Box 9225
Fountain Valley, CA 92728-9225

Next Meeting: Mar 25 1998, 7:30 P.M.*

ISSUE #69

THE ORANGE PULP

*Doors Open 7:00 PM

THE ORANGE PULP

NEWSLETTER OF THE ORANGE COUNTY SCIENCE FICTION CLUB

ISSUE #69 Vol 12, No. 2, March 1998 (as the crow flies)

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The Chief Speaks

Water found on the moon! Imagine that! I guess that green cheese isn't so dry after all. In this issue of the 'Pulp we have a new article by Dave Silva about water on the moon, the continuing story *Stardust* by Tim Cassidy-Curtis and a short slice of a future life by new member Wayne Edward Sherwood.

The Jedi Knights are planning a group trip to see The Star Trek Experience at the Las Vegas Hilton in July. No firm plans have been made yet and anyone who wants to join in should contact them directly. I plan on going.

IAttended Con-Dor last month. One of the highlights was a Star Trek slide show by Penny Juday.

SUBMISSIONS TO THE ORANGE PULP

Send your letter, short story, article, or other items for publication consideration to:

JEFF STEIN
1700 W. Cerritos #312
Anaheim, CA 92804
or by EMAIL to
72437.3435@compuserve.com

Previous Meetings

Jan - S.P. Somtow spoke to us about his current activities and played an exerpt from a ballet that he had written.

Feb - Fred Golan - Fred showed us a video tape of a production he had written and produced.

Upcoming Meetings

Mar - Jefferson Swycaffer- has been a speaker at the OCSFC before. He has published 9 SF and fantasy novels.

No programs have been scheduled for the rest of the year yet. Greg asked me to remind everyone that they can take part in helping to schedule speakers and programs for future dates. Contact Greg at the meeting for more info.

Stardust

by Timothy Cassidy-Curtis

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Chapter 5

Star-Space-Star looked at Amy Henry and nodded. She nodded back.

"Begin." she commanded, and hundreds of feet pushed on hundreds of pedals. This caused the generators to which they were chained to hum, and produce power. A display screen appeared showing the power being produced.

"Fortunately, these units were unassembled when we were hit. They were unaffected, like any other inert piece of material."
Amy summarized

"Than the same should be true for the attitude control motors." Star surmised, and touched controls which connected communications to the bridge. Immediately, the display gained a red bar, showing the amount of available power being used. The line was fairly small compared to the remaining available power.

"Captain to bridge, neutralize ship's spin." Star ordered.

"Bridge, aye, helm responding."

Star began to work some other priorities for the power, running spreadsheets to see if there was an optimized manner to satisfy the remaining power requirements. Suddenly, Lt Henry's eyes began to widen, and bulge. She dove for the engineering panel.

"Captain! Spin is increasing! Attempting to compensate!"
she swatted at the comm which opened a line to the bridge "Bridge! Engineering! Full power clockwise roll on my mark! All hands prepare for full power surge!!!" Amy shouted the last at all thepedlers on the deck.

"Ready..." she said, flipping switches "and..."

"BELAY THAT ORDER!!!!!" Captain Star- Space-Star roared at the top of his lungs. "Bridge..." he paused, lowering his voice, "umm, never mind."

Amy Henry looked with honest fear at her captain. It was
obvious that she had missed something, but with the ship spinning out of control, she could only think of how to correct it. The
captain appeared unconcerned, however, and to Henry's eyes he did not look either alarmed or pleased with her plan of action.

"Hold still and close your eyes." the captain ordered.

She did as she was told. Everyone looked on.

Star-Space-Star grabbed hold of her arms and gently spun her on a head-to-toe axis. "Keep your arms in." he directed.

After a while, Amy acclimated to the spinning motion; it was much like her Academy training.

"Now," said Star "I'm going to slow you. Tell me when you've stopped, but don't open your eyes until I say."

Amy felt Star's arms slowing her gradually, until the spinning sensation abated, than she said "Right there."

After a few seconds Amy heard Star say, in a loud voice "There is nothing wrong with the ship." She heard everyone say "Aye, Captain." in most matter of fact voices. Bridge said "Understood, Captain, Bridge out." And, finally, she heard Star say "Open your eyes, Lieutenant."

With that, Amy Henry opened her eyes and discovered that she was still spinning; there was no sensation. She stopped herself and felt a residual sensation, just like when the ship's spin stopped

"It's called 'vertigo,' welcome to Newtonian Space, Lieutenant." Star may not have been pleased with her performance, but Amy was relieved to see he was smiling at her.

"Real-space lessons are rare to come by." he said, "and even rarer to be so mild. You're one of the lucky ones."

"Now," he said pensively "what can we do with all this power?"

"Twiddle our thumbs?" Amy suggested, innocently. Star looked at her with raised brows, but nodded and smiled. Amy had just been through a professional embarrassment, it was good to see her sense of humor unaffected. She continued, however

"Actually, Captain, I had something like this in mind." An image showed up in the display.

Star looked at it and approved. "Do it." he said, and Amy got to work manipulating switches. Immediately, most of the green reserve power line turned red, as most of the available power went diverted.

BUZZ ALDRIN PREDICTED WATER ON THE MOON

By Dave Silva

On the front page of the L.A. Times, March 6th, appeared an article entitled, "Water Possibly Found on Moon." While the NASA scientists were ecstatic over the findings from the Lunar Prospector, there is still much to learn. The amount of water, as ice at the poles, was estimated at between 10 and 300 million tons. Now that's a big range between 10 and 300 and if we are going to have colonies on the Moon, or use the Moon as a fueling stop on the way to Mars or the asteroids, we need to send a manned mission to the polar regions.

Most people (certainly most outside of SF) assumed there was no water on the Moon. Since NASA must have had a theory for thinking there might be ice at the poles in performing this test, just what was that theory? If you have read, "Encounter With Tiber", by Buzz Aldrin & John Barnes you know all about it. Quoting from page 111, after Aldrin explains how the poles are in permanent darkness; "During the two weeks of dark, lunar rocks become so cold that any water molecule that hits them will stick to them; if there is any water around it will freeze to those rocks, forming frost. During the two weeks of light, the same rocks grow hot enough to throw the water molecules off, with speeds high enough so that the water molecules don't quite go into orbit, but do bound for hundreds of kilometers. If it happens that they come down and hit a lighted, hot rock, they will gain still more energy, and bounce higher the next time; after anywhere from four to ten bounces off rocks in daylight, the water molecules will bounce right off the Moon, and be lost forever.

But if they hit a dark rock, they will stick. Usually they only stick until the sun comes up on that part of the Moon, and then begin the process of bouncing again, until they either hit and stick on the dark side, or bounce off the Moon from the light side. As years go by and lunar day follows lunar night, less and less water is left at the end of each lunar day, and the Moon becomes bone dry.

But that is only what usually happens. The deep craters at the south pole never receive sunlight; the rocks in them are always dark. Thus when a water molecule bounces into one of those craters, it hits, sticks, and stays---forever.

And though such events are rare, water does come to the Moon---often in the form of a comet. Comets, in Fred Hoyle's immortal phrase, are "dirty snowballs"--a scattering of big rocks in a mountain-sized ball of water ice. As millennia pass, now and again a comet strikes the Moon, bursting apart as it digs a new crater and sets millions or billions of tons of water loose on the surface. Most of it disappears quickly in the eternal game of freeze and bounce---but some happens into the craters at the south pole, and it remains there to this day. As the millions of years slide by, eventually it gets to be an immense amount of water."

If any of you good readers out there know of who originated this theory I would like to know. Although I first read it in "Encounter With Tiber," Aldrin may have heard it elsewhere. In any event the "water at the poles of the Moon," theory is an excellent example of a scientific hypothesis that is so logical that it would be surprising if it were not true.

Fond Memories

by

Wayne Edward Sherwood

Paul Johnson stood atop Signal Hill and considered the darkening Pacific. This was his favorite time of the day, sunset.

The Sun had just set below the far horizon, but the sky was still ablaze with glowing rays that streaked across the sapphire hued sky. Here and there, a star could be seen slowly brightening as the sky began to ebb to a velvet blackness. Already Catalina was nothing but a dark silhouette in front of the fading fire of the distant sunset.

Bending, Paul stroked the back of the dog that rested next to him. In the fourteen years that Paul had had Jason, the dog had always seemed to know when his master wanted to be alone with his thoughts. Not once in all those years had Jason complained about these sunset excursions, but now the dog was getting older and Paul found that he was bringing him less often. However, tonight was too splendid of a night not to share with his old friend. He wondered, as he looked down at the dog at his feet, if Jason was aware of the beauty in the sky.

Turning, Paul looked out over the dark Los Angeles basin. Off to his right, Orange County was just as dark. Of all the things he missed, this was the saddest to lose. Once this whole area had been a blaze with the million lights of night. Paul remembered a time when he would drive up here with a date and sit for hours, gazing out at the myriad street lights and the warm, welcoming porch lights. He would marvel at the beauty of the distant traffic signals as they shifted through their three color spectrums. He loved the view so much that there had been nights when he would just come up here by himself just to watch until dawn.

Now only a vast darkness lay where that carpet of living jewels once bloomed. There had not been a light shinning in this basin for more than twenty years. The thought of their passing brought tears to his eyes.

Paul noticed that the sky had grown completely black, with only the stars to show where sky met the horizon.

Sitting on the warm, dry ground Paul wondered, as he often did, if out there somewhere, on another hill, was there someone else watching the setting Sun? In his heart he knew that he was alone in vidual. No one else could see the night lower its cloak of darkness. He had once told his wife that the world would end this way, but she and everyone he knew had not listened. The thought Sarah missing this brought more wetness to his eyes.

Beside Paul, Jason shifted to lay his head on his master's lap. Scratching the dog's head, Paul said, "At least you are here to keep this old man company, but I'm afraid that soon even you will be gone." Paul paused as he stroked Jason's fur. After a moment he continued, "I promise that no matter what happens I will lay you to rest here on this hill you have shared with me these long years."

Paul raised his arm to glance at his ancient watch and saw that it was time to leave.

Rising, he started walking toward the twin seated Sky Cruiser that sat a few yards away. Understanding that it was timeto go, Jason rose, stretched and followed his master. When he reached the vehicle, he jumped into the passenger seat. When they were both secure, Paul started the craft and raised it from the ground on its quad null-G fields.

Heading inland Paul kept the craft only five meters above the earth. For ten minutes he flew over kilometer after kilometer of wheat fields. Finally, he opened the throttle and aimed the Sky Cruiser skyward. There in the distance Paul could see the glowing ring of his orbital home. He could remember the day when nearly the entire human population had moved into space in order to make room for the entire Earth to be turned into a collective farm. All the land mass of the planet was needed to feed the fifteen billion humans now orbiting Terra.

Soon Mars would be completely terra formed and humanity could begin to spread out on the fourth planet. When that happened, food production on Earth could be relaxed and people may return to live once more upon the surface of the Mother Planet.

But that was a decade or two away. For now he was late for dinner. Paul smiled when he thought about how Sarah would scold him, as usual, for being late again.

April

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 Fool's	2	3	4
5 Nat'l lost	6 socks week	7 →	8	9	10	11 →
12	13	14	15	16	17	18
19 JEDI	20	21	22	23	24	25
26	27	28	29 OCSFC	30		

1998

May 1998

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15 LepreCon Phoenix	16
17 JEDI →	18	19	20	21	22 BayCon Agamem-Con	23
24 →	25	26	27 OCSFC	28	29	30
→ 31						

Orange County Science Fiction Club

Meetings have guest speakers, discussions of SF books, movies, TV, etc.

The Club meets at the usual place, in the community room of 2400 E. Chapman, Fullerton, A half mile west off the 57 freeway (corner of Chapman and St. College)

Last Wednesday of Every month except December