

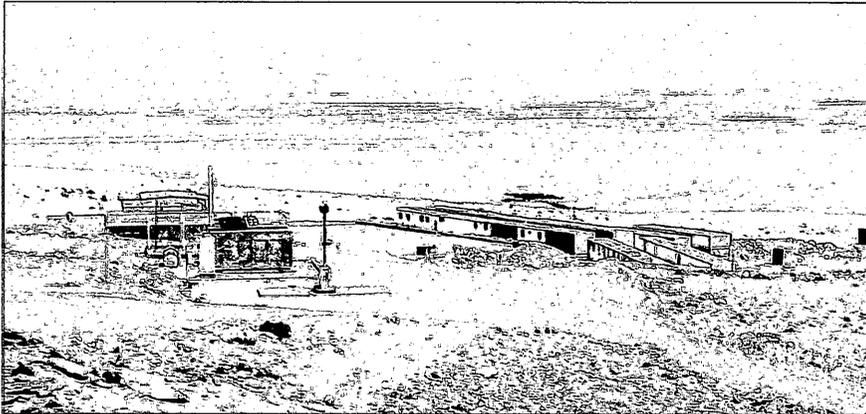


# THE POINT SOURCE

Spring/Summer 2004

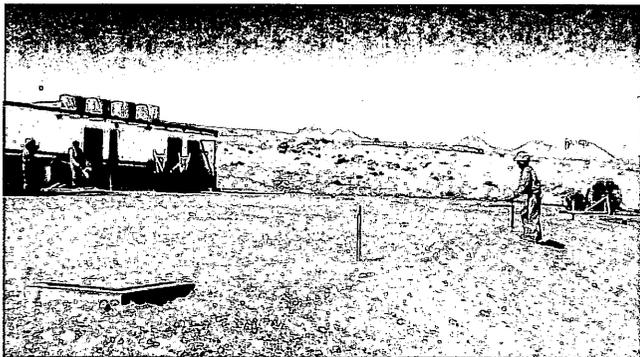
Vol. 10 Issue 1

## OSF IN CHILE READYING FOR BUSINESS



*The ALMA Operational Support Facility (OSF) in Chile*

Construction of the permanent road from the Operational Support Facility (OSF) to the Array Operations Site (AOS) has proceeded as well as installation of the ALMA and contractor camps at the site of the future OSF. The permanent road from the OSF to the AOS is now more than 60 percent completed. At the OSF site itself, where initially, there were just working quarters, there are now living quarters, as well as a “splendid outdoor grill area.” The building shells for these temporary quarters were moved from Paranal Observatory and were outfitted for use at the ALMA construction site. In addition to living and working quarters for ALMA staff, there is also a



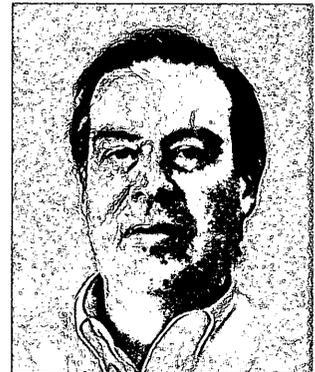
*Work going on outside the dining hall for ALMA staff at the OSF*

contractors’ camp with its own living quarters. Work for electrical distribution is complete, the potable water system is complete, the firefighting system is complete, and the sewage treatment plant operation commenced at the beginning of June. Internet service has been established and other refinements are on the way. As of the beginning of June, there were 69 workers doing on site labor on ALMA, including the construction camps and the road.

Recently, ten ALMA staff members have taken advantage of the board, lodging, and cleaning services now offered at the OSF site.

### ***Eduardo Donoso Joins ALMA as Site Superintendent***

Eduardo Donoso has joined the NRAO to oversee the day-to-day construction work that progresses more rapidly every day. A Chilean, Eduardo is a licensed Civil Engineer with broad experience in road, foundation and building construction knowledge. He and his family live in Santiago. When Eduardo is not directing construction at the low site, OSF, or the high site, AOS, you will find him on a sailboat.



*Eduardo Donoso*

### ***Rick Murowinski Becomes JAO Project Engineer***

Rick began his duties on May 18, 2004. He comes to ALMA from The Astronomy Technology Research



*Rick Murowinski*

Group (Victoria, Canada), where he has been Deputy Leader of the group and working on ground- and space-based instrumentation for large telescopes: Gemini and JWST among others. Research interests (to occupy those ever-diminishing free moments!) are in solid state detector physics. The move to ALMA

brings his career full circle from its start at Algonquin Radio Telescope and then working on SIS mixers at Chalmers Institute of Technology (Goteberg). Rick will take up duties for JAO while initially remaining based in Victoria. Once the new Chilean offices are ready this fall, he'll move to Santiago.

***Tony Beasley Returns to NRAO/AUI as JAO Project Manager***



*Tony Beasley*

The NRAO and AUI welcome Tony back to the fold after an absence of almost four years. During that time he served as Project Manager at CARMA, the Combined Array for Research in Millimeter-wave Astronomy, a California Institute of Technology Observatory. Tony has over ten years of experience with the NRAO/AUI which will come in handy as he takes on his new duties as Project Manager for the Joint ALMA Office in Santiago. Tony will begin his duties in September.

**GREEN BANK WINS PRESTIGIOUS ENVIRONMENTAL AWARD**

On October 14, 2003 the American Council of Engineering Companies - West Virginia awarded Environmental Design Group (EDG) of Charleston, WV and the NRAO the 2003 Engineering Excellence Gold Award for the design of the Green Bank Wastewater Treatment Facility Project. This award was given to EDG and the NRAO after due consideration of all design entrants in the Water and Wastewater Treatment Category in the 2003 West Virginia Engineering Excellence Awards Competition. The uniqueness of the design was a key factor in the decision to award our project the Gold Award.

The design met several criteria developed in-house, including the necessity of low maintenance and provision of surge capacity, all the while meeting the strict discharge requirements of a designated trout stream. In accordance with management of the National Radio Quiet Zone, the project was further challenged with eliminating all electrical components "pumps, motors, blowers, etc." and providing all necessary treatment requirements by gravity flow.

The final design provides three ponds laid out in a radial pattern from a single focal point, linking the

final structures aesthetically to the telescopes on site. The design allows any pond to be taken out of service for maintenance while providing complete treatment by the remaining two ponds, and for water level adjustment of any pond through the use of valve adjustments.

Complete treatment of the wastewater is accomplished without the use of any electricity, eliminating the operational costs usually associated with a system of this size.

Finally, should low water flows in the receiving stream demand it, the entire treatment facility can provide surge capacity through valve configurations that allow retainage of the wastewater for significant periods of time, thereby protecting the delicate ecosystem of the receiving stream.

The system is fully operational and has been functioning exceedingly well for almost two years now. The forethought and care taken in this project should serve Green Bank for many years to come and we are "flushed" with pride for receiving this award.

## NRAO SERVICE AWARD ANNIVERSARIES



Chuck Broadwell  
30 Years  
CV



James R. Gibb  
30 Years  
GB



William R. Lambert  
30 Years  
GB



Frazer N. Owen  
30 Years  
SOC



James M. Rexrode  
30 Years  
SOC



Richard A. Sramek  
30 Years  
SOC



Bedford R. Taylor II  
30 Years  
GB



A. R. Thompson  
30 Years  
CV



William Wireman  
30 Years  
CV

### 20 Year Recipients

Alan Bridle - CV  
Mary Jo Dollins Hendricks - CV  
William H. Porter - CV  
Warren Richardson - CV  
Jonathan D. Romney - SOC  
John N. Sanchez - SOC

### 10 Year Recipients

Harold S. Baca - SOC  
Keith Beverage - GB  
Joseph H. Brandt - GB  
Robert M. Broilo - SOC  
Mary Mayo - CV  
Rayford McFarlin - SOC  
Simon Radford - SOC  
Gayle L. Rhodes - SOC  
Bruce E. Rowen - SOC  
Richard Simon - CV  
Gregory B. Taylor - SOC  
Henry Taylor, II - GB  
Michael M. Torres - SOC  
Jim Ulvestad - SOC



### VENUS TRANSIT

A planned observing session for NRAO staff and families in Charlottesville of the transit of Venus occurred on Tuesday morning, June 8 soon after 6 am. A very small radio telescope was used along with our recently acquired Sunspotter for safe observing of this rare event. The last time Venus transited the sun was on December 6, 1882. That transit was observed from McCormick Observatory in Charlottesville.

## New Regular Full-time Employees



**Mark Adams**  
Assistant to the Director -  
CV



**Yurii Pidopryhora**  
Junior Research Associate -  
GB



**Gregory Worrell**  
Senior Technician - St. Croix



**Kurt Caviggia**  
Electronics Engineer-III -  
SOC



**David Debonis**  
Software Engineer I - SOC



**Jennifer Dugan**  
Mechanical Engineer III -  
SOC



**William Powers**  
Software Engineer II - SOC



**James Wenzel**  
Senior Technician - SOC

## FOR YOUR BENEFITS

### Moved, Married, New Baby, Graduation?

REMEMBER! Changes in your life and family can mean changes in your benefits coverages. The Human Resources/Benefits Office needs to know when any of the following occur:

- Change of address
- Marriage or divorce
- The birth or adoption of a child

- Dependent child turns 19
- Dependent student graduates or turns 25
- Dependent child or student gets married

If you do not notify Human Resources of these changes, you could be faced with lapses in coverage and overcharges in premiums. It is YOUR responsibility to notify the Benefits Office of changes in your status or that of your dependents. Premiums can not be refunded, so please take a few minutes to let us know when one of these events occurs.

## Misplaced Your Insurance Card?

If you need to replace your medical ID card for your CIGNA coverage please dial the following number:

**1-800-622-5579**

This number will take you to RxPrime's automated answering system. Due to HIPAA Privacy laws, you will be asked to verify and reverify various pieces of personal information. Please follow the steps given until you are asked to wait for a customer service representative. You can order your card from the representative at that time.

This is a fairly cumbersome process, requiring you to repeat information several times, but is done for the protection of your privacy.

If you have not set up an online account with CIGNA already, we encourage you go to <https://my.cigna.com> and do so. With the account, you will have access to your claim and summary information about your plan. Once your account is set up, you will have the ability to order replacement cards online. In addition, you will also be able to print a temporary CIGNA identification card.

If you have any questions, feel free to contact your local HR office.

## AUI SCHOLARSHIP WINNERS

Below are the winners of the 2004 AUI Trustee Scholarship competition. Each of these students will receive an award of \$3,500 per year, for four years, to aid in defraying expenses of their college education.

### Lindsay Rae Cryer

Lindsay will graduate from Socorro High School. Lindsay was chosen Who's Who Among American High School Student and a member of the National Honor Society. She has lettered in sports and is currently playing softball for the Lady



Warriors. Rodeo has played an active role in her life since she was four years old. Lindsay has won five saddles, and seventeen buckles. Lindsay has also won Socorro County Princess, and the Physical Fitness Award for 2003 Socorro Junior Miss. Lindsay has volunteered with the Socorro Boys and Girls Club, the Socorro Teen Court, and has given horse back riding lessons to younger children. Lindsay was recently chosen to represent Socorro as the first lady softball player to play in Australia for Team USA in July. Lindsay will attend the University of New Mexico majoring in Dentistry.

Lindsay is the daughter of Liz and Calvin Cryer. Liz works for ALMA as an Administrative Aide in Socorro.

### Tristine Hayward

Tristine will also graduate from Socorro High School. She is a member of the National Honor Society, the Drama Club and Student Council. She is very active in her Communication Science class, a full-credit course that develops skills in the mass media field.



Tristine has played a lead role over the past few years in many community events and public meetings produced by Communications Science, including the broadcast of City Council meetings over the local cable channel. In her spare time, she is an avid reader and considers herself an amateur Egyptologist. She hopes to one day visit Egypt and see its ancient ruins in person. Tristine will attend New Mexico Tech majoring in Engineering.

Tristine is the daughter of Bob and Liz Hayward. Bob is a senior Electronics Engineer in Socorro.

## Tristan Kerr

Tristan Kerr lives in Charlottesville and has been home schooled. He has pursued intense training in dual arts, dressage riding and painting. He has pursued painting for six years under the tutelage of a prominent local artist, and dressage riding with his instructor Patience Wadley. Tristan credits much of his high school academic level success to his local academic mentor. While completing home schooling, he began attending Virginia Commonwealth University (VCU) in Richmond, part time, to study printmaking. Tristan plans to continue his studies at VCU. ---



Tristan is the son of Tony and Tonya Kerr. Tony is a Senior Research Engineer in Charlottesville.

## Caroline McKean

Caroline will graduate from Pocahontas County High School. She has been a high school class officer and vice-president of the National Honor Society chapter. Caroline is an all-state basketball player and has played in the state tournament each of the past three years. She coach basketball team for three years. Caroline has participated in two state track meets. Caroline is an accomplished trombonist of eight years and is low brass section leader. Reading, mountain biking, snow and water skiing, swimming and design are her hobbies. Caroline will attend Marietta College majoring in Graphic Arts with minors in Leadership Studies, Journalism and French.



Caroline is the daughter of Bruce and Freda McKean. Bruce is an MIS Senior Systems Administrator in Green Bank.

## CONGRATULATIONS TO ALL!

### EAP IS FOR EVERYONE

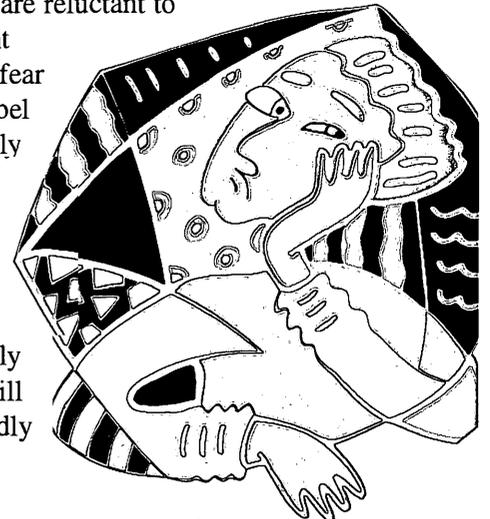
#### The Road To Well Being, Recognizing Depression

Depression isn't just a matter of "will power" as many used to think. It is a real illness with as severe an impact as any other illness.

Nearly 20 million people in the United States suffer from depression in any given year.

Despite the fact that 80 percent of those who get treatment for depression can return to the same level of health experienced prior to depression, two-thirds of those who suffer from it never get any treatment at all.

Some people are reluctant to seek treatment because they fear others will label them "mentally ill" or weak-willed. You should know that the myth of depression as being strictly a matter of will power is rapidly disappearing.



There is a growing awareness that depression is a real medical condition with a significant impact on one's mental and physical health.

Of course we all feel down in the dumps occasionally. That's a normal part of life. Many people choose to talk things out with close friends or family when feeling troubled or sad.

But if we're unable to shake the feeling of being down or blue, we may be on the slippery slope of depression.

How do you know if you're suffering from depression?

There are a range of signs and symptoms:

- ? Persistent sad, anxious, or empty moods
- ? Feelings of hopelessness or pessimism
- ? Feelings of guilt, worthlessness, or helplessness.
- ? An inability to enjoy once enjoyable hobbies or activities
- ? Decreased energy level
- ? Fatigued feeling
- ? Difficulty concentrating or making decisions
- ? Increased restlessness or irritability
- ? Inability to sleep
- ? Oversleeping
- ? Unexplained changes in appetite or weight
- ? Thoughts of death or suicide
- ? Unexplained aches or pains

Although these signs differ from person to person in how severe and long-lasting they are, if you or a loved one experience five or more of them for longer than two weeks, depression may be the culprit.

Left untreated, depression not only can lead to disruptions in family life, work, and relationships, it can also worsen — or lead to — other medical problems such as diabetes and cardiovascular disease.

Some warning signs of depression are obvious, and some are more difficult to detect. Other times they can be confused with other emotions or symptoms, especially if the person in question is suffering from another illness.

But it's best not to take unnecessary chances when it comes to depression.

The earlier depression is recognized, diagnosed, and treated, the better are the chances for recovery and a return to a healthy, productive life.



So reach out to us. We're a free resource that's available to help 24-hours a day, seven-days a week, either by calling our toll free number 1-877-622-4327 or online at [www.cignabehavioral.com](http://www.cignabehavioral.com).

You'll speak in complete confidence with a clinical professional who will listen to your concerns, answer your questions, and provide you the help and resources you need to get back on the road to well being.

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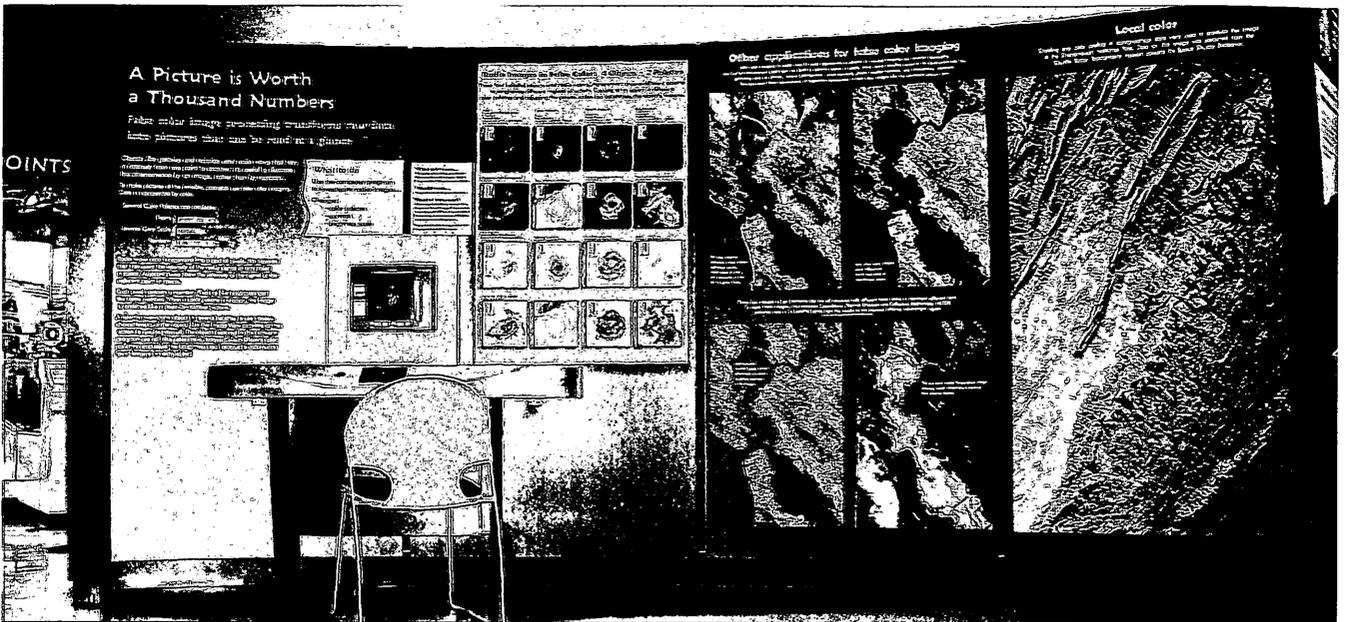
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Chuck Blue, Assistant Editor  
Patricia Smiley, Layout and Design

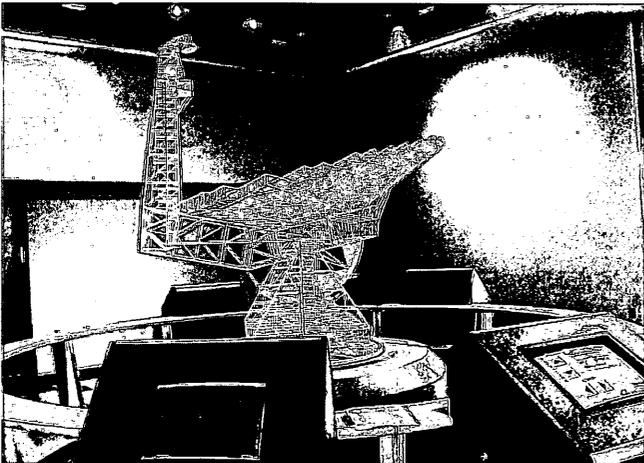
Articles or ideas for the Point Source newsletter are welcomed. If you would like to submit an article, please contact the editor at phone (434) 296-0265 or by email to: [rnorvill@nrao.edu](mailto:rnorvill@nrao.edu).

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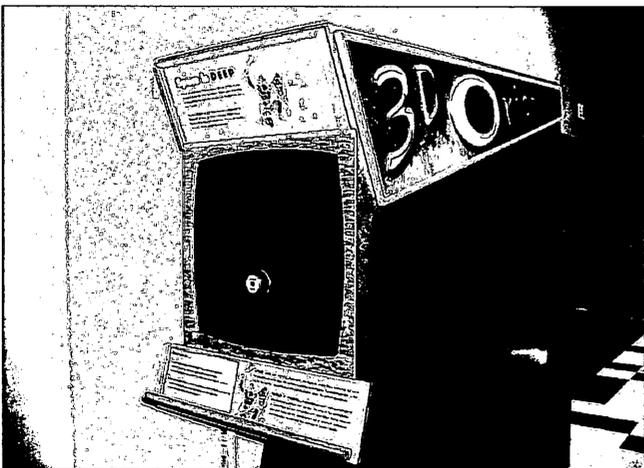
# PHOTOS FROM THE SCIENCE CENTER AT GREEN BANK



*Image Processing Exhibit: allows visitor to manipulate astronomy image data.*



*Working model of the Robert C. Byrd Green Bank Telescope.*



*3D Constellation of Orion*



*Cosmic Light House: Pulsar Exhibit*

*Photographer: Lee Shapiro, EPO*