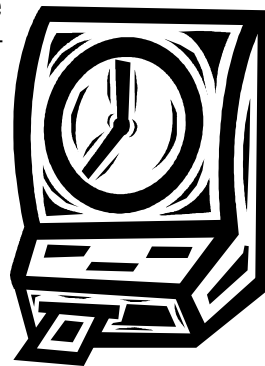


## ORION, Sandia

Payroll is seeing continued use of Personal Leave in the TimeCollection system when employees are taking personal time off. Employees need to use the PTO (Paid Time Off) charge code for any vacation or sick time. Personal Leave is a special charge reserved for those taking time off due to bereavement or taking time off to serve jury duty. Please take extra care to ensure you are using the correct charge codes on your timecard. This prevents changes to individual timecards and less work for payroll. If you have any questions regarding the use of these charge codes, please contact Brandy Marr at [bmarr@orionint.com](mailto:bmarr@orionint.com) or Yvonne Lovato at [ylovato@orionint.com](mailto:ylovato@orionint.com) or call the corporate office at (505) 998-4000.

[ylovato@orionint.com](mailto:ylovato@orionint.com) or call the corporate office at (505) 998-4000.



## A Warm ORION Welcome!

Welcome aboard to the following new members of our team:

### Los Alamos National Laboratories

Cynthia Cochran

### Eglin Air Force Base, FL

Michael Bennett

### Sandia National Laboratories

Andrea Coleman

Wayne Garcia

Karen Harden

Michael Montoya

Desiree Sandoval

Jim Sweet



2201 Buena Vista Drive SE, Suite 211  
Albuquerque, NM 87106  
(505) 998-4000

[www.orionint.com](http://www.orionint.com)



### FOURTH OF JULY FACTOID

Americans celebrate the independence of our country from British colonial rule every July 4th, beginning in 1776. However, Americans did not actually gain independence this day, as it was not officially granted until September 3, 1783 when King George III and US Leaders signed the Treaty of Paris.



# the Observatory

Volume 3—No. 5

Where Stars Are Born

July 17, 2007

## ORION, Washington, D.C.

The Tactical Aircraft Directed Infrared Countermeasures (TADIRCM) system is a Naval Research Laboratory Project that ORION has strongly participated in over the last several years. This system will be used by the Navy and Marines as a countermeasure to enemy missiles. ORION has worked extensively with system engineering and testing of the TADIRCM System.

### TADIRCM System

The TADIRCM System was developed at Naval Research Laboratory (NRL) between 2002 and 2006. The ORION Team (including Hartwood Engineering) participated in the system engineering necessary to bring together the components of the pod.

### China Lake Flight Tests

Five flight tests took place at China Lake between March 16–23. These tests were carefully planned to assess the performance of the pod under a variety of conditions. ORION personnel (Keith Strothers, Rick Cellucci, Joe Schlupf, Bryant Nichols and Kevin Pick) supported the test effort.

The first flight was largely a dry run to verify the operation of the pod on the F/A-18 at VX-31 China Lake.

During the next three flights, missile simulators (large propane burners) were ignited at known times using stopwatches and radio synchronization. Incoming laser energy was recorded a laser measurement device inside a missile simulator. A variety of actual missile seekers (also collocated with the missile simulators) were cued on the aircraft during flight, and were



effectively jammed by the laser energy. The aircraft was flown using a variety of altitude and airspeed combinations.

The final flight was for data collection over Los Angeles. Urban clutter data is always desirable for further study (e.g., missile insertions), and LA was a perfect choice.

### System Operator Responsibilities

ORION personnel were responsible for the operation of the pod during the flight tests. These responsibilities included preparing the system the night before flight, establishing telemetry links when the pilot enabled system power, performing the power up checklist, verifying proper operation of all systems, determining go/no-go criteria, and releasing the pilot to start the mission.

During the flight, our test team was responsible for monitoring the telemetry for problems and immediately correcting them when possible. Serious problems during flight required a quick team consultation to determine the course of action. ORION personnel were also responsible for ensuring the data recorder was functioning, and shutting it down properly at the end of the mission.

After each flight, ORION personnel were responsible for downloading the 245 Gigabytes of data to external drives. It was then copied to a server so the data analysts could get to work as soon as possible.

### System Performance

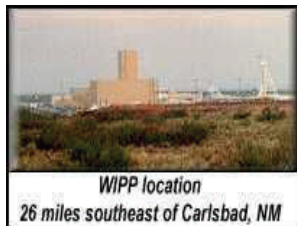
The system successfully jammed all of the missile seekers under a variety of flight conditions. The data recorded by the system will be used for a variety of purposes for years to come.

Independence Day is Wednesday,  
July 4, 2007

## ORION Employees' Corner

ORION wants to share our employees' valuable work. An employees' work experience will be featured in each newsletter. With your manager's permission please share your current project with everyone at ORION.

The Waste Isolation Pilot Plant (WIPP) is the world's first underground repository licensed to safely and permanently dispose of radioactive TRU waste left from the research and production of nuclear weapons. Located in the remote Chihuahuan Desert of Southeastern New Mexico, project facilities include disposal rooms mined 2,150 feet underground in a 2,000-foot thick salt formation that has been stable for more than 200 million years.



ORION employee, John Unyong Moon is currently located at the LANL-Carlsbad Site Office. He supports the Waste Isolation Pilot Plant (WIPP) as a Senior Technical Advisor to the Department of Energy (DOE) Carlsbad Field Office (CBFO). His recent work involves reviewing variety of DOE Environmental Management (EM) Sites (i.e. Oak Ridge Site, Savannah River Site, Nevada Test Site, Los Alamos, Hanford, etc.) for effective and efficient waste packaging, characterization, and operation of nuclear waste. John also supports DOE-CBFO and DOE-EM Sites on difficult-to-dispose legacy nuclear waste. His recent support includes shielded Transuranic (TRU) container, remote-handled (RH) TRU waste characterization process, Oak Ridge RH-TRU waste process, high activity TRU waste disposition, difficult sources from Office of Source Recovery (i.e., PuBe, lithium, etc.) In working with TRU waste, tremendous amount of effort must be placed prior to burial at

ORION Technical Resources recently transitioned its payroll from Automatic Data Processing (ADP) to the ORION payroll department. Payroll was very cautious in this process and mirrored the existing payroll structure in ORION's system for several payrolls. In running a dual process, Payroll noticed a slight difference in the computation of payroll taxes, most likely due to pre-

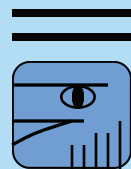
paring payroll with a different software program. ORION Technical Resources employees' first internally prepared pay stubs were mailed out on June 6th, 2007. Please review your pay stubs for the month of June and report any discrepancies to Jennifer Smith at (505) 998-4000.

WIPP. Historical information, inspection, packaging, assaying must be audited under a WIPP certified program, EPA, and New Mexico Environmental Division. In addition, TRU waste packaging must first obtain Nuclear Regulatory Commission; and prior to shipment, the DOT requirements must be met. So far, over 5,800 nuclear shipments have been made with disposal of over 48,500 cubic meters of TRU waste at WIPP. John is well prepared in his position. He has a BSE and MSE degrees in Nuclear Engineering, a MBA degree, and almost 20 years of experience in project management, nuclear operation, nuclear safety, nuclear instrumentation, regulations, and waste characterization and disposal.



"Talent is what you are blessed with. Skill is how you take care of the gift."  
— Ben Holden

## Contact Us



**Program Management**  
Joe Barfoot  
Program Manager, SNL  
jbarfoot@orionint.com

Sharon Potter  
Program Manager, LANL  
spotter@orionint.com

Robert Hester  
Eglin Air Force Base, TEAS  
robert.hester.ctr@eglin.af.mil

Hal Meisterling  
Kirtland AFB, TEAS  
harold.meisterling.ctr@kirtland.af.mil

Marc Tripp  
Alexandria, VA  
trippm@raveninc.com

Everett Heinonen  
Kirtland AFB, AFOTEC  
everett.heinonen@afotec.af.mil

**Recruitment**  
Paula Whittlesey,  
Senior Technical Recruiter  
pwhittlesey@orionint.com

**Security/Clearances**  
Rito Castañeda  
Facility Security Officer  
rcastaneda@orionint.com

**Human Resources**  
Kim Smith ksmith@orionint.com

Jennifer Smith  
jsmith@orionint.com

## Notices



If you wish to submit an article for The Observatory, the deadline for submissions is the 15th of every month. Email articles to Brandy Marr, bmarr@orionint.com. Photographs are encouraged with your submissions. For more information, please contact Brandy Marr, (505) 998-4000.

Brandy Marr, bmarr@orionint.com, is still taking RSVP's for the upcoming ORION Summer Event at the Albuquerque Zoo. Please contact Brandy by July 20, 2007 to reserve your spot. We need to know the number of people in your party and the ages of any children attending with you. We hope to see you there!

## Anger Management

Courtesy of The Solutions Group, ORION's Employee Assistance Provider (EAP)

### What Is Anger?

Anger is a natural human emotion that prepares and enables us to attack a perceived threat. Anger is not a bad emotion, but we must learn to control it. Mismanaged anger is a major cause of conflict in relationships at home and at work. Violence- in the home, at work, and on the road - is the most severe consequence of mismanaged anger.

### Controlling the Response

Although aggression is a natural response to anger, society requires us to manage it. Many of us do not learn this well while growing up. As a result, anger is often mismanaged in response to life events. We then experience more harm from these events than they would otherwise cause. Fortunately, we can change the way we react to unpleasant events and gain control over anger and rage. Rage is an explosive, violent response to anger and is typically disproportionate to the distress of the precipitating event.

### The Nature of Anger

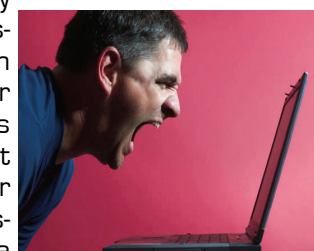
Anger can emerge from external stimuli or internal thoughts about things we perceive as threats, whether real or imagined. Memories of traumatic events that caused rage can also trigger angry feelings. Without life skills to manage anger, it is easy to feel powerless over it.

### Getting a Grip on Anger

Most techniques for managing anger fall into these three categories: suppression, expression and intervention. Each has its unique benefits. *Suppression* is the practice of consciously inhibiting the expression of anger. *Expression* entails talking about angry feelings to reduce their intensity. *Intervention* seeks to reduce anger by changing the way you think or react to anger producing events.

### Do You Need Help?

If you have a problem with anger, you probably already know it. You may respond to negative situations with uncontrollable rage. You may say or do things that frighten yourself and others. Perhaps you have physically hurt someone or come close to doing so. You may not trust yourself to act appropriately and control your temper. You may overuse suppression to prevent feeling anger, and as a result, risk having an explosive event. Feeling out of control is a sign that more help is needed.



### Try This Intervention Tool

The following is a simple intervention tool to help you gain control over your anger in response to a recurring provocative event. Try this to see if it helps:

Instructions: Reproduce the anger management tool 10 times. Each time you experience the event that produces anger, fill out the sections of the tool. As time goes by, you may experience diminishing anger responses to the event.

### What the EAP Can Do

If you are concerned about the way you manage anger, or have experienced difficulties because of your anger, the EAP may be able to help. Contact the Solutions Group at 1-866-254-3555 for a free assessment and assistance.

First sign I was angry	
What triggered it?	
How did I respond to this event?	
What did I do well last time?	
What will I do better next time this occurs?	

"There are no shortcuts to any place worth going."

— Beverly Sills