



President's Place

It's already past the 4th of July and I don't know where the summer has gone. I hope everyone is having a good summer and your family vacations are fun and safe.

I am sure that Bill Stanley will provide more detail in his article but Philotechnics has just been awarded our first major Department of Energy (DOE) award since we made the decision to aggressively pursue more government contracting opportunities. This award provides a contracting mechanism for all DOE facilities and their prime contractors for most of their low level and mixed waste streams. Philotechnics has put together and leads a team of the best waste processing companies in the country to allow us to provide the most effective processing options to DOE.

Many of you know that we have just completed the preparation and submis-

sion of our proposal to provide D&D and construction services to the NRF in Idaho. This proposal involved many hours and the participation of several people from Idaho and Oak Ridge. Unfortunately; we will not know the outcome of this before this newsletter goes to press. I do want to say that in my opinion this was the most professional looking proposal ever prepared by Philotechnics. Everyone who assisted with the preparation of the written proposal and the presentation of orals can take pride in the work they did.

On the commercial front, it looks like there are signs of economic improvement and we are beginning to see customer interest in beginning new decommissioning projects after almost a year of inactivity. Our Eastern HPO group was awarded two pharmaceutical decommissionings that will start the end of July. San Diego continues

to keep busy with several projects and anticipates starting a large decommissioning involving major excavation and soil disposal later this year.

PES continues to add new customers throughout the country and our San Diego based brokerage gets busier every month.

Our accounting group has been pulling double duty for some time. In addition to completing our year end closing and audit they have supported all of our major proposal efforts and been subjected to DCAA audits of several proposals.

It looks like Philotechnics will be busy throughout this year. Thanks to everyone for your contributions. Because of your efforts, more companies and government agencies are aware of the tremendous capabilities we offer.

Special points of interest:

- Birthdays
- Anniversaries
- Philo in the Community
- Summer fun in TN
- Philotechnics' People

Inside this issue:

Government News	2
PES News	3
ECF News	3
Social Engineering	4
HPO Happenings	8
Save Money With Exercise	9
Safety	10

Government News (submitted by Charles Stanley)

Philotechnics is awarded a major DOE contract

We are excited to announce that Philotechnics, Ltd. has been awarded the **DOE Radioactive Waste Treatment and Bulk Survey for Release** contract (DE-AM30-10C60041).

The scope for this contract is to provide waste treatment services throughout the DOE complex and can be used by all DOE site offices and their prime contractors. Philotechnics is leading this team, which includes IMPACT Services, Waste Control Specialists (WCS), and TOXCO. This is a unit rate contract that includes 15 line items that address different treatment techniques for various waste streams.

“Philotechnics is thrilled to win this contract and lead this team of superior processing and disposal firms

to bring cost effective treatment options to DOE.” said Andy Armbrust, President of Philotechnics. “Our combined resources provide nationwide coverage and technical capabilities to address every line item in the contract.”

For additional information regarding this contract, please contact C. W. Stanley at cwstanley@philotechnics.com, (865) 285-3025.

Gulf Oil Spill Cleanup Support

We are providing personnel and expertise to support the Gulf Oil Spill Cleanup response effort. Philotechnics is providing personnel to support Dade Moeller with water sampling receipt and field data verification. This includes resupplying sampling

teams that sail into the gulf to sample the oil spill, accepting the samples when the teams return and re-packaging the samples for final laboratory shipment. Our personnel are working out of eleven locations along the gulf coast from Texas to Florida.

This is our first project supporting disaster response activities. This work will gain us the experience to support future emergency response efforts.

BMPC Proposal

Philotechnics recently submitted the technical and cost proposal for the combined D&D and Construction contract for the Naval Reactors Facility in Idaho. We are the prime on this proposal, teamed with North Wind, and supported by Northrop Grumman.



Philo in the community

From Left to right: Kris Love, Ron Day & Marisa Lykins pose for a picture with Meghan Turvey & Andrew Armbrust after being presented a \$2,500 donation to Life 88.3, a Christian radio station in Knoxville, TN. Andy & Meghan were treated to a tour of the building and learn a little more about the diversity and history of the station. All the members at Life 88.3 want to thank the Philotechnics employees for such a generous donation.



PES News (submitted by Annette Hansen)

It's a busy summer schedule for PES from the East to the West Coast. As I write this article, we are in a middle of a West Coast milkrun that will once again require a second truck to accommodate the load. Kudos to Tom Klett and the CA Team for generating new and increased business on the West Coast. On the heels of the West Coast run, we have a Midwest and Northeast run, as well as special projects in between.

During the week of June 14, PES staff gathered at the Horizon Center for annual DOT Training. Although DOT regulations

require retraining every 3 years, PES performs annual training to ensure everyone is up to date on the latest changes in DOT regulations, as well as a refresher of our PES and GET Procedures. Some folks were also re-trained in IATA regulations which covers any materials shipped by air. Annual Radworker Training was held back in March courtesy of Glenn Marshall.

On May 5-6, Philotechnics was audited by Harvard University and I am pleased to report that as a result of the audit, we have signed an agreement to provide Waste Brokerage

Services for the University. We completed our first pick-up which included both mixed and low-level radioactive waste in early June in conjunction with a LLRW shipment from Yale University. Who would have ever expected Don Hartje to attend both Harvard and Yale in one week! Congratulations to all who have worked diligently to put this contract into place.

In addition to Harvard, we were recently awarded the re-bid for the University of Minnesota, and a shipment specific bid for the University of Georgia.

ECF Happenings (submitted by Tim Walsh)

The year 2010 has brought about many milestones for Philotechnics. Among the ongoing projects currently being worked is the continued support of Philotechnics engineering for the Lifting & Handling group. Philotechnics is keeping busy at NRF by removing and replacing one crane after another after another. The new ECF rigging loft project is just the next step in continuing to enhance the presence of Philotechnics as a complete design and production company. Philotechnics keeps climbing upward with the continual staircase design and build projects (four so

far) in support of fire protection upgrade of NRF facilities. Ongoing work also includes bringing light to the NNPP with a continuous facility lighting upgrade and the installation of a nuclear grade floor. This spring in Idaho has really been one to remember with the design and installation of a roof access hatch that brought better seasonal rainfall to Idaho than has been seen for many years. From all of the farmers in Idaho, thank you Philotechnics, may Lake Powell never run dry! Looking forward to the future, Philotechnics expertise is once again

going to return to the water pits for process support work. The engineering group is also involved in a seismic upgrade to ECF.

As of this writing, Philotechnics has worked over 385 days at the NRF facility without an OSHA recordable injury. Considering the types of high risk work we do here, this is quite an accomplishment. We marked our 1 year anniversary with a safety celebration and BBQ lunch was provided to all hands as a showing of appreciation for their dedication to our safety culture. Finally, *Continued pg. 8*

Social Engineering (submitted by Fred Simpson)

Recently, Philotechnics employees have been receiving many fraudulent e-mail messages that use "social engineering" in an attempt to get you to click on a link or download and install an attachment, all designed to get you to give up personal or corporate information.

While our corporate computing systems are protected from virus infection by hardware firewalls and virus scanning software, we are unable to rely on these preventative measures as these types of e-mail messages attempt to bypass our firewalls and virus scanning software by directly targeting the users.

In order to help you better understand "social engineering" and how to combat it, I have included the following excerpt from the Microsoft Online Safety site.

The full article may be found at: <http://www.microsoft.com/protect/terms/>

What is social engineering?

[socialengineering.aspx](http://www.microsoft.com/protect/terms/socialengineering.aspx)

Online criminals can use sophisticated technology to

try to gain access to your computer, or they can use something simpler and more insidious: social engineering.

Social engineering is a way for criminals to gain access to your computer. The purpose of social engineering is usually to secretly install spyware or other malicious software or to trick you into handing over your passwords or other sensitive financial or personal information.

Some online criminals find it easier to exploit human nature than to exploit holes in your software.

Types of social engineering

There are several types of social engineering you should be aware of:

- Phishing
- Spear phishing
- E-mail hoaxes

Do not reveal any personal information in e-mail or online unless you know who you are dealing with and why. Additionally, make sure you are in a secure environment: that's the key to help you avoid any type of attack.

Phishing: Fraudulent e-mail messages and Web sites

The most common form of social engineering is the phishing scam. Phishing scams employ fraudulent e-mail messages or Web sites that try to fool you into divulging personal information.

For example, you might receive an e-mail message that appears to come from your bank or other financial institution that asks you to update your account information. The e-mail message provides a link that appears to go to a legitimate site, but really takes you to a spoofed or fake



Web site.

If you enter your login, password, or other sensitive information, a criminal could use it to steal your identity.

Phishing e-mail messages often include misspellings, poor use of grammar, threats, and exaggerations. For more information about phishing, see [Recognize phishing scams and fraudulent e-mails](http://www.microsoft.com/protect/yourself/phishing/identify.mspix) at <http://www.microsoft.com/protect/yourself/phishing/identify.mspix>.

If you think you might already be a victim, see [What to do if you've responded to a phishing scam](http://www.microsoft.com/protect/yourself/phishing/remedy.mspix) at <http://www.microsoft.com/protect/yourself/phishing/remedy.mspix>.

Spear phishing: Focused attacks that seem to come from people you know

Spear phishing is any highly targeted e-mail scam; but they usually are

employed in a business environment.

Spear phishers send e-mail messages that appears genuine to all the employees or members within a certain company, government agency, organization, or group.

The message might look like it comes from your employer, or from a colleague who might send an e-mail message to everyone in the company, such as the head of human resources or IT. It might include requests for user names or passwords or might contain malicious software, like a trojan or a virus.

Spear phishing is a more sophisticated type of social engineering than phishing, but the techniques you can use to avoid being fooled are the same. For more information, see [Spear phishing: Highly targeted e-mail scams](http://www.microsoft.com/protect/yourself/phishing/spear.mspix) at <http://www.microsoft.com/protect/yourself/phishing/spear.mspix>.

E-mail hoaxes: Look out for easy money promises

E-mail hoaxes come in many different forms, ranging from a scam that requests your help getting money out of a foreign country (often Nigeria) to a promise that you've won a lottery.

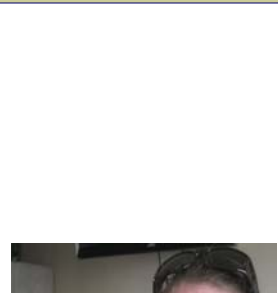
The common element is that you're usually promised a large sum of money for little or no effort on your part. The scammer tries to get you to send money or reveal financial information that they can use to steal your money or your identity, or both.

For more information, see [Spot and avoid advanced fee fraud](http://www.microsoft.com/protect/yourself/phishing/hoaxes.mspix) at <http://www.microsoft.com/protect/yourself/phishing/hoaxes.mspix> and [You have not won the Microsoft Lottery](http://blogs.msdn.com/securitytipstalk/archive/2006/12/22/you-have-not-won-the-microsoft-lottery.aspx) at <http://blogs.msdn.com/securitytipstalk/archive/2006/12/22/you-have-not-won-the-microsoft-lottery.aspx>

Did you know?

The United States is the country most targeted by phishing attacks.

Summer Fun in TN



"Summer afternoon... Summer afternoon...the two most beautiful words in the English language".

-Henry James

Birthdays

April		May		June	
Jennifer King	4/2	Grant Homer	5/17	Bradley Cordon	6/2
Garth Turpin	4/2	Meghan Turvey	5/18	Robert McIntosh	6/2
Chris Brown	4/6	James Stratton	5/20	Skip Barton	6/5
Wilford Terry	4/9	Michael McGhee	5/23	Dale Davis	6/11
Michael Macbeth	4/9	Walter Henicksman	5/29	Suzanne Reynolds	6/20
Jeffery Powell	4/12			James Hembree	6/20
David Garton	4/13			Tim Pratt	6/21
Stephen Hammond	4/14			Delmar Bronch	6/29
Pat Woodworth	4/15				
Eric DeNault	4/17				
Peter Lewis	4/24				
Clint Gneiting	4/28				

Anniversaries

April	May	June
Suzanne Reynolds 4/2/07	William Button 5/1/81	Brian Morris 6/1/98
Kim Christiansen 4/14/08	James Jaspersen 5/2/94	Pat Woodworth 6/2/97
James Gibson 4/14/08	Brian Larsen 5/4/09	Heather Cage 6/2/08
Jeffery Powell 4/14/08	Robert McIntosh 5/12/03	Jared Payne 6/4/07
Wilford Terry 4/16/07	Jacob Campbell 5/12/08	James Doig 6/6/05
Jason Chapman 4/20/09	Patty Seiber 5/14/01	Quinton Gneiting 6/6/05
Donald Empey 4/21/08	Michael McGarvey 5/19/03	Amanda Wagner 6/6/05
Frank Rodriguez 4/21/08	Robert Trimble 5/22/05	Vernon Watson 6/7/99
Rodney Severin 4/23/07	Bradley Wilding 5/22/06	Robert McNabb 6/8/09
	Margaret Donato 5/26/92	Amanda Brown 6/11/07
	Garth Turpin 5/27/97	Meghan Turvey 6/14/01
	James Hembree 5/30/06	Troy Staggie 6/18/07
		Joyce Marsalis 6/19/06
		Danny Hayes 6/23/04
		Chris Smith 6/23/08
		James Liddle 6/25/08
		Chris Brown 6/25/08
		Robert Pastor 6/27/83
		Tim Morris 6/30/08

Philotechnics' People



David DeLaCruz demonstrates the correct way to don PPE during Radworker Training (held in March 2010)

HPO Happenings (submitted by Robert Trimble)

In an effort to increase the efficiency of the Health Physics Group, Andy has made an organizational change by splitting the group into two geographical regions. Tim Pratt will be managing East Coast operations with Ryan Fahey and Justin Button reporting to him and Bob Trimble will continue to manage the West Coast operations with the assistance of Dave Aguero and Doug Bassett. This move will cut down on travel and streamline operations by providing our clients with a single contact point on each coast. Glenn Marshall will continue to provide support and oversight to both offices.

While the majority of the country is suffering from an intense heat wave, here in San Diego we are setting records for lowest high temperature. We typically have a strong marine layer during late spring/early summer which keeps us cool and cloudy; the locals

refer to it as “May gray” and “June gloom”. Unfortunately these seasonal weather patterns have carried into July and we have yet to hit the 70 degree mark this month. The low pressure system responsible for the cool weather should weaken soon and once again we should have our typical sunshine in Sun Diego.

This gloomy weather has not dampened our enthusiasm. We recently completed three large decommissioning projects which stretched our capabilities and forced each one of us out of our comfort zones. These projects have provided new opportunities for our group: Dave Aguero has gained valuable project managing experience while Doug Bassett continues to wear many hats including Waste Broker, Driver and HP Technician. We are currently spending our time writing decommissioning plans for two remediation projects and will be back

out in the field to support large projects scheduled to take place in Palo Alto, CA, Collegetown, PA and Princeton, NJ.

During our off time we are all trying to take advantage of the long summer days. Doug has decided to enroll in a wood working class provided by a local community college. This decision was motivated by his teenage son, Christophe, who is interested in becoming a Luthier. For those who don't know, a Luthier is someone who makes or repairs stringed instruments. Dave is enjoying his time with his two twin boys, Isaac and Issiah and they are currently in Las Vegas visiting relatives. I recently took part II of the Certified Health Physicist exam in Salt Lake City and am recovering by trying to improve my golf game. Let's just say I hope I did better on the test than my recent efforts on the golf course.

Did you know?
June Gloom (sometimes May Gray) is a Southern California term for a weather pattern that results in overcast skies with cool temperatures during the late spring and early summer in the mornings and afternoons.

...Continued from pg. 3

Philotechnics wishes to extend congratulations to Jeff Powell of Idaho Falls for being appointed our new Engineering Manager, to Bily Fullmer for passing the Civil portion of the Professional Engineering (PE) exam and to Dan Pierce, our QA/Training Manager

for passing the American Welding Society (AWS) Certified Weld Inspector (CWI) exam.

Save Money With Exercise (submitted by Joyce Marsalis)

Research shows that physical activity can help you spend less on your health care.

Save as much as \$1,200 a year on medical costs

A sedentary lifestyle is one of two lifestyle costs that directly lead to higher medical costs, according to a study conducted through a large U.S. health plan and published in the March/April 2009 **American Journal of Health Promotion**. Medical costs can be almost 1½ times higher for inactive adults – at least \$1,200 more on average annually.

Spend fewer days in hospital and with your doctor

Research shows that inactive people spend more time in hospitals, need more doctor visits and use more specialist services than do physically active people.

How active you are makes a difference

More physical activity equals lower health care costs, the American Journal of Health Promotion study shows. According to this research, sedentary adults spend \$5,584 a year on health care, while people who exercise one to four days a week spend \$4,442 a year and people who are active five or six

days a week spend \$3,594.

With regular exercise you may improve:

- How well your heart, lungs, and immune system function
- Your muscle mass, strength, power and function
- Your sleep quality
- How well you manage your blood sugar levels if you have type 2 diabetes

Your thinking, learning and judgment skills as you age

With regular exercise you may lower your risks of:

- Heart disease, stroke, high blood pressure, type 2 diabetes and high cholesterol
- Several types of cancer, including breast, colon, endometrial and lung
- Gallstones
- Depression and anxiety

Cognitive decline

With regular exercise it may help you:

- Lose weight and keep it off
- Slow the loss of bone density that comes with age

- Better manage arthritis and other conditions that affect the joints

Quit smoking when you combine physical activity with a cognitive behavioral smoking cessation program.

Aim for at least 10 minutes of activity at a time and a total of at least 150 minutes a week of moderate-intensity aerobic activity.

Physical activity is an important way you can improve your health and lower your medical costs.

Remember, any extra physical activity counts!

“Lack of activity destroys the good condition of every human being, while movement and methodical physical exercise save it and preserve it”.
–Plato



Safety (submitted by John Caudle)

This just in from the Safety Department... it's hot outside. I'm guessing everyone is well aware of that these days. I would say that even the Devil is talking with Al Gore, Jr about his concerns with the global warming trend. I think the last two weeks are about the hottest I remember since my days of high school football two-a-days back in Arkansas. That was when only wimps drank water during practice. Those policies are not recognized in the Philotechnics community.

I've been supporting a Dept. of Energy environmental well drilling contract since Sept. 09 so I was able to experience one of the coldest TN winters in a few decades and so far we are experiencing a very warm summer. Heat related illnesses are something that we have to stay very aware of. They can "reach out and touch us" without much warning if we aren't staying alert to ourselves and those around us.

In an article at EHS Today (<http://ehstoday.com/health/news/heat-stress-affects-performance-7791/index.html>) they talk about how heat stress can impact your ability to function properly from a mental and physical standpoint.

HOW THE BODY RELEASES HEAT

Sixty-five percent of the body's heat is released through radiation. This occurs when ambient air temperature is lower than the body's skin temperature. Radiation is the movement of heat energy from a warmer object to a cooler object, such as when heat radiates from the sun to the earth.

Convection accounts for approximately 10 percent of heat loss. Convection is the transfer of heat energy from a warmer object or space to a cooler object or space through differences in density and the action of gravity.

Approximately 23 percent of heat loss is due to evaporation of perspiration from the skin. Evaporation is the cooling of a surface through the process of a liquid changing to a vapor and leaving that surface. Conduction will add another 2 per-

cent to the heat loss total. Conduction is the transfer of heat energy from a warmer object to a cooler object through direct contact.

When the ambient temperature of the surrounding air is 95 F or higher, radiation, convection and conduction stop working. Evaporation is all that is left to cool the body. Protective clothing used by welders, firefighters, racers and hazmat workers will make the heat situation even worse.

A performance study by NASA using telegraph key operators showed that in temperatures of 80 F, the operator will make five errors an hour and 19 mistakes after 3 hours. At 90 F, the operators made nine mistakes per hour and 27 after 3 hours. At 95 F, the mistakes went to 60 in 1 hour and 138 in 3 hours. Although errors made by telegraph key operators may not be critical, this same hot environ-



ment will produce a proportional amount of errors regardless of the task.

When a person is in a hot environment, up to 48 percent of the blood is pumped by the heart to the skin for cooling. The first effect is to release heat, but water also is released through perspiration. If an individual loses 2 percent of body weight due to perspiring, that person is considered to be in a heat-exhausted state. A study by Wasterlund and Chaseling¹ placed forest workers in a controlled environment, where one group was properly hydrated and the other group was dehydrated to an extent of 1 percent of body weight loss. The test included the time taken to debark and stack 2.4 cubic meters of plywood. They found a 12 percent decrease in productivity from the dehydrated group.

Another study by Gopinthan et al² focused on mental

performance and the effects of dehydration on the decision-making process and could be related to an increase in work-related accidents. The study concluded that with 2 percent of body weight loss, visual motor tracking, short term memory, attention and arithmetic efficiency all were impaired. In the extreme, the study notes that a 23 percent reduction in reaction time occurred with a 4 percent body fluid loss.

As most of us have learned throughout the years, we don't react as well when we are stressed from heat. Our attitudes change and our bodies don't really like when they have to work hard to support our job while also having to overcome heat and a lack of hydration. With the drain on our mental state it makes it all the more important to keep and eye on each other to ensure that no symptoms of heat stress go unnoticed. This extra strain on our concentration can lead to an increase in injuries.

Philotechnics had a great

year last year with our injury performance and is doing quite well this year. I believe alert employees that work as a team has a lot to do with that performance and will help us maintain the standard we've established. Let's continue this quality work.

Regards,

John Caudle

Philotechnics, Ltd.

2328 Bluff Road
Harriman, TN 37748
Newsletter edited by:
Stephanie Button

Phone: 888-RADWAST
Fax: 865-220-0686
E-mail:
hrphilo@philotechnics.com

We're on the web!
www.philotechnics.com

