

# Network Noise

Volume 5, Issue 1

Terry Christie, Editor

February 2000

## Pantex CAS – Final Entry

*Bob Von Eschen, Pantex*

On January 24 I was reassigned to take over the Predictive Maintenance effort. All technical inspection deemed Engineers selected from the Facility Division would perform necessary. The original CAS schedule is expected to be cut to 10% for only Safety Critical Facilities. I am sorry and saddened to bring this report, as we have worked hard to keep the CAS function alive. My phone number will remain (806) 477-3303 and my e-mail address [rvonesch@pantex.com](mailto:rvonesch@pantex.com) will stay the same. I plan to join you on the monthly conference call, when I get a chance.

Note: Pantex has a new General Manager. Dr. Ben Pelligrini of Day and Zimmermann have replaced Dr Bill Weinreich. We are holding out some hope that the new organization will include a renewed CAS Inspection effort, but it doesn't seem likely.

## Brookhaven

*Michael Paquette, Brookhaven*

Brookhaven has decided to use outside contractors to help augment its facility inspection program, at least until a complete cycle is accomplished. We are presently interviewing several contractors and asking them to follow CAS methodology in their inspection approach. Furthermore, we are asking them to deliver their final produce in a software program that we will be able to use in the future and update costing reports for major deficiencies. Keith and I will still be here coordinating contractor activities and feeding the findings into various databases including FIMS, Deferred Maintenance and the computerized Maintenance Management System. Brookhaven CAS team will continue to support upper management assignments, conduct their inspections with various divisions on site, and conduct surplus equipment and excess building inspections. Upon completion of one full inspection cycle, Brookhaven management will reevaluate the findings to determine the most cost effective way to proceed with future facility inspections.

**We make a living by what we get,  
but we make a life by what we  
give.**



## Facility Management, Surveillance, Inspection and Testing

*Jane Nations, ETPP CAIS Administrator*

The Facility Management, Surveillance, Inspection and Testing (FMSIT) subcontractor officially assumed responsibility for the Surveillance program at ETPP on December 13, 1999. The contract was awarded to American Technologies, Inc. (ATI). A portion of that contract included the Deferred Maintenance and Facility Status Review programs. ATI awarded the FSR/DM activities to Commodore Advanced Sciences, Inc., who has contracted our services through CDI. When considering Commodore's acronym, it is only fitting that they should be part of the 'CAS' team!

All of the existing CAS inspection team has transitioned to the FMSIT contract, and we are very excited about the future prospects with our teaming partners. The transition is going very well, with everyone working to resolve 'growing pains'. The contract stipulates for inspections to progress in the same manner as before, with the only visible change being made to the location of our web pages and associated data. We anticipate the move to be finalized in the next few weeks, and hope to have the new address by the next issue of the Network Noise.

## WIPP Condition Assessment Surveys (CAS), Capital Assessment Management Process (CAMP)

*Ed McGary, WIPP*

The CAS Group annually inspects a total of (86) facilities including the WIPP Waterline and the Underground Grounding Inspection. Also inspected are (114) pieces of plant and capital equipment. These facilities consist of permanent structures and

trailers; equipment consists of capital, essential, and balance of plant equipment. Deficiencies found during the inspection process are now grouped into three areas (Safety), (Landlord), and (Significant Items). This grouping process fine tunes deficiency identification and eliminates redundancy making it easier to prioritize items needing repairs. The CAS Group also does special inspections when requested by such groups as VPP, Engineering, Operations, Life Safety Code Committee, Pre-MSHA, OSHA Inspections and Property. In summary the CAS Group provides a snapshot of the current condition of DOE assets while providing a budgeting tool (costing reports) that can be utilized for allocation of funding needed for maintenance repairs. The asset conditions are fed to the Engineering Construction Management Group, which is in charge of the ICAMP Report, based on condition findings and other sources, projects, are prioritized and scheduled for completion. The CAS Group has saved the company money by way of identifying deficiencies before they become fines and ensuring that the site stays in world-class condition.

The following is a breakdown of the square footage within our security fencing by type of facility:

**Existing Site Surface Facilities**

- Permanent Facilities (site)  
240,420
- Trailer Facilities (site)  
34,256

**Existing Leased Facilities**

There is one facility being leased in town that provides 9000 square feet of space.

- Leased Facility (town)

**Existing Underground Facilities**

The Underground Facility contains an area of 534,336 square feet of space.

- Underground Facility located at a depth of 2150 feet below ground level.

The following attachment is an example of one of our in house developed databases that we use for our facilities for information purposes.

**FACILITY STATUS FORM**

**FACILITY NUMBER** 200 **DATE OF INSPECTION FY99** 9/30/99

**DESCRIPTION** WIPP WATER LINE **DATE CAS REPORT COMPLETE** 11/8/99

**TRAILER**  **PICTURE**  **SITE MAP**  **CLOSE OUT DATE IN CHAMPS** 11/11/99

**BUILDING**  **CAS INPUT AND COST SUMMARY COMPLETE DATE** 12/8/99

**LANDLORD** JONES S **FY99 CONDITION** GOOD, CAIS INPUTS WERE NK

**ALTERNATE LANDLORD**  **NOTES** ANNUAL FAC INSP SAME TYPES OF DEFICIENCIES AS L

**LEAD INSPECTOR** MCGARY E **COGNIZANT ENGINEER** BILL BARNHART

**OCCUPIED** N **COGNIZANT ENGINEER 2**

**CAS REPORT 99**

**FY 2000 INFORMATION** **FACILITY NUMBER** 200

**DATE ON INSPECTION FOR FY2K** 10/19/00 **DESCRIPTION** WIPP WATER LINE

**DATE CAS REPORT COMPLETED FY2K**  **CAS INPUT AND COST SUMMARY COMPLETE DATE FY2K**

**CLOSE OUT DATE IN CHAMPS FY2K**  **FY2K CONDITION**

**GAS REPORT FOR FY2K**  **LEAD INSPECTOR** BLACK D

Record: 1 of 96

Form View

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## Word Find

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PARSONS BRINKERHOFF  
DYN CORP  
INEEL  
REAL PROPERTY  
PURDUE  
RS MEANS  
WIPP  
RPV  
NETWORK NOISE  
YUCCA MOUNTAIN  
BROOKHAVEN  
PANTEX  
KEN BAKER  
CAIS  
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LLNL  
ORNL  
CAS  
CONDITION  
ASSESSMENT  
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FIMS  
Y TWELVE  
DOE  
LCAM  
CAMP  
MEL  
KEVIN KIAH  
NICK STOCKTON  
BRETT PLATKO  
JESSE OAK

### **LCAM/CAS Network Meeting and CAIS 2000 Training**

**March 20-23, 2000**

**Host Hotel: Excalibur  
Booking Code: XOAKRID  
Rate: \$55.00 per night**

**Reservations must be made by February  
19<sup>th</sup> in order to receive this special rate.  
Phone number for reservations (800)  
937-7777.**

**The meeting and training will be held at  
the Bechtel Nevada Test Site.**

## **LCAM/CAS March 2000 User Conference**

*Brett Platko, DynCorp*

The CAS / LCAM User Conference schedule for the week of March 20<sup>th</sup> will be organized to support both a general LCAM/CAS discussion meeting and a CAIS 2000 orientation/training session. DOE Sites that are planning to use CAIS 2000 should plan to attend this training.

The CAS training will be focused on using the new CAIS 2000 software and will not cover inspection techniques or processes. Attendees should be familiar with DOE inspection procedures and terminology before attending this class. Attendees will be provided with a CAIS 2000 training manual and a copy of the CAIS 2000 software on CD.

## **LLNL facility management program draws DoD visitors**

Two representatives of the Department of Defense's Office of Defensive Installations toured LLNL recently to learn more about LLNL's facility management practices, which were cited as a model example in a recent GAO audit.

Doug Hansen, director of Installations, Requirements and Management at DoD, and Col. Joel Bradshaw of the Office of Deputy Undersecretary of Defense Installations, were interested in getting a closer look at the Lab's facility management program after reading the GAO report, said Pat Dempsey, division leader for Facility and Maintenance Management in Plant Engineering. "It was a very positive recognition for the GAO to cite us in the report," he said. Hansen and Bradshaw were given a Lab overview as well as a briefing on how Plant Engineering is structured and how it manages the site's facilities, which includes all buildings, utilities and roads, Dempsey said. "One of the big components of our program is the Condition Assessment Survey-----a system that accounts for all equipment, property and deficiencies we have," he said. "The CAS program keeps track of what needs to be repaired. That was listed as one of eight items the GAO report called promising practices that any facility should implement." In addition to a talk by the Lab's Institutional Facility Manager Dick O'Neil, Hansen and Bradshaw also toured the newly rehabilitated Buildings 314 and 315.

## **RS Means Meeting... or Ken's Trip Report**

*Ken Baker, DOE/HQ*

A meeting with RS Means representatives, the preeminent national source for construction cost data, occurred on January 19 at their headquarters in Kingston, MA. Jesse Oak of Parsons Brinckerhoff and Ken Baker of DOE, MA-53, requested the meeting to discuss various scenarios for updating Condition Assessment Survey (CAS) costing systems. The CAS system is currently based on RS Means new construction costs and uses support service contractors to provide annual cost updates. RS Means has products available that could simplify annual updates of the CAS costing program. The CAS program provides deferred maintenance data for about 40% of the Department's assets.

The DOE representatives also discussed the RS Means costing models for commercial, institutional and industrial buildings for determining replacement plant values (RPV) in DOE's Facility Information Management System.

### **CAS Costing Results:**

The CAS nested cost assemblies are based on the RS Means cost books and follow their 12 work breakdown structure systems (foundations, superstructure, mechanical, electrical etc). These assemblies were nested or combined into groups to simplify facility deficiency cost estimates when the CAS information system was designed. CAS uses about 5000 assemblies whereas RS Means complete cost works involves over 40,000 assemblies. The CAS assemblies are nested around a common standard deviation. The meeting with Means was to determine if the CAS users could update their deficiency costs independently from any support services contractors through purchase of the RS Means Cost Works CD.

Based on the discussion with RS Means and DOE representatives, a compiler must be developed to translate or fit the nested assemblies with the standard RS Means Cost Works CD. The goal is to develop a compiler for CAS site use that will update CAS costing algorithms each year using the RS Means Cost Works CD and with no support contractor assistance. Creation of the compiler would be a one time development or enhancement to CAS. Any special training to use the compiler can be added in the CAS scope of work. Each site would be responsible for purchasing the cost works

cd. Who develops the compiler either RS Means or a team of CAS contractors and RS Means was not decided. It will be determined after additional discussions about the complexity of the compiler design.

### **Replacement Plant Values**

Replacement plant values, the cost to replace an existing asset using present building, safety and access codes, is a very important field in the CAS and FIMS databases. In CAS it is used to determine building and building system/component replacement values. Summary condition indexes are calculated for not only a building but also for a building component system using standard system component percentages of an asset. In CAS condition indexes are the ratio of all deficiencies to RPV of the building or component system. CAS has been using these summary condition indexes for approximately two years. In FIMS RPV is used not only in the facility condition index calculation but also to determine if the appropriate amount of maintenance (% of RPV) is being spent and budgeted to adequately maintain a facility.

FIMS has been the source for RPVs. Its unit costs are based on a usage code study conducted in 1989 by Gilbert Commonwealth, an A&E firm. An updated study was suspended in 1994 due to funding constraints. Sites are not required to use FIMS unit costs to calculate an RPV. They can develop their own RPVs. Only 15% of the RPVs in FIMS are contractor or site derived. The CAS subcontractor and Los Alamos National Laboratory (LANL) have looked at the RS Means models for use in deferred maintenance reporting. At the last CAS M&O USERS GROUP, Jesse Oak of Parsons Brinckerhoff Inc demonstrated the RS Means Cost Works CD. At the same meeting, a LANL representative also made a presentation on how he used the models to develop new RPVs for some of their office and laboratory buildings.

The RS Means representatives were provided this background information at the meeting. They mentioned the models are relatively new products and will be refined based on customer feedback. The models are a planning tool to estimate building costs and not to estimate project costs for constructing a facility. RS Means has 70 models. DOE would not use all the models but would need to crosswalk its usage codes to the appropriate model. Preliminary results indicate at least 27 models could match the FIMS usage codes. The RS Means representative, Ed Damphousse, has

permitted limited DOE use of their Web tool, Custom Cost Estimator. Based on my limited viewing, this tool is very versatile and could be adapted for DOE use and individual site use. It bases RPVs on square footage, facility use, a choice of building facades, and geographic location. It could be adapted to include number of building stories and local or site-specific characteristics or adjusters. It could be located on the FIMS server and unit costs would be updated annually. Initial and annual software update costs were not discussed with RS Means. FIMS would have at least 50 users. I have provided RS Means user ID and password information to several interested headquarters and site individuals. I will be asking them for feedback in several weeks.

An invitation was extended for the RS Means representatives to attend the CAS M&O Users Group meeting in March and the FIMS May workshop. Their expertise in costing and replacement plant value modeling are excellent subjects for group discussions.

### **Editor comments**

*Terry Christie, ORNL & Network Secretary*

There has been a lot going on here in Oak Ridge since our last newsletter. Darrell Tullock has taken a new job as supervisor in the garage. He is very excited about his new job and we wish him the best in this new endeavor. Our new boss is Mickey Allred who is also over the asbestos program at the lab. He brings with him a very competent reports and data specialist, Bobbie Scarbrough. We are pleased with this selection and feel that they will be a real asset to our program.

Please remember that reservations for the March training and meeting in Las Vegas must be booked by February 19<sup>th</sup> in order to receive the special \$55 per night rate. There will be three days of CAIS 2000 training and a one-day business meeting. Please try to attend this training if at all possible because the CAIS 2000 will be ready for distribution after the training.

I would like to also let you know that Wednesday, February 9<sup>th</sup> will be the next conference call. The time for this call is 11:00 EST and the phone number is (202) 287-1321.

On a personal note, my daughter gave birth to a new granddaughter, Chloe Madison, on January 12<sup>th</sup>. She weighed 9 pounds and 5 ounces and was 21

inches long. She is beautiful and my grandson and I are very pleased with the new edition.

