
Network Noise

Terry Christie, Editor

November 1997

Volume 2, Issue 4

CAS M&O Users Group Meeting Highlights

Ken Baker, DOE/HQ

Representatives from Ames Laboratory, WIPP, LANL, LLNL, INEL, Yucca Mountain, Pantex, NS and ORNL briefly presented status reports of their condition assessment programs. From the various presentations, CAS is alive and well at these sites. Also present at the meeting were representatives from Purdue University. Purdue has a license with DOE to use and modify the CAS program. DoE will use the license and the resulting derivative works to enhance its CAS program at virtually no cost.

AL Operations Office representatives gave a presentation dealing with their expectations of a condition assessment program it included requirements, specific outputs, and reporting formats.

Dave McIntosh of LANL discussed proposed changes to the FIMS database to facilitate corporate and site level managers. These changes included common system condition definitions; adding utility information on usage, rates, modifications and identity: expansion of primary use codes: adoption of the seismic definition of construction types and validate with industry standards; and adopt AL Surplus Facility and Land definitions for building status. *It must be pointed out that there are 37 common fields between CAS and FIMS. This does not include the summary condition codes associated rehabilitation cost and building deficiency codes.*

Ken Baker of FM-20 discussed the funding status of the support service contract and the continued need for DP and EM support. FM has funded the first quarter of FY98. He also mentioned the GAO study for certifying deferred maintenance costs that are underway for all Federal agencies and will use FIMS and CAIS as reporting sources.

The CAS contractors provided descriptions of the new release of Version 3.1.2 and the use of CAS by other Federal agencies i.e. HUD, Air Force, and NASA.

Jesse Oak of Parsons Brinckerhoff and Charlie Lu of DynCorp demonstrated a proposed RS Means condition code model that uses 70 building models to determine overall condition and RPV's. The CAIS administrators can select a model that best describes their building or asset and the

program calculates RPV using square foot cost from RS Means, calculates work breakdown structure (WBS) RPV's from the model percentages, and then determines the overall condition code based on the sum of WBS deficiencies ratioed to RPV. The prototype that was developed and demonstrated is built into Site-CAIS. The model got rave reviews and copies will be given to LANL and LLNL to review for DOE model specificity and enhancement. The CAS contractors will continue to enhance the model with the addition of geographic multipliers to the unit cost and subdivide the Mechanical WBS breakdown into three separate systems.

Ken Baker proposed some change to the FIMS condition codes and building deficiency codes to make them more in line with their CAS counterparts. He recommended a 5% change to the FIMS scoring ranges and complete adoption of the eleven CAS WBS systems. His proposal was faxed to Tony Medley of ORNL who was attending a meeting in Chicago of ER representatives. ER sponsors the FIMS condition codes and is also modifying the summary code percentages.

The group then divided into three subcommittees to discuss the FIMS-CAIS interface, the Site-CAIS database, and Inspection-CAIS methods.

- **FIMS-CAIS Interface**

This groups concern focused on the current interface, its need, and discussing the feasibility of an interface between digital photo libraries and CAIS. The present FIMS-CAIS interface is a one way interface from FIMS to CAIS. It only allows the user to make the links between FIMS assets and CAIS assets. There is currently no way to update CAIS data with the FIMS data that is imported, hence the need for a new interface. The subcommittee meeting resulted in a redesign of the FIMS-CAIS interface to permit exception reporting between FIMS and CAIS and the export of CAIS information (condition code, rehabilitation cost and future deferred maintenance data). Ken Baker recommended that the CAS contractors take on this assignment because of the workloads of the FIMS contractors and the need for updating FIMS and CAS information. DynCorp stated they would need links to FIMS for

the CAIS administrators and a test set of FIMS data to accomplish this redesign of the interface. The new interface will allow CAIS to automatically link CAIS assets with FIMS assets and provide exception reporting for unlinked assets. It will also allow users to link/unlink assets, view changes between common fields of CAIS and FIMS and update CAIS with FIMS data. The FM representative agreed to transmit this request to FM management for a decision. Regarding the digital photo interface, any interface will require site purchase of digital cameras, and significant database memory enhancements. The group recommended that CAIS photos concentrate on deficiency items with FIMS using building photos in their database. An appropriate place to start for FIMS would be with the 800 excess facilities. CAIS photos would appear in project justifications and maintenance funding requests. ORNL was currently using a digital photo system that included an audio feature. Yucca Mountain was the only site that did not have a digital photo library.

- **Site-CAIS Subcommittee**

The subcommittee approved the interface direction the contractors were headed in and the condition modeling that was demonstrated. This group recommended support for Windows NT, audio-visual capability, GIS interfacing, WEB interfacing, and the adoption of the cradle to grave approach. Unfortunately, the CAS maintenance budget prevents this wish list from being adopted at this time. Maybe the Purdue license work will prove beneficial.

- **Inspection-CAIS Subcommittee**

This group discussed the requirement of inspector certification. LANL requires all their inspectors to be certified. A course for inspectors is being offered in Albuquerque. The exam is difficult and requires prep classes and knowledge of various inspection codes. The inspector group would like the CAS inspectors to have the authority to notify safety officials of safety related problems during CAS inspections. How this authority could be granted went unanswered. Experiences with the

Corps Paver and Roofer programs were discussed. The Corps answer to CAS, Builder, has not been released for use.

A new subcommittee was established to enhance the Site-CAIS reporting capabilities. Paul Reynolds of LLNL will chair this group. Charlie Lu pointed out that Ad Hoc reporting capability is not easy and requires knowledge of field data and table logic. Charlie Lu mentioned two approaches to take.

- **Third party Software (commercial)**

Pros - Low cost.

Cons - Learning curve, need to understand database structure and relationships, need to be somewhat computer/database literate, still may not be able to accomplish very complex reports.

- **Development of Ad-hoc query tool**

Pros - Can be developed to allow ease of use.

Cons - Higher cost, longer wait for product, hard to develop.

The last item discussed dealt with training for Site-CAIS personnel and training for CAS Inspectors. It appears that none of the sites present are using handheld computers for data gathering and entry in CAIS. All use the desktop PC version of Inspection-CAIS to enter data. ORNL volunteered to host a CAIS training session. FM agreed to allow DynCorp to conduct the class with ORNL covering the transportation and per diem cost. Twenty slots are available with ORNL reserving eight. ORNL wants their inspectors to be familiar with the CAIS database. Because of the large number of people that are interested in training, and in order to ensure quality training, a proposal for two training sessions was discussed. Session 1 would be for East Coast representatives at ORNL in December and a second session for the West Coast at Albuquerque in early spring. The course would be for four days and include not only CAIS usage and administration but CAIS table structure understanding as well. Users would be then be able to put together ad-hoc reports using 3rd party software. There was also a request for Inspector training. However, this course must be redesigned. The FM representative told the group there was no funding for Parsons Brinckerhoff to provide this training and the type of training needed further review at the present time.

As a result of this meeting, a very successful one, the following tasks will be undertaken by the CAS contractors:

- Revise the current FIMS-CAIS interface assuming CAIS administrator links to FIMS are provided, and test data to DynCorp from FIMS contractors is furnished.
- Continue development of the RS Means model of calculating condition codes. Review the model enhancements accomplished by LANL and LLNL.

- Explore the digital photo capability needs for capturing deficiencies in CAIS. This will be presented or published by the next meeting.
- Support and study any report enhancements recommended and undertaken by the CAS M&O Report subcommittee.
- Conduct the East Coast CAIS training in December at ORNL. (There will be no increase in the contract cost and assumes ORNL funds travel and per diem costs.)
- FM must secure funding beyond the first quarter ASAP to continue the maintenance of the CAS program. Several of the above tasks were not envisioned prior to this meeting and their adoption could result in increasing the maintenance cost and the software support staff from 1.5 to 2 FTE's. The interface development is essential for the FIMS population exercise and the impending GAO deferred maintenance study. No plans for adding Parsons Brinckerhoff staff are envisioned other than on a very limited hourly basis to finish the MEANS model. The need for inspector training should be deferred until the type of training is determined and additional funding is secured. It does appear that most sites are using digital cameras in some capacity. Based on the ORNL experience the proper digital camera could enhance CAS inspection procedures.
- FM must arrange an FDCC meeting to discuss the user group request for WBS and condition code modification and adoption of some data element pick list additions.

This was perhaps the best CAS M&O Users Group the author attended. The future enhancement directions, the commitment and vitality of the site CAS programs were very encouraging. The Albuquerque training facilities were superb, the best experienced since the group formed.

CAS at LLNL

Paul Reynolds, LLNL

CAS at LLNL has progressed and is used to support our site with a wide range of responsibilities. These include backlog identification and reduction, as well as projected deficiencies for future use. We completed our three-year inspection cycle in FY96 and are currently working on the second year of our re-inspection program. LLNL's CAIS database currently contains 12,963 individual records both in condition and not in condition. Records that are in condition are those, which identify LLNL's current backlog. The records that are not in condition include the following: projected, completed, demolished or removed. All records are identified with an optimum year in which the work should be or should have been done. Each of the completed, demolished and removed records is assigned the fiscal year in which they were done. This is one way to identify your current backlog and reductions to that backlog.

ORNL CAS Update

Charles Lamb, ORNL

Good news from ORNL, it has finally happened, the CAS Program is being recognized for their hard work. We have just moved into new office space where all of our folks can be together. For many years the CAS group has been scattered like chaff in the wind. Our group has a separate cubicle for each inspector. Then separate office space for our Program Director and Program Coordinator, but we are still in hollering distance of each other. Our troops are as proud as peacocks. We couldn't be happier if we were two fleas with a whole dog to ourselves.

We are concentrating on building data bases with more and more information. Our goal is to enlighten ORNL; right up to the point of being blinded. We are working with Ron Clark in the Plant & Equipment Division to build a web page with all of our information, it should look like a Sunday church picnic, with more to choose from than the eyes and mind can hold. The users of our information should have the one stop shopping advantage when they arrive at our home page.

As you see I have thrown in some hillbilly humor to possibly bring a smile to your face, but maybe between the lines to stir up ideas within your programs.

We all need to enjoy our jobs and appreciate them in the time of budget cuts. Many of the CAS programs have been terminated; it is up to we that remain to prove to Lockheed Martin that we are deserving of the budget that they entrust us with.

You'll check us out the next time for the continuing saga of the ORNL CAS Group.

Y-12 Condition Assessment Survey Program

Jane Nations, Y-12

The CAS program at Y-12 is in a state of evolution. As budgeting becomes more of a concern, we are turning to other uses for our services and resources. We have recently focused our efforts to work at the East Tennessee Technology Park (formerly K-25), where we are lending both our inspection and web page design resources for a newly implemented survey program. We anticipate this work to take us through FY98, and (hopefully) beyond. We are also continuing to provide services to the Y-12 utilities program, and Site Management Services.

Our current budgeting trend has us making a temporary turn away from the original CAS mission, but we are hopeful that FY99 may bring us back to an intensified CAS effort within the Y-12 plant. We will continue to stay in contact with the "global" CAS program, and hope to be working with you again soon!

Pantex/CAS

Bob Von Eschen, Pantex

A report is in development of the three-year assessment cycle completed on September 30, that covered most all site facilities once and critical safety facilities three times. The second CAS assessments cycle has begun as an extension of the first cycle data collection. Currently the CAS program staff remains at two, with a proposal to increase and move to another department. One plan is to make the CAS program a subsection of the FIMS program, with an integrated database.

Chairman's Comments

Bob Von Eschen, Pantex

We need a NETWORK communications check:

- The newsletter is going well but Terry has to fight every issue to get information to publish. Please send in your articles on site program status, developments, personnel changes, interesting happenings, personnel happenings, etc.
- The monthly teleconference (second Wednesday of each month) has a declining participation. Is the membership losing interest in this innovation; is the date or time bad, or what? The format used is a discussion along the lines of the committee subjects, as agenda items are not being received. Should some sites be unable to send a representative to the Network meetings, please send a statement of program status to the Network Chairman for presentation at the meeting.

LCAM Meeting, Albuquerque, New Mexico, October 21 – 23, 1997

Robert Hampton, Los Alamos National Laboratory

The CAIS Subcommittee met on both the 21st and 22nd of October during the LCAM general fall meeting. The subcommittee discussed several issues concerning the CAIS software. Before presenting the minutes of that discussion I would like to give some personal comments/observations that may not be shared by the CAIS subcommittee.

COMMENTS: The creation of the FIMS/CAS Interface subcommittee out of the old CAMP/CAS subcommittee was a strategic maneuver to help ensure our survival as a viable organization. The demise of the CAMP report helped expedite this shift from CAMP to FIMS. The organization (CAMP replaced by LCAM), since its inception over 4 years ago, was divided into three groups of people. These groups are the coordinators/administrators, the database/computer people, and the inspectors. This was the reason

behind the creation of the three subcommittees. There is some overlap between functions depending on the topic and the site in question. My concern with our organization is that the FIMS/CAS Interface subcommittee needs to “interface” with the CAIS subcommittee during computer related issues. I was under the impression that the FIMS/CAS subcommittee was dealing with political issues rather than technical and mechanical issues. I was surprised during the subcommittee reports when the FIMS/CAS subcommittee presented a design for the CAIS interface software without any input from the CAIS subcommittee. I have no problems with the design as it was presented but I would like to have some input as a database designer/administrator.

Another reason I have reservations about the organization is that the only real interaction we have as a group with the developers is at these meetings. When half of the technical support for this project (DynCorp) sits in on another subcommittee for almost the entire length of the meeting it decreases the time that the CAIS Administrators have to spend with all the competent technical personnel.

Also, the building profile project would have been a good project to develop in the CAIS subcommittee much like the FIMS-CAIS interface was developed in the FIMS/CAS subcommittee. Instead it was presented to the full task group without any interaction with the CAIS subcommittee. Again, I have no problem with what was presented, only with the lack of opportunity for input into the process. I also think that with the expertise that comprises the CAIS subcommittee we could add some valuable insight into both of the modules mentioned above.

The bottom line is I don't want to see the CAIS subcommittee relegated to a “junior citizen” status at these meetings. I want to have our subcommittee involved in the decision-making affecting the information systems for condition assessments. I do not want to just look at demos of things we're going to get at some future date. The CAIS subcommittee should be a place where we share and develop ideas that will help the DOE complex as well as provide needed training for the CAIS software.

These are my opinions only (and of course I could be wrong).

CAIS SUBCOMMITTEE TOPICS OF DISCUSSION

Robert Hampton, Los Alamos National Laboratory

FIMS/CAIS INTERFACE – We need a push button interface that shares data in both directions (with each database)

INSTALLATION PROBLEMS – Everyone has CAIS 3.X working. Los Alamos had some problems but DynCorp corrected them at the meeting.

WINDOWS NT – The system will work on NT but only running as a 16-bit application. No immediate 32-bit app is on the horizon.

ORACLE 7.3 – The CAIS software will run in 7.3 but the TNS listener parameters need to be adjusted. Power Builder and CAIS are still at Oracle 7.1/7.2.

PERSONAL ORACLE – This seems to be the database of choice. Only LANL and LLNL appear to be using a full-blown Oracle/Unix application. Most sites are using Personal Oracle 7.X on a PC with Win95.

RED RUN – NEW INSTALLATION – There are no problems with the stand-alone version of CAIS. Users need to do the Oracle6.X import over the Red Run Site or create new assets on top of Red Run.

LATEST CAIS VERSION 3.1.2 – Four new enhancements were added from 3.1.1.

The ability to browse IUs in the Survey IU tab

The ability to remove data elements that are no longer effective and have no links.

The ability to extract FIMS data using MS Access and importing the extracted data into CAIS using the FIMS/CAIS interface (you will no longer need an Oracle dump file from the FIMS contractor).

The addition of a Summary Information Tab in the Survey IU section of the desktop survey.

ENGINEERING TABLES 3.2 – These are the 1997 RS Means costing data. It should continue to be updated as long as there is a contract.

UPLOAD/DOWNLOAD – Most sites are inputting data with the desktop survey option. WIPP is using a laptop version of Inspection CAIS and understands the DOS files that are needed for installation.

MS ACCESS INTERFACE (PAUL REYNOLDS) – LLNL has an MS Access mdb file available that provides a template for reporting in CAIS.

CONDITION SCORES (AUTOMATED) – This may be

completed in 1998. This is part of FIMS/CAIS and building profile modules.

BUILDING PROFILES – A beta version of this module was shown. It is not known when this will be released or what features and profiles will be included.

FUTURE UPGRADES CAIS 4.0 – An Enhancement Release Form will be available from Terry Christie. Upgrades are severely limited by the budgetary constraints. New features will be added where deemed appropriate.

NON-DOE SITES – The only non-DOE site in attendance was Purdue. Purdue was well represented and shared their ideas in *Physical Facilities Integrated Facility Management Issues and Solutions*. Parsons Brinkerhoff is developing UCAIS (University CAIS) for them.

BMAR ISSUES/COSTING – Both LANL and LLNL expressed interest in the Cradle-to-Grave concept for inspection IU/deficiencies. This would facilitate tracking of the BMAR (required in UC contracts) and general trending which DOE/AL supports.

ROUTES /PROJECTS – Still is supported but not many people were using. Projects have been virtually replaced with the Data Analysis Package.

MEL – MASTER EQUIPMENT LIST – No one is using. (Y-12 may be using but they did not attend.)

SOFTWARE SUPPORT – Support is given by DOE to PB & DynCorp on a quarter by quarter basis.

ORACLE 8.X – Will work if you keep Oracle 7.X drivers. No plans to update CAIS to this mod of Oracle.

GIS INTERFACE – PB is working on an interface. No planned release date. UCAIS or HUD release may incorporate.

AUDIO/VIDEO/PHOTOGRAPHS/OBJECTS – Next release may support photos – no guarantee due to limited funding.

HAND HELDS – DCD – Most sites are using desktop. PB is experimenting with voice-based equipment to replace pen-based. No release date.

REPORTS – A sub-subcommittee was created with Darrell Tullock, Bob Von Eschen, and Paul Reynolds to review the best formats for standard reports.

WEB INTERFACE – PB looking at doing for the HUD release – no date.

ARCHIVING – Most sites (especially LLNL and LANL) were interested in being able to archive data at multiple levels. This would support the Cradle-to-Grave concept previously mentioned. The archiving we have currently is inadequate because it does not support old costing. If a cost can not be archived with the inspection deficiency or IU then it has little value historically for most sites.

Final Comments from the Editor

Terry Christie, Oak Ridge National Laboratory

I want to thank everyone who provided information for the Network Noise this month. I appreciate the input but would really like to hear from some of our other sites that did not submit an article. The next issue of this newsletter will go out in February 1998 so start thinking now about getting an article together for me. You may send your article to me any time and I will save it until I publish the next issue.

The next LCAM/CAS teleconference will be on Wednesday, November 12, 1997 at 11:00 EST. The phone number for this call is 202-287-1373. Please try to make an effort to have at least one person from your site available for this call.

I think the LCAM/CAS meeting in Albuquerque went really well, with a lot of good information shared by a wide variety of sites. It was real good to have some new faces attend. On behalf of the Network I would like to personally thank David McIntosh and Anna Marie Trujillo for making all the arrangements.

I didn't write minutes from the Inspectors sub-committee because I thought Ken Baker covered it very well and there was no need to duplicate his thoughts.

The next meeting will be held at Lawrence Livermore Laboratory sometime in March or April. We will let you know as soon as a date has been set. I hope everyone will make an effort to attend this meeting.

If anyone needs any information concerning the Network or needs to pass information along to the other members please let me know and I will do my best to get the information out as I receive it.

Since this is the last issue of the newsletter this year I would like to wish everyone a happy and safe holiday season. Try not to eat too much and stay healthy. 'Til next year.....

