



# aef/fyi



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"America's  
Favorite Newsletter"

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TEAM AEF

aef  
HAPPY - BRAVE - NICE

Our 45th Year

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### BEST NETWORK OUT THERE!

AEF's spanking new computer network is a thing of beauty and a joy for our customers.

### DUDE, WHERE'S MY JOBSITE?

A unique AEF project disappears in Brooklyn, and re-appears in Manhattan.

### TALL TALE

Long (like 2000') capillaries are just one of the reasons you should consider electronic thermostats.

### AMERICAN ICON

Behind the scenes for the creation of Mount Rushmore. This is a big story.

### ASK BERNADETTE

AEF's Answer Cow helps readers make wise decisions.



Charlie at the controls of  
The AEF Network.

## The AEF Network

Nope, it's not a new cable channel (although we think we could do better than most of what's on). It's our new computer network that links all AEFers all the time.

AEF computer maven Charlie Yang put it all together. As Charlie splained things to *aef/fyi*, all AEF locations---Galactic HQ in Mamaroneck, the AEF Warehouse in Malone, and all remote sites (various home offices or traveling laptops) are connected by VPN using Tunnelvision technology. We here at *aef/fyi* are old enough to remember when tunnelvision was a bad thing, but Charlie went on to explain that because this is a VPN (Virtual Private Network), all data communications are encrypted,

'like the data is travelling in steel pipes through the internet connections'. Users can access the remote server, print to other sites, or control other computers remotely. (Go to 2)

## The Case of the Moving Jobsite

Since 1964 AEF Sales has been to a lot of interesting jobsites---seven stories below West Street in lower Manhattan for work in rebuilding the PATH station, seventy stories above West Street for 7 World Trade Center, the attic of St. Patrick's Cathedral, the New Jersey anchorage of the George Washington Bridge---but New York's new ferry terminal is the first jobsite that ever moved on us.

Initial construction on the floating terminal--a barge 200 feet long by 160 feet wide by 12 feet deep--was done in Texas. From there it was on to Sunset Park, Brooklyn, where Team AEF entered the picture. Some heat trace material from another manufacturer (not Nelson) had been partially pre-installed in Texas, and when it needed to be completed the New York rep was nowhere to be found. Enter Team AEF: we determined what additional material was needed and sourced it for the customer. Naturally when there was more heat trace needed for the Brooklyn phase of construction the customer called us. Wes Rayburn and Pietro Fasolino went on-site in Brooklyn, and AEF shipped out an elegant Nelson CM1 control panel and 2000 feet of primo Nelson heater cable. The CM-1 panel provided controller status, voltage, current, and continuity monitoring for all heater segments, both Nelson's and Brand X's.

The next time Wes went to Brooklyn the Barge was gone! Just like that time on TV when David Copperfield made the Statue of Liberty disappear. Just kidding. What actually happened was that three tugboats towed it across New York Harbor, to its home in Battery Park. TEAM AEF added some final heat trace touches at the Manhattan site. The new terminal opened in March, and that's where we run out of space and our story ends.



Spiffy new floating ferry terminal at Battery Park.  
(Or possibly the Sydney Opera House.)



*Virtually anything can be  
blamed on somebody else.  
It's easy. And fun.*

*Andrew Malcolm*

*It does not do to leave a  
live dragon out of one's  
calculations.*

*J.R.R. Tolkien*

*We have brought nothing  
into the world, and  
neither can we carry  
anything out.*

*1st Timothy 6:7*

*The greatest things in life  
fall into two categories:  
those that are taken for  
granted, and those that  
aren't even noticed.*

*Alasanor*

*The capacity of  
ignorance to influence  
survey outcomes should  
never be underestimated.*

*John Green*

*Horse sense is the thing  
that keeps horses from  
betting on people.*

*W.C. Fields*

*The only difference  
between death and taxes  
is that death doesn't get  
worse every time  
Congress meets.*

*Will Rogers*

*Wine is bottled poetry.*

*Robert Louis*

*Stevenson*

## memo FROM PETER FASOLINO

Our contact management software allows us to create a contacts database accessible to all AEFers. For example, if Fred calls on a new customer and gets a business card from him or her, all that contact information---phone, fax, e-mail---goes into the contact database. Our customers are often pleasantly surprised when they don't have to repeat all that info when they work with another AEFer. All e-mails to and from that customer are attached to the contact record, so every AEFer can get instantly up to speed.

The same goes for quotes and heater design files: every AEFer has access and can edit it as needed. Slick, yes---but what's it do for our customers?

Let's say Wes has just e-mailed a customer with a quote for a rush project; the quote is based on a 277 volt power supply per the customer. All the material is on the shelf in our warehouse for immediate shipment, as soon as the customer gives the go ahead. Wes then heads off to a jobsite meeting. Later in the day the customer finds out that he actually has only 208 or 120 volt power available. When he calls Wes back and gets voicemail, the greeting reminds him that he can dial 'O' for immediate assistance. The call is then transferred to another AEFer, who can pull up the original design, change the voltage, and instantly revise all heat loss and load calculations. The customer gets a revised quote pronto, and we can still get the material shipped that very same day.

I have to admit that not every member of TEAM AEF gets as excited about this new data center as I do, but they ALL appreciate the way it helps us operate as a team to help our customers with the best possible service. Give us a call and put it to the test!

## AEF Network . . .

Naturally the main hub is AEF Galactic Headquarters. It has a Linux based server with a ton of storage capability, and Intelligent Disk Backup to continually backup data. A backup server is always in place in case it's ever needed, and key datafiles are backed up to a remote location every night.

The server holds AEF's contact management program and database, our relational databases used for quotations, and our inventory and sales data.

The AEF network also has a fax server, so that all faxes are received and stored digitally. They say a picture is worth a thousand words, but quick hand-drawn sketch of piping is worth a lot more than that when time is of the essence. Faxes, like e-mails, are linked to the contact database, and can also be exported to the master quote files or project folders, so they are easily accessible when needed.

Since the various AEF work sites are geographically scattered, and our new transporter system still has a few kinks to be worked out, the other huge advantage to the data center set-up is that with all the servers and PC's clustered in the main office in Mamaroneck, Charlie can easily handle any technical support issues. He can also easily (from Mamaroneck) access PC's at remote locations for software upgrades, updates, and troubleshooting.

Now that the network's all set, Charlie can concentrate on the transporter.

The Web site you seek cannot be located,  
but countless more exist.

Windows has crashed. I am the Blue Screen  
of Death; no one hears your screams.

Program aborting; close all that you have  
worked on. You ask far too much.

Yesterday it worked; today it is not working.  
Windows is like that.

Stay the patient course; of little worth is your ire.  
The network is down.

Three things are certain: death, taxes,  
and lost data. Guess which has occurred.

Out of memory. We wish to hold the whole sky,  
but we never will.

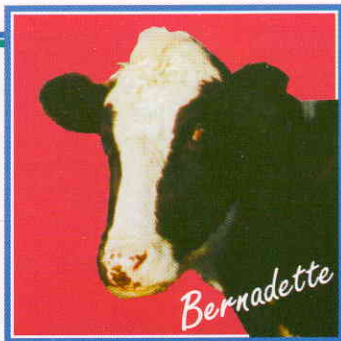
Crash reduces your expensive computer  
to a simple stone.

Your file was so big; it might be very useful.  
But now it is gone.

Screen. Mind. Both are blank.

The above are supposedly actual error messages from  
computers in Japan. We have no idea whether that's true or not,  
but if it's not true it should be.





**Bernadette**  
The AEF Sales Answer Cow

DEAR BERNADETTE:

In this newsletter they're always making a big deal about how this so-called TEAM AEF is always going to jobsites and climbing around cooling towers or whatever. Why do they think that's so all-fired important, huh? M.O.

DEAR M.O.:

There are several reasons why it's so all-fired important. By seeing how the pipe is run, where power is available, and that sort of thing, AEF is able to come up with the most efficient design possible, based on how the piping was actually installed. On most heat tracing jobs the heater cable and controls account for about 40% of the installed cost, while another 40% is labor and 20% is electrical construction material (breakers, conduit, etc.); Good design saves money on all three.

Secondly, they're able to make sure that the people who will actually install it have all the information they need to make the job go smoothly and quickly.

If the poor guy in the field is left to guess what to do with the heaters and controls, it's going to take

*Need help? E-mail [bernadette@aefsales.com](mailto:bernadette@aefsales.com)*

**Got Money to Waste? Buy Heater Cable Somewhere Else and Pay Cut Charges and Shipping Fees.**



Frank

## A Long Story

Old-fashioned mechanical thermostats are not famous for precision. With a deadband of about 10 F and the vagueness of a rotary dial adding another few degrees, you've got something Galileo could be proud of, but then again he lived 400 years ago.

Limited capillary lengths available with mechanical stats mean that if your pipe is way up in the air your stat will be too. Not exactly convenient for maintenance or testing, even if your maintenance guys are real tall. (Even Frank is only good up to 20 feet.)

A better answer is the SST-2 electronic stat. The standard 20 foot lead can be extended up to 2,000 feet, and it provides digitally

filtered 30mA ground fault protection, so NO MORE EXPENSIVE GFI BREAKERS!

LED lights let you know if everything is hunky-dory or not, and the SST-2 costs less than a standard mechanical stat. That's right, LESS. (If you need high and low temperature alarms, or other advanced features, the SST-2 has big brothers who can handle that for you.)

**FunFact:** A giraffe's heart is two feet long and weighs 24 pounds!

time. (Remember this important equation:  $Time=Money$ .) And if he guesses wrong, he'll need more time, and maybe more material, to finish the job. Capisce? These days nobody (except the Federal government) has money to waste, yes?

DEAR BERNADETTE:

But that 20% for other electrical material stays the same no matter what, yes? M.O. (Again)

DEAR M.O.:

Not really. A good design based on actual installed piping runs should save money by minimizing conduit runs, fully utilizing breaker panels, and that sort of thing.

DEAR BERNADETTE:

I've got a problem with Japanese beetles eating my rhododendrons. Do those beetle traps they sell really work? H.W.

DEAR H.W.:

Yes, they work. However, they attract more beetles than they capture, leaving you with more unwelcome diners than before. A better idea may be to pass those traps out as gifts to your neighbors!

*NOTICE: Due to the unflinching candor of this column, attempts have been made recently to get at and destroy my files. The source of these outrages is known, and if they are repeated be assured that the entire story concerning the politician, the lighthouse, and the trained cormorant will be given to the public. There is at least one reader who will understand.*

*If someone tells you two plus two is three and someone else says two plus two is five at least one of them is wrong.*  
Dooms Madigan

*Innovators and men of genius have almost always been regarded as fools at the beginning (and very often at the end) of their careers.*  
Fyodor Dostoyevsky

*Courage is being scared to death - and saddling up anyway.*  
John Wayne

*Every infant car seat now comes from the manufacturer with its own mechanical engineer, and every infant comes from the maternity ward with its own lawyer.*  
P.J. O'Rourke

*I don't like money, actually, but it quiets my nerves.*

Joe Louis

*It's very difficult to make accurate predictions, especially about the future.*

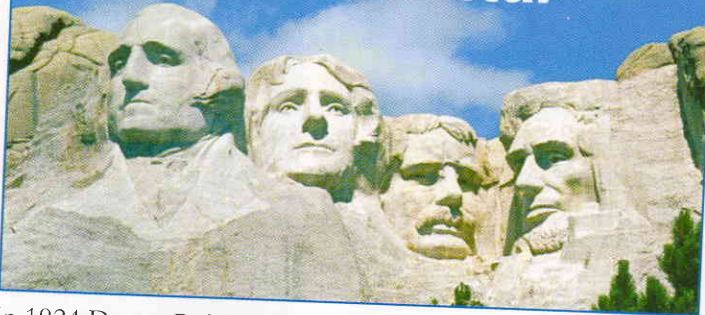
Niels Bohr

*Perpetual devotion to what a man calls his business is only to be sustained by neglect of many other things.*

Robert Louis  
Stevenson



## Monumental



In 1924 Doane Robinson, the State Historian of South Dakota, wanted to create a tourist attraction to draw visitors to his state. He got a really BIG idea: a giant sculpture carved out of a mountain. He got hold of sculptor Gutzon Borglum (see sidebar, lower right), who went to Dakota, and selected Mount Rushmore for his colossus. Borglum chose the four men who would represent the first 150 years of American history, President Calvin Coolidge approved, Congress came up with the money, and work started in October 1927. Sculpting the 60 foot high faces involved a lot of dynamite: a first pass roughed out the shapes, while a second round fine-tuned things; the finish work was done with jackhammers and chisels.

Borglum complained a lot about his 400 workmen, but then again guys that can play with dynamite and jackhammers while sitting in a sling hung over the side of a cliff have never been real easy to come by. Mostly they were miners, a colorful crew whose weekends were filled with drinking (prohibition notwithstanding), baseball, and fighting. One worker was fired eight times, which he figured was the record, but it wasn't: Borglum's secretary stopped counting after she was fired for the tenth time.

Work was finished in October 1941, about six months after Borglum died at 74. We figure him and his boys done pretty good.

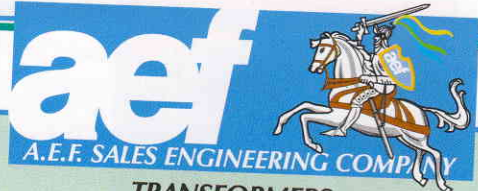
## Backwords

### All Set for the Next 7,241 Years

Arthur Guinness was a man who planned ahead. In 1759, at the age of 34, he signed a 9,000 year lease for the St. James's Gate Brewery in Dublin. He started out brewing ale, and in the 1770's he started brewing 'porter', a dark beer popular in England with porters and other laborers in London. 'Guinness' was a spectacular success. Drinking a good pour has been compared to drinking liquid velvet, and as the Irish say, it 'softens the world'. We know our readers have a lot of things to worry about; but at least we're all set with Guinness.

### Git 'er Done!

What's the difference between scientists and engineers? Scientists try to understand things, while engineers get things done. In the 19th century most scientists believed that no steamship could carry enough coal to make a transatlantic crossing. Engineers made it happen. Wilbur and Orville also decided to do something that couldn't be done, but they didn't wait for some scientist to publish a text on aerodynamics, they rolled up their sleeves and figured out a way to make the darn thing fly. As AEF founder Chairman Tony once observed about engineering: at some point somebody is gonna flip a switch and the thing will have to work. When scientists don't get it right they get another grant and write another paper. (Very often the conclusions in their papers turn out to be very pleasing to whoever gave them the grant. Go figure.) While we are positive there are many nice, sincere scientists out there, if you actually want to git 'er done, git an engineer.



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Gutzon Borglum was born in Idaho in 1867. He studied art in Europe in the 1890's, some of that time with Auguste 'The Thinker' Rodin. On returning to the States in 1901 he divided his time between home in Stamford CT and his studio in New York City. He became in-

terested in what he called 'the emotional impact of volume'. The result was a six-ton head of Lincoln, which got him the attention of some southern ladies who asked him to do a head of Robert E. Lee on the side of Stone Mountain in Georgia. He proposed instead a gigantic scene of Lee and his generals on horseback, and began the project in 1923. All the work was done with jackhammers and chisels, until a visiting Belgian engineer taught him to use dynamite.

When Lee's head was unveiled in 1924 surviving soldiers who had served with him were moved to tears by the likeness, but after a falling out with the project's directors Borglum was fired, and he destroyed all his models to protect his design. A warrant was issued for his arrest and he left Georgia for good. At age 57 he headed for South Dakota and spent the rest of his life working on Mount Rushmore. Turns out he was right with that 'emotional impact of volume' gig.