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"America's
Favorite Newsletter"

MARCH 2006

TEAM AEF



HAPPY - BRAVE - NICE

Our 42nd Year

CONTENTS:

TOP OF THE ROCK

TEAM AEF just supplied the World's Highest Snowmelting System at Rockefeller Center's brand new Observation Deck. Here's how it went down.

NELSON'S CM2 GOES COMMERCIAL

This gutsy and clever control system is winning hearts (and saving rear ends) in critical commercial applications.

SUCCESSFUL FLOP

Dick Fosbury found a better way to high jump, got ridiculed, won an Olympic gold medal. People eventually stopped laughing and started flopping.

STOP THE PRESSES! TEAR OUT THE BACK PAGE!!!

A special late-breaking follow-up on how the Rock Center snowmelting system weathered the Big One!

Top of the Rock, Ma!

High above midtown Manhattan's world famous Rockefeller Center is the world's highest snow melting system. From the newly opened 'Top of the Rock' Observation Deck the views of Manhattan and all of AEF Land are stupendous. On a clear day you can see 80 miles, and on a very clear day you can actually glimpse the Rocky Mountains. From up here humans look like ants, except for Al Roker, who looks more like a lentil bean.

Most exciting of all, visitors are strolling around on top of the world's highest snow melting system: 65 M.I. Heater cables totaling almost 13,000 feet, and putting out 335,000 watts of snowmelting power, right where it's needed.

Just Say No to Hydronic. At the early stages of the project, there was actually consideration given to using an hydronic snowmelt system, but the thought of umpteen hundred gallons of toxic anti-freeze drip-drip-dripping down through sixty-five floors of high rent office space (or scarier yet, into Katie's dressing room!) mitigated in favor of a clean and efficient M.I. System. The high maintenance costs required by an hydronic system would be eliminated, along with the huge problem of where the heck to put all those boilers and valves and pumps. (Go to page 3)



Look! Up in the Sky!
It's a bird. It's a plane.
No! It's the World's Highest Snow Melting System!!!

Take Control with Nelson CM2



The Fabulous CM2

The heart-warming story of how a brave and wonderful control system originally designed for critical industrial applications made the incredible journey to success in commercial projects

Once upon a time, if you wanted to monitor the heat trace on a critical line you put a light at the end of the circuit --- if the light was on the heater was on, nice and simple. But the system had quite a few drawbacks, not the least of which was whether Ralph in maintenance was really going to walk the heater circuits when it was 10 degrees out.

Assuming for the moment that Ralph walks: if he sees the light is on it means the heater is on, and there is voltage at the end of the heater bus wires. But if the light is off, is it because the thermostat is cycled off OR because the bulb is dead or covered with dirt OR because there is a problem with the heater cable?

Get Control! The CM2 changes all that. Not only does it provide control of the heater cables (turning them on and off as required, very precisely), it can also answer questions like "what is the temperature of that bypass line?" 24/7, in any kind of weather, by using RTD or thermocouple sensors, so you know what's really happening to that pipe. Sure beats the heck of Ralph and On or Off.

CM2GF Does What??? The CM2GF configuration even PROVIDES GROUND FAULT PROTECTION WITHOUT GROUND FAULT BREAKERS!!! How?, you ask. Current sensing modules monitor both load current (up to 30 amps) and ground leakage current (from 1 to 250 mA). (Go to page 2)

Lose your dreams and
you will lose your mind.
Ruby Tuesday

The greatest things in life
fall into two categories:
those that are taken for
granted, and those that
are not even noticed.
Alasanor

We entreat you not to
accept the undeserved
kindness of God and
miss its purpose.
2 Corinthians 6:1

Rabbit's clever. And he
has Brain. I suppose
that's why he never
understands anything.
Winnie-the-Pooh

Can't you see you're
really only very small and
life goes on within you,
and without you.
The Beatles

Omne ignotum pro
magnifico.
Sherlock Holmes

Sometimes the light's
all shinin' on me; other
times I can barely see.
Lately it occurs to me,
what a long strange
trip it's been.
Robert Hunter

Ooh, eee, ooh ah-ah,
ting tang, wallawalla
bing bang.
David Seville

memo

FROM
PETER FASOLINO

Like a large number of other inhabitants of Planet Earth, I spent a Sunday evening last January watching the Super Bowl. Like the folks out at the Uptegraff factory in Scottsdale, Pennsylvania, I was pretty happy to see the Steelers win.

The Steelers have always seemed to me to be a pretty classy operation --- finding good players overlooked by the rest of the league, working hard, run by the same family for years, and focused on doing the right thing over the long term, as opposed to the quick fix. Sort of heartwarming, and we can always use more heartwarming.

A lot of the hoopla focused on this being the 40th Superbowl, which reminded me of watching the first one as a kid. My grandparents had the only color television in the family, so that was the place to watch. (You might remember that the picture tube on color sets were sort of round back the, so the edges were either missing or distorted.) The hype and the trash talk paled by today's standards, but Fred "The Hammer" Williamson of the Kansas City Chiefs talked a pretty good game, at least until the kickoff.

Seems like there has always been a Superbowl, but back when that first one was played AEF Sales had been in operation for almost two years. AEF Sales turned 42 years old March 1st, and a lot has changed over the years. But the basics are still the same --- working hard, run by the same family for years, and focused on doing the right thing over the long term, as opposed to the quick fix.

Sort of heartwarming. So if you can use more heartwarming, give us a call and put the AEF Sales Team to work for you.

Take Control . . .

BIG Advantages. Everybody knows how gosh darn expensive those GF breakers are, and how long you can wait to get one. (A GF branch breaker with a 30 mA trip will cost you three times as much as a standard breaker.) With the CM2GF you meet NEC 427-22 using standard breakers, giving you upfront savings on distribution.

Putting some of those savings into a CM2GF panel gets you a better ground fault protection system. The separate alarm and trip settings give you more precise control, and more uptime for critical systems. With that 30 mA GF breaker, you get a dumb yes/no: if the ground fault exceeds 30 mA, breaker trips and the cable goes off line, period. Then it's no easy job to find out whether the ground is 32 mA or 200 mA. The digital readout of the CM2GF gives the system operator the information he needs to get things straightened out pronto. And the system can be programmed to provide an alarm prior to taking the heater off line. Example: By setting the ground fault alarm at 30 mA and the trip point at 50 mA, a problem on any given heater segment can be identified WITHOUT putting the pipe at risk of a freeze-up.

What's Important? While the CM2 was originally designed for critical industrial applications, who's to say that the cooling tower piping for a data center of a major financial company isn't every bit as critical as any process line in any plant? No cooling means no computers. No computers means no work gets done, time and money are lost, and heads roll. So it's really only natural that the CM2 is now being used in more and more important commercial projects.



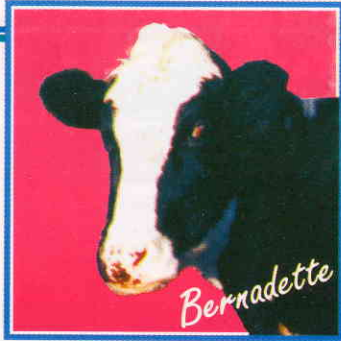
Is a CM2 right for your project, or your existing heat trace system? Could be. There's one easy way to find out: just give TEAM AEF a call for a thorough review of your application. Put our forty-two years of heat tracing know-how to work.

EDITOR'S NOTE: TEAM AEF and Nelson offer a wide variety of controls, from simple mechanical thermostats, to electronic controllers, up through the CM1 Monitor System, the CM2 Monitor and Control Systems (including the CM2, the CM2/1, and the CM2GF).

No matter how big or how small your project is, we can make sure you have the right controls!



BONUS! BONUS!! BONUS!!!
Here's another little extra you get using the CM2 for ground fault protection instead of GF breakers. While the CM2 monitors each heater circuit individually, a GF breaker may be typically feeding 4 or 5 heater circuits. So if there's a ground fault on ONE of those heater circuits, that dumb little breaker is gonna go and shut off THREE or FOUR perfectly good heaters!
That's extra agita you don't need!



Bernadette
The AEF Sales Answer Cow

DEARBERNADETTE:

I just ordered a little bit a material that I needed to finish off a job. The material shipped okay, but when I got the invoice they hit me with minimum billing plus freight, so I wind up paying two hundred and something bucks for fifty dollars worth of stuff. I mean I spent some bucks with these guys, so why do they nickel and dime me? It's not gonna break me, but is that really any way to treat a customer? B.R.

DEAR B.R.:

Apparently this particular supplier seems to think so. I would guess these kinds of policies are set by invisible bean-counters (quite possibly MBA's) in some corporate ivory tower who have never actually seen a customer in real life.

Fortunately not every business is run like that. When you place an order with AEF Sales, you'll only pay for the material that ships, and every ground shipment is freight allowed, every time! If you need overnight shipment, there's no surprises there either: every quote from AEF shows exactly what that will cost. You don't have to put up with shabby treatment, at least not for heat trace.

You can't change how your supplier does business, but you *can* change your supplier. Next time you have a heat trace requirement try AEF Sales, and let me know what you think!

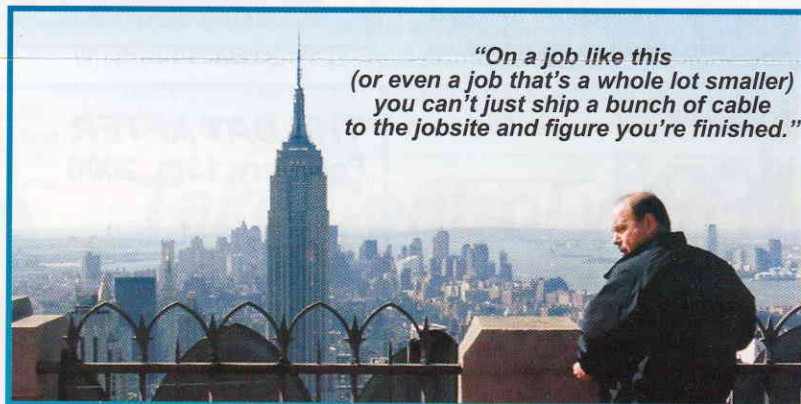
Confidential to C.H.: As Cosmo Castellano's grandfather used to say: 'You plant carrots, you get carrots.' It's time to move on, honey.

Top o' the Rock . . .

Mavens of Heat. TEAM AEF was called in to provide the state-of-the-art snow melting system using primo Nelson Inconel-sheathed M.I. Cables. Not only could AEF be counted on for design expertise, but their Legendary Service would be vital in this challenging project.

All of TEAM AEF's outside salesmen were involved, making dozens of trips to the site as the design was finalized, and throughout the construction process. It was important to make sure that the heater cables as laid out in the drawings would work with what conditions actually were on site. For example, the exact locations and mounting details for all the binocular stations and lighting fixtures had to be verified. And the actual installation of all 13,000 feet of cable required not only that the electricians installing the cable had all the information they needed, but that all the other subcontractors understood how their work had to be coordinated to make sure the whole shebang was installed, and installed right.

On a job like this (or even on a job that's a whole lot smaller) you can't just ship a bunch of cable to the jobsite and figure you're all finished. That's why TEAM AEF's unbeatable field service was so invaluable, making sure everybody knew everything they needed to know, so the job could be completed with no wasted time, effort, or money. That's the kind of service your project deserves too.



Lonely at the Top. AEF's Fred Eigenrauch takes in the view. You can see the Empire State Building, the Hudson River, the Verrazano Bridge and New York Harbor.

A government that robs Peter to pay Paul can always count on the support of Paul.

George Bernard Shaw

I'll gladly pay you Tuesday, for a hamburger today.

Wimpy

I'm proud to pay taxes in the United States. The thing is I could be just as proud for half the money.

Arthur Godfrey

Most of life's dilemmas can be solved simply by buying equipment from AEF Sales.

Abraham Lincoln

There is no safety in numbers. Or anything else.

James Thurber

The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.

George Bernard Shaw

Before I got married I had six theories about bringing up children. Now I have six children and no theories.

Lord Rochester

YOU CAN WIN A TRIP TO THE TOP OF THE ROCK!!!

HERE'S HOW: It's Easy! It's Fun!

Just visit aefsales.com and check out the photo tour of this landmark project. Then follow the on-site instructions to enter!

The Lucky Winner wins a trip for two people to check out the view from the Top of the Rock, and lunch at the Rock Center Café.



Flop

There was an element of novelty in the high jump competition at the 1968 Summer Olympics in Mexico City. Every world class high jumper used the same 'straddle' technique, and always had. But there was an American kid, twenty-one year old Dick Fosbury from Oregon State who had a completely different take on the sport: he would approach the bar, then turn his back toward it, and launch himself headfirst and backwards. People didn't know quite what to make of it. Even after he won the gold medal with a record jump of 7'4" most track experts figured it was a fluke. Many people even thought it was too dangerous, and the AMA even set up a committee to evaluate it, but today the Fosbury Flop is the technique used by every high jumper from junior high school to the Olympics.

Fosbury didn't set out to start a revolution, but in high school he could not master the then-standard straddle, and could jump no higher than 5'4". So he threw the book out and tried jumping his way, and almost immediately was clearing 5'10". By the time he finished high school he was jumping 6'7", and won a scholarship to Oregon State. His college coach wanted him to jump 'the right way', and Fosbury gave it a whirl, but the highest jump he could manage that way was 5'10", so he switched back and by his sophomore year he was consistently clearing 6'10", but nobody else copied the Flop.

At least not until he struck gold at the Olympics; and even then it took more than a decade for the Flop to replace the straddle. Fosbury has a theory as to why it took so long. "The problem with something revolutionary like that was that most of the elite athletes had invested so much time in their technique that they didn't want to give it up, so they stuck with what they knew."

Possibly a moral of some sort in this story, yes?

Backwords

Scientists Discover New Element: Governmentium

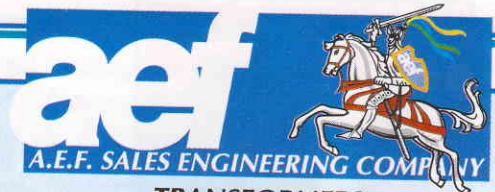
According to a report in Oregon Magazine, a major research institution recently announced the discovery of a new element, which they have named 'Governmentium'. Its unique atomic structure has one neutron, 25 assistant neutrons, 88 deputy neutrons, and 198 assistant deputy neutrons. It has no electrons, making it inert, but it can be detected because it impedes every reaction within range: a minute amount of Governmentium located within 100 yards causes a single event to take four days to complete, when it would normally take less than a second.

Neither Rain, nor Sleet, nor Transit Strike

The transit strike in December threw a lot of folks for a loop, but nothing stops TEAM AEF from making their appointed rounds. Pietro Fasolino had an appointment to review a new CM1 installation at York Ave. and 68th St. in Manhattan, so he brought along his trusty roller blades to get from Grand Central to the jobsite. He made it on time, and met with the electrical contractor, who had ridden his bike in from Brooklyn. Only in New York, kids.

Central Moloney to Unveil Interactive Display at IEEE/Dallas

If you're headed for the big show in Dallas May 22-24, make sure you stop by Booth 2631, where CM will have a zesty display of transformers and components, plus something brand new: a display where you can try your hand at installing a Shedmount T1 Wildlife Guard. This protects transformers from wildlife (and vice versa), but the really cool part is that the Shedmount can be installed from a bucket truck or ground level WHILE THE TRANSFORMER IS ENERGIZED! Should make life a whole lot simpler. AEFer Pietro Fasolino will be helping to man the booth, so come on down!



TRANSFORMERS Central Moloney

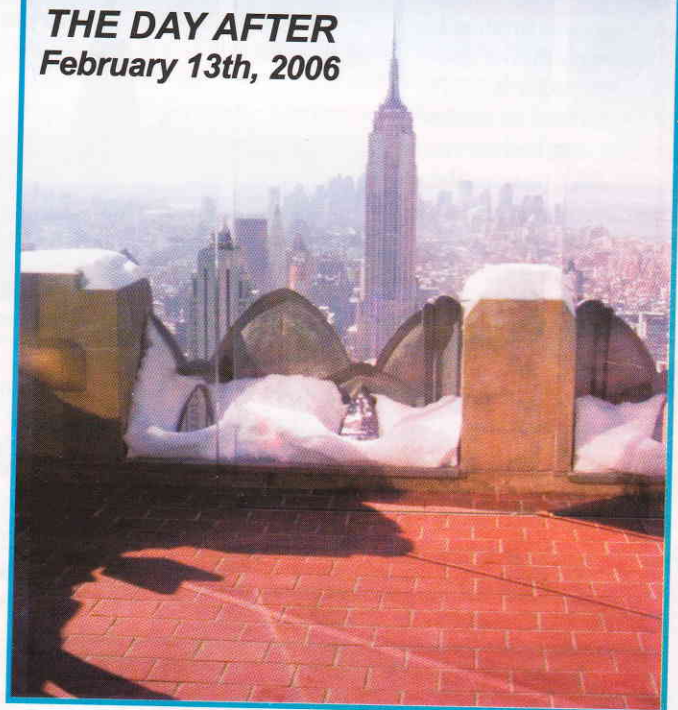
Single Phase Transformers: Pole Type, Padmounted, Vault, and Stepdown
Three Phase Padmounted Transformers
Components: Bushings-Switches-Accessories
JSRP Job Site Ready Padmounts!

R.E. Uptegraff Manufacturing
Liquid Filled Transformers to 20mva
Subsurface, Load Center, Station Type
Rectifier Applications, Zig Zag Grounding
Phase Changing and Phase Shifting
Traction Power, Current Limiting Rectifiers
Rebuilding and Rewinding Services

HEATER CABLE & CONTROLS
Nelson Electric Heater Products
MI Cable for Pipe Tracing & Snowmelting
Self-Regulating Cable for Pipe Tracing
Hot Water Maintenance Cable
Self-Regulating Cable for Roof & Gutter De-Icing
Thermostats & Controls
CM-1 Cable Monitoring Systems
CM-2 Heat Trace Management System
NEW! CM-3 PLC Based Circuit Management System

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THE DAY AFTER February 13th, 2006



What better way to test a snow melting system than with a record-breaking snowfall? AEF's Mr. Pete traveled in to Manhattan the day after February's gigantic storm, to see how the system worked. While the rest of the Big Apple was under two feet of snow, the pavement of the Top of the Rock Observation Deck was Clean and Dry.
Don't forget to visit aefsales.com, and enter to win a trip for two to the Top of the Rock, with lunch at the Rock Center Café!