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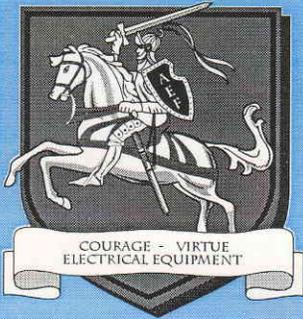
The Quarterly
Newsletter from
the folks at
A.E.F. Sales
Engineering
Company

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Guido, the AEF
Corporate Seal

July 1997



Our 33rd Year

CONTENTS:

SECRET SNOWMELT SYSTEMS TESTING

All the inside skinny
they were trying to keep
secret. An FYI Exclusive.

WE PROPOSE!

Ever get proposals that
bear so little resemblance
to your spec that you
wonder why you wrote a
spec in the first place?
There's a better way.

IBEW ANNIVERSARY

Our own Chairman Tony
celebrates 55 years of
card-carrying.

POSTCARDS FROM BERNADETTE

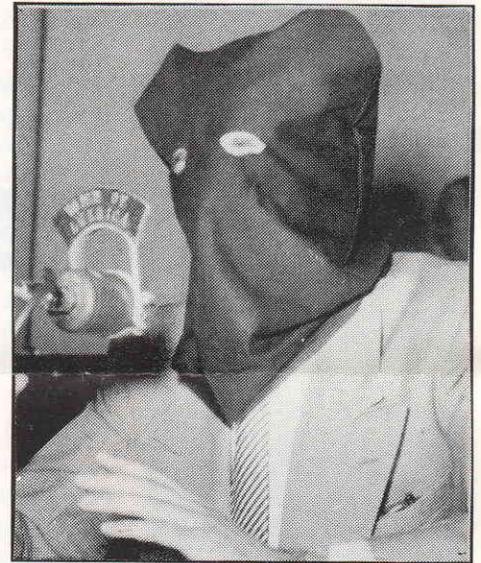
AEF's Answer Cow sends
her readers an update
from her European Tour.

Secret Government Test Shows MI Cable Tops at Snowmelting

EDITOR'S NOTE: This is the first of a three (or possibly four) part series designed to let you, dear Reader, know everything you've always wanted to know about snowmelting, and to actually put you smack inside the secretive, scientific and sometimes sinister World of Snowmelting. So here goes.

You hear a lot of conflicting talk about which approach to snowmelting works best. Wouldn't it be neat if you had the time (and the money) to set up a real-world test, to actually install three systems side by side and see what really worked best? Well, a government agency did just that in a Top Secret test, and in this exclusive report AEF/FYI gives our readers the inside skinny. (Security measures have been undertaken to protect the identities of our informants and our undercover investigators.)

The Agency (not its real name) needed to install a snowmelting system in a large, heavily trafficked ramp, and the in-house engineers were divided on just what type of system to use. Some wanted a hydronic system, (using a heated fluid, run through tubing), some wanted to try self-limiting heaters (essentially pipe tracing cable on steroids), and some (incidentally the handsomest and smartest ones) wanted to use an Inconel-sheathed MI cable system. Since talk is cheap, they decided on a test installation, side-by-side on the ramp to decide the winner. *(continued on 3)*



*Wearing a hood to protect his identity,
Engineer 'X' spills the beans.*

Indecent Proposals

One of our good customers (a large Engineer/Constructor in a state whose initials are N J), recently told our Fred Eigenrauch III what a pleasure it was to receive and review a proposal from R.E. Uptegraff for some load-center transformers. It was an interesting comment, and it set us to thinking about things. According to our customer, most of the transformer proposals he gets offer units of specified size and voltages, but that's where all similarity to the spec ends. *"They don't give you enough information, enough detail, to evaluate their proposal, so you've got to keep going back and forth with them for specifics. It's like pulling teeth, and I don't have that kind of time to waste."* It's like those other companies have aspiring politicians doing their proposals: a few ambiguous statements, some implied promises (but nothing concrete), and a slick pile of computer-generated gobbledygook and boiler plates. And while that may be a good way to run the country, it's no way to buy transformers. (On second thought, it's probably not a good way to run a country either. But that's another story.) *(continued on 2)*

Were we directed from Washington when to sow, and when to reap, we should soon want bread.

Thomas Jefferson

Those who have wished to worship men as gods have made a very grave error.

Leonardo daVinci

The wise ones have become ashamed. They have become terrified and will be caught. Look! They have rejected the very word of God, and what wisdom do they have?

Jeremiah 8:9

The way to love anything is to realize that it might be lost.

Gilbert K. Chesterton

I feel sure that the world would be better off if some of the folks who are trying to save it would give up.

Frank A. Clark

Look not at the face; look at the heart.

Quasimodo

In the 23rd Century B.C., the wisdom of the world was that outside the Ark was the smart place to be. It was incorrect.

Nat Gulotta

What we think, or what we know, or what we believe is, in the end, of very little consequence. The only thing of consequence is what we do.

John Ruskin

memo FROM Peter Fasolino

I've always thought of AEF Sales as a sort of skunk works. If you're not familiar with the term, a word of explanation is in order.

Back in 1943, the first German jet fighters began to appear in the skies over Europe, while the U.S. was still limited to propeller airplanes. Lockheed Aircraft was given 180 days to develop a jet fighter prototype. Within the normal corporate bureaucracy, the job would have been impossible, so a special task force was formed. Office space was in short supply, so they set up shop in a circus tent next to a plastics factory at the Lockheed complex in Burbank. The idea was to create an environment where innovative thinking and getting things done was more important than corporate politics; where what counted was

doing things right—a place with very few rules. The rules we go by here at AEF Sales are few and simple. Will it work? Is it fair? Will it help our customers? Our suppliers? The people who work here? If the answers are all "Yes", then it's generally full speed ahead." Ray Bradbury once spoke of "jumping off of cliffs and building your wings on the way down." There's a bit of that going on here every day, and it makes things kind of fun.

Which brings me back to the odd name Skunk Works. At about the time the Lockheed engineers set to work, Al Capp introduced a new character to his "Lil Abner" comic strip, a maker of moonshine whiskey at a place dubbed "the skunk works". Working all day in the aroma of the adjacent plastics plant, the engineers adopted the name for themselves. And I like to think that at AEF Sales we've adopted the can-do spirit of innovation of those engineers.

If you can use this kind of innovative approach to your problems, give us a try.

Indecent Proposals. . .

It's as if those other transformer guys are saying: "We have no idea what you need, but this is what we'll build." And the problem doesn't end with the quotation stage. Usually the lackadaisical approach evident in the proposal extends through the finished product and re drawings. Hey, if a company hasn't paid much attention to your spec in the first place, at the quotation stage, what makes you think it'll get better after you've committed yourself?

But it doesn't have to be that way. Being slightly old-fashioned, Uptegraff's attention to your needs starts right from the beginning: *a proposal that actually is responsive to your spec!* The impedance you asked for, the paint finish you wanted, the tests you specified --- it's all there, it's all in writing. Any exceptions taken, any clarifications required, well they're all part and parcel of the quotation too. No need to guess what you're buying.

And that same concern for your requirements is reflected in the unit that's delivered to you. Sounds good, don't it? Send us your next inquiry, and see how wonderful life can be.

EDITOR'S NOTE: *Although Uptegraff is slightly old-fashioned in good ways, they're up to date where new technology can help their customers. Example: their Web Site is up and operating, and you're invited! Check it out at www.uptegraff.com*

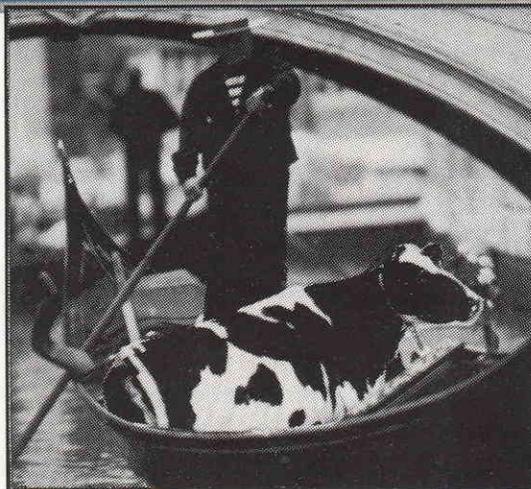
You can also E-Mail Uptegraff at:
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upt-sale@uptegraff.com (for the sales office),
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When Was the Last Time YOU Kissed a Transformer Salesman? *It happens just about every time a customer gets an Uptegraff proposal. Above, FYI's HiddenCam captures a typical customer reaction.*

Bernadette The AEF Sales Answer Cow

DEAR READERS: By all means you must see Europe, and above all--*Venice!!* Avoid June through August if possible (crowds!). Buy a gelato, and wander from the Rialto toward St. Mark's. Go to the top of the Campanile for a view you'll never forget. Stroll the piazza toward the Grand Canal, slowly. And *yes*, go for a ride in a gondola! It'll set you back about \$60 for a forty minute ride, but you will never be the same again. In all my life I have never experienced a more magical moment: moonlight and lantern light, stars, bridges, palaces . . . *Bellissima!*
(TIP: I recommend Rick Steve's Guidebooks.)



Romantic Venice

Snowmelting . . .

The Test. All three test sections were designed to provide 50 watts per square foot. (More about this in Part 2.) The guys that wanted the hydronic system decided to use plastic tubing, since the system that was being replaced had used metal tubing system which had corroded. The choice for heat transfer fluid didn't make much difference, since they're all about equally toxic.

The guys who wanted to use the plastic pipe tracing cable also had some decisions to make. That manufacturer *TALKS* about placing its cable on 12 inch centers (it's expensive stuff, and using less of it makes it seem cheaper), but when they realized that this installation would be scrutinized, they decided that 8 inch spacing might be better after all.

Those smart guys who wanted MI continued their smartness by calling in AEF Sales to design a system using Nelson Electric's Inconel sheathed MI Cable. AEF Sales not only helped out at the design end, using thirty years worth of experience to provide an optimum design for minimum cost, but also provided time in the field so that the installation received the same assistance as the design. This also insured that any field conditions not part of the original design would be noted and accomodated. (We'll provide the same field service on *your* job.)

The Envelope, Please. After one year, the hydronic system had some problems. The plastic tubing resisted corrosion well, but it was believed to be responsible for some cracking of the slab, since the large diameter plastic tubing is not simpatico with the concrete slab. And although it was not measured in the test, this seemed to be least energy efficient, since the fluid loses heat as it moves farther away from the source, and since the heat has to pass through the plastic tube, which is in fact a pretty good insulator.

The self-limiting cable also caused some concrete cracking, apparently for similar reasons: Remember this is big old stuff, and between its size its plastic sheath it compromised the slab. (*The inability to bond causes so many of our problems today, don't you think?*) And remember, this damage to the slab was evident after *only one year!*

The MI cable, with its small diameter and metal sheath, was most compatible with the masonry (*looks like re-bar to me!*), and since the electrical insulation in MI cables is also a GOOD conductor of heat, the energy used went to heat the slab, and melt the snow. If you want your snowmelting system, to melt snow, to last, and not to cause structural damage, an MI system from AEF Sales is what you want. *But there's more you need to know about Snowmelting, so Part 2 of this series will be in the October edition of FYI. WARNING: If you need to do any snowmelting before then, better call AEF Sales!*

QUESTION FOR EXTRA CREDIT

What do the George Washington Bridge, The New York Times, the Javits Convention Center, Riker's Island, the UN Building, the Moscow Trade Center and the Metropolitan Museum of Art have in common?

THE ANSWER: *Just Sales by AEF Sales!* They all have snowmelting systems using Nelson's MI Cable and controls, all arranged by AEF Sales!

CONGRATULATIONS!! If you answered correctly, take the rest of the day off.

One of the symptoms of approaching nervous breakdown is the belief that one's work is terribly important.

Bertrand Russell

Kings is mostly rapsallions.

Mark Twain

It is a charming quality of the happiness we inspire in others that, far from being diminished, like a reflection, it comes back to us enhanced.

Victor Hugo

Nevermore.

The Raven

If we can prevent the government from wasting the labors of the people, under the pretense of taking care of them, they must become happy.

Thomas Jefferson

Most dogs are earnest, which is why most people like them. You can say any fool thing to a dog, and the dog will give you this look that says, 'My God, you're RIGHT! I NEVER would have thought of that!'

Dave Barry

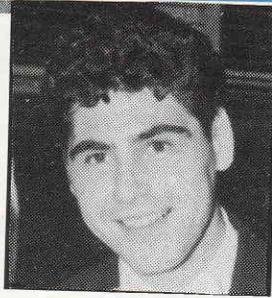
No matter how your heart is grieving, if you keep on believing, the dream that you wish will come true.

Cinderella

NOTICE: The Publishers wish to state that no animals of any significance were harmed during the production of this newsletter.

IBEW & Br. Tony

The International Brotherhood of Electrical Workers recently presented AEF's Tony Fasolino with a Citation in honor of his 55th Anniversary as a member. So let's travel back to 1942, when men were men, and cars were made out of metal (*and, by the by, Chairman Tony's hair was black*).



Chairman Tony, circa 1945

Our story actually starts in 1941, when Tony got his first job within the IBEW, working for Ben Offen at Code Electric in Stamford, CT. Code was a good place to learn the trade, since Ben was a perfectionist: all connections were made with solder and tape (no wire-nuts for Ben!). In the beginning Tony rode his bike from his home in Port Chester to the jobsite in Stamford, a one-way trip of about eight pre I-95 miles. But since he was now making a hefty four dollars a day he was soon able to trade up to a spiffy 1935 Plymouth convertible. (*ESOTERIC NOTE: Yes, this was the same convertible whose rag top was subsequently pierced by Joe Richen's head, when he jumped that time when Nicky Carlucci . . . , but we digress.*)

In order to pay his union initiation fee of \$325 (1942 dollars, Tony reminds us), one day's pay each week was withheld. So, eighty-one weeks later, in September of 1942, he was paid up and initiated into IBEW Local 501. *Happy Trails, Bro!*

Fin du Journale

Report Card

A survey of U.S. public schools was made in 1940 to determine the top disciplinary problems. The worst seven problems in 1940? 1) Talking, (2) chewing gum, (3) making noise, (4) running in the halls, (5) getting out of turn in line, (6) wearing improper clothing, and (7) not putting paper in wastebaskets.

Built to Last

The water to part of the city of Segovia, in Spain, is provided via an aquaduct built by the Romans over 1800 years ago. The aquaduct is now threatened by vibrations from motor vehicles.

Built to Last II

Central Moloney's attention to details gives you pole type transformers that last just about forever. After all a "small" problem like corroded mounting brackets can shorten service life just as much as a "big" problem with the core. Or as Bill Shakespeare put it: "For want of a nail the horse was lost; for want of a horse the rider was lost; for want of continuous arc welded hanger brackets a perfectly good transformer was scrapped after just two years in service."

Bad Words

The government of France has a list of 3,500 foreign words and phrases that can't be used in schools, bureaucracies or companies. Some of the Phorbidden Phrases: stress, cheeseburger, bulldozer, log on.

Food for Thought

Thirteen states have passed 'food disparagement' laws that make it a crime to criticize any perishable items without scientific evidence to back your view.

Forever (Almost)

Nehring's Aluminum Clad Cable lasts and lasts. Aluminum coated cables are conservatively estimated to have life expectancies three to five times that of galvanized zinc, which means you'll probably be retired by the time it needs to be replaced.

We Is Smarter

Back in 1913 an 'educator' by the name of H. Goddard administered an intelligence test to immigrants on Ellis Island, and concluded that over 80% of them were 'febleminded'. He had given the tests in English.

A.E.F. SALES ENGINEERING CO. Representing:

CENTRAL MOLONEY

Single Phase Transformers: Pole Type, Padmounted, Vault, and Stepdown
Components: Bushings-Switches-Accessories

CONEX CABLE

Aluminum Clad Shield Wire, Guy Wire
Messenger Wire, and ACSR/AS (AW)

LORTEC POWER SYSTEMS

On-Line UPS to 300kva
Specialty Inverters, Battery Trackers

NELSON ELECTRIC HEATER PRODUCTS

MI Cable for Pipe Tracing & Snowmelting
Self-Regulating Cable for Pipe Tracing
Self-Regulating Cable for Roof & Gutter De-Icing
Thermostats & Controls
CM-1 Cable Monitoring Systems
CM-2 Heat Trace Management & Control System

NEHRING ELECTRICAL WORKS

Bare Copper and Aluminum Cable
Aluminum Clad Cable
Weather Proof Copper Wire
Ground Rods & Accessories
Cathodic Protection Cable

NORBERG INDUSTRIES

Silver Sand Current Limiting Fuses
Type E General Purpose Fuses
Type R Motor Starting Fuses

RAPID POWER PRODUCTS

Power Conditioners, Voltage Regulators and
Isolation Transformers to 1000kva

R.E. UPTGRAFF MANUFACTURING

Liquid Filled Transformers to 15mva
Subsurface, Load Center, Station Type
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MYRON ZUCKER, INC.

Low Voltage Capacitors to 600 Volts
Harmonic Traps
Capacibanks and AutoCapacibanks

Next Issue

COMING in OCTOBER

A Tribute to Audrey Hepburn
plus probably some articles
about Electrical Stuff

