

winter

1996

Volume 6

Issue 4

aef/fyi

The Quarterly
Newsletter
from
A.E.F. Sales
Engineering
Company

P.O. Box 295, Mamaroneck, N.Y. 10543 (914)698-0432 Fax (914)698-7279

January 1996



Our 31st Year

CONTENTS:

The Uptegraff Story

What makes Uptegraff so special? Read all about it.

In the Long Run

Nelson adds long line heating systems to the line-up.

Dreams Come True

Walt Disney dreamed big, and we're real glad he did.

Heating Heroes

An actual story that happened last month, and what it could mean for you!

Still Caring After All These Years

True Story. In 1995, A.E.F. Sales, representing R.E. Uptegraff Mfg. Co., received an order from one of its utility customers. The transformer was designed to spec and the drawings were approved. Then the customer discovered that the dimensions in their spec were wrong. There was no time to start a new design since the unit was needed in the field. The customer began to try and figure out how to jury rig the installation. But Uptegraff's Chief Engineer, Stan Kostyal, came up with a fresh approach to make the existing tank size work in the installation site, saving the customer a major problem. Extra cost to the customer: none. Time lost: virtually none. Uptegraff's commitment to service, custom approach, and old fashioned know-how saved the day. What would have happened if the order had been placed with another manufacturer? We shudder to think.

Continued on page 3



Experience Counts. Roy Thayer and Tom Connors wind a winding. Roy's been with Uptegraff for forty years. Tom, a relative new-comer, has been at it for thirty-six. (Roy's son, Roy Thayer III, has been with Uptegraff for sixteen years.)

Heat for the Long Run

Nelson Electric and A.E.F. Sales have been turning up the heat for a long time, and things have changed quite a bit over the years. Back in the early '60's, when Tony Fasolino first hooked up with Nelson, the entire Nelson heater line was as follows: 2 conductor #18 copper sheathed MI Cable. Yup, that was it; whatever you had to do, heating, snowmelting, whatever--you found a way to do it using 2c/18 MI cable, a stat, and a bunch of autotransformers.

MI remained the only game in town for quite a few years, but the game got bigger. First off, other cable sizes were gradually added, with different resistances, which made designing a bit easier. (Today's MI is offered in about 50 sizes, ranging from .0097 to 18 ohms/foot.) Then stainless steel sheathing was offered in addition to copper, and finally both copper and stainless were replaced by today's Inconel alloy.

Continued on page 2

*People's wits seem to slip
a bit when they aspire to
divinity.*

Zakath

*Any refusal to recognize
reality, for any reason
whatever, has disastrous
consequences.*

Ayn Rand

*Let him that thinks he
is standing beware that
he does not fall.*

1 Corinthians 10:12

*Man, when you lose
your laugh you lose
your footing. A man go
around lettin' the world
whup him down till he
can't laugh any more,
and he loses one of the
biggest edges he's got.*

R.P. McMurphy

*Almost anyone can find
Philadelphia who tries.*

E.B. White

*I have told my sons that
they are not, under any
circumstances, to take
part in massacres.*

Kurt Vonnegut

*What happens to most
people is when their first
dreams get killed off
nothing ever takes its
place. The important
thing is to keep holding
out for possibilities, even
if no one ever really
makes it.*

Bruce Springsteen

memo

from the desk of

Peter Fasolino

As we begin the new year, it is natural, useful (and occasionally discouraging), to look at the year just gone by. At A.E.F. Sales, 1995 stands out as one of our best years ever, by virtually any conventional financial yardstick which can be used to measure a company's vitality. The hard work of the A.E.F. Sales Team, the support we get from our principal companies, and the loyalty of our customers are the major components of the year's success. Thanks!

Looking back, I am especially happy with one rather unconventional measure of the company: we have, over the past year, invested nearly \$20,000 — and uncounted man-hours — in upgrades of our computer hardware and software.

Long Run *continued from page 1*

The next leap forward came with constant wattage heater cables: these provided a constant heat output regardless of length. The big difference from MI was that these cables could be cut to length in the field, which made for more flexible installation. Nelson's Nelcon came in two attractive styles, Nelcon Blue and Nelcon Yellow. Today Nelson offers five Type NC heaters.

Next addition to the family was Nelson's Limitrace; self-limiting heater cables with heat output that varied along the length of the pipe, the cable automatically increasing or decreasing its heat output in response to temperature changes of the pipe. Today's Limitrace line offers cables that have maximum outputs of from 3 watts/foot up to 20 watts/foot, with multiple jacket and sheathings offered to accommodate various circumstances, including exposure to high temperatures and Division 1 areas.

BUT . . . But even with all this variety, there were limitations based on length. A major expense of long heat tracing systems that use conventional heat trace is the construction and maintenance of power

supply points. Because of bus wire size and voltage drop (depending on the cable), once you get beyond 1500'-2000' circuits, conventional 2 wire heat trace is unable to maintain moderate temperatures. So in 1995, Nelson enhanced the product line by becoming the worldwide representative for Ricwel Skin Effect and Impedance Heating Systems.

With Ricwel's SECT System, a single power feed point will take care of 16 MILES OF PIPE. (Technical Note: Skin Effect Current Tracing combines skin effect and proximity effect. An electrical cable is installed in a carbon steel heat tube which is mounted on the carrier pipe; heat generated from the current is dispatched through the heat tube wall into the carrier pipe by conduction, and provides uniform heat along the entire length.) And Nelson provides the whole package, thermal and mechanical designs, insulation, controls, and transformers.

On behalf of all of us at A.E.F. Sales, our best wishes for a happy and healthy 1996.

This new capability from Nelson rounds out the Full Nelson line, which means one source responsibility for all facets of your heat tracing requirements. So from now on all you need to know about heating is Nelson Electric, and A.E.F. Sales.

A Dream is a Wish Your Heart Makes

How long does it take for a dream to come true? Depends. For Walt Disney, Disneyland was a dream dancing around in his head for about twenty years. Started out to be an eight acre park right next to his studio, but by the time the dreaming was through it was gonna take alot more land, and a whole lot more money than anyone had figured on. "I could never convince the financiers that Disneyland was feasible" Walt recalled, "because dreams offer too little collateral."

Walt cashed in his life insurance policies, and got his brother Roy to bet to whole company on his latest dream. The land they bought in Anaheim was all flat, just 180 acres of orange groves in the middle of nowhere. But Walt put together a team of 'imagineers' to make the dream come to life.

Uptegraff *from page 1*

Bad News. Did you ever get a transformer that didn't exactly conform to your specs, even though the manufacturer said it would? Wrong fittings, wrong tank finish, wrong dimensions, wrong whatever? Sometimes it's something you can live with (even though you shouldn't have to), sometimes it's something you can fix (even though that costs you money), sometimes it's so far off spec you just send it back from whence it came (if you have enough time). Why does that happen?

Sometimes it's a product of corporate culture, an inability to know or care enough about their products, a need to make someone at Corporate Headquarters happy when they look at a computer printout. Sometimes its a lack of depth and experience. There's alot of companies that just don't have it; if they don't already have a design they can't build it, can't even quote it. There ain't many companies around where you give them a blank sheet of paper and tell them what you need and they can quote it, design it, and then build it.

Since 1926. Uptegraff has been building transformers for over seventy years. For all that time they have always been a family-owned, independent company. (Uptegraff's

Build a turn-of-the-century Main Street, with horse-drawn trolleys, and a railroad at one end and a castle at the other. Carve out a river and put a paddle-wheeled steamboat on it. Transform an orange grove into a jungle, and fill it with believable wild animals. And, oh yeah, we've only got a year to do it.

Ground was broken July 21, 1954; Opening Day was set for July 17, 1955. On live TV. They did it.

While it still existed only in his head, Walt said that to step through the portals of Disneyland would be like entering another world. It is. Safe to say you'll never be quite the same again. If you ever get the chance to go there, go!

And thanks, Walt.

president, Susan Endersbe, is the granddaughter of founder Roy Uptegraff, Sr.)

They're responsible to you, the customer, not to some vice-president of a corporate behemoth. And they've got people like Stan Kostyal, and Ron Thayer, and Tom Connors, who know what they're doing, and take pride in their work.

So What's New? Disc wound units! Well not new, exactly, but back again. Uptegraff stopped building them in the late 50's, but since they do have mechanical superiority under short-circuit, and superior cooling, and, well there was this customer with a problem... they started building them again. The learning experience filtered down through all the areas of the shop from trying out new materials, new designs, new ways of doing things. And now Uptegraff has the capability of building disc wound units as high as 550kV BIL, and through 15mVA.

Can We Build One For You? We'll build it the way you want it. Got a weird application? A special environment? We can handle it. Need two transformers in one tank? Copper windings? We can handle that too. Put Uptegraff to work for you, and get the transformer you need, not the one somebody else felt like building.

There are some people you like immediately, some whom you think you might learn to like in the fullness of time, and some that you simply want to push away from you with a sharp stick.

Douglas Adams

Thirty days hath September; April, June and November; All the rest have thirty-one; Except January, which has eighty.

Unknown

Heroes exterminate other heroes for the benefit of people who are not heroes.

Havelock Ellis

There comes a time in the history of every project when it becomes necessary to shoot the engineers and start production.

Dan Borkosky

To live content with small means; to seek elegance rather than fashion; to be worthy, not respectable, and wealthy, not rich; to study hard, think quietly, talk gently, act frankly; to listen to stars and birds, to babes and sages, with open heart; to bear all cheerfully, do all bravely, await occasions, hurry never. That is to be my symphony.

William Henry Channing

Heating Heroes (Us)

EDITOR'S NOTE: *We felt sort of sheepish about calling ourselves heroes here, but in the interest of Truth, Justice, and Hard-Hitting Journalism we really felt we had no choice.*

December 12, 1995, 4:20 P.M. An order comes over the fax at A.E.F. Sales: "Emergency at the job site; material urgently required. Can you still ship today by Fed Ex Overnight? Please fax back what you are able to do." Yes we could. And yes we did.

Some people talk about customer service; A.E.F. Sales delivers. By keeping plenty of local stock (we've got two and a half miles of festive heater cables, plus a pile of zesty thermostats and accessories, on the shelf *and it's yours if you want it!*); and by going the extra mile when a customer has a problem (no extra charges here--the customer just paid for Fed Ex).

So the next time you're really up against it, you know who to call. We'll do everything we can to help out. And then you can be a heating hero too.

4 Things Worth Knowing

- **Great Invention.** *Weirdest thing we've seen in any of the 7,000 catalogs that came in the mail last month: The Cracker Thrower. It looks a little like an old-fashioned straight razor, and with it you'll be able to fling a Ritz (or any Round Snack Cracker) over 60 Yards with a Flick of Your Wrist. It comes in right-handed or left-handed models, and costs just \$19.95. Call the Brainstorms Catalog at 800-231-6000 to order yours.*
- **Good as Gold.** *Has there ever been a warranty as good as Lortec's Gold Warranty? Probably not. When you buy an LE500 UPS from Lortec, instead of scheduling a technician, the warranty allows overnight swapout for the FIRST FIVE YEARS. You get a brand new unit tomorrow, and use the packaging to send the old unit back to Lortec. Doesn't really make sense to buy from anyone else, does it?*
- **Funny Money.** *Ever wonder about that weird pyramid thing with the eye on the back of a dollar bill? It's the reverse side of the Great Seal of the United States. (You know, the eagle with the arrows.) That eye is supposed to be the 'Eye of Providence'. The motto 'Annuit coeptis', means 'He (God) has favored our undertakings'; the lower motto 'Novus ordo seclorum', means 'the new order of the ages, which supposedly began in 1776. Designed by the Continental Congress, the reverse side of the Great Seal has never been used anywhere else.*
- **Independence Day.** *Uptegraff isn't the only Independent transformer manufacturer A.E.F. represents. Central Moloney (see line list above, right) was bought by its management last year, and now Transformer People are calling the shots there, too. Find out what a difference that makes!*

A.E.F. SALES ENGINEERING 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)

LEWTEX TECHNOLOGICAL MFG.

Fibreglass Crossarms

LORTEC POWER SYSTEMS

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

NELSON ELECTRIC HEATER PRODUCTS

MI Cable for Pipe Tracing and Snowmelting
Self-Regulating Cable for Pipe Tracing
Thermostats and Controls
Control and Monitoring Panels
Ricwel SECT and Stereo Impedance Heating

NEHRING ELECTRICAL WORKS

Bare Copper and Aluminum Cable
Aluminum Clad Cable

NORBERG INDUSTRIES, INC.

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

PYRAMID INDUSTRIES, INC.

Plowable Duct, Locatable Duct, Inner Duct
Aerial Duct, Cable Blowing Equipment

RAPID POWER TECHNOLOGIES

Power Conditioners, Voltage Regulators
and Isolation Transformers to 1000kva

R.E. UPTGRAFF MANUFACTURING

Liquid-Filled Transformers to 15mva
Subsurface, Load Center, Station Type
Rebuilding and Rewinding Services

MYRON ZUCKER, INC.

Low Voltage Capacitors to 600 voltss
Harmonic Traps

*aef/fyi is published quarterly, more or less,
by A.E.F. Sales Engineering Co. of
Mamaroneck, N.Y.*