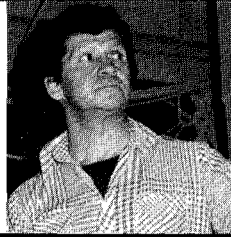


A Look INSIDE



**The work
of an NSW
crane operator**

See page 6



**First Aid
training
a success
in Houston**

See page 5



**Gurnitz speaks
at Chamber
dinner**

See page 8

The Owners Manual

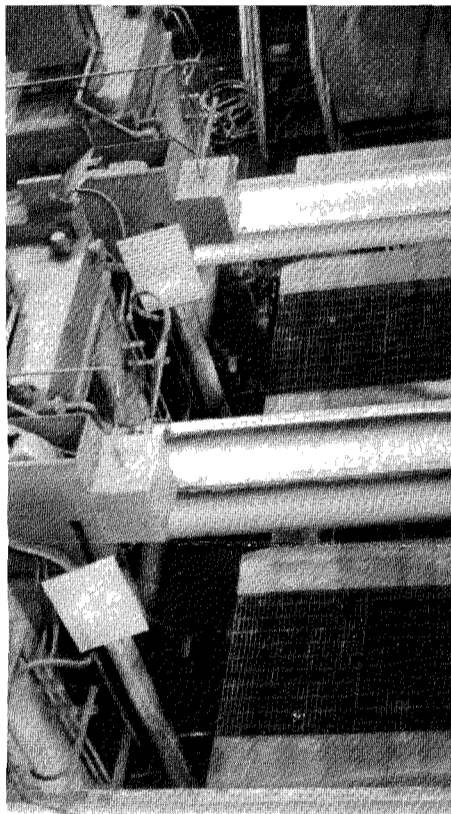
A PUBLICATION FOR EMPLOYEE/OWNERS AND RETIREES OF NORTHWESTERN STEEL AND WIRE COMPANY

April, 1991

Consistency is the key

World's largest beam blanks cast on jumbo

The world's largest cast beam blanks rolled off Northwestern's new jumbo caster in late March. The blanks, which are 23-3/4 inches wide, 10-3/4 inches high and have a web seven inches thick, weigh an incredible 1,005 pounds per foot.



An overhead view of the jumbo caster shows the largest beam blank (the "A-beam") in the middle strand.

Norm Woost, Caster Practice Engineer, says that despite its large size, the jumbo caster has been very successful in producing beam blanks that are extremely consistent dimensionally.

"If a problem occurs in the rolling of the bar, the rollers will be able to pinpoint the cause of the problem right away if they don't have to worry about whether the measurements of the beam blanks have varied," Woost explained.

...despite its large size, the jumbo caster has been very successful in producing beam blanks that are extremely consistent dimensionally...

Jack Cox, Roll Shop Manager, is hoping the "A-beam" will be rolled in Houston at the end of April. Sixteen different sized sections will be rolled out of the "A-beam." Twelve will be wide flange beams ranging in weight from 90 pounds per foot to 257 pounds per foot. An additional four sections will be rolled as bearing piles with weights between 73 pounds per foot and 117 pounds per foot.

Bearing piles are driven into the ground and used as foundation support. They are primarily used in heavy construction projects such as large buildings and bridges. The large wide flange beams rolled from



The "A-beam" is consistently being measured at over 1,000 pounds per foot.

the "A-beam" will be used as column sections in high-rises and heavy industrial buildings.

These large sections being rolled from the "A-beam" are creating advantageous possibilities for Northwestern. With these added

sections, NSW will be able to compete in a market that previously was inaccessible. Additionally, this new market opportunity will enhance NSW's sales of the balance of sections produced in Sterling and Houston.

Mike Mullen assumes Vice President position at Houston

Effective April 1, Mike Mullen became the permanent Vice President of Houston. Mike took over as acting Vice President on February 13, so he has had a chance to become well acquainted with the facilities and procedures there.

Mullen says he decided to take on the position permanently so he could complete the job he started. "It

appeared to me that I couldn't get the job done being temporary. I couldn't make the changes I felt necessary," Mullen explained.

Houston is not as similar to some of the mills in Sterling as employee/owners might expect, according to Mullen. "It is a rolling mill. Therefore it's similar to the (Continued on page four)

Customer honors NSW with prestigious award

Jorgensen Steel and Aluminum, one of Northwestern's largest steel service center customers, recently visited the Sterling plant to present NSW with the 1990 Vendor Quality Award. Outside Salesman for the Steel Division, Ed Kolinski, services the Jorgensen account. He says NSW received the award because Jorgensen ranked Northwestern as

the top performer among carbon steel-producing mini-mills.

Northwestern was judged on all facets of their relationship with Jorgensen, including the quality of the product, on-time delivery, product metallurgy, NSW's competitiveness in the market, and a responsiveness to inquiries and needs.



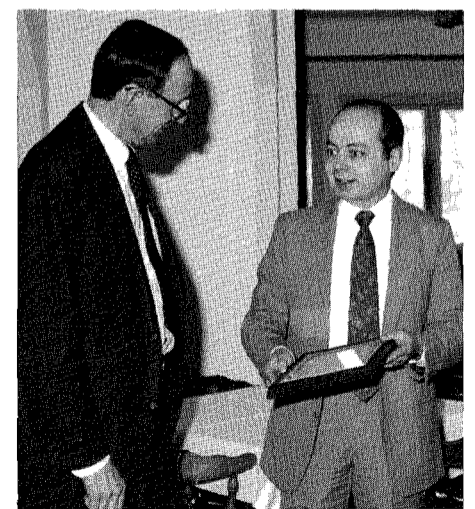
All the representatives from Jorgensen that visited Sterling gathered for a photo with several NSW sales personnel. In the front row on the far left is Ed Kolinski, NSW Outside Salesman. In the back row, second and third from the left are Charles Biermann, Senior Vice President of Sales, and Vern Johnson, Manager of Fabricator Sales. President Robert Gurnitz is standing in the back row, second from the right.

Kolinski says the credit for this award should not be limited to the sales department. "All of us at Northwestern can share in this award. Every department from quality assurance to shipping has had a part in achieving the Vendor Quality Award," Kolinski commented.

Inside Steel Sales Representative for the Jorgensen account is Judi Golden. Jorgensen buys Northwestern's hot-rolled flats, channels, angles, wide flange beams, and straightened and cut rounds. They have 30 service center plants coast to coast and more than 5,000 employees. Jorgensen, like NSW, is also an ESOP.

According to Kolinski, Jorgensen performs an in-house evaluation to rate their vendors on a percentage basis, with a 100% rating meaning perfect. Vendors must remain above 95% to be considered a preferred supplier, and Northwestern has never fallen below this ranking.

Besides earning the Vendor Quality Award, Kolinski says Jorgensen has rated Northwestern the "best" mini-mill among all

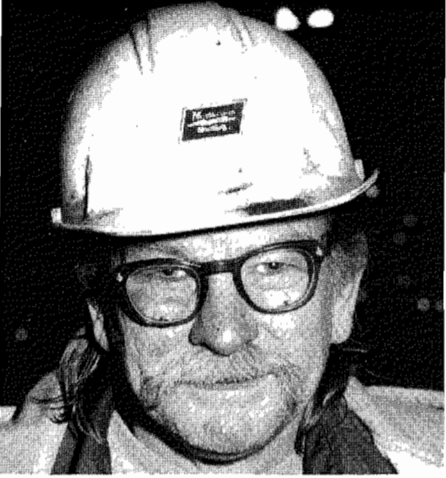


Robert Gurnitz received the Jorgensen 1990 Vendor Quality Award from Chuck Freda, Quality Assurance Manager and Metallurgist (right).

others. This means Jorgensen rated NSW as the very best producer, including those who produce stainless, aluminum, hot-rolled quality bars (alloys and SBQ), and cold-drawn bars.

(Continued on page seven)

Viewpoint



"I think the company is making their own decisions on that by cutting back on overtime."

Billy Slade
Hooker
24-Inch Shipping

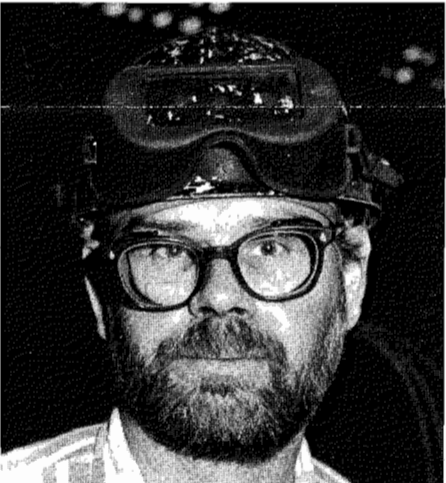
"What do you think we, as employee/owners, can do to help the company through this economic downturn?"

The NSW employee/owners who give their viewpoint are picked at random. The opinions of the *first eight* people who give spontaneous or impromptu answers are used; we do not look for the "best" eight answers. The responses given are the responses that appear in print. They are not edited or changed.



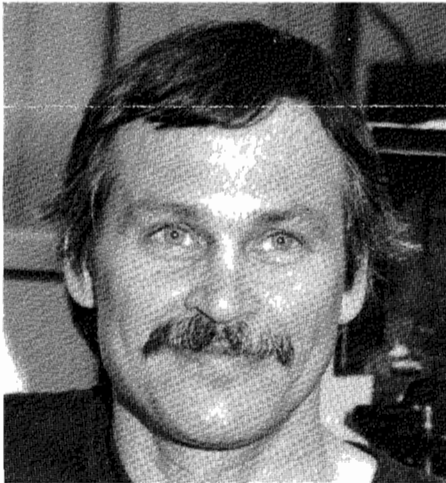
"We can work harder and try to help boost everyone's morale."

Freda Last
Secretary
Employment



"We should fix things now because there are many serious things that need to be fixed, and we don't have the opportunity to fix them when the mill is operating."

Wilbur Schwindenhammer
Multi-Craft Pipefitter
14-Inch Mill



"We have no control over the economic downturn. The only thing that can turn things around is, with the limited staff that we have, to become more efficient."

Tony Fiorini
Steel Chemist
Metallurgy West



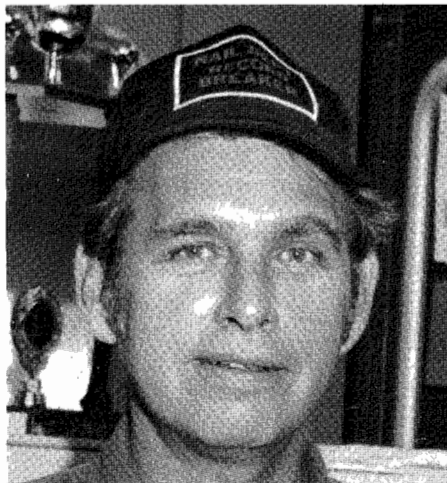
"We're already reducing the quantity of overtime, and only doing work that's absolutely necessary, work that relates to better production, efficiency, and of course, safety."

Bob Walker
Supervisor
Electronics Shop



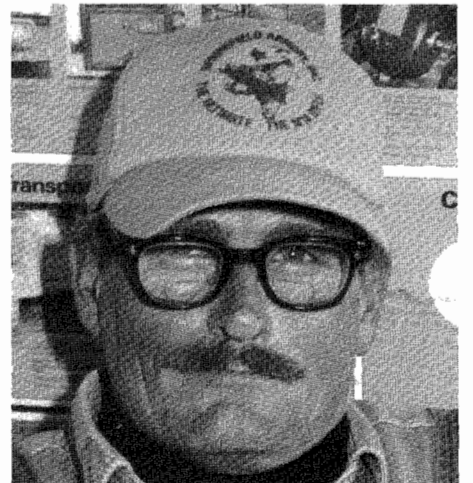
"Sell it."

Garry O'Neal
Wire Drawer
Plant 1 Drawing Room



"Do our job the best we can."

Richard Van Ausdoll
Group Leader
Nail Room



"Sell Houston."

Bill Guinn
Remote Engineer
Scrap Yard

The President's Corner

Robert N. Gurnitz,
President &
Chief Executive Officer

Dear Fellow Employees:

The economic recession that has been prevalent on the East and West Coasts, has finally arrived in Sterling. It's not that we haven't been expecting it. The questions have been, when will it arrive, how severe will it be, and how long will it last?

Most NSW employees realize that the steel industry is cyclical. Market conditions can change very quickly, and often without much warning. For example, in the beginning of February, NSW

received 850 applications from the Illinois Job Service with the intentions of hiring 100 new employees. Six weeks later, there were 300 people that were laid off (most were for inventory adjustment in the 14" mill).

During the month of March, market prices for certain of our structural products fell \$15/ton following a \$20/ton decrease in early February. We were then impacted in early April by additional decreases averaging another \$12/ton.

These two examples illustrate

how Northwestern is impacted by external economic conditions. However, we are not just idly standing by. Northwestern is actively pursuing improvements to its sales strategies, purchasing practices, manufacturing productivity efforts and its staff areas.

Northwestern is currently involved in attempts to increase sales in three areas - Kuwait, direct sales to fabricators, and other export sales.

Contacts are being made to sell the full line of wire products and structural steel to Kuwait. We are attempting to deal directly with the Kuwaiti government as well as numerous major contractors involved in the rebuilding of Kuwait.

Today, in the United States, approximately 30% of steel produced is sold to the service centers and about 70% is sold directly to fabricators. With the Houston facility, Northwestern will have the capabilities of producing 80% of the sizes and weights of structural steel manufactured in the United States. Efforts have been redirected so that Northwestern will be selling directly to fabricators in addition to our very important service center customers.

Currently, our emphasis is on selling to the steel service centers. Our competitors are principally the mini-mills. By concentrating on the fabricator sales, we will be competing with the larger, higher cost, integrated steel mills for structural steel sales.

Our Purchasing Department has been working with the vendors from whom NSW purchases machinery, equipment, materials, and supplies. The Company has requested that we receive a 5% discount on our purchases. If the vendors cannot comply with this request, Northwestern will seriously consider doing business elsewhere.

Also, the Purchasing Department is making arrangements to pay our

bills on a forty-five day cycle, instead of the present thirty day cycle. It is anticipated that NSW will generate about four million dollars just following this procedure.

And, lastly, in order to increase sales, attempts are being made to export overseas and into Canada. With the acquisition of the JIS certification, Northwestern is developing marketing strategies that will enable our Company to capitalize on the JIS certification.

In Houston, management roles and responsibilities have been redefined so as to promote a smoother running operation. Also, more hourly and salaried employees from Sterling have been going to Houston, on a temporary basis, in order to increase the operating efficiency of that facility.

In Sterling, as you may know, reorganizing and redefining management roles and responsibilities have already occurred in the 12" mill, Sales, and Human Resources.

...Northwestern is impacted by external economic conditions. However, we are not just idly standing by. Northwestern is actively pursuing improvements to its sales...purchasing... manufacturing...and its staff areas...

Northwestern Steel and Wire company is entering a difficult 112th year of operation. But, as a company, we've experienced the peaks and valleys of the steel industry before.

When the current economic recession is over, Northwestern will emerge "leaner and meaner." NSW will survive in a fiercely competitive global market, where other companies will not. Northwestern will persevere because as what has been often said, "When the going gets tough, the tough get going!"

Checking the stats February, 1991

PRODUCTION

Department/Mill	Produced (tons)	Performance to Plan
Primary Department		
Raw Steel	134,867	N/A
Billets Cast	65,438	91.5%
Blooms Cast	58,038	119.9%
Jumbo Beams Cast	6,371	85.2%
Wire Division		
Rod/Wire	3,018.3	N/A
Plant 1	8,265.4	98%
Plant 4	4,652.2	103%
48-Inch Mill	12,334	62%
24-Inch Mill	29,843	101%
14-Inch Mill	23,137	107%
12-Inch Mill	32,996	106%
	Shipped (tons)	Plan vs. Actual
Total Rod/Wire	16,924.7	+ 464.7
12-Inch Mill	16,374	+ 4,374
14-Inch Mill	24,877	- 2,323
24-Inch Mill	27,784	- 696
48-Inch Mill	15,986	- 5,014
Semi-Finished	16,446	+ 4,446

COMPLAINTS

Wire Division Products				
Number Recorded	Reason	By Costs		TOP FOUR COMPLAINTS = 87% OF TOTAL
		\$	%	
64	Order Entry	\$8,656	41.31%	
	Service	3,873	18.48%	
	Mixed Steel	3,449	16.46%	
	Short	2,269	10.83%	
Steel Division Products				
Number Recorded	Reason	By Costs		TOP FOUR COMPLAINTS = 82% OF TOTAL
		\$	%	
50	Square	\$25,942	30.72%	
	Order Entry	19,006	22.51%	
	Service	18,604	22.03%	
	Customer Error	5,652	6.69%	

ABSENTEES

Normal Work Hours	Total Absence* Hours	% Absence to Normal	% Jan., 1991
454,322	25,736	5.66%	5.65%

* includes off until further notice, i.e. workers compensation, sickness and accident, discipline, etc. and general reporting off.

OSHA RECORDABLE INJURIES

OSHA recordables are injuries resulting in time loss, sutures or physical therapy needed, industrial illness, etc.	Rate 11.45% Rate is % per 200,000 man hours (100 employees working 1 year)	Rate - Feb., 1990 11.76%
26		

Production records continue to be broken

Many records were again broken in the first part of March. The *Owner's Manual* congratulates the following employee/owners for setting new standards at Northwestern.

Plant 1 Drawing Room Shift Record **Old Record**
16 gauge (.0625)

March 4, 1991 New Record
11,150 pounds Established
3 to 11 shift
Mark Nitsch

Field Fence Shift Record **Old Record**
47-6-B

March 5, 1991 Feb. 18, 1991
71 rolls 70 rolls
7 to 3 shift 7 to 3 shift
Curt Dusing John Lewis

Netting Shift Record **Old Record**
24/24 1x20 25-foot

March 5, 1991 Feb. 28, 1991
88 boxes 80 boxes
7 to 3 shift 3 to 11 shift
Ron Roberts Steve Hatten

Plant 1 Drawing Room Shift Record **Old Record**
14 gauge (.082)

March 6, 1991 Feb. 20, 1989
18,740 pounds 18,200 pounds
3 to 11 shift 7 to 3 shift
Tracy Russell Felipe Ranjel

Plant 1 Drawing Room Shift Record **Old Record**
9 gauge (.148)

March 7, 1991 Feb. 16, 1991
38,480 pounds 35,160 pounds
7 to 3 shift 3 to 11 shift
Paul Brunk Mike Kinnaman

Field Fence Shift Record **Old Record**
47-6-B

March 8, 1991 Oct. 4, 1990
69 rolls 67 rolls
7 to 3 shift 7 to 3 shift
Glenn Landherr Glenn Landherr

Plant 1 Drawing Room Shift Record **Old Record**
12-1/2 gauge (.098)

March 8, 1991 Jan. 21, 1991
24,320 pounds 23,400 pounds
11 to 7 shift 3 to 11 shift
Tracy Russell Dennis Ortgiesen

Plant 1 Drawing Room Shift Record **Old Record**
16 gauge (.062)

March 10, 1991 March 4, 1991
11,870 pounds 11,150 pounds
11 to 7 shift 3 to 11 shift
Mark Nitsch Mark Nitsch



Sterling's 24-Inch Mill employees offer their experience to 48-Inch Mill

A Task Force of employee/owners from Sterling has been in Houston recently exchanging information and knowledge with the Houston employees to help solve some of their procedural problems.

Several employees from the 24-Inch Mill were in Houston for ap-

proximately four weeks, while a few remain there, assisting with problems in their specialized areas. These employees are Frank Sanders, Conditioning Yard; Willy Sifuentes, Straightener Operator; Dave Douglass, Crane Operator; Mike Miller, Inspector; Randy Johnson, Finishing Supervisor; and Joe Sibley, Roller Supervisor.

Miller and Sibley have continued to work in Houston, while Sifuentes

and Wayne Spencer to assist with Quality Assurance.

Joe Sibley says the purpose of the Task Force is to offer Houston employees the knowledge gained from almost 30 years of experience in operating the 24-Inch. "We came down to share with the Houston employees any of our knowledge that might be useful to them. Also, we were chosen as resource people to help identify problems in specific areas," Sibley noted.

Sibley says he feels the Task Force has not only helped in solving some of Houston's problems, but they have also provided a steady flow of communication to management and other employees in Sterling about Houston's progress.

Sibley feels it's important for the employee/owners in Sterling to understand how much the workers in Houston care about the company. He commented, "These employees are a very knowledgeable group. They are extremely determined to make the 48-Inch Mill a success."



Members of the Steel Service Center Institute who visited NSW-Houston for a plant tour, posed for a picture with their tour guide, Patsy Klenk, QIP-TEXAS Facilitator (far right).

"These employees are a very knowledgeable group. They are extremely determined to make the 48-Inch Mill a success."

returned once after the initial four weeks. Other employees from the 24-Inch have also been sent to Houston as needed, including Gary Rosenow, Maintenance Manager,

"We came down to share with the Houston employees any of our knowledge that might be useful to them. Also, we were chosen as resource people to help identify problems in specific areas..."

Some people might feel threatened or intimidated by someone coming into their work place and telling them what to do. But according to Sibley, Houston employees have received the Task Force's suggestions very well. "We approached them by saying, 'Hey, we're here to help you. We're not telling you how to do your job. You already know how to do your job.' And I think that helped a lot," Sibley said.

A couple of specific areas in which the Task Force has generated new procedures in Houston include changing the roll designs and set-up practices on the straightener.

'Young leaders' add tour of NSW Houston facility to conference

Northwestern-Houston had a distinguished group of visitors tour the mill in late March. The Steel Service Center Institute's (SSCI) annual Young Leadership Forum concluded their two-day activities with a tour of the plant by 21 SSCI members.

The Steel Service Center Institute is a trade organization of steel distributors throughout the U.S. It hosts a Young Leadership Forum each year to train those steel service center leaders under age 35 in various topics of business management.

Vern Johnson, Manager of Fabricator Sales-Steel Division, says the tour is an excellent opportunity for many of these people to observe

mill operations. "They're trying to give these young people a 'look-see' at a mill. Some people that work for the service centers have never been

"They're trying to give these young people a 'look-see' at a mill. Some people that work for the service centers have never been into a mill..."

into a mill. They are trying to expose them to a working operation," Johnson commented.

This tour was not only advantageous to the young leaders, but also to NSW-Houston. Johnson

noted, "What better opportunity for us to get exposure. These are young people who are in positions of importance, and we were glad to have the opportunity to show them our facilities."

Rubin Carter, Human Resources Manager at NSW-Houston, showed the group the video on the Northwestern story before they took an hour-long tour conducted by Patsy Klenk, QIP-Texas Facilitator, and Dan Olson, Quality Assurance Manager. A question and answer period followed the tour, and Jack Cox, Sterling Roll Shop Manager, assisted in answering the questions about the various sizes Houston is capable of rolling.

Mullen

(Continued from page one) 24-Inch, but it's a very different type of rolling mill in almost all respects," he commented.

A couple of the differences Mullen noted were that Houston's mill is a reversing mill and rolls by each piece, which means that each semi-finished blank is scheduled for an individual customer.

"We're all in this together. Every player has his part to play, whether it be in the Wire Mill, the 14-Inch Mill, Primary, or in the Houston plant. Everybody has to do their jobs and pull together..."

For the near future, Mullen's plans include completing trial rollings and working up to a consistent, high rate of production. With the new caster in Sterling starting up, Houston also had to start over with more trial rollings. "We're switching over to the beam blanks from the new

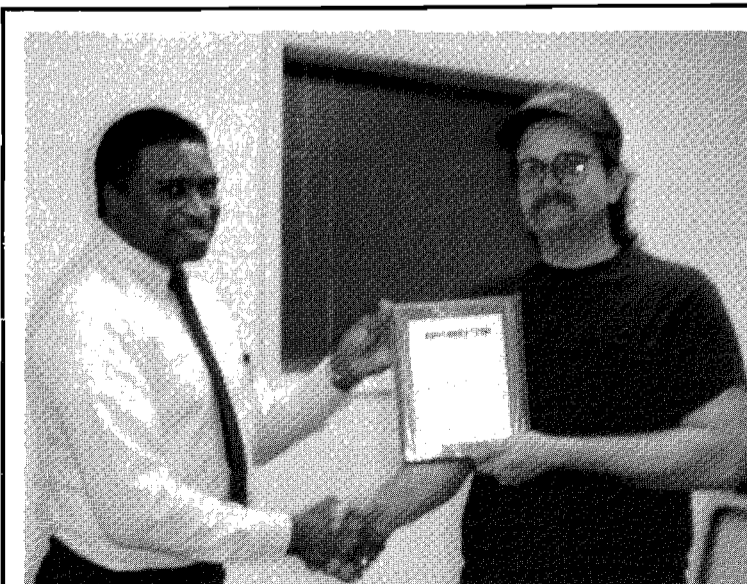
caster, and that entails using up the old semi-finished, switching to the new, and starting a learning process all over again," Mullen commented.

By following the rolling schedule, Mullen says he hopes to maintain 80 tons per hour production for longer,

more sustained periods of time.

Mullen feels it is important for the employee/owners in Sterling to remember that this is a total company effort, and the company includes the Houston operation.

"We're all in this together. Every player has his or her part to play, whether it be in the Wire Mill, the 14-Inch Mill, Primary, or in the Houston plant. Everybody has to do their jobs and pull together," Mullen said.



Rubin Carter, Human Resources Manager at NSW-Houston (left), presents an award to Kent Moore, Plant Technician, for creating their safety slogan for 1991. The slogan and logo are also shown above.



Accident victim saved by quick-thinking co-workers

First Aid training pays off in Houston

Concern for safety in a steel mill may get taken for granted once workers get into a routine with their jobs. Maurice Bard, Safety and Environmental Coordinator at Houston, intends to see that this doesn't happen at the Texas plant.

One step he took was to hold First Aid and CPR classes for Houston employees who wanted to receive



Lt. Jerry Johnson, Security (standing), observes Dewayne Strum, Security, practice CPR on a dummy at the First Aid Training held at NSW-Houston.

the training. Classes lasting six to eight hours each were attended by a total of 40 participants.

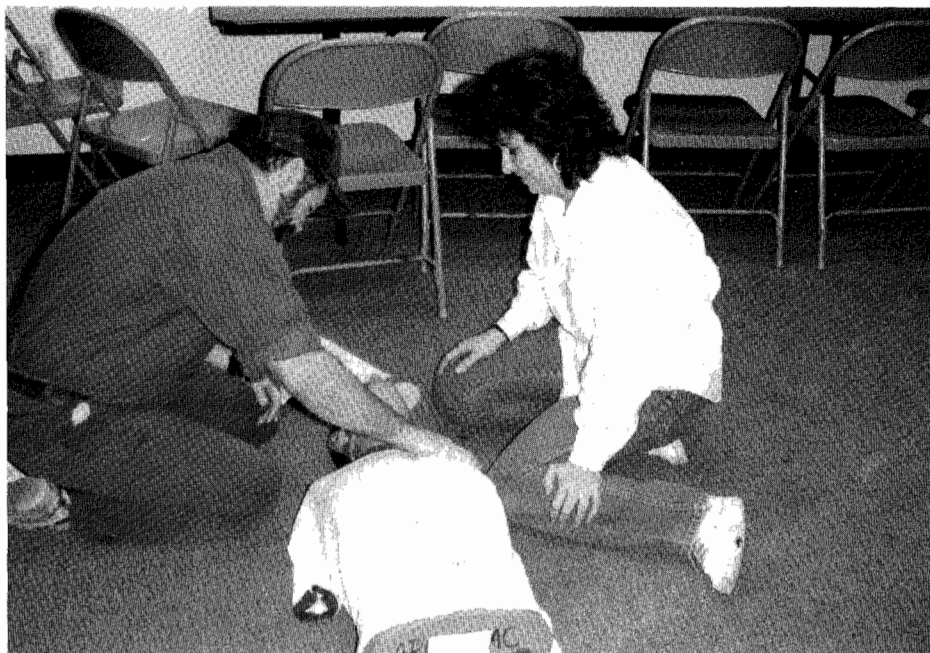
The Red Cross Standard First Aid Class included training in the following areas: emergency action principles, choking, eye and nose injuries, rescue breathing, bleeding and shock, burns, fractures and dislocations, stroke, seizures, poisoning, temperature extremes, rescues, bites and stings, sprains and strains, diabetic emergency, and heart attack and cardiac arrest, including CPR for an adult.

Bard asked for volunteers to take

While it is always hoped that serious accidents...can be prevented, in cases where they cannot, the next best thing is to have trained personnel nearby and ready to assist.

the class. He was more than satisfied to receive 40 volunteers because now one-third of all Houston employees are certified for one year in CPR on an adult and three years in Red Cross First Aid.

About ten days after the classes were held, a serious accident occurred in the mill, and the First Aid training was quickly put to good use. The accident involved a severed artery, and two men who attended the classes were nearby.



Dennis Belote, Maintenance (left), and Sue Roebuck, Drafting, practiced First Aid techniques together during their training.

They quickly and efficiently activated emergency procedures (attended to the victim right away, stayed calm, called for help, and treated the victim for shock) and stopped the bleeding. Because of their quick action, the ambulance arrived in only ten minutes.

While it is always hoped that serious accidents such as this one can be prevented, in cases where they cannot, the next best thing is to have trained personnel nearby and ready to assist. "We're fortunate that

we had people trained, but unfortunate that we had to use this type of training," Bard commented.

In order to re-certify employees as their certificates expire and to let more employees have the opportunity to be trained, Bard hopes more classes will be held in the future. "I'd like to see more people get this training. Our goal is to hold another four sessions in October, and then have refresher training once every year," Bard noted.

Stressed out?

Drugs and alcohol not the answer

Our bodies and emotions sometimes need help in recovering from stressors such as illness, divorce, a new baby, or a promotion. Unfortunately, many people turn to alcohol and other drugs to help relieve tension and pressure, failing to realize that these substances actually make stress worse. If you or someone you know uses alcohol or other drugs to "calm down," consider the following information, and think again.

Understand The Effects Of Stress

Common responses to stress are fatigue, depression, grouching, and sadness. People are more likely to become ill or have difficulty concentrating during or after a stressful period. This is true whether the stressor is positive or negative. If you're promoted, you might feel excited about the challenge and extra pay. But your body will still need to recover from the added strain.

Know The Effects Of Drugs And Alcohol

Drugs and alcohol are poisonous to our systems, and can cause serious damage over time. Drug and alcohol addictions are progressive: that is, they tend not to stop on their own, but they get more and more troublesome. People find that one drink no longer has any effect, and even when drunk, they don't feel happy. Or the drug that helped them forget now forces them to focus all

their energy on getting more drugs.

How Drugs And Alcohol Affect Stress

Some drugs speed you up. Alcohol slows you down. But all these substances share one thing in common: they put additional stress on the body. So using drugs or alcohol as a way of getting rid of stress is counterproductive: it prevents what you're trying to accomplish. It's like trying to do situps with a 2,000-pound gorilla on your chest.

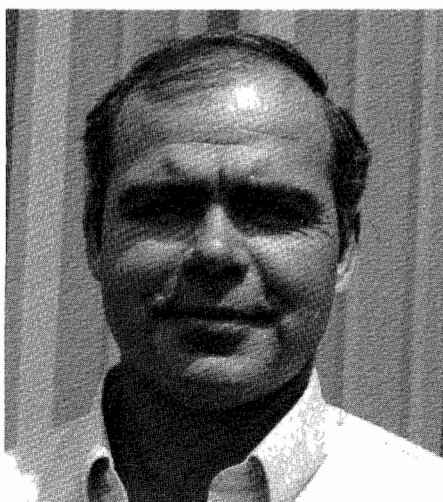
As poisons, drugs and alcohol can harm your immune, circulatory, and

nervous systems. Since drugs and alcohol can make functioning properly very difficult, other problems can arise which cause new stresses, such as losing a job, destroying a marriage, or causing a car accident.

The Message Is Clear

It's a clear message: drugs and alcohol can't help get rid of stresses, and in the long run will only make them worse. Seeing a counselor, learning stress reducing techniques, or reaching out to friends are all more helpful and healthy for you and for others.

EAP Profile

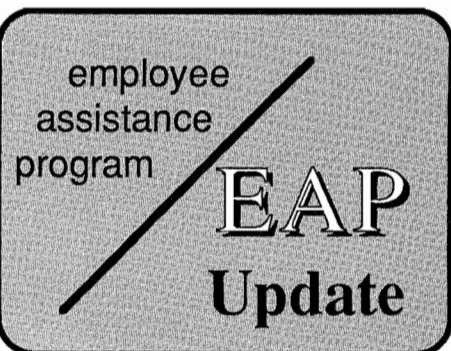


Bill Free

The E.A.P. Contact Person for the 24-Inch Mill Millwrights is Bill Free, Multi-Craft Millwright. Bill has been with Northwestern for almost 23 years, and he's been in his current department since June 1988.

Bill and his wife, Laurie, live in rural Tampico with their family. They have four children: Billie Jo (19), Brad (17), Marilyn (12) and Sara (4). Bill says he enjoys raising horses and traveling with his family.

Feeling that the E.A.P. can be very beneficial, Bill decided to become a contact person. "I want to help people. I was having problems myself at one time, and there was no Employee Assistance Program to help me," he commented.



The following support groups' phone numbers are listed for your convenience:

Alcoholics Anonymous
625-5475 - 24 Hr.
772-4368
288-1616
589-3936 (Fulton)

Alcoholics Anonymous (Spanish)
626-7842
626-1655 After 5:00 PM

Alanon
625-5475 - 24 Hr.
772-4368
288-1616

Narcotics Anonymous
964-5959 - 24 Hr.

Cocaine Anonymous
312/202-8898 (Chicago)

Adult Children of Alcoholics
284-1959

Overeaters Anonymous
284-3796
857-2412

Eight retire on April 1st

Eight employee/owners retired effective April 1, 1991. *Owner's Manual* wishes them a happy retirement and congratulates them on many years of hard work and dedication.

47 Years

William Brockman, Plant 2 Electrical.

31 Years

Kelly Hicks, West Plant Pipe Shop.
Richard Plock, Wire Mill Electrical.

30 Years

Richard Hutchison, East Plant Pipe Shop.

28 Years

Richard Summers, West Plant Cranes.

26 Years

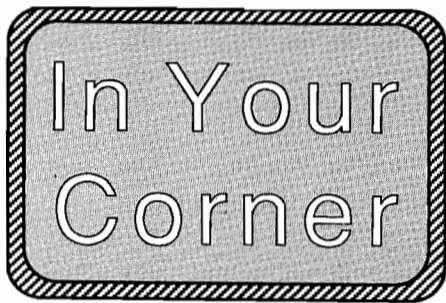
Joseph C. McDonald, Scrap Yard.

23 Years

E. Paul Johnson, Medical.

17 Years

James Call, Electric Furnace.



Glenn Hendryx would like to thank all employees who contributed to the Bucket Brigade held for Louis Turner's wife, Gail, who is a cancer patient. Louis is an inspector in Plant 4.

Employees gave \$1,216.84 to help defray medical expenses for the Turners.

Newest well pumps 1,000 gallons/minute

Wells provide abundant water supply

Something that is usually taken for granted by Northwestern employee/owners is all the water they use. Where does it come from? And just how much is used by the company?

Many people may not realize that NSW has installed several drinking water wells over the years. Right now, there are mainly four wells operating to provide good clean water for drinking and certain processes in the mills. While most water used in the plants (especially water used for cooling) comes from the pond and is re-circulated, certain machinery, such as air compressors, need clean water free of contaminants.

All drinking water wells are nearly 1,700 feet deep. The wells must be drilled this deep in order to reach an aquifer (an underground layer of earth or stone that contains water) that is free of contaminants and suitable for drinking. Through the four main wells, approximately 4.5 million gallons of water are pumped every day.

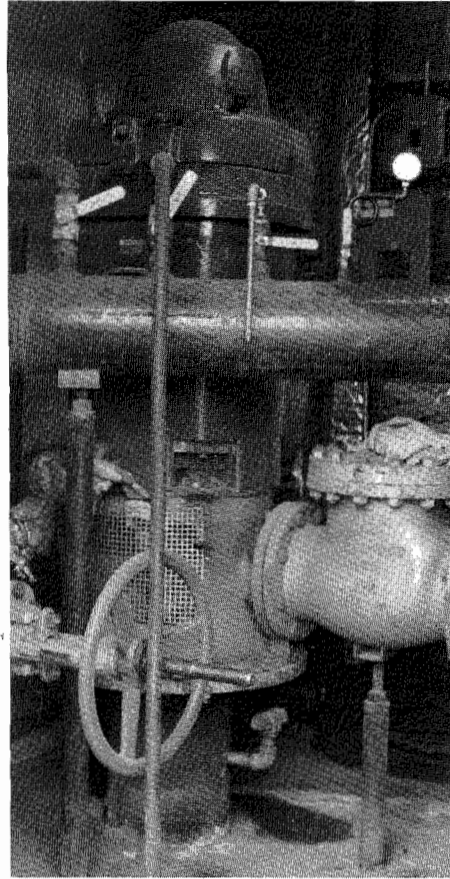
The newest well added to Northwestern was drilled last year, at a cost of roughly \$224,000. The added expense of operating this new well (electricity costs) runs close to \$2,000 every month, but the monthly water bills Northwestern receives from the Northern Illinois Water Corporation have decreased by about \$4,500.

This new well ("J") is capable of pumping 1,000 gallons per minute, which matches the performance of well "C" located just east of the 24-Inch Mill and installed in 1980.

The other drinking water wells Northwestern has installed include wells "A" and "B" which supply water to the 14-Inch Mill. Only one of these wells runs at a time; the other is used when the primary well must be shut down for regular maintenance or repairs. These

wells pump between 700 and 850 gallons per minute. Well "D" is located in the basement of the old 46-Inch Mill between the Furnace building and the 12-Inch Mill. This well pumps 400 gallons per minute and was installed in 1952.

Dave Long, Northwestern's



The most recent addition to Northwestern's drinking water wells is well "J" located in the East Plant. Shown above is the pump which draws 1,000 gallons of water each minute.

All drinking water wells are nearly 1,700 feet deep...Through the four main wells, approximately 4.5 million gallons of water are pumped every day...

Environmental Engineer, says the company still depends on the city of Sterling for part of its water supply. "Our need for fresh water is a little bit greater than we can supply from our wells," Long commented. Because of this need, the company's water lines are directly connected to city water lines.

Even though Northwestern can pump city water into the company's system, the city cannot accept water from NSW's wells because Northwestern is not a public water supply. A backflow preventer has been installed on each pipe leading from the city water system to the Northwestern water system so that water can only flow into NSW and not out of it.

According to Long, water tests are made every quarter to ensure that NSW water meets the drinking water standards.

Looking through the eyes of a Primary Dept. Crane Operator

A view from above

The 500-ton crane slowly maneuvers its two truck-sized C-hooks around the ladle filled with 400 tons of molten steel. The crane raises the giant cuplike bowl about 30 feet above the floor and travels westward to the ladle metallurgy furnace.

"In a crane, every day is different. It can basically be the same, but there's always something extra you can do to make it interesting..."

These are such immense quantities and sizes that most people truly don't have any perception of them until they actually see it all in person.

And one person sees it all from a completely different viewpoint – the ladle crane operator. One such man is Rafael "Ray" Hernandez, who has been a crane operator at Northwestern for 32 years, and running the ladle cranes since 1982.

As do all crane operators, Ray began in the Scrap Yard and worked his way through all the mills before he reached the ladle cranes in the Furnace and Caster Departments.

Carrying around the massive ladles filled with steel that is 3,000 degrees F is one of the most challenging jobs at Northwestern. Ray says that by remembering the potential hazards associated with his job, he always stays alert. "I think about the

responsibility constantly. It never leaves my mind," Ray commented.

Ray says he chose this job more



Ray Hernandez, who has been a Crane Operator at Northwestern for more than 30 years, stands outside his cab in the Primary Department.

than 30 years ago, and has loved it ever since. "I like to pick things up with the crane – have the big crane do the work. You make it do what

Carrying around the massive ladles filled with steel that is 3,000 degrees F is one of the most challenging jobs at Northwestern...

you want to do," Ray said.

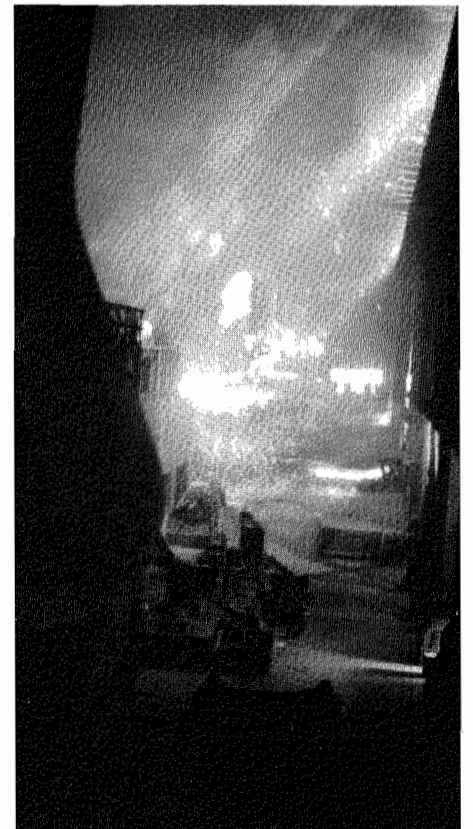
He also says he feels unlimited in his job. Ray noted, "I love running the crane. When you think about it, there's almost *nothing* you can't do with a crane."

The primary responsibilities Ray holds as ladle crane operator include making sure that there is always a ladle sanded and ready for a tap. He also works with the ladle

"I think about the responsibility constantly. It never leaves my mind..."

supervisor to keep track of all available ladles and which station each ladle should go to next.

While some people might think operating a crane can become monotonous, Ray says he never finds this to be true. "In a crane, every day is different. It can basically be the same, but there's always something extra you can do to make it interesting," he said.



The view from the crane cab in the Primary Department is very different for most, but not those who spend their days dangling several feet above the furnaces.

Ray has no problem making things "interesting" in Plant 2. He explained, "I do more than just my job. I'm always helping the other guys out or looking for a faster way to do things."

Employee Stock Ownership Plan

ESOP Administrative Committee Members

Jim Olson	625-3465
John "Skip" Leach	625-3465
Jim Boesen	625-2500, Ext. 2361
Malon Wilkus	(301) 951-6122

ESOP stock value increases by \$1.50

The latest quarterly valuation of Northwestern's ESOP stock was received in early April. The value of \$22.28 per share was assigned to the stock by the appraisal firm which evaluates Northwestern's stock each quarter. This value was figured based upon unaudited financial statements from the quarter ended January 31, 1991 and the accumulated results of the last 12 months.

Because this is a valuation of the second quarter, it will *not* be used for redeeming ESOP shares, but only as an informational figure.

There have now been eight quarterly stock valuations. The highest value was the July 31, 1989 valuation of \$29.60 per share. The lowest value was assigned the last quarter ending, October 31, 1990 at \$20.78 per share. The most recent valuation is a \$1.50 increase in value

Jim Olson...says he was very pleased with this increase in value in comparison with the relative performance of Northwestern's competitors during this quarter.

per share for the quarter.

Jim Olson, Chairman of the ESOP Administrative Committee, says he was very pleased with this increase in value in comparison with the relative performance of Northwestern's competitors during this quarter.

The appraisal firm studies eight other steel companies which are offered on the public stock exchange as one factor to determine a value for Northwestern's shares. While these companies averaged nearly a 1% drop in the value of their shares during the quarter, the appraisal firm reported an increase of more than 7% in the value of NSW's shares.

Cashing in your ESOP shares

For the employee/owners contemplating retiring, we feel it is necessary to explain the put option of your distributed shares. Once a participant has filled out their application for distribution, and received their shares, the company (NSW) has an obligation to purchase their shares if the shares cannot be readily traded on an established public market, which is currently the case at NSW.

Two sixty-day periods are provided in which you may elect to sell your shares. The first period is for the 60 days immediately following the mailing of your shares. The second period is for the 60 days after the mailing of written notice of the next new fiscal year valuation. Your shares will be purchased at all times during the fiscal year at the

prior year's ending (July 31) valuation number.

These two sixty-day periods apply whether you are receiving a 100% distribution (you were gone more than one year when you requested distribution) or a 50% distribution (you elected to receive your stock during your first 12 months of retirement).

The following example is for selling stock during the first sixty-day period and having all paperwork filled out as soon as possible.

- Retire March 1
- Receive application for distribution by March 25
- Return application by April 15
- Stock certificate mailed by April 30
- Stock certificate and put option

form surrendered to company by May 15

- Check mailed by May 31

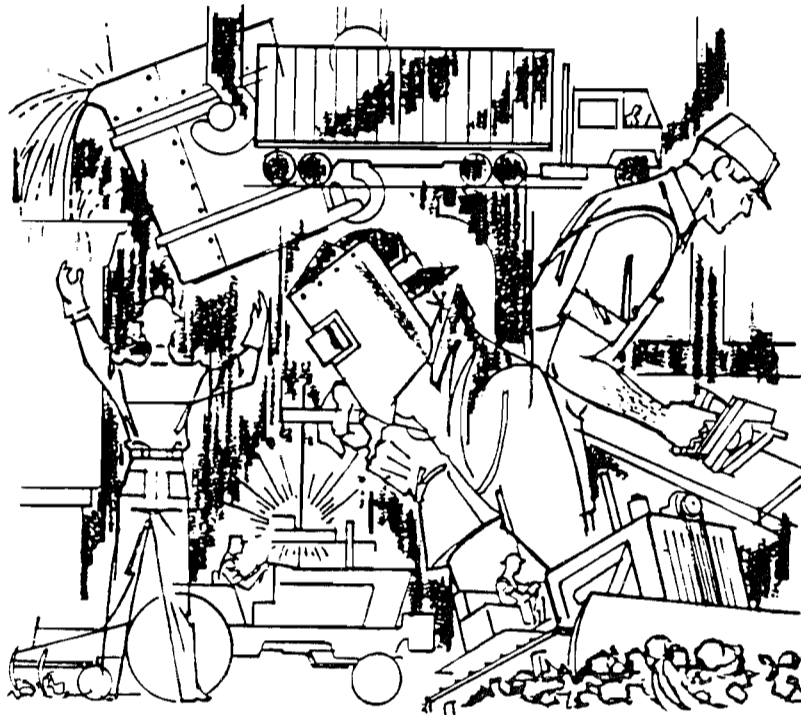
The second sixty-day period example, using March 1 retirement date, follows:

- Retire March 1
- Receive application for distribution by March 25
- Return application by April 15
- Stock certificate mailed by April 30
- DO NOT SELL DURING FIRST SIXTY-DAY PERIOD
- Mail letter with new valuation on October 15
- *Must* return stock certificate and put option by December 14
- Check mailed by December 31.

Due to a valuation lag, no stock is purchased by the company from August 1 (new fiscal year) until the new valuation number is received from the firm of Houlihan, Lokey, Howard and Zukin in Chicago which is usually not until October.

NOTE: Anyone contemplating retirement near the end of the fiscal year (July) should be aware that paperwork for this period must be accelerated to cash out the first half of the distribution by July 31. Retirement by June 1 will be necessary to *guarantee* promptly filed paperwork will clear in time to cash participants out by July 31. July 1 retirees are at risk in meeting paperwork deadlines and will assume all responsibility for timely filings.

If you have any questions, please call any member of the ESOP Administrative Committee listed above.



Keeping your Beneficiary Statement up-to-date

Update on share allocation and distribution

Just a reminder: Allocated shares are those released from the Trust's suspense account to the ESOP. Distributed shares are those the ESOP issues to employee/owners as a result of retirement, disability, extended layoff, or death.

The ESOP is operating smoothly and shares are constantly being distributed to eligible participants. Since the first distribution made in January 1990, 45,513 shares have been distributed to Northwestern employee/owners.

These shares were available from the 1,696,202 shares allocated between the beginning of the ESOP on August 16, 1988 and the end of the last Plan year, July 31, 1990. One hundred ninety-seven (197) NSW employee/owners have redeemed all or part of their shares for a total of \$1,242,498.

Share allocation is ahead of the original schedule because two payments were brought forward in the first Plan year.

NSW employees should also remember that it is their responsibility to keep certain records with the ESOP up-to-date. For

The spouse of an employee is automatically the beneficiary of that employee unless otherwise noted...

example, retired vested employees should keep their current address filed with the ESOP. Another instance in which the ESOP must be informed is the event of a change in an employee's marital status. He or she may want to change his

or her Beneficiary Statement.

The spouse of an employee is automatically the beneficiary of that employee unless otherwise noted. If an employee re-marries, but wishes his or her children to be beneficiaries, the new spouse must sign a waiver consenting to this designation.

Any employee who has been with Northwestern at least six months is now or soon will be an ESOP participant and should contact one of the members of the ESOP Administrative Committee to obtain and complete a Beneficiary Statement.

It is important for both new and experienced employees to update the designation of their beneficiaries as changes occur. It might prevent unwanted difficulties for family members in the future.

Jorgensen

(Continued from page one)

On the day of the award presentation, twenty-four salesmen from Jorgensen's Central District, which includes the states of Iowa, Illinois, Minnesota and Wisconsin, visited the Sterling facility.

Other Jorgensen representatives who came from their Schaumburg offices to tour the plant were Pete Ray, Sales Manager; Chuck Freda, Quality Assurance Manager and Metallurgist; and Anne Gordon,

Plant Purchasing Manager. Gordon works closely with Northwestern because her department generates

The Vendor Quality Award is a new development for Jorgensen and Northwestern is the first to receive it...

the reports on suppliers, and these reports are used in deciding who

receives the Vendor Quality Award.

The purpose for taking Jorgensen employees on a tour was to show how Northwestern's products are produced. This knowledge should help them in selling NSW products to their customers.

The Vendor Quality Award is a new development for Jorgensen and Northwestern is the first to receive it.

Gurnitz addresses local business community

President and CEO Robert N. Gurnitz was the guest speaker at the recent All Levels of Management dinner hosted by the Sterling Area Chamber of Commerce. The dinner was attended by more than 250 Sterling area businesspersons.

Gurnitz spoke on the importance of quality in the work place, especially at a time when so many businesses are entering the global market. Another area he discussed was the trend toward elimination of departmentalization. He noted that in many cases departmentalization

has had the unfavorable effect of creating adversarial relationships between functional groups rather than cooperation and communication.

Gurnitz also talked about the "walls" between managers and employees and said that one of the first to break these down were the Japanese in their rebuilding process following World War II. The result for the Japanese was a very productive work environment with direct employee involvement.

Gurnitz also listed the "14 Steps to

Quality" by W. Edwards Deming, an American statistician who greatly influenced the Japanese quality movement in the early 1950's. These steps include such principles as innovation, improvement of job training, elimination of fear by encouraging open, two-way communication, setting high standards and the teaching of statistical techniques.

Results from Deming's principles included the implementation of quality control into the Japanese work place and the reorganization of

work to improve the quality of the product.

Gurnitz reminded all managers of their responsibility to quality, thus meeting the customer's requirements.

Encouraging employee participation in seeking ways to improve and increase production, Gurnitz added that the concept of quality must be foremost in the minds of all workers. "Quality must be a corporate way of life rather than just another step in the manufacturing process," he noted.



Robert N. Gurnitz, President and CEO, spoke at the All Levels of Management dinner in March.

Volunteers welcome

'Operation Lean On Me' provides needed services

The Sterling-Rock Falls community has been very supportive of the troops that participated in the Persian Gulf War, as well as their family members. Most recently, the Family Assistance Center in Rock Falls has organized a program called Operation Lean On Me.

This program matches up volunteers with family members of servicemen still overseas who need help. Persons may volunteer to assist with any household chore or offer to fill the role of the "fix-it man" around the house.

Colonel DuWayne Dietz, an organizer of Operation Lean On Me, says the early response has been great and families have already had their washing machines fixed and gutters cleaned out as well as received babysitting services and transportation.

The Family Assistance Center in Rock Falls is one of seven in the state of Illinois. They all decided to activate this service once troops began to get ready for the war in the Persian Gulf. Dietz says he plans on the service continuing until all the servicemen return home.

Although response has been very good with more than 30 volunteers, Dietz says more volunteers are always appreciated. "So far we've been lucky that we've been able to satisfy the services that have been requested," Dietz commented. He also hopes more family members of servicemen will take advantage of the program. Nearly 20 have participated so far.

Anyone who can offer a service, or any family member who needs assistance, is encouraged to fill out a form. The Operation Lean On Me forms can be picked up in Sterling and Rock Falls at the banks, post offices, the YMCA, the True Value stores, the *Daily Gazette* and the National Guard. An address is printed on the back of the form so it can simply be folded and mailed.

Dietz says volunteers or family members may also call the National Guard at 625-9286 or 625-9365.

Several anniversaries to be marked in May

Several anniversaries are coming up in May. Congratulations to all those employee/owners celebrating milestones in their careers at Northwestern.

35 Years

James B. Simmons, 5/7/56, Rock Falls Shipping.

30 Years

Charles K. Druce, 5/2/61, Plant 2 Electrical.

Lloyd W. Graham, 5/2/61, Rock Falls Shipping.

David M. Jacobson, 5/2/61, Mats. Arthur L. Mendoza, 5/2/61, Plant 2 Pipefitters.

James F. Bunch, 5/3/61, Mats. Leslie D. Finkle, 5/4/61, Plant 3 Inspection.

Edward L. Munson, 5/4/61, Plant 5 Electrical.

Edward C. Struhs, 5/5/61, Plant 2 Electrical.

Eddie J. Sandoval, 5/6/61, Plant 2 Welders.

Duard Lee Wolfe, 5/9/61, General Supervisor of Caster Maintenance.

Johnie Leopard, 5/15/61, Trucks. Donnell Alcorn, 5/16/61, Furnace Cranes.

25 Years

Dan L. Kindle, 5/2/66, Outside Wire Division Salesman.

Kenneth W. Asbury, 5/4/66, Plant 1 Pipefitters.

Donald L. Zinke, 5/7/66, Supervisor of Scrap Yard.

Berniece M. Martens, 5/16/66, Wire Mill Drawing.

Jack Carroll, 5/24/66, Data Processing Analyst Programmer.

20 Years

Greg A. Brooks, 5/4/71, Plant 2 Machine Shop.

Jack J. Guerrero, 5/5/71, 12-Inch Finishing-Bars.

Thomas R. Cox, 5/30/71, Scrap Yard.

James E. Rumley, 5/30/71, Rock Falls Electro-Weld.

5 Years

Ken A. Reynolds, 5/1/86, Mobile Mechanics.

Donald G. Clark, 5/5/86, Rock Falls Electrical.

Troy E. Frank, 5/5/86, Plant 3 Millwrights.

Gerry L. Staton, 5/5/86, 24-Inch Mill.

Gene T. Dalton, Jr., 5/6/86, 12-Inch Finishing-Bars.

Shawn P. Hunter, 5/6/86, Nails. Barry E. Montague, Jr., 5/6/86, Transportation Clerk.

Rodney L. Jacobs, 5/10/86, Bundling.

James E. Edmonds, 5/12/86, Nails. Kelly L. McDuffy, 5/12/86, Employment.

Michael D. Jacobson, 5/15/86, 12-Inch Mill.

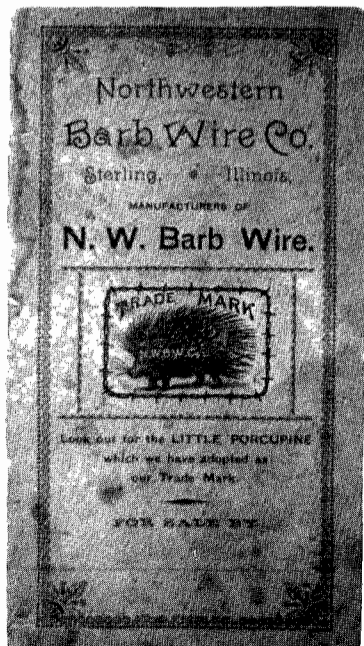
Alfred G. Leal, 5/17/86, Nails. Garry D. O'Neal, 5/17/86, Wire Mill Drawing.

Jeffery A. Tiesman, 5/17/86, 14-Inch Finishing.

Jeff A. Nelson, 5/19/86, Rock Falls Electro-Weld.

John W. Rumley, 5/19/86, Rock Falls Electro-Weld.

The 'Little Porcupine' returns to Northwestern



Jim Treacy, Manager of Eastern Regional Sales, obtained this catalog from an antique store in Princeton, Illinois. The catalog details the specifications of the barb wire produced here more than 100 years ago. Treacy says that it is his opinion that this was the first catalog ever produced by Northwestern Barb Wire Company. Prior to this, there had only been single pages for advertisement and specifications. This catalog, produced in the early 1880s, is rare because it was made of paper and bound with string, so most just didn't last.

Northwestern Steel and Wire Company
121 Wallace Street
Sterling, Illinois 61081

Bulk Rate
U.S. Postage
PAID
Permit No. 69
Sterling, IL

ROCK FALLS
61071

IL