We wish you and your families all the joys of Christmas and every happiness throughout the New Year.

Sincerely,

[Signature]

President

Merry Christmas
To further explain the corporate reasoning behind this decision, Mr. Paine noted that "this infusion of new capital should put us in a better position to turn to long-term debt financing when the time is appropriate for continued expansion and modernization."

Why not borrow the necessary capital, rather than dilute our stock?
"While this new issue does represent a net dilution in earnings per share of approximately 4-5%," Mr. Paine explained, "the present rate of interest if we were to borrow the money would amount to almost 11%.

Mr. Paine noted that in today's economic climate, "there is no inexpensive method of raising capital. However, the result of selling 500,000 shares of new Common Stock should improve our future balance sheets, and thus almost compensate for this present, short-term dilution."

"Looking to the future," Mr. Paine concluded, "we see a recurring need for capital to keep our mills efficient and to continue the process of modernization and expansion which has been the basis of our past success."

The 500,000 shares of Common Stock were bought by an underwriting syndicate headed by Lehman Brothers Incorporated (New York City).

While much of this new issue was sold to institutional investors, a good percentage was bought by individual investors, an indication of strong public confidence in Great Northern Nekoosa.

GREAT NORTHERN NEKOOSA SELLS 500,000 SHARES OF NEWLY ISSUED COMMON STOCK

At the close of business on Monday, December 7, GNN sold 500,000 shares of newly issued, but previously authorized, Common Stock.

Based on the closing market price of 40-3/8, the net proceeds from this sale exceeded $19 million. Total GNN Common Stock presently outstanding amounts to 4.6 million shares.

According to Peter S. Paine, Great Northern Nekoosa's Chairman and Chief Executive Officer, "the public's desire to acquire our stock is most heartening. In fact, the 500,000 new shares were oversubscribed."

The net proceeds received from the sale of this stock will be added to the Company's general funds for corporate capital expenditures.

"In these times when the economy is retrenching and we are in the middle of a cost-price squeeze," Mr. Paine said, "it is imperative that we prepare ourselves for the period when once again the economy will be looking forward."

"It is for this reason," he added, "that we have gone to the equity market for the addition of more than $19 million of equity capital. Our present debt-equity ratio is high, and we must provide the capital necessary to protect our present investments and future ability to sustain our operations on a long-term, continuous basis."

Production for the 11 months ended November 30.

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Daily Avg.:

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Rails Get 9% Increase. On November 5, the ICC granted the nation's Eastern and Western railroads a freight rate increase of approximately 9%. Southern railroads received a 7% hike.

Eastern and Western carriers had previously requested 15%, and the Southern railroads--anticipating that too high a rate increase might drive shippers to trucks and barges--had asked for less than half of that.

Nevertheless, the railroad industry indicated it was satisfied with the decision. According to the Association of American Railroads, "The railroads are pleased that the Commission has recognized the industry's need for immediate relief" (from inflationary costs and declining profits).

Unlike many previous rate revisions, which the railroads have adopted almost immediately, this latest change can become effective only 15 days after the carriers publish new tariffs.

The ICC made this modification at the request of shippers who said they needed time to adjust their own prices to reflect the impact of the higher freight rates.

The added transportation cost to Great Northern as a result of this recent freight rate increase is projected to exceed $2 million (both Northern and Southern divisions) during the November 1970–November 1971 period.

* * *

"It makes good sense and is good business to begin a program of drug abuse prevention before the problem requires drastic action," says Frederick M. Jarfield of the U.S. Justice Department's Narcotics Bureau, in the September 1970 issue of INDUSTRIAL RELATIONS NEWS.

The basic function of an industrial program for abuse prevention should include:

- instructing supervisors in early recognition of drug abuse;
- seeing that industrial physicians and nurses are up to date on handling psychiatric as well as drug problems;
- having a consulting service for physicians and management to draw on in evaluating apparent drug abusers and referring them to rehabilitation services when possible;
- research on possible adverse influences on employees not using drugs as far as morale and productivity are concerned;
- development of relationships with community agencies concerned with welfare;
- development of an educational and informational program for employees which provides accurate factual information about the dangers of drug abuse.

NORTHERN DIVISION

Snowmobilers Again Asked to Use Only Unplowed Roads. Great Northern's policy on the use of snowmobiles during the 1970-1971 winter season has been issued again this year by the Woodlands Department in Bangor.

Registered snowmobiles will be allowed on the unplowed roads listed below. However, in order to ensure the safety of non-snowmobilers, plowed roads on Great Northern lands will be closed to snowmobiles. Plowed parking areas for cars and trailers will be provided near the unplowed snowmobile roads.

In addition to the roadways mentioned, there are many additional miles of private unplowed roads on Great Northern land. However, those using these private roads do so at their own risk.

Piscataquis and Penobscot Counties

1. For snowmobile access (Mondays through Fridays) to Baxter State Park, Sourdnahunk, Telos and Chamberlain Lake and the Allagash Wilderness Waterway, use the Ripogenus Dam-Sourdnahunk Road via Frost Pond. Parking for cars and trailers will be provided at Frost Pond and the junction of the new Telos road near Harrington Lake.

(continued on next page)
2. The new Telos Road, beginning at the West Branch of the Penobscot, will be open to automobile traffic from Fridays at 7:00 P.M. until Sundays at 7:00 P.M. Cars and trailers may be parked at the Telos woods camp for access to the Allagash on weekends.

3. Jo-Mary road to Johnson Pond: Cars and trailers may be parked at the Great Northern Jo-Mary woods camp for access by snowmobile to many miles of unplowed roads on Jo-Mary Mountain. You may also drive to and park at Jo-Mary Campground for snowmobiling around Jo-Mary Lakes.

4. There will be an unplowed road and/or trail from Smith Pond to Wadleigh and North Twin for snowmobile use.

5. The wide right-of-way on the new road from Millinocket to Millinocket Lake will be open this winter to snowmobiles so long as the plowed highway is not used. From Millinocket Lake to Togue Pond, the Millinocket Snowmobile Club, "The Northern Cruisers", will have a marked trail which will give access to the perimeter roads of Baxter State Park and the Allagash Waterway.

Somerset County

1. Seboomook and Northeast Carry for access to Moosehead Lake and Lobster Lake: Park cars and trailers at Seboomook Campground and Northeast Carry and snowmobile on unplowed roads around the Moosehead and Lobster Lake areas.

2. The North Branch road, just a mile or two north of Pittston Farm, will be open to snowmobiles. Cars and trailers may be parked at mouth of road.

Aroostook County

1. Red River Road. Leave cars at St. Froid and enter Red River Road by snowmobile for many miles of unplowed roads.

2. American Realty Road. Drive cars to Russell Crossing, T.11-R.8. Park cars and trailers just before Russell Crossing Bridge and snowmobile on all the unplowed roads.

3. Fish River Lake Road. Drive cars to Wilmer Saucier's woods camps. Parking will be provided along the road between the camps and the dump area. This will give snowmobilers access to the many miles of unplowed roads.

In the interest of public safety, and because the new trucks and trailers hauling tree-length loads of wood are particularly hazardous to the smaller snowmobile, all plowed roads on Great Northern lands will be closed to snowmobilers. Cars and trailers, however, will be allowed on plowed roads in order to reach those unplowed areas specified earlier.

Great Northern feels that the beauty of Maine's forests in winter is something everyone should be able to enjoy, and the Company is pleased to share its woodlands with winter sports enthusiasts. Specific questions about the use of GN lands should be cleared with Great Northern Woodland Area Superintendents at Pittston Farm, Millinocket, Greenville or Sheridan. Local Snowmobile Clubs in these areas will also be able to provide additional information.

* * *

"Golden Road" Construction of the 65-mile West Branch Road continues on schedule. The section from the Millinocket Mill to the dike at Millinocket Lake has been completed and is now open to Company vehicles.

Approximately 90% of the stretch from Caribou Lake to the West Branch in T3, R14 (north of Lobster Lake) is also finished.

In addition to actual road construction, the bridge at Abol is undergoing reinforcement—heavier piers are being added and the old truss arch removed. Although the width of the bridge will remain unchanged, load capacity will be doubled in order to accommodate the anticipated weights of trucks hauling tree-length logs to the mills.

At the same time, GN is surveying truck manufacturers for the type, size and capacity of presently available trucks to be used on the "Golden Road."

Payloads for these vehicles will be carried on trailers with bunks as wide as 14 feet. Also being considered is the concept of "trains" of trailers behind one tractor with a total capacity of about 40 cords per trip.
Ninth Consecutive Record Stumpage sales have set a new record for the ninth year in a row, reports the Woodlands Department, Bangor.

During fiscal 1970, stumpage sales amounted to $1,941,966—on target, according to the five-year projection made in 1966.

* * *

Pollution Abatement An environmental meeting was recently held in Millinocket. Participants from GN's Northern and Southern Divisions and Nekoosa Edwards' Ashdown (Ark.) and Wisconsin Mills discussed various pollution abatement programs and ways of exchanging mutually beneficial information.

* * *

Feller-Buncher Great Northern has purchased a new harvesting machine. Called the "Feller-Buncher," this machine is mounted on tracks and fells trees with a cutting shear located at the bottom of an extending hydraulic boom.

After shearing, the felled tree is retained by clamps and then placed near the skidder to be trucked to the Woodyard.

According to the Woodlands Department, it is planned to couple this highly productive harvester with another machine known as a "Processor."

Located in the Yard, the Processor will remove limbs and tree tops, then pile them in windrows for subsequent loading and delivery to the mill.

Preliminary studies of this harvesting system indicate that it is capable of replacing four to six cutting crews using conventional methods.

SOUTHERN DIVISION

Apalachicola-Chattahoochee Waterway. In the July issue of this Newsletter it was reported that a bill had been submitted to Congress requesting funds to maintain and improve the river channel.

According to Jerry D. Perkins, Director of Transportation, we have recently received a letter from Congressman George Andrews (Dothan, Ala.) stating that "Public Works Appropriations Bill for Fiscal Year 1971, which contains $1,250,000, together with such additional available funds as may be necessary, for the maintenance of the Apalachicola-Chattahoochee channel, has received approval from both the House and Senate and is now before the President for signature."

The U.S. Army Corps of Engineers has also given Great Northern a status report which includes continuing construction of dikes "along the more critical sections." A full-time dredge has been assigned to the waterway, and the Corps plans to lease another supplementary dredge.

* * *

The "Cardboard Box." Approximately 95% of the packaged freight transported throughout this country is moved in a paper product that is taken for granted, abused and insulted by being called a "cardboard box."

Cardboard is a very general term, and those associated with the converting end of the paper box industry prefer that this packaging material be called by its proper name, the corrugated container. For example, we have corrugated board, boxboard, chipboard, solid fibreboard, filled newsboard, lined boxboard, and solid newsboard to name a few.

The origin of the corrugated container dates back to 1856, and the first patent for use as a packaging material was issued in the United States in 1871. From a minor position in the industry, the corrugated box business has grown from seven billion square feet produced in 1920 to 78 billion square feet in 1950. Present production figures for 1970 amount to more than 175 billion square feet.

Great Northern's Southern Division plays a vital part in the production of the component parts of the corrugated (continued on next page)
shipping container. Linerboard, the inner and outer facing of a box as well as the fluted material, or corrugating medium, is the major product of our Cedar Springs mill, and over 2,000 tons are produced daily.

Once the mill has produced what we consider the best sheet available to the trade, and the Sales Department has placed orders for this product, it's now ready for the converter customers to combine these two products into a sheet of board with thousands of different uses.

The corrugating machine, or corrugator, is a complex piece of equipment. About 300 feet long, it is made up of one to three singlefacers, a doubleface glue machine, doublebacker, slitting and scoring unit, cut-off knives and take-off delivery.

The singlefacers consist of corrugator rolls, similar to a set of gears, with teeth cut to a depth of .097 to .185 thousandths of an inch high and widths that vary from 63" to 105". The rolls are heated by live steam to a temperature of 330°F. (The high temperature is necessary to form the corrugating medium to the contour of the fluted rolls.)

Adhesive is then applied to the tips of the fluted medium which is attached to the inner liner at the nip of a third roll, the pressure roll. This roll is then heated to 350°F and the starch adhesive is gelatinized to form a permanent bond between the fibers of the liner and medium. The running speed of the corrugator at this point will vary between 100-650 fpm.

The web, or singleface, is now conveyed to the doubleface glue machine where the third component—the outside liner—is applied. A continuous sheet of board passes over a series of steam chests where the adhesive that has been applied to the opposite side of the flutes reaches the gel point and becomes doubleface board.

At the end of the doublebacker section the web is slit and scored into a pre-determined width and passes through the rotary cut-off knives where it is cut to the proper length.

The sheets are then delivered to the take-off table and stacked. Following the desired curing time, the blanks are ready for fabrication into a box.

The complete operation has been very briefly described above and many complexities of the operation have been deliberately omitted. However, five factors must be considered in the production of corrugated board.

We are dealing with a complex machine, adhesive, steam, paper and the operating crew. If any one of these factors fail to perform properly, serious operating problems can occur. When this happens, the technical service people from the mill, machinery manufacturer and adhesive supplier are called upon to determine the source of the problem and to resolve it.

For the express purpose of solving these problems, GN’s Board Sales Division has two highly trained and experienced Technical Service Representatives—Edward M. Lavery and Eugene V. Tiejema. In addition to offering consulting assistance to our customers, GN’s Technical Service Representatives also help the customer resolve any operational difficulties that may arise.

In some instances, the problems are caused by the components of the box—the linerboard and/or the adhesive—or the converter’s method of fabrication.

No matter what actually causes the problem, Great Northern offers all its customers the additional service of on-the-spot technical expertise.

One specific example involved a customer complaint that the medium was fracturing (breaking apart), thus forcing below normal operating speeds.

The team of service representatives observed the operation, made routine checks of moisture content and caliper of the paper, but could find nothing wrong.

The heat was at the proper level on all of the hot rolls and steam chests.
The gelatinization temperature and solids (continued on next page)
content of the adhesive was satisfactory. (A baby bottle warmer is used to check the former, and a refractometer for the latter.)

When the machine was checked out, the problem was resolved. Using a special stethoscope, it was discovered that the top corrugator roll bearing was freezing as a result of a blocked lubrication line. The bearing was changed and the problem eliminated.

The adhesive used to bond the components of a corrugated box is generally made up of corn starch, with small amounts of caustic soda and borax added for the proper physical properties needed to perform at high speeds.

A strong complaint was received that our liner was too high in moisture content, thus causing extreme warp of the blanks coming off the corrugator. Fabrication of the blanks was difficult because the sheet must be flat to be processed through the secondary converting equipment.

An electronic moisture meter was used to check the rolls of paper being combined, and the level was well within the industry standards. Further investigation brought to light the fact that the gelatinization temperature of the adhesive was 160°F instead of 145°F.

The operators were applying excessive adhesive to insure bonding, but in turn were unbalancing the moisture content of the sheet. A sheet of corrugated will always draw (or warp) toward the side having the highest moisture content. The gel temperature of starch adhesive is controlled by the amount of caustic soda in the mix, and the corrective measure here was merely to add more caustic.

Without steam there would be no corrugated board produced that the customer could afford to buy in volume. There have been many cases where the box people feel that they have a paper or adhesive problem, only to find that their problem is steam. Many paperboard defects have been traced to poor boiler maintenance, worn steam traps, defective check valves and improper piping.

Also important when making a service call is the operating crew on the corrugator. Personality quirks, poor work habits, lack of knowledge and poor supervision generally run hand-in-glove with the number and nature of complaints received.

Singlefacer adjustments are measured in thousandths of an inch, and there have been cases where a unit will not produce board when out of parallel by less than .015. That's the thickness of three sheets of newsprint!

As you can see, there is a lot more to making up that old "cardboard box" than meets the eye.

NAMES IN THE NEWS

ROBERT A. HAAK, President, was re-elected a Trustee of the American Forest Institute at the association's Annual Meeting, November 5-6 in Washington, D. C.

***

RALPH C. KEEF, Pulp Mill Superintendent, Millinocket, presented a paper at the recent TAPPI Alkaline Seminar. Entitled "Magnesium Bisulfite Recovery Start-Up at Great Northern Paper Company," the paper describes the Company's water pollution problems, with particular emphasis on the operation of the new equipment installed in the MgO Plant to eliminate the sulfite pulp by-product pollution problem.

***

ROBERT J. SHINNERS, Vice President-Northern Division, has been re-elected a Director of the Maine Council of The New England Council, a regional economic development organization.
PATRICK H. WELCH, Environmental Protection Supervisor, Research & Development Department, was the guest speaker at the Darien (Conn.) Audubon Society on October 29. To supplement his two-hour talk, Mr. Welch used a slide presentation to introduce the audience to GN's Woodlands, Manufacturing, recreational and pollution control activities. Discussion of the Company's past, present and future pollution abatement programs was followed by an enthusiastic question and answer period.

"PERSONALITIES"

PROMOTION

HENRY W. BLAIR has been promoted from Systems Programmer to Senior Systems Programmer, Administrative Services Department at Millinocket.

TRANSFERS

ERNEST DANIELS, Supervisor, Southern Division Billing Department at Cedar Springs, has transferred to Great Northern Plywood as an Accountant, effective January 1, 1970.

** **

FLETCHER W. LINDSAY has transferred from Chief Design Engineer to Process Engineer, Central Engineering Department at Millinocket.

** **

H. RICHARD OILER, JR., Junior Salesman, Chicago Commercial Sales Office, has been reassigned to the new Southern District of the Eastern Region, effective January 1, 1970.

TERMINATIONS

MICHAEL P. ALFORD has resigned from his position as Junior Salesman, Chicago Commercial Sales Office.

** **

MARCEL N. DYER has resigned as Foreman-Finishing Room at East Millinocket.

RETIREMENTS

SAMUEL DICKINSON, Wood Buyer, Aroostook Area, has retired after 27 years.

** **

FINLEY MACINTOSH, Chief Scaler, Woodlands Department, has retired after 30 years.
GNN REPORTS LOWER THIRD QUARTER EARNINGS ON SLIGHT SALES INCREASE

As anticipated, and despite a slight increase in sales, Great Northern Nekoosa Corporation reported significantly lower earnings for the third period of 1970. In addition to the general economic turndown experienced by most companies, Peter S. Paine, GNN's Chairman, cited recent increased costs for fuel, labor and transportation as the principal reasons for the poor results.

Net income for the third quarter of 1970 amounted to $2,840,000, or $.57 per share on a primary basis, compared with $5,855,000, equal to $1.25 per share, posted in the 1969 quarter.

Results for last year's comparable period included investment credits of $.29 a share for new facilities. These credits were absent from the 1970 figures.

Sales for the first nine months of this year rose by 4 percent to $265,859,000. Third quarter sales in 1969 amounted to $255,891,000.

Pre-tax income showed an increase of $514,000 over the comparable amount for last year's nine months.

Loss of the investment tax credit, which amounted to $2,488,000 in 1969 and only $202,000 in the current period, was primarily responsible for the reduction in net income to $13,507,000 this year from $15,029,000.

Primary earnings per share for the first nine months of 1970 were $2.84, as compared with $3.19 in 1969, while the amounts on a fully diluted basis were $2.74 and $3.05 respectively.

Commenting on the results, Mr. Paine said, "During the past few months our products, and thus our profits, have borne the impact of a number of cost increases. "The most distressing of these increases was a rise of 43 percent in the cost of residual fuel oil."

"New labor agreements have been reached at several of the Company's mills which provided for substantially higher wages and employee benefits.
"Transportation costs have also been rising steadily. Rail carriers have raised tariffs twice within the last year so that present rates are 11.3 percent higher than they were a year ago."

"In an attempt to offset, at least in part, the effects of these cost increases, the prices of several of our major products have been raised. The price of certain business communication papers is being increased $20 a ton during the current quarter. Prices of newsprint and groundwood printing papers are scheduled to go up $8 to $10 a ton on January 1, 1971."

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Production for the 10 months ended October 31. . . .

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"The outlook for the balance of 1970 is uncertain at the present time," Mr. Paine continued. "And, with the sluggish economy likely to continue through the year, it seems unlikely that there will be any substantial improvement in profits during the final quarter.

"We are, however, optimistic over the longer term, and we expect that the demand for our products will gradually improve, so that product price increases and improved efficiencies should bring about a return to a more normal level of earnings."

* * *

United Fund. Introduced last year, New York's first United Fund appeal was most successful.

The 1970 fund-raising drive is now in progress, and contributions may be made during the month of November. The Greater New York United Fund asks only once a year, exclusively on the job and never at home. And your dollars are spent in the Metropolitan area where you work or live.

For those in the New York office who live out-of-state or outside the Metropolitan area, it is important to note that the 425 hospitals and health and welfare agencies supported by the United Fund are available to you and your family in time of need.

NORTHERN DIVISION

Commercial Sales Reorganized. In order to promote greater efficiency, en-

large our present market area, and prepare ourselves for the increased capacity of No. 11 Paper Machine, the Commercial Sales Division of the Sales Department has been realigned as follows.

The Eastern Region, under the direction of J. Paul DeMarrais, has been enlarged to include the state of Ohio and the city of Detroit (Mich.). In addition, this region has been subdivided into two districts, each with a District Manager.

William L. Shaughnessy has been appointed District Manager of the Eastern District, which will operate out of Stamford (Conn.).

The Southern District will be directed by Terry N. Pendleton, District Manager, and will be headquartered in the general vicinity between Baltimore (Md.) and Washington, D. C.

Both of these appointments are effective January 1, 1971, and both District Managers will report directly to J. Paul DeMarrais, Eastern Regional Manager.

Mr. Shaughnessy received a B.A. in business administration from St. Michael's College (Winooski, Vt.) and a B.S. in Printing Management from the Carnegie Mellon University (Pittsburgh, Pa.).

He joined Great Northern's Research and Development Department in Millinocket in 1961 as a Junior Technologist. Two years later he transferred to New York as Sales Service Trainee.

In 1965, Mr. Shaughnessy was named Junior Salesman, Commercial Sales, in Chicago. The following year, he was promoted to Sales Representative, and in May, 1966 he returned to the New York Office where he has been ever since.

Mr. Pendleton is a 1965 Pulp and (continued on next page)
Paper Technology graduate of Miami University (Oxford, Ohio).

Prior to joining Great Northern on a full-time basis in February, 1965, he was a summer apprentice with the Company in 1963 and 1964.

Mr. Pendleton began his GN career in the Chicago Commercial Sales Office as a Sales Trainee. He was named Junior Salesman in March, 1966, and Sales Representative two years later.

* * *

Newsprint Price Increase Reduced. In order to eliminate price discrimination—particularly in the Northeast—and to maintain a competitive market position, Great Northern stated on October 2 that its previously announced $10 per ton increase for standard newsprint was being reduced by $2.

This adjustment affects the Company's entire marketing area and, effective January 1, 1971, GN's new price for newsprint will be $159 per ton.

In announcing the earlier increase of $10 a ton for standard newsprint, other manufacturers excluded areas in the South and West, and limited their increase in these areas to $8 per ton.

Great Northern felt that this two-price policy discriminated unfairly against publishers outside the Southern and Western market areas.

Hence, the $2 reduction, which is uniform throughout the Company.

* * *

New Townsite Policy. Effective immediately, Great Northern has discontinued its former policy of furnishing survey services on all lots sold by the Company in Millinocket and East Millinocket.

According to Frederick C. Morrison, Administrative Assistant and Manager of Townsite, the Company's future survey services will consist of setting the four corner stakes on any lot sold.

"We will no longer provide services on foundation excavation and elevations, nor will we offer final surveys after the lots have been graded and landscaped," Mr. Morrison said.

This new policy will result in an approximate savings to the Company of $250 per lot.

* * *

Wrapper Pulper. The new broke pulper for the Wrapper Machine was started up on October 21. The system consists of one Morden 27-inch side entering, tile tank slushmaker and associated pumps, piping and controls.

Located in the Beater Room basement (Millinocket), with the broke chute west of the Wrapper Machine calender stack, the pulper is capable of handling 50 tons of Wrapper Machine and roundhead cutter broke per day.

(Broke is the term applied to damaged paper unfit for sale. In this case, it is repulped for the production of wrapper paper.)

According to Donald G. Griffey, Manager of Engineering, the installation of this pulper has eliminated trucking of wrapper and cutter broke to the waste kraft hydropulper which is located in the pulp mill.

* * *

Pamola Park. Under construction since July, Great Northern's new mobile home park, Pamola Park, became ready for occupancy on October 30.

Located south of Tamarack Street in Millinocket, the park development has lots available for 79 mobile homes. There is also additional space for future expansion.

Pamola Park is owned by GN and administered through the Townsite Department.
Eastern Region Golf Outing. The first annual golf outing of the Eastern Region, Commercial Sales, was held recently at the Panther Valley Country Club, Allamuchy, New Jersey.

Unquestionably, it will be a long time before such golfing prowess is again displayed.

After a six and one-half hour marathon, Edward J. Burke, Sales Representative, emerged the winner with a blistering score of 150.

Francis J. Dunne, Sales Coordinator, and J. Timothy Samway, Sales Representative, slugged it out for the runnerup spots with scores of 128 and 127. Mr. Samway further distinguished himself by taking the prize for the most lost balls—15.

When all the chopping and slashing was finished, the 11 golfers (?) had lost the amazing total of 89 golf balls in the high rough and marsh areas surrounding the course.

To their credit, noted Eastern Regional Manager J. Paul DeMarrals, who hosted the outing, "our men were swinging with confidence and authority right up to the very end!"

SOUTHERN DIVISION

CIRR Annual Meeting. On October 29, the Chattahoochee Industrial Railroad, a subsidiary of Great Northern Paper Company, held its annual meeting.

Two new directors, Joseph F. O'Handley, Secretary, GNP, and K. Earl Durden, Vice President and General Manager, CIRR, were elected. Nine of the company's 13 incumbent directors were reelected.

After the meeting, the directors met and elected officers and an executive committee. Officers are: John J. Neely, Chairman of the Board; Bruce P. Ellen, President; K. Earl Durden, Vice President and General Manager; Joseph F. O'Handley, Secretary and Treasurer; and B. W. Moore, Assistant Treasurer.

The executive committee is composed of Messrs. Ellen (Chairman), Durden, O'Handley, and James W. Richardson (Woodlands Manager-Southern Division, GNP).

The Chattahoochee Industrial Railroad serves industries on the east bank of the Chattahoochee River, and is active in the industrial development of the Lower Chattahoochee Valley.

* * *

1971 Plywood Outlook. Although the plywood industry has suffered seriously from the effects of inflation and the general economic downturn, Crow's Weekly Plywood Letter (October 23) forecasts a brighter future.

"Nationwide construction will advance nearly 10% in 1971 to $74.4 billion, with housing in the lead by a wide margin," according to the annual forecast of construction markets released by McGraw-Hill Information Systems Company.

"Residential building is expected to rise 21% in 1971 to $30 billion, with apartment construction carrying the largest share of the gain."

With an estimated increase of 11%, the greatest overall gains should occur in the South, followed by the West (9%), the Northeast (8%) and the Midwest (7%).

According to the McGraw-Hill study, the recovery of the housing market, longest depressed of all the construction markets, is beginning now with single-family building occurring where newly available money can be put to work fastest. And the upswing will carry into 1970 and beyond.

"Under the pressure of a large backlog of demand, gains should come rapidly on the strength of the change in credit conditions alone.

"Housing starts--already on the upswing--should be averaging close to 1.7 million units by the middle of next year."

However, the report concluded, "continued expansion will depend on Federal support through the Department of Housing and Urban Development."

NEKOOSA EDWARDS

$7 Million for Pollution Abatement. Industrial waste abatement proposals of Nekoosa Edwards Paper Company, Inc., have been preliminarily accepted by the Wisconsin (continued on next page)
in Department of Natural Resources (DNR).

These proposals for reduced discharge of waste into the Wisconsin River include facilities to be built at the Ne-Koosa and Port Edwards mills and at Whiting-Plover Paper Company, a division of NE in Stevens Point (Wis.).

Total cost of the pollution abatement facilities at the three mills is estimated at $7 million.

MANAGEMENT NOTES

"Don't Do It -- Delegate It." (Excerpted from an article by Bernard B. Beegle, April 1970 issue of SUPERVISORY MANAGEMENT, (c) 1970 American Management Association, Inc.)

There's no doubt that successful delegation takes much thought, careful planning, knowledge of capabilities, effective interpersonal communication, and willingness to take risks.

But that's what management is all about. And the supervisor who's afraid to delegate can be compared to the man with a toothache who would rather suffer than face the dentist's drill.

In the same way, the supervisor who spends the day hopping frantically from problem to problem would rather suffer than face the challenge of working out ways to reorganize himself and his job so that he's running it instead of the other way around.

If he turned to delegation, he would soon find himself free of many daily pressures and time-consuming chores. Eventually, he'd be able to devote most of his time to his real job: being a manager. And he'd have more time to:

- Train and develop subordinates. What discourages many managers is that when they begin to delegate, the process often takes more time than it saves. What they fail to realize is that time is an investment--spend more to make more.
- Plan ahead. The more time you have to plan ahead, the better you'll be able to solve problems before they arise. Overall performance should be measured by the number of crises you don't have to handle, not by the number handled well.
- Control and coordinate the work of subordinates. Controlling is not synonymous with close supervision, which would defeat the very purpose of delegation. Basically, controlling means developing ways to make sure your department's objectives are being accomplished. This would include clearly specifying and communicating individual and group goals, establishing clear-cut standards against which to measure performance, and setting up warning controls to alert you when things go wrong. At the same time, you must coordinate the work of subordinates. If you don't, there will be tangled lines of communication, wasteful duplication of effort, and people working at cross purposes instead of pulling together.
- Visit subordinates periodically. To supplement his daily contacts with those in his department, one manager makes it a rule to spend at least 15 minutes a week with each member of his staff for a leisurely private chat. This helps spot potential problems before they become major crises. The manager can also get to the bottom of morale problems, learn about technical problems that must be solved, and draw out grievances that otherwise might be bottled up until they explode.
- Solve problems and think about new ideas. The manager can find ways to help his department only if he has thinking time--time to weigh the pros and cons of alternative solutions, time to find out about recent developments in his field, and time to dream up innovations of his own. The manager who delegates will have this time. Successful delegation requires thoughtful judgment, and the following guidelines might help in your own department:
  1. Accept delegation.
  2. Specify goals and objectives.
  3. Know subordinates' capabilities.
  5. Include training.
  6. Take an interest.
  7. Assess results.
  8. Give appropriate rewards.
  9. Don't snatch back the delegated task.
"PERSONNELITIES"

NEW EMPLOYEES

WARREN L. HARKNESS has joined the Systems and Programming staff of the Administrative Services Department in Stamford as a Systems Analyst.

***

JOYCE I. HARRIS has rejoined Great Northern as Supervisor-Office Services, Controller's Department, in Millinocket.

***

WILLIAM H. SCOURFIELD has joined the Controller's Department in Cedar Springs as Billing Supervisor.

PROMOTIONS

RICHARD D. BESSEY has been promoted from Assistant Chief Scaler-Aroostook Area to Chief Scaler-Aroostook Area in the Northern Woodlands Department.

***

TERRY N. PENDLETON has been promoted from Sales Representative, Commercial Sales, in Chicago, to Southern District Manager, effective January 1, 1971.

***

WILLIAM L. SHAUGNESSY has been promoted from Sales Representative, Commercial Sales, in New York, to Eastern District Manager, Stamford, effective January 1, 1971.

TERMINATIONS

FRED J. BUCKLEY has resigned from his position of Supervisor-Office Services, Controller's Department, in Millinocket.

***

ROGER W. POE has resigned from his position as Green End Superintendent, Great Northern Plywood.

ANNIVERSARIES

LAWRENCE P. TRAINOR, Tour Foreman, Millinocket, 35 years on October 21.

***

CECIL A. JARDINE, Foreman-Woodlands, Greenville Shop, 25 years on November 6.

***

EDWIN C. BODDY, Tour Foreman-Coater, Millinocket, 15 years on October 17.

***

DAVID E. BROOKS, District Forester, Woodlands, 15 years on October 27.
SAM CASEY TO TAKE LEAVE OF ABSENCE

On October 1, Peter S. Paine, Chairman and Chief Executive Officer of Great Northern Nekoosa Corporation, announced that due to illness in his family, Sam Casey will be taking a three-month leave of absence.

Mr. Casey's daughter has become extremely ill and he wants to devote his attention to her care, Mr. Paine explained. "At the time of the merger between GNP and Nekoosa Edwards," he continued, "the directors stated their intention to elect Sam Casey President of Great Northern Nekoosa this fall. I want to make it plain that our plan has not changed, and we look forward to his return after his leave of absence," Mr. Paine said.

While giving up his day-to-day responsibilities, Mr. Casey will continue as Chairman of the Executive Committee of Great Northern Nekoosa.

* * *

The following article appeared in the September 24 WALL STREET JOURNAL:

NET OF GREAT NORTHERN NEKOOSA IS EXPECTED TO SKID IN 3RD PERIOD

"Great Northern Nekoosa Corp. earnings for the third quarter are expected to be less than half the fully diluted $1.20 per share earned in the comparable period of 1969, Peter S. Paine, chairman and chief executive, said in an interview. "Mr. Paine said earnings for July and August are running at a rate about half the primary $1.11 per share earned in this year's second quarter, adding, 'I see little prospect for improvement' during September. "In contrast, for the first half, the company reported net income of $10.7 million, or $2.17 a fully diluted common share, a year earlier. Sales for the period increased to $178.9 million, from $169 million.

"The company, which expected a 'good' fourth quarter, must now 'temper predictions,' Mr. Paine said, adding nonetheless, 'I know we're going to bounce back, but I don't know how soon in the fourth.' For all of 1969, Great Northern Nekoosa earned $20.3 million, or $4.11 a fully diluted common share, on sales of $344.1 million. The figures were restated to reflect the pooling of interests of Great Northern Paper Co. and Nekoosa Edwards Paper Co. which were merged last March.

"Mr. Paine attributed the decline in earnings to 'the weakness in the nation's general economy coupled with the sharp rise in the costs of labor, transportation and materials.' The cost of fuel oil alone increased 40% in three months, he said. And market conditions forced a curtailment of operations throughout the company.

"The curtailment didn't have to do so much with layoffs but with cutting down on (continued on next page)
Production for the nine months ended September 30. . .

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overtime, he said.

"Great Northern Nekoosa derives 78% of sales from manufacturing paper and paperboard and 22% from other related sources, like plywood, pulp and the merchandising of various grades of paper.

"The company, which usually declares dividends of $.60 yearly, hasn't any plan to alter it, Mr. Paine said. The past quarterly dividend was declared, on time, in August, he added.

"The company's estimated capital expenditures of $30 million for the year will be unchanged, Mr. Paine said. The company has a $20 million unused line of credit with two New York banks, he said. Moreover, it can count on $10 million of additional funds under agreement with four Midwestern banks, he concluded.

* * *

No. 11 Expansion Program Stretched Out. Due to the present unfavorable economic outlook and the fact that third quarter earnings are expected to be substantially lower, the Company has decided to delay start-up of No. 11 Paper Machine.

As previously announced, GN still plans to finance this $45 million expansion project, which includes the installation of a new high speed paper machine and supporting equipment, out of the Company's cash flow from operations. However, sharply increased costs of labor, transportation, materials and fuel have substantially affected earnings. This, combined with a weakness in the market for containerboard, has reduced the amount of money generated internally. As a result, the Company's management believes it to be economically unwise to continue the Millinocket expansion as originally scheduled.

At the moment, No. 11 is slated to come on-stream in April 1973, 12 months beyond the date set when the program was announced in July 1969. New work schedules are being adopted, and suppliers will be notified that their original delivery deadlines are being moved ahead.

At the same time, it is intended to monitor the situation closely. If the present economic environment improves, and earnings and cash flow increase, it should be possible to accelerate construction of the expansion program for an October 1972 completion.

According to Robert A. Haak, President, the No. 11 expansion project is a very definite part of our long-range objectives but, along with other companies throughout the country, Great Northern is feeling the present economic squeeze, and "we are tightening our belts and reducing costs wherever possible."

Other cost-cutting measures are being taken throughout the Company, including equipment rental reductions, curtailed travel expenses and reduced outside services.

* * *

Price of Newsprint Increased. On September 25, Great Northern announced that the price of standard newsprint would rise $10 a ton with shipments made on or (continued on next page)
ter January 1. The increase will also affect certain grades of groundwood printing paper.

Sharp increases in the cost of labor, fuel oil and transportation has made this move necessary.

* * *

Great Northern's Policy on the Millinocket School Building Program. The reduction of municipal spending is a matter of concern throughout the Company, especially in Millinocket where property taxes comprise a significant portion of GN's overall operating costs.

In 1950, for example, our taxes in Millinocket were $326,000. By 1960, they had more than doubled, and this year—with no substantial increase in tonnage— the Company's tax bill is $1,750,000.

Therefore, CN is asking that special restraint be exercised in all areas of municipal spending.

Specifically, it is being requested that the Millinocket school authorities re-examine the new school building program that will be presented to the voters in referendum this fall.

Through the years, the Company has championed all areas of education; however, it is felt that the present economic climate is not conducive to spending $3.6 million on a school building program— much of which will be devoted to non-classroom facilities.

Moreover, as the major taxpayer in Millinocket, the Company is not entirely convinced that the solution to the secondary school problem lies in spending large sums of money on this type of facility.

"In addition, we feel that the voters of Millinocket should be given the opportunity to decide on the merits of each segment of the program, rather than being forced to vote on an all or nothing at all basis," Mr. Haak said.

"Because we do have misgivings about the necessity of the total building program, and because the economic picture is putting great pressure on all expenditures, however worthwhile, our policy must be one of opposing the school building program as it is presently conceived," he said.

* * *

"Great Northern Nekoosa—Two Companies Not So Much Merged As Running In Tandem." See the attached reprint of an article that appeared in the September 15 issue of FOR-BES Magazine.

NORTHERN DIVISION

Million Man Hour Scholarships Awarded. Three college students from Millinocket have been named winners of Great Northern's Million Man Hour Scholarship.

Eugene D. Bouchard, a junior majoring in elementary English at the University of Maine (Farmington) has been awarded a $1,000 scholarship.

Deborah L. Albert has received a $500 award. She is a sophomore at Aroostook State College of the University of Maine (Presque Isle), majoring in elementary education.

Linda M. Gagnier has been given a $500 scholarship. A senior at the University of Maine (Machias), she is a business education major.

The million man hours worked without a loss-time accident were attained on May 18, 1970 in Group I of the Millinocket mill. This is the fourth scholarship to be awarded by Group I since the program was begun in 1964.

* * *

GNP Introduces New Grade of Coated Paper. After many months of research and press trials, a new grade of coated paper has been added to the list of Great (continued on next page)
Northern products.

Called Astro-Lith, the new grade was designed to meet the most demanding one, two and four-color web offset requirements. The introduction of this new, blade coated paper will eliminate Jetblade Offset; however present orders for Jetblade Offset will be filled. Jetblade Letterpress and Jetblade Rotogravure will continue to be part of our present grade structure.

The new Astro-Lith coated paper features higher surface strength with additional resistance to picking. Higher paper gloss, increased ink receptivity, greater internal bond, and smoother, more uniform surfaces are further advantages of this new sheet.

Effective with the October 5 introductory date, Astro-Lith will be available in 38, 40, 43, 45 and 50# basis weights and will be packaged with Great Northern's new body wrap, label and castillated bands.

* * *

Annual Foreman's Picnic was held on September 10 at the Rice Farm (Millinocket).

Although the weather did not cooperate with the planned events, attendance was the highest ever and a good time was had by all.

* * *

West Branch Storage is now at 35.4 billion cubic feet. This is 62% of full storage and 5.8 billion cubic feet below rule curve.

* * *

Excellent Safety Record Attained at East Millinocket. The Steam Plant and Yard Crews have recently passed the 10-year mark without a disabling injury, and the Stock Preparation Department reached the 13-year mark with the same record.

In recognition of this excellent safety record, a memento will be presented to each man in the three departments.

Woodlands. In 1966, the Northern Division Woodlands Department joined with other Maine industries and State Foresters to develop genetically superior spruce and fir trees.

As trees were approved by Federal geneticists, they were reserved for future cone collections. This year was an outstanding seed year, and Great Northern's contribution was some 3,470 cones from eight trees.

Seeds from these cones and cuttings (for grafting) from the parent trees will be incorporated into seed orchards for future superior planting stock.

* * *

Tree Farms. The Maine Tree Farm Committee spent two days last month inspecting Pingree and Great Northern lands.

As a result, 52,450 acres of timberlands will be added to our Tree Farm. (Until now, GN had some 1.4 million acres of wholly-owned land certified as a Tree Farm.)

This marks the first time that jointly owned lands have been given Tree Farm certification in the State of Maine.

* * *

Newsprint Sales Office In Cincinnati.

On October 1, Great Northern opened a new sales office in Cincinnati.

Under the direction of Benjamin B. Appleton, Manager-Newsprint Sales, the office is located at 801-B West Eighth Street (tel.: 513-651-3780).

Along with Mr. Appleton are Stephen G. Hobson, Salesman and Robert D. Walls, Sales Trainee, who has transferred from the New York office.

Until now, this newsprint sales office was located in Chicago. Mr. Appleton explained that relocation to Cincinnati would enable his sales staff to reach new markets and extend better GN service to present customers.
MgO Recovery. The MgO Recovery System continues to perform well, and make-up chemical requirements for the past four months have consisted of approximately 54 pounds of Mg(OH)$_2$ and 92 pounds of sulfur per ton of pulp.

According to R&D, our goal is to reduce these requirements to 47 and 67 pounds, respectively, per ton, and to do this new instruments are being installed to measure MgO slurry density and flue gas SO$_2$ content.

The analysis of the performance test on the MgO boiler and acid preparation system has been completed.

Results indicate that this equipment will handle the liquor from a 600-ton per day sulfite operation and produce satisfactory MgO ash, cooking liquor and steam.

***

A schedule of hearing tests began at both mills on September 25 for the 4 p.m.-12 midnight shifts, and will continue until the entire crew has been tested.

In conjunction with this, eye tests will also be given, and it is expected that this program will be extended to include all personnel at the Millinocket and East Millinocket mills.

SOUTHERN DIVISION

Cedar Springs to Play Role in Tour. On October 11 a historical tour of Early County (Ga.) will be held and it is expected that Cedar Springs will play of prominent role.

One of the earliest communities in the county, Cedar Springs received its name from a group of sprigs east of the village.

***

All roads inside the mill gate have been resurfaced. In addition to giving the Cedar Springs mill a fresh look, completion of this project has greatly improved driving conditions.

***

Fiber Holding Pond. A trial run has been made on the 10-inch dredge, and fiber is being removed from the holding pond. As a result, there is now room for addition fiber in the holding pond.

***

Alternate Base High Density Storage Tower. To date, the steel structure has been completed and hydrostatically tested. Piping is now in progress, and major tie-ins to existing lines are planned for the Christmas shutdown. Painting and tiling is expected to begin this month.

***

Golf Tournament. The annual Labor Day Golf Association Golf Tournament was held at the Blakely Town and Country Club. Approximately 85 members and salesmen participated in the outing.

First prize, a golf blazer, was awarded to Coy Williams, Pulp Mill, at the dinner and dance that followed the outing.

NEKOOSA EDWARDS

NE Has New President. Gerard E. Veneman has been elected President of Nekoosa Edwards Paper Company, Inc. The action was taken at a board of directors meeting held at Port Edwards on September 30.

As Nekoosa's fifth president in its 62-year history, Mr. Veneman succeeds Sam Casey who has become Chairman of the Executive Committee of Great Northern (continued on next page)
Nekoosa Corporation

Mr. Veneman joined NE's sales force in 1949 and was named General Sales Manager in 1953. The following year he became Vice President and Director of Sales, and in 1962 advanced to Executive Vice President and Director of Marketing. In 1969, he was named Executive Vice President, responsible for marketing and manufacturing.

Under Mr. Veneman's leadership, the company's sales have increased from $27.2 million in 1953 to a record $164.5 million last year. During the same period, tonnage more than tripled to 325,000 tons annually.

Mr. Veneman has been a member of NE's board of directors since 1956, and a member of the CUNA board since March of this year. He has also served as President of Butler Paper Company, a wholly-owned paper distribution subsidiary of Nekoosa Edwards, since 1964.

Active in industry affairs, Mr. Veneman served for three years as President of the Writing Paper Manufacturers Association, and is a past president of the Salesmen's Association of the Paper Industry.

He is also a member of the Executive Committee of the Printing and Writing Paper Association and a trustee of the Paper Technology Foundation of Western Michigan.

management notes

"Do You Need a New Right Hand?"
(Excerpted from an article that appeared in the July 1970 issue of NATION'S BUSINESS.)

Even the best executive, caught in the ordeal of multiple problems and pressing deadlines, is prompted to turn his eyes upward for a brief moment and wish for less pressure, more time—or another hand.

The fact is, there is a perfectly practical and proper remedy for "executive work crisis." With a capable assistant at your elbow, the following things can go zooming upward: your efficiency, your peace of mind, your standing in your company and profession.

And the following tend to nosedive: headaches, instances of failure or incomplete success, the panting you do to keep up with job responsibilities.

"If having an assistant is such an unmitigated blessing," you may say, "how come many executives who could have them, don't. And how many who do wish they hadn't—because the assistants become more of a problem than a solution?"

Many failures are caused long before the assistant is even put on the job, and you must go through four preliminary steps to foster an effective executive-assistant team:

- Think about your job. Be specific and pin down its elements. What do you do? For what are you responsible? What are the future areas?
- Think about the assistant's job, and make sure there is a job—i.e., a responsibility you can exact from your duties that will have its own rationale and logical design.
- Think about yourself: what kind of direct superior are you; do you want an assistant who can back you up in taking care of details and routine, or will you help an assistant grow so he can take over some of the less routine parts of your job?
- Think of the spectrum of possible assistants—people with high levels of initiative and creativity, or those who are more methodical.

After you have given due thought to the above preliminaries, here are some guidelines to help you set a course that avoids most of the pitfalls.
- Select for compatibility and rapport.
- Set the stage and when your assistant first starts out give him a broad line of his responsibilities and your joint objectives.
- Arrange for routine and emergency communication channels.
- Don't treat him like a high-powered secretary.
- Clarify your feelings about the "yes man," "no man" dilemma. Lack of freedom to agree or disagree deprives you of the benefit of dependable and uninfluenced opinion.
- Don't let him see his job merely as a stepping stone.
- Back him up.
- Know what not to delegate. Don't (continued on next page)
ss along a problem so delicate and explosive that even you are in doubt as how to handle it.

- Assess his strong and weak points, either formally or informally. Be specific.

If it is within your leadership style, you may want to begin with the understanding that you're training him to master a major part of your job. This requires a high degree of openness, retention by the executive of a minimum number of secrets.

One guiding factor here is your assistant's ability to absorb the ideas and information he must have, to master the challenges he will face and to develop the sense of responsibility to wield the power you're placing in his hands. How quickly this proceeds depends on the trust you develop in one another.

"PERSONALITIES"

NEW EMPLOYEES

ARTHUR D. FULLER has joined the Controller's Department in Millinocket as an Accountant.

***

LUNSFORD H. LEWIS has joined the Board Sales Department in New York as Salesman.

***

EARL W. VICKERY has rejoined Great Northern. Formerly an Area Engineer, he is now a Maintenance Engineer at the Millinocket mill.

***

GEORGE T. WOODS has joined the Southern Woodlands Department (Troy Area) as a Unit Forester.

PROMOTIONS

ARTHUR L. BRACKIN has been promoted to Dry End Foreman at Great Northern Plywood, Cedar Springs.

***

BERTRAND A. DOYLE has been promoted from Tour Foreman - Paper to Day Foreman - Paper at the Millinocket mill.

***

PATRICK H. WELCH has been appointed to the new position of Environmental Protection Supervisor, Research and Development, Millinocket.

***

TRANSFERS

WESLEY L. CHAPMAN has transferred from Green End Foreman to Finishing and Shipping Supervisor, GN Plywood.

***

ALFRED A. COWETT has transferred to Supervisor-Road Construction & Maintenance Trucking at Millinocket.

***

TERMINATIONS

EMMETT L. LONG has resigned from his position as Finishing and Shipping Supervisor, GN Plywood.
GEARRY L. RANGER has resigned from his position as Manager of Internal Auditing, Controller's Department, Millinocket.

* * *

ANNIVERSARIES

DAN GARRITY, Contract Foreman, Northern Woodlands, 25 years on September 6.

* * *

GORDON R. PAGE, Electrical Foreman, East Millinocket, 25 years on September 18.

RANDOLPH R. ROBINSON, Superintendent of Stores, Millinocket Mill, 15 years on September 1.

* * *

KELSIE L. FISH, JR., Power System Operation Superintendent, Millinocket, 15 years on September 27.

* * *

GLEN L. WILEY, Research Technologist, Millinocket, 15 years on September 26.
The Economy and the Paper Industry. "Current indications are that profits in the paper industry in 1970, when measured as a percent of sales after taxes, will be the poorest since 1938, excluding the wartime years of World War II," remarked John F. Darrow, Vice President, Paper Group, the American Paper Institute, at a recent conference.

Although the state of the country's economy--called a recession by some--that existed since the beginning of the year has recently shown slight signs of revival, these hints of a business turnaround are neither strong enough nor consistent enough to accurately forecast optimistic year-end results.

There has been a veritable explosion in labor, fuel and freight costs in all markets, and along with companies throughout the paper industry and the nation, Great Northern has been hard hit by these increases.

In the Northern Division, it is estimated that by year-end transportation, labor and fuel charges will have risen to the point of costing Great Northern $9 for every ton of paper produced.

If the proposed freight increases are put through, transportation rates will be up 20% by January 1, 1971 over last year. Since May, fuel oil costs have risen $.85 a barrel and are expected to go up even more by the first of next year. GN's Northern Division uses more than 1.5 million barrels of fuel oil a year. While the Cedar Springs mill will consume more than 1 million barrels in 1970, it is impossible to make a cost comparison with last year since the conversion from coal was made during 1970.

In the South, freight costs have not yet gone up--mainly because the railroads in the Southern Territory have so far refused to petition the ICC for higher rates.

The facts are stark. At the end of the first half of 1970, 19 out of 25 major pulp and paper companies showed an average decrease of 21.8% in net income over the same period in 1969. And some observers believe that third quarter results will be even more disappointing.

However, the future is not entirely dismal. As Mr. Darrow observed, "If the paper business commences to improve again later this year and resumes its normal increase in consumption growth, we should witness a gradual strengthening in the market."

***

Temporary Space has been leased at 65 Prospect Street, Stamford, for the Director of Computer Information, Systems & Programming staff of the Administrative Services Department, and Salary & Benefits Department.

***

Increased Rail and Demurrage Charges. Railroads in the East and West have voted (continued on next page)
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...to petition the Interstate Commerce Commission for a 15% increase in rail rates.

The railroads filed on September 1 for an 8% increase to be effective on one day's notice. They will file for the remaining 7% at a later date.

At present, the railroads in the Southern Territory, the Illinois Central and the St. Louis-San Francisco (Frisco Lines) have refused to sign the petition.

In addition to increased freight rates, the railroads have also published increased demurrage charges of $10 for each of the first four days following the expiration of free time, $20 for each of the next two days, and $30 for each subsequent day—effective September 1.

The Bangor and Aroostook Railroad has refused this increase and announced independent action. BAR demurrage charges will be $8 for each of the four chargeable days and $16 for each subsequent day. An effective date has not yet been set.

At press time it was learned that the ICC has suspended action on demurrage increases until April 1.

***

"Driography: Bridging the Water Gap."

"We firmly believe this plate opens up a new climate for printing, a climate with fewer operating problems, higher quality, and greater overall economies," commented Edward J. Kane, VP, 3M Company's Printing Products Division, at a press conference held to introduce the 3M Brand Dry Plate.

The key to driography, this new product is claimed by 3M research scientists to be the answer to the problem of ink-water balance so necessary for efficient offset printing.

The Dry Plate ends the need for water and opens the door to a new printing process that combines the best features of letterpress and lithography.

Presensitized and conventionally exposed, the Dry Plate is developed in a single step, rinsed with water and dried. The plates are said to be good for 50,000 impressions, but 3M expects this figure to increase substantially in the future.

Driography is based on the principle of differential adhesion. Under certain circumstances, ink will adhere to image areas of a printing plate, but not to the background. Until now, water was required to keep the non-image areas free of ink.

The Dry Plate cannot be run in the conventional way with dampening, since it will scum if water is used. However, the plate may be used on any offset press on which the damper has been shut down or removed.

According to 3M, "dampening has long been a troublesome area in lithography, and transition to the Dry Plate could be rapid."

The plate indicates greatest compatibility with a rotary type offset press—either sheetfed or webfed—without a dampening system.

About 20 major ink companies are evaluating the Dry Plate in connection with ink formulations. 3M distributes the special inks required for the process and will remain the major ink supplier until the firm is sure that the printers' needs are met.
NORTHERN DIVISION

West Branch Storage is now at 41.3 billion cubic feet, 73.3% of full storage and 4.3 billion cubic feet below rule curve. Below-normal precipitation over the northern section of the drainage area during July and over the entire area in August combined with high temperatures to reduce the inflow to zero.

***

Salvaged Wood. The first load of wood salvaged from the bottom of Quakish Lake was delivered to East Millinocket on August 17.

In the first four days of operation, 139 cords of wood were delivered. However, it is hoped to increase production to 70 cords per day.

After delivery to the mill, the wood is piled at the upper end of J Conveyor to allow it to dry out before being processed into groundwood pulp.

***

Coated Offset Improvements. Several Quality and Service reports have been received that comment favorably on the various changes that have been made in GN’s coated paper.

Shifting the Jetblade 0 formula to a higher proportion of latex, together with a more strongly bonded basestock, has resulted in improved resistance to piling, picking and fiber roughening.

In addition, there have been no reports of ink-water balance problems.

***

Summer Visitors. To date, the number of summer visitors who have requested tours of our two Maine mills amounts to 2,553. 1,747 people, representing three foreign countries and 48 states, toured the Millinocket mill, and 806 visitors from two foreign countries and 15 states went through the East Millinocket operation.

During the June-September period last year, 3,390 people toured both mills—2,143 at Millinocket and 1,247 at East Millinocket.

It is believed that the decrease in total visitors resulted from the fact that there was no Open House this year.

***

Cottage Lot Surveys are continuing on several of GN’s Northern Maine lakes, and 131 new campsite leases have been written this year.

In compliance with recent Maine regulations on waste and disposal facilities, the new lots have a minimum of 150 feet of shore frontage.

The new shore areas being opened up are on lakes where there is some development. According to John T. Maines, Vice President-Woodlands, the present policy of no new leases in the more remote areas is being continued.

***

Plastic Calender Roll. A new Beloit plastic-sleeved calender roll for No. 4 Paper Machine at Millinocket is presently being evaluated to determine if it can be used to produce smoother Roto paper without the printing mottle characteristic of paper produced with high nip pressure steel-to-steel calenders.

***

Cutting Production continues to be high, with the Tibetan crew at Ramsey Brook cutting over 600 cords the week ended August 24.
SOUTHERN DIVISION

Channel Conditions. Since August through December is normally considered the "low water season" on the Apalachicola-Chattahoochee Waterway, the U. S. Corps of Engineers has been conducting dredging operations in shallow areas in order to maintain a nine-foot channel.

In addition to the "William Guthrie" dredge already in operation, a contract dredge will be placed on the lower river system in early October and will remain through December.

It is hoped that with this action by the Corps of Engineers a satisfactory channel will be maintained to assure a consistent flow of inbound fuel oil during this period.

***

Long Log Slashers. The McRaeville has been started up and operations began on August 31.

The Hilton slasher should be ready for start-up by the end of September.

***

Fire Wall Between Nos. 1 and 2 Recovery Boilers. Carroll Construction Company will install a fire wall between Nos. 1 and 2 Recovery Boilers. To be completed by October 1, the wall will include necessary doors and hatches, and will run from the first through the third floors.

***

Sheet Piling will be driven along the bank of the Chattahoochee (behind the mill) by Jordan Pile Driving Company, and anchors will be installed to prevent erosion.

The drive will be completed by October 1, and the measures taken to prevent erosion will render the land adjacent to the river bank usable in the future.

***

GN Plywood Maintenance Shutdown. Many major maintenance and modification projects were accomplished during the shutdown the week of August 16.

At the Debarker System, bark conveyors and the lilly-pad chipper were rebuilt, wear surfaces and worn sprockets were replaced and the motor control center was relocated.

The lathe charger was modified with new thrust cylinder action and hydraulic deceleration system. This will result in faster, more positive lathe charging.

Fuel oil conversion was installed on No. 1 Boiler and air compressors were overhauled.

In addition, cables and fire-damaged wiring were replaced in the Dryer Area.

***

Painting of the evaporator area, pulp mill area pipe bridges and digester loft is nearing completion.

In addition, 70% of the wet end of the paper machine and washer room is finished.

***

Woodlands. Site preparation, hardwood control and prescribed burning continue to be the principal forest management activities in the South.

***

Transportation Flow has been good, and the first six new CIRR woodracks have arrived from Great Northern's Newman (Ga.) woodyard.
"The Management of Creative Personnel."
(Excerpted from an article by Carl Gregory in the Fall 1969 issue of JOURNAL OF CREATIVE BEHAVIOR.)

Change is a very real factor to which every area of our environment is subjected, and to put new ideas together in new ways, professional employers and managers must work together as they have never worked before.

Present indications are that the degree of a business' success during the next decade will positively correlate with its management's ability to reappraise corporate beliefs and thus separate reality from fiction.

Achieving optimum creativity, morale and motivation in personnel necessitates creative change on the part of management. Tight, formal authority systems discourage creative decisions. The creative man needs to be given intelligent audience by the kind of flexible management that listens to all new ideas, absorbs the useful and tactfully defers the unrealistic.

A strong, free-flowing formal communication system is necessary along with the recognition of the importance and power of the informal organization.

Thinking, much like concrete, can harden into set patterns and become narrowed until the thinker is so enmeshed in minutiae that he is unable to see the whole.

Management needs to schedule a "daily thinking hour" for intellectual adventure and exploration. Too much pressure with too little time off for relaxed thinking increases the risk of reducing output.

Reasonable deadlines are effective innovation motivators, but continued crash programs tend to automate thinking, lower morale, increase tension and promote interpersonal conflict.

The unpredictable insights coming from research, the accidental findings not directly related to immediate objectives, have kept many modern-day organizations in the vanguard of progressiveness and high profit.

Obviously, each of those organizations had managers who could evaluate and capitalize upon serendipity without spreading resources too thin.

A high level of morale and motivation can be maintained by recognizing and rewarding scientific personnel for serendipitous discoveries.

Parallel ladders for promotion could also be established in each professional area so that it would not be necessary to move into management in order to find higher status and income.

Perhaps the basic ingredient for creative scientific management is the conviction that change is inevitable. Scientific management constantly makes realistic evaluations of trends within the larger cultural environment.

Qualified persons are delegated the responsibility for predicting the future and anticipating its implications for the business enterprise.

Such peeking behind the curtain of tomorrow can profitably affect research decisions through a better differentiation between the real and the unreal, the important and the unimportant.

Scientific management must also protect the dissenter, capitalize on the unpredicted, coordinate the diverse and adapt to change while never losing sight of the very important fact that profit is the symbol of efficiency and a necessary criterion for measuring business success.

"PERSONALITIES"

NEW EMPLOYEES

PHILIP CANNELLA has joined the Controller's Department in New York as Tax Manager.

***

GORDON H. COOK, JR. has joined the Controller's Department in Millinocket as an Internal Auditor.
JOHN M. EASH has joined the Northern Woodlands Department as a Forester.

* * *

DAVID R. ROOP has rejoined Great Northern. Formerly with the Boston Sales Office, he is now a Market Analyst, Market Research Department in New York.

* * *

PROMOTIONS

RICHARD D. BESSEY has been promoted to Assistant Chief Scaler-Aroostook Area, Northern Woodlands Department.

* * *

WADE F. CLARK has been promoted from Unit Forester, Southern Woodlands Department, to Project Forester-Timberlands.

* * *

EDWARD A. LUMBERT has been promoted from Assistant Manager-Purchased Wood to Administrator-Plans, Budgets & Costs in the Northern Pulpwood Procurement Department at Millinocket.

* * *

HOWARD L. SPRUILL has been promoted from Finishing & Shipping Supervisor to Dry End Superintendent, Great Northern Plywood Corporation at Cedar Springs.

ROBERT STACEL has been promoted from Scheduler to Assistant Board Sales Supervisor, Board Sales division in New York.

* * *

TRANSFERS

CHARLES A. ARNOLD has transferred from Assistant Area Superintendent, Southern Woodlands Department, to Project Forester-Wood Procurement.

* * *

EMMETT LONG has transferred from Dry End Superintendent to Finishing & Shipping Supervisor at GN Plywood.

TERMINATIONS

CLYDE H. CROMMETT has terminated as Internal Auditor, Controller's Department at Millinocket.

* * *

ROBERT M. HERSEY has terminated as Day Foreman-Paper at the Millinocket mill.

* * *

JOHN V. PRATT has terminated as Finishing & Shipping Foreman at the Cedar Springs mill.
GREAT NORTHERN PAPER COMPANY
NEWSLETTER
FOR MANAGEMENT EMPLOYEES

Vol. IX No. 3 New York, New York August 10, 1970

NORTHERN DIVISION REACHES RATIFIED AGREEMENT WITH UNIONS FOR A TWO-YEAR CONTRACT

Great Northern Paper Company and seven international unions, represented by 12 locals, have signed a ratified agreement for a two-year contract for the Company's two Northern Division mills in Millinocket and East Millinocket.

The contract provides for a general wage increase of 23 cents an hour for both years, retroactive to July 1, 1970.

Life insurance, maternity benefits, major medical and hospital expenses, and comprehensive medical coverage for retirees were substantially increased.

Other improvements provided by Great Northern included an additional week of vacation after 15 years of continuous service (effective July 1, 1971), a seventh vacation week after 30 years of service, increased work turn differentials, revised seniority rules and improved sick pay.

The seven international unions involved in the agreement were: International Brotherhood of Pulp, Sulfite and Paper Mill Workers; United Paper Makers and Paper Workers, AFL-CIO; International Brotherhood of Firemen and Oilers; International Brotherhood of Carpenters and Joiners; International Brotherhood of Electrical Workers; International Association of Machinists and Aerospace Workers; and United Association of Plumbers and Pipe Fitters.

GREAT NORTHERN NEKOOSA REPORTS 16% INCREASE IN NET INCOME FOR FIRST SIX MONTHS OF 1970

Net income for GNN, on a pooling of interests basis, amounted to $10,667,000 for the first half of 1970, up 16%. Net sales increased 6% over the same period last year.

Attached to this issue of the Newsletter is a copy of the second quarter earnings report.

***

U. S. Department of Labor Overruled. Great Northern has won a favorable decision in its petition against the Department of Labor's "prevailing rate" for tree-length pulpwood.

The decision rendered by the U. S. Department of Justice Immigration and Naturalization Service overruled the Department of Labor's $4.85 per cord figure. The new prevailing rate is now $4.60.

Great Northern had contended that the $4.85 per cord figure was based on an erroneous survey by the Labor Department that did not apply to our cutting operations. Tree-length logging is a new method of harvesting pulpwood and too few companies were using it at the time of the survey to make for an accurate tabulation of rates.

(continued on next page)
Production for the month ended July 31.

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Since Spring start-up, the Aroostook and Millinocket Area woods camps have been cutting four-foot wood; they have now been converted back to their former tree-length cutting operations.

* * *

Corporate Relocation to Stamford
Definite. On Friday, July 31, Great Northern Nekoosa Corporation signed a 20-year lease for a 39,000 square-foot building at 75 Prospect Street in Stamford (Conn.).

The relocation of corporate headquarters from New York City to Stamford is expected to be completed by the end of the year.

Housed at 75 Prospect Street will be the executive offices of GNN and Great Northern Paper, and the New York sales staffs of GNP and Nekoosa Edwards.

* * *

Climb on the "Bond" Wagon! Along with other major corporations throughout the country, Great Northern is again holding its annual U. S. Savings Bonds Campaign which will give all employees the opportunity of purchasing Savings Bonds through the Payroll Savings Plan.

The Company's goal during the campaign, which will begin on August 17, is to enroll at least one of every two employees not now in the Payroll Savings Plan, and to increase allotments from at least one of every two already participating.

According to Robert A. Haak, President, "a successful campaign is an increasingly important part of our continuing fight against inflation. I believe that no other form of saving is as easy or as secure as regular amounts invested in United States Savings Bonds each pay day."

If Great Northern's campaign exceeds the 50% participation mark, we will receive a special citation from the U. S. Treasury Department.

Some new facts concerning Payroll Savings: On December 1, 1969, President Nixon signed into law legislation increasing the interest rate on U. S. Savings Bonds (Series E) to five percent if held to maturity of five years and 10 months and retroactive to June 1, 1969.

* * *

CORRECTION:
Last month's Newsletter incorrectly listed the maximum donation that will be matched by Great Northern as $250.

Under the Matching Gifts Program, the maximum donation matched by the Company is $500 per institution, per employee, per year.

* * *

Holopulping. A new process for converting wood into pulp has been disclosed (continued on next page)
by the Institute of Paper Chemistry in Appleton, Wisconsin.

The process, called "holopulping" to reflect its ability to retain in the pulp almost all the cellulose and other carbohydrates from the wood, has proved successful in the Institute's laboratory and soon will be tried on a larger scale in a pilot plant.

Noting projections that the demand for paper and paper products will require doubling pulp production within the next 20 years, the Institute foresees holopulping as a major supplement to the traditional sulfite and sulfate methods of chemical pulping.

Pulping involves separating the lignin of wood from the cellulose and other carbohydrates. The chemical pulping processes degrade the lignin so that it becomes soluble and can be drawn off with a solvent; cellulose remains in fibrous form for use in the making of paper. The sulfite and kraft processes also attack the carbohydrates to a certain extent.

Holopulping, however, involves a selective delignification that focuses on the lignin and leaves more of the carbohydrates. The wood, in the form of fine chips, is subjected to a process that modifies the lignin with a mild oxidant such as chlorine dioxide. The lignin is then extracted with a solvent such as sodium hydroxide, and the pulp is bleached with hypochlorite.

***

Allagash Designated as "Wild River." On July 19, the 95-mile Allagash Wilderness Waterway in northern Maine was named as the first addition to the National Wildlife and Scenic Rivers system.

U. S. Secretary of the Interior Walter J. Hickel noted that "it is particularly fitting that the Allagash be the first state-administered unit added to the national system as for many years the Allagash has been recognized by the State of Maine and this department as having natural and scenic value of national significance."

As a "wild river," the Allagash will receive new environmental protection. Dams for other than recreational uses will be prohibited; water pollution restrictions will be imposed; and access will be limited to trails and infrequently used roads.

Great Northern has played an important role in preserving the natural wilderness of this waterway.

In November 1968, Allagash Falls was part of a 770-acre gift to the State of Maine.

***

Annual Report Award. GNP's 1969 Annual Report has received FINANCIAL WORLD Magazine's "Merit Award," thus making it eligible for FW's "Oscar-of-the-Industry" award to be announced in October.

***

Would you believe...it took 186 years for the U.S. Government to reach its first $100 billion federal budget, but only nine years to reach the $200 billion mark!

NORTHERN DIVISION

Progress Report on No. 11 Paper Machine. Excavation for the Paper Machine Building and Trainshed Building began on May 1, and despite 18 days of rain that month, the job has been completed.

In addition, concrete has been poured for footings, and piers for the buildings and erection of structural steel has begun.

Before start-up of the new Black Clawson Verti-Forma (probably mid-1972) can be accomplished, a tremendous amount of preliminary work must be done.

A few of the "incidentals" of installing a paper machine include: relocating railroad tracks; building temporary roads, a pedestrian bridge and parking lots for (continued on next page)
construction workers; providing offices for the contractor, consulting engineers and their employees; excavating and installing underground fire main lines; and revising electrical power distribution systems.

According to Donald G. Griffee, Manager of Engineering, "much remains to be finalized—specifications are being prepared for bidding, proposals are being evaluated, and purchase orders for equipment related to the new paper machine are being drawn up. Altogether, things are humming on the No. 11 jobsite, and we will continue to give progress reports until the expansion program is completed in 1972."

* * *

Log Stacker on Trial. During the week of July 17, a Letourneau Log Stacker was on trial at East Millinocket.

The machine, with its pincer-like attachment, is designed to lift a complete load of tree-length logs from a trailer truck and either stack the logs or transfer them to the slasher.

Because an entire truckload of tree-length logs can be picked up and moved in one operation, the Letourneau shows great potential for Great Northern as more tree-length wood deliveries build up.

On July 24, the Letourneau Log Stacker was moved to Millinocket for trials on long log handling.

* * *

Coated Offset Paper. According to Research and Development, recent pressroom reports on coated offset paper have been encouraging.

Press runs have been made at Mid-Atlantic (NEBRASKA FARMER), Judd & Detweiler (GERIATRIC TIMES), Danner Press (AIR PROGRESS) and Service Offset (CAMPING GUIDES).

These favorable reports would indicate that improved manufacturing techniques and new coating formulations at Millinocket have resulted in a better grade of coated offset paper.

Salvage Raft at North Twin. A floating raft, or platform, has been constructed at North Twin. Large enough to support a 25-ton crane, this unit will be used to salvage sunken wood from the lakes, ponds and rivers that have been part of Great Northern's river drives since the early 1900's.

The removal of this wood is but another part of the Company's pollution abatement program in Maine.

* * *

River Quality. The dissolved oxygen content of the Penobscot continues to decrease as water temperatures rise.

However, measurements made on the river this summer indicate that the BOD (biochemical oxygen demand) content has dropped by nearly 75%. This, of course, is the result of start-up of the MgO plant.

* * *

Roll Packaging Inspection System. As part of this new inspection system at Millinocket, books have been prepared showing what is and what is not acceptable in terms of roll appearance.

These books will be used by the Finishing Department to acquaint new personnel with expected performance, and by the Control Department to train inspectors in roll packaging requirements.

This inspection program has already borne fruit in that it recently picked up a sharp increase in gluing defects. As a result, the problem was corrected before shipment rather than after complaints were received from customers.

* * *

The Atlanta Sales Office, directed by Charles M. Sheafe, Regional Manager-Newsprint, has relocated to 1422 West Peachtree Street, N.W., Atlanta, Georgia 30309, (404), 892-8676.
"Nader's Raiders." In conjunction with Ralph Nader's study of the Maine pulp and paper industry, representatives of various paper companies in Maine met recently to review the group's comprehensive questionnaire.

Subject to review by individual company managements, it was agreed that the Paper Industry Information Office would reply to the questionnaire—the answers to be approved by the participating companies.

It was also decided that, when completed, the industry's answers would be released to the press.

Great Northern has been visited by two law students participating in the study group. According to Research and Development, they had very little understanding of pollution or the technology of its abatement.

* * *

Joint Golf Outing. The Chicago sales offices of Great Northern and Nekoosa Edwards recently held a golf outing and dinner at the Inverness Country Club in Palatine (Ill.).

In the past, this has been an annual event for Great Northern. However, it was expanded this year to include NE.

* * *

Additional Facilities for Pollution Control. Great Northern's pollution abatement program did not stop with the completion of the MgO Recovery Plant.

At present, design work for the installation of new process interceptor sewers, sanitary sewer lift stations and new sanitary sewer piping in Millinocket and East Millinocket is progressing well.

According to Donald G. Griffee, Manager of Engineering, completion of this work is scheduled for the end of the year.

West Branch Drive. The rear of the drive has cleared Seboomook Dam, and approximately 35,000 cords have already been sluiced through Ripogenus Dam.

* * *

Printing Problems Discussed. Walter Janel, President of Precision Colors, Inc. (Xenia, Ohio), was the guest speaker at a dinner meeting hosted by the Chicago Commercial Sales Office on July 27 at the Marriott Motor Inn.

During the meeting, the interrelated printing problems of ink and paper were discussed in detail.

Precision Colors, a Midwestern offset printing ink manufacturer, specializes in low-tack, stable offset printing inks for use on coated and uncoated groundwood printing papers.

Present at the meeting were: George L. Nystrom, Regional Manager-Commercial Sales; Benjamin B. Appleton, Regional Manager-Newspaper Sales; Michael P. Alford, Jacques L. Dardenne, John B. Deibel, Jr., Terry N. Pendleton and Richard J. Rychlik (Chicago Sales Office); and George Schnauf-fer (New York Sales Office).

SOUTHERN DIVISION

Reforestation. Woodlands personnel are making final plans for reforestation activities during the 1970-71 tree planting season. (The planting seasons normally begin after one or two heavy frosts harden the seedlings and cause them to enter a dormant stage.)

Great Northern purchases its pine seedlings, grown in State-operated nurseries and lifted for out-planting when approximately eight-nine months old, from State Forestry Commissions in Georgia, Florida and Alabama.

(continued on next page)
Planting will be done by Company crews and contractors, using mechanical planting units consisting of a tractor-plow and planting machine.

The tractor pulls the machine and an operator feeds seedlings into the trench (or furrows) at intervals of six feet within rows.

It is anticipated that approximately 8,000 acres of land--740 seedlings per acre--will be reforested from mid-December through March.

* * *

**Long Log Slashers.** All mechanical work at the McRaeville (Ga.) slasher has been completed. Electrical and hydraulic systems will be finished by mid-August, and trial runs will begin shortly thereafter.

Work will resume at the Hilton (Ga.) slasher as soon as McRaeville is put into operation. Additional grading will also be done to increase the size of the woodyard to approximately 15 acres.

* * *

**Dissolving Tank Vent Recovery System.**

An induced draft fan and associated equipment to direct vent gases from the No. 1 dissolving tank vent stack into the two tertiary air ports on the front of the No. 1 recovery boiler will be installed this month at Cedar Springs.

As a result, dissolving tank vent gases will be diverted into the recovery boiler to recover salt cake now being lost to the atmosphere.

The control of corrosive salt cake fallout will reduce painting maintenance in the power house and better control air pollution.

* * *

Recent woodlands acquisitions include 1,250 acres in Dale County (Ala.), 1,129 acres in Bullock County (Ala.) and 2,690 acres in Gadsden and Liberty Counties (Fla.).

According to James W. Richardson, Woodlands Manager-Southern Division, these properties are well stocked with merchantable timber and represent desirable additions to Great Northern's holdings in the South.

* * *

**Maintenance Shutdown.** The Cedar Springs mill was shut down on August 3 for overhaul and repair work.

Included in the maintenance work was the rebirking of 70-80 feet of the No. 1 lime kiln and the rebuilding of the No. 1 Paper Machine drive generator on all six dryer sections.

An alignment check was run on the No. 1 turbine-generator governor, and the digester loft was repainted.

Great Northern Plywood Corporation will shut down the week of August 17. It is planned to run the plywood plant each Saturday until the shutdown week.

* * *

**Painting.** In accordance with a new color code scheme, most of the pipe bridge and washer room structural steel, and part of the structural steel on the wet end of the Machine Room at Cedar Springs is being sandblasted and painted.

**MANAGEMENT NOTES**

"Mumbling, Stumbling and Bumbling."

(Excerpted from an article by C. P. Prahalis in the June-July 1970 issue of MANAGE.)

The manager who accepts an invitation to speak before a group does so for one of three reasons: a good friend asked him; he thinks a good purpose will be served; or (continued on next page)
he can't think of a convincing reason why he shouldn't.

Whether speaking to an audience of 5 or 5,000, the qualities that spell success are the same. They can be achieved through planning and practice.

Don't accept a speaking engagement until you've given the matter careful thought. Find out who the other speakers will be, where the meeting will be held, size and type of audience, length of talk desired, and whether there will be a question and answer period.

With these facts, you will be able to determine whether you can give a talk that will be suitable to the audience's interests. And whether you're qualified.

An interest-rousing title may be hard to devise, but it's well worth the effort. As for the length of your talk, it's usually well to heed the axiom, "No souls are saved after 20 minutes." Neither loudness of voice nor length is any test of excellence in a speech.

When a speaker hears his name called by the chairman making the introductions, his immediate inclination is to begin talking. Fight this temptation. Pause a few seconds after being introduced. Generally, it's best to skip long introductions and plunge into your subject. Many experienced speakers begin with a knowledgeable compliment to the audience, organization and place. Above all, don't begin with an unrelated joke.

Many a well-prepared speech has failed for lack of rehearsal. But rehearsal has to be intelligent practice. Cards or notes are also helpful—they will remind you of main points, and you won't run overtime.

While speaking, be psychologically prepared for anything, including audience distractors. If you're on a panel, you may have to cut material because a preceding speaker dealt with it in an ad lib.

After uttering the last word of your speech, nod to your audience, smile, turn and walk back to your chair. It's that simple.

"Thank you" is not necessary. In fact, it can weaken your talk. It's the audience who, in appreciation for the message you have given them, should thank you.

Giving and listening to a brief talk can be a pleasant experience, particularly if the speaker involves his whole being in the effort. If you're totally involved, chances are the audience will be, too.

"PERSONALITIES"

NEW EMPLOYEES

GEORGE V. NOCKS has joined Board Sales in New York as Board Sales Service Supervisor.

***

ANTHONY STAMMS has joined the Administrative Services Department in Millinocket as a Systems Programmer.

***

WALTER D. VAIL has joined the Sales Department in New York as a Sales Trainee.

***

WILLIAM C. WALDO has joined the Central Engineering Department in Millinocket as a Senior Engineer.

PROMOTIONS

DONALD E. BLACK has been promoted from Data Processing Supervisor to Systems Programmer—Southern Division at Cedar Springs.
RICHARD L. GREENE, JR. has assumed a new position assisting the James L. Bellis, Manager of Board Sales, and R. K. Crippen, Assistant to the Executive Vice President-Board Sales.

* * *

CHARLES C. GRIMES has been promoted from Maintenance Programmer to Data Processing Supervisor at Cedar Springs.

* * *

ALBION L. KELLEY has been promoted from Research Engineer to Senior Research Engineer, Research and Development Department, at Millinocket.

* * *

PHILIP C. STURMAN has been promoted from Research Technologist to Senior Research Technologist, Research and Development Department, at Millinocket.

* * *

LARRY E. TOWNSEND has been promoted from Engineering Assistant to Associate Electrical Engineer at Cedar Springs.

TITLE CHANGE

LUCIEN A. BRUGGEMAN'S title has been changed from Sales Administrator-Board Sales to Board Sales Market Analyst.

TRANSFER

JAMES A. BLICKLE, Sales Correspondent-Board Sales, has transferred to the Sales Department as a Sales Trainee-Newsprint.

TERMINATIONS

DANNY R. CHANDLER has resigned from his position as Mechanical Engineer at Cedar Springs.

CARLENE P. HARVEY has resigned as Systems Programmer, Administrative Services Department, at Millinocket.

* * *

ROBERT C. HILL has resigned from the position of Electrical Engineer at Cedar Springs.

* * *

JOSEPH J. MARTIN, III has resigned as Administrator-Industrial Relations, Central Personnel Department, at Millinocket.

* * *

KENNETH R. PARKER has resigned as Research Technologist, Research and Development Department, at Millinocket.

* * *

DONALD E. ROBINSON has resigned as Engineering Office Supervisor at Cedar Springs.

RETIREMENTS

EDWARD L. COWAN, President, Chattahoochee Industrial Railroad, and former GNP Vice President-Engineering, has retired after 11 years with the Company.

* * *

HOWARD L. THURLOW, Market Analyst, Sales Department, has retired after 15 years with Great Northern.

ANNIVERSARIES

WILLIAM C. BIRT, Mechanical Inspector at Millinocket, 33 years on July 19.

* * *

HERMAN W. PETERSON, Senior Design Engineer at Millinocket, 19 years on July 6.
Million Man-Hours Attained. On May 16, Group I—the Millinocket Mill—attained one million man-hours without a loss time accident, making the unit eligible for the Company's "Million Man-Hour Scholarship."

Established to encourage greater safety efforts among employees, the scholarship fund consists of $2,000 to be granted in $500 units over a period of four years.

The Million Man-Hour Scholarship was first awarded in 1964 to Groups I and II. Each group received $2,000.

There are four "groups" eligible to participate in the scholarship program: I - Millinocket mill; II - East Millinocket mill; III - Engineering Services and all in the Administration and E&R buildings; and IV - Cedar Springs.

Scholarship candidates must be the son, daughter or legal dependent of an employee in the group that has reached the million man-hour safety goal. He or she must also be a high school graduate in good standing, or a high school senior who has been enrolled or accepted in an accredited college, university, trade school or other recognized institution of higher learning.

Financial need is also considered in making the scholarship award.

Applications must be submitted to the Scholarship Committee, which is composed of representatives of the Company, unions, school system and community.

According to Roland L. Russell, Safety Supervisor—Millinocket, the Company feels that "the Million Man-Hour Scholarship is the best way in which Great Northern can reward its employees for their conscientious efforts in safety."

***

General Increase in Rail Freight Rates. Effective June 9, our rail rates were increased 5% on Interstate shipments.

This Spring, under Docket Ex Parte 265, rail carriers requested permission from the Interstate Commerce Commission to raise freight rates by 6%, effective June 2.

On May 27, the ICC authorized a 5% increase as an interim measure while a full investigation into the carriers' needs for additional revenue is being conducted.

The only one of GN's shipments that did not come under the terms of the rate increase was fuel oil from Searsport (Maine) to Millinocket and East Millinocket. While the Bangor and Aroostook Railroad was authorized to effect a 5% increase on this traffic, they agreed not to accept it.

The interim increase approved by the ICC will raise Great Northern's freight charges by approximately $1,063,900 annually.
Paper production for the month ended June 30...

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<tr>
<th>Production:</th>
<th>1970</th>
<th>1969</th>
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<tr>
<td></td>
<td>Tons</td>
<td>Daily Avg.</td>
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<tr>
<td>Cedar Springs</td>
<td>366,155</td>
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<td>East Millinocket</td>
<td>197,087</td>
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<td>Millinocket</td>
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<td>4,087</td>
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Secondary Schools Added to Matching Gifts Program. On December 17, 1969, the Executive Committee of Great Northern's Board of Directors has amended the Company's Gifts Program so that all donations made to secondary schools will now be matched by Great Northern.

The program was established in 1966, and any employee with at least three months service with the Company is eligible. It is not necessary to be a graduate of the school to which the donation is made.

Any college, university, or secondary school in the United States or its possessions which grants a two or four-year graduate or undergraduate degree—whether privately or tax supported—and is accredited by a national, regional or professional accrediting organization is eligible.

Personal donations in cash which qualify for exemption under the Federal Income Tax Laws also qualify under Great Northern's Matching Gifts Program.

The minimum amount that will be matched by the Company is $20; the maximum contribution is $250 per institution, per employee, per year.

Applications for the Matching Gifts Program can be obtained from the Personnel Department.

* * *

Linerboard in the 70's. "Taking the large view, I think we are justified in regarding the world linerboard situation as being in a healthy state, reasonably well balanced for both producers and consumers, and likely to remain so," noted Edwin A. Locke, Jr., President of the American Paper Institute.

Mr. Locke's comments were made before the International Corrugated Case Association at the 11th Congress of the European Federation of Corrugated Board Manufacturers (FEFCO) on May 29 in the Canary Islands.

Discussing the world linerboard situation, Mr. Locke stated that in the five-year period 1970-74, U. S. economists forecast a rise in demand of about one-third. "This could be on the conservative side; it is certainly a good deal less than the 50% increase in demand for the preceding five-year period," he added.

Attending the week-long meeting from CN were Robert A. Haak, President; Joseph V. Carena, General Sales Manager; Frederick V. Ernst, Manager-Export Sales; and John A. Pintard, European Representative.

On May 27, the Company held its initial cocktail party and reception for the European boxmakers in the beautiful tropical gardens of the Hotel Mencey.

The reception was hosted by Mr. Haak and members of the Company's Export Department.

According to Mr. Carena, it was a huge success. "The Company received many laudatory comments from the more than 75 guests who attended," he said.

"We were assured of continued, long-term relationships between Great Northern and the European boxmakers," Mr. Carena added.
Sales Training Class. J. Paul DeMarrais, Regional Manager-Commercial Sales, reported that seven men had successfully completed the Sales Training Program offered to the Sales and Sales Service Representatives in the New York Office.

Under the direction of William L. Shaughnessy, Sales Representative, the six, two-hour sessions were held at the Columbia University Club.

The program consisted of 15 chapters, and topics ranged from Planning, Prospecting and Introductions to Handling Objectives, Closing and Follow-up.

Each class was broken up into a lecture period and a question and answer session. "A good deal of the time was devoted to case studies and practice approaches," Mr. DeMarrais said.

In designing and writing the Sales Training Program, Mr. DeMarrais noted that he had incorporated concepts developed and taught by IBM, Xerox and the American Management Association.

* * *

Law Students to Study Maine Pulp and Paper Industry. At a press conference in Portland on June 8, Ralph Nader announced that--working under the auspices of the Center for Study of Responsive Law in Washington, D.C.--a group of nine law students will study the pulp and paper industry in Maine this summer.

The students are from the University of Maine School of Law, Harvard and Columbia Law Schools, and Wellesley College.

William S. Brodrick (UofM) will direct the program, and Professor Orlando E. DeLogu (also UofM) will serve in an advisory capacity.

Focusing on the industry's impact on Maine's environment, taxation and relevant laws and their administration, the students will research and analyze the effect of the pulp and paper industry on the people of Maine.

To determine "what is the public interest and how is it being affected and protected?", the students will conduct interviews, engage in on-site observations, and study published and unpublished documents and material.

According to Mr. Nader, this study will be completed before the end of the year and "should be helpful to industry, communities and citizens in finding new and better approaches for dealing with environmental and other corporate-related problems."

Great Northern intends to cooperate with the study program. "Our MgO plant, Mr. Paine's statement as to the Company's intentions regarding pollution and our ceasing of river drives should have a favorable effect," said John T. Maines, Vice President-Woodlands.

John T. Gould, Jr., Executive Secretary, Paper Industry Information Office, has indicated that other paper companies in Maine also plan to cooperate.

* * *

The Golden Era on the Penobscot. In conjunction with the 150th anniversary celebration of the State of Maine, the Penobscot Heritage Museum of Living History (Bangor) has opened its second stationary exhibit for public view.

Entitled "The Golden Era of Logging on the Penobscot," the exhibit traces the history of logging in the Penobscot area from 1800 to the early 1900's.

An introductory panel explains the reasons for the great quest for lumber at that time.

The second section of the exhibit deals with the Yankee Logger and his environment. Actual photographs of lumber camps are used, and such well-known woodsmen as John Ross and Jigger Johnson are featured.

Section three depicts the river drive which started in the Spring with the breaking up of the ice. Included is a display of the tools used on a drive--such as the cant dog and peavey (levers with a sharp spike at the end).

The logging exhibit will be open for two years in the Bangor City Hall gallery. During July and August, there will be guided tours for the public weekdays at 10 a.m. and 2 p.m.
NORTHERN DIVISION

Annual Retiree Banquet. Northern Division top management and their wives recently hosted GN's annual retiree banquet. Held at the Millinocket Junior High School on May 28, 372 retired employees attended the dinner.

As part of the evening's program, Harvey C. Moody, Research Engineer, used the MgO model to give a detailed explanation of the new chemical recovery process.

***

Logging Camps Modernized. As part of the Company's plan to update all its logging and cutting camps, nine new units have been moved into the Aroostook Area.

Custom built by Treco Company (St. Romuald, Quebec), the wood-panelled units have up to 10 two-man sleeping rooms with corresponding closet, storage and lavatory facilities.

The nine new housing units mark the third installation of these portable camps. Future plans call for adding similar units annually until all Company logging operations have been so equipped.

***

Penobscot Dam. Repairs of damage caused by Spring floods are proceeding on schedule and should be completed by July 1.

At the same time, a new gate has been constructed at the Greenville Shop and will be installed to complete the overhaul and repair of the dam.

***

Portage Chip Mill Completes Second Year. At the end of its second year of operation, the Portage Chip Mill had processed a total of 68,000 cords of pulpwod. At present, the mill's four-foot slasher and chipping facilities are producing 2,000 cords of wood a week.

***

Apprentice Program. Fifteen Papermakers and Mechanical Trades apprentices were the guests of Great Northern at a cook-out at the Rice Farm on June 20.

Recognizing the accomplishments of the apprentices, certificates and awards were presented. Local union representatives and GN management also attended.

All candidates for the Apprentice Program are initially screened through a battery of tests and must be physically qualified for the job. Age and Company seniority also play an important part in their selection.

Established in 1962, Great Northern's Papermakers Apprentice Program is reputed to be the first of its kind in the world. Since its inception, 40 members have been graduated.

The Mechanical Trades Apprentice Program was founded in 1952, and today its graduates serve as Supervisors, Millwrights, Electricians, Pipers, Machinists, and Instrumentation and Heavy Equipment Mechanics.

***

GN Camp Lot Leases. Many of the areas where Great Northern has camp lots will now come under the new Maine Wildlife Zoning law.

Although the State has not yet issued all the new regulations, Great Northern has notified all cottage site lessees of a new policy for Company-owned land.

According to G. Robert Godin, Supervisor of Leases-Woodlands, "We will require that new buildings and additions to present structures be constructed only after plans have been approved by this office" (Woodlands Department-Bangor).

"A plot plan must be submitted showing dimensions of proposed construction; relationship and distance to water, road, lot lines, etc.; type and color of siding (continued on next page)
location of driveway; and plans for water supply and waste disposal," he said.

Until now, lots leased from the Company were 100'x100'. In compliance with new State regulations of at least 20,000 square feet, all future lots leased from GN will be 150'x150'.

"The time has come," Mr. Godin concluded, "when we must all dedicate ourselves to conserving our heritage, and this new policy is a necessary step which will benefit present lessees as well as present and future generations of Maine citizens and visitors."

* * *

Formex Fabric Installed On No. 5. On June 11, after several fourdrinier modifications, a formex fabric was installed on No. 5 Paper Machine at Millinocket.

Included in the modifications were:
- a deeper set on the spreader roll; installation of a shower on the guide roll; and
- the use of water deckles instead of deckle boards.

Since these changes were made, No. 5 has been running a 24# sheet.

* * *

Coater Plant Shut Down. Due to weakened market conditions resulting from a decrease in magazine advertising, as well as quality problems in GN's 40# web offset paper, agreement was reached between Sales and Manufacturing to shut down the Coater Plant for a scheduled two-week period beginning June 14.

During the shut-down, various crews from the Coater were re-assigned work or allowed to take vacation time.

R&D's Product Development Group has redesigned our 40# coated offset sheet, and a number of process changes has improved the overall quality.

According to Charles P. Mosher, Product Development Group Leader, "Wet-rub resistance, pick resistance and fiber puffing have been substantially improved, and the new 40# sheet will be competitive in all respects."

* * *

Alum Eliminated on Nos. 5 and 6. The installation of Dominion hydra-foils has improved the drainage rate on No. 5 and 6 Paper Machines at East Millinocket.

This factor, combined with a higher fiber retention level, permitted the elimination of alum on May 23.

In addition, the Borol Bleaching System was shut down. Newer wood and the elimination of alum increased Newsprint brightness to the point where bleaching became unnecessary.

On June 4, talc was also removed as a pitch inhibitor.

* * *

Safety Meetings and Housekeeping Inspections. During the month of June, special safety meetings were conducted at both mills. The film, "It's in the Card," (produced by Abitibi Paper Company, Ltd.) was shown, followed by a discussion on the tag-out procedure within the mills.

Housekeeping inspections were also held at both mills. Deficiencies on previously inspected areas were reviewed, and the number of corrected areas recorded.

SOUTHERN DIVISION

Funds Allocated for Apalachicola-Chattahoochee Waterway. $1,100,000 has been approved by the House Appropriations Committee's Subcommittee for Public Works for the development and maintenance of a nine-foot channel on the Apalachicola-Chattahoochee Waterway.

To be built by the U. S. Army Corps of Engineers (Mobile, Ala.), the channel will extend from the Gulf of Mexico to Jim Woodruff Dam (Chattahoochee, Fla.) to (continued on next page)
Columbus (Ga.), and will result in making the 275-mile waterway navigable year-round. 

Until now, the Corps of Engineers had not been able to stabilize the channel and had failed to assign a full-time dredge to the lower river. 

Had the $1.1 million appropriation not been granted, the threat of losing present and potential industry along the waterway was fast becoming a reality. 

Great Northern's Southern Division at Cedar Springs is but one of the major industries in the area that has been seriously affected by the lack of a dependable channel. 

The Company has also been a leader in bringing about the allocation of the necessary funds. 

Jerry D. Perkins, Director of Transportation, and E. Reid Smith, Traffic Manager-Southern Division, told a Congressional delegation on June 9 that last September the Cedar Springs mill had converted from coal to oil as a primary fuel. "Consistently low water conditions have greatly hindered barge shipments from the oil terminal at Port St. Joe (Fla.) to the mill," Mr. Smith said.

Due to shallow channels, the River Transit Company has been able to load its barges only two-thirds full. "If the present situation doesn't improve immediately," Mr. Smith added, "the transit company could go out of business, thus forcing Great Northern to shut down its Cedar Springs mill because of a lack of fuel."

The continuation of current conditions could cause a major setback for industry along the banks of the Chattahoochee. "The key to industrial and commercial growth in this area is the development and maintenance of the nine-foot channel," he said.

A spokesman for Allied Chemical Corporation (New York) told the delegation that his firm had cancelled plans to locate a chemical storage depot complex at Columbus, as well as plans for expansion of facilities at Bainbridge (Ga.) because of the navigation conditions they had experienced on the Apalachicola-Chattahoochee Waterway.

Other industrial representatives testified to similar problems.

Also attending the hearing were U. S. Representative George Andrews (Dothan, Ala.) and Lt. Gen. Fred Clark, Chief of the Army Corps of Engineers.

Using as examples the Corps of Engineers' accomplishments in enormous projects such as the Tennessee Valley Authority, Cape Kennedy and the Atomic Energy Programs, Rep. Andrews said "surely you can engineer and maintain a nine-foot channel from the Gulf to Jim Woodruff Dam to Columbus, Georgia."

He then requested the cost of such an undertaking, and later that day was given a figure of $1,100,000.

In a subsequent meeting of the House Appropriations Committee, the budget for the channel was approved. (Rep. Andrews and two other Congressmen who attended the June 9 hearing are members of the Committee.)

"Although appropriations have to go through the whole Committee, Congress and the President," Rep. Andrews said, "99 times out of 100 they make it all right."


Reinforced Plastics Used for Maintenance and Replacement. Filament-wound reinforced plastic (RP) is presently being used to carry paper mill effluent in a number of mills in the Southeast. (The term "Plastic" is a loosely applied, generic word that in the case of RP must be limited to those thermoplastic resins reinforced with fiberglass filaments.)

At Cedar Springs, structural RP was used to erect an inspection platform and ladder above the seal pit box near No. 1 Paper Machine.

Until the corrosives-resistant unit was installed, the control valves could be reached only through the use of a portable ladder.

Reinforced plastic is one of the best materials to handle liquid process waste from plants to waste treatment areas.

One of the most significant developments in the pulp and paper industry is the establishment of RP fabricating shops within the mills.

(continued on next page)
According to Waylon A. Lacey, Plant Engineer, Great Northern plans to have such a shop in operation in the near future. "This is a major step for the industry," he said. "One of the things that has delayed it has been the lack of RP standards and design data.

Mr. Lacey also noted that "availability of products such as standard structural shapes and improved product quality were the factors instrumental in Great Northern's decision to set up an RP fabricating shop."

When completed, the shop will handle small repairs and fabrications. Large fabrications—structures, tanks, etc.—will be purchased from established suppliers.

***

Long Log Slashers. Although 85% of all work has been completed on the Hilton slasher, work has begun on the McRaeville long log slasher in order to start up there first.

The reason for the change in the order of start-up is that McRaeville has both a full inventory of wood and all necessary personnel.

Mid-July is the target date for starting up McRaeville; the Hilton slasher is slated to begin operation in September.

***

The New Fiber Reclaim System, which processes waste stock for reuse in the making of paper, has been in operation at Cedar Springs since March of this year.

During this time, the system has been in the testing stage. In order to improve its performance, an additional cleaner has been added.

Equipment to handle rejects from the Fiber Reclaim System is also being investigated and will probably be added at a later date.

When completed, the system will be a further step in Great Northern's efforts to reduce pollution in the Chattahoochee River.

Two-Way Radio Communications Facilities are now being used by Woodlands personnel in Georgia, Florida and Alabama.

Base stations and mobile units were installed earlier this year. To date, 25 base stations are in use at all Area Offices and most of the Company-operated field woodyards.

Additional mobile units have been placed in vehicles operated by Woodlands employees.

This new communications system serves as an effective tool in coordinating pulpwood shipments and forest management activities in the three-state area.

***

A General Sales Meeting was held May 14-15 in Cedar Springs, with 31 Sales and Mill personnel in attendance.

After the two-day meeting, the group spent the weekend in Panama City (Fla.)

***

New Plywood Record. On June 18, a new record of 411,894 square feet (3/8" basis) was set for daily press production at Great Northern Plywood Corporation.

The old record was 386,000 square feet (also 3/8" basis).

***

A 216-Acre Tract of woodlands has been purchased in Marion County (Ga.). To date, site preparation has been completed on 214 acres of the tract.

(Site preparation includes land clearing, chopping and prescribed burning of the area.)

James W. Richardson, Woodlands Manager—Southern Division, has been looking into other woodlands tracts that might be available for purchase by the Company.
INDUSTRY NOTES

IP to Have New Facility. Internation-
al Paper Company recently announced a new
Packaging Center.
Located at IP's corporate research
center in Sterling Forest (N. Y.), the
Packaging Center will implement the com-
mmercialization of new packaging develop-
ments and will be a source of new field in-
formation as a guide for significant new
research investigations.
George A. Rutledge, a former Manager
of New Products, has been named Director
of the Packaging Center.

MANAGEMENT NOTES

"The Credibility Gap in Management."
(Excerpted from MANAGEMENT REVIEW, 11/69.)

No matter how important or relevant
a manager's actions are, if they are not
believable their effectiveness will be
lost.
When employees lose confidence in
their management, their respect and esteem
may never be regained. A manager's actions,
therefore, must reasonably conform to his
stated intentions—"actions speak louder
than words."
A recent study of top management
development by the American Institutes
for Research in the Behavioral Sciences
concluded: "There is a wealth of pious
statements in the literature about what
companies are doing, based on what they
think they are doing. But there is often
a disparity between this and what is
actually being done."

No modern manager who is aware that
people are his most valuable resource will
intentionally destroy the confidence that
his people have in his management. Still,
without realizing it, most managers act
from time to time in ways that erode the
esteem in which their subordinates hold them.
When it comes to keeping employees
informed, many managers pride themselves
on being best able to determine what in-
formation should be given to their people.
Many also slant the news to achieve
immediate objectives. For them, the
short-range gain may be bought at a
significant long-range cost in credibility.
The insensitivity of many managers to
people is perhaps best described in a
cartoon that shows a puzzled manager com-
plaining to a colleague: "What's his name
over there says my employee relations aren't
what they ought to be."
The manager who wants to improve em-
ployee relations and strengthen his
credibility should first determine his own
beliefs about the objectives of his organi-
zation. He should then examine his view
of the dignity of the individual and the
importance of people in fulfilling organi-
zational objectives.
Finally, he should review his beliefs
in managerial principles and his commitment
to them. Having done this, he should ask
what actions support his beliefs; what
evidence is there that he himself gives
more than lip-service to his convictions.
Failure to maintain credibility can
be most destructive. When employees feel
that management says one thing but does
another, they are less inclined to per-
form at top level.
An honest look in the mirror may re-
veal some surprising credibility gaps in
an executive's own management.
Managers, however, must avoid the
temptation to look to their superiors in
search of credibility gaps that need to
be identified. Instead, they must look to
their own performance as measured against
the reasonable expectations of their sub-
ordinates.
To survive in the future, managers
must be effective. To be effective, they
must be credible. Actions must conform to
words.
Tomorrow's employees may expect nothing
less to tomorrow's managers. Indeed, a
good many of today's employees already
have such expectations.
"PERSONALITIES"

NEW EMPLOYEES

LEWIS S. BERGEN, JR. has joined the Administrative Services Department in Millinocket as a Systems Programmer. He will report to Richard E. Colburn, Systems Supervisor. Prior to joining Great Northern, Mr. Bergen was with the Connecticut Bank and Trust Company.

***

CHRISTOPHER N. BURGESS has joined the Sales Department in New York as a Sales Trainee. A graduate of Brown University, he will report to Joseph V. Carena, General Sales Manager.

***

JAMES E. CARRIER has joined GN's Administrative Services Department at Millinocket as a Software Development Analyst. He is a graduate of the State University of New York, and will report to James R. Powers, Director of Computer Information Services. Mr. Carrier was formerly a Project Leader at the University's Office of Computer Services.

***

A. BRADFORD SWAIN has joined the Administrative Services Department at Millinocket as a Systems Programmer. A graduate of Clarkson College of Technology (Potsdam, N. Y.), he will report to Richard E. Colburn, Systems Supervisor. Prior to coming to GN, Mr. Swain was with Uniroyal.

***

CHARLES W. WITZ has joined the Administrative Services Department as Systems Supervisor, Southern Division. He will report to James R. Powers, Director of Computer Information Services. Mr. Witz is a graduate of Wisconsin Institute of Technology and was formerly with Wheeling-Pittsburgh Steel Corporation.

PROMOTIONS

J. DERRELL CLARK has been named Purchasing Agent at Great Northern Plywood Corporation, reporting to Robert Epperson, Manager, Purchases and Stores. Mr. Clark joined GN in 1963 and has held the positions of Expediting Clerk, Buyer, Superintendent-Stores, and Acting Purchasing Agent-Plywood.

***

J. RUDY CLENNEY has been promoted to Assistant Buyer, Purchasing Department-Southern Division, reporting to Howard Pugh, Purchasing Agent. Mr. Clenney has been with Great Northern since 1966.

***

CHARLES E. HEATH has been named Buyer, Purchasing Department-Southern Division, reporting to Howard Pugh, Purchasing Agent. Mr. Heath joined the Company in 1966.

***

WALLACE O. LANE has been promoted to the newly created position of Administrator Treasury Services-Southern Division. He will report to Ross A. Miller, Assistant Treasurer, and will be responsible for credit, collection and insurance for the Southern Division. Mr. Lane has been with the Company since 1963, most recently as cashier.

***

ROBERT L. LIIMATAINEN has been named Senior Engineer, Central Engineering, at Millinocket. He will report to Fletcher W. Lindsay, Senior Design Engineer. Mr. Liimatainen joined GN in 1961 and has served as Junior Engineer and Engineer.

***

ROBERT A. MACKIN has been appointed Purchasing Agent, Purchases and Stores (continued on next page)
Department at Millinocket, reporting to F. Dan Woodard, Manager-Purchases. Mr. Mackin joined the Company in 1948 and has held the positions of Supervisor-Stores and Buyer.

** **

DAVID C. SMART has been promoted to Process Engineer, Central Engineering, at Millinocket, and will report to O. John Lombard, Division Engineer. A graduate of the University of Maine, he joined GN in 1965 and has served as Junior Engineer and Engineer.

** **

TODD STIFFEL has been named Systems Analyst, Administrative Services Department, at Millinocket. He will report to Richard E. Colburn, Systems Supervisor. A graduate of Ursinus College (Collegeville, Pa.), Mr. Stiffel joined the Company in 1969 as a Systems Programmer.

** **

RONALD E. WHITEHEAD has been promoted from hourly classification at the Millinocket mill to Systems Programmer, Administrative Services Department. He will report to Richard E. Colburn, Systems Supervisor. Mr. Whitehead has completed three years at the University of Maine.

TRANSFER

GEORGE W. BEARS has transferred from East Millinocket to Millinocket as an Area Foreman, reporting to Oswald B. Pound, Assistant Maintenance Superintendent. Mr. Bears joined GN in 1933 and has held the positions of Service Superintendent, Assistant Service Superintendent and Assistant Construction Superintendent.

TERMINATIONS

RICHARD A. DANIE has resigned from his position as Foreman-Supercalender at Millinocket. He joined the Company in September 1964.

KENNETH A. GREENE, Tax Manager, Finance Department in the New York Office has resigned and now is working for CIT Financial Corporation. Mr. Greene has been with GN since December 1969.

** **

BERTRAND A. LEVESQUE has resigned from his position as Internal Auditor in the Controller's Department at Millinocket. He joined the Company in June 1968.

** **

JOHN B. WALLS has resigned from his position as Area Foreman at Millinocket. Mr. Walls has been with GN since November 1968.

ANNIVERSARIES

ALLISTER M. EMBLETON, Maintenance Superintendent-Millinocket, 35 years on June 22.

** **

STANLEY V. MARAGUS, Tour Foreman-Millinocket, 25 years on June 28.

** **

MARIE A. BERTRAND, Administrative Assistant, Controller's Department, 15 years on July 18.

** **

WILLIAM L. DEWITT, Tour Foreman-East Millinocket, 15 years on July 11.

** **

WILMER A. SAUCIER, Contract Foreman-Woodlands (Sheridan), 15 years on June 15.
GREAT NORTHERN CHIP PLANT CLOSING AND TREE-LENGTH PULPWOOD CUTTING SUSPENDED

As released to the press on Monday, May 18:

Tree-length pulpwood cutting operations of Great Northern Paper Company in the Millinocket and Ashland areas are being shut down and a chip plant at Portage in Aroostook County will be closed.

Robert J. Shinners, Vice President-Northern Division of the firm, said operations will be converted to the former four-foot cutting method. He said some jobs will be lost.

In a complaint against U. S. Secretary of Labor George P. Schultz and U. S. Attorney General John N. Mitchell, Great Northern protested that the price set by the government for tree-length pulpwood cutters is based on an erroneous method of arriving at the so-called "prevailing rate."

The U. S. District Court at Portland recently denied a request by Great Northern for a temporary restraining order against the government ruling raising the prevailing rate per cord from $4.60 to $4.85.

Mr. Shinners stressed that the rate itself is not the principal issue but that the company questions the methods used in determining the tree-length pulpwood rate and cannot accept the continuing effect these methods would have on costs.

"We've had a 60-cent per cord increase in the last 13 months," he said, "and we find ourselves involved in an unmanageable dispute with governmental authorities which has forced us to ask the court to intervene."

The company will move at once to start taking testimony from Department of Labor and Maine Employment Security Commission representatives.

It hopes that a trial before the U. S. District Court will be held no later than the early fall.

"The surveys that have been done in this field are not sound and reasonable, largely because of the newness of this type of pulpwood cutting and the fact that so few companies are doing it," he said, "leaving us no course but to seek relief in court."

Mr. Shinners said Great Northern operates eight pulpwood cutting camps and that five of these have been using the tree-length cutting method.

He said the Company had been hoping to convert the other three camps to tree-length cutting by the start of the 1973 season. At that time, the capital investment for the total conversion—including the proposed Millinocket-Pittston Road—would have been more than $2.5 million.

Going back to four-foot pulpwood will mean closing the chip mill at Portage, but most of the men working there will be (continued on next page)
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offered other employment.

Some jobs will also be lost by loggers presently working in the tree-length cutting operations in the Millinocket and Ashland areas.

Mr. Shinners said a by-product of conversion to tree-length cutting is the opportunity for increased employment of United States workers to operate the chip mill and the special slashing equipment at the Millinocket and East Millinocket mills and to construct and maintain the up-graded road systems.

The company is seeking a federal wage ruling of $4.60 as the prevailing rate for tree-length cutting. Mr. Shinners said Great Northern cannot continue the tree-length cutting operation if it is forced to pay the $4.85 rate during the time the ruling is under review because this would render the review meaningless.

*

New Dateline for Newsletter. The monthly meetings of the Board of Directors and Executive Committee of Great Northern Nekoosa Corporation have been tentatively scheduled for the Wednesday preceding the first Thursday of each month.

In order to coincide with these monthly meetings, which will be held in New York City, all future issues of the Newsletter will be distributed on the Monday following each meeting.

Great Northern Board Sales Company has re-elected the following officers: Robert A. Haak, President; Robert C. Macauley, Executive Vice President; and Allan E. Miller, Vice President.

Joseph F. O’Handley was elected Secretary.

Great Northern Board Sales Company is an unincorporated division of Great Northern Paper Company, responsible for the domestic sale of linerboard and semi-chemical corrugating medium which is produced at our Cedar Springs (Georgia) mill.

***

The April issue of the Newsletter carried an item on the first quarter earnings for Great Northern Nekoosa Corporation.

Attached for your information is a copy of the first quarter "Report to Stockholders," dated March 31, 1970.

***

GN Makes FORTUNE "500". The top 500 U. S. industrial corporations listed in the May issue of FORTUNE Magazine include both Great Northern (461) and Nekoosa Edwards (490).

Had GNN been in existence during 1969, it would have ranked 281, based on sales of $340,716,000.
Robert C. Macauley, Vice President-Board Sales, was inadvertently omitted from the listing of new officers of the Great Northern Paper Company Division of Great Northern Nekoosa Corporation in last month's Newsletter. Mr. Macauley continues as Executive Vice President of the Board Sales Division of Great Northern Paper Company.

***

Peter S. Paine and Samuel A. Casey were interviewed by BUSINESS WEEK earlier this year.
A reprint of the article, which appeared in the magazine's May 16 issue, is attached.

***

Newspaper Readers. According to the Bureau of Advertising, ANPA, 78% of the country's adults read at least one newspaper on the average weekday.
One out of every three adults reads two or more newspapers a day.
The Bureau's study was based on a representative sampling of 15,000 people over 18 years of age.

***

The Chatty American. Americans are the "most talk-happy people in the world," according to an article in the April issue of DUN'S.
Not only do we own 45.9% (109.2 million) of the telephones in the world, but in 1968 (the last year for which figures are available) Americans averaged 701 conversations per capita.

***

Pulp and Paper Industry Statistics Course. Plans have been announced for the 19th annual TAPPI-CPPA Statistics Course, to be held June 15-26 at the University of Maine (Orono).
Designed to provide technical people with a practical working knowledge of statistical methods, the course will be oriented to pulp and paper men now employed as research chemists, technical directors, quality supervisors, production managers and operations research directors.
There will be two concurrent courses: a "basic" section for those with little or no statistical training, and an "advanced" group for those who have already taken the basic course or who have some statistical background.
Complete information and applications for enrollment can be obtained from Mr. W. L. Cullison, TAPPI, 360 Lexington Avenue, New York, New York 10017.

***

Color Ads on the Rise. According to the Bureau of Advertising, ANPA, 1,043 of the country's 1,758 daily newspapers are now running full color, run-of-press advertising—an increase of 124 papers over the last year.
The Bureau also noted that the 1,043 papers represent a circulation of 48.9 million, or 76% of the country's total circulation of daily newspapers.

***

Population Gain in the Penobscot. At the end of May, the Penobscot River had been stocked with 30,000 Atlantic Salmon smelt.
The first stocking of 1,000 young fish was released into the river during the first week of May.

NORTHERN DIVISION

Ground Broken for No. 11 Paper Machine. On April 27, following approval by the Environmental Improvement Commission, (continued on next page)
Robert A. Haak, President, officiated at the groundbreaking ceremonies for No. 11 Paper Machine.

When completed in mid-1972, the $45 million expansion program will increase the capacity of GN's Millinocket mill by 40%, or 135,000 tons of paper annually.

The No. 11 Paper Machine building will be approximately 80 feet high, 100 feet wide and 700 feet long. It will be a separate building, except for the east wing, which will be attached to the west section of the Coater Building.

Constructed of precast concrete panels, it will house a new Black Clawson Verti-Forma and two 60-ton cranes.

To date, more than 20,000 cubic yards of earth have been excavated, and pumps are on order (in the event of unfavorable water conditions) to enable erection of form work and installation of rebar for substructure foundations.

The Black Clawson Verti-Forma, with a wire width in excess of 310 inches and a trim of 292 inches at the winder, will operate at a speed of over 2,500 fpm.

Great Northern's Millinocket installation will be the largest of its type in the world, and one of the first four Verti-Forma units in operation in the United States.

***

Penobscot West Branch Storage is now at 57.3 billion cubic feet. This is 100% of full storage and 12 billion cubic feet above rule curve.

Recent high temperatures and above-normal precipitation have caused such a high inflow into the storage system that it has been necessary to open waste gates to prevent over-filling.

***

Wood Drive Underway. The annual wood drive to the Millinocket mill has started at Big Bog.

Unusually high water conditions are expected to result in a lot of wood being left "high and dry" this summer.

***

Soda-Ash Tank Conversion to MgO. A project to study the conversion of the soda-ash tank at East Millinocket to an emergency storage facility for magnesium hydroxide was recently begun.

The system would unload MgO (magnesium oxide) and keep in suspension 500 tons of Mg(OH)₂ (magnesium hydroxide).

***

A High Pressure Needle Cleaning Shower has been installed on No. 5 Paper Machine pickup run.

It is expected that this shower will assist in keeping the felt clean, thus giving it longer life than in the past.

***

No. 1 Boiler at East Millinocket was shut down on May 9 for annual inspection and overhaul. As a result, Nos. 5 and 6 Paper Machines have been slowed down until the completion of the overhaul.

Present plans call for overhauling No. 2 Boiler shortly.

***

Pulpwood Pickets. The Maine Pulpwood Producers Association recently caused some statewide disturbance when they picketed the International Paper operation at Jay and the Oxford Paper Company mill at Rumford.

A few pickets arrived at the East Millinocket mill, but left within an hour.

The MPPA is picketing in support of their request for higher prices for pulpwood.
Heavy Rains and Melting Snow Cause Damage. The combination of heavy rainfall and upriver melting snow has resulted in increased Penobscot River flow.

A wing on Penobscot Lake Dam was washed out, and a temporary bridge on the West Branch (below Rigogenus Dam) was damaged and partially lost.

***

Evaporator Tenor System. The tenor system for the MgO evaporators has been reprogrammed to match the procedure now utilized by the Recovery Boiler Fireman.

Used to standardize the method of washing the evaporator effects, the tenor system now makes the valve sequencing process easier—i.e., the operator pushes only one button instead of several as the effects are removed.

To date, the new program has been successful for spare and first effects. Second and third effects are scheduled for future testing.

***

Coated Offset Papers. Although significant improvements were made in these grades during February, coating preparation problems—which lessened resistance to piling and picking—arose in March.

Tests, however, indicate that March paper—though slightly inferior to February paper—was decidedly better than any paper made during 1969.

***

The Bangor and Aroostook Railroad has received 82 of their 100-car order for new 50-foot Plate "C" cushion underframe cars.

Richard Sprague and Howard Cousins, Jr. of BAR visited the East Millinocket mill recently to observe the unloading of one of the new cars into our trainshed.

Non-Returnable Cores. A shipment of Novel Paper wound on the new non-returnable 100% Appleton paper core was made to R. R. Donnelley & Sons (Mattoon, Illinois) last month.

According to George L. Nystrom, Midwest Regional Manager-Commercial Sales, "no mechanical difficulties were encountered and press speeds in excess of 1,600 fpm were successfully achieved."

The paper will be used for an editorial insert in the July issue of FAMILY CIRCLE Magazine.

***

Chicago Area Visited. Arthur E. Dentremont, Mill Manager-Millinocket, and James M. Giffune, Control Superintendent, visited various printing plants in the Chicago area during the week of May 10.

Plants visited included Photopress, Poole Brothers, W. F. Hall (Normandy Plant), Mid-America Webpress, Fawcett-Lincolnwood, Pioneer Press and Kable Printing.

During the same week, meetings were held with the Chicago Office personnel to discuss quality and printing problems.

SOUTHERN DIVISION

Wood Suppliers Meetings Held. A series of wood supplier and Company personnel meetings were held in April and May in Dothan (Alabama), Albany (Georgia) and Pine Mountain (Georgia).

Wood dealers discussed the economics of buying, harvesting and transporting forest products.

GN presentations included methods of communications between suppliers and the Company, requirements regulating wood flow and projected wood consumption figures for 1970.

***

Richardson, Manager of Woodlands, recently reported that during the 1969-70 season 3,679,587 trees were planted on 5,245 acres in the South.

The purchase and operation of two tree planting units during the 1969-70 season made it possible to cover more acreage—especially where contract planters did not have adequate equipment for rough terrain.

** * **

Woodlands Meeting. On April 22, a meeting of Woodlands Department personnel was held in Dothan (Alabama).

Area Superintendents, Unit Foresters and Associate Foresters from field locations in Georgia, Florida and Alabama participated in the program which included discussion of job responsibilities, training programs and methods of improving operations efficiency.

Also in attendance were: Bruce P. Ellen, Vice President-Southern Division; James W. Richardson, Manager of Woodlands; William E. Lloyd, Industrial Relations Manager; and E. Reid Smith, Traffic Manager.

** * **

Hilton (Georgia) Slasher. Work on the stationary slasher at Hilton is progressing at an accelerated rate after several weeks of rain which hindered grading and concrete work.

To date, construction is about 50% complete on this new long log slasher installation.

Scheduled for start-up later this month, the slasher will cut tree-length wood into pine veneer logs and pulpwood billets.

The veneer logs will be delivered to Great Northern Plywood Company, while other material will be used for pulping.

High-Density Storage Tower. Engineering has been completed and foundatiwork begun on the installation of an additional high-density base stock storage tower at Cedar Springs.

When completed, this tower will provide increased base stock storage for Nos. 1 and 2 Paper Machines.

** * **

Favorable Plywood Log Price. A favorable price for plywood logs has been negotiated with Georgia Kraft at Waverly Hall (Georgia).

These logs are being recovered from tree-length stumpage that would normally go through Georgia Kraft's utilizer and be made into chips.

This project will be evaluated in mid-June by Great Northern and Georgia Kraft in order to determine if either or both companies have enough interest to continue.

** * **

Linerboard Shipments to Be Studied. The Southern Division Transportation Department has begun a study to determine whether or not it is feasible and economical to ship Export linerboard tonnage—loaded on the deck of the River Transit fuel oil barges—from Cedar Springs to Port St. Joe (Florida).

Inside and outside storage for approximately 5,000 tons of linerboard, as well as unloading expertise, is available and adequate at Port St. Joe.

It has already been determined that 1,500 tons of linerboard can be loaded on the deck of the two barges.

All that remains is devising and approving a method of loading the barges at Cedar Springs.
NEKOOSA EDWARDS

Experimental Coater at NE Research Lab. Multiple research capabilities have been built into a new pilot coater at NE's Port Edwards (Wisconsin) mill.

The multi-station machine will coat a 24-inch web at 1,400 fpm and is equipped for air knife, blade, size press, gate roll, meyer bar and reverse-roll coating.

Built by the Wheeler Roll Division of Beloit Corporation, the coater has a 32-foot drying tunnel which uses forced hot air and five steam-heated dryer cans.

Alternate web paths are provided for multi-layer or alternate-side coating of like or unlike materials, and rearrangement of the standard coating heads will allow coating by other processes such as roll coating, dip coating and gravure.

Except for roll width, the pilot coater creates conditions that duplicate those on production machines—i.e., nip pressure, coating roll speeds and shear speeds. This will simplify the transfer of work from the experimental stage to volume output.

The coater will also help the Port Edwards mill to customize paper surfaces for individual business-communications needs by producing special-function sheets through new combinations of raw materials and coating systems.

Experimental product development cycles will be shortened, and the on-premises coater should help restructure and/or improve standard Nekoosa grades.

***

Process Water Clarifier to Be Installed. A half-million dollar process water clarifier is planned for Nekoosa's Potsdam (New York) mill. The clarifier will remove suspended solids from the paper mill's effluent.

Plans for the installation have been approved by the New York Department of Health and engineering work in completed.

Construction contracts will be awarded shortly, and completion of the project is planned for early 1971.

The clarifier, to be used in connection with a filter-thickener unit, will remove 93% of the solid effluent and 60-70% of the BOD (biochemical oxygen demand) content.

The removed solids will be trucked to a company-owned land fill site and buried.

The concrete and steel clarifier is a 60-foot diameter tank which will accept 1.25 million gallons of paper mill waste a day.

***

Ashdown Pulp Mill Expansion. Nekoosa Edwards recently announced that the pulp producing capacity of its Ashdown, Arkansas, mill will be expanded by 100 tons per day.

Preliminary work is already underway and construction crews are expected to move onto the site—which is adjacent to the present pulp mill—by mid-May. Completion of the expansion project is slated for January 1971.

The Ashdown pulp and paper mill, completed in mid-1968, has a 400-ton-per-day bleached kraft mill and one Beloit four-drinier machine with a 224-inch trim producing 200 tons of paper a day.

Expansion of the pulp mill is necessary to increase Nekoosa's pulp sales potential and to provide additional production for pulp shipments to the company's northern mills in Wisconsin and New York.

The total project includes brown stock washing modifications, a high density unbleached pulp storage tower, recausticizing equipment, a lime kiln oil burner and allied equipment, duplicate chlorine dioxide manufacturing facilities with hypo tank, and well water supply to the chill vactor.

Additional high density storage will be provided for bleached pulp, and evaporator modifications are also being installed—as well as provisions to supply additional steam and electrical requirements.

Work on the expansion program is being done by Brown & Root, Inc., Houston, who designed and built the complete pulp and paper complex.
ROBERT A. HAAK, President, has been named to a three-year term on the Board of Directors of the University of Maine Pulp and Paper Foundation.

* * *

PAUL D. HUBBE, Paper Research Supervisor, Millinocket, recently reported on computer advisory committees at the University of Maine Pulp and Paper Foundation's 20th annual meeting.

* * *

DR. VICTOR F. MATTSON, Director of Research and Development, was a panelist at the University of Maine on April 15. Dr. Mattson was part of the fourth panel discussion—"Pollution and the Pulp and Paper Industry in Maine"—presented as part of the University's Environmental Teach-In.

* * *

MAURICE C. MCLEAN, Instrument Engineer, Millinocket, has been re-elected President of the Down East Maine Section of the Instrument Society of America.

* * *

JOHN E. MCLEOD, JR., Woodlands Personnel Administrator, Millinocket, was a recent speaker at the Woods Safety and Training meeting of the Penobscot County Extension Association. Mr. McLeod discussed "Down Time Because of Mufflers."

* * *

JAMES W. RICHARDSON, Woodlands Manager, Southern Division, has been named to the Board of Directors of the Southern Forest Institute, a division of the American Forest Institute.

Mr. Richardson was also made an honorary member of the Early County High School Chapter of the Future Farmers of America.

ROBERT J. SHINNERS, Vice President—Northern Division, has been elected to the Board of Trustees of the Eastern Trust at Banking Company, Bangor.

"PERSONALITIES"

NEW EMPLOYEES

CLYDE H. CROMMETT has joined the Controller's Department at Millinocket as an Internal Auditor. He will report to Gearry L. Ranger, Manager of Internal Auditing. Mr. Crommett is a graduate of Husson College where he received a Bachelor of Science degree in Finance & Management.

* * *

JOHN W. MANNING has joined the Southern Division as a Unit Forester, reporting to Wendon W. Warr, Area Superintendent. Mr. Manning earned a B. S. degree in Forestry from the University of Georgia.

TRANSFER

JOSEPH A. BERTRAND has transferred to the Internal Auditing Department at Millinocket as an Internal Auditor, reporting to Gearry L. Ranger, Manager of Internal Auditing. After attending Bryant & Stratton Business School (Boston), Mr. Bertrand joined GN in 1948 as a Woods Clerk. Most recently, he has been Data Processing Supervisor, Administrative Services Department.

PROMOTIONS

RAYMOND C. BLAISDELL has been promoted to Senior Area Engineer at East Millinocket, reporting to Richard W. Noyes, Plant Engineer. Mr. Blaisdell joined the Company in 1952.

* * *

RAYMOND E. BOWERS has been promoted from Draftsman to Junior Engineer, Central Engineering, at Millinocket. He will continue to work in the Instrumentation Group, (continued on next page)
Mr. Bowers has been with GN Systems since 1968.

**

ALLAN M. BROWN has been named to the newly created position of Supervisor, Estimating and Cost Control, Central Engineering Department at Millinocket. He will report to Donald G. Griffee, Manager of Engineering. A Mechanical Engineering graduate of Northeastern University. Mr. Brown has been with GN since 1964.

**

STEPHEN D. BURR has been appointed Systems Programmer, Administrative Services Department, at Millinocket, reporting to Richard E. Colburn, Systems Supervisor. Mr. Brown joined GN’s Data Processing Department in 1957 as a Computer Programmer. Two years later, he was named Maintenance Programmer.

**

C. GLENN EARNEST has been promoted to Assistant Area Superintendent, Woodlands Department, at Cedar Springs. He will report to George S. Stough, Jr., Area Superintendent. Prior to joining Great Northern in 1965, Mr. Earnest was a Forest Technician with International Paper Company, Jasper, Florida.

**

GALYN A. LANDER has been named Senior Engineer at the Millinocket mill, reporting to Waldo C. Preble, Plant Engineer. Mr. Lander joined GN in 1964. His most recent position has been Process Engineer.

**

O. JOHN LOMBARD has been promoted from Plant Engineer at the East Millinocket mill to Division Engineer in the Central Engineering Department. In this position, he will be in charge of Mechanical, Electrical and Process Engineering design for capital and major repair projects in the Northern Division. Mr. Lombard will report to Donald G. Griffee, Manager of Engineering.

**

RICHARD W. NOYES has been named Plant Engineer at the East Millinocket mill, reporting to Carl H. Reed, Mill Manager. Mr. Noyes has been with the Company since 1960, most recently as Paper Mill Superintendent, East Millinocket.

**

J. REX SNELLGROVE has been promoted to Chief Accountant, Great Northern Plywood Company, reporting to W. K. Hoseid, Vice President & General Manager. A graduate of Troy State University, Mr. Snellgrove joined GN Plywood in 1968.

**

ROBERT STACEL has been promoted from a weekly classification to Production Scheduler, Board Sales, in the New York office. He will report to Richard L. Greene, Board Sales Service Supervisor. Mr. Stacel came to Great Northern in 1968 as an Assistant Scheduler.

**

ELLIS L. STEPHENS, JR. has been named Assistant Logging Superintendent, Woodlands Department, at Cedar Springs. He will report to Patrick N. Carmichael, Logging Superintendent. Prior to joining GN in 1969, Mr. Stephens was with Union Camp Corporation, Savannah, Georgia.

**

RUSSELL F. TAYLOR has been appointed Superintendent-Maintenance at the East Millinocket mill, reporting to Richard W. Noyes, Plant Engineer. Mr. Taylor has been with the Company since 1960, most recently as Senior Area Engineer.

**

ALLEN J. TOZIER has been named Manager of Accounting-Northern Division, reporting to Robert F. Bartlett, Assistant Controller. A graduate of the University of Maine, Mr. Tozier joined Great Northern in 1965 as an Internal Auditor. Since then, he has held the positions of Accountant and Supervisor, General Accounting-Southern Division, and
most recently, Chief Accountant and Assistant Secretary, Great Northern Plywood Company.

** **

ROBERT E. WIGNINS has been promoted to Supervisor, Cost Accounting, in the Controller's Department at Millinocket. He will report to Allen J. Tozier, Manager of Accounting. After graduating from Ricker College, Mr. Wiggins came to GN in 1968 as an Internal Auditor.

** **

GERALD L. WILSON has been named Supervisor, Pulpwood Accounting, Controller's Department, Millinocket, reporting to Allen J. Tozier, Manager of Accounting. A graduate of Ricker College, Mr. Wilson joined the Company in 1969 as an Internal Auditor.

** **

F. DAN WOODARD has been appointed Manager-Purchases at Millinocket, reporting to John F. Marquis, Director, Purchases and Stores. Mr. Woodard is an alumnus of St. Stephen Business College (New Brunswick). Prior to joining GN in 1969 as Purchasing Agent, he was with Georgia-Pacific Corporation, Woodland, Maine.

** **

RICHARD D. VIOLETTE has been promoted from Senior Engineer at Millinocket to Paper Mill Superintendent at the East Millinocket mill, reporting to James W. Griffin, General Production Superintendent.

TERMINATIONS

JOHN P. BISHOP, Salesman-Newsprint in the New York Office, will leave GN effective June 1. A graduate of Miami University (Ohio), he joined the Company's Research & Development Department in Millinocket in 1964. Two years later, Mr. Bishop transferred to the Sales Department. He came from the Chicago Office to New York in July 1969. Mr. Bishop will be General Manager of the SOMERSET REPORTER in Skowhegan (Maine).

** **

MICHAEL C. BUSCH has resigned from his position as Unit Forester, Woodlands Department, at Cedar Springs. He joined the Company in July 1969.

** **

GARY H. HARMON has resigned from his position as Mechanical Engineer at Cedar Springs. Mr. Harmon has been with GN since July 1969.

RETIREMENT

WILLIAM N. COOK, Engineer, Central Engineering Department at Millinocket, retired after 16 years with the Company.

NEWS FLASH:

The Regional Commissioner of the U. S. Department of Justice Immigration and Naturalization Service recently overruled the District Director's denial of Great Northern's petition to reconsider the "prevailing rate" of $4.85 per cord for tree-length pulpwood. It has further been order that our "appeal be sustained and this proceeding be certified to the Deputy Associate Commissioner, Travel Control."

Based on this recommendation, it seems that the outcome of our suit against the Federal government will be successful and that out tree-length pulpwood cutting will soon be back in operation.
GREAT NORTHERN NEKOOSA CORPORATION
BECAME OFFICIAL MARCH 31, 1970

Effective at the close of business March 31, Great Northern Paper Company and Neekoosa-Edwards Paper Company were joined together officially. Robert A. Haak, Great Northern President, made the announcement.

The result is Great Northern Neekoosa Corporation, with Great Northern Paper Company a division of the new company and Neekoosa Edwards Paper Company, Inc. a wholly-owned subsidiary.

Directors of the Great Northern Division will be Emery E. Allain, Samuel A. Casey, Bruce P. Ellen, Robert A. Haak, Robert Hellendale, Robert C. Macauley, John T. Maines, Robert J. Shinners and John H. Staples.

Great Northern's present officers will remain the same with three exceptions: Robert Hellendale has been named Vice President-Administration; Joseph F. O'Handley, Secretary; and Frank J. Reidy, Controller.

Great Northern Neekoosa Corporation being together two successful companies with combined assets of $430 million, combined sales of $340 million, annual net income of $20 million, and a cash flow of $48 million a year.

** **

Relocation of Corporate Headquarters contemplated. On March 19, Robert A. Haak, President, announced that "considerable thought has been given to the ad-

visability of relocating Great Northern's New York Office to the suburbs."

While the Company has made no commit-
ments, serious consideration is being
given to an office building in downtown
Stamford, Connecticut.

The timing of the move is indefinite—
"not before the Fall of this year, and pos-
sibly not until the Fall of '71," Mr. Haak
said.

Relocation is a major step. It pre-
sents many problems--both personal and
corporate--and gives rise to many questions.

In order to resolve these problems and
to answer as many questions as possible be-
fore making a final decision, the Company
has retained the services of Metropolitan
Relocation Associates, a New York consulting
firm.

MRA has set up an Information Center
in the New York Office containing information
on the Connecticut area--housing, education,
and cultural and recreational activities.

An MRA representative will be available
each Monday for consultation with employees.

** **

GNN Now Reporting on a Calendar Year
Basis. Great Northern Neekoosa Corporation
recorded net earnings of $5,455,000 for the
first quarter of 1970, ended March 31. This
represents an increase of 38 percent over 1969.

Based on a pooling of interests, this
figure compares with $3,937,000 for the same
period last year and is equivalent to $1.16
per share on a primary basis and $1.11 fully
diluted compared with $.83 and $.80 a year ago.
(continued on next page)
Paper production for month ended March 31...

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<td>Tons</td>
<td>Daily Avg.</td>
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Net sales totaled $90,465,000, a nine percent increase over the $82,887,000 reported for the 1969 period.

Commenting on the first quarter, Peter S. Paine, Chairman and Chief Executive Officer of GNN, said he was pleased with the results and "guardedly optimistic" about the remainder of 1970.

* * *

First Meeting of GNN Board. The Great Northern Nekoosa Corporation Board of Directors held its first meeting on April 15 in New York City.

At that time, a quarterly dividend of $.40 a share was declared for GNN Common Stock. The dividend will be payable June 30 to stockholders of record June 3, 1970.

* * *


N-E sales set a record for the twelfth consecutive year with total volume reaching $164,509,000—an increase of 18 percent over 1968's $139,512,000.

* * *

GN Annual Report Photo Featured. The "rainbow" picture appearing on pages 12-13 of Great Northern's 1969 Annual Report (special groundwood section) was featured on the cover of the February issue of NEWS FRONT magazine. The photograph was used in conjunction with a special cover story entitled, "The End of Consensus," and the Company received full credit.

Since GNN's report was published last year, two other trade magazines—INLAND PRINTER and BOXBOARD CONTAINERS—have requested permission to use color photographs from the special section.

NEWS FRONT is published monthly by Year, Inc. and has a controlled circulation of 150,000.

* * *

New Ad Agency for GNN. Marsteller, Inc., with offices in New York, Chicago, Pittsburgh, Los Angeles and Washington, D.C., as well as several foreign countries, has been awarded the Great Northern Nekoosa corporate advertising account.

Marsteller will also be responsible for Great Northern Paper Company product advertising, replacing Turner & Feeney, Inc.

Prepared to introduce the new corporation, this financially-oriented advertisement appeared nationally in the WALL STREET JOURNAL and THE NEW YORK TIMES.

It is also scheduled for BARRON'S (April 20), EDITOR & PUBLISHER (April 25) and the "500 Issue" of FORBES (May 15).

Burston-Marsteller, public relations affiliate of Marsteller, Inc., has been retained to handle financial communications for GNN.

Advertising and collateral material on behalf of Nekoosa Edwards Paper Company, Inc. will continue to be prepared and placed by The Cramer-Krasselt Company, Milwaukee, Wisconsin.
MgO Commended. Great Northern's new MgO chemical recovery plant received national acclaim following the March 17 dedication.

One letter of particular interest came from the Fourth Grade Science Class at Yarmouth (Mass.) Elementary School:
"Your efforts to make a better environment to live in by eliminating pollution are commendable.
"We hope they will be successful. We would breathe easier if all the plants would do what you have done. Good Luck!"

***

Management Research Program. The application of the findings of behavioral scientists to increase productivity through maximum use of human resources took place at Millinocket the week of April 6.

In attendance were Wallace L. Adams Personnel Supervisor-Millinocket; Russell E. Byron, Staff Assistant; Mary Rose Daniels, Public Relations Assistant (New York); Henry J. Deabay, Personnel Supervisor, Woodlands; Elizabeth Center, Administrative Supervisor (New York); Stanley G. Hawes, Salary & Benefits Supervisor; Joseph J. Martin, III, Administrator-Industrial Relations; Robert E. Montgomery, Personnel Supervisor-East Millinocket; and Russell W. York, Education and Training Director.

The session was conducted by Gordon Harrison, a consultant from Montreal, and included tests, questionnaires and in-depth discussions in order to reach a group consensus.

Future plans call for involving other Company departments in this program.

***

MILLINOCKET

West Branch Storage. According to William F. Elliott, Chief Power Dispatcher, the Penobscot West Branch storage as of April 9 was 38.9 billion cubic feet.

This is 68.2 percent of full storage and 20.3 billion cubic feet above rule curve.

The drainage area snow pack at this time held 5.5 inches of water and is expected to fill all reservoirs. The deciding factor will be rainfall amounts and their distribution during the critical melting period.

***

Grinder Room Improvements. No. 3 and No. 4 Grinders on No. 1 Line were started up on April 8.

No. 1 and 2 Grinders on Line 1 were started up on March 25 with a rewound motor and a repaired water wheel. The Line is running well and the problems of rotor shifting have been eliminated.

***

Roll Crimper. With the installation of polyethylene crimper blades on the right side of the roll crimer, all blades on this machine are now polyethylene.

As a result, blade pressure has been increased and there is a noticeable improvement in the package.

***

No. 9 Gate Roll Coater. An order has been placed with Beloit Corporation for a gate roll coater, high nip calender, air cap, after dryer section, and other related equipment for No. 9 Paper Machine. Delivery of the gate roll coater is expected at the end of this year.

***

Coater Record. With the production of 6,542.8 tons for the sixth period, the coater broke its previous record of 6,396 tons produced during the third period of this year.

EAST MILLINOCKET

Reel Turn Up Devices on Nos. 5 and 6 Paper Machines have substantially reduced the loss of loose paper on the top of each (continued on next page)
reel. In the past, loose paper went to broke and represented a sizeable loss of saleable production.

***

Dominion Units Installed. Four Dominion adjustable foil drainage units have been installed on Nos. 5 and 6 Paper Machines in order to improve drainage and formation and to lower water tray consistency.

Five table rolls and five skimmers have also been removed from these machines.

***

Increased Pitch. With the additional use of long logs, greener car wood and year-round drum barking, the amount of pitch has increased.

However, various trials of pitch dispersants are constantly being evaluated in order to discover means of reducing pitch content.

***

A Ruck-Zuch High Pressure Cleaning Shower and Pump installation has been made on No. 6 Paper Machine pickup felt position. Although results to date have been poorer than expected, it is hoped that the shower effectiveness will improve after the rebuild of the Yule box and saveall installation.

***

150# Wrapper Trial. On April 9, a trial was begun on all rolls finished in the new Finishing Room. The rolls are from Nos. 5 and 6 Paper Machines and use wrapper, heads, and bands of 150# basis weight.

Normally, 210# paper is used for wrapper stock.

The trial is being conducted by Product Development as part of the overall program to improve and standardize roll packaging.

RESEARCH AND DEVELOPMENT

Palette Plus for Roto. One roll of 40# dark yellow Palette Plus R was printed by Nashua Corporation on March 18.

According to Nashua pressroom personnel, the paper ran well and printed competitively with the 34# Roto News usually used for Hi Fi and Spectacolor preprints.

This was the first application of Palette Plus in rotogravure printing, and Nashua was enthusiastic about the possibilities of applying the concept to Hi Fi.

***

Norblade 0 for McGraw-Hill. A 250-ton order of Norblade 0 for use in a BUSINESS WEEK run was recently printed at Williams Press, Albany, New York.

Surface roughening ("fibre puff") has been improved and ink absorption was more competitive.

Williams Press was extremely pleased with the entire order—especially the improved roll-to-roll uniformity.

***

Roll Packaging. Plans for an extended trial using a 33 percent lighter package design for newsprint was presented and approved at a review of the Roll Packaging Program in New York.

All materials to produce the package have been made on the cylinder machine at Millinocket.

WOODLANDS - NORTH

Experimental Planting. Plans are underway to clear 30 acres of hardwood land near Millinocket to begin experimental planting of hybrid poplar and Norway and white spruce.

In conjunction with this program, the Woodlands Department is considering the advisability of creating a new position—"Research Forester"—in the Northern Timberland Management operation.

According to John T. Maines, Vice President-Woodlands, the Research Forester would have the responsibility for this experimental planting program, together with other research programs which are either underway or in the planning stage.
Bonded Labor. All bonded labor is now out of the woods and operations will not begin again until May 1. There are indications that visas may be more plentiful next season due to the slight recession that is slowing down some manufacturing plants.

* * *

Production and Delivery Records. A total of 20,860 cords was delivered to the Millinocket and East Millinocket mills points of acceptance during the week ended March 17. This was the second heaviest week of the 1969-70 season. 21,235 cords were delivered during the week ended January 15. New-cut fibre production for the week ended March 17 amounted to 20,325 cords—a new seasonal record. Approximately 88 percent of our overall total contracted volume has been produced, and 91 percent of this production has been mill delivered or piled down for spring rehandling.

* * *

Tibetans. In February, the last Tibetan dependents arrived from India and joined the others at Portage, Maine. Last month, two of the original six-man crew left for West Coast positions. The remainder of the Tibetan crew is presently working on a commutation basis near Big Brook, T. 14 R. 10. To date, they have increased their production to about .32 cords per man-hour.

* * *

Golden Road Construction continues on schedule with 25 miles of right-of-way having been cut. Ten miles of sub-grade and stripping are nearing completion, and bids have been sent to local contractors for construction of an additional 17 miles. This will bring the road to a proposed bridge crossing which is located approximately 11 miles east of Seboomook m.

Cutting Projections. The Division of Forest Engineering has recently completed a five-year cutting plan for fir and spruce on GN lands. This plan is a slight revision of the 10-year cutting plan prepared in 1965, and further adjustments will be made when additional capacity for consumption of wood fibre is completed at both mills.

* * *

Legislative Notes. The Special Session of the 104th Maine Legislature defeated an attempt to increase Wildland taxes by six percent. This is a subject that is often misunderstood by people who don't realize the length of time required to grow a crop of trees and the cost of the capital involved in land ownership. The fact that 90 percent of the tax would be paid by about 50 landowners always makes this an easy tax to pass, according to Roderick E. Farnham, Administrative Assistant, Woodlands. (Mr. Farnham is also a Representative to the Maine State Legislature.)

Trees can't vote, he noted, and as a substantial timberlands owner, Great Northern would have been hard hit had the tax been passed.

* * *

Mud Time. An unknown wood's saga once described Maine as having four seasons—"Mud Time," "Bug Time," Fourth of July and Winter. We are now entering into "Mud Time," and all trucking and travel has been restricted until roads have been dried out by May's sun and are back to normal.
In addition, all cutting—with the exception of road construction right-of-way—has been suspended for the spring break-up period.
Plans are to resume cutting on or about May 11 in the Millinocket and Aroostook Areas and on or about June 1 in the Pittston-Greenville Area.
Seeding of Cut-Over Timberland Completed. The Southern Division Woodlands' first large scale operations in direct seeding of cut-over timberland has been completed.

All merchantable trees had been cut from approximately 700 acres of land on rolling to steep terrain.

Prior to seeding, site preparation included prescribed burning on 421 acres and mechanical treatment on the remainder.

Because the rough terrain made it almost impossible to use conventional planting equipment, a helicopter was used. 736 pounds—slightly more than one pound per acre—of loblolly pine seeds were treated with bird and rodent repellant before planting.

The entire seeding operation took less than seven hours flying time, whereas more than six weeks would have been required had conventional planting machines been used.

Permanent sample plots have been established to evaluate germination of seeds, survival of seedlings and growth of trees.

Aerial Fertilization Studied. A pilot study of aerial fertilization on approximately 500 acres of planted pines near Cedar Springs was recently completed.

Pine plantations fertilized range from three to nine years in age.

Soil samples were analyzed at the University of Georgia, and sample and control plots will be studied to measure the response to fertilization.

Some studies already indicate an annual increase in growth of up to 30 percent.

According to the Southern Woodlands Department, any accelerated growth on the fertilized area could increase growth to 372 cubic feet per acre.

Export Tonnage. During the month of March, export tonnage from Searsport, Maine amounted to 3,871 tons—the largest tonnage shipped from Searsport in any one month for a considerable length of time.

Included in the total tonnage was a 2,704-ton shipment to Germany on the S. S. Charlotte Schulte, March 9. On March 25, the S. S. Pobjeda sailed to France with 1,111 tons.

The Experimental Use of Rail Flat Cars equipped with drop side-stakes and chains and binders to transport plywood logs from company woodyards to Great Northern Plywood has proven successful.

Shipments have been averaging 165,000 pounds, or 11,500 board feet per load.

Because of the success of this new (continued on next page
method of moving plywood logs, the Sea-
board Coast Line has built additional cars
for the exclusive use of Great Northern.
The Chattahoochee Industrial Railroad
recently purchased the same type of equip-
ment. This will be placed in service for
the proposed movement of logs from the new
Hilton, Georgia long log slasher operation
expected to be completed by July.

CEDAR SPRINGS

The Southern Division Cessna was in
Wichita, Kansas early in March for ser-
vice and minor repairs.
The plane—now back in operation—
was also repainted.
The possibility of purchasing a single
hanger in Dothan for the Cessna is being
investigated.

***

13 New Southern Jumbo Chip Cars have
have replaced 21 old units. The new cars
will handle approximately 40 percent of
the total chips originating on the South-
ern system.

***

Hilton (Georgia) Slasher System. Earth-
work is in progress, and a new truck-weighing
scale is being constructed at the site of
a new long log slasher system at Hilton.
The slasher system is scheduled for
start-up June 1, followed by the start-up of
another slasher installation at McRae-
ville, Georgia by July 1.

***

Maintenance Shutdown. During a seven-
day maintenance shutdown that began on
March 30, work continued on the rebuilding
of No. 1 Paper Machine base plates.
During that time, equipment repairs
were also made in No. 1 side pulp mill
and power house.

PLYWOOD

EDA Survey Conducted at Great
Northern Plywood Company. GN Plywood is
cooperating with the Economic Development
Administration (a part of the U. S. De-
partment of Commerce) in a survey to
determine employment patterns throughout
the country during the past four years.
The purpose of the survey is to
discover the number and types of jobs
that have opened up and what happens
when people change jobs.
Great Northern Plywood's participa-
tion included interviews with 230 employees,
both part-time and full-time.
The answers to the questions asked
will be combined with other employees'
of new industries to get a cross-section
of employment patterns throughout the
country.
Some 5,000 executives, foremen, super-
visors, office personnel, maintenance men,
engineers, truck drivers, and laborers
in the United States have been asked to
answer the questionnaire which was com-
plied by Chilton Company of Philadelphia.

***

Plywood Prices Improve. Due in part
to President Nixon's announcement during
the week of March 16 of specific Adminis-
tration plans to boost home construction,
plywood prices showed their first sharp
improvement since last summer.
The President's statement was rein-
forced by Arthur Burns' remarks that the
Federal Reserve is relaxing its tight
money policy and is now taking a course of
"anti-recessionary credit."
However, it is uncertain whether
prices will hold, and GN Plywood is pro-
ceeding with caution. The Company is
raising prices and protecting against
selling too much at current levels, since
more is to be gained than lost by holding
the order file short.
3/8" Basis Rated Capacity Changed. Effective the week ended March 22, the new rating for 3/8" basis plywood is 280,000 square feet per day.

The old rating of 231,000 square feet per day has been carried since start-up and was based on the following:

Annual Rated Capacity 60,000,000

\[
\begin{array}{l}
\text{52 weeks} = 1,155,000/\text{week} \\
\text{5 days} = 231,000/\text{day}
\end{array}
\]

The 60,000,000 was the "rule of thumb" rating for a single lathe in the southern pine industry, operating five days per week.

Using the new rating figures, GN Plywood now has an annual capacity of 72,800M per year.

 NAMES IN THE NEWS

BRUCE P. ELLEN, Vice President-Southern Division, was recently re-elected Vice President of the Pulp Chemicals Association.

WILLIAM E. LLOYD, Industrial Relations Manager, Southern Division, attended a Management Seminar sponsored by Emory University in Atlanta the week of March 22.

H. J. MALSBERGER, JR., Assistant Woodlands Manager, Southern Division, has been elected Chairman of the Georgia State Board of Registration for Foresters.

Mr. Malsberger was appointed to the Board (a State agency that examines applicants for registration as professional foresters) by Governor Lester Maddox in 1968. Last year, he served as Vice-Chairman.

LEO L. THIBODEAU, retired Public Relations Director-Woodlands, has been named Special Representative of the Northeast Manpower and Training Committee of the American Pulpwood Association.

According to Morris Wing, Chairman of the Committee, "Mr. Thibodeau was selected on the basis of his long experience in woods labor problems and his thorough knowledge of the subject."

** **

RUSSELL W. YORK, Education & Training Director, Central Personnel, Millinocket, has been re-elected Chairman of the Millinocket Republican Town Committee.

"PERSONALITIES"

NEW EMPLOYEES

C. RAY BROCK has joined the Southern Division as a Unit Forester, reporting to Wendon W. Warr, Area Superintendent. A 1968 graduate of the University of Georgia, Mr. Brock was formerly with St. Joe Paper Company, Port St. Joe, Florida.

** **

JOHN B. DEIBEL, JR. has joined the Chicago Sales Office as a Service Representative, reporting to George L. Nystrom, Midwest Regional Manager-Commercial Sales. Prior to coming to GN, Mr. Deibel was associated with the R. H. Donnelley Corporation in Warsaw, Indiana.

** **

ROBERT C. HILL has joined the Southern Division as Electrical Engineer, reporting to Waylon A. Lacey, Plant Engineer. He is a graduate of Indiana Institute of Technology and was formerly with Hudson Pulp & Paper, Palatka, Florida.

** **

JAMES A. PALMER has joined the Southern Division as a Unit Forester, reporting to Hoyt S. Grissom, Area Superintendent. A 1970 graduate of the University of Georgia, he received a bachelor of science degree in Forestry.
JAMES R. L. POWERS has joined the Finance Department, Millinocket, as Director of Computer Information Systems, reporting to Emery E. Allain, Vice President-Finance. In his new position, Mr. Powers will be responsible for GN’s administrative services department, including data processing operations. He received a bachelor's degree from Eastern Michigan University and a master's degree from the University of North Carolina. Prior to joining GN, he was with Weyerhaeuser Company in Fitchburg, Massachusetts.

* * *

H. BARRETT THOMPSON, JR. has joined the Southern Division as an Accountant, reporting to Charles R. Chandler, Manager of Accounting. He is a graduate of Auburn University.

* * *

MALCOLM D. WILLIAMS, JR. has joined the Southern Division as Process Chemist, reporting to Richard W. O'Donnell, Technical Services Superintendent. An alumnus of the University of Mississippi, Mr. Williams was formerly a Senior Chemist at Chapman Chemical Company, Memphis.

PROMOTIONS

JOHN M. ANDREWS has been promoted to Technical Supervisor-Woodlands at Cedar Springs. He will report to H. J. Malsberger, Assistant Woodlands Manager. Mr. Andrews is a graduate of Auburn University and has been with GN since 1966.

* * *

WESLEY L. CHAPMAN has been named Green End Foreman at Great Northern Plywood Company, reporting to Roger Poe, Green End Superintendent. Prior to joining GN Plywood in 1968, Mr. Chapman was with Georgia Rock Products, Arlington, Georgia.

FREDDIE F. DAVIS has been promoted to Mechanical Supervisor, Southern Division, reporting to Cathiel D. Phillips, Mechanical Superintendent. Mr. Davis joined the Southern Division in 1963 as a Mechanic and three years later was named Mechanical Foreman.

* * *

LOVICK M. (JOHNNY) KIMBROUGH has been named Mechanical Foreman, Southern Division, reporting to Freddie F. Davis, Mechanical Supervisor. Prior to joining GN in 1963, Mr. Kimbrough was a Senior Mechanic at Columbus National Corporation, Pace, Florida.

* * *

STANLEY R. NASON has been promoted to the newly created position of Operations Supervisor, Data Processing Department at Millinocket. He will be responsible for the Input-Output Control, Computer Operations and Keypunch sections, reporting to Michael E. Roche, Data Processing Supervisor. Mr. Nason joined GN's Data Processing Department in 1956.

* * *

JOSEPH F. O'HANDLEY has been appointed Secretary of Great Northern Paper Company. A graduate of New York University and Harvard Law School, Mr. O'Handley has been with Great Northern since 1965.

* * *

JACKSON L. (BUDDY) TIMMONS has been named Accountant, Southern Division, reporting to Charles R. Chandler, Manager of Accounting. A graduate of Troy State University, Mr. Timmons joined the Southern Division in 1968. The following year, he transferred to the Controller's Department as Facilities Clerk.
ALLEN J. TOZIER has been promoted to the position of Budget Supervisor, effective May 15. He will report to Victor M. Antoniello, Manager of Budgets and Consolidations. A graduate of the University of Maine, Mr. Tozier joined GN in 1965 as an Internal Auditor. Since then, he has held the positions of Accountant-Southern Division and Supervisor, General Accounting-Southern Division. He is currently Chief Accountant and Assistant Secretary at Great Northern Plywood.

* * *

CHESTER R. TWEEDIE has been named Power and Recovery Foreman at Millinocket, reporting to Paul T. Illingworth, Superintendent-Steam and Recovery. Most recently, Mr. Tweedie was Power Systems Engineer.

TRANSFER

JOHN A. PINTARD has been assigned as Great Northern’s Resident Representative in Europe. He joined the Company’s Sales Department in 1961 following graduation from St. Lawrence University. Before leaving for Europe, Mr. Pintard was in the Export Department in New York.

TERMINATIONS

JOHN W. BIGGS has resigned from his position as Mechanical Engineer at Cedar Springs. Mr. Biggs joined the Southern Division in 1968.

* * *

JACK COLSON has resigned from his position as Mechanical Supervisor at Cedar Springs. He had been with the Southern Division since 1963.

* * *

R. LARRY CRAWFORD has resigned as Associate Chemist at Cedar Springs. He joined the Company's Southern Division in 1969.

* * *

JAMES M. FRENCH has resigned from his position as Associate Forester at Cedar Springs. He came to GN in 1969.

* * *

BARRY RUMAC has resigned as Market Analyst in the Sales Department in New York. He joined the Company in 1964.

* * *

JAMES F. SEXTON has resigned from his position as Unit Forester at Cedar Springs. He had been with GN since 1965.

* * *

J. HARRELL TRICE has resigned as Technical Supervisor-Woodlands at Cedar Springs. Mr. Trice joined Great Northern in 1964.

DEATH

ALBIN R. CASPAR, retired Vice President and Manager of Sales, died in Florida on April 15. A graduate of Bowdoin College, Mr. Caspar's entire career was with Great Northern—from 1919 until his retirement in August 1961.
GREAT NORTHERN, NEKOOSA STOCKHOLDERS VOTE MERGER AT ANNUAL MEETINGS MARCH 17

Separate annual meetings of shareholders were held on Tuesday, March 17, at Millinocket, Maine, and Port Edwards, Wisconsin.

Shareholders of both companies voted their approval of the previously announced proposed merger of Great Northern and Nekoosa-Edwards.

Under the terms of the merger agreement, Great Northern will be a division and Nekoosa-Edwards a wholly-owned subsidiary of a parent company to be known as Great Northern Nekoosa Corporation.

It is anticipated that the merger will be finalized by the end of March—pending a favorable tax ruling.

The transaction is also under consideration by the U. S. Department of Justice which has not yet completed its review.

Peter S. Paine and Sam Casey, chief executive officers of GN and N-E respectively, said the two companies will retain their traditional identities and will continue to operate under their present managements.

Great Northern Nekoosa directors will be Hoyt Ammidon, Richard G. Croft, Robert A. Haak, Robert Hellendale, E. Spencer Miller, Minot K. Milliken, John J. Neely, Peter S. Paine (Chairman of the Board), Walter D. Sanders, Frederick K. Trask, Jr., (all currently on the Great Northern Board), Sam Casey, Ralph J. Kraut, John A. Puelicher, (continued on page 2, column 1)

OFFICIAL DEDICATION CEREMONIES OF MgO CHEMICAL RECOVERY PLANT HELD AT MILLINOCKET

Tangible evidence of Great Northern's continuing concern for the environment in terms of pollution control and abatement was seen on March 17 at the official dedication by Governor Kenneth M. Curtis of the Company's MgO chemical recovery plant at Millinocket.

Finding an effective and economically feasible way to reduce pollution from our pulping operations required the services of specialists in many areas and years of trial and experimentation.

In 1960, extensive steps were initiated and a number of chemical processes tested. Seven years later, the Company decided to change from sodium acid sulphite to magnesium bisulphite—thus the addition of the new recovery plant which was completed in 1969 and is now in full operation.

Today, water returned to the Penobscot River from the sulphite mill has 85% less BOD (biochemical oxygen demand). At the same time, a high percentage of the pulping chemicals are recovered for reuse.

Other processes have also been improved. The phasing out of our chemi-groundwood operation last year significantly reduced pollution from East Millinocket, and water returned to the river from both mills now averages 75% less BOD than in 1968.

The dedication ceremonies began at 11 a.m. at the Elks Hall in Millinocket.

Robert J. Shinners, Vice President—Northern (continued on page 2, column 2)
Paper production for twenty weeks ending February 15. . . .

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<thead>
<tr>
<th>Production:</th>
<th>1970</th>
<th>1969</th>
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<tbody>
<tr>
<td></td>
<td>Tons</td>
<td>Daily Avg.</td>
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<tr>
<td>Cedar Springs</td>
<td>260,051</td>
<td>2,067</td>
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<tr>
<td>East Millinocket</td>
<td>151,136</td>
<td>1,094</td>
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<tr>
<td>Millinocket</td>
<td>123,574</td>
<td>894</td>
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<td></td>
<td>534,761</td>
<td>4,055</td>
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(continued from page 1, column 1)

and Gerard E. Veneman—members of the Nekoosa-Edwards board.

The executive offices of Great Northern Nekoosa will be located in New York City, and it is anticipated that within a year following the effective date of the merger, Mr. Casey will move from Port Edwards to the New York metropolitan area and be elected President of Great Northern Nekoosa.

Mr. Paine will continue as Chairman of the Board and Chief Executive Officer.

From the effective date of the merger, Mr. Casey will be Chairman of the Executive Committee.

Messrs. Paine and Casey noted that the combined strengths of the two companies in marketing, raw materials and production facilities complement each other and should result in an increased rate of growth for the new corporation.

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Board of Directors Meets. Great Northern's Board of Directors met in New York City on March 18 and voted final approval, including the appropriation of funds, of the $45 million expansion program at Millinocket.

Construction should begin about May 1, and start-up of No. 11 paper machine—a Black Clawson Verti-Forma—is scheduled for April 1972.

The Board also re-elected Great Northern's present officers for a one-year term.

Division, served as Master of Ceremonies. Robert A. Haak, President, greeted an audience of more than 200—including the Governor, state and local officials, conservationists from Washington, D. C., New York, Massachusetts and Maine, GN personnel, and members of the national and regional news media.

Dr. Victor F. Mattson, Director of Research, commented on the MgO recovery process, and Harvey E. Moody, Research Engineer, gave a detailed explanation—which included a slide presentation—of the entire recovery system.

Reviewing Great Northern's decision to spend nearly $20 million on pollution control and abatement, Peter S. Paine, Chairman and Chief Executive Officer, noted that the Company has long been concerned with environmental problems. "Our new recovery plant is just one example of our continuing program to protect Maine's waters and help restore the balance of nature," he explained.

Mr. Shinners adjourned the meeting—inviting members of the news media to a special news conference with Governor Curtis, Mr. Paine, Mr. Haak, Mr. Shinners, Dr. Mattson and other Company executives.

Non-media guests were invited to a cocktail hour, followed by a buffet luncheon at which the Honorable Kenneth M. Curtis was guest speaker.

"Great Northern Paper Company is to be congratulated for having put into prac

(continued on next page)
tice a concept that may well be the key to mankind's solving of its problems of waste disposal. To turn waste into productive material not only makes good sense, it may also be absolutely essential to the future health of an overcrowded planet," the Governor said.

Mr. Paine presented the Governor with a picture of the MgO plant and asked him to sign the dedication plaque which will be cast in bronze and placed in the plant.

After the luncheon, guests were invited to tour the MgO plant and both mills.

James R. Adams, Manager of Personnel, was Chairman of the MgO Dedication Committee. Mr. Adams and his staff are to be congratulated on doing such a fine job of coordinating the many facets of the dedication of Great Northern's MgO chemical recovery plant.

* * *

Excerpts From Peter S. Paine's Statement at MgO Dedication:

"The whole country has awakened to the fact that our vaunted prosperity is an illusion if the price is the destruction of our environment.

"Those who are fortunate enough to live in Northern Maine are aware that Great Northern Paper Company has had a long record of sound conservation practices in the management of its woodlands.

"We cannot speak as proudly on the subject of pollution, but then like the rest of the country, it sort of crept up on us. When this mill was first built, its capacity was 100,000 tons a year. Today we produce more than 700,000 tons. What is more, other industries and towns expanded, too, until the total load on the Penobscot River exceeded the river's natural regenerating capacity.

"This is the natural process by which water assimilates both natural and man-made wastes. The problem arises when too much waste is added, and the oxygen in the water is used up faster that it can be replaced by natural aeration processes. This type of waste loading is measured in terms of its BOD, or biochemical oxygen demand. GN's most serious problem has been the relatively high BOD of its effluent from the sulphite mill.

"In 1962 we began to tackle this problem in earnest. We first had to completely rebuild the mill while continuing to keep it in operation. Some $9 million was expended on this phase of the program.

"Extensive studies were conducted to find alternate pulping and recovery processes. The Babcock & Wilcox recovery process for MgO seemed to have the most possibilities for success, given our wood supply and product grade structure. This process was developed before World War II by George Tomlinson, Sr., of Howard Smith Paper Mills in Canada, along with the Weyerhaeuser Company and B&W. It was a refractory-type furnace and the unit was small--150 tons a day.

"The greatest advance--and the one that clinched the decision for us--was the development of a water-cooled furnace in 1966 to replace the refractory type. This plant you will see today is the largest such installation in the world with a capacity to evaporate and burn all the collectible wastes from a 600-ton-per-day sulphite mill. Between that start-up of this process and the phasing out of our chemi-groundwood operation at East Millinocket, GN has reduced its total BOD loading on the Penobscot by 75%.

"Pollution control costs money--frequently dramatic amounts of money. As a result, we cannot overlook the importance of economic feasibility in the fight for a better environment.

"Money and technology must be coupled with the commitment to use them to bring our endangered environment back from the brink. We at Great Northern believe in such a commitment, and our dedication of this new plant here today is proof of it.

"The acceptance of the change man has made on his environment is after all a question of the times. St. Patrick, whose birthday we celebrate today, was revered for driving out the snakes from Ireland. Today, he would be condemned for disturbing the ecological balance of nature."
Behavioral Science – Greater Productivity Through Optimal Use of Human Resources. Great Northern took a first step using findings in the field of behavioral science on January 22 at the Company’s Guest House in Millinocket.

In attendance were Robert Helendale, Vice President and Secretary; Robert J. Shinners, Vice President-Northern Division; James R. Adams, Manager of Personnel; Scott B. Weldon, Manager of Manufacture; John F. Marquis, Director of Purchases and Stores; Donald G. Griffee, Chief Engineer; Phillip P. Paul, Traffic Manager-Northern Division; and Frederic C. Morrison, Administrative Assistant and Manager of Townsite.

The two-day session was conducted by Gordon F. Harrison, a consultant from Montreal.

Behavioral science is essential to a systematic study of people and their relationships to each other. In recent years, behavioral scientists have focused on business organizations, while at the same time, a growing number of companies have turned to behavioral scientists for greater insight and understanding of people and their motivations in relation to increased productivity.

The behavioral science movement shares with its predecessor, the "human relations" movement, a humanistic approach to people. However, behavioral science goes one step farther and encompasses the economic requirements of the enterprise while seeking increased productivity through maximum use of human resources.

According to Mr. Harrison, most companies integrate behavioral science findings into management in order to create open, free-flowing communication; participative decision-making; improved superior-subordinate relationships; integrated human and economic objectives; and increased job satisfaction and individual freedom as motivational factors.

At the January 22 meeting in Millinocket, each participant was first required to analyze a wide range of questions relating to human behavior patterns as they were known to him through personal experience in given situations.

At the second phase, two groups were formed to analyze and compare their individual findings, and—if possible—reach a consensus on each question.

Because of the varied backgrounds of the individuals involved, some very positive opinions were exchanged. The two groups were then put into a single group again, and a consensus of the entire group was reached after a day of discussions conducted by Mr. Harrison.

Once the total group arrived at a position on each question, Mr. Harrison compared Great Northern’s results with those of a group of research scientists who have done the most work in the field of behavioral science.

One participant noted that "to our great satisfaction, it was determined that our judgment on most of the questions was consistent with the best known scientific results."

Plans call for a further application of this method in the near future.

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WOODLANDS – SOUTH

As released to the press on Friday, March 6:

"Mr. William B. Turner and Great Northern Paper Company jointly announced today that they have entered into 66-year timber purchase agreements, covering approximately 33,000 acres in Georgia and Alabama.

"Mr. Turner, president of W. C. Bradley Company and Developers-Investors, Inc.—both of Columbus, Georgia—and James W. Richardson, woodlands manager of Great Northern's containerboard mill and plywood plant in Cedar Springs, explained that Great Northern will purchase all present and future timber on these lands.

"Mr. Richardson noted that the company plans to continue its 'multiple-use' forest management policy on these timberlands. 'Planned diversification—the "multiple-use" concept—is a modern forestry practice that benefits everyone,' Mr. Richardson said. 'It assures an ever-growing re- (continued on next page)
source of raw material without disturbing the existing balance of nature or the beauty of the forest.'"

* * *

"Prospects Are Bright for Southern Timber in '70's," according to an article in the February 1970 issue of PLYWOOD & PANEL Magazine.

During the 1960's, there was a period of unprecedented growth for industrial enterprises based on southern pine forests, and all signs indicate that expansion of the South's timber economy will further accelerate during this decade, P&P states.

The new surge of "forestry, tree planting, and growth is designed to meet mushrooming population needs for forest products, recreation, and other essentials."

"By the beginning of the 1960's, industry forestry programs had become so successful that the growth of southern pine at that time was double the rate of harvest despite substantial production of timber products. This healthy resource situation attracted investment from all arts of the United States in southern forestlands and timber enterprises. While outside investment came in, existing industry expanded. Total investment in new plant and expansion was estimated at $3 billion."

Southern pine lumber production increased 25%; the new southern pine plywood industry expanded and now provides 16% of the nation's total plywood supply; and plywood production in the South now is nearly 61% of the nation's total.

"At the close of the decade, southern pine was also supplying 85% of the nation's pressure-treated wood poles, plus growing quantities of laminated lumber, chemicals, and other products.

"The '70's can be even more prolific," the article stated, predicting that the need for southern pulpwood will double by 1985.

* * *

The Forest Cruise Program developed for the Southern Division has been successfully run on an IBM 360 computer in Columbus, Georgia. It is expected that the program will be used to process all large forest cruises.

During a cruise, the information which is collected will be entered directly onto forms suitable for key-punching. The data will then be sent to Columbus and run on the computer.

The program output will consist of a detailed wood volume and land description report.

With this new procedure, it should be possible to obtain accurate reports much sooner than the previously used manual methods.

CEDAR SPRINGS

Industrial Relations Visited Clemson University and the University of Florida the week ending March 2 for recruiting purposes.

Indications are that job offers are sharply reduced this year, even though starting salaries have increased.

* * *

Southern Division Breaks Own Record. During 1969, the Southern Division broke its own record in controlling demurrage of rail equipment.

Last year, the mill received and shipped 41,938 cars and incurred only $837.50 in demurrage charges (2c per car on total cars). 1968 demurrage charges on 39,676 cars amounted to $1,343.75.

An outstanding aspect of this accomplishment is that no demurrage has been incurred on woodchips since July 1967, on coal since May 1966, and on pulpwood since August 1965.

* * *

Eight Large Accounts Change Loading Patterns. In order to improve paper mill net by reducing outbound transportation costs, Sales, Shipping & Finishing, and Traffic have initiated a campaign to telephone and visit customers in an effort to persuade them to relax or elim-
nate loading restrictions.

According to Reid Smith, Traffic Manager, the results to date have been beyond expectations, with eight rather large accounts agreeing to a change in loading patterns.

PLYWOOD

Three-Year Contract Signed. During the week of February 2, union contract negotiations were conducted at Great Northern Plywood Corporation.

On Tuesday, February 3, management and union worked together with the aid of a mediator toward an agreement. The result was ratified by a vote of the union membership on February 5, and a three-year contract was signed on Friday, February 6.

***

General Employee Meeting Held. In order to acquaint employees with the current plywood market condition, a general employee meeting was held for each shift the week ending February 15.

In addition to market conditions, topics included curtailed operation, the need for employee cooperation in improving recovery and quality, and the necessity of keeping areas and equipment clean.

Donald G. Nolan, General Superintendent gave a 30-minute talk which covered each working area and the importance of each individual to the operation of the plant.

The Union President also spoke, emphasizing that the Union is fully behind the Company and asking each man's full cooperation.

The immediate reaction was overwhelmingly favorable, and the great majority of employees left the meeting determined to do a better job.

The same subjects were covered in greater depth in both plant production and plywood staff meetings.

***

Plant Improvement Projects completed during the second week in February included remodeling of the veneer breaker at the lathe; installation of a new trash dropout gate at the upper green clipper station; and revamping of the veneer chipper conveyor at the chain station.

The trash dropout gate was built at the plant shop.

At the same time, the edge-gluer on the string machine went into a two-shift operation.

NAMES IN THE NEWS

EDWIN N. GRINDLE, Salary and Benefits Administrator, has been released from Millinocket Community Hospital and is recuperating at his sister's home in Ellsworth Falls, Maine.

***

LESTER W. HAZELTON, Superintendent-Operated Wood at Millinocket, was a guest speaker at the American Pulpwood Association's annual meeting, March 16-19 in New York City. Mr. Hazelton addressed the Association's general session on March 18 and spoke on "Longwood Harvesting Systems."

***

JOHN T. MAINES, Vice President-Woodlands, was recently elected President of Associated Industries of Maine for the year 1970.

***

ROBERT J. SHINNERS, Vice President-Northern Division, has been named a Director of the Syracuse Pulp and Paper Foundation, Inc. He will serve on the board for a three-year term.

A non-profit organization of individuals and corporations, the Foundation provides information about careers in the paper and allied industries and offers approximately 40 scholarships a year to students at the State University College of Forestry at Syracuse University.

***

WILLIAM H. SIMPSON, Structural Inspector, Central Engineering, has been appointed Inspector for the West Branch Road construction. This project is also known as the "Golden Road."
KNOW YOUR BENEFITS

The revised Incentive Profit Sharing Plan was authorized by the stockholders on March 18, 1964, and Great Northern's Board of Directors approved a small contribution for the year 1964. The first announcement letter from Mr. Paine was sent to each participant on February 5, 1965. The Board has authorized contributions each year since.

To participate in the Plan, one must be a regular, full-time employee who on October 1 has been on the monthly salary payroll for the preceding 12 months.

The contributions authorized by the Board are paid in cash to the Trustee, Manufacturers Hanover Trust Company, who invests in the Company's Common stock. This investment is kept in each employee's account as a total number of shares and dollars contributed. The dividends on this stock are reinvested and added to the total number of shares and dollars in each account. The Trustee sends a status card twice a year to each participant, showing the total amount of stock credited to the employee's account.

On termination, the stock in the account is issued to the individual and mailed to him registered mail some six to eight weeks after termination. He does not participate in the fiscal year that such termination occurs.

On retirement or death, the individual participates up to such date in the current fiscal year.

The Board has authorized the following payments to the Plan:

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<th>Board Meeting</th>
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<th>Salaries Covered</th>
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<tr>
<td>1/65</td>
<td>2</td>
<td>1/1 - 12/31/64</td>
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<td>10/65</td>
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<td>1/1 - 9/30/65</td>
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<td>10/66</td>
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<td>10/1/67 - 9/30/68</td>
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<tr>
<td>10/69</td>
<td>8</td>
<td>10/1/68 - 9/30/69</td>
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Distributions of stock have been accorded favorable tax treatment; however, amendments in the Federal tax law, effective this year, have changed this status.

A subsequent issue of the Newsletter will describe the changes in further detail.

Ulcerless Decision-making. (The following was excerpted from the November 8, 1969 issue of MANAGEMENT INFORMATION, Copyright 1969, Elliott Service Company, Inc., and appeared in the January issue of NOTES & QUOTES, published by Connecticut General Life Insurance Company, Hartford.)

Although decision-making can never be an easy, routine job, it doesn't have to involve mental turmoil and jagged nerves. Here are some pointers on how to make decisions without getting ulcers.

- Distinguish big from little problems. Spend time on big matters and give little things less attention.
- Rely on policy to settle routine problems. Don't waste time making the same decisions over and over again.
- Delegate all of the smaller decisions you can.
- Consult and check. Today it is a sign of strength, not of weakness, not to know all the answers. Consultations help.
- Get into a relaxed frame of mind. Try not to decide under stress. Take enough time to decide. On the other hand, concentrate on the problem at hand and exclude other things for the moment.
- Avoid crisis decisions. Dashing about putting out fires is the mark of an amateur.
- Don't try to anticipate all eventualities.
- Don't expect to be right all the time.
- Don't be afraid of failure. Fear of failure is the biggest cause of mental strain.
- Cultivate decisiveness. Indecision leads to tension.
- Don't put off making decisions. Now is the time.
- Try to have alternative solutions up your sleeve.
- When you've made a decision—forget it. Mulling over past decisions invites ulcers.
NEW EMPLOYEES

EDGAR V. MAXFIELD has joined the Administrative Services Department at Millinocket as Senior Systems Analyst, reporting to Richard E. Colburn, Systems Supervisor. A graduate of Bentley College in Boston, Mr. Maxfield has been with the Boston Edison Company for the past 16 years.

* * *

FRANK J. REIDY has been appointed Controller, effective April 1. A University of Notre Dame graduate, Mr. Reidy will be located in the New York Office and will report to Emery E. Allain, Vice President-Finance. Prior to joining Great Northern, he was Assistant Comptroller of St. Joseph Lead Company, the largest producer of lead and zinc in the United States.

* * *

HOWARD SPURILL has joined Great Northern Plywood Corporation as Finishing and Shipping Supervisor. Prior to this, he was with Weyerhaeuser Company in Plymouth, North Carolina, where he was responsible for panel layup, finishing and shipping.

PROMOTIONS

STEVEN T. DUNNING, JR. has been named Personnel Assistant at Great Northern Plywood Corporation, reporting to William E. Lloyd, Industrial Relations Manager-Southern Division. Mr. Dunning was formerly Finishing and Shipping Supervisor.

TERMINATIONS

RONALD A. BAILLARGEON has resigned from his position of Engineer, Central Engineering Department at Millinocket.

CLARANCE D. BATES, JR. has resigned from his position of Dry End Foreman at Great Northern Plywood Corporation.

* * *

WEAVER HOOVER has resigned from his position of Green End Foreman at Great Northern Plywood Corporation.

* * *

GERALD A. PACKARD has resigned from his position of Systems Analyst, Administrative Services Department at Millinocket.

* * *

JOHN W. REIF has resigned from his position of Personnel Supervisor at Great Northern Plywood Corporation.

* * *

CHARLES H. SHEENAN has resigned from his position as Engineer in the Electrical Design section of the Central Engineering Department at Millinocket.

DEATHS

BERTRAM M. GODDARD, 72, of East Millinocket, died on December 14, 1969. Mr. Goddard joined Great Northern Paper Company in 1920. At the time of his retirement in 1961, he was a Tour Foreman-Steam.

* * *

DELORE F. THERIAULT, 76, died in Millinocket on December 24, 1969. When he retired on January 1, 1959--after nearly 40 year's of service with Great Northern, Mr. Theriault held the position of Senior Engineer.
GREAT NORTHERN SELECTS BLACK CLAWSON VERTI-FORMA FOR MILLINOCKET MILL

As released to the press on Wednesday, February 4:

Robert A. Haak, president of Great Northern Paper Company, today announced the selection of The Black Clawson Company's Verti-Forma paper machine for inclusion in Great Northern's previously announced $45 million expansion program at Millinocket, Maine. Final approval of the program, including purchase of the Verti-Forma, is expected to be voted on by the company's board of directors in April.

When completed, the expansion program will increase the capacity of the Millinocket mill by 40%, or 135,000 tons of paper annually. Construction is scheduled to begin about May 1, and start-up of the new machine is slated for April 1972. Based on this timing, Mr. Haak said, it is planned to finance the program out of the company's cash flow from operations.

Designed primarily for the manufacture of Great Northern's extensive line of lightweight groundwood printing papers used in catalogs, periodicals, directories and paperback books, the expansion project will include the new Verti-Forma and all necessary supporting equipment.

Black Clawson's Verti-Forma is a twin-wire device operating in a vertical plane. Unlike the conventional fourdrinier paper machine on which water drains from only one side of the sheet, the Verti-Forma removes water from both sides in identical amounts. The sheet is formed as stock is gradually compressed between the two converging wires, and fiber distribution is uniform over both surfaces—thus reducing wire mark to half of what it would be on the fourdrinier.

With a wire width in excess of 310 inches and a trim of 292 inches at the winder, Great Northern's new Verti-Forma will operate at a production speed of over 2,500 feet per minute. "We selected this twin-wire machine," Mr. Haak said, "because we felt it would enable Great Northern to manufacture a better quality product at higher speeds and lower cost."

According to Black Clawson, the Verti-Forma is the result of 13 years and $3 million in research by the company in its efforts to improve the speed and quality of paper formation. The Millinocket installation will be the largest in the world when it begins production, and one of the first four Verti-Forma units in operation in the United States.

Delivery of the new machine, to be produced by the Paper Machine Division of The Black Clawson Company in Watertown, N. Y., is scheduled for the third quarter of 1971.

Great Northern's Millinocket expansion program was originally announced last July. Since that time, Mr. Haak noted, preliminary design, engineering, and equipment (continued on next page)
**Production:**

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<td>199,358</td>
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<td>203,579</td>
<td>1,896</td>
</tr>
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<td>119,891</td>
<td>1,088</td>
<td>117,098</td>
<td>1,063</td>
</tr>
<tr>
<td>Millinocket</td>
<td>97,201</td>
<td>882</td>
<td>101,551</td>
<td>922</td>
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<td></td>
<td>416,450</td>
<td>4,008</td>
<td>422,228</td>
<td>3,881</td>
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</table>

procurement has progressed well. Commitments have been made to the General Electric Company for a 50,000 KW Turbo-Generator, and to Riley Stoker (Worcester, Mass.) for a 600,000 pound per hour power boiler.

Chas. T. Main, Inc., Boston, has been retained as chief engineer and will provide detailed design work on the new paper machine installation, building and machine shop. Stone & Webster, Inc., also of Boston, has been hired as the consulting engineers.

"Innovation, modernization and a sense of pioneering leadership have long characterized Great Northern," Mr. Haak said. "The proposed $45 million project will enable us to expand our present role as the world's largest producer of groundwood printing papers and assure our ability to keep pace with the growing demand for these grades."

* * *

Great Northern Nekoosa Corporation
"Could Be the Start of Something Big" according to a feature article in the February 14 issue of THE MAGAZINE OF WALL STREET. Excerpts from the article follow:

"Great Northern Paper Company, Nekoosa-Edwards Paper Company. That's the way it was. Now try Great Northern Nekoosa Corp. How does it sound?

"Peter Paine, chairman and chief executive of Great Northern Paper, and Sam Casey, president and chief executive of Nekoosa-Edwards, are hoping that to their approximately 30,000 shareholders it will sound just fine.

"Recently, the boards of both companies approved a plan under which Great Northern would become a division and Nekoosa-Edwards a wholly-owned subsidiary of a parent company to be known as Great Northern Nekoosa Corp. Shareholder meetings are scheduled for March 17 for final approval, and it is expected that the merger will be consumated by the end of March.

"In the original plan, both companies were careful to avoid using the word 'merger' because of the connotation that one company was buying the other. In the earlier stages of discussion, the plan was for the formation of a holding company, which would own 100% of the stock of each company, and Great Northern and Nekoosa would become operating companies under the financial umbrella."

For legal reasons, the plan was revised and the new agreement calls for a merger, with Nekoosa a subsidiary and GN a division.

"However, Paine and Casey said that the original idea, embodying the holding company concept, will be achieved and will assure that both Great Northern and Nekoosa-Edwards will retain their traditional identities and continue to operate under their present managements."

"Under the new plan, the assets of Nekoosa-Edwards will be transferred to a wholly-owned subsidiary named Nekoosa-Edwards Paper Co. Inc. This is a legal technicality which established the new status of the old Nekoosa. The board of directors and the officers of the new subsidiary will consist principally of officers of the old Nekoosa. Likewise, the present officers of Great Northern will (continued on next page)
become officers of the new Great Northern division, with the exception of Paine, who will be chairman of the board and president of the new parent, Great Northern Nekoosa Corp. It is expected that Casey will be elected president of the new parent within a year following the merger.

"On the whole reaction to the merger has been good. In fact, Wall Street is quite enthusiastic. 'It makes a lot of sense,' commented an analyst with an independent advisory service. 'Each company has something to offer, and each has obvious weaknesses that this deal should help eliminate.'

"The two companies are equally matched in many respects, except that Nekoosa's profit margins have been slimmer, due partly to start-up expenses at the new mill in Ashdown, Ark. This mill went on stream in July, 1968 and Casey says it is now contributing to profits.

"Each company has about 6,000 common shareholders, but Great Northern, because of a merger arrangement in 1965 under which it acquired Great Southern Land & Paper Co., has about 18,000 preferred shareholders.

"The deal is set up to be a tax-free exchange. As far as Great Northern holders are concerned, the main change will be in the name on their certificates.

"For Sam Casey, the deal will mean a change of address. As president of the new company, he will move from Port Edwards, Wis., to New York, where the new corporate offices will be located.

"This is the second merger attempt for Nekoosa-Edwards in a year. Nekoosa and Continental Can Co. began preliminary merger discussions in 1968-69 but the deal was called off last February because of inability to agree on terms.

"Semantics aside, this is, in fact, a merger, with Nekoosa-Edwards actually being merged into Great Northern, although technically both companies are being melded into a new company with a double-barreled name.

"The crux of the situation is that it is Nekoosa-Edwards shareholders who are being offered an exchange of shares on a one-half for one plus extras basis and NOT at Northern holders, who will be affected mainly insofar as the new name is concerned and the minimal amount of potential dilution.

"Nekoosa is well situated to take advantage of the burgeoning business papers market and Great Northern is also in a favorable position because of recent price increases in newsprint and groundwood papers (40% of tonnage). In addition, linerboard prices (linerboard accounts for 50% of Great Northern tonnage) are in an up-trend which is likely to continue through 1972.

"With the amalgamation of Great Northern and Nekoosa-Edwards there is likely to be increased emphasis on business communication papers and computer print-out forms because the new company will have greater merchandising strength to compete with entrenched operations in this field.

"We foresee Great Northern Nekoosa becoming more directly involved in the total communications concept."

**

TAPPI Held Its 55th Annual Meeting at the New York Hilton Hotel, February 16-19.

The program included presentations on such topics as chemical additives, industrial engineering, pulp manufacture, statistics and paper physics.

In addition, the TAPPI Medal (the Association's highest honor) was awarded to Borge K. Steenberg of Sweden. Recently named Assistant Director-General of the Forestry and Forest Industries Department, Food & Agricultural Organization of the United Nations, Mr. Steenberg is the first person from outside North America to receive this distinction.

**

API Submits Views to National Water Commission. The National Water Commission, a non-partisan body of seven citizens appointed by President Nixon to recommend over-all national water policy, recently asked the American Paper Institute to issue a statement. Here are some interesting facts contained in the report:

while annual paper production has doubled over the past 15 years—from 27 million tons in 1949 to 53.5 million tons in 1969—total water "use" has in- (continued on next page)
creased less than 10%. On the basis of water "use" per ton, this represents a reduction of 50%.

Almost all the water used in the pulp and papermaking process is returned to the streams and becomes available for further use downstream. Reports indicate that the average gallon of water is now "used" at least three times before discharge.

Total waste load per ton has decreased 60% in the past 15 years. Today, more than 80% of U.S. pulp and paper mills have water treatment facilities in operation.

Through careful forest management, the Paper Industry conserves far more water than it uses, and natural runoff amounts to six times as much water as the total intake of the industry's mills.

* * *

Largest Employer. A directory recently issued by the Pulp and Paper Foundation of the University of Maine lists GN as the largest employer of the school's alumni, with 79 graduates working for the Company.

* * *

National Teach-In on Environment. Set for April 22, this is a nationwide movement by college and high school students to examine the problems of the environment in their local communities.
The topics of discussion are broad--air, water and noise pollution, social ills, conservation, etc.--and it is expected that at least 1,900 colleges and universities and numerous high schools will conduct programs.

Sen. Gaylord Nelson (D-Wis.), Rep. Paul McCloskey (R-Calif.), and Sidney Howe, President of the Conservation Foundation are co-chairmen of the Teach-In Committee.

Leaders of the Teach-In in Washington say the movement has spread locally without direction from them. At least 350 colleges and universities and some 200 high schools are already committed to the program.

The programs will be centered on the school campuses. However, it is expected that they will draw local attention and eventually involve civic groups and the general public.
The general feeling in Washington is that the student events will be restrained and that the program can become a promising vehicle for responsible community involvement and action.

* * *

Tree Farm Program Grows by More Than 1 Million Acres in 1969. The American Forest Institute, national sponsor of the Tree Farm Program, reports that during 1969 615 tree farms--covering 1,128,131 acres--were added to the Tree Farm Program.

This brings the national total to 33,688 tree farms on 74,638,247 acres. According to E. J. Hodges, AFI President, the program plays a major role in helping the forest industry meet the needs of the American public for wood and wood products.

During 1969, GN planted 2,815 acres--all in the South. Assuming 6' to 10' spacing occurred--which is ideal for the South--John T. Maine, Vice President-Woodlands, noted that the Company planted 726 trees per acre, totalling 2,043,690 new trees.

The AFI report also pointed out that for the first time since 1962, Alabama leads the nation in acreage enrolled in the program with 7,820,027 acres. Georgia is now in second place with 7,787,188 acres.

* * *


Production of paper and paperboard climbed to a new high of 53.5 million tons in 1969, an increase of six percent over last year.

"Both paper and paperboard sectors operated at 95 percent of practical maxi- (continued on next page)
mum capacity," Mr. Locke said. "Among the paper grades, largest growth was shown by newsprint, coated papers, writing and related papers, and bleached kraft papers," he continued.

In paperboard grades, greatest growth was in kraft linerboard and semi-chemical corrugating medium--reflecting both the strong demand for fibre boxes and the continued growth in the use of kraft relative to combination liners.

"The capacity to produce paper and paperboard," Mr. Locke said, "will grow by some 3.7 percent per year from the end of 1969 to the end of 1972."

"The next decade offers great promise to American industry--and paper will share fully in this growth. The year 1970 may well contain some unusual economic problems but the Paper Industry is in a particularly strong position to meet them successfully," he concluded.

MILLINOCKET

Annual Meeting and MgO Dedication

Scheduled for March 17. The annual meeting of Great Northern stockholders will be held in Millinocket on Tuesday, March 17. Nekoosa-Edwards stockholders will hold their annual meeting at the same time in Port Edwards, Wisconsin. It is expected that shareholders of both companies will vote final approval of the proposed GN-Nekoosa merger.

Following the annual meeting, the MgO Chemical Recovery Plant will be officially dedicated. The largest of its kind in the world, the recovery boiler uses waste from GN's pulping operation for fuel and consumes hundreds of tons of waste products each day. Much of this waste is converted into re-usable chemicals, while the rest is burned--thus substantially reducing pollution in the Penobscot River.

Peter S. Paine, Great Northern's Chairman and Chief Executive Officer, will officiate at the dedication ceremonies. Governor Kenneth M. Curtis is also expected to be present.

Other guests will include Federal, state and local government officials, conservationists and members of the press.

West Branch Storage. As of January 21, the Penobscot West Branch storage was at 51 billion cubic feet--89% of full storage capacity and 25.3 billion cubic feet above rule curve.

December's heavy rain fall continues to result in above average run-off.

**

No. 2 Paper Machine Winder. Beloit-Eastern and Great Northern are working together in an effort to eliminate crepe wrinkles and increase winder speed on No. 2 paper machine.

Two methods of producing a tighter wrap on the first few inches of a shipping roll are under consideration.

One involves the installation of a booster generator in the armature circuit of the front bed roll drive motor; the second method involves the addition of some armature resistance in the back bed roll drive motor.

The Electrical Design Group will present a proposal for the installation of armature resistance.

EAST MILLINOCKET

Installation of Officers of Local 37.

On January 23 the Officers of Local 37 Pulp and Sulphite Union were installed at East Millinocket.

Company representatives at the ceremonies included Mr. and Mrs. Robert J. Shinners (Vice President-Northern Division), Mr. and Mrs. Carl H. Reed (Mill Manager-East Millinocket) and James R. Adams, Manager of Personnel.

Mr. Adams noted that the Union seemed pleased to have the Company represented at the installation ceremonies.

**

Appleton Fabric 74 Days Old. As of February 9, the Appleton Fabric on No. 3 Paper Machine had run for 74 days. Pitch deposits on these fabrics seem to be a major problem, and at present the fabrics are being continuously cleaned with a high pressure water shower.
RESEARCH AND DEVELOPMENT

**Pilot Coater Data Evaluation.** After each pilot coater run, it is necessary to analyze the test data that is generated. For this reason, a computer program has been written which should greatly simplify this task. Test results will be entered directly onto key punch forms in the laboratory, and the computer will perform the necessary statistical calculations on the data—thus enabling R&D to compare the various coating formulas used in the experiment.

This new computer program was used to evaluate previously obtained test data and results indicate that small coating formula changes can now be detected with much more precision and accuracy.

***

**New Wrap.** Sixty-nine tons of 150# (24x36-500) bodywrap and 37 tons of 150# (24x36-500) headstock have been produced on the Wrapper Machine at Millinocket. It is expected that these materials will be used to package newsprint production from Nos. 5 and 6 Paper Machines at East Millinocket.

***

**New Product Efforts.** Several meetings were held at Millinocket the week of January 12 with the Sales Department and prospective customers of Palette + Plus paper.

Representatives of Metro Media and U. S. Envelope Company reviewed their use of GN paper for direct mail advertising.

Time-Life is considering P+P, or a possible coated colored paper, for special advertising in LIFE Magazine. We will supply them with P+P samples with a high machine stack finish.

***

**Pilot Calendars.** Both the pilot supercalender and the pilot machine calender are now able to process rolls of paper, since they have been rebuilt to include a common unwind stand and two separate horizontal surface wind reels.

A new variable speed drive has been placed in operation on the machine calender to simplify threading.

In the past, paper from the pilot paper machine and pilot coater had to be cut into sheets and fed through the nips manually. (In calendering paper, the web passes between two or more rolls, and the points of contact are called the "nips").

Initial runs with the new calenders indicate good results, with fewer calender cuts, and greater speed is now possible.

**WOODLANDS - NORTH**

**Debarking Tests at Portage Plant.** Two development tests were conducted at the Portage Plant the week of January 19—one on poplar and the other on the effect of infrared heat on spruce and fir.

Preliminary results indicate that ring debarking of poplar is feasible. However, the application of infrared heat to spruce and fir long wood warrants continued experimentation.

***

**Truck Delivery to Pittston Landing continues at a very good rate.** As of February 2, approximately 25,000 cords had been landed—30% of the total cut.

Only one truck has gone through the ice, and no injuries were reported. This is an excellent record considering the landing make-up and ice conditions.

**WOODLANDS - SOUTH**

"Environment-Whose Responsibility?" will be the theme of the 1970 Annual Meeting of the Southern Forest Institute, February 25-26 in Atlanta.

Great Northern representatives at the two-day meeting will include James W. Richardson, Southern Woodlands Manager; H. J. Malsberger, Jr., Assistant Woodlands Manager; Noel H. Haskins, Timberland Manager; and Patrick N. Carmichael, Logging Superintendent.
TRANSPORTATION

Decreased Transit Damage. During the past several months, customer complaints on transit damage have decreased greatly.

According to Phillip F. Paul, Traffic Manager-Northern Division, this is due to constant handling with the carrier, the use of dunnage bags on bilge loads (in which rolls are side loaded), and the desire of some carriers to regain business lost because of improper handling in the past.

***

Canadian Pacific Equipment Used. Because of derailments, heavy snowfall and lack of sufficient cars, the Boston and Maine and Bangor and Aroostook Railroads have been unable to handle recent shipments from our Northern mills.

As a result, all tonnage—except that which must move via the Maine Central-Boston and Maine—has been rerouted to the Canadian Pacific Railroad.

PLYWOOD

Press Unloading Rack Modified. During the early part of January, improvements were made on Great Northern Plywood Corporation's press unloading rack.

As a result, the rack is now raised and lowered by hydraulic rams—replacing the mechanical drive, clutch and cable suspension.

The new system eliminates the possibility of a mechanical failure which would allow the rack to fall to the bottom of the press pit.

***

Log Selection by Grade at the cut-off saw was initiated the week of January 26.

High-grade logs are now separated for peeling into lighter thickness, thereby giving more surface footage of high-grade veneer for sanded grades.

***

Plywood Outlook for the '70's Indicates New Sales Records. Despite an expected drop in 1969 production figures, the plywood industry may reach a record 15.8 billion square feet sales total in 1970 reports the American Plywood Association's Market Research Department.

Bronson J. Lewis, APA Executive Vice President, predicts a recovery in housing activity with approximately 1.6 million conventional housing units and 425,000 mobile homes forecast for 1970.

Three factors are expected to assist a "return to life" in housing in 1970:

1. Gradual increase in money flow available for mortgage commitments.

2. Government encouragement of a better climate for all types of housing activity could result in as many as 100,000 modular, industrialized housing units being built during the year.

3. Mobile home industry expansion, with land site problems being offset by growing acceptance of modular home construction. Mobile home manufacturers will also broaden their product lines with many more units of conventional appearance.

Multi-family construction will continue to claim more of the total housing "pie," while production of single family homes will probably remain at its current level.

NAMES IN THE NEWS

PHILLIP H. BARTRAM, Public Relations Supervisor, attended the 1970 International Snowmobile Congress in Duluth, Minnesota, February 9-11. The Congress was sponsored by the Minnesota Dept. of Conservation and the Maine Dept. of Economic Development.

Various workshops dealt with the environmental and economic impact of snowmobiles on private and public lands.

***

K. EARL DURDEN, Vice President and General Manager, Chattahoochee Industrial Railroad, has been appointed by John A. Volpe, Secretary of Transportation, to the National Defense Economic Reserve for a three-year term.

NDER is composed of selected leaders from various segments of the national economy and exemplifies the constructive cooperation between the private and public sectors of our society.

Mr. Durden will assist in providing central control and direction for the allocation and use of all modes of transportation.
NEW EMPLOYEES

LUCIEN A. BRUGGEMAN has joined Great Northern Board Sales Company as Sales Administrator, reporting to R. K. Crippen, Assistant to the Executive Vice President. A graduate of the University of Amsterdam, Mr. Bruggeman was formerly with S & S Corrugated Paper Machinery in Brooklyn and Beloit Corporation, Beloit, Wisconsin.

***

BURTON C. POLAND has joined the Southern Division as Unit Forester, reporting to R. C. Wakefield, Area Superintendent. He is a graduate of Louisiana Polytechnic Institute. Prior to coming with GN, Mr. Burton was self-employed as a Forestry Consultant.

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GEORGE E. VAN GOETHEM has rejoined the Southern Division as General Production Superintendent, reporting to W. W. Ricketson, Mill Manager. A graduate of Oregon State University, he was originally employed at GN in 1963 as Pulp Mill Superintendent. Mr. Van Goethem served as General Production Superintendent from 1967 until August 1969.

PROMOTIONS

VICTOR M. ANTONIELLO has been appointed to the newly created position of Manager of Budgets and Consolidations at Millinocket, reporting to Robert F. Bartlett, Assistant Controller. He will be responsible for overall Company budgeting, consolidation of Company financial statements and other financial reports. Mr. Antoniello joined GN in 1969 as Financial Analyst.

***

ERNEST L. DANIELS has been named Billing Supervisor, Southern Division, reporting to Charles R. Chandler, Manager of Accounting. He joined GN in 1969 as an Accountant after graduation from Troy State University.

C. JACKIE FIRTH has been promoted to Supervisor, General Accounting, Southern Division, reporting to Charles R. Chandler, Manager of Accounting. A graduate of Florida State University, he came to GN in 1967 as an Accountant. The following year, he was named Billing Supervisor.

***

LURENE E. MCAVOY has been appointed Assistant Buyer, Purchasing Department at Millinocket, reporting to F. D. Woodard, Purchasing Agent.

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W. HEENAN SPURLIN has been promoted to Dry End Foreman at Great Northern Plywood, reporting to Emmit L. Long, Dry End Superintendent. Mr. Spurlin joined GN Plywood in 1968 as Mill Clerk and seven months later was named Quality Control Technician. In December 1969 he was made Quality Control Analyst.

TRANSFER

ROBERT D. WALLS has transferred from Board Sales to Newsprint Sales as a Service Representative, reporting to Charles D. Tiedemann, Manager-Newsprint Sales. A graduate of the University of Maine, Mr. Walls has been with GN since June 1969. Prior to joining the Company on a full-time basis, Mr. Walls worked at Millinocket during the summers of 1966-68.

TERMINATIONS

WILLIAM O. WAGNER has resigned from his position as Director of Computer Information Systems, Controller's Department at Millinocket. Mr. Wagner joined Great Northern in October 1958.

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PETER F. YACAVONE has resigned from his position of Controller in the New York Office. He joined the Company in July 1966 as Assistant Controller and was appointed Controller in June 1968.
GREAT NORTHERN REPORTS SLIGHTLY HIGHER EARNING FOR FIRST QUARTER

As released to the press on Thursday, January 15:

Reporting today on the first 12 weeks, ended last December 21, Great Northern Paper Company announced earnings of $3,545,000 on sales of $42,048,000, a shade higher than the $3,491,000 recorded a year ago.

Although net sales revenue of $42,048,000 was only two percent ahead of last year, profit for operations of $6,995,000 increased 13 percent. Containerboard shipments during the quarter decreased 13,490 tons, or eight percent, primarily as a result of an eight-day shutdown at our Cedar Springs mill. During the shutdown one of the power boilers was converted from coal to oil and the recovery boiler stack was rebricked for the first time. Shipments from our Maine mills were down slightly due to the continuing trend to lighter weight papers.

In his interim report to stockholders, Peter S. Paine, Great Northern's Chairman and Chief Executive Officer, pointed out that in light of current market conditions and production schedules, the Company expects to operate at near capacity in the current quarter. He said dividends declared to date amounted to $1,435,000 and reflect the increase in the Common dividend quarterly rate from $.35 to $.40 per share.

Primary earnings per share, based on the average shares of Common stock outstanding and issuable upon the conversion of convertible Preferred stock, were $1.07, the same as last year.

Fully diluted earnings per share, which assume conversion of all convertible securities outstanding, were $1.03 this year as compared with $1.02 last year.

Investment tax credit reflected in first quarter earnings totaled $75,000, or $.02 a share, as compared with $300,000, or $.09 a share, last year.

* * *

Robert J. Shinners, Vice President-Northern Division, and Scott B. Weldon, Manager of Manufacture, visited the Daishowa Paper Company in Fuji, Japan, during the week of January 5 to examine a twin-wire Verti-forma—the first of its kind in the world installed as original equipment.

The machine, at the company's Yoshiwara Mill, has had no trouble making newsprint up to 2,100 fpm, although the quality is not up to United States standards—due to low quality semi-chemical pulp. However, forming a sheet between two wires has the advantage of reduced wire mark—half of what would be on a fourdrinier—since the Verti-forma drains from both sides of the sheet.
Paper Production for twelve weeks ending December 21...

### Production:

<table>
<thead>
<tr>
<th></th>
<th>1969</th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons</td>
<td>Daily Avg.</td>
</tr>
<tr>
<td>Cedar Springs</td>
<td>153,461</td>
<td>2,005</td>
</tr>
<tr>
<td>East Millinocket</td>
<td>91,406</td>
<td>1,088</td>
</tr>
<tr>
<td>Millinocket</td>
<td>74,318</td>
<td>885</td>
</tr>
<tr>
<td></td>
<td><strong>319,185</strong></td>
<td><strong>3,978</strong></td>
</tr>
</tbody>
</table>

### MILLINOCKET

Sulfite Series Screening system for sulfite pulp used at Millinocket was successfully started on January 1. Regular primary screen accepts (as opposed to rejected pulp) are now re-screened through a second set of Cowan screens before going to the Radiclone cleaners. This additional filtering process improves the cleanliness and reduces shive content of sulfite pulp at Millinocket.

** ***

Plastic Forming Fabric Installed on No. 5 Paper Machine. An Appleton plastic monofilament forming fabric, the first of its kind ever run at Millinocket, was put into operation on No. 5 machine January 6.

Installation and start-up were smooth, and the drainage rate on this monofilament fabric—designed to replace a 75"x56" mesh bronze wire—was a bit lower than for the bronze wire. However, wire mark on a 35# Jet O English sheet has been competitive with that for the bronze wire.

The few minor problems with pitch filling the fabric have been solved by using pitch dispersants and a movable shower at the wash roll.

** ***

New Coater Production Record of 6,396 tons was set for the period ending December 22. This represents a 67-ton increase over the previous record of 6,329 tons produced January 20–February 16, 1969.

### EAST MILLINOCKET

River Driven Wood No Longer Used. The East Millinocket Mill stopped using wood directly from the river on December 10 and has since been receiving long logs and four-foot rough (unpeeled) truck and rail wood. It has been necessary to supplement this wood flow with peeled wood previously piled out for winter use.

** ***

Borol System Redesigned. The Borol System at East Millinocket, which formerly used sodium bisulfite produced at the Chemi-groundwood plant, has been redesigned to use liquid SO2 (sulfur dioxide) and Borol (a boron compound) for the production of hydrosulfite bleaching chemical.

The new system went into effect on January 13 and it is expected to result in savings in bleaching costs.

** ***

An Appleton Monofilament Forming Fabric has been running on No. 3 Paper Machine since November 25, 1969—the longest run of this type of plastic fabric.
WOODLANDS - NORTH

"Golden Road" Construction Started. An extensive road building project, called the "Golden Road" (West Branch Road), has begun.

When completed in August 1970, the road will be a "woods expressway," linking together all areas of woodlands into one common road system which will funnel all wood to Millinocket and East Millinocket.

Two independent contractors—H. E. Sargent, Inc. and Sheridan Smith, Contractor (both Maine firms)—and one company right-of-way crew have started work on three sections of the West Branch Road.

To date, clearing and burning right-of-way on major excavation locations is progressing well.

***

Newest Tibetan Arrival. Sither Tenpa, son of Dolma and Lobsang Tenpa, was born December 23 at Gould Memorial Hospital, Presque Isle. Young Sither is the first child born in our Tibetan community two miles north of Portage, and the first Tibetan-American.

***

Hauling Conditions Improve. A month of cold, clear weather has returned wood hauling volume to normal. Robert A. Leadbetter, General Superintendent-Purchased Wood, reports that the first week in January showed the largest truck and rail wood volume delivered to Millinocket since last May. Mill deliveries during the week of January 5 were the heaviest to date for the current season—9,240 cords of rail and 10,140 cords of truck fibre.

Mr. Leadbetter also reports that skidders are replacing the horse on purchased wood, and within another year or two the era when man and horse worked together hauling wood will come to an end.

***

Oldest Retiree Honored. Ulric Cyr, the man who helped tow the first boom of short pulpwood down the West Branch, was the honored guest at the annual Woodlands Christmas party on December 20.

Mr. Cyr celebrated his 86th birthday on December 13, and at the party was presented with a gift and candle-lit cake to note the occasion.

A veteran of more than 20 years of continuous service with Great Northern, when he retired in the 1950's, Mr. Cyr worked on the river drives and at the Millinocket Shop.

WOODLANDS - SOUTH

Proposed Reorganization of Southern Pine Association. The first of a series of meetings to discuss the proposed reorganization of the Southern Pine Association was held the week of January 9 in Atlanta.

The changes are designed to broaden the membership base among both manufacturers and firms in related industries. Under the proposal, the SPA would be divided into 11 membership districts, each represented on the board of directors. Voting would be changed from total shipment volume to one member/one vote, regardless of size or number of mills.

It is also proposed that SPA would reaffiliate with the National Forest Products Association and that greater emphasis would be placed on forest resource development.

If the changes are ratified at SPA's April 6-7 convention, reorganization would be effective immediately and the name would be changed to the Southern Forest Products Association.

CEDAR SPRINGS

Record Cold Weather Beset the South during the first half of January. Fortunately, no serious damage resulted, but freezing lines hampered operations.

Although gas lines were cut off, purchased propane was used for the boiler igniters, and coal and oil provided the necessary fuel—thus eliminating any production curtailment.

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Emergency Basin Empty. Good river conditions brought the emergency basin empty. (continued on next page)
flow has made it possible to empty the emergency basin in order to begin repair work on the discharge valve.

RESEARCH AND DEVELOPMENT

Modifications in Crimping Equipment Suggested. In an attempt to determine exactly what happens during the crimping operation and what improvements can be made to produce better, tighter wrap and less transit damage, high speed motion pictures have been taken of the automatic crimper at Millinocket.

What takes place in eight seconds has been slowed down to approximately 12 minutes—1/90th of the actual speed—allowing a much more detailed examination of the crimping operation.

Preliminary review of the film suggests minor modifications in the crimping equipment.

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New Paper Evaluation Equipment Added. A Scott Internal Bond Tester, a West Linn Blister Tester, an Atlas Fade-O-Meter, and a GRI Printability Tester were recently added to R&D's battery of paper evaluation tools.

The Scott Internal Bond Tester and the West Linn Blister Tester are sophisticated devices, especially effective in the development and quality control of coated, supered paper printed offset with heatset inks.

To understand how these two instruments are being used, one must first understand the problems incurred when coated and supercalendered papers are printed on offset presses with heatset inks.

The coating and supercalendering processes close up the surface of the paper, and a heavy ink film then further seals it. After printing, the ink is dried in high temperature gas flame ovens which turn the moisture trapped behind the coating and ink coverings into steam. This produces an explosion which blisters (delaminates) the paper, causing fibre rise in extreme situations, and puffing (surface roughening) in less extreme instances.

The Blister Tester measures the degree of this condition, while the Bond Tester seeks to improve fibre bonding. If the moisture content can be reduced, the coating can be made more porous—i.e., fibre-to-fibre bonding can be increased.

The Fade-O-Meter is a self-contained laboratory instrument particularly suitable for determining the effects of light under controlled conditions of temperature and relative humidity.

The GRI Printability Tester was designed by the Gravure Research Institute in cooperation with the TAPPI Graphic Arts Committee to provide a rotogravure proof press that could confidently be used by both manufacturer and printer as a basis of acceptance/rejection of paper based on skipped halftone dots.

Test procedure and test inks for this tool must still be prepared by the TAPPI Graphic Arts Committee; when they are ready, Great Northern plans to cooperate with 10 other purchasers of GRI Testers in the development of criteria.

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Wet End Stock Trial. A trial was run on basestock machines at Millinocket the week ended January 12 to determine if internal starch additions will decrease the fibre rise tendency of GN's coated offset paper.

Initial results of the Scott Internal Bond Tester indicate improvement of about 30 points on basestock. This should noticeably enhance pressroom performance.

SALES AND SERVICE

World Color Printing Company Visited. Jacques Dardenne, Sales Representative, Chicago, and John D. Nicholson, Foreman-Finishing, Millinocket, visited World Color Printing Company in Sparta, Illinois, during the week of December 8. The purpose of this meeting was to observe World Color's operations in order to determine means of reducing its white and printed waste.

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PLAYBOY MAGAZINE Orders More Palette + Plus. The third order of Palette + Plus (continued on next page)
SALES AND SERVICE (continued)

Paper for PLAYBOY MAGAZINE was manufactured at Millinocket the week of December 15. The dark blue sheet printed five-color offset with high tack inks and coverage was heavy on both sides.

As a result, PLAYBOY has placed additional advance orders for Palette + Plus green, yellow and red for delivery in the first half of 1970.

PLAYBOY used P+P dark green for its Jazz Poll in October, and the dark violet in the November 1969 issue.

Are Fourdriniers and Newspapers Dead?
Not by a far sight, says Scott B. Weldon, Manager of Manufacturer, in an interview appearing in the January 1970 issue of PULP & PAPER.

"There are so many people making groundwood papers between 2,500 and 3,000 fpm," Mr. Weldon said, "that it is obvious the standard fourdrinier is not dead."

"However," he continued, "when considering speeds much beyond 3,000 fpm on groundwood, and especially when talking basis weights less than 32#, a two-wire forming device appears to have distinct advantages. The technical problems of high speed can then be expected to move to the presses and early dryer sections."

"Already, I would guess that offset paper made on a twin-wire machine has some appeal to the printer that isn't apt to be matched with a standard fourdrinier," Mr. Weldon noted. On the other hand, he said a question yet to be answered is whether or not papers requiring high finish, roto sheets in particular, can be successfully made when two wire sides are involved. Highly filled sheets and grades that require on-machine centrifugal cleaners have special problems yet to be resolved.

PULP & PAPER then asked Mr. Weldon why conventional fourdrinier machines are becoming wider and wider and the reasons for this approach to high productivity.

"There are three significant advantages to the ultra-wide machines," Mr. Weldon pointed out. 1. per ton of paper made, there are fewer deckle edges; 2. a better opportunity to maximize trim; and 3. design of an efficient shipping winder is becoming a critical problem as machines exceed 3,000 fpm. (At lower speeds, a wider machine doesn't push the winder nearly as hard in its winding cycle.)

Mr. Weldon was skeptical about predictions that electronic media (in-home TV sets reporting the daily news) will soon replace newspapers.

"While the prospect of receiving typed-out news over private TV sets sounds intriguing, I believe the format of newspapers will be difficult to beat as the media for distributing the news behind the headlines," he remarked.

"The publisher's knowledge in cataloging and arranging the news in a proven array that suits the individual tastes of his subscribers will be his strong suit," he said. "Moreover, the growth in suburban papers seems to indicate that people are being satisfied by TV and major city newspapers for national and international news coverage." As a result, Mr. Weldon noted that the public is developing a new appetite for more detail in its regional and local news.

"If these two assumptions are valid," he said, "we should see continued growth rather than decline in the consumption of paper by news publishers."

When asked to comment on product quality trends and the increasing pressure for change in newsprint properties and performance, Mr. Weldon told PULP & PAPER that publishers are becoming more aware of the difference in color between suppliers. "Brightness and cleanliness will undoubtedly follow," he explained.

"With this new awareness, it can be anticipated that the publisher will first ask for conformance on the part of all suppliers to some color standard; subsequently, he will negotiate for brighter, cleaner papers."

For publishers where mailing is a significant cost factor in the distribution scheme, Mr. Weldon feels lightweight sheets will be of particular interest. "Publishing economics will dictate that switch," he said.
NEW EMPLOYEE

DANNY R. CHANDLER has joined the Southern Division as Mechanical Engineer, reporting to Waylon A. Lacey, Plant Engineer. Mr. Chandler is a 1969 graduate of the University of Georgia where he earned a Master's degree in Agricultural Engineering.

PROMOTIONS

RICHARD E. COLBURN has been promoted to Systems Supervisor, Administrative Services Department at Millinocket, reporting to William O. Wagner, Director of Computer Information Systems. A graduate of Tufts University, Mr. Colburn received a Master of Science degree from the University of Southern California. Mr. Colburn joined GN in June 1967 as a Mathematical Analyst, and for the past year has been a Senior Systems Analyst.

MARY ROSE DANIELS has been named Public Relations Assistant in New York, reporting to Robert P. Vivian, Director of Public Relations & Advertising. A graduate of Regis College in Weston, Massachusetts, Miss Daniels joined the Company in February 1969. Prior to this, she had been a Publicity Writer at Connecticut General Life Insurance Company in Hartford.

PAUL I. FIRLOTTE has been appointed Chief Electrical Engineer, Central Engineering at Millinocket, reporting to Donald G. Griffie, Chief Engineer. Mr. Firlotte came to Great Northern in 1956 after graduation from the University of Maine. Most recently he has been Project Manager, responsible for coordinating engineering, construction and start-up of the MgO Recovery System at Millinocket.

OJARS (JOHN) RUTENS has been promoted from a weekly classification to the position of Production Scheduler, Commercial Grades, in the New York office, reporting to Edward J. Leonick, Sales Administration Supervisor. Mr. Rutens attended New York University and has been with the Company since July 1966. Prior to this, he was with The Travelers Insurance Companies in New York City.

GEORGE SCHNAUFFER and STEVEN F. SCOFIELD have been promoted from Sales Trainees to the position of Junior Salesman, Commercial Sales, in New York, reporting to J. Paul DeMarraís, Regional Manager, Commercial Sales.

Both men joined GN in November 1968 as Sales Trainees. Mr. Schnauffer attended Valparaiso University in Indiana, and was formerly Printing Production Manager at Arinco, Inc. in Passaic, New Jersey. Mr. Scofield is a 1968 graduate of Syracuse University.

HAROLD E. STEPLER has been promoted from hourly payroll at the Southern Division Woodlands Department to a Unit Forester in the Albany Area, reporting to Hoyt S. Grissom, Area Superintendent. A graduate of Stephen F. Austin State College in Texas, Mr. Stepler came to GN in June 1969.

DANIEL L. WILLIAMS, JR. has been named Director of Marketing-Board Sales. In this new position, Mr. Williams will retain direct responsibility for the Southeastern sales area, as well as assist James L. Bellis, Manager of Board Sales, in the line of supervision of the total sales effort.

TERMINATION

JEROME H. WALKER, JR. has resigned from his position as Assistant to the Director of Public Relations & Advertising to rejoin EDITOR & PUBLISHER as Associate Editor. Mr. Walker, former Editor of the Newsletter, joined Great Northern's Public Relations & Advertising Department in New York in April 1969.