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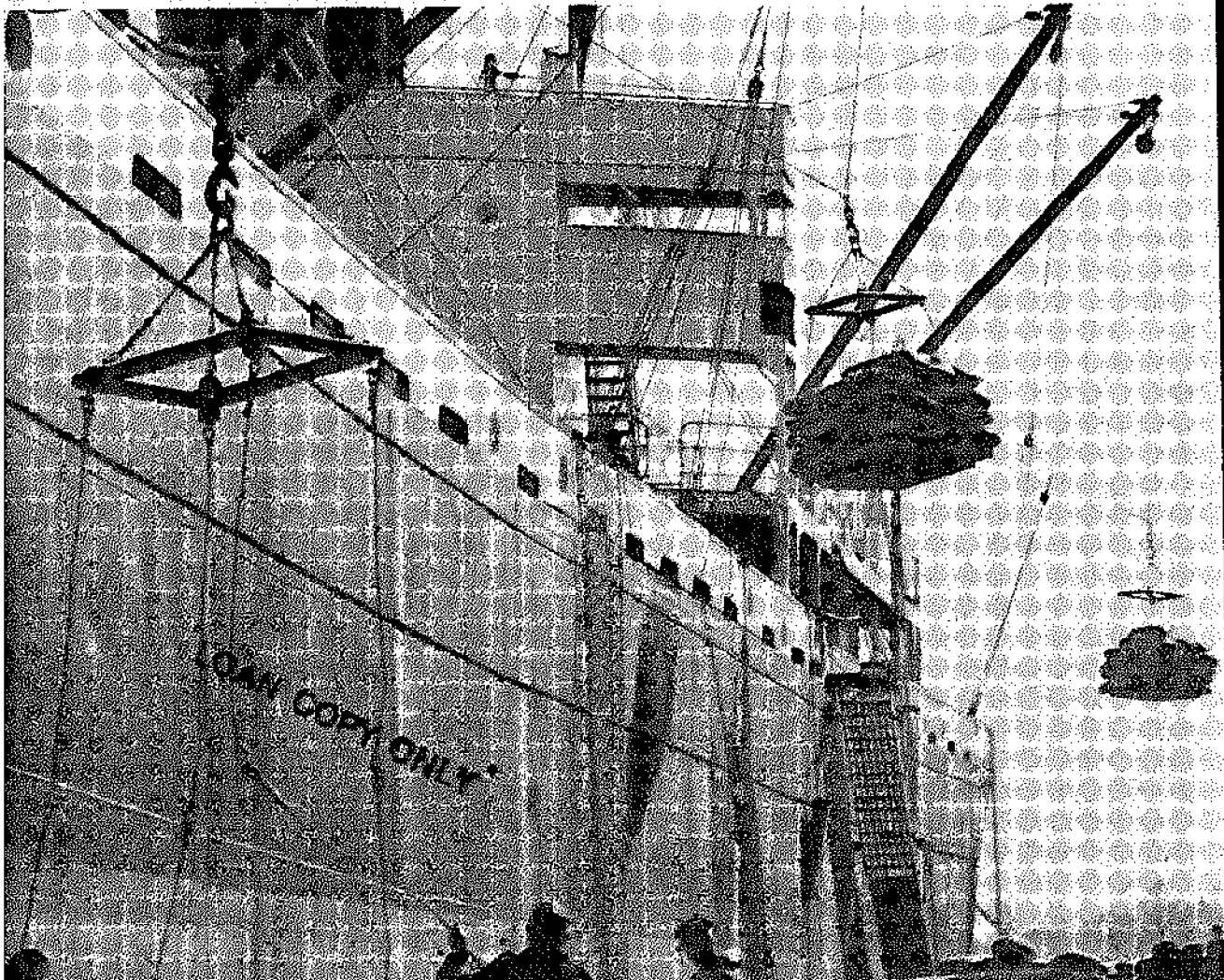
CONFERENCE HIGHLIGHTS

Agriculture and the Seaway

From Field to Foreign Market

LOAN COPY ONLY September 25-27, 1986

Sponsored by
Minnesota Sea Grant Extension Program,
University of Minnesota
St. Louis County Extension Service,
University of Minnesota
Adult Education Department,
Duluth Area Vocational Technical Institute



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AGRICULTURE AND THE SEAWAY

From Field to Foreign Market

**September 25-27, 1986
Duluth, Minnesota**

**Karen Plass
Editor**

Cover:
**Loading Food for Peace grain products in Duluth
for shipment to a Third World country.**
Photo courtesy of the Seaway Port Authority of Duluth.

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INTRODUCTION

The importance of grain to the Twin Ports of Duluth, Minnesota, and Superior, Wisconsin, can be seen in their waterfront silhouettes, which are dominated by grain elevators. The Twin Ports have long been both destination and shipping points for grain, which arrives in trucks and trains from America's agricultural heartland. Duluth is in a geographically critical location: it is the western terminus of the St. Lawrence Seaway, through which the grain and other agricultural products are exported overseas. Thunder Bay, a major grain port, plays a similar role in Canada. Grain exports are vital to the economic well-being of the Seaway as well as the ports. In fact, grain traditionally accounts for about half of the tonnage shipped on the Seaway.

In recent years, exports of grain from both the U.S. and Canada have plummeted. This has

been a blow to the ports and the Seaway, which continue to suffer from a slump in demand for taconite. The decreased demand for taconite and grain is felt in inland production areas as well. First Minnesota's Iron Range was hard hit, and now we are in the midst of an agricultural crisis.

Because the slump in grain exports is hurting the grain growers as well as shippers, both groups were involved in the **Agriculture and the Seaway Conference**. The conference provided a forum where experts from the agriculture and shipping industries, the universities and the Seaway could exchange ideas about the causes of and solutions for today's flagging grain exports. The conference was unusual in that high-school students with an interest in agriculture were invited. One school group came all the way from North Dakota.

In these proceedings, readers will find some rather grim statistics describing the recent declines in U.S. and Canadian grain exports. Some of the problems are linked to government policies and the physical constraints of the Seaway system. Others, however, are due to changes in international agriculture that may be largely beyond our control. For example, several counties that formerly imported grain have recently become self-sufficient producers or even exporters of grain, through the use of modern agricultural technology.

In keeping with the wide range of problems that were identified, the speakers proposed a variety of solutions — actions and changes that dealt with things like U.S. farm policy, federal cargo preference regulations, protectionism, Seaway maintenance and operation, cost-containment and marketing.

The conference was successful in providing a forum for discussion and the exchange of ideas. In addition, it is hoped that this proceedings booklet will provide an interesting and useful summary of the presentations.

A number of people helped make the conference a success. I would particularly like to thank Gene Bromenshenkel and Rodger Palmer, who undertook the responsibility of planning and coordinating the hundreds of details that are involved in a conference of this magnitude.

A handwritten signature in cursive script, reading "Dale R. Baker".

Dale R. Baker

Director, Minnesota Sea Grant Extension Program

OPENING PRESENTATIONS

Speakers: **James L. Emery**
 Jim Nichols

James L. Emery
United States Administrator, St. Lawrence
Seaway Development Corporation

This conference is timely for two reasons. First, because grain is the Seaway's bread and butter cargo, accounting for almost one-half of the 1.1 billion metric tons of cargo moved on the Seaway since it opened in 1959. The Seaway is essentially a grain route, and without grain we can't make it.

The second reason this conference is timely is because grain exporting and shipping is a business of peaks and valleys. Calling the current situation a valley might be too mild. Maybe we should call it the bottom of the Grand Canyon. What better time is there than today to answer two questions: (1) how did we fall into the canyon, and (2) how do we climb out?

Maybe things wouldn't seem so bad if we hadn't fallen off a high cliff. Only a few years ago, in the late 1970's, grain exports and Seaway shipping were on a roll. As recently as five years ago, the Seaway had a fifty million ton year, with twenty-six million tons made up of United States and Canadian grain exports. We were fat, happy and maybe complacent in our success.

But the seeds of our misfortune were being sown as the onslaught of inflation drove up interest rates and with them the value of the dollar. As the dollar rose, our grain became less and less price-competitive in world markets.

Even then, we might have survived if it wasn't for the most catastrophic event in the history of American agriculture: President Carter's ill-advised decision to embargo grain sales to the Soviet Union. That single policy decision produced disastrous long-term ramifications which are still with us today. Not only did it close off one of our major markets, costing millions of tons of lost sales per year. It also sent an ominous message around the world that the United States could no longer be counted on as a reliable supplier of grain.

With one stroke of the pen, we violated the cardinal rule of international grain trading: security of supply. It ruined our reputation and we've suffered from it ever since.

The damage was compounded when other nations moved in to fill the vacuum. We gave them the incentive and a golden opportunity to take our markets away. They increased production and subsidized their grain.

Today the world grain market is glutted. We are locked in a "Cold War of Commodities," and it is not being waged with our enemies, but with some of our closest allies, such as the European Common Market and Australia.

Now, six years after the embargo, the Russian troops are still in Afghanistan, and we're

stockpiling grain on high-school football fields because there's no place else to put it.

We're at a critical juncture where we as a nation — including agriculture, shipping and government -- must make a long-term commitment to recapture our world market share. The alternative is to endure continued atrophy and retrenchment in this most basic aspect of our national economy, one that is particularly important here in the Midwest-Great Lakes region.

A long-term commitment can succeed given three new trends in the competitive environment. First, President Reagan's leadership in lowering the dollar relative to other currencies is making American grain more attractive to foreign purchasers.

Second, we have the attention of policymakers in Washington. We need both Houses of Congress and both parties working together on this issue. There is no time for potential one-upsmanship. If all efforts are harnessed together to sell agriculture, instead of trying to build points on the backs of a depressed industry, we'll see our grain exports increase.

Third, there is an increasing world awareness that the current vicious cycle of subsidy, over-production and surplus can't go on forever.

These three developments are positive steps, but it has taken a long time to get us in the mess we're in, and it will take a while to get us out.

In the meantime, we at the Seaway are exhausting every channel to be there when the market does come back. Our efforts span the

four areas of marketing, transportation cost control, lock maintenance and long-range strategic planning.

Major marketing thrusts have included our formation of a Seaway Grain Export Task Force to identify ways the Seaway can become more competitive as an export grain route, and annual Seaway trade missions to our prime trading partners in Europe.

We are making an all-out effort to control Seaway costs and hold the line on tolls. We have frozen United States tolls for the past three years.

Ports, labor and shipping companies have joined our efforts to control costs. The greatest example of that was achieved in Duluth this year with the International Longshoremen's Association (I.L.A.) and the terminal operators agreeing to wage and rate reductions for handling P.L. 480 "Food for Peace" cargo. Their efforts have paid off: P.L. 480 shipments through the port of Duluth are up by fifty thousand tons this year. Without I.L.A. and terminal cooperation that cargo could have been lost to other coastlines. Their success was a plus for the entire Seaway system.

The remarkable thing is that they did it despite the requirement, under law, that 60 percent of P.L. 480 cargo must move on U.S.-flag vessels, which are virtually extinct in serving the Seaway. This cargo preference requirement discriminates against the Seaway and Great Lakes ports, and it eats up money that could go toward increasing the amount of food exported. Given the current world market situation and the need to reduce our vast surpluses, maybe it's time that something was done, at least temporarily.

to ease the cargo preference rules. Addressing that issue will require the united cooperation of Midwest agriculture, Great Lakes ports, labor and our Congressional delegation.

Another area we're working on is ensuring the dependability of our locks. We have in place a three-phase program including extensive lock rehabilitation, an analysis of lock wall stability, and development of a contingency plan to allow a quick and effective response to possible lock problems.

We are also looking at ways to enhance the long-term viability of the Seaway into the year 2000. Secretary of Transportation Dole has appointed a Seaway Strategic Planning Group composed of a cross-section of Great Lakes leaders to advise her on marketing, incentive tolls, financial planning and infrastructure.

Jim Nichols
Commissioner of Agriculture, State of Minnesota

Duluth has depended for years on two mainstays, wheat and iron ore. We also export barley, sunflowers, corn, beat pulp, bulgar wheat (generally bagged to Africa as P.L. 480 "Food for Peace" shipments), and a variety of other processed and finished products as well. We've improved our position this year, compared to last year, as a P.L. 480 shipper.

We load a lot of shipments for Europe and Africa at the port of Duluth and at other Seaway ports. The ship size we load here is generally compatible with the smaller harbors and ports in Africa and Europe. The Asian countries handle

much larger ships, which are loaded either on the West Coast or at the port of New Orleans. Our market is to the east, whether it's Europe or Africa.

I would like to talk today about three things: the value of the dollar, protectionism and U.S. grain exports.

Inflation doesn't drive the value of the dollar up overseas. Instead, the reverse happens. Our dollar is tied principally to the amount of money borrowed by the federal government, and the government has borrowed over a trillion dollars in the past five years. That is like a giant vacuum sucking American currency out of local banks: most Minnesota banks are one-third to one-half loaned out to the federal government. It also attracts currency from foreign countries, and that drives the value of the dollar up overseas.

The overvalued dollar has become, basically, a 30 percent tax on everything we export, and a 30 percent subsidy on everything we import. That's a 60 percent differential.

The United States and Canada are the world's largest trading partners. Canada is also one of our great competitors. Right now the Canadian dollar is worth about 70 cents on the U.S. dollar. Canadians have captured much of the wood-products market in the U.S., because they can automatically undersell us by 30 percent and it's the same value to them.

Japan, which is entirely dependent upon trade, is probably the most protectionist nation in the world. The Japanese do not like protectionism: everything they do is good business, not protectionist. But try and sell

products to Japan; they will not let American food in. Most countries of the world protect their domestic markets. There's only one free market in the world, and that's us.

Wheat is a big product out of this port. U.S. wheat exports were (in billions) \$8 in 1981, \$6.1 in 1982, \$5.8 in 1983, \$5.6 in 1984 and \$2.9 in 1985. These exports have dropped by more than half. We are now exporting fewer tons and selling those tons more cheaply, so we are getting hurt in two ways. American farm exports peaked at about \$44 billion in 1980. For this year, the U.S. Department of Agriculture is predicting farm exports of only \$26 billion and we won't make that. This drop of 40 to 50 percent in our American farm exports over a six-year period was caused by several things: the Carter grain embargo, the overvalued dollar, and the export of our technology to the rest of the world. China and India, the world's two most populous nations, have become exporters of grain.

The world's largest grain importer is the Soviet Union, which is also the world's second largest producer of wheat, behind China. We are third. Two years ago the Soviets were the largest buyer of American wheat. Last year they bought very little. This year, although we have an agreement to sell them 4 million tons of wheat, they have bought almost none. The Soviets bought 530 million bushels of corn last year out of the 1.3 billion that we sold. If the Soviets ever get organized, U.S. farmers will lose about 40 percent of their corn sales.

Every other nation subsidizes exports. The U.S. is the only one that lowers the price of grain and subsidizes farmers. It's ridiculous and we can't afford it. We will spend \$30

billion this year to subsidize farmers, principally because the government decided to lower the price of grain so we could be competitive in world markets. When the dollar went up 30 percent, they had to cut the price of my grain 30 percent to get back to where I was in 1980, just in world price. They had to cut the price of our grain 30 percent to make us competitive because of the overvalued dollar and the federal deficit.

Other nations subsidize their exports, and we have to compete with them. The Soviets are buying wheat for \$80 a ton from Canada. We have to meet that price. There is a way to meet it that is simple, cheap and easy: use surplus wheat as a bonus. The message we have to give to the world is buy 10 bushels and I'll give you three free — or I'll give you five or 10 free. To any country that is willing to send a ship to load here at the port, we should say send another ship and we'll load it free.

I believe that over 70 percent of Duluth's elevator capacity right now is tied up in government grain. The terminal elevators are full of grain. We have grain stored here at the port of Duluth that the taxpayers are buying back for the second and third time in interest and storage. That's what it costs us to store it. In fact, the cheapest thing we could have done for the taxpayers was miss the terminal elevator and dump it in the harbor. Large terminal elevators can make more money storing grain, without risk, than they can exporting it. Cargill probably has the best facility in the world. Unfortunately, it is largely filled with government grain, at great cost to taxpayers. Let's save the taxpayers money by taking that grain out of storage and using it as a bonus.

Most people are afraid of protectionism. We need to eliminate it, but let's start with the other countries of the world that are protectionist. The European Common Market is very protectionist. Within it they have eliminated all protectionism and equalized the currency, but it wouldn't work if one nation was protectionist and another was not. That's the situation we face in competing with Canada, Japan, Europe, Taiwan and China, and we need to deal with it.

GRAIN TO FOREIGN MARKETS — HOW DO WE GET IT THERE?

Panel I Moderator: Ed Tyrchniewicz

Panelists:
Sven Hubner
William D. Martino
Daniel L. Zink
Cecil Watson

Ed Tyrchniewicz
Director, Transport Institute, University
of Manitoba

Many changes are taking place in agricultural products and in their marketing and transportation. The concerns expressed in the grain belts of the United States and Canada are similar: what has happened to our markets?

We have to concentrate on paying attention to what the marketplace wants, finding out what our competitors are doing to meet those desires, and getting a piece of that market for ourselves.

This section focuses on the interaction between grain transportation and marketing. When we look at marketing our grain, we must remember that the St. Lawrence Seaway is an important transportation route, but it is not the only alternative.

Sven Hubner
Vessel Agent and President, Guthrie-Hubner,
Inc.

Let's take a ship across the North Atlantic through the Seaway. Say a ship is sailing from Rotterdam to the St. Lawrence River, a trip that normally takes 10 days. The ship picks up its first pilot in Escomains; there will be a pilot on that ship all the way through the Seaway up to Duluth-Superior. In Montreal the ship is inspected to see that all the regulations have been followed. Then it sails through seven locks in the Seaway itself, and is raised about 248 feet into Lake Ontario. It bypasses Niagara Falls via the Welland Canal where eight locks raise it about 333 feet. At Sault Ste. Marie, the final lock raises the ship 21 feet. It is now on Lake Superior, 602 feet above the Atlantic Ocean.

An agent is hired to look after the owner's interests. As the ship comes up through the lakes, we talk to it every day, monitoring its progress and telling the captain how it will load.

When the ship arrives here, it goes through a lot of red tape. The U.S. Department of Agriculture inspects it for cleanliness. The National Cargo Bureau inspects it for cleanliness and to see that the load is balanced for proper stability. Then the Customs Service and the Immigration and Naturalization Service check it over.

We want to get the ship loaded and out of here. Normally, we load at two elevators, but the shipper has the right to go to three elevators. Whenever a ship shifts from one

elevator to another, it costs roughly \$3,500 for pilots, tugs and linesmen. It is expensive and time consuming. If we load a ship at just one elevator, we save a lot of time and cost. We expedite the ship as much as we can: the faster we do it, the less costly it is.

When the ship is loaded and ready to go, we get the pilots and check the route. It will take maybe a day more to cross the ocean with a load, so it's about 16 days from Duluth-Superior to Rotterdam.

Because we can load to a maximum draft of 26 feet here on the Great Lakes, we load only about 18,000 tons even though the ship might have a capacity of 33,000 tons. Rather than send it across the ocean only partly full, we try to top the ship off in the St. Lawrence River so it leaves filled to capacity. When the ship is loaded and gone, we do the documentation, which is horrendous.

The Seaway locks are only 800 feet long and 80 feet wide. Those dimensions, and the maximum allowable draft of 26 feet, are very mediocre in today's steamship business. But those limitations are not necessarily all bad. Major importers of Duluth-Superior shipments for the last three or four years have been Algeria and other North African countries. They love our Red River Valley Durham wheat, and we have an advantage in that all the ports in Algeria are shallow-draft: 28 feet. Ships loading at East Coast ports, carrying loads four times as large as ours, can haul at cheaper rates per ton, but they can't get into Algeria because they draw about 42 feet. That market belongs to us.

The future looks good. The dollar has gone down. That has not yet had the effect we hoped

for and expected, but I think it will eventually. In addition, the developing countries will have more buying power when oil prices go up again.

We face competition everywhere. What we have to do in this port is be better than our competitors. The grain must get to its destination, no matter what. We have to get our act together, develop a better labor climate, and be out there promoting and doing better than our competition on the East Coast, West Coast and the Gulf.

William D. Martino
Account Manager, Grain Transportation
Marketing and Pricing, Soo Line Railroad

The Soo Line Railroad has been in existence since the 19th century. Recently we acquired the Milwaukee Road. Both the former Soo and the former Milwaukee were Granger Lines, meaning they had extensive trackage in the Midwest grain-production areas. The Soo was strong in the Upper Great Plains wheat territory, predominantly in North Dakota and Northwestern Minnesota. The Milwaukee was strong in Southern Minnesota and Northern Iowa, in corn and soybean country. This year, the new Soo Line will haul close to 90,000 carloads of grain and seeds. Most originate in those country areas, and many end up at Duluth or Superior. The size of that total haul indicates the importance of grain to the Soo Line.

The Soo serves two major grain territories: the wheat belt and the corn belt. The wheat belt is a natural hinterland for

Duluth-Superior, which has always been an important destination for Soo Line grain. The main lines are used for originating grain and hauling traffic like lumber and potash. Branch lines exist almost solely for grain. Without grain, the branch lines would be scrapped.

In the grain territory, we serve an extensive network of country elevators, mostly locally owned co-ops. They buy grain from the farmers and sell it to exporters or domestic millers and maltsters either directly or through commission houses. They can load 1, 3, 24 or 50 cars at one time for one destination. The number of cars loaded depends on a number of factors: elevator capability, the availability of grain and the farmers' willingness to sell it, the amount desired by the buyer, and the market demands at a particular time of year. The Soo gathers up these shipments and moves whole trainloads of grain into its most important terminals, the Twin Cities of Minneapolis and St. Paul and the Twin Ports of Duluth and Superior, where the cars are unloaded into large terminal elevators.

At the Twin Cities, the grain is positioned for further movement, either by barge to Gulf ports or domestic flour millers, or else by rail to domestic millers and maltsters. Or it is used locally at the flour mills and malt houses in the Twin City area. At Duluth-Superior, the grain is positioned for further movement, either by vessel to foreign countries or to East Coast flour millers and maltsters, or else by rail to U.S. millers and maltsters. Or it is used locally at ConAgra's huge flour mill in Superior.

The Soo has no direct dealings with vessel, barge or port operators. Decisions as to the

ultimate destinations of the grain are made by grain buyers through market mechanisms.

Historically, Duluth-Superior has been an important outlet for wheat, Durum, barley and sunflower seeds. The barge market at Minneapolis and St. Paul has been a destination for wheat and Durum. Southern Minnesota corn and soybeans usually find their way to the Mississippi River, although Duluth-Superior has occasionally exported corn. This was especially true when the Soviets were buying U.S. corn.

Changes are occurring. Currently, there is less movement of barley and sunflower seeds to the Twin Ports due to decreased U.S. exports of these commodities, on which Duluth-Superior had a virtual monopoly. Also, Duluth-Superior has not seen any corn since the Soviets cut their U.S. purchases. There is now a small movement of feed barley and Durum off the Pacific Northwest. Much of the wheat and Durum that once moved through Duluth-Superior is now moving by barge from the Twin Cities to Gulf ports.

Until about two years ago, the Twin Ports were the major destination for Soo country wheat and Durum. Now the Twin Ports and the Twin Cities are about even. The Twin Ports have been adversely affected by cheap barge rates on the Mississippi, low ocean-vessel rates off the Gulf, and reduced demand from Western Europe and the Soviet Union. The Soo country grain rate structure from the wheat belt treats the Twin Cities and the Twin Ports equally. Market mechanisms, rather than our rate structure, determine which market attracts the grain.

There are other ways to move Soo country grain for export. We can move grain all-rail to Gulf and Atlantic ports or all-rail to 12-month

barge terminals on the Illinois, Ohio and Mississippi Rivers. These are mainly winter routes, used when the Seaway and the Upper Mississippi are frozen, and covered hopper cars are surplus.

From April through November, however, we like the Twin Cities and Twin Ports for our export business. We keep our cars on-line and can return them quickly to the country for more loads. This is critical during the harvest months of August through November, when surges in grain shipments are unavoidable.

We continue to receive requests for all-rail programs even after navigation opens on the lakes and river. For Gulf moves, due to market inverses, there are sometimes premiums for speed of movement, a situation which favors all-rail over barge. This bears watching.

Market forces, demand, and competitive pressures will determine how much grain is moved all-rail to ocean ports, away from the traditional export outlets at the Twin Cities and Duluth-Superior.

Daniel L. Zink
Transportation Economist, Upper Great
Plains Transportation Institute, North
Dakota State University

Our international marketing system is a series of interrelated activities — a chain of events that gets commodities from the Midwest into the hands of foreign buyers. One link in this chain that is often ignored is our rural road system. This road network consolidates feeder lines for major arterial highways much as

railroad branch lines "feed" the carrier's main lines. Our rural road network is facing serious problems as our agricultural marketing system undergoes major changes.

Agricultural products in North Dakota are transported by truck and rail. The mode selected is a function of many variables, including government policies and regulations, technology, and production patterns. Recently, railroads have dominated shipments of raw agricultural products from the state. In 1978-79, trucks hauled 41 percent of all grains and oilseeds shipped from the state. Since then, the truck share has declined, but the absolute volume carried by trucks has remained relatively constant due to the increasing volume produced and marketed from the state. The state's road system has been affected by these volumes.

State roads have also been affected by changes in the vehicles themselves. The size of over-the-road trucks has increased and may have out-stripped the road system's ability to accommodate larger vehicles. In addition, legal weight limits for grain trucks have been increased, putting increased pressure on local roads. Farm trucks are used for hauling grains from fields both to farms and to local country elevators. Farm trucks affect local roads according to their axle configurations, maximum weights, and distances driven. Between 1973 and 1980, average farm truck payloads increased from 248 to 310 bushels. The average distance traveled by farm trucks increased as well.

Country grain elevators consolidate small shipments from farmers and merchandise them in larger consignments at major terminal markets. This involves three steps. The grain is

purchased and received from farmers throughout the marketing year. Then it is conditioned -- blended, dried and cleaned -- and stored. Finally, it is sold and shipped.

The number of grain elevators in North Dakota decreased from about 2,000 at the turn of the century to 563 in 1984. This has significant implications for local roads. Fewer elevators mean longer hauls, and more deliveries funneled onto the roads that approach the elevators. Road deterioration may be more dramatic.

In addition to the decrease in elevators, more of the grain is being handled by fewer firms. The five largest grain elevators in 1977-78 handled about 5 percent of all grains marketed from North Dakota. In 1983-84, the five largest firms handled almost 10 percent of those grains.

Changes in North Dakota's grain-gathering system were precipitated in 1980 by the introduction of "multi-car" railroad rates. Under these rates, reductions are offered for shipping grain in multiple-car lots. The effects of this pricing policy have been numerous and far-reaching.

A major change has been the emergence of "subterminal" grain elevators, which can load grain into 26- or 52-car trains to obtain the associated rate savings. Today North Dakota has 147 subterminal elevators that have been constructed or upgraded to subterminal capacity since 1980. Although those 147 subterminals represent only 30 percent of the elevators operating in North Dakota, they handled 59 percent of all grain and oilseeds shipped from the state during the 1984-85 crop year. The advent of subterminal elevators has had

consequences for North Dakota's road and bridge network. Most significant is probably the development of "subterminal/satellite" cooperative elevator companies, formed by merging several local elevators to consolidate grain shipments through a single shipping point.

Although the primary method of marketing is still from farm to elevator to terminal market, significant quantities of grain are trucked from one elevator to another for reshipment, which has led to a significant increase in local truck traffic in some parts of the state. In 1983-84, almost 32 million bushels (40,000 truckloads) were moved between elevators, in addition to the 145 million bushels that were trucked out of state. While interstate truck shipments are routed to the nearest major arterial or interstate highway, intrastate shipments are made primarily on state or county roads built to a lower structural design standard.

A final agricultural change affecting rural roads is agricultural processing. Prior to the 1970's, this was mostly limited to blending, mixing and grinding at local feed plants for nearby livestock consumption. Since then, however, several processing plants of varied sizes have been constructed, including three sunflower crushing plants, two barley malting plants, a pasta manufacturing plant and two alcohol fuels plants. Commodity shipments for in-state agricultural processing can be substantial. In the 1984-85 crop marketing year, total shipments of grain and oilseeds to in-state processors amounted to approximately 70 million bushels, of which over 50 million bushels were shipped by truck.

Cecil Watson
Chairman, North Dakota Wheat Commission

Getting grain to foreign markets is a primary concern of wheat producers in the United States, since the U.S. consumes less than one-half of what it produces. Wheat producers have formed market-development organizations like the North Dakota Wheat Commission in fourteen wheat-growing states. These organizations are funded by the farmers themselves by a checkoff at the time of the first sale.

The wheat-growing states have a national market-development organization called U.S. Wheat Associates, which is based in Washington, D.C. U.S. Wheat Associates has 13 fully staffed offices and carries out market-development activities worldwide. These activities occur in four program areas: market analysis, market information, trade servicing, and technical assistance. This approach allows enough flexibility to meet almost any challenge in market development.

Market analysis is an ongoing program which is basic to market development. Market screenings pinpoint prospects and problems within countries. Market analysis keeps current information about each country's supply of and demand for wheat. It also notes any political and social activities that may influence purchases of wheat.

Market information is very important to a sound market-development program. There is a general lack of unbiased, factual information about worldwide supply, demand, and availability of wheat. Overseas buyers rely heavily on U.S. Wheat Associates' information, which is made available in foreign languages.

Trade servicing is a broad-based, highly varied program designed to bring people from overseas to the United States for approximately three weeks to observe all facets of the U.S. wheat industry. Trade teams observe the wheat industry from the farm to the manufacture of the end products. The objective of this program is to foster a better understanding of the U.S. system.

Technical assistance is very important in the markets of a developing world, especially in areas where wheat is not a common food. A lack of education and training of overseas millers and processors of wheat products contributes to poor management, poor-quality end products and, in general, an inefficient overseas wheat industry. Millers and bakers from overseas are brought to the United States to observe and study our system so they can apply it to their own. Consultants from the United States also do on-site trouble-shooting when problems occur in foreign mills and bakeries.

Our hope is that these activities will convince other countries to buy wheat from the United States, but there are no guarantees that this will occur.

The St. Lawrence Seaway is important to North Dakota and the North Dakota Wheat Commission, since one-third of our hard red spring wheat, one-half of our Durum and one-fourth of our barley are moved on the Seaway each year.

QUESTIONS

- Q. Did you say that rail rates are equalized between the Twin Cities and the Twin Ports?
- A. (Martino) Traditionally, rates from the wheat territory of North Dakota and Western Minnesota are equalized into the Twin Cities and the Twin Ports. With a few minor exceptions, the rates are the same.
- Q. Would you elaborate on the premium service and how that might lead to an all-rail route to the Gulf or the East Coast?
- A. (Martino) Once loaded, a train can go all the way down to a Gulf port or a 12-month barge terminal if there is a demand for it and the railroad prices allow it. The premium I mentioned is that sometimes if they need the grain immediately, let's say in New Orleans, it will go all-rail rather than by barge because rail is much quicker.

REBUILDING WORLD GRAIN MARKETS

Panel II Moderator: C. Ford Runge

Panelists: Ron Rudolph
Stan Smith
Jerry Fruin

C. Ford Runge
Associate Professor, Department of
Agricultural and Applied Economics,
University of Minnesota

Two questions are fundamental to the rebuilding of world grain markets. First, what can be done to increase world trade in agriculture and, specifically, what can be done to improve the competitive position of U.S. agriculture? Second, how can Duluth-Superior best share in that growth?

First, what can be done by U.S. policymakers to increase the size of the agricultural trade pie, and what should be avoided to keep it from shrinking further? The size of the world trade pie in agriculture seems unlikely to grow as rapidly as in the past. What growth is achieved will depend largely on the policy decisions we make to promote this trade. We can think of this as the external competitiveness of the U.S. in world markets. If we improve our external competitiveness, Duluth-Superior and the Seaway will benefit. The specific measures required will depend on the sources of demand, particularly from Europe and the Soviet Union, for exports from Duluth-Superior.

Second, what about the proportion, or slice, of the pie received by Duluth-Superior and the St. Lawrence Seaway in relation to other U.S. ports and the Mississippi River system? In other words, how can our internal competitiveness be enhanced through changes in policy such as cargo preference?

Ron Rudolph
Regional Director, St. Lawrence Seaway
Development Corporation

I will limit my comments to one important factor in rebuilding our grain market, and that is reliability. The U.S. must be seen as a reliable source of supply by the world grain buyers.

For many years the U.S. was this steady, reliable source of grain to the world. But when President Carter decided to use agriculture as a tool in international diplomacy by placing an embargo on grain sales to Russia, that changed suddenly. We lost one of our largest customers and gave competing, producing countries what they needed to become truly strong competitors in world markets.

The subsequent strength of the U.S. dollar was unfortunately timed, and further reduced our competitiveness in world grain markets. Although this has been changing rapidly and we are now moving in the right direction, Trade Ambassador Clayton Yeuter recently said the dollar may have to fall another 10 to 15 percent against certain other currencies in order to dramatically improve our competitiveness.

In the past few years, under the leadership of James Emery, the St. Lawrence Seaway Development Corporation has made a strong commitment to cost containment on the system. We have held our tolls with no increase for the past three years, and have worked hard to encourage Canada to hold its toll increases to the absolute minimum.

The Corporation has made a strong commitment to preventive maintenance for the two U.S.-owned locks to ensure that what happened at the Welland does not happen at our locks. This past year the Corporation spent \$2.1 million on concrete repairs at the Eisenhower Lock. We have also committed almost \$400,000 to have an engineering firm study and make recommendations for future structural repairs and reconstruction.

The Corporation is preparing a series of contingency plans with contractors for the safe and efficient correction of various hypothetical mishaps that could potentially disrupt the operation of the U.S. locks. The plan would save us valuable time should emergency repairs become necessary.

The Corporation is also in the process of dealing with the U.S. Army Corps of Engineers and the U.S. Congress to earmark funds for upgrading the concrete on the entire Eisenhower Lock because of structural deficiencies in the original construction.

These positive steps have been coupled with our increased emphasis on trade promotion, such as the 1985 and 1986 trade missions to Northern Europe and the Mediterranean countries. Preliminary plans for the 1987 trade mission include revisiting London, Antwerp and

Dusseldorf, moving north to Oslo and Copenhagen, and possibly stopping in the Soviet Union.

Another positive step has been reverse trade missions by foreign countries, where transportation and procurement officials are invited to visit our Midwest port and grain facilities. Two such missions will occur this fall: one from Morocco and one from Turkey.

Secretary Dole has established a long-range Strategic Planning Committee, made up of leaders from industry and government. They are brain-storming innovative new ideas and making good hard business decisions that will help us be even more competitive in the year 2000 and beyond.

In addition, the Corporation has formed a Grain Export Task Force to discuss strategies that may help us with problems and opportunities. One of the Task Force's first products was a flyer on Midwest grain.

The St. Lawrence Seaway Development Corporation is committed to doing all it can to help the agricultural heartland of this country be the reliable source of supply that it should be and thereby contribute its share to rebuilding the world grain market for the United States.

Stan Smith
Export Coordinator, Commodity Marketing
Division, Cargill, Inc.

Cargill is a privately held merchandiser, processor, warehouse and transporter of numerous bulk commodities, with operations throughout the United States and much of the

world. Because of the nature of our business, Cargill has close ties to American agriculture. When the American farmer prospers, we prosper. Our interest in the St. Lawrence Seaway system goes hand in hand with our commitment to the future of American agriculture.

Our concern about the future of the Seaway system is a direct result of the crisis facing American agriculture. I'd like to take a look at agriculture today -- where we've been and where we're headed.

Agriculture faces an enormous challenge in the coming years. Because of artificial conditions created by past government farm policies, supply and demand seem almost hopelessly out of kilter. Today, U.S. farmers are forced to farm for government programs that stabilize prices at levels determined by the political process rather than by supply and demand. As a result, U.S. farm policies have contributed both to reduced exports and to the resultant accumulated surpluses that are now holding the farm economy down.

Five years ago, when the 1981 farm bill was passed, U.S. exports of grains and oilseeds exceeded 5 billion bushels. The United States held over two-thirds of the total world wheat and feed grain stocks, which at that time were 92 million metric tons.

This year, U.S. grain and oilseed exports will be down to just over 3 billion bushels, and the U.S. will hold 80 percent of the total world wheat and feed grain stocks, which have more than doubled to 200 million metric tons.

While the world grain trade stagnated, stored stocks have ballooned. Exportable stocks have

gone from half of one year's exports to a full year's exports. The U.S. share of world stored stocks has risen precipitously. Yet, the U.S. market share has fallen from 60 percent to 40 percent of world grain trade, and the volume of U.S. exports has fallen at least 10 percent per year for the last three years.

There is some good news in recent U.S. Department of Agriculture (USDA) reports projecting modest increases in both domestic use and exports. The USDA is projecting corn exports of slightly more than 1.5 billion bushels in the 1986-87 marketing year. That compares with projected exports of slightly more than 1.2 billion bushels for the 1985-86 marketing year, which was about half of the 2.4 billion bushels of corn exported during the 1979-80 marketing year.

But even with USDA's fairly optimistic export projections, ending stocks will probably approach a new record of 5.4 billion bushels at the close of the 1986-87 marketing year, or about 77 percent of a year's total demand. To put it another way, we don't need a corn crop this year. The U.S. could meet its domestic corn needs by using what's already in storage.

The combination of record stocks and an abundant new crop are straining an already overburdened grain-storage system.

Like the shortage of grain-storage space, the lack of export activity on the Great Lakes is a direct result of failed agricultural policies. The grain export statistics for the St. Lawrence Seaway serve as a vivid reminder that something must be done to restore U.S. competitiveness around the world.

Total Seaway exports have fallen dramatically over the past six years, and while the total U.S. export pie is shrinking, the Great Lakes region seems to be carrying a disproportionate share of the burden. Great Lakes exports this year were only 5 percent of a U.S. export total of 3.1 billion bushels. Five years ago, they were 10 percent of a total of 5 billion bushels. This coming year, exports from the Great Lakes region could drop even further, to about 152 million bushels -- down about 70 percent since 1981.

While it would be nice to blame the shipping industry's slump on increased competition from the rail and barge industries, they are also victims rather than villains in this situation. Barge rates are now at 180 percent of tariff, a benchmark for barge rates -- down from 365 percent in November 1979, and 310 percent in 1980. Today's weak prices reflect the number of barges standing empty due to the serious drop in U.S. agricultural exports.

American agriculture faces a serious challenge: to design policies that deal realistically with the longer-term problems facing agriculture.

With projections of significant increases in ending stocks for nearly all major commodities, we hear cries for more restrictive acreage-control programs to reduce supplies, and for marketing loans or expanded export subsidies to increase exports.

Such quick-fix solutions will not work. Worst of all, they deny U.S. agriculture the opportunity for increased employment. Today, only one-seventh of the value added in agriculture occurs on farms and ranches. A

policy that retires land means the other six-sevenths of the agricultural economy must suffer from underutilization, inefficiency and declining opportunities.

We need a new way of thinking about agricultural policy. The old commodity-based approach equated income protection with a guaranteed price per unit of output. What we got instead were high loan prices that discouraged exports, encouraged uneconomic expansion at home and abroad, and contributed to the surpluses that continue to depress market prices.

A better way to deliver needed farm income support would be transition payments or decreasing direct payments to help farmers through the current adjustment period. This would break the link between income benefits and cropping decisions, and would end the cycle in which income-protection programs encourage surpluses that necessitate more income protection.

We can regain employment in agriculture if we rebuild world grain markets. If market-driven loan levels and income benefits are temporarily guaranteed, without regard to cropping decisions, farmers will be free to adjust their farming practices to the needs and opportunities of the marketplace. The alternatives are just too costly and self-defeating.

Jerry Fruin
Associate Professor, Department of
Agricultural and Applied Economics,
University of Minnesota

I have good news and bad news. The good news is that, in a perfect social and economic world, all countries would ensure that their citizens have low-cost, adequate diets.

The bad news is the world is rapidly moving in that direction, and many historically food-poor countries are achieving self-sufficiency in food production. This is how it should be, but it is bad news for U.S. agriculture. Many of the Third World markets that seemed potentially limitless a few years ago can now pick and choose among suppliers or even decide whether or not to import food.

Most of the regions of the world have adequate land and other resources to feed themselves. The exceptions are nations like the island states of Hong Kong, Singapore and Japan.

The U.S. was impressed by the rapid growth of food demand in Third World markets as they developed their manufacturing capability and increased their per capita income. This reinforced the conventional wisdom of economists: incomes rise as Third World countries develop, causing an increased demand for food and a demand for higher-quality food — demands which must be met through imports. The traditional view, therefore, was that U.S. agriculture should not fear foreign aid and transfers of technology but should favor them, because they would ultimately lead to increased foreign demand for food imports.

But that view can be erroneous. In most instances, the past failure of food supplies in Third World countries to increase as rapidly as demand has been due to misguided food pricing policies and/or a failure to develop the required infrastructure of roads and markets. The governments and the aid-givers were blinded by the glamour of manufacturing and get-rich-quick schemes, and they got their priorities wrong. They were pressured by the immediate demand for low-cost food for their rapidly increasing and potentially volatile urban populations. Professional planners distrusted the market solutions that would have allowed resources to flow into food production. Instead, they frequently implemented policies that caused resources to leave agriculture, and thus slowed agricultural development.

But isn't the U.S. the low-cost producer? Don't we have a competitive advantage? Can't we feed these countries more cheaply than they can feed themselves? Not necessarily. Agriculture, like any industry, requires the three classical factors of production -- land, labor, and capital. It also requires a fourth modern-day factor -- technology.

Unlike some industries like steel making, where there is a limited mix of factors required for low-cost, efficient production, agriculture has many possible combinations of factors that can lead to efficient production. The appropriate combination in any country depends on the resources available and the relative price levels in that country. For instance, weed control can be accomplished a number of ways: pulling weeds by hand, hoeing, cultivating by tractor, or by application of chemicals. The "best" method depends on the relative price of labor and capital.

Although the North American grainery is a wonderful agriculture-producing region, there are many areas in the world that are lower cost in terms of relative resources and potential transport distances. Our labor and machinery costs are too high and the distances are too great for us to compete effectively with well-managed peasant agriculture in some parts of the world.

The competition will be even worse in the future as the range of available agricultural technologies continues to increase through advances in plant and animal breeding stock, increased knowledge about local soils and diseases, and any number of other things now under investigation by researchers.

I want to emphasize the wide range of technology available to developing countries. The underdeveloped countries can pick and choose according their land/labor/capital mix. The result has been a 4.4 percent increase in food production -- twice the rate of Third World population growth in the last decade.

The food problem in the Soviet Union and Eastern Europe is inexcusable. Nevertheless, the most disruptive thing the Soviets could do to world stability would be to become self-sufficient in food. It would reduce world demand for food exports by 20 percent and throw markets into a turmoil.

The role of the U.S. is not hopeless. We need to pay more attention to developing markets for products for which we have a competitive advantage. One future growth area will be in products which depend on our advanced technology, like processed foods. The way to increase our total grain exports may very well be to export grain in the form of meat and processed animal products.

QUESTIONS

- Q. Does it make more sense for the U.S. to ship bulk commodities or to ship value-added commodities?
- A. (Smith) This depends a lot on the market where it's going. Where countries have their own processing infrastructure, they prefer to import the bulk commodity and process it to suit their particular needs.
(Rudolph) Another thing is the relative cost of labor. If our labor costs are higher and other things are equal, it will cost more to manufacture or process it here.
- Q. What is the likelihood that the Twin Ports will remain competitive over the next 20 years? What advice would you give to improve our competitiveness?
- A. (Smith) The port of Duluth is as competitive as any port on the Great Lakes or the St. Lawrence Seaway system. The problem, and the reason that the region is a residual supplier, is the limitation on the size of vessel that

can come into this system. The maximum draft is 26 feet, and I don't see that changing.

One thing ports can do under these circumstances is be sure that they head off situations that discourage people from coming in: work stoppages, strikes and other disruptions, and unnecessary increases in user costs. Because of production that is tributary to Duluth, particularly wheat and sunflowers, the port will always be necessary.

Q. What could be done to exert more leverage on countries such as Japan to open their markets to our exports?

A. (Fruin) One way to expand our markets is to look at the countries that should not be subsidizing and producing food, and convince them that the world is stable enough that they can rely on free trade: they provide the labor and technology to produce goods, and then trade those goods for food.

Q. Is there any unilateral action that the U.S. could take to make our products more competitive in world markets?

A. (Fruin) We have tried dropping the price of grain substantially, and even giving it away, but there is so much grain out there and the competition is so tough that we have lowered the world price and are still not selling very much.

(Smith) If we let the market work on price, we would eventually price ourselves into the world market again. Lower prices wouldn't just increase the U.S. share of the world market; they would also encourage consumption. This is a long-term factor, but it's the most solid and stable way to build markets.

Q. What is your opinion about the export enhancement program? What would you do about it?

A. (Smith) This program, mandated by the 1985 Food Security Act, says that a billion dollars of U.S. government commodities must be used over a period of three years as bonuses to encourage exports of U.S. agricultural commodities. We're now completing the first full fiscal year of that program.

In terms of meeting the dollar objective, the program has been relatively successful. But the jury is still out as to whether it will either help us regain our share of the world market or tell the Common Market that we are prepared to compete with their policy of subsidies. It has probably hurt Argentina because it has lowered world wheat values, and Argentine wheat is not subsidized.

Cargill participates in the export enhancement program, but we don't believe that subsidies are the answer to re-establishing our grain markets.

Q. How does the quality of U.S. grain compare to the quality of grain supplied by our competitors? If there is a problem, what can be done about it?

A. (Smith) We hear a lot more complaints about quality in a buyers' market like we have today, but buyers can get any quality they want to pay for.

We need to continue giving serious consideration and study to grain quality. Momentum is building for legislation on this matter, but I hope it does not result in regulations that would be detrimental to our industry.

Q. Is Duluth-Superior's location a disadvantage?

A. (Fruin) Compared to the Gulf ports, we are closer to northern Europe and the same distance to the Meditterrean. The disadvantage here is the depth of the channel and the fact that full-size ships can be loaded only to about two-thirds of capacity. Duluth-Superior has an advantage in shipping to Russia and the Baltic countries with shallow harbors, but a major disadvantage in shipping to a port like Rotterdam, which can take full-size ships.

THE SEAWAY — ITS PROMISE FOR THE FUTURE

Panel III Moderator: Bill Newstrand

Panelists: James H. Hartung
 William F. Blair
 P.R. (Jerry) Cook
 W. Angus Laidlaw

Bill Newstrand
Director, Ports and Waterways, Minnesota
Department of Transportation

The current decline in freight movement through the Great Lakes and the St. Lawrence Seaway has generated a number of questions that center on the Seaway's continued viability. If you were to ask a number of people about the Seaway's promise for the future, you would get an equal number of diverse responses. Most responses, however, could be grouped into one of two schools of thought. One group thinks that there is no future for the Seaway as a commercial navigation system and that it will soon be merely a playground for small boats. The other school of thought looks for a reversal of the current hard times and a future of restored vitality and cargo growth.

The following presentations examine the Seaway's past record, current problems and probable future. They provide a broad perspective based on the views of shippers, government authorities and port operators.

James H. Hartung
Port Director, Burns International Harbor;
President, International Association of
Great Lakes Ports

Intelligently discussing the future of agriculture and the Seaway requires a little understanding of history, the U.S. and Canadian political scenes, global markets, and agricultural economics.

Historically, the success of international traffic on the St. Lawrence Seaway has been the product of a relatively simple formula: foreign steel in, grain out. This formula had its roots in two marvelous and seemingly never-ending realities: America's industrial and agricultural heartland had an insatiable appetite for steel, and had become the world's major food supplier. That seemingly indestructible formula has experienced an erosion on both sides.

The overall reduction in the amount of steel used in U.S. manufacturing over the last 10 years has intensified competition between foreign and domestic suppliers. In response to this competition the federal government created a trigger-price mechanism which did little to impede steel imports. At the same time a strengthening U.S. dollar enhanced foreign steel's appeal and its penetration into the domestic market. In response, voluntary restraint agreements from our major steel-trading partners were sought.

The reduced volume of steel coming into the lakes has reduced the number of saltwater vessels available for outbound grain cargoes.

This has increased the rates, compressed the margin of cost advantage for Great Lakes grain movements, and increased the impacts of tolls, pilotage and facilities charges. These factors, plus very low rates in competing transportation systems, have reduced in the size of the regional drawing area for Great Lakes shipping.

World demand for U.S. grain has been reduced. Many of our former customers are moving quickly toward self-sufficiency for basic food production. The Common Market is now a competitor. Even Saudi Arabia may become an exporter this year. A further problem is the U.S. loss of reliability as a trading partner, as a result of the Carter Administration's grain embargo. The stigma of the embargo hangs like an albatross around our necks, particularly with regard to the Soviets, who pretty much do business with us only when they have to.

Beyond these market/political barriers we must add two more barriers to full utilization of the Seaway as an avenue for U.S. agricultural commerce: the size limits on vessels (a physical barrier) and the length of the navigation season (a policy barrier).

Let's take all of these issues in order of their appearance, starting with imported steel. It is here to stay. It will most likely stabilize at about one-third of our national need, and much of it will come in through the Seaway. Besides importing steel, the new U.S. steel industry may someday begin exporting specialty steel products.

The shrinking of the Great Lakes drawing area for grain will be halted and reversed as rates for competing transportation modes rise. If grain merchandisers are as slick as I think they

are, they will make sure that enough export grain flows through the lakes to keep them viable, for if the day comes when the lake alternative disappears, transportation rates will skyrocket.

The world grain market will get better, for some good reasons.

- The grain is here. The region will continue to be a dominant force in world grain merchandising.
- Many nations now claiming self-sufficiency will lose that status because agriculture is not natural to their environment.
- World population growth will continue to drive demand up. Regions like ours will be able to provide the grain.
- Changing world diet preferences will also create demand. Growth in the use of meat and poultry will require importing either food or feed grains.

Contrary to predictions by the U.S. Maritime Administration, shipping consultants predict that ocean grain carriers will continue to be ships of Seaway size. International grain movements often involve poorly developed port facilities and unstable commodity volumes, both of which are unsuited to larger ships.

Some people consider the most significant factor limiting the growth of the Seaway to be its limited navigation season. An extension to 10 months, rather than 12 months, seems to be the most effective way to meet our system's needs and assure its continued viability.

The grain and steel markets are secure, and the Great Lakes/St. Lawrence Seaway continues to

be an attractive way to move both commodities. Adequate long-range planning and aggressive industry efforts will assure the Seaway's continued contributions to both the regional and national economies.

William F. Blair
Member, St. Lawrence Seaway Authority,
Transport Canada

The three major concerns in the future for the Seaway Authority are traffic, finances, and system integrity.

The first concern is traffic. When the Seaway opened in 1959, a little over 18 million tonnes of cargo moved through the system. Annual cargo continued to increase until it peaked at 66 million tonnes in the Welland Canal and 57 million tonnes in the Montreal-Lake Ontario section (MLO). Last year's traffic dropped to 41.8 million tonnes on the Welland and 37.3 million tonnes on the MLO section. The Welland Canal normally moves 4 to 5 million tonnes more than the St. Lawrence section, due largely to the movement of U.S. coal from Lake Erie into Lake Ontario for the Canadian steel mills.

There have been several downturns in traffic over the years, but never the duration and depth of the present one. In spite of the declining trend, we at the Seaway Authority are confident that traffic on the system will rebound.

Grain and iron ore are the most important cargoes on the system. Grain is by far the more important, accounting for some 50 percent of the Canadian total. Canadian grain has accounted

for as much as 17.7 million tonnes of cargo on the Seaway. Last year it dropped to 11.7 million tonnes. This year it will be only about 11 million, due largely to the strike in Thunder Bay. But the long-term trend in grain has been up, and we expect it to recover.

In peak years, U.S. grain has added as much as 15.8 million tonnes to the Canadian movements on the Seaway. That movement amounted to 5.1 million tonnes last year; in 1986, we expect as little as 3.7 million tonnes.

Iron ore volumes have also dropped, due largely to the inability of the region's steel producers to compete with foreign suppliers. This is particularly true in the U.S.; the Canadian plants are more modern and they remain competitive.

Finances are the second major issue facing the St. Lawrence Seaway. When Canada and the U.S. agreed to build the system it was understood that operating, construction, and maintenance costs would be covered by tolls. Nevertheless, it soon became necessary to rely on annual Parliamentary appropriations to keep it operating. As a result, it was necessary to restructure the Seaway's finances. Refinancing was carried out in 1977, with the federal government writing off the Crown Corporation's debt of \$840 million. The refinancing was done with the understanding that in the future the Seaway would cover its annual operation and maintenance costs from toll revenue.

Since 1978, the Authority has been able to maintain sufficient working capital, in spite of occasional deficits, to remain self-sufficient. That self-sufficiency, which is not common to Crown Corporations, is now in jeopardy because

of the major decrease in demand. In fiscal year 1985-86, the Authority's deficit was \$25 million; the reserves built up over the years are rapidly being depleted.

That is why in 1986 we reluctantly implemented the first increase in tolls on the Welland since 1983. The tolls on the MLO section, however, were not increased. That section has always been more profitable than the Welland because the tolls are higher.

Any increase in tolls has always been a controversial action. It has been said that it is not equitable to raise tolls in the face of decreasing tonnage. The 1986 increase was very modest, averaging only about 6 percent, or 7 cents per ton, for vessels transiting both sections of the system. Even with this increase, we are anticipating a \$25 million deficit this year.

Three years ago we had over \$50 million in reserves. Now we are down to \$29 million and dropping. Future toll increases are probably unavoidable.

The third issue is integrity of the system. Since 1959, less than 1 percent of the system's downtime has been attributable to system mechanical or structural failure. Nevertheless, twice in the last two years mechanical and structural problems have interrupted navigation. The first was the rupture of a shaft on Valleyfield Bridge in 1984. The second was a blowout of a section of wall in the Welland Canal's Lock 7 in October 1985. A non-mechanical incident occurred in November 1985 when the Motor Vessel Jalagodavari collided with the St. Louis Bridge.

These accidents, though unrelated and unpredictable, have not improved the image of the Seaway. Notwithstanding our long history of trouble-free operation, the job of improving our image is a difficult one. I assure you that the Seaway Authority is doing everything possible to meet the challenge. We are re-examining all critical structures with particular attention to the 50-year-old Welland Canal. We have reviewed consultants' evaluations of the system and have prepared a seven-year rehabilitation program which has been forwarded to the Minister of Transport for approval.

While world and regional economic conditions and unpredictable accidents may cause temporary fluctuations in the Seaway traffic, it is essential to remember the strategic nature of the system's location. It is central to the world's largest agricultural and industrial production region. Those characteristics, added to its link with a vast and diversified international market, assure its future viability.

The decline in Seaway traffic since 1979 is the result of a depressed economic situation and a reduction in demand for Seaway commodities. It is not due to losses to other competitive modes. In fact, competitors such as the Mississippi River system have had similar or greater reductions in cargo.

The future of the Seaway is assured, but it must remain safe and efficient, and transportation rates must be more competitive. We are confident that, when the economy of North America revives and the grain market recovers, the Seaway will once again become a major transportation route. It is absolutely necessary that Canada have the Seaway as a viable operation.

P.R. (Jerry) Cook
General Manager, Port of Thunder Bay

The Port of Thunder Bay contributes some 35 percent of the through-traffic on the Seaway. The Seaway's major commodity is Canadian grain, which ranges between 12 and 17.5 million tons annually. That grain originates in Thunder Bay. I think I can say that what happens in Thunder Bay is probably what is going to happen on the Seaway.

The Seaway presents special problems because of its uniqueness as the only major waterway run by two sovereign nations. It is fortunate that the University of Minnesota has taken a leadership role in examining Seaway issues. It is equally fortunate that on the other side of the border the University of Manitoba is doing much the same. These institutions can have significant influence in creating the necessary climate for change because of their unbiased positions and objective perspectives.

Because these two institutions have great potential for influencing our governments, I cannot help but speculate on the outcome should they take specific action -- action, say, in the form of letters informing our governments that the St. Lawrence Seaway is under significant strain, and that unless corrective government action is taken soon we can expect an increase in idle facilities and in Seaway-related unemployment.

My remarks may be interpreted as critical of the governments of the U.S. and Canada, and of the Seaway entities that are responsible for the operation of the waterway. I make no apologies,

but I hope my comments will be construed as constructive.

Our governments have mandated that the Seaway entities operate and maintain their facilities within their own generated revenues. This was done without concern for the consequences. The entities have responded individually and separately so that today they are on seemingly divergent courses with an apparent lack of close cooperation and compatibility. More importantly, I see little evidence of them pleading with their masters, the federal governments, for rationalization before an impending crisis.

The Seaway entities are not responsible for all of the problems. Pilotage, insurance rates, the economy -- all have contributed in greater or lesser degree to the current downturn in traffic. Nevertheless, the Seaway entities are recognized as the leaders and they should be taking a leadership position in all of these matters. Most importantly, they must do it together and as a team.

Two years ago we looked at necessary changes. Later, we showed concern about lack of change. As time passed, we faced a challenge and then a threat, and now a crisis.

The trouble is that governments and their agencies have a difficult time reacting. The Seaway is a commercial enterprise and faces the same problems as all businesses today: the need for (1) the reduction and control of costs, (2) a determined and innovative marketing program in an increasingly competitive society, and (3) new and realistic solutions to financing.

Look at the dramatic changes that have taken place on both sides of the border in the management, organization and operation of rail, truck and air. Things are not the same as they were in 1980.

I am very much afraid that the Seaway components have not recognized these economic realities. The Seaway just chugs along as it did in 1959. Its costs go up and its cargo goes down.

I think it is appropriate to look at why grain shipments have fallen in volume, but grain is only part of the total change. We have lost both a sizable forest-products movement and a potash movement from Thunder Bay. The forest products now go through East Coast ports and the potash goes down the Mississippi. That is great for those areas, but not for Thunder Bay and the Seaway. Those losses are symptomatic of the total system losses and are due to failure to control costs and rates. The seaboard ports and their serving railroads have reduced their rates so that it is cheaper to move their way rather than on the Seaway.

In fact, soon an inbound potash movement from New Brunswick to the Upper Midwest will be tested via the Gulf and the Mississippi. It will take longer than using the Seaway, but it is expected to be cheaper.

The bottom line is that the Seaway is the most expensive waterway in North America.

Now we face government cost-recovery programs, commonly called user fees. The trouble is that the methods and philosophies being used in the two countries are different. The potential for creating further deterrents to traffic is imminent.

The fundamental problem is that both our governments lack commitment to the Seaway as an international waterway that leads to the heartland of North America. That waterway services an area that generates 70 percent of Canada's international trade and 20 percent of the United States'. It contains 60 million people as well as a major portion of the U.S. agricultural-production area.

The problems facing each of our governments today in matters of trade and deficit, compounded by the problems between our governments, have allowed them to lose focus. The Seaway has become simply another bureaucratic problem to be administered. It is up to all of us, individually and collectively, to use our ability and influence to convince our politicians, first, that there is a problem and, secondly, that something must be done about it.

In recent weeks I have become somewhat encouraged that people are beginning to listen to our efforts. There is evidence on both sides of the border that action is being taken to look at the situation. We cannot relax. We must make sure that those who are looking get the facts as they are.

W. Angus Laidlaw
Research Coordinator, Dominion Marine
Association

I think there may be some grounds for optimism about the Seaway's future, but only after study and action on some major current problems.

Over the past five years, the Seaway has seen a traffic decline of some 30 percent. From the Canadian lake carriers' point of view, last year's total haul of 74 million tons was the lowest since 1982, and 1982 was the worst year in the last decade.

All of us are aware of the plight of the U.S. steel industry, which has directly and permanently reduced the activity of much of the U.S. Great Lakes fleet. Canadian vessels have also been affected. Last year, they carried 8.5 million tons of iron ore through the Seaway, more than half of which was destined for U.S. mills. In 1977, they hauled nearly 20 million tons, three-quarters of which went to U.S. mills.

While iron ore is an important commodity and its decline is a blow to Canadian dry bulk operators, grain is the life essence of the fleet, and it is suffering too. In 1985, Canadian shipping experienced a 20 percent drop in grain movement. U.S. Great Lakes carriers have also felt the loss of export grain.

While Great Lakes ship operators have no control over either the grain market or ocean shipping rates, they do have control over the efficiency of their operations and their shipping capacities. Reaction to the existing severe overcapacity has been slow in coming, but an adjustment of the fleets is starting to occur. We are beginning to see ships being sold for scrap. Since 1977, membership in the Dominion Marine Association has fallen 25 percent, accompanied by a 20 percent decrease in vessels.

In spite of the industry's denunciation of this year's 15 percent increase in Canada's

Seaway toll, we are confident that the Canadian Authority is promoting cost containment. Our industry's message was directed toward the federal government, which in its zeal to reduce the deficit instituted a carte blanche directive that Crown agencies must be financially self-sufficient. Thus, by government fiat the Seaway must respond to a traffic loss by raising tolls, which further burdens the remaining traffic.

A parallel situation exists with pilotage services for ships on the St. Lawrence River. As traffic declines, the relative demands on the system by pilotage services increase because the services themselves do not contract. It should be relatively easy matter to reallocate resources to reflect decreased demand for those services, assuming there is political will to do so.

If the system is to remain competitive, cost containment must become a preoccupation.

The second major bugbear is cost recovery, which both the Canadian and American governments have embraced. The Canadian government has proposed legislation that would recover some of the cost of navigation aids and Coast Guard services. Our fear is that the Seaway will be charged for services that must be provided in order for it to operate. The problem will be exacerbated if the level of cost recovery contributes to the further erosion of revenue-producing traffic.

Although the U.S. government appears to be somewhat responsive to cost-recovery concerns, we must draw attention to certain transportation distortions in order to persuade both the U.S. and the Canadian governments that the system is

at a critical juncture. For example, the Canadian government must be persuaded to alter the regime by which grain is railed to port. Since 1984 it has paid substantial subsidies to the railways to support an artificially low statutory freight rate for grain. The railway subsidy is on a mileage basis rather than a cost basis. We would like to see the rates for grain movement west and east equilibrated on a cost basis.

Eastern movement of grain by the lakes involves myriad costs which have opened a price gap between western and eastern movement to export points. The Dominion Marine Association and the government of Ontario have commissioned a study to identify the genesis of these costs.

There have been other recent developments. The Seaway Development Corporation has taken some positive steps in the area of marketing the system. It has organized a series of trade missions to Europe and Africa. We in the Dominion Marine Association are preparing to help the Canadian Authority in its domestic and international marketing efforts.

After a period of what might be termed benign neglect of the system by our legislators, the Parliamentary Standing Committee on Transport is preparing a review of the system. We hope the results may form the basis for a needed elevation of the Seaway, and for the development of means to arrest declines in revenue and traffic.

Let me conclude with a final observation. Back in the late 1970's, Great Lakes shipping interests discussed with the Canadian government ways to overcome the traffic bottleneck that forecasters told us would develop even on the

Welland. Would that we could worry about such a problem today! Current forecasts predict that grain shipments will increase at an average of 1 percent annually until the year 2000, that movements of lesser commodities will increase slowly but steadily, and that iron ore will not return to its former place of prominence.

If the Seaway is to realize any promise for the future other than rudimentary survival, it is up to all of us to do a whole lot more than rely on positive forecasts. We must examine and re-examine the system, practice cost containment within our own spheres of influence, and persuade our governments to address and remove existing distortions and to refrain from presenting the system with new ones.

QUESTIONS

- Q. With the current depressed state of traffic on the U.S. side, what if a 1000-foot vessel from some unknown U.S. fleet operator were to become surplus? Would there be any interest on the part of members of the Dominion Marine Association?
- A. (Laidlaw) I doubt it. The DMA members committed themselves long ago to vessels with a maximum draft of 30 feet, so they could develop trade patterns that involve the Seaway rather than just the lakes, which is what the 1000-footers were built for. In that market, I can't see that the Canadian lake carriers would augment their own surplus ships with surplus ships from the U.S.

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