HOWARD N. HUBBARD, JR. • IRON & STEEL SOCIETY

Canfield, OH is a sleepy little town about 15 miles southwest of Youngstown. When the steel plants in Youngstown were running full bore, quite a few of the men operating those mills resided in Canfield. Howard Hubbard, 1983 ISS President, was among them. He was the assistant general manager, Youngstown District, of Youngstown Sheet and Tube Corporation through December of 1978. Prior to coming to Youngstown, Howard was divisional superintendent, steelmaking at United States Steel Corporation's Gary Works.

In January 1979, he assumed the position of general superintendent – primary operations at Jones & Laughlin Steel Corporation, Aliquippa Works, where his primary areas of responsibility included: three by-product coke batteries, five blast furnaces, a three-furnace BOF shop, and six-strand billet caster.

In early 1980, Howard started in his present position as vice president – operations, KSR International, Ltd.

Howard still resides in Canfield with his wife, Jan, and two of their children: their oldest son Matthew, a landscape architect graduate from Purdue, and their youngest daughter Jennifer, who is a junior high school student. The two middle children, sons Ted and Andy, are studying engineering at Youngstown State and architecture at Ohio State respectively. The Hubbards also share their country-like home with three cats, a dog, and a couple of horses to say nothing about the geese.

In his present position, the incoming ISS President travels constantly. The I&SM staff caught Howard at his home in Canfield between trips, to discuss his views on our industry and the Iron and Steel Society of AIME.

I&SM: From your vantage point, Howard, what do you see happening in our industry?

HUBBARD: I'm not sure as to what extent the steel industry will come back, but it will be back, you can be sure of that. It really depends on the people in the industry and how they adapt themselves to foreign competition. We are not going to be able to sit back and wait for restrictions or tariffs on foreign trade to straighten out our problems. We are in full world competition now, even though the world steelmakers are not playing by the same rules.

I&SM: Do you feel that the people running our mills recognize this world competition?

HUBBARD: I'll have to admit that in the mills I have visited recently, and that's been quite a few, the attitudes of the people, the superintendents, indicate to me that they realize this competition and they are determined they're going to compete.

These superintendents of the mills that I have visited realize their plight but they're convinced they're going to make it. I've seen more examples of ingenuity and new ideas in the last year than I've seen in a long time. I've seen some new ideas get implemented very quickly.

I&SM: How would you compare today's plant superintendents?

HUBBARD: The bull of the woods superintendents are all gone. They couldn't keep up with the current technology. Our industry is demanding managers who are technically qualified. The technology in the industry is changing so fast.

When the open hearth furnace was the major producer, this wasn't true. The overall operation of the open hearth didn't change all that much.

But it's changed. I had many superintendents that I really had to work on, to get them mad. You know that the best run shops have disciplined operations. A good manager must take the time to discipline his people to follow set procedures. The Japanese are experts at this. They are the advantage because there isn't the adversary relationship between labor and management in Japan that we have in North American plants. On the other side, there is a disadvantage to the discipline. It goes against our so called Yankee ingenuity. You get away from the originality and cannot afford to lose that. I think that is coming into play now. I can see more ingenuity now than has gone on for some time.

I&SM: Would you care to cite an example?

HUBBARD: Well, the way that some companies are adapting to ladle technology – Argon gas stirring, alloy addition, combined gas blowing. Degassing is coming back.

I&SM: With all of these technological options available do you see a change in decision making?

HUBBARD: most companies have developed technical groups to assist superintendents on the best methods to follow for an individual shop. There has to be an agreement between the superintendent and this technical group on such things as feasibility of a process.

I&SM: Once again an example.

HUBBARD: Bottom pouring is coming back in. There wasn't a superintendent, and I was one of them, who would even admit that there was any room in the shop to put it in – well the benefits of

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it are starting to show up. Now there are some 30 different steel mills in the United States that are working on bottom pouring programs.

I&SM: Do you have any suggestions, on where the industry should go from here?
HUBBARD: In order to compete with the balance of the world, the U.S. has got to be 80 percent continuous casting by 1987. This will probably be done either by building caster facilities or by just shutting down plants that have no casters. There is a sobering thought. We are only beginning to see the steel competition of the third world countries, such as Korea and Taiwan. Mainland China lies awesomely in the background. The thinking that the U.S. can exist with the loss of a basic industry, such as steel, is suicidal. We have no recourse but to develop the facilities that are necessary to be competitive with foreign companies.

One piece of equipment that could help us to get there over the next few years is the horizontal casting machine. Here again is existing technology on a new process that could be installed at the fraction of the cost of the big continuous casters. It could be the answer in areas where product mix has insufficient tonnage in various grades to justify the large caster operations.

I&SM: Do you think horizontal casting will catch on?
HUBBARD: Very few big steel corporations are looking at it currently with serious intent. However under the present economic conditions no company wants to get involved in a big development project. I believe it will be picked up by the mini- and midi-mills, because they can make decisions without going through the large bureaucracy of the major corporations.

I&SM: In the last 15 years, the U.S. industry appears to have fallen behind in modernization of existing plants. Would you care to comment on this?
HUBBARD: Many plants have let their facilities become obsolete. Some of this was due to the pressure of the environmentalists who forced huge expenditures to clean up a neglected air and water condition. As a result, appropriations were moving from new production facilities to environmental facilities. This did not produce one more ton of steel. It sapped up money with rabbit-like perpetuation and resulted in less money available for plant modernization and facilities. One of the biggest mistakes was the lack of the steel industry, for one reason or another, to take advantage of the modern caster technology and put the U.S. in line with Japan, where currently 70 percent of the steel is continuous cast. We are currently only doing 21 percent.

When the history of steel technology and process development is reviewed, we do not stand out in general as leaders in adopting new technology until we are forced to through competition. American mills were among the last to recognize the potential of the BOF and install facilities in the U.S. The lack of adopting caster technology has followed the same pattern. We would however develop this technology once brought into the U.S. with much higher tonnage loads and larger furnaces than existed before. We exploited what we thought was the ultimate in the BOF. However the U.S. did not have discipline of its people to be able to match the degree of efficiency that has been shown by the Japanese steelmakers in the last ten years.

I&SM: In light of all this, what do you consider the most important role of the Society?
HUBBARD: I think the emphasis must be on what we can do to assist the steel industry. And how to provide our services to help us all get through this current economic situation.

I think the biggest thing we can do is throughout conferences and continuing education program. We must put much emphasis on the quality of our meetings. We must make sure our program planners are providing what our members currently need.

We must gear our continuing education program in order to provide the most up-to-date technology information in as many areas as possible. We must get the message to operating VP's that the Society conferences and educational courses are indeed worthwhile.

I&SM: Would you care to expand on that?
HUBBARD: If ladle technology is the hottest subject in the industry then we must provide programs that provide our members with the most current information on that subject.

We must do the same in our continuing education program. We must develop courses that we can take to the steel centers and teach this technology.

People are crying for information on how to make better steel at lower costs. Our Society is a collection center of this type of technology and we must take this information to our people.