## The Bechtel Group: Focus on the Future

Interview with Harvey F. Brush. senior executive of Bechtel Group, Inc., by Jack Russell

Bechtel Group, Inc. has provided professional engineering and carried out construction in some 100 nations. It is also engaged in research and development in a number of areas, including research on alternative energy sources. It has provided nuclear reactor technology to Japan, and its procurement in Japan amounts to about \$1 million a day. The group's principal companies are: Bechtel Power Corporation, Bechtel Petroleum, Inc., Bechtel Civil & Minerals, Inc., and Bechtel Investments. Inc.

Harvey F. Brush, executive vice president and a director of Bechtel Group, Inc. in an interview voiced Bechtel's interest in using Japanese trading companies to handle deals where developing countries pay for projects in commodities.

He said the trading firms would carry out the financing through commodities and Bechtel would stick to engineering and construction. Although he said no specific deal with any trading company had been discussed, Brush expected such commodity deals to grow in the future.

Brush questioned whether Japan could take the lead in technology and stay there with innovations. He felt the U.S. would remain the most innovative country in the world at least for the next 10 years. However, he deplored the trend in the U.S. where service industries are growing while industry is being neglected and is declining.

Brush said Bechtel expects a good "flow of work" from the Pacific basin which he believed will be the most important economic area in the world in the next century.

The Bechtel executive said that the U.S. should develop processes for alternative energy sources as an "insurance policy" against another oil crisis. He also expressed interest in widening Bechtel's nuclear technology transfer to Japan, providing the U.S. government eases its restrictions.

Brush expects no quick recovery from the world recession, but is optimistic about the new Soviet leadership changing policies in a way which would improve relations with the U.S. and would benefit husiness

The interview follows.

Russell: The Bechtel Group is conducting wide-ranging activities both in the U.S. and internationally. What is Bechtel's strategy in this period of recession? It would seem from your yearly report that you are doing quite well considering the circumstances.

Brush: We did quite well last year and expect to do quite well this year. In fact, last year was our best year ever and this year probably will be not quite as good as last year but as good as 1981. The basic explanation for this is the nature of proiects we work on, which last quite a long time, so that we have a very large backlog of work. What concerns us most is what our work load will be in the period 1984 to 1986. Right now we can't see clearly how big that work load will be. Typically when we get an assignment, particularly a large job, it takes up to 18 months before it really has a significant impact on our work force. So we have the feeling that with the work slow in coming in at this time, 18 months from now could become a rather critical period.

Russell: I'm sure your group has done a little looking into the future. What are the trends? We become a little confused by what we hear from the United States. One moment the economy appears to be perking up and the next it is flattening out again. How do you think the world economy is going generally?

Brush: Poorly. Mostly the good news you hear, not only from the United States but around the world, comes from politicians who, generally speaking, cannot be bearers of bad tidings. I feel from the business people I have talked to, including bankers, that there is generally a conservative view that business is not good and will not pick up rapidly, and that we can look forward to anywhere from 12 to possibly 30 months of rather poor economic conditions throughout the world.

Russell: There is of course an oil glut on the world market. However, Bechtel is very active in coal conversion projects and also in R&D on oil substitutes such as oil shale, despite the apparent flagging interest in the U.S., where there have been cutbacks in programs seeking alternative

energy sources. How do you account for your good business in this field?

Brush · I didn't realize that our business was that good. Most of what we're doing really is study and what you might call the development phase of projects. However, two years ago people generally visualized strong, healthy business with a lot of work, but now most of the jobs are being set aside and are going at a fairly slow pace.

Russell: We constantly hear scare reports of another energy crisis when we might need these alternate energy sources.

Brush: I think at the present time you have to say there are uncertain market conditions and we are not clear when demand will pick up. It's not clear what the world price of oil will be when the demand does pick up. But you know sooner or later the world is going to run out of oil. Nobody thinks that's going to be in 5 or 10 years-more like 30 years.

So what I visualize is that the United States should develop the processes like an insurance policy, not necessarily to satisfy the demand now, but to build the technology so that we know how to do these things when the time comes.

Russell: There's been a lot of talk, particularly in Japan, about the so-called Pacific basin and its economic potential in the near future. How does Bechtel view prospects for business activity in this Pacific-Asian area from now to the end of the century and into the next century?

Brush: Well, I think generally we're quite optimistic about business in the whole Pacific basin. The United States has generally good political and economic relations with all of the nations on the Pacific, starting with New Zealand and Australia and all the way around. It's an area of great political stability and generally speaking it is an area which has a lot of natural resources to be developed. It also has good labor and good markets. So we visualize a flow of work over a long period of time here, just to satisfy the demands which are internal to the area.

Russell: Would you go as far as some people have in predicting that the Pacific basin will be the most important economic area in the world in the next century?

Brush: Yes.

Russell: The U.S. administration, as we all know, has lifted its sanction against the export of equipment for the Soviet Union's pipeline project which will bring Siberian natural gas into the heart of Europe. And recently a number of American businessmen in Moscow heard the Russians say they had a big market for development or upgrading such industries as petroleum and agriculture with billions of dollars involved. Is Bechtel involved in business with the Soviet Union or does it intend to become involved?

Brush: We are not involved in the Soviet Union at this time. In fact, to my knowledge, we have never worked for a client behind the Iron Curtain directly.

Russell: Is this your group's policy?

Brush: It is not a policy but it's rather difficult for us to work in areas where you can't get paid in currency and in which business relies on barter transactions or something like that. So it would be perfectly possible for us to work with an American company like Occidental Petroleum or with Japanese interests who would be able to handle the financial arrangements and leave us free to do engineering and construction. You may be aware that recently Armand Hammer made a statement in Moscow about his interest in a coal slurry pipeline and mentioned Bechtel in connection with that, but we have never discussed anything like that in Russia. That was his idea.

Russell: Are there any prospects in the future of doing business with Russia?

Brush: Oh ves. But I think it would be fair to say that we would always put national interests ahead of Bechtel interests in that regard. I would like to say that I have a feeling that the relationship between the United States and Russia will be much better in the next five years than it was in the last five. I base this on the 'new look.' I base it in part on the fact that U.S. Secretary of State George Shultz, who we know quite well personally, is a very fair and even-handed person who tries to find ways to solve problems and get along, and I think there is a new regime in Russia which is going to take a very realistic look at their situation and probably change some of their policies.

Russell: And this would be good for business?

Brush: I think that what is good for people generally works out to be good for business, and we know that Russia has a need for a lot of things to help their people, starting with food. They need to develop a more productive economy.

Russell: What are the prospects for cooperation in technological development on an international level?

Brush: From my viewpoint, I think there is a wide open field for collaboration between business entities in various countries to work in a third country. In fact, we



have a long history of that. For example, working in the Pacific basin in countries like Australia, New Zealand and Indonesia, we have worked with Japanese interests for years. This generally produces a better result because what happens is you get the best of the strengths of several parties involved in a project. So you generally end up with the best financing, the best engineering, and the best construction.

Russell: Although your group does cooperate with Japanese companies in some projects, Japanese companies also are competitors, particularly in areas like the Middle East. How do you rank Japan as a competitor?

Brush: It is fair to say there are more areas where we collaborate with Japan than where we compete with Japan. Japan's real strengths in the world market are in manufacturing and in setting up the commercial deals. Bechtel's biggest strength, I think, is in management of very large, complex projects, and if we put the two of those things together we do very well. Now there is competition in the petroleum and process design fields and certain other fields. And I think over the past 15 or 20 years, Japanese organizations in those fields have built up a great deal of confidence.

But we still find ways to work together with them. We use them as subcontractors on some work. They use us as sub-contractors on some work. And we collaborate on some work.

Russell: You seem to have a fairly good relationship with Japanese industry, but as we all know there is the trade problem which seems to be getting worse. How do you think Japan and the U.S. could best overcome this issue?

Brush: This problem is a little beyond my own expertise. But I think there are two or three issues. One is the issue of protectionism. I noticed that President Reagan has come out rather strongly on that issue to support free trade. It is getting to be a worldwide problem. I think the second issue is generally the balance of trade between Japan and the United States, and the fact that we've allowed the Japanese to compete in some areas in the United States while we can't compete with the Japanese in their market. I see a world problem that is going to be very difficult to handle with high unemployment, and each country will find that in certain instances their local industry is competing with imports which are selling below the cost of production. It is going to be very difficult for the political or governmental forces to resist the temptation to set up protective barriers, taxes, levies or whatever—the things the French seem to be so superb at.

Russell: You are not very optimistic then about this being solved quickly?

**Brush:** I don't think it will be solved very quickly but I think it will help to have some good honest discussion about it. Even if we only get the two countries headed toward a solution, it will be helpful.

Russell: There is talk, and a lot of talk, that the next trade war is going to be over high technology products, that Japan will become a threat in the computer field and so forth. How would you rate the competitors—Japan, the U.S. and Western Europe—in this coming trade war?

Brush: Well, I think Japan has a high degree of strength now and the Japanese are using it well in a tradition of very high quality work, and you can see this in the chip and micro-processor area. You might call this the zero defects policy of Japan, I can go back to the period of the 1950s, when I was over here, when Japan had taken an electron microscope, improved it by a factor of 10 and reduced its price. They are very, very good at that kind of work. What is not clear is whether they can develop a program to get out on the forefront of technology and stay there by continuing to innovate. And I think the United States over the past 20 or so years has really been better than the rest of the world in innovating, even if Americans haven't been quite as good as the rest of the world in keeping up with quality of production. And I'll make a prediction that this will be true 10 years from now.

Russell: Can there be a lot of business in rebuilding such industries as steel in the U.S. where there doesn't seem to be enough interest in modernizing plant and equipment?

Brush: If you go back to a period sometime in the 1960s you will find that everytime the steel companies tried to raise their prices, they had trouble with the federal government. It wasn't legal trouble but what the president called jawboning. He got them to hold their prices down. What happened? The companies had very poor returns on investment. They did not have the cash flow to put into new, modern facilities at a time when Japan's facilities were growing at a very rapid rate. Russia was also putting in new modern facilities at a rapid rate. Europe was coming up fast. And almost every developing country in the world put in some kind of a steel mill as a hobby-sometimes it was used. So suddenly after 50 years the United States finds its steel producing facilities are probably the oldest in the world, except for Britain, and you know how bad theirs are. The U.S. steel industry was not really permitted to make the investment and return on investment that say the oil companies could do in their field.

Now you might accuse them of bad judgment and it might be true, and maybe they didn't behave in their own best interests. Maybe they should have resisted harder. I cannot understand how the Defense Department and the federal government could allow the steel industry to disappear from the United States. There must be a lot of concern in government about what happens now to that industry. America's steel industry's present low production rate has to do with decreased demand and also increased ability to compete for the demand that is there. If you look at the question a little more broadly, there is another problem and that is that things have been changing so rapidly that some of the manufacturing companies in the U.S. still are not clear in their own minds what they have to do to modernize their plants. Should they go to robotics and complete automatic control? What market should they aim at and where should the plants be located? Truly there is now occurring a revolutionary change.

Russell: Under these circumstances, what will happen to U.S. industry?

Brush: There is a view I have heard that the United States is going to become more and more a nation offering services rather than goods. And you can see internally the growth of services compared to the manufacture of goods. But I don't think we can exist in world commerce over a long period without a substantial manufacturing capability to back up all those services. Otherwise, we'll just gradually disappear from the scene.

Russell: I note that Bechtel recently contracted to transfer pressurized water reactor technology to Mitsubishi Heavy Industries and is interested in the transfer of uranium enrichment and nuclear fuel recycling technology to Japan. What are the prospects for accomplishing this under U.S. government restrictions?

Brush: In the field of nuclear reactors, we're working with Hitachi and Mitsubishi Heavy Industries specifically on some transfer of technology involving our U.S. experience on power reactors. We're also doing a small amount of study work for other Japanese entities on power reactors. And probably we'll do more. When you get outside the power reactor field itself and into almost anything involving isotope separation or processing and related technologies, we cannot work for anybody outside the United States without specific U.S. government permission. We would very much like to work with Japanese interests in a reprocessing plant,

including the downstream technologies, which are not so critical, of how to dispose of radioactive waste from spent fuel reprocessing.

Russell: What are the prospects of the U.S. government easing restrictions?

**Brush:** Moderate. I should point out that the French do not similarly inhibit their industry from exporting that technology. In fact, we believe that all of the real technology involved is open art, and is probably attainable in most scientific libraries throughout the world.

**Russell:** You seem to be not too much in agreement with the U.S. government's policy?

Brush: We've made our position clear a number of times both individually and through organizations such as the Atomic Industrial Forum. Our position basically is that in the efforts to reduce the proliferation of nuclear weapons, the U.S. government has instituted some so-called safeguards which we believe are counterproductive to U.S. interests in the longrun. And those interests are both our security interests and our economic interests.

**Russell:** There are reports that Bechtel will utilize Japanese trading companies in the future. If true, how will you use them?

Brush: We believe at Bechtel that in the future there probably will be greater use of barter or commodity trade arrangements than there has been in the past. Of course, there's been a lot of it in the past, but Bechtel has never gotten involved in it. But we can see more of this coming, particularly among developing countries which want to increase their international trade, and also find it difficult to borrow for projects. We do not intend to get into the commodity trading business ourselves. We would look for a partner or collaborator or a business agent who would handle those kinds of arrangements for us. There are several European and American companies doing that kind of business. But I would say generally we are more familar with the Japanese trading companies we have worked with for many years. I believe that if anything like this in the Pacific basin came up, they would probably be able to give better service to Bechtel than a U.S. or European company. But so far we have not yet set up the first deal. We have not talked to any trading company specifically about any project, but we have talked to all the trading companies generally about the idea.

Jack Russell is a broadcast journalist who has reported on developments in Japan for more than 10 years. Previously he covered the Vietnam war for NBC News, and prior to that was a business and economic reporter in Tokyo for a number of publications.