

# M.R. Debriddi: Inventor extraordinary

by Sakultala

AT an age when most other retirees like himself are content with gardening or going fishing, M.R. Debriddi Devakul, 66, is preparing to supervise the construction of a pilot hydrogen plant, based on one of his latest experiments, which may well turn out to be the most important breakthrough of his long and distinguished career as an inventor.

M.R. Debriddi has discovered the secret of extracting pure hydrogen from sea water and sunlight — an astonishing new process that has been certified by the Louis Pasteur University in Strasbourg recently, and is about to be patented by an international law firm, Andrejewskies Hanke and partners. M.R. Debriddi has submitted an official proposal to the Thai Government for the construction of a pilot hydrogen plant here (capacity of 150 kilowatts).

"If this proposed plant proves successful, then larger units will follow," M.R. Debriddi divulged. "No other fuel is required. I believe this experiment will be successful."

He is holding preliminary talks with a German engineer assisting on the project. Main equipment, consisting of a photo cell, will be imported either from Germany or France.

"For experimental purposes, as little as 2.8 volts is required to produce a minimum amount of hydrogen, but the voltage requirement would have to start at about 30,000 volts for industrial use, with substations controlling the voltage needed, depending on the requirement."

He devised a reactor which eliminates chlorine and oxygen during electrolysis, producing only pure hydrogen. Chlorine and oxygen are undesirable by-products in this case as they cause engine corrosion.

"But hydrogen, pure and clean, causes no pollution, no smoke, and is ideal for industrial use, eliminating smoke from steam boilers, for example," he said. "Once a hydrogen plant begins to generate electricity locally, then the people can see and experience the benefits."

"Oil and natural gas will be exhausted as energy sources sooner or later, but there's an almost unlimited supply of sea water and sunlight to produce hydrogen. The unique process I have discovered produces 99.9 per cent pure hydrogen and a total of 83 elements from the sediment, including iron, nickel, magnesium, calcium, etc."



M.R. Debriddi

Another possible use of hydrogen is as a motor fuel.

"You can well imagine that in the future motorists will have to fill up at the nearest hydrogen, instead of gasoline, station. Hydrogen is being used in experimental ways right now in Europe and America. I have also been recently to the Mercedes Benz plant in West Germany, where they have built cars running on hydrogen, which could only be put on the market when hydrogen is commercially available."

#### STILL FLYING

Long used to working on several experiments at the same time, M.R. Debriddi, by appointment of HM the King, is lifetime senior expert adviser to the Royal Rainmaking Research and Development Institute as well as Agricultural Engineering Department of the

Ministry of Agriculture and Cooperatives. M.R. Debriddi continues to lead rainmaking missions both here and abroad.

He was recently honoured by the Asian Productivity Organisation, and awarded a gold medal for his "outstanding contribution to the cause of increasing production in the Asian region," mainly having to do with rainmaking accomplishments.

Since 1938, M.R. Debriddi has come up with several significant and useful inventions, including equipment and machinery for rice production, such as the iron buffalo tractor, Debriddi propeller pump, paddy threshing machine and the centrifugal rice milling machine. He also introduced the automatic tapioca flour processing plant, making obsolete the drying of tapioca under the sun.

At present, he continues to instruct and advise 30 local rainmakers. He has always proved himself capable of putting his words into practice. He also keeps himself physically fit, and requires less oxygen to breathe than the average person, thus enabling him to go up as high as 17,000 feet without having to wear an oxygen mask. He is totally deaf in one ear and slightly deaf in the other, but that doesn't interfere much with his scientific work.

In the past few years, M.R. Debriddi's fame and reputation as a successful rainmaker has spread to neighbouring countries. He has been officially invited through the Thai Government to make rain in Indonesia, Malaysia and Sri Lanka.

Successful rainmaking in Indonesia by the Thai team led by M.R. Debriddi is credited with having persuaded President Suharto to make a gift of two orang utangs to Thailand, now prized creatures at Dusit Zoo, which has been trying to obtain a pair of them for several years.

"Our rainmaking team spent two months in Indonesia, and made rain in Bogor, Surogata, Bali and Lombok Island," M.R. Debriddi said. "The Indonesian team working with us was quite efficient, and they can carry on their country's rainmaking projects by themselves by now. After Indonesia, we went to Malaysia. The Malaysians have built a dam at the Thai-Malaysian border, adjacent to Pattani, Narathiwat and Yala. We flew around that area for one whole month, and made rain right into the Malaysian reservoir."

"Then, Sri Lanka wanted our assistance in increasing the water



*M.R. Debriddi (second from right) goes over a rainmaking map with members of his team.*

level of their reservoir, which is rather small, only 30 square kilometres, but then roughly 95 per cent of electricity in Sri Lanka depends on that reservoir. Again, we accomplished our rainmaking mission there with flying colours."

Candidly, he told us that making rain abroad has indeed been a pleasure, both from the standpoint of the host country's hospitality and remuneration.

"In Indonesia, for example, our team received US\$5,000 service fee, and each member was also paid US\$150 per day, with all other expenses paid for. That of course represents a vast improvement over what a local rainmaker earns. The local pay is 10 baht per hour during rainmaking missions, and you have to pay for your own expenses."

Although there have been a number of minor accidents during

rainmaking assignments, no serious casualties have been recorded since 1969 when the Thai rainmaking programme commenced.

"Sometimes our aircraft are forced to land on the main road or highway, and I can tell you it's quite a sight," M.R. Debriddi said with a chuckle. "Once, one of our Fokkers had to make an emergency landing in an area infested with communist insurgents. The insurgents immediately arrived on the scene, and also quickly demanded the burning of the aircraft, saying it belonged to the Government. But I told them, no, it belonged to the people. The farmers bought it through contributions. The insurgents relented. But, on the other hand, if it was a police aircraft, then the insurgents would have set it on fire without any questions asked."

Wasn't he afraid of the danger of a violent clash with insurgents?

He replied, "No, I always carry a gun. Besides, the insurgents, I believe, are fully aware that what we are doing is beneficial to the people and leave us alone."

Rainmaking won't be taking up much of M.R. Debriddi's time from now on, because he has decided to concentrate more on the establishment of the pilot hydrogen plant.

"I have spent a total of seven years already on my hydrogen research, most of the time in my laboratory in a boat," he said. "I will have to go back soon to my boat lab and do further research, particularly on the sediment of metals from the hydrogen process that I have invented."

For this tireless inventor, going out to sea is thrilling in an unusual way, because when he is in his boat lab, work and pleasure are one and the same.