

# In Memory of Our Great Friend Professor Dong Haishan

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In October 1987 an international symposium on propellants, explosives and pyrotechnics was arranged in Beijing at the Beijing Institute of Technology. I participated in that symposium and presented a paper entitled "Sensitivity Test Methods for approval of Explosives in Sweden". A very kind person helped me to prepare my slides for the presentation. We became friends and one year later he and some of his co-workers visited the company where I am working, Bofors, in Karlskoga, Sweden. This person was Professor Dong Haishan, and since that we have been friends, and have visited each other several times. Below follow some memories from Professor Dong's and his co-worker's visits to Bofors, Sweden.

In the year 1988 Professor Dong and four of his companions visited us. I met them at the railway station and Professor Dong was surprised that I immediately recognised them. To be honest these five gentlemen were the only persons from China on that train, so it was no big problem for me to recognise them.

We visited our company's Department of Explosives Technology. When we came to the laboratory, the staff run up the Chinese and the Swedish flags and fired salute with a 37- mm gun. Before we entered the laboratory Professor Dong went to the gun service staff and expressed his thanks for the salute. The main purpose of the work at this laboratory is research of sensitivity and performance of all kind of explosives and most of the equipment was shown to our visitors. The work consists of testing as well as computer simulations.

The company Bofors was established as a black smith hammer in 1646 in Karlskoga. The two hammers and the waterwheels still remain and I showed these to my Chinese guests and told them the history of our company. In the late 1890's the world famous person, Mr. Alfred Nobel, lived in Karlskoga and was also the Director of Bofors. His last will was obtained legal ratification at the court in Karlskoga and this last will is the base of the Nobel Price Award. Alfred Nobel's mansion, laboratory and stable during his last years in Karlskoga are today a museum. The guide is a local actor who looks exactly as Mr. Nobel. In his young days Alfred Nobel lived in Saint Petersburg, where Professor Dong also has lived. I introduced Professor Dong to "Mr. Nobel" and said that because they both had lived in Saint Petersburg maybe they had met there. They both laughed at the joke and started to talk about old days in Saint Petersburg. Then we were guided in the mansion and continued to the laboratory, the company museum and the gun museum. In the museum there is, among other things, a gun of a type also sold to China. This gun is possible to disassemble and the different parts were carried by donkeys.



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Sweden has since several hundred years a great iron production. In the old days we had a lot of small iron foundries. One such foundry is situated just north of Karlskoga and is today a museum. We paid a visit to this museum and our Chinese visitors were very interested in the Swedish iron production 100-400 years ago and a lot of photos were taken of the blast furnace, crushing-mill and the production of charcoal. We climbed from level to level and looked at absolutely everything.

A mini seminar concerning development of secondary high explosives was arranged together with Bofors Explosives (Eurencor Bofors). This seminar was held in the old headquarter of the explosives plant and Professor Dong talked about works going on in China. We talked about development of new formulations and the process to transfer them into production. In Sweden new formulations mostly come from FOI which is an institute corresponding to CAEP in China and then the production is started at Bofors Explosives.

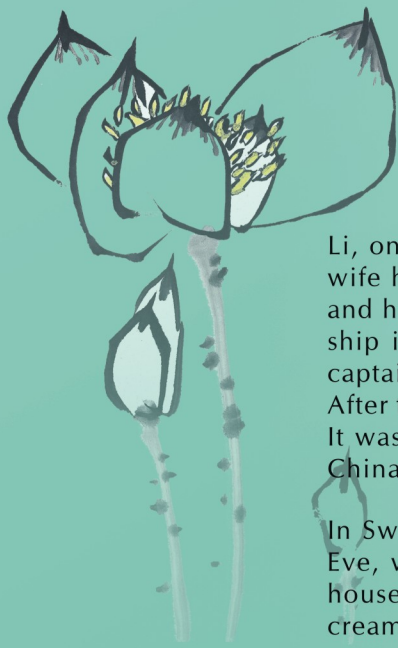
Just outside Karlskoga a proving ground, Bofors Test Center, is situated. We were invited to this Bofors Test Center and given information of the company and looked at different facilities of firing ranges, environment test laboratories and wind tunnel. We also showed Professor Dong and his colleagues a shooting-test of anti-armour weapons. The Carl Gustav anti-armour weapon system is a great product of Bofors.

Out in the wilderness on the proving ground we have a beautiful cottage with sauna and dining room where we had dinner one evening. It started with a drink and a special sport, to throw an axe. You swing a two-edged axe behind your back and throw it towards a wooden target with a diameter of one meter at a distance of about five meters. I think our Chinese friends were somewhat confused about this sport so rather soon we continued to the dinner table.

One evening just before supper we talked about wild animals in China and in Sweden, especially wolves and elks. Professor Dong mentioned that there are a lot of wolves in China, in fact too many, but very few elks. In Sweden the relation is the opposite and elks are a problem here. We discussed, as a joke, the possibility in sending wolves from China to Sweden and elks from Sweden to China as a friendly exchange and then we had a good supper.

About 30 km west of Karlskoga is the city Kristinehamn, close to a huge lake, in fact one of the biggest in Europe. There is a copy of an old ship. This type of ship, called Bojort, was used on this lake during several hundred years as a merchant ship as well as a naval ship. One day Professor Dong, Doctor





Li, one of my co-workers, Mr. Widlund, my wife and I participated in a tour. My wife had prepared a lunch and we had a wonderful weather. We left the harbour and headed out at sea. After a good lunch we participated in a special event. This ship is armed with four guns, which are loaded with black powder. I asked the captain if we could fire a salute with the guns as an honour to our Chinese guests. After the salute the ship was navigated by a very proud helmsman, Professor Dong. It was of course a very great honour to fire a black powder salute to guests from China where the black powder once was invented.

In Sweden the greatest day is Christmas Eve and the next greatest is Midsummer Eve, when the longest day of the year is celebrated. This is celebrated in every house in Sweden with a special meal consisting of herring, fresh potato, sour cream, onion, vodka and followed by fresh strawberries. You also erect a wooden may pole, covered with leaves and flowers, decorated with flower rings and with a flag on the top. Every girl has a wreath of flowers on her head and we perform strange dances with non understandable names as "The priest's little crow" and "The small frogs".

In 2006 Professor Dong and Doctor Li visited us during this Midsummer festival and when we had visited Bofors they participated with great interest in the festival. First of all we made a may pole, not with one flag on the top, but two, one Chinese and one Swedish. Then we had our special Midsummer dinner. Later we went to a festival place where they arranged for dancing. Professor Dong told us that in his young days he was very fond of dancing, so he enjoyed the dancing around the may pole very much, among them "The priest's little crow" together with my wife. Then we went back home for coffee and tea and then we accompanied Professor Dong and Doctor Li to the train as they had to start their journey back to Mianyang.

For me and my wife, Karin Hanson, it has been a great honour and a magnificent pleasure to have been friends of the great scientist Professor Dong Haishan during so many years and have had the possibility to spend many interesting days together with him in Sweden as well as in China. Professor Dong has always shown us great hospitality, and given us China; a country which we thanks to him are deeply fond of.



Professor Dong Haishan will always stay in our hearts and our memories.

