

Northern Sea Route and climate change

→ The February meeting of the Hong Kong branch was one of our most interesting for a number of reasons.

We were delighted to welcome a group of students from Dalian Maritime University – the first time we have ever had the pleasure of their company in Hong Kong. They were all smart, articulate and a credit to their university, and we hope they enjoyed the evening as much as we enjoyed meeting them.

Our speaker, Professor David J. Drewry, is every bit as interesting as his subject matter. He is Honorary Fellow of Emmanuel College, Cambridge, a Trustee of the Natural History Museum and Vice President of the European University Association. He holds a doctorate in geophysics from Cambridge University and has published three books and more than 100 research papers. He has been Director of the Scott Polar Research Institute and the British Antarctic Survey, and has led scientific expeditions to Antarctica, Greenland, Svalbard and the Russian Arctic. He is a recipient of the Polar Medal, the United States Antarctic Service Medal, the Patron's Gold Medal of the Royal Geographical Society and the *Prix de la Belgica*. Remarkably, he has a mountain and a glacier named after him in Antarctica.

His talk on the Northern Sea Route started with a look at the history of the area, from the Vikings who first rounded North Cape at a time when it was noted for its thick ice, severe storms and long, dark winters. The first complete transit was accomplished by Nordenskjöld aboard *Vega* in 1878/9, although he was blocked by ice and had to over-winter before he could complete the task. Russia built some icebreakers and established the city of Murmansk in 1915, but it was in the Soviet era that local shipping began to exploit timber resources. By the time the Soviet Union collapsed, traffic had increased more than tenfold, largely due to the oil and gas in the Kara Sea region, and port facilities had improved. However, the subsequent turmoil in the former USSR saw traffic levels collapse.

In 1991 the Northern Sea Route was opened to international shipping. The advantage of the Route is obvious – it reduces the distance between the Far East and Europe by at least one third, but it is only open during the relatively short northern summer. Nonetheless, Russian Prime Minister Dimitri Medvedev recently announced that he expects traffic to grow thirty-fold in the next eight years, and the Northern Sea Route to eventually carry one quarter of seaborne traffic between Europe and the Far East.

Prof Drewry thinks this is not impossible. He cited the first transit by a foreign vessel in 2010 as saving the owners EUR 300,000 despite the high cost of the Russian icebreaker needed to escort the vessel, and pointed out that there were no less than 71 transits in 2013. He believes growth will be exponential in the future as Russia reduces costs and bureaucracy, and as climate change reduces ice cover and lengthens the sailing season.

Turning to climate change, our speaker pointed out that there has been a two degree temperature rise in the area since 1880, and it is the fastest-warming region on Earth. There has been particularly strong warming in the Barents Sea, but overall the ice is thinning and reducing in extent. The reduction may reach 20% over the next 20 years, and most ice will be lost along the Russian coasts. Thus the Northern Sea Route will become more navigable and is likely to remain open for six months every year, and indications are that it will not suffer from the political instability which often affects the Middle East.

There was a lively discussion after the talk, and our visitors from Dalian took an active part. No doubt many of them will sail the Northern Sea Route during their careers, the lucky things!

Captain Alan Loynd FNI

