

Loran and the Royal Institute of Navigation

ILA 34th Annual Convention & Technical Symposium

Santa Barbara, CA, USA

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Good morning, ladies and gentlemen

******* NAV1785 - Title slide *******

Bob Lilley kindly gave me this short slot and told me to talk about the hot issues confronting the Royal Institute of Navigation.

I feel a bit of an impostor. I'm not actually President of the Institute. I'm not even President-elect. I'm the Council nominee for President. The election is tomorrow morning at 8.30, California time, 1630 in London. Perhaps the people will rise against me, Middle England will speak out. Perhaps it'll all collapse in a welter of hanging chads and Supreme Court decisions. If not, I'll let you know.

I don't even think I should talk about the hot issues confronting our Institute. Would they interest you? Number 1: how to handle tomorrow's visit of our Patron Prince Philip. The Institute and Buckingham Palace do not see eye-to-eye. If it goes wrong, I can see the entire Council confined to the Tower of London. Of with their heads! Why do you think I'm not there but in a hell-hole like Santa Barbara instead.

So, I'm going to stick to Loran. I thought I should talk about what's happening to Loran in Europe. It's very important to the Royal Institute of Navigation, we've spoken out loud and clear publicly and to government about it. It's very important to Loran folk in Europe. And it's going to have repercussions here in the US, and in Asia.

******* NAV0772 - NELS map *******

The immediate issue is the future of the 9 stations of the NELS network, following the ending of the NELS international agreement on 31 December. That's less than 3 months away. The stations are in the balance. Jacques Manchard will give you a much fuller briefing about NELS after coffee. To summarise, France intends to maintain its two stations, possibly build new ones. The UK, which does everything better than France of course, has already opened a new station, as Paul Williams has told us. France is taking over the Danish station at Ejde. And that's the end of the good news.

Germany will close Sylt and mothball it for possible future use. And Norway tells us that it plans to close down all four of its stations and dismantle them.

By doing that, they'll torpedo almost all the UK has achieved by building its new station at Rugby. They'll also sever the timing link from France to Ejde. Coverage will end inside Norway and will fall dramatically outside. Not surprisingly, the British and French governments are putting great

pressure on Norway to reverse, or at least postpone, its decision. There is talk of sending a gunboat.

Perhaps we should see this situation in a wider perspective. Here in the US, informed opinion has moved over the last 10 years from regarding GPS as a stand-alone system, all the nation requires, to a system with certain vulnerabilities and limitations that must be complemented by other technologies to safeguard navigation and timing services. It's taken a concerted and sustained effort by organisations such as this one to change the views of opinion-formers in the US. That same process is under way in other continents, too.

In Europe, of course, we have to work country by country.

****** NAV1786 - Views of Loran ******

Take the UK: as recently as a year ago you'd hear from our Department for Transport that Loran-C was a marine navigation system, quarter-mile accuracy, for which the shipping industry had no enthusiasm. Now the view has changed: Loran is seen as the most economical way to fulfil our international obligation to provide a maritime navigation service if GPS is lost. Reversion to lights and buoys is a step too far, and Loran will fill the gap. Plus, it's there for other modes of transport, and for timing.

Across Europe, the view of Loran held by each government, indeed by each agency of government, lies somewhere on this continuum. All are tending to move in this direction, each at its own pace. It seems to depend

on whether they've yet listened to an inspirational speech from Durk van Willigen, the Billy Graham of the European Loran-C business.

The attitudes of US agencies could also be plotted on this chart: where would the US Coast Guard lie, where the FAA? But in Europe there's an additional complicating factor.

****** NAV1787 - Galileo ******

Galileo. Many of our politicians have only recently committed themselves to funding Galileo, Europe's GPS. They believe Galileo will give Europe independence of the US in satellite navigation and a profitable new satnav industry. Those who accept the vulnerability of GPS often believe that Galileo will be immune. My own view is that all three of these views of Galileo are largely fictitious: Galileo will not be independent of GPS; of itself it will not bring a new industry; and it will share GPS's vulnerability to jamming. But these myths are widely believed in Europe. The last thing a politician who's gone out on a limb to invest in Galileo wants to hear is that Galileo is fallible and needs support from a terrestrial system. So, we have to convince them of that, too; Durk's really got his work cut out.

****** NAV1788 - ERNP ******

The final complicating factor is the European Radio Navigation Plan, the ERNP. The preliminary study for this plan said all the right things: Galileo's vulnerable and Loran's OK. The nations of Europe, together,

should make up their minds, says the study, should come to a common policy. Excellent! The question for Loran right now is simply whether we can hold European Loran together until that process gets under way. That's what we're trying to persuade the Norwegians to do, then the Germans. Whether we'll succeed or not, it remains to be seen. If we don't, I fear we will lose the Norwegian stations forever and Loran will cease to be viable in our continent. If we do succeed, I hope we can then carry Loran successfully through the European Radio Navigation Plan to continued operation and expansion.

As the Chinese, that great Loran nation, would say: we certainly live in interesting times.

***** NAV1789 – Wrap-up sunset *****

And you can be sure of this: the Royal Institute of Navigation is a firm supporter of Loran and will remain so if I'm elected President.

Thank you.

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