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The Unofficial Ski Trip to Courchevel 1st to 8th March 2015 by Ron Walker



For the third year running our Unofficial Ski Group returned to Chalet Monique at Courchevel 1650. Expectations were running high in the transfer coach from Grenoble Airport. There was one apprehension - with our Group at only nineteen this year we would be sharing the chalet with four strangers, who proved to be great and coped admirably with our group. On Monday the first day it was snowing and unheard of - it rained! A few skiers ventured out in the afternoon in the very poor conditions. On Tuesday the sunshine arrived and a good days skiing for all. On Wednesday the third day we awoke to heavy snowfall and the walkers temporarily increased for the morning with a little skiing in the afternoon. The rest of the week was lovely - blue skies and near perfect conditions. This year we had fifteen skiers, three walkers and one part-time walker visiting her son who works in Courchevel.

The least experienced group came on leaps and bounds with their lessons, enjoying venturing further afield. The stronger ski group were again able to cover many kilometres of the excellent three valleys ski area. One member of this group complained all of one morning about his boots, later a nice young lady children's' ski instructor pointed out he had his boots on the wrong feet! The hot tub was again very popular after a hard day's skiing.

I think everybody agreed an excellent week but very unfortunately on the last day on the penultimate run home Miranda Greenway took a fall that resulted in a broken femur. She was taken to a clinic in Aix Les Bains where they operated with a replacement hip. Miranda spent a week there before returning home where her recovery is progressing well.

Skiing next year has been booked at Tignes and we have taken exclusive use of Chalet Anne Marie. There are still five places available - anyone interested in joining this exclusive ski group next year please contact Ron Walker 01428 604254 or ron.walker1@tiscali.co.uk.

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ROSL Meeting 5th November 2014

The Autumn meeting was held at the Royal Overseas League, where we had the pleasure of an excellent lecture by Dr Richard Harris on the subject "The Great Man-made River Project"

The lecture began with a brief history of Libya bringing us from Roman times through to a control by Italy, independence and King Idris, and then the Gaddafi revolution. In 1983 Gaddafi looked to the USA and the company Brown and Root to solve the water shortage problem and to provide water for irrigation. In the Sahara there is a lot of water under the surface and the project was to gather this water from a total of 1100 wells and pipe the water to Benghazi in the east and to Tripoli in the west. Richard Harris described some of the technical challenges facing the team, and how the project had managed to continue through international political difficulties and local conflicts. Richard recruited Peter Varley, our President in 2014, whose skill and patience was needed during the long meetings which had to be held with the Arab customers. The project was opened by Gaddafi, who claimed to be the architect of this Great Man-made River.

Today the water is still flowing despite being bombed by the UN during the recent civil war, although with lower demand than planned as the agricultural demand is hampered by local fighting.

The AGM, President's Lecture and Dinner at the ICE

The evening opened in the splendid Telford Theatre at the Institution of Civil Engineers with the AGM under the Chairmanship of Peter Varley, the outgoing President. After the meeting Peter Varley handed over the Presidency to Peter Blair-Fish.



Peter then gave his Presidential lecture on the subject of Offshore Structures, the French Connection. Peter gave us a comprehensive review of the various structures used in the offshore oil and gas industry in the major fields of the world. He showed clearly where French companies were involved with the design and build of such structures, giving us an insight into the different approaches taken by the various designs.

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After the lecture some 110 people sat down for a splendid dinner with a friendly atmosphere and the usual good service of the ICE staff.

Peter Blair-Fish has devised an excellent programme for 2015 and we look forward to an interesting, entertaining, and convivial year.

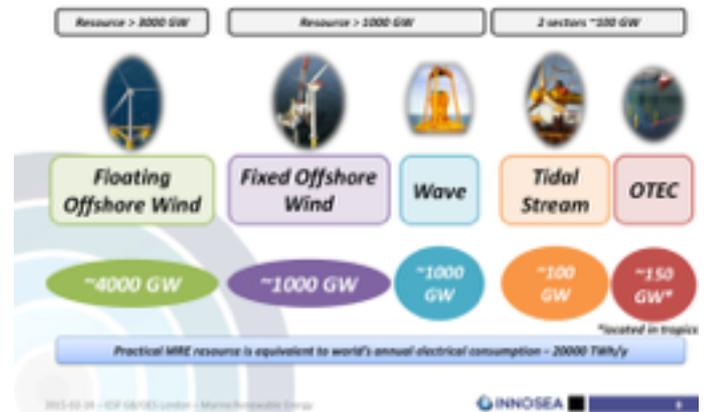
ROSL Meeting 18th February by Richard Groome

At a well attended meeting in the Royal Overseas League, Felix Gorintin from INNOSEA started what promises to be a year with much French content, with a very detailed journey through European offshore wind and renewables. INNOSEA itself is a French company, founded as a spin off from successful research projects in the wind, wave and tidal arenas.

What was rapidly apparent was that, almost certainly because of favourable subsidies, the UK was one of the European leaders in offshore wind, and well ahead of France; though French companies were involved in all the projects.

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MRE practical resource



M. Gorintin explained the differences between floating and fixed offshore wind installations, which are at the upper end of the renewables generation scale, and then showed us the smaller wave and tidal projects (which are being pioneered in the Orkneys amongst other sites). Some of the other ideas such as salinity gradient (osmosis) projects, were still at least 10 years away, he said.

Interestingly the equivalent cost of generating electricity by offshore wind is currently 5 times that of the nuclear option, and projects like wave and tidal are 8 times as expensive. However, we were told that the cost objective for fixed offshore wind as an example was to be about 3 times the cost of nuclear by 2030, and this was the sole sector that had really been commercialized at present.

As is usual with renewables, there were lots of spirited questions and Roger Venables gave the vote of thanks.

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**Anaerobic Digestion. Lecture and
Dinner 3 March 2015**



In the splendid surroundings of the National Liberal Club, Andy Bull of the Severn Wye Energy Agency gave a talk on the development of Anaerobic Digestion in France and the UK. He described the smaller scale on-farm systems that produce electricity and heat. The Brittany region leads the way in developing such systems and has a number of active units in operation. The UK is still a little way behind, a few progressive farms are making progress. Andy compared the way the subsidy systems work in France and the UK, and discussed the benefits or otherwise of the production of crops specifically for use in digesters. Andy's relaxed and clear style both entertained and informed some 69 members and their guests on a fascinating topic. After a glass of wine we then sat down to a splendid dinner.

Spring Voyage 2015 Poitiers

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First day Thursday 19th April by Joe Modro

After an early start and trouble free check in at St Pancras, we were on our way by Eurostar to Lille. A straightforward change of stations at Lille, and we were on a TGV direct to Poitiers. This is a double decker and goes via Charles de Gaulle Airport, then skirts around the west of Paris. Towards the end of the journey we got glimpses of the new LGV construction we were to hear about later.

After joining up with our independent travellers and settling in to our hotel, we were treated to a very detailed presentation by Robert Piechon of Vinci about the Ligne de Grand Vitesse from Tours to Bordeaux, with a connection to Poitiers. The need for this line may have surprised a few of us, since we had just arrived by TGV, but a glance at the station area showed that a mix of traffic, viz. goods, local and TGV, must impose severe limitations on line capacity (shades of HS2?).

The basic statistics of the new line are slightly eye watering. A 50 year concession with Vinci and associated companies is for a 302km Tours-Bordeaux section, designed for speeds up to 320km/hr with no stations on the way but with connections to 10 places. A few sample statistics are: 1320km of rail track, 500 structures, 800,000 cu.m of concrete and 69 million cu.m of excavation. Peak workforce numbers 8500 including 2000 hired locally. We were shown details of a few of the major structures, including the ones

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to be visited the following day. Of particular interest was the post-tensioned segmental bridge constructed by cantilevering from pier to pier with cable stayed supports from a temporary mast above the pier.

The scheme is due to open in 2017 and is substantially on programme. The presentation concluded with a short film showing a TGV achieving the world speed record for rail of 574km/hr.

After such a full presentation, questions were left for the following day, and we proceeded straight to the nearby Poitevin restaurant for an excellent meal.

Second Day Friday by Gareth Williams

The voyagers, after an ample breakfast, made an early start walking a few minutes to the foot and bus bridge named after the post war president Leon Blum. I was intrigued by the joints at the base of the column allowing for movement of the bridge, and the many and varied steel arms giving the bridge its width and elegant shape, designed by the RFR consultancy. It links the old town of Poitiers with the west part of the city, The river Boivre, the main roads and railway line run below. We walked part of the bridge and down many steps to a waiting coach. We were then taken to the construction sites described in Robert Piechon's lecture on the Ligne Grande Vitesse Tours to Bordeaux section.

The L'estacade de la Folie is 900 metres long. It has 79 solid concrete pillars each constructed on site. Some 40 metre long

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concrete beams, the ends of the beams resting on double width pillars, support the railway line. The massive structure will be required to withstand 500 tonnes of train every few minutes, in addition to high winds and any geological movement. The second site gave us an idea how much cutting and infilling had taken place. The viaduct was made up of segments of precast concrete.

Throughout the morning Robert emphasised how sensitive the designers had to be of environmental issues. Much of the construction traffic was on the rail track bed and there was evidence of reinstatement.

After lunch at nearby Futuroscope we went to the musée des Tumulus de Bougon. The site of these burial chambers constructed of very large stones, megaliths dating from 4500 years BC, predating the pyramids by 2000 years. They represent the earliest known time when men ceased to be nomadic hunters and became herders and growers. Carbon dating verified the ages of the remains in the chambers, who were probably important people buried with offerings of jewellery and polished axe heads. How the large megaliths were transported there will probably remain a mystery. The group of engineer voyagers looked rather too comfortable entombed in the Tumulus discussing it! The museum displayed stone age settlement tools and artefacts.

Later the vaulted ceiling of the basement dining area of the gastronomic Antipodes restaurant dating from the 12th century created a great ambience for our evening

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dinner. So ended an interesting day of contrast, 2015 engineering projects to megaliths 6500 years ago.

Day 3 Saturday by John Duthie

On Saturday, we took the IESF 'walking bus' to the market square, where they sold an enormous range of fine food, including 10 different grades of oyster, to view the church of Notre Dame La Grande. This 12th century Romanesque church still has some of the original wall paint remaining. Having re-assembled, we took the motor bus to a view point overlooking the fortified medieval town of Chauvigny, with the historic profile clearly visible through the morning mist. We stopped in the village of Angles sur l'Anglin for a coffee and to see the exhibition of needlework in the tourist office. (They had a very poor sales technique: I don't think anyone bought anything.)



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After lunch we visited the Abbey Church of Saint-Savin, a UNESCO world heritage site, with many historical frescos on the walls and ceiling. The guide explained how to 'read' the frescos. We learned about the story they were intended to tell, and the fact that where the frescos were placed in the church was just as important as what they depicted. We also learned that medieval painters were not free-thinking artists, but craftsmen who produced the message that they were commissioned to produce.

The gala dinner in the evening was held in Chateau du Clos de la Ribaudière, featuring langoustine mousse and paté de foie gras canapés with the pre-dinner drinks, and rabbit for a main course. An excellent meal!



Sunday 19 April by Jean Venables (plus pics from Roger!)

We woke to clear blue sky and sunshine from the comfort of inside the hotel, but this was

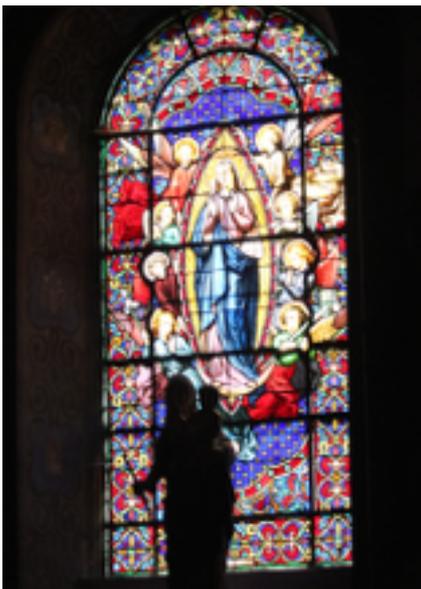
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misleading because we were still having to wrap up against a cold wind.

Our walking tour of Poitiers started by meeting the Guide outside Cathédrale Saint Pierre. One comment on Poitiers' standing in the tourism stakes is that it has insufficient numbers of non-French-speaking visitors for it to be possible for English-speaking Guides to make a living there, so our guide was only French-speaking. Those who admitted defeat quietly followed Peter & Diana for a self-guided tour in English.

Poitiers is very well endowed with churches, so our visit started in front of and in Cathédrale Saint Pierre. Next was Eglise Sainte-Radegonde, with much to learn, especially the links to Jesus College, Cambridge



Preparing this short note of the day has prompted me to look up the link to St Radigunds Abbey in Dover, a place I much visited as a child.

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Baptistery St Jean (no connection to me!)

followed, with an intriguing exhibition of carved stonework.

We re-traced our steps past the Cathédrale Saint Pierre and on to Grand Rue with many historic buildings, the oldest dating back to 1667.



Our view of Eglise Notre Dame la Grande was unfettered by, and a calm contrast to, the

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previous day's splendid and extensive open-air market that almost surrounded it.

Our route back to the hotel to collect our luggage and say our farewells to the independent travellers took us once again through Place du Maréchal Philippe Leclerc in front of the impressive Hotel de Ville

Then, after three days that seemed to have flown by, but which had been filled with so much of interest and to enjoy, it was time for our short coach hop to Poitiers station. Then our calm and comfortable 3½-hour TGV journey to Lille Flandres, was followed by the short walk to Lille Europe and, after the customary wait there, our 95-minute Eurostar to St Pancras.

Another Voyage successfully completed, we offered our profuse thanks to Peter & Diana for all their efforts to make it the success it had been, and content in having got to know another corner of France with excellent food and wine and in great company.

Letter from Maurice Kenn

Members will have received notification from our Secretary that Maurice Kenn, a member for many years, passed away recently in Brisbane. Before he died he sent the following letter addressed to the editor, which I thought members might like to read

The comments on Gustav Eiffel (in an earlier Newsletter) reminded me of an occasion in the ICE library, when over-reaching for an elevated book, I optimistically used a low

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shelf as a foot rung. Inevitably the latter "step" tipped up and, with much clatter deposited a pile of books on the floor at my feet.

This pile included a very large volume signed by Gustav Eiffel and presenting the collection of his published papers, I discovered that, after working for many years as a structural engineer, he had developed a keen interest in the wind loading on structural elements.

Accordingly Eiffel decided to determine the drag coefficients for objects of different cross sections by measuring the terminal velocities of such objects free-falling through air. Eiffel needed a tower with an elevated platform from which to drop the objects. Very conveniently the Paris 1889 Universal Exhibition provided a good excuse to build a tower and Eiffel duly installed his Fluid Mechanics Laboratory on the "Deuxième Etage" of his tower.

Erol Gelenbe - congratulations!



In the 18th of April 2014 Honours list of

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France, Professor Erol Gelenbe of Imperial College, a member of IESF since early 2012, was awarded the Chevalier de la Legion d'Honneur by the President of France. On 19th December 2013, he received in the Hungarian Parliament (photo above) the "In Memoriam Dennis Gabor Award" for outstanding scientific research with strong innovation content. On 23rd May 2013 he was elected a Foreign Member of the Polish Academy of Sciences. Our belated congratulations to Erol.

Welcome to New Members

We are delighted to welcome our new members since the September 2014 Newsletter

Keith Hinde holds the degree of Bachelor of Pharmacy and is a member of the Royal Pharmaceutical Society. He has practiced as a pharmacist for over forty years and has contributed to the development of pharmaceutical services and on pharmaceutical committees.

Daniel Fayolle is a mechanical and electrical engineer, living in France. With degrees from British and French Universities and with senior involvement in power engineering systems around the world

Doug Ward is a chartered civil and mechanical engineer and is active in estate management for hospital trusts.

Adrian Franklin is a chartered civil engineer and has held senior positions in engineering organizations

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Douglas Oakervee is a highly qualified civil engineer with extensive experience

Philip Bennett is a Chartered Engineer, Fellow of the Institution of Civil Engineers and the Institution of Electrical Engineers and held senior positions in engineering organisations.

Peter Hughes was trained as a surveyor and in more recent years was active in IT for business systems.

A warm welcome to all these distinguished new members.

Your editor, **Bill Bayly**, welcomes all contributions to your Newsletter. Please make the Newsletter your Newsletter!!
Email Anthony.bayly@yahoo.co.uk