



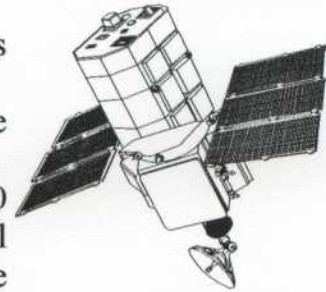
THE FEBRUARY MEETING

One subject we have not covered in our series of lectures and demonstrations is Commercial Satellites.

Our guest speaker this month is Steve Emmett, G7RGG who works in one of the ground stations of Cable and Wireless, a major company in satellite communication.

In his introduction, Steve will outline the history of space communication from 50 years ago when Arthur C. Clarke forecast his vision of three geostationary orbital satellites serving the needs of the world, up to the present day where just about all the limited number of space 'slots' are filled. Subjects will include launching, housekeeping, SATCOM Bands, carriers and the inevitable horror stories.

The meeting opens at 7.30pm in the Board Room of the Marconi Social Club, Beehive Lane, Chelmsford. Please sign-in on arrival and place your order for refreshment to be served during the interval.



DATES FOR YOUR DIARY

- 1 Feb. SOUTH ESSEX ARS RADIO RALLY - Canvey Is.
- 3 Feb. CLUB MEETING - Commercial Satellites G7RGG.
- 15 Feb. CAMBRIDGE & DARC RALLY - Addenbrooks Hosp.
- 22 Feb. RSGB NATIONAL VHF CONVENTION - Sandown Pk.
- 28 Feb. RAINHAM RADIO RALLY - Rainham Kent.
- 3 Mar. CLUB MEETING - Auto Link Establishment.
- 7/8 Mar. LONDON AR & C SHOW - Picketts Lock.

DF NEWS - Dick, G3WHR

The Direction Finding season will open with The Snowman Event on 1st February with the start at Long Melford, prompt at 12:50pm.

SLOW MORSE TRANSMISSIONS

Tom, G4INM has volunteered his services to local amateurs by resuming his slow morse practice sessions on three evenings each week. This is not part of the nation wide RSGB morse service GB2CW in which Tom was a major contributor for many years but rather for local stations wishing to brush-up their speed in preparation for the morse test.

The transmissions are on a one-to-one basis (in terms of license regulations), with any other stations wishing to check in if they so desire or otherwise just listen, however, Tom would like to know if you tune-in to make his task more interesting.

The sessions are on Monday, Wednesday and Friday at 7.30pm (local) on 145.225MHz FM with tone modulation and voice reading of the text. To match the present format for the morse test, Tom will send messages in the form of short QSO's

MEMBERS NEWS

Congratulations to Robert Tavener who sat the R. A. E in December and passed. Robert has applied for a callsign but at the time of going to print this had not been received.

LOOKING AHEAD

A few reminders of events to be enjoyed this year which also will need members participation.

INTERNATIONAL MARCONI DAY - 25th April 1998

The Society will again be operating a 24 hour station in the Marconi Hut at the Science and Industry Museum.

C.A.R.S. CONSTRUCTORS' COMPETITION - 2nd June 1998

Now is the time to decide what to construct and get started, remember there are some worthwhile prizes to be won!

SCIENCE AND INDUSTRY MUSEUM OPEN DAY - 26th July 1998

This is a Sunday opening to the Public and the Society will be operating an HF station with the Callsign GB2CMS.

THE POLDHU WIRELESS STATION - Then and Now.

By David Barlow G3PLE (known as "Duke" on HF).

In the Summer of 1900 Guglielmo Marconi, Major Flood Page, and R.N.Vyvan Managing Director and Construction Engineer of Marconi's Wireless Telegraph Co. Ltd., looked at several sites in Cornwall to build their experimental wireless station. What they sought was a remote location with uninterrupted path across the Atlantic. The site chosen was on Angrouse Cliff adjacent to the Poldhu Hotel. Nearby Mullion village was alive with rumours that a mad Italian was to send messages through the air. This was the making of the village, as both accommodation and labour were required for building and aerial rigging.

Dr. J.A. (later Sir Ambrose) Flemming was responsible for much of the design of the station and in today's terms progress was rapid - building work commenced in October 1900 and by January 1901 the first tests commenced. The equipment was large and heavy and in order to produce a spark a 32 horsepower engine and transformers weighing half a ton were required. In the Summer of 1901 twenty 200 ft. masts were put up in "Wireless field".

Marconi had already sent signals over a distance of 150 miles prior to setting up the station at Poldhu. He had early success at the new site when he contacted Crookhaven on the West Coast of Ireland, some 250 miles away. This encouraged Marconi and preparations were made on the other side of the Atlantic for the main objective of a transatlantic transmission. The twin station to Poldhu was built at South Wellfleet, Cape Cod, Massachusetts and alternative sites were also visited.

The biggest set backs all concerning the aerials; on September 17th 1901 severe weather and gales demolished the aerial array at Poldhu. Similar masts at Cape Cod were also blown down a month later. R.N.Vyvan had warned that the guying arrangements at both sites were flawed. While the aerials at Poldhu were redesigned, the onset of winter made it impossible to continue at Cape Cod and so Marconi went to St. Johns, Newfoundland instead arriving on 5th December. It was decided that the attempt to receive the signals from Poldhu would be made using a balloon but it was ripped from its moorings and so a kite was used in its stead.

On 12th December 1901 a kite was launched and flew at about 400ft, Marconi heard the letter "s" in Morse code (three dots) on three occasions during the day. The first transatlantic communication

Thereafter Poldhu worked extensively with ship shore communications and thirty five years of pioneering work in wireless telegraphy with the station playing its part in the apprehension of Crippen and also being in contact with the Titanic on its fateful maiden voyage; it was a major source of information and news for shipping. The aerials became larger reaching heights of over 300ft and the equipment became more refined.

Poldhu ceased to be a commercial station soon after the First World War. It then became the Marconi Company research and development centre. More pioneering work by Marconi and Charles Franklin led to the development of "short waves" and the Imperial Network linking the British Empire was all based on the research carried out at Poldhu. The Poldhu Station was closed in 1934 and the site cleared three years later. The Marconi monument was erected to mark the site and its historical importance. (continued over)

LAST MONTH'S MEETING - Geoff, G7KLV

A New Year, a New Venue and New Procedures! What a way to start the New Year! It was forty-three years since the Club had a similar upheaval when the move was made to Marconi College from Fred Smith's radio shop in Moulsham St. The move to MASC in Beehive Lane was all quite painless with the help of Roy's little map, enclosed in the last Newsletter. All the usual faces were present, plus a few more, so it would seem that everyone found their way!

Just in case anyone didn't know where to go our presence was emblazoned with Colin TRM's new plastic CARS banner! There were more changes to come, and we were asked to sign in on arrival and book hot cuppa's for the interval. The bar was available for those in need of something stronger.

Roy had organised our requirements for the traditional New Year Video Evening. The boardroom was nicely laid out with comfortable chairs and the necessary equipment. Luckily Harry G5HF was early and sussed out the workings of the VTR for us!

Sharp on time Chairman John DET called us to order. We were glad to



Nil by mouth ... that's a joke ...with John, once he's started there's no stopping him!

see that he seemed none the worse for his recent spot of 'men's trouble' and he was full of praise for the consultants at the 'waterworks' department of Broomfield Hospital! Fred FXM also had a few words on the subject and their collective advice was

that if you think you've got problems down there, don't delay, seek advice!

Our feature film was loaned to us by an ex-club member Don Beattie G3OZF, who is now an RSGB Council member. It was a very well produced account of the 1997 DXpedition to Heard Island, a rather bleak spot just north of Antarctica. An international team spent two years planning the expedition which started from Reunion by ship and was unloaded by 50 chopper flights with sufficient supplies for 2 to 3 months in the worst case. The site was ready, working and on air after 3 days with 47 aerials available, three operating sites, with a multitude of BP filters so that all sites could work the same band, at the same time, on all modes if necessary! The operating session lasted 13 days and the 20 operators notched up 80,673 contacts on 19 band/modes, including 1241 on top band. Carl PEM said that the cost of partaking was about \$9000. A truly superb effort from the bottom of the world at the bottom of the solar cycle!

To round off the first half Fred FXM treated us to some film he had videoed at the Christmas Party and the 1997 Sandford Mill open day, where the Club had a working station. In his introduction Fred told us something about professional video production but warned that his footage was not quite up to those standards! Taking into account the lack of suitable lighting it was very good indeed and we were all instantly recognisable! Thanks for the comedy spot Fred!

After tea the once traditional Tom & Jerry spot was replaced with some live steam. Apologies to anyone suffering from T&J withdrawal symptoms but I'm sure Peter and Andrew KQE approved! Unfortunately due to shortage of time it was necessary to edit the film concerning horse, tram and steam traction on the Isle of Man. Quite apart from the vintage transport attractions the scenery is superb and well worth a visit but, take my tip, fly rather than boat!

Being on our best behaviour, John 'pulled the plug' so that we were on our way home by 10:15, as specified in our agreement with MASC. I think the new venue was a great success and bodes well for the future and one that has certain attractions for our Venue Organiser Chris IPU!

However, there was just one thing that spoilt the evening! Unfortunately Roy PMX was indisposed and couldn't be with us, but due to his meticulous planning and liaison with MASC management everything went off without a hitch and Ela HKM did the honours instead! Thank you Ela and Roy.

P.S. The video and an account of the previous 1983 DXpedition are available from the library on the usual terms!

Cartoon created by Eric, G8ADX, more in future editions. Ed.

COMMITTEE MEETING

The next Committee meeting will be held at 7.30pm on Wednesday 11th February at the QTH of Charles and Ronnie, you are welcome to join us.

Poldhu - Then and Now (continued from page 1)

The past few years have seen the emergence of the Poldhu Amateur Radio Club with a clubhouse adjacent to the Wireless field. The site remains ideal for wireless communications. The Club has facilities which make many other radio amateurs green with envy. A workshop, VHF room, HF room, and museum/meeting room and a thriving membership. The clubhouse is open two nights a week and world wide contacts are made from the historic location to the delight of the operators who send and receive the signals and recognise the historic importance of the site.

The Club recalls and recognises the importance of the site as far as aerials are concerned. The Wireless field is owned by the National Trust and they agreed that 60ft masts could be erected on the same location as the



original station aerials. Of course permission for 300ft masts would not be possible or obtainable, and, bearing in mind that this is a location prone to gales, sound construction is vital. Planning permission was sought and obtained and two 60ft masts now form the

basis of a multi-band aerial array enabling world wide communications on the amateur bands.

Many radio enthusiasts make a pilgrimage to the monument and today they also visit the Club. During 1997 visitors from Australia, the USA and many European countries have joined those UK holiday makers and had the pleasure of operating the Poldhu special call sign GB2GM. Gaining a contact with the station is special but being able to operate from the famous site is a real feather in the cap of any radio amateur. A special certificate is awarded for operating the station and the QSL card sent to those who contact the station depicts Marconi's yacht Electra.

In 1903 the Prince and Princess of Wales visited Poldhu and in 1995 Marconi's daughter Princess Elettra and her son Prince William were honoured guests. She also welcomed club members when they visited Sasso Marconi, Italy the following year.

The scale of the radio equipment and aerials may be very much smaller than it was at the turn of the century but the spirit of experimentation and pioneering still exists at Poldhu. Earlier this year members were delighted when a profoundly deaf 13 year old Girl Guide called Jessica from the West Midlands obtained her communication badge by "talking" to a club member over a distance of 250 miles. She used the morse code as she can feel or "hear" the vibrations. Scout and Guide headquarters have confirmed that this was another first.

The Club has a membership of 60, which includes many overseas associate members. It holds regular monthly meetings with first class speakers and encourages younger members of whom three hold Novice licences. There are projects and social events. Club members have designed and constructed some of the equipment used, and the museum contains many working receivers among other items of equipment. Poldhu Amateur Radio Club Chairman Eric White is also the Regional Liaison Officer for the Radio Society of Great Britain.

Each year on 12th December club members mark the historic events of 1901. The station operates all day and in the afternoon contact is made with station VO1AA at Station Hill, St. Johns. The letter S is sent in Morse Code and greetings exchanged between civic dignitaries. Last year the Chairman of Mullion Parish Council (club member Carolyn Rule) was delighted to talk to the Mayor of St. Johns and to the Italian Ambassador in Canada.

73 from Roy & Ela Martyr,

G3PMX & G6HKM

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Deadline for the next NewsLetter is Saturday 21st February