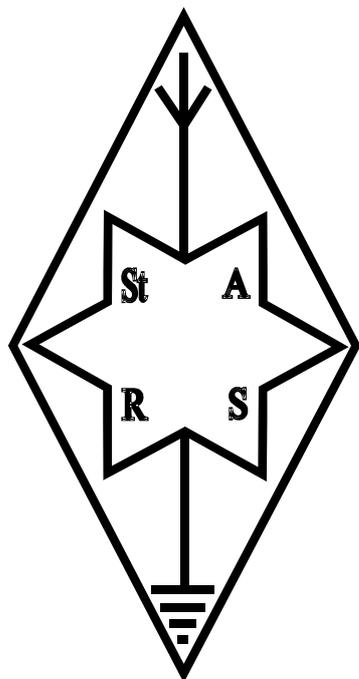


# STARLITE

**G6OI**  
1938

*The Award Winning Newsletter for Members and Friends of*  
**Stourbridge and District**  
**Amateur Radio Society**  
incorporating  
**Old Swinford Hospital School Radio Club**

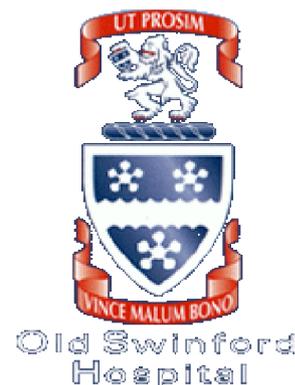
**G6SRS**  
1938



**G4CVK**

1969

**ISSUE**  
**09/2013**



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# STARLITE

## MEETINGS

Visitors always welcome  
The Society holds its full meetings on the  
1st and 3<sup>rd</sup> Monday of each month at

**Old Swinford Hospital School  
Heath Lane  
Stourbridge  
(8.00pm – 10.00pm)**

Additionally the shack is open during the same times on the  
intermediate Mondays

Telephone Enquiries to :-  
Hon Secretary  
John Clarke M1EJG  
(01562) 700513

Or by e-mail to :-  
honsec@g6oi.org.uk

All correspondence/enquiries should be  
addressed to the Hon. Secretary :-  
STARS  
c/o The Mill House  
21 Mill Lane  
Blakedown  
Kidderminster  
DY10 3ND

STARS Web Site URL :-  
[www.g6oi.org.uk](http://www.g6oi.org.uk)



# STARLITE

## MESSAGE FROM THE PRESIDENT

### SSB Field Day

As there is just one name me on the list in the shack, one person verbally confirmed they can help out and one apology for not been able to help out - It appears there is no option other than to cancel the SSB Field Day.

I hope the other 2 events that have been organised (see below) will be supported?

James

### Supporting YOUR Society

There are a number of upcoming events that need *your* support in order to happen and to ensure the name of the club is spread far and wide!

Weekend of September 7th & 8th. HF Field Day, same venue as last year, Highdown Nursery. There is a time sheet rota on the shack noticeboard. Please fill in when you can attend to operate, log keep, assist, put up and take down etc

Monday 7th October - 75 years of StARS anniversary meal, Please return your selection along with £5 deposit per person.

Weekend 19th & 20th October. to attend Rydd Scouts, adjacent to the West Midlands Safari park to operate our special event call-sign and JOTA station. Again sheet on the shack noticeboard to express availability to assist in this event. This may be just a Saturday event, depends on interest and commitment

There will be no meeting on Monday 26th August as this is a bank holiday  
The meeting on Monday 2nd September will be to prep for HF Field day  
Monday 23rd September - Committee meeting



# STARLITE

**Visit to Grey Point Fort Amateur Radio Society and Northern Ireland Scout Jamboree 03 – 10 August 2013 at Crawfordsburn Country Park, Bangor**



My daughter Briana and I were invited, through a friend, to the Jamboree back in Easter 2013 by the 11<sup>th</sup> Redditch Scout Group. I was to attend as an Assistant Leader and Briana, although a Guide member, could join the Scout Troop for the Jamboree. I am not a member of the Scout Association and the last time I really had anything to do with Scouting was back in 1985, so from my previous experience, I knew what to expect. I decided to use my two Business in The Community Work Days and take four days annual holiday. Approximately a thousand Scouts were to attend the Jamboree in Crawfordsburn Country Park, Bangor from throughout the British Isles.

The journey to and from the UK was by coach and ferry, departing from Liverpool to Belfast and return. The country park being a twenty minute journey from Belfast.

We took all our own Scout equipment, less Mess and Dining room tent which were provided by our twinned Scout Group – 74<sup>th</sup> Belfast, an all boys school Scout Group. Food was ordered by internet and delivered directly to the site when required, refrigeration was provided centrally by the Scout Association.

We arrived at the Country Park on the Saturday at 8am, and quickly set up. By 4pm our site was organised, the scouts fed and we all had a well deserved rest.

Over the next six days we attended numerous events, including trips to The Giant's Causeway, The Titanic Museum, a Monopoly game through Belfast City Centre, Portrush and then a number of outdoors activities, sailing, climbing and grass rollerblading to name a few. All the events were pre-booked so we could make the most of the time on each activity.

I'm a member of Stourbridge and District Amateur Radio Society and fellow member, Andy Hill – M6APJ loaned me his 2m/70cm handheld for the Jamboree. On the second day – Sunday 4<sup>th</sup> August



# STARLITE

I made contact with Bertie GI4POC on 145.450 FM early in the morning who agreed to collect me from the camp site at 11am and take me to the local radio society based at a Second World War coastal defence position – Grey Point Fort.



A plan view and view of one of the fort gun emplacements is shown above and to the right.



On arrival I was immediately welcomed to the Fort by society members who were busy operating from a short-wheelbase military Landrover on the grassed area, some of the members dressed in military uniform. I was quickly given a mug of tea, showed around the museum within the Fort and then shown around their radio room – a lot to take in! It seems the Society was invited to locate to the Fort to bring additional focus to the Fort complex as a place of interest within the local community. I was introduced to other Society members in particular GI4MUE - Jimmy and MI0MOD – Thomas who also allowed me access to use their radio equipment and I promptly took the opportunity to use 40m and the fort call sign – GB0GPF. The 40m band was busy and I made six quick contacts talking to call signs who were clearly engaged in local events themselves. After three or so hours at the Society another member returned me back to camp, apologies I have forgotten your name and call sign! Thank you to all at the Society for making me very welcome.

The Jamboree also gave me the opportunity to try to gain our Scout members their communication badge, and by the end of the Jamboree I had completed 3 of the 5 parts of the badge required. This also included a second visit to the Fort, and now having become accustomed to our location it was just as quick to walk to the Fort from our camp site, returning on Wednesday 7<sup>th</sup> August again for a couple of hours. Later in the day I also made contact with MI0VTW, MI3FEZ and MI0TGM.

Overall the Jamboree was a great experience, and well organised. Nothing ever goes exactly to plan, there are always incidents on activities particularly with children, but we all dealt with each situation as it came along! The Redditch Scout Troop has a number of great characters which helped the week flow very well. Being twinned with a Belfast Scout Troop gave a greater understanding of the local area, the country and its history.

## Internet and Call Sign references:

### Grey Point Fort

Website: <http://www.greypointfort.magix.net/public/>

Email Contact: [greypointfort@hotmail.co.uk](mailto:greypointfort@hotmail.co.uk)



# STARLITE

Callsign - GB0GPF

Callsign - GN0URN

Callsign - MN0GPF

**Stourbridge & District Amateur Radio Society**

Website: [www.g6oi.org.uk](http://www.g6oi.org.uk)

Email Contact: [honsec@g6oi.org.uk](mailto:honsec@g6oi.org.uk)

Callsign – G6OI

Author - Adrian Simms (M3HBA)



# STARLITE

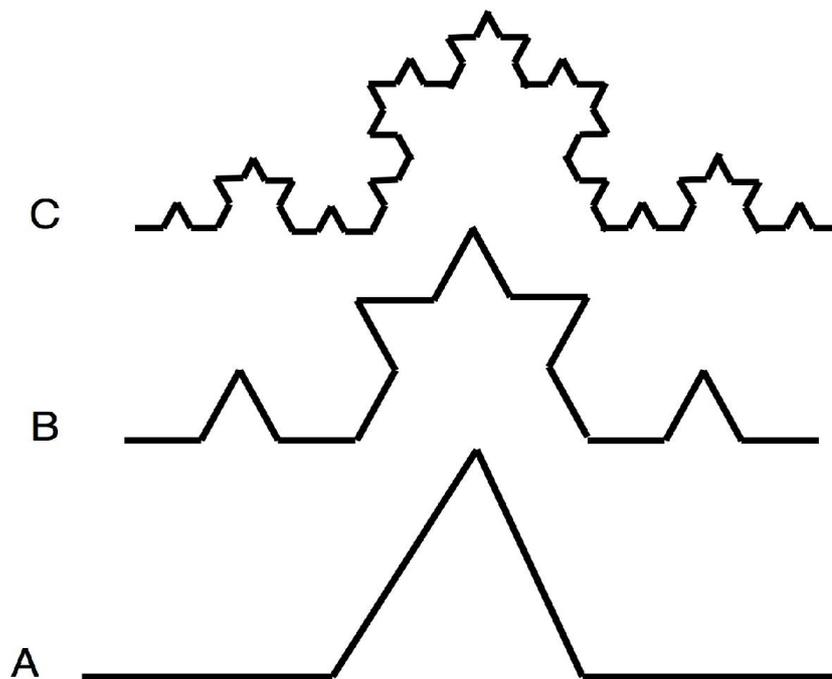
## A BRIEF LOOK AT FRACTAL ANTENNAS

### Introduction

The purpose of this article is to encourage you to delve deeper into the subject of fractal antennas. Increasingly we are becoming dependant on good radio reception. Our mobile phones are often quad-band with GPS and WiFi. As consumers we rely on parts of the radio spectrum receiving broadcast digital TV and radio and telephone signals. Note for the purposes of this article I have chosen antennas as the plural of antenna (and not antennae).

### What are fractals?

Fractals are comprised of shapes which are termed as self similar. As a single example of a fractal shape, consider the diagram below. The figure at A below is a line with a 'tent' figure at its centre.



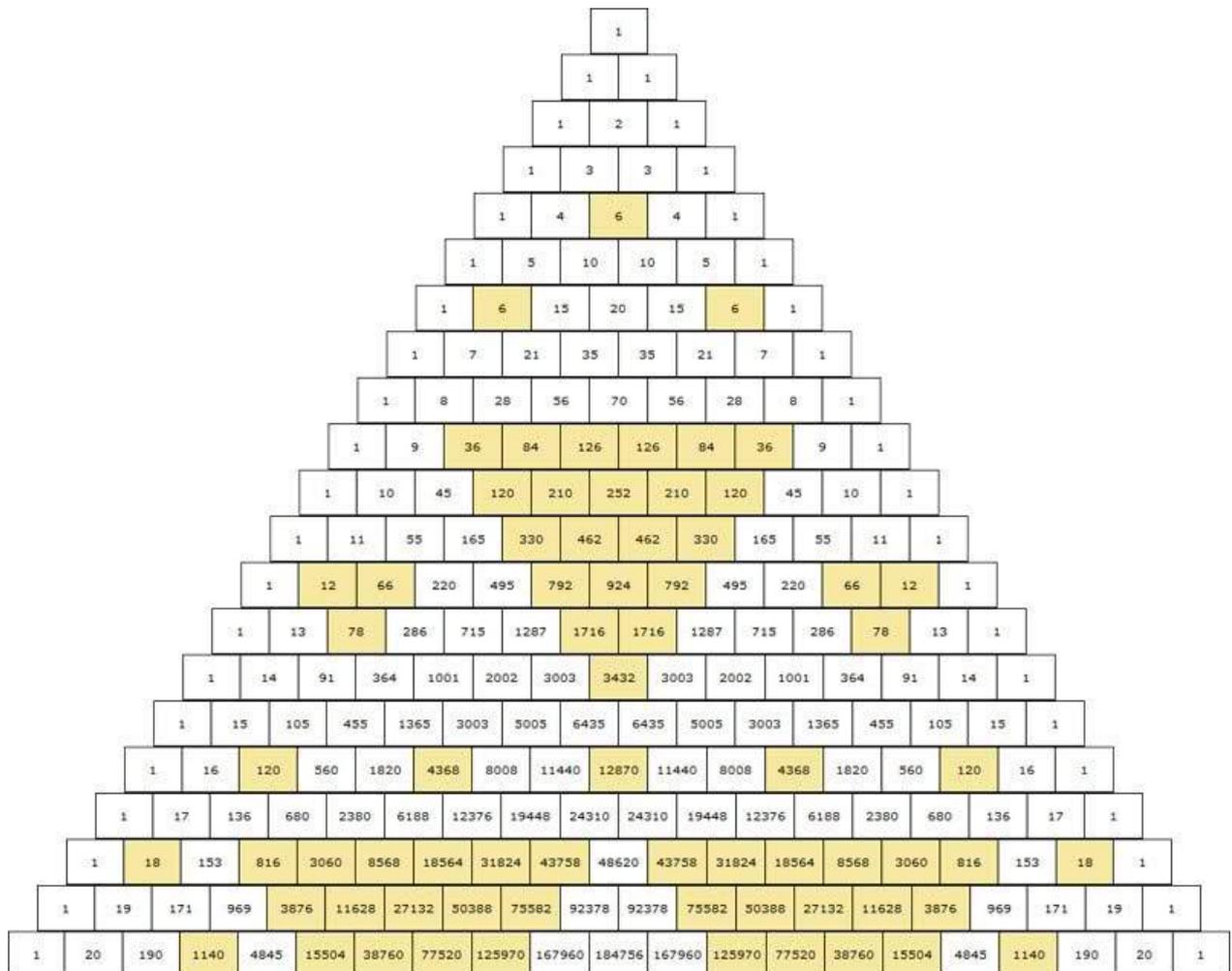
All four lines which make up figure A are of equal length. (If they aren't I apologise, drawing the figure proved surprisingly difficult and time-consuming.) If the figure at A is reduced and applied to the four lines which make up figure A the resulting figure is shown above as figure B. Consider a similar transformation is applied to figure B, whereby all the straight lines in figure B are converted to "tented" lines. The result is shown as figure C. This transformation can take place ad infinitum. It should also be noted that the transformations are non-colliding. A transformation enables a longer line to be accommodated within a similar space to that occupied by the previous transformation.

As a further example of a fractal shape, see the figure below courtesy of the Wikipedia. This shape is named after the Polish mathematician Waclaw Sierpinsky

# STARLITE



As an aside it is interesting to note Pascal's triangle below and its relationship to Sierpinski's triangle. Briefly the box in any lower row contains the sum of the contiguous boxes from the row above. If all odd numbers are set to black and even numbers are set to yellow we start to see the familiar Sierpinski shape.



## Why the interest in fractals?

A reduction in the size of antennas is becoming more desirable. A big incentive with fractal shapes is that they seem to promise more compact antennas. The degree to which this can be achieved varies. A conventional antenna has capacitance, inductance and to a lesser extent resistance. To achieve resonance, it is cut to a certain length and is most efficient at a specific design frequency. The length of an element for a fractal antenna can be set such that its size is less dependant on its overall length.

A further observed characteristic of a fractal antenna is that it may function adequately at several other frequencies. Large amounts of work have been undertaken into understanding the

# STARLITE

interaction between electromagnetic waves and different fractal shapes. Research and development of this nature costs money and most of the effort has gone into areas that will achieve results for the sponsor and unsurprisingly this has not benefited the ham radio user.

## **What Sort of Information is Available for the Ham Radio User?**

Published information on fractals and allied subjects is mainly available from mathematicians. The mathematics tends to leave the layman behind rapidly. From a ham radio perspective, I suppose we are interested in the theory, but more interested in the practical aspect - "how does it perform" and "can I build one for 2 metres". Note that fractal antennas have an application at all frequencies, HF, VHF, UHF and beyond. There seems to be relatively little information on the Internet on ham radio fractal antennas and much larger amounts on fractal HDTV antennas. I do not doubt that fractal antennas can improve HDTV reception, but a large number of articles on this topic are short on important detail. In particular what is the fractal antenna replacing? If it was replacing a set-top antenna, that would be credible. If it was replacing a correctly positioned wide band yagi it is tempting to be sceptical.

## **Ham Radio implementations hard to find**

I searched with limited success for a DIY article for a 2 metre or 70 cms fractal antenna. The nearest and best I got was in an article by Werner Hodlmayr, DL6NDJ which I would encourage you to read. I have not reproduced any parts of this article as it is copyrighted. A fractal shape starts as an initial iteration, a second iteration produces a more complex shape which in turn, becomes more complex with each iteration. Hodlmayer publishes plots of the radiation pattern of his fractal antenna, which displays some directionality and a modest maximum gain of 2.0 dBd. This is achieved in a square shaped fractal antenna which I would estimate to have a side length of 12 -14 inches.

## **Conclusion**

In my opinion, developments in fractal antennas are worth following, but it is well worth being wary of claims of exceptional performance. I would guess that they are more likely to yield benefit at the UHF end of the radio spectrum. It is easy to print fractal and regular antenna on to printed circuit boards. The article mentioned above by Hodlmayer is interesting where it demonstrates the ability of his fractal antenna to be resonant at multiple different frequencies. It is possible that R&D is being carried out and the commercial sensitivity of the information means progress is not shared.

As usual all errors are mine.

Adrian Bryan (G0NLA)

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## ROVING REPORTER

**Starlite 2013 September**

As many of the STARS members know my life has been completely changed with the passing of my XYL Glenys on 2 August after 52 years of married life. As some of the STARS members know, who were at her funeral on Tuesday 13 August she was my support in everything I was involved in. I will not go into details because many of you know my many interests, which were all represented at the funeral. Some who were at the funeral had travelled some distance. One had travelled from Stoke-on-Trent. I must thank the following STARS members for attending: John Scott, Mark Hedges, John Clark and I believe John Bills and also very many thanks for your cards of which there are many. Any donations will be passed on to Ward C8 Station Three at Russell Hall Hospital and they are still being received. She had the last three days there in a deep sleep. The nurses were wonderful and they did everything they could. My son Andrew and I tried to wake her from her sleep. Andrew and I received the phone call around 5.00 a.m. on Friday 2<sup>nd</sup> Aug asking us to go to the hospital because Glenys had taken a turn for the worse. We both of us knew it would soon be all over.

Over the years she has had quite a few health problems. I sometimes used to think our house was like a chemist shop, with all the medication she has been prescribed, but despite all this she encouraged Andrew and me to go out to all our interests. In retrospect we should have been at home more often. At first the operation at the Q.E. on 27 June to have the tube inserted into the brain to drain the fluid was a success, but three weeks later things started to go wrong. Firstly she had a fall in the toilet during a visit to GP followed by an overnight stay in Russells Hall. This was followed by a second fall at home on Friday 26 July. I found her on the floor in the hall. I managed to use some of the First Aid I was taught 52 years ago, when I was the first aider at our factory in Leomister. When she regained consciousness, she did not remember anything about the fall.

Stan's (G8SR) daughter was at the funeral along with John G3LGL, who I keep in contact with. I will be returning to STARS, I can't say when, as there are still lots of things to be done. I know it would have been Glenys' wish that I should continue with all my interests, but at the time of writing this report I am suffering myself. The discomfort started during the week when Glenys was in hospital. I experienced pain like arthritis in all my joints. I have visited my GP and had two blood tests. I feel certain it has been brought on by stress. I get the results of the second blood test on Wednesday 28<sup>th</sup> August. I have not driven the car for a month as my son Andrew has been taking me out. Andrew started back to work last Thursday. He did take me to the Shropshire Steam Rally on Aug Sunday, because one of the committee members of The Shropshire Theatre Organ Trust decided the Trust should have a stand there to raise money towards the cost of expenses for the organ. So that was one of my more enjoyable days when I was able to move around and do some busking on one of my ukuleles. (See next pages for photographs) I sat down most of the time. I enjoyed the day and apart from the petrol costs Andrew enjoyed the day out. It was his first visit to the Shropshire Steam Rally, it's about my eleventh over the years with The STOT. I have seen Alan Parkes there in the past. Money is tight, but we managed to clear the cost of the 6 ft table space and make a modest £40 profit for the two days. I was only there on the Sunday. Andrew was at work on the Monday. I did suffer with pain on the Sunday night. See some of the photos taken at the rally, below. I have yet to return to SVR and to the computer club and of course STARS. I was provided with a lift to get to The Stourbridge Branch of The George Formby Society. I do run that and after nearly 22 yrs I am looked on as a personality. I was undecided about going but I am glad I did attend. I have not yet been to any meetings of The Hippodrome, but everything is moving in the right direction with the Council's decision to defer demolition. There is a lot of support to see the Hippodrome returned to a theatre. Business people and solicitors are now taking an interest and it could it be that Malcolm's folly becomes a reality?



# STARLITE



*Illustration 1: STOT Stall at Shropshire Steam Rally*



*Illustration 2: Old BBC Outside broadcast Unit at the Shropshire Steam Rally*

I hope it will be, but only time will tell. Watch the press and TV.

I do not think we will have to wait long before the mighty Wurlitzer in The Buttermarket will be heard again. For Stars members who were at the funeral a CD recording chosen by me, entitled The Sanctuary of The Heart by Albert Ketelbey was recorded on the the Buttermarket Wurlitzer by the then Treasurer in 2004, John Barnett. We both featured in photos taken on the cover and the inside the CD.

Well 73s For Now. Your Roving Reporter

Malcolm Palmer G8BOP

Note there is a free exhibition on Dudley Memorabilia that takes place over first weekend in September at the Station Hotel, Dudley.



*Illustration 3: Taken at Shropshire Steam Rally*

# STARLITE

## YOUR COMMITTEE

Hon. President	JAMES	G7HEZ	
Vice President	NICK	G6DQN	
Hon. Secretary	JOHN	M1EJG	(01562) 700513
Hon. Treasurer	JOHN	G8UAE	
Committee Members	MARK	G7EDZ	
	MALCOLM	G8BOP	
	KELVIN	M6KTR	
	ANDREW	M6APJ	
	ADRIAN Simms	M3HBA	
	ADRIAN Bryan	G0NLA	

## CALENDAR OF EVENTS

**It should be noted that the Shack will be open every Monday evening unless shown otherwise in the Calendar**

September	Mon 2nd	Open Shack Night - Or on air natter
	7/8th	SSB Field Day (this is not the NFD!!!)
	Mon 9th	Open Shack Night - Or on air natter
	Mon 16th	John Bills G3KZG Stars Involvement in NFD - Up to Winning
	Mon 23rd	Open Shack Night - Or on air natter
	Mon 30th	Open Shack Night - Or on air natter
October	Mon 7th	75 <sup>th</sup> Club Anniversary Events
	Mon 14th	Open Shack Night - Or on air natter
	19/20th	Jamboree on the Air (JOTA)
	Mon 21st	Talk on GB3KD Kidderminster Repeater by Paula
	Mon 28th	Open Shack Night - Or on air natter
November	Mon 4th	Open Shack Night - Or on air natter
	Mon 11th	Open Shack Night - Or on air natter
	Mon 18th	Annual Surplus Sale
	Mon 25th	Open Shack Night - Or on air natter

