

# A TOUCH OF GAS


The Newsletter of Glasgow Archaeological Society



Issue 81 – Spring 2018

**Glasgow Archaeological Society, c/o Tho. & J.W. Barty, Solicitors, 61 High Street, Dunblane, FK15 0EH**

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 There is now a Flickr account for members to download their photographs of Society events, moderated by Natasha Ferguson - <http://www.flickr.com/groups/gasmembers/>

**Keep up to date with Society Activities on our website – [www.glasarchsoc.org.uk](http://www.glasarchsoc.org.uk)**

## Annual General Meeting 2018

Members are reminded that the AGM will take place on

Thursday 19th April 2018  
At 7:15pm (Note earlier time)

This is your Society and your AGM gives you the opportunity to raise points that concern you or which you think will be of interest to the Society.

**The meeting will be followed by:**

**The Art Bunker in Nuremberg**  
Dale Bilisland, Retiring Presidential Lecture

### AGENDA

1. Apologies for absence
2. Minutes of the Meeting of the AGM on Thursday 20th April 2017
3. Annual Report from the President, Dale Bilisland
4. Annual Report from the Treasurer, Stephen Stockdale
5. Presentation of the President's Award
6. Election of Office Bearers and Council Members
7. A.O.C.B.

Important Note – Due to refurbishment works in the Boyd Orr, this Meeting will take place in the Lecture Theatre of the Sir Alexander Stone Building (Faculty of Law), University Gardens, G12 8QL. It is the sandstone coloured building situated behind the Boyd Orr and to the right of the QM Union. There is no level access, with a few steps up at the front.

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### The Dalrymple Lecture Fund

Jointly with Glasgow University the Society administers The Dalrymple Lecture Fund, a generous bequest by James Dalrymple to finance a series of free public Lectures on European topics of historic and archaeological interest. The first Lecture Series was delivered in 1907, and recent speakers have included, Dr Chris Stringer, Professor Sir Barry Cunliffe, Ian Hodder, Professor Mike Parker Pearson, Professor William Hanson and Professor Roger Stalley. The Fund also generously supports the publication of the Scottish Archaeological Journal.

## The Dalrymple/Donaldson Fund

In addition to the Dalrymple Lecture Fund, James Dalrymple left money in trust, later greatly augmented by Professor Gordon Donaldson, formerly Historiographer Royal, to provide funds to assist with the renovation and repair of buildings of historic or architectural importance.

Further details may be obtained from the Fund Secretary, please see the GAS website for contact details.

Applications require to be submitted prior to commencement of works by 31 October in any year in which the awards are made.

### First Summer Excursion – 2<sup>nd</sup> June 2018

#### Dunfermline and Inverkeithing

The first summer excursion will take place on 2<sup>nd</sup> June 2018. The coach will leave from outside the main gates of Glasgow University, University Avenue, at 8.30 a.m.

Our group will head east to the Royal Kingdom of Fife and Dunfermline, the ancient capital of Scotland. The first visit of the day will be Dunfermline Abbey and Palace which are associated with Queen Margaret and her son, David I. Surrounding the 12<sup>th</sup> century Romanesque Abbey are the impressive ruins of the Benedictine Abbey and Royal Palace.

After lunch we shall make our way to Andrew Carnegie's Birthplace Museum where we shall have the opportunity to wander through the original birthplace cottage, built in the 1770's. Our group will be taken on a guided tour of the museum, which tells the story of Carnegie in America.

Later in the afternoon our coach will take us to the Royal Burgh of Inverkeithing where members will have the chance to view its many historic buildings including the 14<sup>th</sup> century Hospitium of the Grey Friars, the 18<sup>th</sup> century Town Hall, the Fordell Lodgings of 1671 and many more.

We expect to be back in Glasgow by 7 p.m. The cost for Historic Environment Scotland members will be £20 or £25 for Non-members. Concession are £24.

## SCOTTISH ARCHAEOLOGICAL JOURNAL

The latest edition of the Scottish Archaeological Journal is about to be published and if any member has not received it by the end of April they should contact the President.

Members are entitled to access back issues online from the Edinburgh University Press website. This requires an exclusive Access Token which has changed and the previous one is no longer valid. This facility is only available to members of Glasgow Archaeological Society, and can be obtained from the Membership Secretary.

GAS members are also entitled to discounts on EUP Publications – 20% on Books and 10% on Journal Subscriptions. Again a different **Access Token** is required is available from the Membership Secretary. Enquiries can be made via the contact form on the GAS website.

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### Scanning Colour Slides for the Earl's Bu, Orphir (Orkney) excavation report

GAS members will recall that Dr Batey of the University of Glasgow received a grant from the Society to scan images from excavations carried out at Earl's Bu in Orkney in the 1970's. This has now been done and she has provided ATOG with a brief report.

In 1978 excavations commenced at the site of what was to be identified as a Norse period horizontal mill at the site of the Earl's Bu (Farm) in Orphir, Orkney. The excavations themselves were completed in 1993 when the last of the overall total of about 20 weeks of on-site activity was finalised. The site was then laid out for public interpretation and the task of securing post excavation funding commenced. So many charitable institutions contributed to the massive

task of processing environmental data, the burden of the work required to interpret the evidence. Within the last few years, the final report has begun to take shape, and a number of synthetic articles have been published. The site was home to the Earl's of Orkney, we know now that they commanded resources from other sites on different islands, many for payment dues in the form of grain and fish. The site was a consumption site, rather than a production site, importing commodities which included foods for large-scale feasting on the site. The environmental data supports the Orkneyinga Saga in this activity...despite our initial scepticism!! The Earl's horizontal mill has been revealed and the processing of oats and some barley identified. The local agricultural activity shows a dairying strategy, much as in place in modern-day Orkney. That this was a high-status site, has never been in doubt, the Round Church and associated buildings in the immediate vicinity have underlined this for several decades, but the economic indicators, the presence of a (currently) unique Norse period horizontal mill, as well as varied evidence of bullion processing and exchange have added to this status.

However, a major stumbling block has remained the issue of illustrations for the reports. In 1978 and indeed up to 1993, digital photography was not either possible or indeed generally available, so the primary record for the illustrations was approximately 500 35mm colour slides and a similar number of black and white images. Scanning a selection of the significant colour images was a large task, and I am happy to report that Dr Adrian Maldonado undertook this tedious but crucial task with funding awarded from the Society. Many of these 200 scanned slides will be utilised in the accessible publication being prepared and the contribution of the Society will be fully acknowledged in this. The quality of the scans in many cases is such that they will be usable for the publication, but those which are not included will form part of the digital archive of the site. The publication of these excavations will change our understanding of the Late Norse economy in Orkney – and I hope will feel as if this has been worth this long wait!!!

Dr Colleen Batey, Archaeology, University of Glasgow.

Second Summer Excursion – 1<sup>st</sup> September, 2018

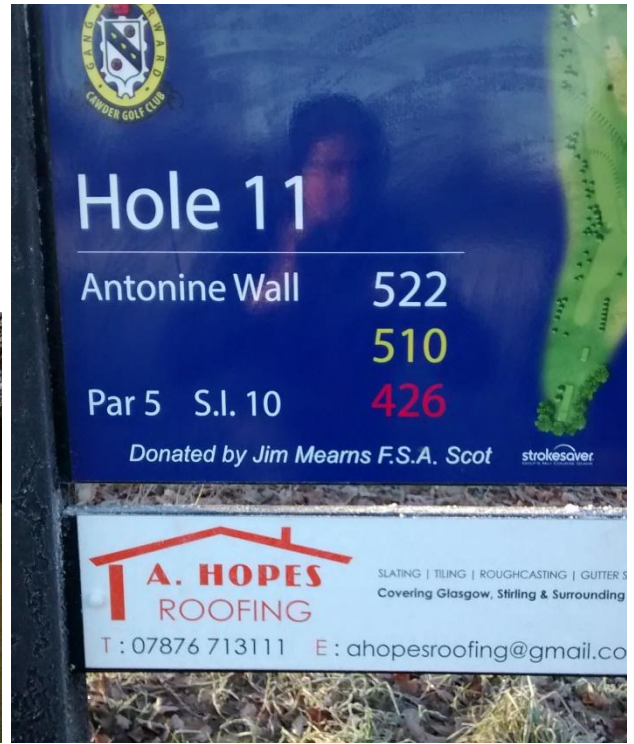
### **Dumfries and Galloway**

On our second summer excursion we shall explore sites in Dumfries and Galloway. Our first visit of the day will be to the market town of Dumfries with its numerous places of interest. Later we shall head to Threave Castle, the island fortress on the River Dee, built by Archibald the Grim in 1369.

Further information will be sent out later in the session.

Jim takes the flag

In AToG 66, Spring 2011, I wrote about 'Surprising Archaeology' and how I came across some interesting archaeological material on my golf course (Cawder Golf Club) that I had not expected. I was aware of the Antonine Wall running across the 11th and 12th fairways, indeed the 11th hole is called 'The Antonine Wall' and as this picture shows it is quite prominent! When the opportunity arose this year to sponsor the tee signs on the course I couldn't resist and now have a permanent reminder of my archaeological fascination with the Antonine Wall on the course (see below).



Jim Mearns

### Dumfries Aviation Museum Update

2017 has been a big year for the Museum. After two years of building work, the new buildings have been erected, and the exhibits installed. One of the new buildings has been designated as the all-weather workshop, and already has the F111 cockpit and Sycamore Helicopter ready to be restored.

The year also saw the unveiling of the fully restored, “Loch Doon” Spitfire. This aircraft, which crashed into the chilly waters of Loch Doon in 1941, sits in its new hanger, looking just as it did on the morning of its fatal flight.

Another of the new buildings is to house a display concerning Dumfries part in the Bomber offensive during the second world war. The Airfield was home to large numbers of Wellington Bombers during the conflict and repaired and serviced just about every other aircraft in the RAFs catalogue. This display will however, focus on the Dumfries people’s involvement in in the airfield, whether as workers, suppliers, or service personnel.

Looking forward to 2018, the Museum intends to focus on two areas, namely, the Airborne Forces building, and the Museum Archive building. In the former building, thanks to donations from many regional Parachute Regiment Associations, we will be able to expand the current display, using many items we have not had room to show. These items will include a Hadrian Glider and a Willys Jeep.

The Archive building will be the next one to be built. It will contain a vast amount of material which due to space restraints, can’t be displayed or easily accessed. The target here is to raise the funding required to build it before the end of the year. Altogether, lots going on in the Museum this year, and well worth a return visit. Go to our web site at [www.dumfriesaviationmuseum.com](http://www.dumfriesaviationmuseum.com) and see what’s on 2018.

Stephen Stockdale

Non-destructive chemical analysis of Samian pottery from Roman military sites in northern Britain:  
Inveresk, Elginhaugh and Newstead – preliminary results  
Richard Jones and Louisa Campbell

Over the last five years we have applied portable X-Ray Fluorescence (XRF) to the chemical analysis of samian pottery found at Roman sites in Scotland as an objective means of determining its centres of production in Gaul. This analysis is non-destructive, rapid and is carried out in situ. Using this fingerprinting approach, we found good correlation between the chemical composition groups present in 140 sherds of samian found at forts from the western half of the Antonine Wall and the inferences about their origins based on style, stamp and fabric in the case of (Jones and Campbell 2016). The results were especially helpful in the case of undiagnostic sherds. Even better correlation was found in the case of samian found at South Shields on Hadrian's Wall; classification of the chemical data revealed groups that could be attributed to particular workshops in East, Central and West Gaul and furthermore those assignments agreed exactly with the origin designation based on the potters stamp (Jones and Campbell forthcoming).

This report concerns the preliminary results of similar analysis applied to samian from the Flavian fort Elginhaugh, the vicus at Inveresk and the fort at Newstead. The analyses were carried out at the National Museum Scotland store at Granton in November 2017, using the same methodology (and instrument - Niton XL3t pXRF) as in the earlier work. Although attention focused mainly on the body fabric, analysis was also made of the gloss slip because potentially interesting differences in its composition have previously been detected between the workshops.

#### The material

Elginhaugh (Hartley 2007): 20 decorated sherds, Flavian date, four stamped

Inveresk vicus (Dickinson 1988): 9 decorated sherds, Antonine date, three stamped

Inveresk Gate vicus (Bishop 2004, 103-5): 7 decorated sherds, Antonine date, two stamped

Newstead (Curle 1891; Hartley 1972, 8-9, 20-22): 23 decorated sherds and vessels, Flavian and Antonine date, one stamped

#### Results

The compositions were scrutinized with respect to fifteen elements, of which rubidium (Rb), zirconium (Zr) and titanium (Ti) were found to be informative. Bivariate plots provide a good overview of the data and the way individual samples group together. Statements about origin, either positive or negative, are proposed with reference to the extensive chemical databases for samian from known production centres that have been built up by several European laboratories over the last several decades, notably that in Berlin run by Dr Gerwulf Schneider.

Using Figs. 1 and 2, the following remarks can be made:

Elginhaugh (E): With two possible outliers the samian forms a uniform group which chemically is consistent with the reference data available for South Gaul (La Graufesenque). The compositions of Hartley's S6 (Hartley 2007, 380) – SEVERI – lies well within that group (Fig. 1), as does Curle's 83 – OF RVFINI – at Newstead. The ranges in the K/Ca ratio in the slip and body contrast considerably: 3-5-7.8 and 1-2 respectively. Significantly, one of the outliers has an anomalous slip composition.

Newstead (N): the examples of samian have varied composition: at least two specimens (and perhaps more) group with Elginhaugh and are likely to be from South Gaul. They include Curle's number 83 – OF RVFINI (Fig. 1). There are several samples in the 130-160 ppm Rb range which from previous work can be linked to Central Gaul (Lezoux). A

further group has low Rb and Ti contents which is indicative of a source in East Gaul (such as Reinzabern). The slip compositions also vary, many of them with K/Ca ratios in the 2-4 range while the body ratio is <1.

Inveresk vicus (IT): all but one example lie together with the Newstead samian having Rb in the 130-160 ppm range linked to Central Gaul. The outlier with low Rb and Ti is probably from East Gaul. The stamped fragment - L?XTVCISF attributed by Dickinson (2004, no. 6) to Lezoux – safely belongs to the Central Gaul chemical group (Fig. 1).

Inveresk Gate (IB): the results exactly mirror those for the vicus.

The results are encouraging in the way they conform to the general picture established from the chemical analysis of samian from forts on the western half of the Antonine Wall and from the eastern end of Hadrian's Wall. But further examination of the data is likely to reveal subtle differences in the body (and slip) composition which should reflect separate workshops within Central and Eastern Gaul. What also remains to be done is to correlate the chemical grouping of each of the ten stamped pieces with the reading of the stamps. It remains to be seen, for example, whether each of the different workshops supplying Inveresk Gate - Lezoux and Les Martres in Central Gaul, Montans (South Gaul) and La Madeleine (East Gaul) (Bishop 2004, 103-5) - is chemically 'visible'.

Work is currently underway on the project's final stage focusing on undiagnostic samian from military and other sites in Scotland.

We are grateful to GAS for supporting the work reported here.

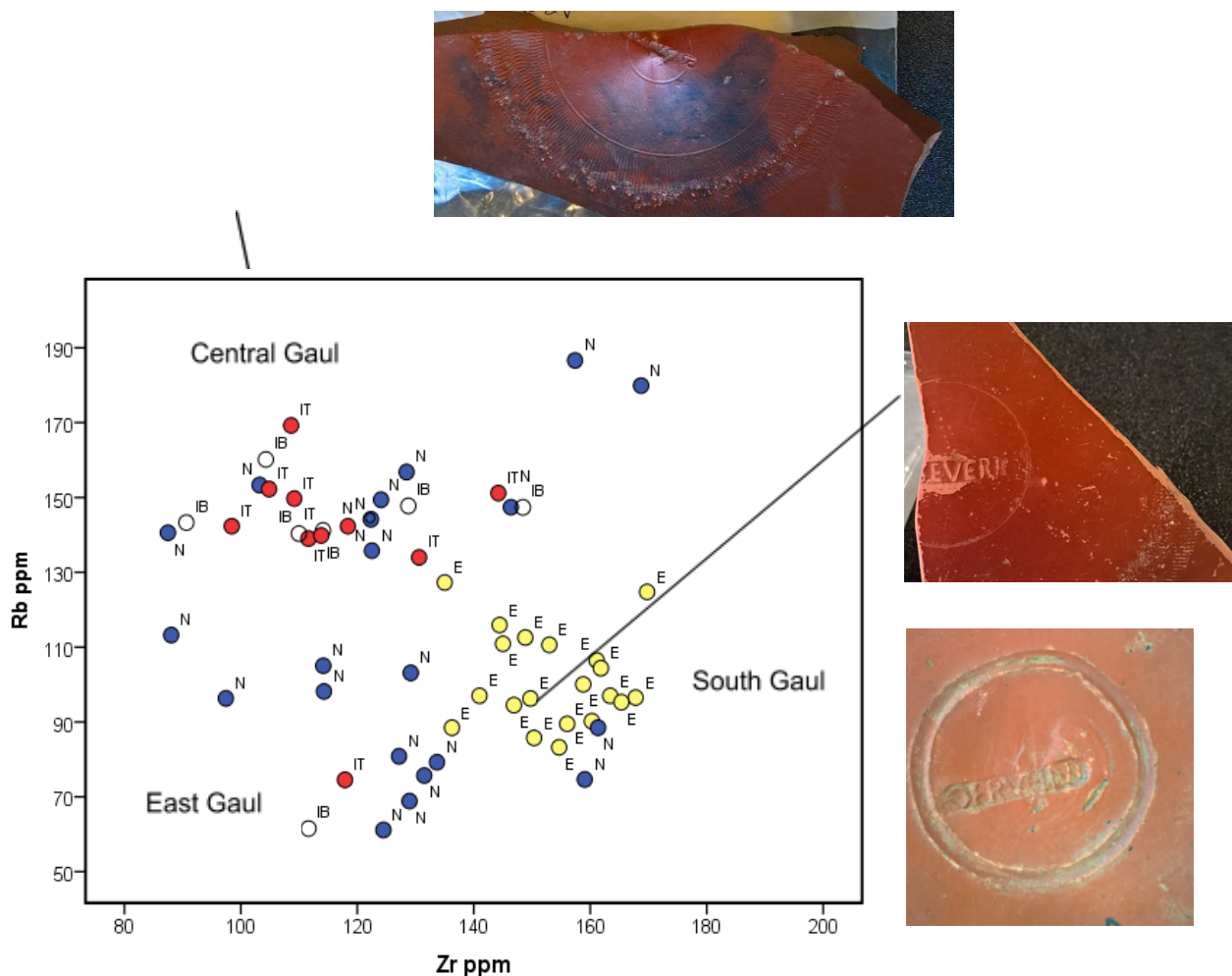


Fig. 1 Rb-Zr plot for samian from Elginhaugh (yellow), Newstead (dark blue), Inveresk vicus (IT Thomas excavations) (red) and Inveresk fort (IB Bishop excavations) (no colour). The compositions of Hartley's S6 – SEVERI – at

Elginhaugh, Curle's 83 – OF RVFINI – at Newstead and Dickinson's no. 6 - L?XTVCISF – at Inveresk are shown.

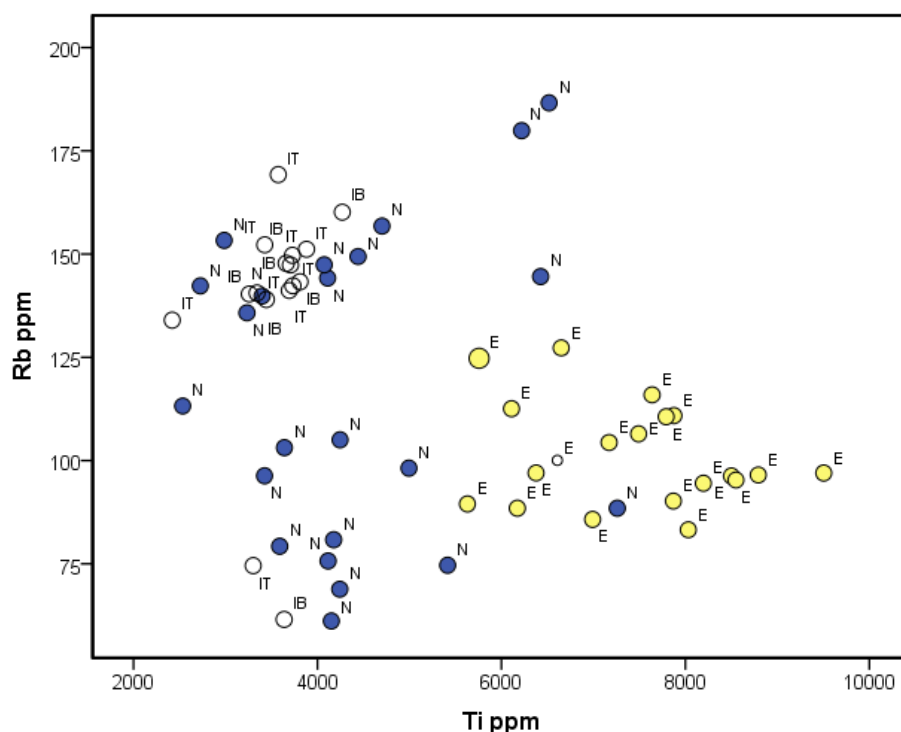


Fig. 2 Rb-Ti plot for the samian from Elginhaugh, Newstead and Inveresk.

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## Typhoon Story

On the 24th of January 1943, a Hawker Typhoon fighter bomber, with the factory no DN 365, took off from RAF Drem on a training flight to RAF Heathfield near Ayr. Sometime later, the aircraft crashed into high ground at a place called Queenside, near Lochwinnoch. The pilot, 20-year-old, Flying Officer Auriol Gould, was killed instantly. The RAF rescue team attended at the scene, and after removing the Pilots body, removed such parts of the aircraft as could be collected. They also picked up large quantities of ammunition spilled from the plane as it crashed.

The Hawker Typhoon first flew in 1941, but various design faults proved difficult to overcome, and its production was delayed to allow the further development of the Hawker Hurricane. By 1943, and in response to the arrival of the formidable German Focke Wulf 190, the Hawker Typhoon began to arrive in frontline squadrons. It did not prove to be the Fw190s nemesis, but it did prove to be a formidable ground attack fighter bomber. Armed with a formidable array of Cannons and Rockets, the Typhoon, nicknamed "Jabos", or "Hunter Bombers", roamed at will over the German rear areas, causing a trail of destruction which badly affected the distribution of munitions and supplies. Not an easy aircraft to fly, the exact cause of the crash is not known, but the area is littered with wrecked aircraft, both old and modern, testifying to the difficult terrain and variable weather conditions. Whatever the reason, the crash threw the propeller and gearing nearly 150 yards away from the point of impact, a place where it has remained pointing at the stars since 1943.

On the 22nd November 2017, members of the Dumfries and Galloway Aviation Museum Archaeology team, went to the crash site with permission to remove the propeller and take it to the Museum. After a brief search, the propeller was located and released from its earthy grip, placed on a sledge and dragged nearly a mile over open moor to the nearest dirt track. It is now in the Museum awaiting restoration.

There are presently only two complete Hawker Typhoon aircraft in the World. There is however, a Typhoon in Canada being rebuilt from spare parts, into what is hoped to be flying condition. At this length of time original parts are almost impossible to obtain, so renovated parts could mean the difference between an unfinished project, and a complete aircraft. Who knows, perhaps parts of our crashed aircraft will fly again?

Stephen Stockdale



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Members are reminded of the Society's Policy under this Act.

Members' details are held electronically in computer and are used solely for administrative purposes of the Society. Details are not provided to any outside body other than Edinburgh University Press for the purpose of distribution of the Scottish Archaeological Journal.

Any member who wishes to exercise the right to have his or her name excluded from the database should contact Margaret Gardiner, the Membership Secretary

**Electronic Communication**

It is our Policy to use E-mail communication where possible reminding members of the forthcoming lecture, other events of interest and to distribute A Touch of GAS and inform members of events that arise between issues.

We would urge members if possible to subscribe which can be done through the website. Council accepts that members may be either unable or unwilling to receive E-Bulletins (it is astonishing how quickly one's "Inbox" fills up!) and that is their right. We can assure members that they will not be disadvantaged by not subscribing inasmuch as they will continue to receive twice-yearly Newsletters.

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