HISTORY GROUP NEWSLETTER

News, views and a miscellany published by the Royal Meteorological Society's Special Interest Group for the History of Meteorology and Physical Oceanography

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News Julian Mayes, Secretary / Newsletter editor

****** ****** A Happy New Year to all our members

Welcome to the 2nd newsletter of 2022 – as it is issued a little later than expected I hope I can still call it that! In this issue Catherine Ross, Met Office Archivist, reports on the celebration of the centenary of the opening of Lerwick Observatory. Alan Heasman recalls the early years of his career in the Marine Division of the Met Office and John Gould commemorates the 150th anniversary of the Challenger voyage. I would like to extend a warm welcome to those who have joined the group in 2022. Julian

News from the Group and plans for 2023

In 2023 the History Group will be involved with several activities. The RMetS is planning to commemorate the 150th anniversary of the founding of the Quarterly Journal and have asked us to take a leading role in this. As mentioned in the last newsletter, we are running a main society meeting on Data Rescue to be held on 11th October.

In the last few months a new pen portrait has been submitted for publication (see below), work continues on a new podcast for the Distinguished Voices series (see p. 14) and a new occasional paper.

Centenary of Weather Prediction by Numerical Methods – L. F. **Richardson (1922)**

It would be wrong to reach the end of 2022 (or early 2023!) without reference to this ground-breaking publication that demonstrated the potential for numerical weather prediction. We commemorate this anniversary in a short note on p. 11.

Pen portraits of Presidents RMetS

A list of pen portraits of Society presidents published in Weather was included in the last Newsletter. At that time one pen portrait of a deceased president remained unpublished – that of Sir Henry Charnock, President 1982-84. This omission has now been rectified and portrait has been completed by committee member John Gould. This is about to be submitted to Weather and we hope that it will be published in 2023.

250th anniversary of the birth of **Luke Howard**

Luke Howard, pioneer of cloud identification, was born in November 1772. In addition to classifying cloud types in a scheme that remains to this day, he also pioneered the study of London's weather and climate.

An interesting biographical study appears in the November 2022 issue of *Weather* and David Pedgley wrote about Luke Howard and his clouds in the February 2003 issue (Weather, 58 (2), 51-55).



RECENT MEETINGS

Evening virtual meeting 23rd May 2022 Prof. Jonathan Martin Chasing a Giant –Reginald Sutcliffe and the Invention of Modern Weather Systems Science

This was an enjoyable and informative talk given by Jonathan Martin, the biographer of Reginald Sutcliffe. It combined a review of his professional achievements with an insight into his life (as does his biography).

Evening virtual meeting 14th September 2022 Dr. Stephen Burt, University of Reading.

Oxford and Durham – the two longest climatological observations in England.

Following his co-authorship of books on each of these observatories, Stephen's talk provided an interesting and topical update on the published material, highlighting the number of records broken in the last few years. Stephen led us through some of the problems and imperfections in the observations.

FUTURE MEETINGS

Future evening virtual meetings will be announced by e-mails when arranged.

History Group Autumn meeting 2023 and RMetS National Meeting Data Rescue – bringing old records to life

The History Group is organising a meeting on Data Rescue as a RMetS National meeting. This will take place on the afternoon of Wednesday 11th October 2023 in central London. The programme is now being completed but do let us know if you are working in this field and are interested in contributing to the meeting. It will be publicised further via the RMetS events pages and in the next History Group newsletter.

Speakers currently confirmed include Ed Hawkins and Stephen Burt (both University of Reading), Mark McCarthy (Head of the National Climate Information centre, Met Office) and Michael Taylor (CRU, Univ of East Anglia).

History Group visit to Eskdalemuir Observatory

In the last newsletter we mentioned that we had wanted to arrange a group visit to Eskdalemuir for some time. We still do but it is not possible to arrange this visit for the time being.

We continue to follow-up several other meeting ideas for the future.

Lerwick geophysical observatory 101st anniversary celebration, 7th July 2022

Dr. Catherine Ross, Archivist, National Meteorological Library and Archive, Exeter.

On Tuesday 7 July 2022 invited guests, representatives from the media and the MSP for the Shetland Islands gathered at Lerwick Observatory under sunny skies and a moderate breeze to belatedly celebrate the centenary of the opening of the observatory. Catherine Ross, Met Office Archivist and member of the RMetS History Group committee represented the RMetS at the event. Although the celebrations had been delayed by a year due to the pandemic it was a great success and helped to shine a light on the great work carried out at the observatory over the last 100 years and its ongoing role in collaborating with the British Geological Survey, observing, and contributing to ongoing development and research.

Background

In May 1919, the Norwegian Meteorological Service asked the Met Office to participate in an international programme of geophysical observations to coincide with an attempt by explorer Roald Amundsen to drift across the North Polar Basin in the ship named 'Maud'. Norway was keen for the Met Office to establish a geophysical station on Jan Mayen but the office had already been looking to establish a geomagnetic observation station in Shetland, and so Lerwick Observatory was opened on 7 June 1921. There were just three staff living in fairly rough-and-ready accommodation and a locally recruited caretaker.



Lerwick Observatory in about 1924

Specialist Observations

Lerwick Observatory has a long tradition of involvement with specialist observations. Gordon Miller Dobson sent one of the very earliest experimental spectrophotometers to the site in 1939 and in 1940 it was designated as one of the earliest Met Office radiosonde sites. During the 1960s a wealth of new specialist observations began including chemical and radioactive air and rainwater observations and cosmic rays. In 1992 the observatory joined the Terrestrial Initiative in Global Environmental Research (TIGER), plugging the gap between Alaska and India and carrying out flask sampling for atmospheric trace gases, especially 'those implicated in environmental issues of the Enhanced Greenhouse Effect'. Today it remains a key station for new and evolving observing technology. It provides a strategically key site for our LiDAR Volcanic Ash Detection system. It also hosts a node of our next-generation lightning detection system LEELA, linking it to early work at the station on thunderstorm detection. It is one of only three principal radiation stations across the UK. The British Geological Survey (BGS) also continue to have a strong presence on the site and the station forms an important part of their studies in Geomagnetism and Seismology - the location and characteristics of the station are important for this monitoring.

A challenging landscape

Lerwick has long been associated with exceptional science, but this has not been easy to achieve in the challenging landscape and weather conditions. During the early years of the observatory the original team of four levelled the observations enclosure by hand! Later on, as the country faced the challenges of World War Two and despite the difficulties experienced when trying to launch radiosondes in hurricane-force winds, the staff persisted in all but the most impossible conditions. Indeed, the report of one particularly precarious launch earned the praise 'this report indicates that upper winds are not bought with money but wrought by intense devotion to duty'. Snow was also known to bring down the telegraph lines and when this occurred the on-duty assistant had to walk to the nearest operational telephone in Lerwick. On one occasion the conditions were so bad that the assistant was blown onto the ice of a frozen loch beside the road, which then broke, but he still ensured the observations were delivered!



Aerial view of Lerwick Observatory today

Famous Names

The observatory has also been home to some well-known Superintendents including D-Day forecaster James Stagg (1929 – 1930), Brian Oddie (1931 – **1934)** – **Olympic** and Commonwealth runner, Richard Hamilton 1960 – 1966, an eminent Arctic Explorer who also carried out a lot of valuable research during his time at Lerwick and Oliver Ashford Hon FRMetS (1937 – 1943), a keen member and supporter of the RMetS History Group.

The Celebration

The day started with a speech from Met Office Services Director looking at the history and significance of the station followed by a presentation from Guanren Wang of the British Geological Survey explaining their ongoing work at the site and how some of the key original geomagnetic survey buildings had been constructed. Indeed, the White Hut remains operational exactly as it was on first construction, creating a thread of continuity through a changing landscape. This was followed by the launch of the weekly ozonesonde and an opportunity to view a display of historical materials from the National Meteorological Archive reflecting the long and varied history of the Observatory. Materials included the first hand written observatory reports, early ozone observations, the first Daily Aerological Report featuring observations from Lerwick, a range of photographs, and a representative selection of autographic and published observation data.



Release of the ozonesonde during the celebrations

Former and current staff enjoyed viewing and interacting with the records and the current team were particularly interested by the first *Daily Aerological Report* given its direct relation to one of their ongoing critical daily duties – the twice daily radiosonde release. Guests then enjoyed lunch and time to talk to local staff, as well as representatives from MO HQ Exeter and engage in reminiscences inspired by the archival materials.

Following the opportunity to view a video created by Stuart Goldstraw, who originally proposed the Lerwick celebration, the day concluded with a tour of the observations enclosure and, for those of a more adventurous nature, an opportunity to explore further up the hill to see the old Cloud Base Searchlight, some of the BGS huts and the wonderful view.



From left to right Norrie Lyall (Lerwick Observatory Manager), Bruce Truscott (Associate Director – Technical Services) and Simon Brown (Services Director)



Some of the attendees on the day including former staff, representatives from Met Office HQ Exeter and the British Geological Survey, the MSP for the Shetland Islands and current observatory staff.

Everyone agreed that the event was a great way to celebrate, explore and share the history and ongoing role of Lerwick Observatory.

Marine weather logbooks and the ice charts of the UK Met Office in the 1960s

Alan Heasman, Aldbourne, Wiltshire

'Are we heading for another Ice Age?' When I left school in mid-1963, that was the questions on many peoples' minds because we had just about recovered from the harsh UK winter of 1962/63 which itself followed the 1950s which I recall as being regularly 'snowy' even in my home area of Brighton on the south coast of England. After an interview at Bracknell, the location of the then new Headquarters of the UK Meteorological Office (UKMO), I joined the UKMO as a Scientific Assistant (SA), the lowest of the Civil Service science grades. Unusually for new SAs, I was not posted to an airfield to undertake weather observations but I was recruited into MO1, the Marine Division of the UKMO and historically the original department set up by Robert FitzRoy in the 1850s. I didn't fully appreciate the significance of that until many years later!

As the name implies, MO1 was still very focused on marine meteorology. Just as in FitzRoy's time and thereafter, MO1 recruited British merchant ships to the Voluntary Observing Fleet' (VOF) to observe the weather and other related phenomena such as ocean temperatures and currents, issuing appropriate weather logbooks which were returned to MO1 after each voyage which in some cases lasted more than a year. I was one of a small team whose job it was to extract all the weather etc., data, quality control it and transcribe on to data sheets for entry on to computer databases via punch cards and tape. In time these data formed one of the earliest computer-based marine climatological archives.

In the 1960s the UK merchant fleet was still numerous and therefore hundreds of weather logbooks each containing pages of weather observations flowed into the office each year. When time permitted, we also extracted data from the much older marine weather logbooks accumulated in the early 20th century and sometimes even earlier. The thousands upon thousands of original weather logbooks from the 1850s onwards were, and still are, retained in the National Meteorological Archive, now at Exeter. In order to maintain close liaison with the VOF, the Marine Division included several retired nautical officers, much as it had done since FitzRoy's day, as well as scientific staff. In 1963, the Head of the Division was Commander 'Eddie' Frankcom, ex-merchant navy and Royal Navy – a real character!

In addition to my weather logbook work, I also helped collate and prepare near real-time charts of sea ice and sea temperature over a large area of the northern hemisphere with special emphasis on the North Atlantic. Hundreds of synoptic weather reports were received into the UKMO every day from ships at sea and land-based observing sites. Their immediate use was for the UK weather forecasting service but bundles of teleprinter paper were passed daily to the Marine Division where data relating to air temperature and sea temperature were extracted from the synoptic messages and plotted on to large working charts. Over the ocean and sea areas virtually all sea temperature observations from ships were plotted so to try and achieve as full a cover as possible. This was easier along regular shipping routes but in other areas, for example off the northeast coast of Canada, around Greenland, in the Baltic and on the north Russian coast, ships' observations were far fewer.

Every ten days, the average sea surface temperature for each one-degree square of latitude and longitude was calculated and from that, isotherms could be drawn.

The air temperatures reported from the land stations were treated differently. The mean of the daily maximum and minimum air temperature for each site was calculated. If the resultant mean temperature was, say, one degree Celsius below zero, then it was considered that that station had had 'one degree day' of sub-zero temperature. If the mean was two degrees below zero, that counted as 'two degree days' . These daily degree days were accumulated day on day. This gave an indication of the accumulated freezing conditions at that site. Based on previous studies, assumptions could then be made about the formation of ice on nearby water areas. Isopleths of 'degree days' were then constructed on the charts which gave a wider indication of freezing conditions across the whole of the North Atlantic in the regions of Canada, Greenland, Iceland, the Baltic and the Barents Sea.

In addition to the 'normal' meteorological parameters in the synoptic reports, ships were encouraged to report 'special code' groups about any sea ice or icebergs etc., seen. Also, regular reports were received from the 'International Ice Patrol' which operated off the east coast of the USA and Canada. The 'Patrol' had been set up after the *Titanic* disaster of 1912 in order to provide more detailed observations of the density of icebergs affecting the very busy shipping lanes near Newfoundland. In addition, Canadian and American air forces made reconnaissance flights over the Canadian Arctic and Greenland. Also prior to the advent of satellite observations of sea ice cover, a novel airborne method was introduced.

Postcards were supplied to the aircraft of the 'Scandinavian Airlines System' more commonly known by the abbreviation 'SAS' who were pioneering trans-polar commercial flights. If or when the crew observed an 'ice edge' or similar across their flight path, they would sketch details of location, time etc., on the card and then post the card at their flight destination back to MO1 ! Whilst this rather 'crude' method was dependent on the postal service and thus often arrived too late for the 10-Day ice charts, they were useful to confirm previous assumed ice conditions in otherwise unobserved polar areas.

Another unique source of polar weather information came from the semi-permanent 'drifting ice stations' of the USA and the USSR. These were polar research stations built on very large ice floes which circulated slowly in the Arctic gyre. No doubt these stations had 'other interests' because 1960s was the peak time of the 'Cold War' especially after the Cuban missile crisis of 1962.

From all these various sources it was possible to construct a summary chart issued every 10 days showing not only the seasonal distribution of the main areas of icebergs in the northwest Atlantic but the general edge of the semi-permanent and permanent ice around North Canada, Greenland, Iceland, northern Scandinavia and the Baltic. Pre-printed transparent 'sticky' overlays in various patterns were used on the charts to indicate the different types of ice cover reported or determined from other sources.

In the 1960s, the sea ice off the southeast coast of Greenland often extended as far as northern Iceland during the winter and early spring. This was of particular interest to the UK

fishing fleets. Some synoptic information was obtained direct from these fishing boats but in many cases fishing boats were reluctant to openly report their positions for fear of giving away clues to the whereabouts of their fishing grounds to rival fleets. The positions of the ice cover were also important to the military who were monitoring USSR naval movements in the Denmark Strait. Also, in those days, the Baltic was a busy shipping area and sea ice routinely affected ports and navigation during the winter and early spring. On the other side of the Atlantic access to Hudson Bay and the St. Lawrence Seaway and the Great Lakes was determined by ice conditions and thus shipping from the UK benefitted from early knowledge of ice conditions in northeast Canada. Several academic institutions were also interested in the ice conditions in the northern hemisphere.

The large (760mm x 1010mm -almost A0 size) charts were prepared at ten-day intervals, printed in monochrome (via a dyeline process) by the Met Office and mailed to dozens of commercial, military and academic clients in the UK and some overseas addressees. Finally, at the end of each month a smaller 'special edition' chart in colour was prepared which was meant for more permanent retention. This not only included all the above information for the final ten days of the month but on the reverse of the chart were printed monthly mean bathy-thermograms showing sea temperatures at depth sourced from the fleet of Ocean Weather Ships (OWS) then operating in the North Atlantic.

There is insufficient space here to reproduce a full copy of one of the monthly charts but the figure below shows a detail from the chart for the end of January 1965. It shows the isopleths of mean 0 °C air temperature, accumulated degree days and mean sea surface temperatures. The extent and type of ice is shown using the green overlay patterns.



A section of the UKMO ice chart as at end of January 1965

Individual reports of icebergs are similarly shown along with associated reports of 'open water' etc. Details for the Gulf of St. Lawrence, the St. Lawrence Seaway and the Great Lakes and, separately, the Baltic were shown on two larger scale insets. A full 'key' to the symbols was included.

As well as the external interest in the ice charts, Hubert Lamb the renowned climatologist, then still an active member of the UKMO, would regularly pop into the MO1 to view the current ice chart prior to his discussions with other senior staff in the run up to each issue of the trial monthly 'Long Range Forecasts' which had started to be issued soon after the cold winter of 62/63.

These ice charts continued to be produced into the early 1970s but as 'real time' satellite imagery became more widely available, the requirement for detailed charted information faded but nevertheless the Met Office still issued near real time sea ice information as part of the commercial 'Ship Routing' service which the UKMO operated in the 1990s and into the early 21st century.

The archive of ice charts is retained along with all the marine weather logbooks in the National Meteorological Archive now based at Exeter in southwest England. It provides a valuable research resource for those assessing how ice cover etc. has changed from the 1960s. Those wishing to examine those charts should contact the Archive. It now seems that the 1960s' fear of another 'Ice Age' was a bit of a false alarm – at least in the short term. Now global warming is the main concern.

After writing about this early stage in his career in the above article, Alan added this postscript to show how his career progressed within the Met Office....

After my initial role in the UKMO, my 37 years career included spells in agricultural meteorology, military weather forecasting, personnel management, past weather enquiries and research. My final role was as Manager of the UKMO National Meteorological Library & Archive which included looking after the vast archive of ships' weather logbooks, the very same logbooks which I had handled in the 1960s. So, my career had turned full circle. I retired in 2001.

Much has changed in the science of sea ice detection...... https://www.metoffice.gov.uk/research/climate/cryosphere-oceans/seaice/measurehttps://www.metoffice.gov.uk/research/climate/seasonal-to-decadal/longrange/arctic-sea-ice

Current Arctic sea ice extent is well summarised in these maps and graphics..... https://nsidc.org/arcticseaicenews/ with a link to Antarctic ice-extent.

If you started your career in meteorology in the 1960s or 1970s, would you be interesting in writing about it for the newsletter? If so, please let me know (contact details are on the last page of this newsletter).

Centenary of the publication of *Weather Prediction by Numerical Process* - L. F. Richardson (1922)

This ground-breaking book that foresaw the era of numerical weather prediction started life while Richardson was superintendent at Eskdalemuir Observatory, Scotland. His wrote in an early issue of *Weather* (Richardson, 1949) that he first started thinking about this problem as early as 1913. A first draft of the book had been written by 1916 by which time Richardson had left the Met Office and was serving in the First World War with the Friends Ambulance Unit in France (Walker, 2012, p. 218). While in France he applied his mathematical methods to the surface and upper air charts of 20 May 1910 and attempted to compute a forecast using his methodology.

The late Oliver Ashford (who was active in the History Group in recent memory) knew Richardson and his family and wrote personal reminiscences in the January 1949 issue of *Weather;* he was the author of Richardson's biography (Ashford, 1984). Schultz and Knox (2013) have written about Richardson's activities while attending Bootham School, York.

Ashford, O. M. (1984) *Prophet – or Professor? The life and work of Lewis Fry Richardson*, Adam Holger Ltd., Bristol, pp. 305. Richardson, L. F. (1949) Meteorological publications by L. F. Richardson as they appear to him in October 1948, *Weather* **4** (1), 6-9. Schultz, D. M. and Knox, J. A. (2013) Young Lewis Fry Richardson in Yorkshire, *Weather* **68** (3), 66-67. Walker, J. M. (2012) *History of the Meteorological Office*, CUP, pp. 468.

Weather extremes and disasters in and around the UK 70 years ago

Although the individual events are well known, the cluster of weather-related hazards and disasters around the UK 70 around years ago is worth considering together. As Britain struggled to emerge from post-war austerity, the Lynmouth flood disaster of 15th August 1952 was followed in close succession by the London smog of December (~4,000 excess deaths) and the North Sea storm surge and flood of 31st January 1953 (over 300 deaths in the UK and over 1,800 in the Netherlands and Belgium). These events were described well in the pages of a relatively new magazine that aimed to communicate weather and meteorology to a wider group of readers than had hitherto been the case – that magazine was, of course, *Weather*.

This is may be a good time to remind readers that the full archive of all RMetS publications is available free-of-charge to members via a simple log-in to the RMetS website. The following list of 'classic papers' from *Weather* includes L. C. W. Bonacina's account of the London fog and sections dealing with the Lynmouth and North Sea floods (scroll to the end of the listing);

https://rmets.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1477-8696.EditorsChoiceofClassicpapersfromtheWeatherBackfile

Articles on the North Sea floods have also been written more recently by Maurice Crewe (January 2003, p. 47-48) and by Bob Prichard (February 2013, p. 31-36).

150 years ago – the birth of oceanography

Dr John Gould (History Group committee member), Romsey, Hampshire

"The Challenger left England on the 21st December 1872, and experienced heavy gales until the 30th, when the parallel of Finisterre was reached. From this position to Lisbon, which port was reached on 3rd January 1873, the weather was variable, but on the whole fine, so that it was possible to test the sounding and dredging gear, and instruct the ship's company in duties new to nearly all of them."

So began the narrative of the voyage of HMS Challenger which is generally recognised as marking the beginning of the science of oceanography. The ship did not return to England until April 1876 after having sailed and steamed 69,000 nautical miles through the North and South Atlantic, to the edge of the Antarctic ice in the Indian Ocean sector, to Australia and Japan and then across the Pacific round Cape Horn and home. On board the 73m long vessel was a complement of 233 under the command of Capt. George Nares including 175 naval personnel, a party of six scientists led by Prof Charles Wyville Thomson and Nares' nine year old son and his tutor.

The voyage's mission was to discover what lay below the ocean's surface; how deep the ocean was, what the sea bed was made of, what lived there and in the water above. They measured how the water's temperature changed with depth, analysed water density and its chemistry and determined ocean currents. The observations were focused on 362 "stations", at each of which the vessel held position for as much as 12 hours while instruments were deployed. Detailed meteorological and geomagnetic measurements were made throughout the voyage. The measurement techniques used aboard Challenger had been tested during the voyages of HMS Lightning in the N Atlantic in the late 1860s.

Two years later the newly-established Imperial German navy mounted a similar expedition (1874-6) aboard SMS Gazelle using equipment almost identical to that on Challenger and supplied by the British Admiralty. Together these voyages marked the start of global-scale marine science.

The Challenger voyage was deemed an enormous success and Wyville Thomson was knighted in 1876. An international team based in Edinburgh then set about analysing and cataloguing its scientific findings. These were recorded in 50 volumes of reports published over a period of 20 years, an activity led by Sir John Murray following Wyville Thomson's death in 1882. The Gazelle findings received much less prominence but were nevertheless of significant value.

Together, these voyages provide a legacy that remains of scientific value. Since they occurred relatively early in the industrial age before there had been a significant increase in atmospheric CO_2 , the results of these voyages can be used to define the pre-industrial state of the oceans. They help us to assess ocean heat uptake, changes in salinity patterns

indicative of changes in the global hydrological cycle and changes in hard shelled ocean organisms due to ocean acidification.

Further information

Challenger reports	https://www.biodiversitylibrary.org/bibliography/6513
Gazelle reports (in Ge	rman and excluding Vol. 1) https://www.biodiversitylibrary.org/bibliography/984
Paper describing and	comparing the Challenger and Gazelle voyages. https://hgss.copernicus.org/articles/13/171/2022/
Podcast	https://noc.ac.uk/education/educational-resources/blue-special- challenger-expedition

OBITUARY Ann Savours Shirley, 1927-2022

The death was reported in early October 2022 of Ann Savours Shirley, normally known by her maiden name of Ann Savours. Ann was a noted archivist, museum curator, adventurer and polar historian and was a member of our History Group committee in the late 1990s and into the early 2000s. She had worked in the Scott Polar Research Institute from the 1950s until the 1970s as an archivist and librarian and later as the curator of maps, charts and pictures. In 1970, she moved to the National Maritime Museum. She retired in 1987 but continued to travel and to write, especially on the history of polar exploration. She was best known for her research about the long history of the ship 'Discovery,' used by Captain Robert Scott on his first exploration of the Antarctic. Her extensive history of the ship was published in 2001 as *The Voyages of the Discovery*.

Ann Savours Shirley, past member of the History Group, died 8 October 2022, aged 94.

Alan Heasman



Outreach and feedback

As ever, we welcome further membership enquiries and also offers of submissions to this newsletter! Maybe you have recollections from the start of your meteorological career in the 1960s or '70s - or earlier?

DISTINGUISHED VOICES PODCAST

Members may remember the 'interviews with distinguished meteorologists' series, a collection of oral histories built up over many decades, largely by the History Group. These recordings have now been collated into a series of podcasts making the

interviews easily available to all. They can be accessed at the RMetS website at https://www.rmets.org/distinguished-voices. The series continues with a recording recently completed by Prof. Chris Folland and Prof. John Mitchell which we hope will be available soon.

If you are already on Twitter, please follow us at #RMetS_HistGroup. If not, you can still view tweets at https://twitter.com/RMetS_HistGroup

For Facebook members, our Facebook site continues, maintained by committee member Richard Griffith. This can be found at https://www.facebook.com/RMetSHistoryGroup/

All enquiries please to history@rmets.org



Committee members

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