

History of Meteorology and Physical Oceanography Special Interest Group



Newsletter 2, 2008

A VIEW FROM THE CHAIR

I became your chairman again twelve months ago. Many of you will remember that I chaired the Group right through the 1990s. None of you can dispute that I am now nineteen years older than I was in 1989, when I first became the Group's chairman. I must say here and now, therefore, that I do not propose to remain chairman for another decade, even if you wish me to.

I am very keen to see a growth in membership of the Group, and we have, indeed, welcomed new members during the past year. But I should like to see a massive growth in membership. Some branches of history have seen tremendous growth in recent years, especially family history; and it seems clear from the popularity of TV history programmes, and the growth in membership of bodies such as English Heritage and The National Trust, that there is interest in the past 'out there'. Among meteorologists and oceanographers, I find no lack of interest in the history of their subjects, but why do not many more join our Group? Perhaps they do not know exactly what our Group is for and what it does. I also encountered a belief recently that our meetings are more demanding than the Society's Saturday Meetings!

I ask you all, please, to spread the word that our Group is very active and well worth supporting and arranges meetings which are full of interest. We need especially to convince students that the origins and growth of the atmospheric and oceanic sciences are not only fascinating but also important. All too many research students are now discouraged from reading anything more than ten years old and, moreover, do not appear to want to read anything that is not on the Web. To this end, historians of science are fighting back. I attended, in January, an exploratory meeting convened to begin the process of creating a network of groups concerned with the history of science, technology, mathematics, engineering and medicine. Another meeting is planned for June.

So what does our Group do, and what have we done in the past year?

We operate behind the scenes to some extent. I wonder how many of you know that most of the

pen portraits of presidents and some of the profiles of interesting meteorologists that have been published in *Weather* were commissioned by – and a number written by – Group members. And the Group oversees the series of monographs known as *Occasional Papers on Meteorological History*. We also publish a newsletter, which I hope you find interesting. Three have been published in the past year. Do, please, send us snippets or longer pieces for the newsletter. We want it to be your newsletter.

The Group's meetings are highlights of every year, no less the past year, when three great meetings were held, one in March, the others in September. The one in March, held at Harris Manchester College, Oxford, was the second of two meetings concerned with Meteorology and World War I. The other meetings were on successive days in September. First, we marked the centenary of the death of the celebrated Scottish meteorologist Alexander Buchan with a meeting in Edinburgh. Then, the following day, we visited the Isle of Bute to view, in Mount Stuart, the home of the Marquess of Bute, an eighteenth-century clock-barograph and a number of historic meteorological documents. Many thanks to all who have organized, and those who have spoken at, the Group's meetings.

At the Royal Meteorological Society's Awards Dinner in Edinburgh in September, it was my very great pleasure to present to Oliver Ashford the History Group's Jehuda Neumann Memorial Prize for 2007.

Without an enthusiastic and conscientious committee, there would be no History Group. My thanks to all who have served on the committee this past year. Thanks especially to my predecessor as chairman, Howard Oliver, who introduced a number of new ideas (exhibitions at meetings, for example, and slots for shorter contributions at meetings). He left the Group in great shape. And my very grateful thanks too to our Secretary, Sara Osman, who not only prepares the paperwork for committee meetings and writes the minutes but also edits, produces and distributes the newsletter (and sends you subscription reminders!). She left the Met Office in January and we congratulate her on her new

job in the library of Kingston University. Last, but certainly not least, my thanks to our Treasurer, Mick Wood, for keeping our accounts healthy.

Ah, yes ... there are two other matters to report. As chairman of a Royal Meteorological Society Special Interest Group, I am invited to attend meetings of the Society's Meetings Committee. I have attended four such meetings since becoming your chairman, one of them concerned solely with strategy/policy. At these meetings, I have gained support for the idea of the Society's scientific meetings, whenever appropriate, including a paper which sets the meeting's historical context. The other matter to report is that most of the Society's archive is now cared for by, and can be viewed in, the National Meteorological Archive, Exeter. This includes a very large number of glass slides, some dating from the nineteenth century.

Malcolm Walker

MEETING REPORT

The Group's meeting on 19 April 2008 was held at Radley College, near Abingdon, Oxfordshire. The campus of the College is superb, with its buildings, parkland, playing fields, golf course, lake and farmland, but the New Theatre, which seats nearly 400, is, as they say, something else (see picture). Opened in 2005, it is spacious and comfortable and equipped with first-class projection facilities. In addition, it has a large foyer where tea and coffee were served and the publications concerned with the subject of the meeting were exhibited. And what an exhibition it was, containing more than 100 books, pamphlets and leaflets concerned with public weather services in the UK over the past fifty years.

The first talk was given by Roger Hunt, formerly Operations Director of the Met Office and now CEO of Weatherworld, a new interactive visitor centre in Devon which will further the public's knowledge and understanding of weather and climate.

Roger began his talk on *Public weather services – meeting the public need* by addressing the question of what the public want. There had not been many studies, he said, so not much was known, but the studies there had been suggested that the public were more interested in whether or not it was going to rain in their locality than in temperature or windiness. The value of providing national forecasts could be questioned. The public seemed more interested in their local weather.

Where do the public get their forecasts from? In 2008, as in 1993, when a previous survey had

been made, television was the main source, with radio second, but the internet was now used by a significant number of people, replacing Ceefax and Teletext as sources. The 2008 survey had found that BBC television forecasts were rated the easiest to understand (38%), with ITV second (20%). As for the TV channel used most often for obtaining forecasts, the public in most areas preferred the BBC. However, ITV appeared to be slightly more popular than the BBC in the north-east of England. The BBC's website was the most popular of the online sources (42%), with Google's second (11%) and the Met Office's third (8%). When asked about forecast reliability, 77% of those surveyed said forecasts were accurate and 89% considered them useful. Roger also reviewed the various sorts of weather information now available to the public, particularly warnings of severe weather and services provided through emergency authorities.

The next talk was given by Jim Bacon, who has long been a radio and television weather presenter and is now Managing Director of Weatherquest, a company in Norwich which was formed in 2000 and provides a wide range of weather forecasting and weather analysis



The New Theatre, Radley College

services. Jim called his talk *Scarlet Pimpernel to red studio light* and began with an appreciation of the very successful efforts of the late Michael Hunt to involve the public. Starting in the 1950s, Michael had built up a network of correspondents in East Anglia, among them farmers, who had, Jim said, an innate sense of weather and how to read the sky. He, Jim, had learned a lot from them. Michael Hunt had been particularly keen to explain how weather worked. This educational approach did not happen so much now, though to some extent the loss had been offset by the new presentational techniques available to the media today.

Jim traced in his talk the changes in public weather services which have taken place during his forty-year career. When his career began, he recalled, public access to weather information was usually through the local RAF station, the means of contact being the telephone. Apart from the cost of the calls, users considered this a free service, and it was much used by farmers and local flying clubs. There were regional weather centres from the late 1950s until comparatively recently and they provided services to the National Press, transport operators, the public utilities and the general public (through, for example, recorded forecasts available over the telephone). A shortcoming of the London Weather Centre was that it had no windows, which had on occasion proved embarrassing when meteorologists inside the building were caught out not knowing what the weather was outside their own front door!

Jim and others had founded Weatherquest to provide a tailored public weather service with much the same clientele as years ago, i.e. the armed forces, commercial aviation, emergency services, insurers, press, radio, television, public utilities, the offshore industry, transport operators, and farmers. He noted that there were now many online sources of weather information and advice and opined that independent review and quality safeguards were needed. Among bones of contention for him were the continuing Celsius versus Fahrenheit debate, the misunderstanding of wind chill by many members of the public, and the use of fast graphics on television which he said could leave him "gasping for air".

The next talk focused on weather routing of ships and towed structures, the speaker being the Group's Chairman, Malcolm Walker, for many years an academic in a university maritime department. The main objectives of routing were, he said, to avoid areas of heavy weather so as to achieve the fastest possible passage with maximum profit, minimum damage and greatest comfort and safety for those on board. He explained in technical terms how routing was carried out in the 1970s and 1980s and mentioned briefly today's weather routing methodology, which employs sophisticated on-board software tools to gain access to weather routing advice and to the latest wind, wave, swell, ice and weather forecasts. Masters of ships can now route themselves by obtaining tailor-made routes based on data entered by the Master into the vessel's onboard system; and onboard behaviour sensors were today fitted to some ships. Malcolm said that weather routing may be counterproductive from a meteorological

point of view because ships are routed away from areas of heavy weather, thus introducing an observational bias towards areas of relatively clement weather. From a financial point of view, though, weather routing has proved broadly successful. The Met Office withdrew their routing service a decade ago (for what they called "internal reasons"), but there were today commercial companies around the world offering services for shipping companies which clearly consider routing cost effective.

David Axford, a former Director of Services in the Met Office, provided a commentary on photographs taken during his time in the Office from 1958 to 1989. His career had been mainly in research branches of the Office, including five years with the Meteorological Research Flight at Farnborough and a period with the Office's Instruments Branch at Beaufort Park (near Bracknell). He had worked on the Mark 3 radiosonde and been in charge of the ocean weather ships. He had also been involved in designing and building the automatic weather station which is now on Cairngorm and in the development of the ocean buoys which are today deployed in significant numbers in the waters around the British Isles. His talk brought out the importance of research in respect of public weather services. His research on Clear Air Turbulence, for example, had proved important for aviation, especially civil aviation, and the data obtained from ocean buoys are very valuable for weather forecasting.

The meeting concluded with four short contributions, the first of them by Stan Cornford. He recalled the AIRMET broadcasts of the late 1940s, which he considered a valuable public weather service lost, an opinion clearly shared by others in the lecture theatre; and he mentioned that the Centenary Proceedings of the Royal Meteorological Society (published in 1950) contained a paper by Sir Nelson Johnson (then Director of the Meteorological Office) entitled *Services rendered to the community by the Meteorological Office* which included Town Planning as a section of the community served by the Office. Care had to be taken, Stan said, when trying to sell weather services abroad. He had found from personal experience that a video which included shots of a woman in a bikini on a beach could cause offence in some countries.

Vernon Radcliffe talked about the provision of weather services at Kew Observatory around 1950, mentioning that press enquiries had to be answered and that meteorological information had to be supplied to insurance companies wishing to confirm whether or not the weather was as the claimant stated. School parties were

shown around the Observatory and grounds and also shown Kew seismograph records, including the one for the Krakatoa explosion of 1883. The Observatory's library was not much used, but Vernon recalled Sir George Simpson ringing in one day to say that he would like to visit.

Martin Kidds (National Meteorological Library, Exeter) reviewed recent improvements to the National Severe Weather Warning Service. This Service was set up after the Great Storm of 1987 and supports the public, emergency services, civil authorities and the Ministry of Defence. As required by the 2004 Civil Contingencies Act, the Met Office provides early warnings and flash warnings, and a large number of authorities now receive these warnings.

Finally, Rodney Blackall showed a video on the origins of the FRONTIERS nowcasting system at Malvern.

The day ended with very grateful thanks being expressed to John Harris, Head of Geography at Radley College, for all the arrangements he had made and all the help he had given. Thanks were also expressed to the technician, Matt, and to Malcolm Walker and Martin Kidds, who had supplied most of the exhibition material. Another successful History Group meeting came to an end, undoubtedly enjoyed by the 30 who attended.

Minutes of the AGM of the Special Interest Group for the History of Meteorology and Physical Oceanography

Radley College

Saturday, 19 April 2008 at 11:20

Members present

Oliver Ashford	John Goulding	Howard Oliver	Vernon Radcliffe
Rodney Blackall	Arnold Johnson	Sara Osman	Diane Walker
Stan Cornford	Julian Mayes	David Pedgley	Malcolm Walker
Brian Dagnall	Reg Milne	Ernie Pepperdine	Mick Wood

Apologies for absence

Margaret Deacon	Valerie Green	Roger Phillips	Dennis Wheeler
Tony de Reuck	Alan Heasman	Peter Rowntree	Peter Wickham
Brian Giles	Joan Kenworthy	Keith Tinkler	

1. Report of the last meeting – 24 March 2007

A report of the meeting was published in Newsletter 1 – 2007. The report was accepted.

2. Chairman's report

Malcolm Walker reviewed the past year's meetings: World War I part 2 in Oxford in April, September's meeting on Alexander Buchan in Edinburgh and the visit to Mount Stuart on the Isle of Bute the following day. He also gave details of a new History of Science Network and gave an update on the Society's archive material. He congratulated Oliver Ashford on the award of the Jehuda Neumann Memorial Prize and thanked the Committee for their work over the last year. Malcolm highlighted that the Royal Meteorological Society was granted its "Royal" handle 125 years ago (in September 1883) and mentioned that an article about how the Society gained the handle will appear in

Weather. He also mentioned that the History Group celebrates its 25th anniversary in 2008.

3. Treasurer's Report

Mick Wood presented the 2007 accounts, which were accepted. He thanked Maurice and Pat Crewe for auditing the accounts.

4. Future meetings

Meeting about the meteorology and oceanography of the Southern Ocean, Southampton, 28 June 2008

Details will be sent to History Group members shortly

History of Seasonal Forecasting, starting with the classic papers of Gilbert Walker and E W Bliss, Reading University, 19 November 2008

Developments in observing systems, London, 15 January 2009

Joint meeting with Retired Members' Group of the Institute of Physics

AGM and joint meeting with Observing Systems Group at Royal Astronomical Society, London, 28 March 2009

Agricultural meteorology, Summer visit to Rothamsted June 2009

Other suggestions put forward were:

- Meeting on flooding and visit to Wallingford
- Visit to Stoneyhurst

Any other suggestions should be sent to the Secretary.

5. Election of Committee

Continuing Committee members are:
Margaret Deacon (corresponding member and representative of the Challenger Society)
Alan Heasman
Joan Kenworthy
Howard Oliver
Sara Osman
Dave Pedgley
Vernon Radcliffe
Dennis Wheeler (corresponding member)
Mick Wood
Malcolm Walker

Julian Mayes was elected as a new member of the Committee.

6. Election of Officers

The following were confirmed:
Malcolm Walker (Chairman)
Mick Wood (Vice Chairman and Treasurer)
Sara Osman (Secretary)

7. AOB – None

The next AGM will be held on 28 March 2009 at the Royal Astronomical Society, London.

EAST INDIA LOGBOOKS (1780 to 1840): imaging the oceanic world and its weather

The Hadley Centre is working with NOAA, the British Library and the University of Sunderland in 'recovering' one of the oldest instrumental temperature datasets yet found for oceanic areas. The captains of the EIC ships that sailed regularly between London and India and China were required to keep a daily record of air temperatures and air pressure. These observations are preserved in some 800 logbooks held in the British Library; each logbook

covering a 'round trip' to the Orient and back. DEFRA has provided funds to image this complete collection, amounting to over 180,000 pages, with the images then being shipped to the US where the CDMP section of NOAA will digitise the observations into a database for checking and verification before making them more widely available.

The route in those days took the ships across the North and south Atlantic before heading south of the Cape of Good Hope into the deep southern oceans to take advantage of the westerlies before heading north to India and Asia. Such a substantial body of daily instrumental data for these oceanic areas and for this remote period in time will make an important contribution to understanding past climates and climatic change.

For further details contact: Dennis Wheeler on dennis.wheeler@sunderland.ac.uk

AAG Boston 2008

The Association of American Geographers meeting in April included five sessions of interdisciplinary papers on various aspects of Climate History (sponsored by the Climate and Paleoenvironmental Change specialty groups).

CLIMATE HISTORY I: HISTORIES FROM RIVERS, LAKES & OCEANS

1. Dennis Wheeler: Filling the oceanic gap: ships' logbooks in climatic studies 1680 to 1850.

Land-based climatic records of a non-instrumental character exist from as early as Medieval times in Europe, for the past two millennia in parts of the Far East. Instrumental data begin in the seventeenth century, mostly in Europe. The oceans however, and for obvious reasons, do not enjoy such a prolonged wealth of climatic evidence. Instrumental data have become increasingly abundant following the Brussels Maritime Conference in 1853, and some scattered instrumental observation exist for earlier years. It might be concluded therefore that observations or evidence from earlier times would be absent for oceanic regions. This is not the case, and recent studies of the huge accumulations of ships' logbooks, mostly from the UK, and some from as early as the late seventeenth century, have revealed a remarkably rich source of valuable climatological information.

This presentation includes a review of logbook contents, their manner of preparation, the nature

of the climatological information that they contain and geographic and temporal ranges that they collectively embrace. Further attention will be given to the way in which logbook data, most of which are non-instrumental for the pre-1850 period, can be treated and used in scientific analysis. The work of the EC-funded CLIWOC programme and related projects will be reviewed and examples given of the manner in which this source can provide a new and unique insight into the oceanic climates of past centuries.

2. **Michael Chenoweth:** A Multi-century Record of Caribbean Region Tropical Cyclones, 1690 to present

3. **Sharon E. Nicholson:** Quantifying the historical climate record for Africa: added value to historical records and information

4. **Neil MacDonald:** Historical flood chronologies: a valuable resource in re-evaluating flood risk and determining periods of hydroclimatic variability

5. **Rosario Prieto:** Reconstructing hydroclimatic variability in the high and middle basin of the Bermejo River (Subtropical Andes of Argentina-Bolivia) during the 18th and 19th centuries

CLIMATE HISTORY II: THERMAL HISTORIES

1. **Stefan W. Grab & David J. Nash:** "To Shiver With Cold In This Africa": Documentary Evidence For Snow And Frost Variability In Lesotho, 1833-1900

2. **Ricardo Garcia-Herrera:** Interannual oscillations and trend of snow occurrence in the Andes region since 1885: a case study to analyse the quality of climate proxies derived from newspaper reports.

3. **Takehiko Mikami et al.:** Climate reconstruction in Japan based on the historical weather records

4. **Masumi Zaiki et al.:** Instrumental records in Japan in the 19th century and their climatological significance

5. **Dorian Burnette:** Screening, Correction, and Analysis of a new 180-year Daily Temperature Record for Kansas

CLIMATE HISTORY III: CLIMATE CHANGE AND SOCIETY

1. **Rodolfo Acuña-Soto:** Drought-associated Famines and Epidemics in Central Mexico. The last 1000 years.

2. **Sarah Davies:** Documentary evidence of climate variability in Wales – unlocking the potential of an untapped resource

3. **Lucy Veale:** Domesticating the tropical landscape: Climate, health and British society in nineteenth century Ootacamund, India.

4. **Georgina H. Endfield:** "Lying under a curse"? Famines, floods and crisis in late nineteenth century Uganda

5. **Jim Fleming:** The Societal Context of General Circulation Model Research and Development: Public Policy and Pressures since 1945

CLIMATE HISTORY IV: EXTREME EVENTS

1. **Clare Kelso:** Historical Climate and Livelihood Adaptation: Namaqualand 1800-1900

2. **Michael A. Palecki:** 19th Century U.S. Daily Climate Observations and Extreme Events in Space and Time

3. **Stephanie Dodds:** Aeolian Activity in the Desert Region of North America during the Mid-19th Century

4. **Cary J. Mock:** 1849, The Most Famous Year of Extreme Weather in American History

5. **Raphael Neukom:** Reconstructing southern South America's climate combining historical documents and natural archives (LOTRED-SA): The actual predictor network and its possibilities and limitations

CLIMATE HISTORY V: DROUGHT HISTORIES

1. **David W. Stahle et al.:** Drought in Mexico

2. **Jose Villanueva-Diaz et al.:** Tree-ring reconstructed winter-spring precipitation for the Sierra Madre Occidental, Mexico

3. **Isabel Fernandez Tejedo:** The impact of climate change in livestock management in 18th colonial Chihuahua, Mexico

4. **Matt Therrell:** The 1890s Drought: Causes and Consequences

100 YEARS AGO

What was the Royal Meteorological Society doing 100 years ago? To answer this question, we turn to the *Report of the Council for the Year 1908* (published in the 1909 *Quarterly Journal*, Vol.35, pp.93-125).

Among the losses by death in 1908, the Council felt it "right to refer specially to seven distinguished Fellows or Honorary Members", among them: Sir John Eliot (b.1839), formerly Meteorological Reporter to the Government of India; Professor Eleuthère Elie Nicolas Mascart (b.1837), formerly Director of the Central Meteorological Bureau of France; and Sir Richard Strachey (b.1817), third recipient of the Symons Memorial Medal and formerly Chairman of the Meteorological Council, the body which for many years controlled the Meteorological Office. Another who died was William Morris Beaufort (b.1823), youngest son of Admiral Sir Francis Beaufort. The number of Fellows of the Society was 745 on 31 December 1908, an increase of 13 over the year. Of the 745, 570 were Annual Fellows, 158 Life Fellows and 17 Honorary Fellows.

The Council of the Society was assisted by several committees, namely the Editing Committee, General Purposes Committee, Finance Committee, Kite Committee, Local Scientific Societies Committee, Observers' Handbook Committee, and Revision of By-Laws Committee. Along with the minutes of the Council's meetings, the minutes of the meetings of all of these committees are now in the National Meteorological Archive, Exeter.

At the request of the Director of the Meteorological Office, the Council had in 1908 examined the new edition of the *Observers' Handbook* and proposed some modifications, including the addition of a statement on the title page that the handbook had been "Approved for the use of Observers by the Royal Meteorological Society, in association with the Scottish Meteorological Society and the British Rainfall Organization". This, the Council thought, could not "fail to promote that uniformity in methods of observation which is essential to the successful co-operation of observers throughout the country".

The Council reported that researches into the meteorological conditions of the free atmosphere by means of kites and balloons had continued to be promoted in 1908 and that the kite work at the Howard Estate Meteorological Station of the University of Manchester under the direction of Mr.J.E.Petavel had been supplemented by ascents made during calm weather by means of

a captive balloon, towards the cost of which the Society had contributed.

The Society had again been invited to take part in the Agricultural Education and Forestry Exhibition "in connection with the Show of the Royal Agricultural Society" (held at Newcastle-upon-Tyne from 30 June to 4 July 1908) and had exhibited a large collection of instruments, photographs, diagrams and maps.

Mr William Marriott, Assistant Secretary of the Society, who was also the Society's Lecturer "under its scheme of diffusing a knowledge of Meteorology", had delivered lectures at several schools and before several societies; and a very successful Prize Competition for Teachers had attracted 180 essays from teachers, seven from pupil teachers and eleven from children aged 11 to 13. After examining the essays, the Council had decided to award four extra prizes in addition to those announced. The names of the successful competitors can be found in the 1908 *QJ* (Vol.34, pp.153-154). The winners of the first three prizes were all teachers. First Prize, £5, went to W.C.Upshall of Broughton, Stockbridge; Second Prize, £3, went to Miss A.B.Phillips of Blythe Hill, Catford; and Third Prize, £2, went to Albert V.Stevenson of St.Paul's School, Sunderland. Two of the other four prizes went to teachers, the rest to pupil teachers.

Mr Marriott had inspected the Society's weather stations in the northern and eastern parts of England and "found them to be generally", he said, "in a satisfactory condition". The Report of the Council included notes on 36 stations, in which we find that the Snowdon rain-gauge at Blackpool had a hot-water jacket for melting snow; that a Campbell-Stokes sunshine recorder had replaced a Jordan recorder at Buxton; that the thermometer screen at Derby required painting; that a railway porter took the observations at Hillington when the regular observer, the Rev H.Ffolkes, was away from home; that the Glaisher rain-gauge at Lancaster required some soldering; that an electrical thermometer was fixed on the great tower of Lincoln Cathedral and read off by a galvanometer in a vestry; that at one of the Scarborough stations the muslin and cotton on the wet-bulb thermometer were very dirty; and that the observations at Wakefield Prison were, "owing to the exigencies of the prison duties", taken a few minutes before 8.00pm, instead of at 9.00pm.

All in all, the impression given is one of an active Society that was well run and forward-looking. With such great names as Hugh Robert Mill (President), William Henry Dines and William Napier Shaw (Vice Presidents), Robert Henry

Scott (Foreign Secretary), H.N.Dickson, M.W. Campbell Hepworth, Richard Inwards, R.G.K.Lempfert and D.Wilson-Barker (Councillors) running the Society's activities, this was not surprising.

SOCIETY SUCCESS 100 YEARS AGO

It was mentioned on page 95 of the 1909 volume of the *Quarterly Journal* (Vol.35), in the *Report of the Council for the Year 1908*, that the Society had "contributed a special exhibit to the Meteorological Section in the Science Court of the Franco-British Exhibition, the most important part of which was a series of books and papers illustrating the history and literature of Meteorology". The Exhibition celebrated the entente-cordiale which had been signed by Britain and France in 1904 and was held in Shepherd's Bush, London, in the area subsequently called White City. The 1908 Olympic Games were held close by; and the BBC Television Centre (opened in 1960) now stands where the Exhibition was held.

The Diploma for Grand Prix which was awarded to the Society (see picture below) is now in the National Meteorological Archive, Exeter.



FIFTY YEARS ON

Recollections of the Met Office and the Royal Meteorological Society fifty years ago
by Stan Cornford

THE MET OFFICE

About fifty years ago, I was a young forecaster at Royal Air Force Syerston, Nottinghamshire, and then an instructor at the Meteorological Office Training School at Stanmore.

No. 2 Flying Training School was an RAF unit training pilots for the Royal Navy. Some instructors were RAF, some RN. The Station Commander was always a Group Captain, whilst the post of Chief Flying Instructor alternated between RAF and RN. The Senior Meteorological Officer spent most of his time in the ground school. He was a short, kind, Scotsman, Mr Cruickshank, always affectionately known amongst ourselves as Wee Cruickie. On one occasion, though, when he was in the forecast room, a new arrival introduced himself and said "Ah! You must be Mr Weecrookie.!"

One of the forecasters was 'Paddy' Harrington. His scientific knowledge may have been less than that of some of today's forecasters but his rapport with the RAF was splendid. Our practice was to give a mass briefing to all instructors and students, perhaps 60-100 people, at 08:00LT, 12:45LT and before night flying, if any. Written forecasts (Form 2330) [see Footnote A] were issued to those flying cross-country. We carried to the briefing room two large sheets of perspex: one was the chart, in 'chinagraph', for the most recent main synoptic hour, the other a time cross-section of the weather we expected over the local area. On a board fixed to the wall was the latest report of the weather at Syerston, plotted, in chalk, as a 'station circle'. One foggy winter morning, Paddy gave the shortest and best briefing I've heard. Pointing to the station circle, and in his best Irish brogue, he opened "Good morning, gentlemen!" [See Footnote B]. Then, pointing to the station circle, "You can see past weather fog and present weather fog, and ...", pointing to the cross section, "... future weather fog. Good morning.!" Would that I had his flair for public speaking!

When I arrived at the Meteorological Office Training School, the instructional technique was to transfer information from the mind of the instructor to the blackboard, then through the chalky air to the notebook of the student in the hope that, on the way, some would stick in the student's mind.

New instructors were given a one-day course on teaching technique. This included ensuring that the back of the board had not been written on by some errant soul to amuse the class when, to find more space, the instructor turned it over. Before my first lesson, I lifted the board to check that the back was clear-and smashed the electric lamp shade just above it.

Footnotes

A Duplicated using a special kind of carbon paper: hectograph. When put on a baking tray of melted and solidified gelatine the 'ink' from the

'negative carbon copy' could produce twenty or thirty 'positive' replicas. The gelatine was then re-melted on an electric hot-plate for re-use. Most of the forecasts issued to aircrew throughout the Second World War had been 'printed' in this way.

B No female RAF or RN pilots then.

THE ROYAL METEOROLOGICAL SOCIETY

Fifty years ago I was a very new FRMetS (we were all Fellows then); and very pleased to be a member of a Royal Society with the privilege of attending erudite discussions at 49 Cromwell Road, South Kensington. Wednesday meetings began with tea in the Fellows' Room, including excellent cakes and succulent bridge rolls filled with crab. Ah! – OÙ sont les neiges d'antan?

The format was for two, or perhaps three, recent authors of *QJ* papers to present their work. The wise ones told us why they had done it and what it was about, rather than repeat the paper as such. Members then discussed each paper and presentation with its author and were afterwards asked to let the Editor of the *QJ* have a written version of what they thought (or wished) they had said. Reports of the discussions then appeared in later *QJs*. A few years later, the system changed: notes on the presentation and ensuing discussion appeared in *Weather*. These are sometimes still the clearest extant account of a particular piece of work, because reporters had perforce to study the paper, get to grips with the discussion and then present the ideas as simply as the subject allowed: to be such a reporter was a good way to learn.

One meeting, I recall, was an all Imperial College, cloud physics, evening. The two stars were Ludlam and Scorer. Dick Scorer advocated a physical basis for classifying clouds, in contrast to their appearance from the ground which had long formed the basis of the International Cloud Atlas. What was needed was not a Bible, serving as Authority, but an Instruction Manual, to be amended from time to time. Ludlam outlined ideas on the growth of large hail which have since become received wisdom.

We were not aware of it at the time, but this was, perhaps, a golden age; but then, perhaps, a time fifty years before always has been, is and shall be.

NO COMMENT!

The following has been taken verbatim from the magazine *Flight* (Vol.12, No.29, 15 July 1920,

page 768), from a review of the Aero Show held at Olympia in July 1920.

“The Meteorological Office is, of course, well represented, and has a very popular exhibit in the form of a large map of the British Isles and adjoining portion of the Continent on which the latest weather reports from all the important centres are marked up from time to time. Thus, one is able to ascertain at a glance whether or not the wife's mother is having pleasant weather down at Somewhere-on-Sea this afternoon, and if the visibility is bad enough for her to miss the edge of the cliff.”

By contrast, with proper political correctness, the review goes on to say that “Some very fine photographs of clouds, taken from an aeroplane by Capt. C.K.M. Douglas, are also well worth studying”. They were indeed.

JEHUDA NEUMANN MEMORIAL PRIZE FOR 2009

Nominations for the 2009 Jehuda Neumann Memorial Prize are invited. Please send them to the History Group's Secretary, Sara Osman (metsochistorygroup@gmail.com), by 31 July 2008. Her postal address is: Ms Sara Osman, History Group Secretary, c/o Royal Meteorological Society, 104 Oxford Road, Reading, RG1 7LL.

The rules for the prize are as follows:

1. The Jehuda Neumann Memorial Prize commemorates the work of Professor Jehuda Neumann (1915-1993) on the relationship between weather and historical events.
2. The Prize shall be awarded biennially to the person whom the Committee of the Royal Meteorological Society's Specialist Group for the History of Meteorology and Physical Oceanography (or delegated sub-committee) considers to have made the most outstanding contribution to the study of the history of meteorology or physical oceanography during the preceding five years. In exceptional circumstances, at the discretion of the full Committee, this qualifying period may be extended – to recognise, for example, an individual's outstanding contribution over a long period. The award shall not be confined to members of the Royal Meteorological Society or of the Group.
3. The Prize shall usually be awarded for a published paper in the English language, or for an outstanding contribution or contributions to the Group's activities, during the preceding five

years. Exceptionally, the period may be extended to recognise long-term meritorious contributions.

4. Nominations for the award, with supporting reasons, should be sent to the Honorary Secretary of the Group by 31 July in even years. A decision will be made by the Committee, or by a designated sub-committee of at least three persons nominated by the Committee.

5. The Prize shall be awarded only if the Committee is satisfied that a sufficiently high standard has been attained.

6. The Prize shall be presented at the Annual General meeting of the Society next following the last day for nominations and shall consist of a prize to the value of £50, together with a certificate and five years free membership of the Group.

7. No person shall be eligible for a second award.

GALTON'S 'METEOROGRAPHICA'

A facsimile edition of Francis Galton's classic work *Meteorographica or Methods of Mapping the Weather* (Macmillan, 1863) can now be read online. See <http://www.galton.org/books/meteorographica/index.htm>. Galton's work was an important contribution to meteorological cartography. In his words, taken from the Introduction to *Meteorographica*:

"The accompanying Charts and Maps are contributions to a branch of Meteorology which is theoretically divisible into two separate portions, though they may be more or less united in practice, and it is convenient to class them under a single term, – Meteorography.

I mean by that phrase, first, the art and practice of tabulating Observations which have been made simultaneously at numerous stations, each record being inscribed in the geographical position of the place where it was made; and, secondly, the subsequent step of delineating the General Results of the Observations in a pictorial form.

When lists of observations are printed in line and column, they are in too crude a state for employment in weather investigations; after their contents have been sorted into Charts, it becomes possible to comprehend them ; but it requires meteorographic Maps to make their meaning apparent at a glance."

Galton devised symbols for showing cloud, precipitation, wind direction and wind force on weather maps and used them to produce daily

weather maps for much of Europe during December 1861. He also included in *Meteorographica* a barometric pressure conversion table showing that: 1 inch = 25.3995 millimetres = 11.2595 Paris Lines = 20 Russian Half Lines.

For more about the history of the weather map, see *Air Apparent: how meteorologists learned to map, predict, and dramatize the weather* by Mark Monmonier (University of Chicago Press, 1999, 309 pages).

... AND A DIFFERENT KIND OF METEOROGRAPH

Over the years, the *Quarterly Journal of the Royal Meteorological Society* has included many fascinating snippets of historical information, some taken from other journals. We find on page 235 of the 1924 QJ (Vol.50), for example, an extract from *Nature* (31 May 1924, page 805), from its column on 'Early Science at the Royal Society'. Entitled *An early meteorograph*, it reads as follows:

"May 29, 1679. – The Society then went to take a view of the new weather-clock, which was set up in Mr.Hunt's lodgings, made to keep an account of the quantity and time of all the changes that happen in the air, as to its heat and cold, its dryness and moisture, its gravity and levity; as also of the time and quantity of the rain, snow, and hail that fall; all of which it sets down in a paper, so as to be very legible and certain.

A later note (June 21, page 913) adds: '1679. There being but few members present, and Sir Robert Viner and Sir Robert Clayton being there, they were entertained by those members with a sight of the repository, library and weather-clock newly set up. Monsieur Papin showed a new kind of wind-fountain of his own contrivance'."

Mr.Hunt was probably Henry (Harry) Hunt (d.1713), the Royal Society's Operator and Robert Hooke's apprentice, assistant, colleague and friend. Denis Papin (1647-1712) was a French natural philosopher and inventor who invented a steam digester (an early pressure cooker) and a simple form of steam engine. Sir Robert Viner (1631-1688) and Sir Robert Clayton (1629-1707) were both businessmen, and both served as Lord Mayor of London, Viner in 1674-5, Clayton in 1679-80.

A BALLOON ASCENT IN A SNOW-STORM

Here is another example of fascinating information found in a *QJ* of long ago, this from the 1909 *QJ* (Vol.35), where it was reported that the Hon.C.S.Rolls had recently drawn attention to an article in *l'Aérophile* in which Monsieur E.Carton had given a graphic account of a balloon ascent made from Paris in a hail and snow-storm. The following has been taken from the translation of Carton's article which was provided on pp.299-300 of the 1909 *QJ*.

"In the course of balloon ascents I have oftentimes had the opportunity of making some curious meteorological observations. But it has never before happened to me to observe the phenomena occasioned by the sudden appearance of a squall of snow and hail as I did on April 19, 1908, in the course of an ascent on board the *Araïne* (450 cubic metres) in company with Monsieur Louis Méan, leaving the Bois de Boulogne at 3.55pm. The day was marked by showers of hail and intermittent snow, with rather low temperature – such as is generally called 'showery'."

The flight began smoothly enough, with a flight over the Bois de Boulogne and most of Paris at an altitude of about 350 metres, "in an ordinary manner; easy equilibrium without throwing out of ballast". To the south, "light stratus stretched to the horizon". To the north and north-west, however, there was "dense nimbus, which was very dark, and of great height".

By 4.10pm, Carton and Méan were "enveloped on all sides by dense clouds". Then, at 4.20, the first flakes of snow fell, and almost at the same instant there was "a terrible noise caused by the fall of hailstones", which the aeronauts "found were of large size, 8 to 10mm in diameter". The balloon was "violently tossed about" and began to ascend, "drawn up almost vertically to 1,900m, without throwing out a gramme of ballast". And all the time, "hailstones struck the envelope of the balloon with great noise".

Then, at 4.35, "the hail ceased and intense cracklings were heard around us". Carton "accounted for these as being due to electrical discharges on the anchor which was hung at one side of our car" and he reported that "the cracklings were sometimes so strong as to cause the vibration of the basket work of the car towards the part where the anchor was". By 4.45, the balloon was descending rapidly, and at 4.50 there was anything but a smooth landing.

In the opinion of observers on the ground, the squall had been (to quote Carton) "most violent",

and they reported that it had been accompanied by a fall of snow which completely covered the ground. As the balloon descended, Carton said, "a crust of frozen snow 7 or 8 centimetres thick" built up and "this was partly detached when the balloon came to rest".

It appears that Monsieur Carton did not know about up-draughts and down-draughts in cumulonimbus clouds, for to explain the rapid ascent he speculated as follows. "Might we suppose that during the vertical ascent from 600m to 1,900m without throwing out any ballast, without sunshine, and in the full force of the hail, the balloon was charged with electricity, and that a tremendous expansion of gas took place?" He did not attempt to explain the balloon's rapid descent, but his description of the closing stages of the flight indicate a vigorous down-draught and probably a gust front. "At 4.45 we were in full descent; two sacks of ballast of 22 kilos were thrown out in a few minutes, but still the descent grew faster." "The covering of the balloon bent beneath the gusts of the wind." "We were thrown against the trees, the snow and wind being furious".

Like Glaisher and Coxwell, whose balloon exploit in 1862 could so easily have ended tragically, Carton and Méan lived to tell the tale. Were they intrepid, or was it a case of ignorance being bliss? Probably a bit of both, but isn't it a shame we are not often treated to such graphic and exciting accounts of atmospheric behaviour nowadays?

THE NEW METEOROLOGY

Using kites to obtain meteorological observations from aloft was, as they say, 'all the rage' 100 years ago. Many papers on their use were published around this time, among them the one by Eric Stuart Bruce on *Some forms of scientific kites*, published in the *Quarterly Journal of the Royal Meteorological Society* in 1909 (Vol.35, pp.31-35).

Bruce began by recommending a report by Ernest Gold *On the calculation of wind velocity from pressure distribution and on the variation of meteorological elements with altitude* (Meteorological Office, 1908). Then, he mentioned that observations of atmospheric electricity had been made by means of kites at Manchester University's meteorological observatory at Glossop in July and August 1907. He went on to comment, somewhat presciently, that it was "no exaggeration to say that kite observations in the free and open air, coupled with those other observations gained by the use of *ballons-sonde* at still greater heights, were

laying the foundations of what may be aptly called 'The New Meteorology'".

The main purpose of Bruce's paper was, however, to draw attention to some forms of scientific kites other than the box-kite invented by Lawrence Hargrave. Though stable and able to ascend steeply, the box-kite was comparatively heavy (and breakable) and would not rise when the wind was light. Bruce described devices which he considered worthy of consideration, particularly when winds were light, namely the Brogden Six-Winged Bird-Kite, the Eighteen-Winged Kite of Mr.S.Salmon, Salmon's Multiple-Celled Rhomboidal Kite, the Barclay Honeycombed Kite, the Cody Bat-Winged Box-Kite, Mr.R.M.Balston's Butterfly Kite and the Aluminium Kite of Alan Burgoyne. Mr.Salmon had found, Bruce said, that the string of the Barclay Kite could make an angle of almost 80° with the ground.

Bruce expressed the hope "that, before very long, a permanent national aerial observatory may be established in this country where will be gathered together every useful form of kite, and, in fact, every contrivance that is fittest to further the investigations of the upper air".

THE FITZROY BEQUEST: CAN YOU HELP, PLEASE?

by Malcolm Walker

It was reported on page 84 of the 1944 *Quarterly Journal of the Royal Meteorological Society* (Vol.70) that Miss Laura Maria Elizabeth FitzRoy, daughter of Admiral Robert FitzRoy by his second marriage, had bequeathed by her Will a number of items to the Royal Meteorological Society. She had died on 6 December 1943, aged 85.

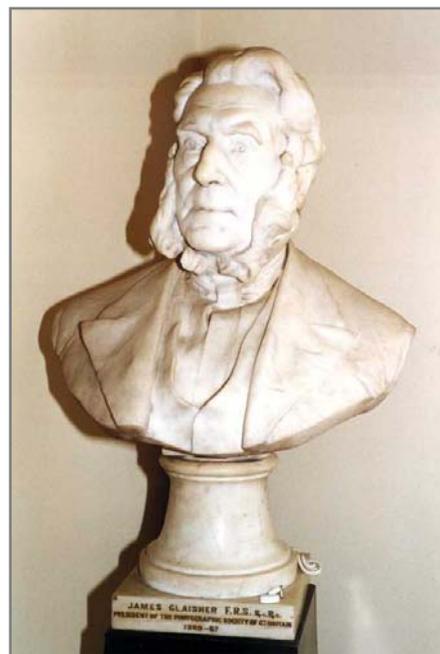
According to E.L.Hawke, the author of the *QJ* report, Miss FitzRoy had bequeathed to the Society a marble bust which had been "placed in the main library room on the ground floor at 49 Cromwell Road" (then the home of the Society). This bust, of her father "as he was in early middle life", lacked the name of the sculptor and bore no date.

"With the bust", Hawke went on, "we received a gilt-framed crayon portrait of the admiral at the age of 30, when he was in command of the *Beagle*; two large bound volumes of pilot charts formerly belonging to him; a set of wind charts issued by the Meteorological Department of the Board of Trade in 1856; and a sketch-book from which it is clear that FitzRoy possessed considerable artistic talent."

The 1945 *QJ* (Vol.71) also mentions the FitzRoy bequest, on page 170, in the *Report of the Council for the year 1944*.

The whereabouts of the items bequeathed to the Society are unfortunately not now known and the Society would very much like to hear from anyone who has information about the items, not least because there have been enquiries about them from members of the public in the past year or so. It is now all too easy by means of a Google Search of the Web to discover that the items were bequeathed to the Society, and it is embarrassing to have to admit that their whereabouts are unknown.

Do you ever remember seeing a bust of FitzRoy in the Society's library or offices? This bust should not be confused with the one of James Glaisher which has been in the possession of the Society since 1903 and stands today in the Fellows' Room of the Society. I first attended a meeting at 49 Cromwell Road in the autumn of 1964 and do not remember seeing the bust of FitzRoy. Others who joined the Society before I did have no recollection of seeing it, either, so it is possible that it never reached the Society, though, if that is the case, the reports in the 1944 and 1945 *Quarterly Journals* are curious, because Hawke stated unequivocally that the bust had been placed in the main library room at 49 Cromwell Road. And what about the other items bequeathed to the Society, the portrait and sketch-book especially? Does anyone know where they are? Please contact the Chief Executive of the Royal Meteorological Society with any information.



The bust of James Glaisher in the Fellows' Room of the Royal Meteorological Society.

LOCATION, LOCATION, LOCATION

The British (later Royal) Meteorological Society was founded on 3 April 1850 at Hartwell House, near Aylesbury, Buckinghamshire, the country mansion owned by Dr John Lee. At first, the Council and scientific meetings were held at Hartwell House or in Lee's rooms at Doctor's Commons, London. Then, in early 1852, the Society obtained a base of its own by renting rooms at 5 Cavendish Square, London, just to the north of Oxford Street. From there, the Society moved to Great George Street (London, SW), first, in 1857, to No.25, then, in 1872, to No. 30, and finally, in 1891, to No.22. Seven years later, the Society moved yet again, this time to 70 Victoria Street (London, SW), to rooms rented from HM Office of Works on a 21-year lease at £200 *per annum*.

The trigger to vacate No.70 came in late 1919 or early 1920 when the landlord informed the Society that the rent was to be raised to £340 *per annum*. The Council of the Society responded by searching for another place in London to rent, considering, among other properties, 38 Grosvenor Gardens and 82 Queen's Gate. But when the New Premises Committee failed to find suitable place at a reasonable rental, the Council decided instead to purchase. For the first time in its history, the Society was to have a home of its own.

The decision to purchase 49 Cromwell Road, South Kensington, a freehold property, was made by Council on 22 September 1920, and the price agreed was £4,500. Because the capital of the Society was insufficient to meet the whole cost of purchase, removal, repairs, carpets and decoration, though, a decision was taken (at a Special General Meeting held on 17 November 1920) that a sum not exceeding £8,000 would be raised by means of debentures of £50 each. These carried interest at 6% *per annum* to be redeemed gradually, commencing in March 1926 and redemption completed by 1957. As required by restrictions imposed by the London County Council, the upper floors of the property would be sub-let for residential purposes.

The purchase of 49 Cromwell Road was completed on 11 February 1921, on which date the Society obtained possession of the building. Because of the need for alterations, repairs and decoration, however, and because of protracted negotiations with the prospective tenant and other delays, the new home was not occupied by the Society until the autumn of 1921. And the final cost to the Society was £7,638. For further information about the purchase of 49 Cromwell Road, see the 1921, 1922 and 1923 volumes of

the *Quarterly Journal of the Royal Meteorological Society*, respectively Vol.47 pp.124-125, Vol.48 pp.185-186, Vol.49 pp.120-121.

No.49 was sold in 1971 (for £110,000) and the Society relocated to Bracknell, Berkshire, moving first, in July of that year, to temporary accommodation in Cromwell House, an old bank on Bracknell High Street, then, in 1975, to James Glaisher House, an architect-designed building in Grenville Place (foundation stone laid on 26 September 1974). From the outset, this building leaked in wet weather, and the Society's officers and headquarters staff expended much time and expense on trying to remedy the matter. Legal action against the architects of James Glaisher House proved successful, but the problem of rain-water ingress was never solved.

Eventually, the Society's Council decided that enough was enough; James Glaisher House would have to be sold. The search for a new home began in earnest in September 1988 and the Society moved in April 1990 to Mannson House, 104 Oxford Road, Reading, a Grade II listed building dating from about 1800. The sale of James Glaisher House realised £600,000 and the new home, the current home, cost £530,000. The name Mannson House has never been used by the Society.

NOTTINGHAMSHIRE OBSERVERS AND RECORDERS OF WEATHER

Last October, a member of the History Group's committee, Vernon Radcliffe, attended what sounds to have been a most interesting lecture, given by John Wilson, a pharmacist by profession. Called "Two centuries of observers and recorders of weather in Nottinghamshire", the lecture was given to the Thoroton Society, which is Nottinghamshire principal historical and archaeological society.

One of those mentioned in the lecture was Henry Mellish, who lived at Hodsock Priory near Worksop and served as President of the Royal Meteorological Society for the years 1909 and 1910. For a pen portrait of him, refer to the November 1996 issue of *Weather*. Others mentioned in the lecture were Alfred Lowe (1789-1856) and his son Edward Joseph Lowe (1825-1900), both of Highfield House near Nottingham and both keen weather observers. Alfred established an observatory at Beeston and Edward was one of the ten gentlemen who in 1850 founded the British (later Royal) Meteorological Society. Arnold Birkbeck Tinn (1890-1962) was also mentioned. He was called,

in a profile of him written by John Wilson (the Thoroton Society lecturer) and published in the April 2005 issue of *Weather*, "one of the most enthusiastic and dedicated amateur meteorologists of all time". In the 1960s, two well-known radio and TV weather presenters, Jack Scott and John Kettley, had served as local forecasters at RAF Watnall, near Nottingham.

FORTHCOMING MEETINGS

Members of the History Group should by now have received information about the meeting to be held at Southampton on Saturday 28 June. This is a Royal Meteorological Society National Saturday Meeting organized by the History Group, on *Advances in Southern Ocean meteorology and physical oceanography: the exciting work of the 1920s and 1930s and why it is still important today*. If you have not received information, please contact the Group's Secretary, Sara Osman, via metsochistorygroup@gmail.com or by writing to her c/o Royal Meteorological Society, 104 Oxford Road, Reading, RG1 7LL. Alternatively, details including a booking slip can be downloaded from the Royal Meteorological Society's website. The URL is <http://www.rmets.org/pdf/southernoceanapp.pdf>.

Another Royal Meteorological Society National Meeting which is being organized by the History Group will take place on Wednesday 19 November at Reading University. Details of this meeting will be sent out in due course. The title of the meeting is *See-saws, oscillations and seasonal foreshadowing: the pioneering work of Sir Gilbert Walker and modern understanding of climatic variability*. The meeting will focus on the advances in knowledge and understanding of climatic variability which have taken place since Walker's day.

Meetings will take place in London on Thursday 15 January 2009 and Saturday 28 March 2009, and details will be published in due course. Suffice to say now that the meeting in January, at the Institute of Physics, Portland Place, will be concerned with the history of weather observing by means of radar, radiosondes and meteorological satellites, while the meeting in March, at the Royal Astronomical Society, Piccadilly, will be concerned with historical links between astronomers and meteorologists and between astronomy and meteorology.

WEATHER FORECASTING AIDS

History Group member Anita McConnell has drawn attention to the *Daily Weather Guide* of D&K Bartlett and to Herschel's *Table of the Weather*.

Herschel's 'Table' is a weather prediction chart which comprises a circle set in a square with the sides labelled winter, spring, summer and autumn. The outside of the circle is decorated with images depicting the signs of the zodiac, and the circle itself is divided into areas which contain information used to predict the weather. The picture of Herschel's chart shown here was obtained from the website of the Science Museum, from <http://www.scienceandsociety.co.uk/results.asp?image=10422361>.



Herschel 'Table of the Weather'
© Science Museum Pictorial
Picture Reference: 10422361

The chart was published on 21 March 1815 by R&E Williamson, Ornamental Writing Engravers of 8 Brook Street, West Square, and cost three shillings. The explanation below the chart reads as follows:

"The above Table, constructed upon a Philosophical consideration of the attraction of the Sun and the Moon in their several positions respecting the Earth and Confirmed by the experience of many Years actual Observation, will without trouble suggest to the Observer what kind of Weather will most probably follow the Moon's entrance into any

of her Quarters; and so near the truth that in very few instances will it be found to fail. If it be New or Full Moon or the Moon enters into the first or the last Quarters at the Hour of 12 at Noon or between the Hours of 12 and 2 O'Clock (the Table points out) in Summer it will be "Very Rainy", in Winter "Snow or Rain" and so on."

There is a copy of Herschel's *Table of the Weather* in the National Meteorological Archive at Exeter, and there is a copy too in the Bodleian Library.

The *Daily Weather Guide* of D&K Bartlett (see picture) is also a forecasting device (a pocket forecaster) but based upon conventional relationships between cloud, winds, visibility, etc. It was published by the Bartlett Weather Service in

1938 and sub-titled "The Bartlett Weather Wheel". There is a copy in the British Library.

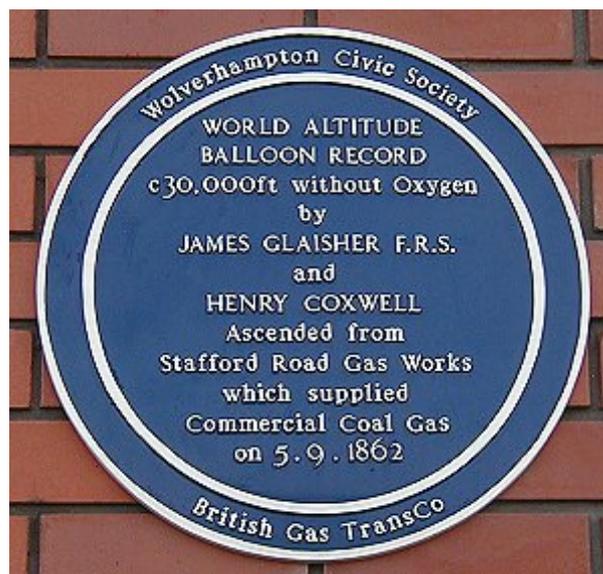
Another publication by D&K Bartlett was *Signpost to the weather*, published by Edward Stanford in 1949, price three shillings and sixpence. The authors say in their Introduction that they "became Professional Weather Consultants and Long-Range Weather Specialists in 1935" and since then "have had the unique experience of solving thousands of weather problems, not only of the business man, to whom a change in the weather can involve thousands of pounds, but also of members of the general public"! And there is a section in their book, on pages 71-72, entitled "Humidity is very important especially to ladies", in which you learn that "humidity is not only important on wash-day, but when ladies visit the hairdresser". The Bartletts added: "As humidity increases, so the hair stretches or

loosens. For this reason, ladies should visit the hairdressers in dry weather. Their hair will remain curled, springy, and less floppy than it does in damp weather". Finally, on the last page of the book, the reader learns that he/she is "now a Weather Forecaster" and told that "in a non-technical manner you have completed a survey of what is behind it all, and discovered that forecasting coming weather is comparatively easy, if certain factors are borne in mind"!!

METEOROLOGICAL BLUE PLAQUES

Is there a meteorological blue plaque near you? If so, we hope you will send us details, please.

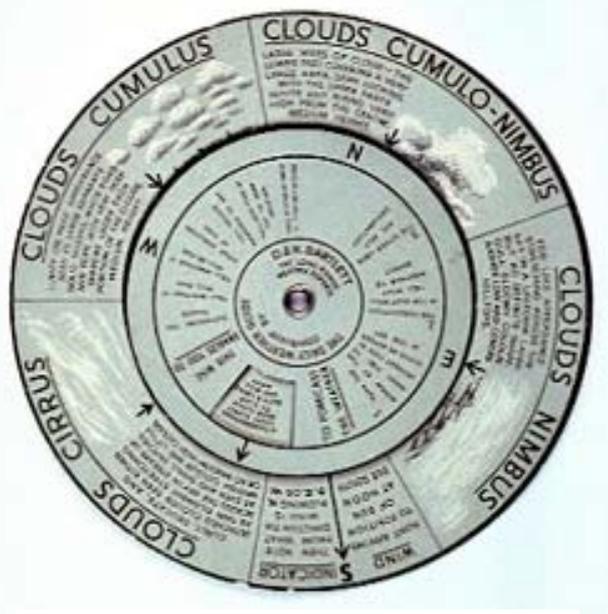
Most plaques are in London, but there are some elsewhere. There's one in Wolverhampton, for example, marking the balloon ascent made by James Glaisher (1809-1903) and Henry Coxwell (1819-1900) on 5 September 1862 (see picture). It's to be found in the Science Park, Stafford Road, Wolverhampton. And there's a blue plaque to Glaisher in London, too, at 20 Dartmouth Hill, SE10.



Another plaque outside London is the one to Leonard Hussey (1891-1964), meteorologist and explorer on Shackleton's *Endurance* expedition to Antarctica in 1914. It's at Ferring, near Littlehampton, West Sussex. And a plaque in Scotland is the one to C.T.R. Wilson (1869-1959), inventor of the Cloud Chamber, which is on a specially-built cairn at Flotterstone, south of Edinburgh. See "Memorial plaque to C.T.R. Wilson, Nobel Laureate" by Marjory Roy (*Weather*, 1997, Vol.52, pp.224-225).

London blue plaques include the following:

- Luke Howard (1772-1864), 7 Bruce Grove, Tottenham, N17;
- Sir Francis Beaufort (1774-1857), 51 Manchester Street, W1;



The 'Daily Weather Guide' of D&K Bartlett

- Admiral FitzRoy (1805-1865), 38 Onslow Square, SW7;
- Sir Francis Galton (1822-1911), 42 Rutland Gate, SW7;
- George James Symons (1838-1900), 62 Camden Square, NW1, for many years the home of the British Rainfall Organization, which Symons founded in 1860 and directed until 1900.

And there is a Croydon Heritage green plaque at 140 Church Road (formerly Lyndhurst House), Upper Norwood, the home of Admiral FitzRoy in the latter part of his life.

There must surely be more meteorological plaques than this. Please send us details.

OUT-OF-PRINT BOOKS

The desirability of reprinting historic out-of-print meteorological books was discussed at the July and October 2007 meetings of the History Group's committee. The committee agreed that the Group does not have the resources to do this by itself but nevertheless thought the idea one worth pursuing through commercial publishers, perhaps by recommending works that might be reprinted.

Facsimile on-demand copies of a number of classic works have in fact been produced, among them *A Handy Book of Meteorology* by Alexander Buchan, reprinted by Kessinger Publishing in 2007 to mark the centenary of Buchan's death. Another book which has become available on demand is *Modern Meteorology: an outline of the growth and present conditions of some of its phases* by Frank Waldo, first published in 1893 and reprinted by Read Books in 2006.

Weather Prediction by Numerical Process, L.F. Richardson's classic, published in 1922, was reprinted by Dover as long ago as 1965; and *A Treatise on Meteorological Instruments*, published by Negretti and Zambra in 1864, was reprinted by Baros Books in 1995.

What do you think of the idea of reprinting classics of meteorology? Please write and tell us. There is, it appears, a market for reprints of classic meteorological works. Which works do you think should be reprinted? John Dalton's *Meteorological Observations and Essays*, for example, published in 1793? Or John Drew's *Practical Meteorology*, published in 1855? Or Admiral FitzRoy's *Weather Book*? Do please let us know.

BUCHAN BENCH

The following announcement has been made by the Scottish Centre of the Royal Meteorological Society.

Alexander Buchan was a distinguished meteorologist who lived from 1829 to 1907. From 1860 until his death he was the Secretary of the Scottish Meteorological Society. A meeting to commemorate his achievements was held at Heriot-Watt University on 7 September last year, immediately after the Society's biennial conference.

A more permanent memorial is planned in the form of a bench with a plaque which will be placed in the garden of the Michael Bruce Cottage Museum in the village of Kinnesswood, Kinross. The bench has been funded by the Royal Meteorological Society with a contribution from the Royal Scottish Geographical Society (RSGS). Buchan was a founding member of the Council of the RSGS. The opening ceremony will take place on Saturday 14 June 2008.

Kinnesswood is the birthplace of Alexander Buchan and is situated close to the eastern shore of Loch Leven, on the opposite side to Kinross. Bishop Hill rises steeply above the village and its summit is the site of a new weather radar. The RSPB reserve at Vane Farm is a short distance away.

All members of the History Group and their guests are welcome to attend the opening ceremony. Participants will gather at 11am on 14 June in the car park of the Lomond Inn at Kinnesswood, KY13 9HN. The opening ceremony will include speeches from Marjory Roy, a member of the History Group, and Professor David Munro, Director of the RSGS and Chairman of the Michael Bruce Trust. Lunch will be taken at the Lomond Inn with participants settling their own bill. Optional excursions will be arranged after lunch, but these will be decided on the day, as much depends on the weather.

Public transport to Kinnesswood is very limited and so travel will be by car. However, car sharing is encouraged and lifts will be offered to those who need them.

Those who wish to attend the event are requested to contact Richard Tabony (rtabony@btinternet.com) by 31 May.

DO YOU REMEMBER THE 'HURRICANE' OF 15 OCTOBER.....?

No! Not the small but intense depression which brought so much damage to the south and south east of England on 15/16 October 1987 and so often mis-named as a 'hurricane' because of the unfortunate link to Michael Fish's TV weather broadcast.

No! Not even the devastating storm of 15/16 October 1886 which caused so much loss of life at sea around the United Kingdom especially off the south west of England and Wales. (See QJ, Royal Met. Soc., 1887, Vol13, No61, pp1-12).

No, I mean the "Hurricane that happened at Roehampton Lane and Places Adjacent on the Fifteenth of October 1780" to give (most of) the title of a little known account of a damaging 'storm' which affected the south west of London over 220 years ago. It was written by Edward Edwards, artist and Associate of the Royal Academy. The account was read at the Royal Society on 31 May 1781 and was subsequently published by H. Reynell, Piccadilly, London, also in 1781, illustrated with four beautiful colour-wash tints by the author. A copy of this rare and intriguing little book of some fourteen pages and about 4000 words is owned by the RMetS as part of its substantial 'rare' book collection most of which is held on behalf of the Society at the UK National Meteorological Library & Archive at Exeter. However this particular volume has yet to be formally added to the collection's catalogue. The detailed description of the event and the trail of damage is worthy of any account currently published in 'Weather'. Indeed it would make a good subject for inclusion (with minimal editing) in 'Weather', perhaps as one of an occasional series of historical re-prints. Despite its main title, the account goes on to refer to the storm of Sunday 15 October 1780 as

lasting about one and half hours in the general area of south west London but "...at Roehampton...the storm was accompanied by a most furious tornado or whirlwind which left such dreadful marks of its force and fury that they can be but faintly described by the pen or pencil". The account goes on to note that the main damage "...from the upper end of Roehampton Lane to Hammersmith cannot be less than three miles; which was the utmost of the continued progress of the hurricane; and its greatest breadth was about 200 yards. This breadth was marked with the greatest precision". Although the narrative mixes the terminology of 'hurricane' and 'tornado' we would now certainly refer to it as a tornado. There are of course no quantitative measurements of the wind strengths etc., but the details of the thickness of trees twisted and broken, their fallen orientation, the scale of damage to brick walls and buildings including the near total destruction of a wooden windmill, are impressive and could offer an opportunity to estimate the strength of the tornado on the modern scales. "Of seven poor persons ...in the barn in Roehampton Lane ...one was killed on the spot, another died of bruises he received (and) the rest were hurt but not dangerously". "The devastationwas all effected in a very short time (and) all describe it as the work of ten minutes".

Of the few existing catalogued copies of this publication in other libraries etc., most lack the illustrations, no doubt removed to provide dis-bound prints for the decorative market. Copies of the illustrations can be viewed 'on-line' via the City of London website under 'Collage'. If any readers require it, I can provide a transcript of the full text.

Alan Heasman

2008 Members

Rob Allan (Exeter)
Alberto Ansaloni (Milano Italy)
Oliver Ashford (Didcot)
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