

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

I am pleased to report that the committee has been developing a programme of meetings organised by the Group and the first of these will take place later this year. Further information is on page 2 of this newsletter. Thanks to those who have worked this programme up from scratch; this takes considerable effort and we hope to meet as many of you as possible again at future meetings.

In this issue of the newsletter we have the usual range of articles. My thanks to all contributors. Special mention must be made of the research of two members. This issue contains a research article by Dr Peter Rowntree on the severe weather of January 1776 in southern England. Comparison is made with other cold spells, pertinent in view of the recent cold spell. Ex-committee member Brian Booth is researching the lives of Met Office staff who were killed in the World Wars. His *Faces from the Past* series starts in this issue (details opposite).

We are still quite reliant on committee members for contributions and I would like to extend an invitation to all members to contribute.

And finally, a quick word on membership changes. Since the last newsletter we have gained one new member - David-John Gibbs, an airline pilot and a restorer of old meteorological instruments. Sadly, as many of you will have heard, we have also lost one of our most well-known members, Philip Eden (see item opposite).

Thank you for your support.

Julian Mayes

Faces from the Past

Brian Booth's *Faces from the Past* series starts in this issue. Brian's research has led to the creation of a new Roll of Honour in the Met Office in Exeter. In this newsletter Brian writes an introduction to his research, telling the story of the Roll of Honour followed by two Pen Portraits.

Dines memorial plaque – an update

In the last issue we carried details of a plan to erect a plaque in honour of W. H. Dines in the Oxfordshire village of Benson where he worked. A site for the plaque has now been found and the unveiling will take place on June 9th at 3pm. Visitors are welcome and there will be tea and a small exhibition in the Parish Hall afterwards. It is hoped that the former BBC weather forecaster Bill Giles will be able to attend the event. As this will take place before the next issue of the newsletter, any details received nearer the time will be e mailed to History Group members.

Philip Eden

Members may have heard of the untimely death of Philip Eden at the start of the year. He had been suffering from dementia and his death followed a fall late last year. Philip was one of our most well-known members, renowned for bring historical perspective and authority into his climatological research and writings. Arguably, his weather forecasts were also enhanced by his ability to place current weather events into proper historical perspective. A comprehensive obituary was published in *The Daily Telegraph* <https://www.telegraph.co.uk/obituaries/2018/01/10/philip-eden-meteorologist-obituary/>. His knowledge and insight will be greatly missed.

FUTURE MEETINGS

The History Group has a proud record of organising meetings, both free-standing and in conjunction with the RMetS as Main Society Meetings or with other bodies. A range of future meeting topics is currently being considered by the committee. We have one definite meeting planned for this year -

From HMS Challenger to Argo and beyond

Venue - National Oceanography Centre, Southampton

Date - Wednesday, November 21st 2018

A meeting jointly sponsored by the History groups of the Royal Meteorological Society and the Challenger Society for Marine Science.

The measurement of ocean heat content and related changes in ocean salinity requires the collection of ocean profile data. The meeting will explore how our ability to collect, process and interpret these profiles has developed since the late 19th century to the present day. The observational methods have changed radically from the early reliance on ship-based measurements to the present-day information from the autonomous profilers of the Argo array in partnership with satellite altimetry.

Registration details will be sent later this year.

Other meeting topics being considered for 2019 – 2020 include the following.....expressions of interest welcome.

Weather Reconnaissance Flights

History of Surface Meteorological Observations - Scope could be from weather diaries to present-day issues such as demise of mercury.

Historic Instruments at the Science Museum

History of Ideas in Climate Change

History of Public Weather Forecasting through the media

History of NWP at the Met Office

Group visit to archives at Exeter. Possible summer visit.

Barometers/surface pressure records

The 100th anniversary of the publication of Lewis Fry Richardson's *Weather Prediction by Numerical Process* falls in 2022.

The exceptional cold spell of January 1776

Introduction

In an earlier Newsletter (Rowntree, 2014), I surveyed English outdoor temperature observations from the 1770s and early 1780s. Prior to this thermometers were commonly sited indoors, following the recommendation by James Jurin (1722) that the thermometer “should be exposed in a fireless room where no sun can penetrate”. Consequently it is only from around 1771 that detailed studies of daily temperatures are consistently possible for southern England. During the remainder of the 18th century there were several spells of severe winter weather, of which one of the most extreme, at least for daytime temperatures, was in late January 1776. This spell followed three weeks of frequent snowfalls and persistent frosts, as described at the time by Gilbert White (1788). Smith (1979), in a discussion of cold Oxford winters, suggested that after January 1963, the Januaries of 1776 and 1814 “probably rank as the second and third coldest months on record at Oxford since 1760”, though the Oxford record has gaps which include January 1795, almost certainly colder than any of these.

In this article I describe the weather of January 1776 in southern England, using data referenced in Rowntree (2014) and also including data from a source omitted there, that of Hornsby’s intermittent observations for Oxford documented by Smith (1979), with comparisons to data for Mongewell, about 20km away beside the Thames. I also compare the exceptionally cold final five days of the month with other cold spells of this length over the last 240 years.

The other stations contributing daily data for January 1776 are Stroud, Crane Court in central London and Muswell Hill in NW London, all with outdoor temperatures. Gilbert White’s journal is also useful particularly for snow and wind, though most of his temperature observations are indoors. The monthly Gentleman’s Magazine (GMag) included daily indoor temperatures together with observations of weather, wind and barometric pressure. A note in Jan 1768 GMag states: “Thermometer hangs within a window facing north – no fire affects it. North bank of Thames just below London Bridge. Observation at 9 am. Weather

account for London from beginning of November to beginning of April, 7 miles west of Hyde Park Corner rest of year”. Indoor temperatures in January 1776 fell to remarkably low levels by modern standards, with 22°F (-5.6°C) at the GMag site and 19°F (-7.2°C) at Crane Court, where the thermometer was “intended chiefly for correcting the heights of the barometer, and [is] therefore placed close to it. The room in which it is kept looks to the North, and sometimes has a fire in it, but not often” (Cavendish, 1776).

Winds and pressure

Although December 1775 opened with very mild SW to W winds, with 08h temperatures up to 13°C on the 1st, much of the month was dominated by high pressure and winds from NW through N to E, and frequent night frosts. Brief spells with low pressure and westerly winds brought higher temperatures from 22nd-25th and 29th-31st December and around 5th January but thereafter winds between N and E dominated January, with only brief interruptions by SE or S winds ahead of periods with lower pressure. These were centred on 7th, 12th, 22nd and 27th, suggesting lows moving east not far to the south. After the end of the cold spell, low pressure persisted from 3rd to 7th February with SW winds dominating till mid-month. Two of these low pressure periods were associated with widespread, often heavy snowfalls on 7th-8th and 11th-16th January. Snow on 27th-28th was associated with particularly strong winds in London, blowing mostly from E-ENE.

Snowfall of 7th-8th January

On the 6th the winds changed from W to E, during the previous night at Stroud and Mongewell, and in the morning further south and east. Rain late in the day at Stroud, Selborne and the GMag site turned to snow overnight except in lower parts of London (GMag site, Crane Court). Gilbert White (see Greenoak, 1986-1989) reported “driving snow all day” and the GMag observer “rain all night and snow all day”. Strong winds were reported in London, Stroud and Oxford. Thomas Hoy at Muswell Hill measured 8 inches of snow and after more snow the next night Thomas Hughes at Stroud reported 6 inches (as far as I can make out from a weather report which is often difficult to decipher). At

Mongewell the 10pm observation on the 7th omits the temperature with a note "Thermometer covered with snow". Temperatures were below freezing point by the afternoon of the 7th and remained generally below till the afternoon of the 10th but, in the overcast weather, fell at the lowest only to 26°F (-3.3°C). This period was also snowy in eastern Scotland where Janet Burnet at Kemnay, 20km WNW of Aberdeen wrote "the weather continowd [sic] open & fine till the 7th Jan^r 1776 that day we had some snow, which incresd & Continowd falling three days & quit Calm weather We measurd the snow & Computed 14 Inches over all" (Pearson, 1994, also Pearson, 1977).

Snowfall of 10th-16th January

A fall of pressure by 0.6" (20hPa) at Stroud and Selborne from 10th to 12th was accompanied by the second major snowfall of the month. Snow commenced at Stroud late on the 10th, and by the afternoon of the 11th, Thomas Hughes reported "Snow 4 or 5" deeper than before". He observed some thawing, but by morning the frost had returned with temperature on 28°F (-2.2°C). Snow continued much of the 12th and the "frost increased" with 27°F (-2.8°C) by 16h. At Mongewell, heavy snow in the morning of the 11th was followed by rain with some thawing, but it froze later in the day, and heavy snow fell till the evening of the 12th giving "A most tempestuous night. The deepest snow known for many years". Nearby in Oxford, James ("Parson") Woodforde (1978) at New College, wrote on Sunday the 14th "The Post which should have come in last night, did not come till 10 this morning on account of the snow. Scarce ever was known so deep a snow as at present. Many carriages obliged to be dug out near Oxon. No Curates could go to their Churches today - Not one from our College went today on account of ye snow". Selborne had a similar mix of snow, rain, thaw and freeze, with snow continuing much of the 12th giving a "very deep snow". "The snow is drifted up to the tops of gates & the lanes are full" wrote White on the 13th. In London, there are some curious disparities in the reports of the weather. The GMag correspondent reported "a great deal of snow" on the 11th and "snow all night and day" on the 12th, and Hoy at Muswell Hill saw snow in the morning and sleet in the afternoon of the 11th, followed by "High wind and light snow all day" on the 12th. The Crane Court observations have no mention of snow on the 11th ("Cloudy" at 08 and 14h) then on the 12th "Much snow and wind last nt.", "Snow" at 14h, and "Much snow and wind last

nt." again on the 13th. A bitterly cold day followed on the 14th, with snow throughout in London, "Heavy" at Muswell Hill, and snow at times in Stroud. At Selborne, Gilbert White reported "Driving, drifting snow all day" and wrote "Rugged, Siberian weather. The narrow lanes are full of snow in places, which is driven into most romantic, & grotesque shapes. The road-waggons are obliged to stop, & the stage coaches are much embarrassed. I was obliged to be much abroad on this day, & scarce ever saw it's fellow". He also noted (White, 1788) the misfortune of the ladies, travelling from Bath to London to attend the Queen's birthday celebrations on the 18th, who were still stranded "in very uncomfortable circumstances" at Marlborough on the 18th. Temperatures from all four observers were 25-26°F (about -3.5°C) at 08h, and only 26-27°F (about -3°C) in mid afternoon – encouraging consistency on a windy, mostly snowy day. At Mongewell, though snow was observed at 08, 12 and 16h, "there was but little snow fell today" and the 12h observation gave 30°F (-1.1°C), falling to 26°F (-3.3°C) at 16h.

More snow fell on the 15th and, especially, the 16th when at Mongewell it "Snowed all day from 9 am to 6 pm". On the 17th the observer there wrote that "No post had come to Wallingford except on Saturday [13th] since this day sevensights. All carriages stopt on this & the Oxford roads". Temperatures briefly reached freezing point at Crane Court and Mongewell on the 18th but, after more snow on the morning of the 19th, temperatures on 19th to 21st ranged between 22°F (-5.6°C) and 29.5°F (-1.4°C). The sun did appear on the 20th, Hoy at Muswell Hill reporting "Clear aft." after "no sunshine for 2 weeks past". The Mongewell observer noted on the 20th that "The Oxford coach went today for the first time since the Frost", and on the 21st that "The Post came in as usual for the first time since Tuesday the 9th". The freeze relaxed a little over 22nd to 25th, with highest afternoon temperatures of 35°F (1.7°C) at Crane Court (14h) and 37°F (2.8°C) at Mongewell (12h), though only 32°F (0°C) at Muswell Hill (15h) and 30°F (-1.1°C) at Stroud (16h).

The snow and intense frost of 26-31 January

On the 26th the skies cleared, Hughes at Stroud observing "Thaw in sun" but temperatures had dropped overnight with 20°F (-6.7°C) at Mongewell and 22°F (-5.6°C) at Stroud at 08h. There was morning snow in London followed by clear skies, and

temperatures remaining at 22°F (-5.6°C) to 26°F (-3.3°C) in the afternoon. Pressure falls of 2-3 hPa from the 25th to the 27th were associated with snow and strong winds much of the 27th in London with the GMag observer reporting “snow most part of the day” and on the 28th “a great deal of snow”, Gilbert White at South Lambeth “Snow all day” on the 27th, and the Royal Society at Crane Court “Snow” at 08h and 14h on 27th and at 08h on 28th. Temperatures had fallen further, ranging in the morning between 17°F and 19.5°F and, in the afternoon, between 14°F (-10°C) (Stroud at 16h) and 20.5°F (-6.4°C) (14h at Crane Court). Indoor temperatures were also plunging, with 27F (-2.8C) from the GMag observer and 26F (-3.3C) at Crane Court. Gilbert White had travelled to South Lambeth on the 22nd to visit his brother so was not reporting the indoor temperatures at Selborne – he had observed 17.5F (-8C) there on 7th January 1768 – though we shall see that outdoor temperatures from both Selborne and South Lambeth were recorded in his journal during the following few days.

Temperatures remained very low on the 28th with 15°F (-9.4°C) at Muswell Hill at 08h, rising only to 16°F (-8.9°C) at 15h. At Crane Court in central London, the temperature at 14h was 22°F, and on the following three days 24°F, 21°F and 23.5°F, having risen from 14.5°F, 1st5F and 13.5°F at 08h. This remarkable period of five days from the 27th to 31st with 14h temperatures ranging from 20.5°F to 24°F (-4.4°C) is discussed later. Outside London conditions were even colder, with highest afternoon temperatures for 27th to 31st 22°F at both Mongewell and Oxford at 12h to 14h (observation times varied), 20.5°F at Mongewell at 16h and 19°F at Stroud at 16h, These low daytime temperatures were generally not associated with fog, the only exception being the morning of the 31st at Muswell Hill and the GMag station, with the fog clearing by afternoon. Thomas Barker’s monthly report for Lyndon (Phil Trans, 1777, 350-352) tells us that the lowest temperature at his afternoon observation (normally about 14h) was 16°F (-8.9°C) and that “we had perhaps the sharpest frost since 1740”.

With generally clear skies from the afternoon of the 28th to early on 1st February, there were severe night frosts, with morning temperatures down to 13.5°F at Crane Court, 9°F at Mongewell and 6°F in Oxford on the 31st. At Lyndon, Thomas Barker observed morning temperatures of 10 to 11°F (-12.2 to -11.7°C) on the 28th and 30th January and 1st February

– also, earlier, 11°F (-11.7°C) on the 20th (see Kington, 1988, p. 120). Gilbert White reported temperatures at South Lambeth of 7°F (-13.9°C) on the 29th and 6°F (-14.4°C) on the 30th and 31st, while at Selborne, from 28th to 31st, temperatures “abroad” (outdoors) were 7, 6, 10 and 0°F (-13.9, -14.4, -12.2 and -17.8°C). He commented that 0°F was a “most unusual degree of cold for S. England”. In his journal for the 4th February he comments that “At Selborne the frost was more violent than at any other place that I could hear of with any certainty: tho’ some say the therm. in some place in Kent was 2 deg. below zero”. He wrote that from the 28th to the 31st, “the cold was so intense that it occasioned ice in warm chambers and under beds; and in the day the wind was so keen that persons of robust constitutions could scarcely endure to face it. The Thames was at once so frozen over both above and below bridge that crowds ran about on the ice.” White comments on February 1st “Snow lying on the roofs for 26 days” and in White (1788) writes that this was “a longer time than had been remembered by the oldest housekeepers living”.

End of the cold spell

The cold spell ended abruptly on the 1st February. At Stroud, Hughes reported cloud both late on the evening of the 31st and also the following morning, with temperatures at 17°F (-8.3°C) at 07h, 4degF (2.2K) above the previous two mornings. Temperatures at 08h were otherwise similar to the previous morning, with only 14.5°F (-9.7°C) at Crane Court and Mongewell and 12°F (-11.1°C) at Muswell Hill. At 0650h, Hornsby in Oxford had observed 8°F (-13.3°C) and evidence of a rapid rise in temperature comes from Mongewell with a 4degF (2.2K) rise from 08h to 18.5°F (-7.5°C) at 09h. By early afternoon, temperatures were near or above freezing point.

Weather reports are a little confusing, but there is mention only of rain or sleet, not snow. At Crane Court, the weather on 1st February was described as “Fair” at 08h and “Cloudy” at 14h. However, Hoy at Muswell Hill reports “Cloudy with rain and sleet” for the day’s weather. At Mongewell the descriptions are “Clear” both in the morning and at 13h, though at that time also “Small Showrs”. By 22h it was cloudy and there was “Hard rain” from 23h to 01h. The only mention of rain at Stroud is “incl[ine]d to R[ai]n “ in the late “D” (?abbreviation for “Day” meaning afternoon, as Hughes uses it for the period between “F” (Forenoon) and “E” (Evening)), though

temperature was still down at 30°F (-1.1°C) at 18h. Subsequently there is no mention of rain till the evening of the 3rd at Stroud, and the following day further east. By then, temperatures were above 40°F (4.4°C) generally, and the rest of the winter was mild, with Crane Court's lowest 07h temperature 30.5°F (-0.8°C) on 3rd March.

Comparison of low 5-day afternoon temperatures

During January 27th to 31st 1776, the highest temperature observed at Crane Court was 24°F (-4.4°C). A five day spell with such a low highest afternoon temperature is rare in southern England. In the Royal Society record from 1774 to 1800, the nearest approach to the 1776 event was in the exceptional January of 1795, with highest afternoon temperature of 25°F (-3.8°C) for the 7-day period 20-26 January with the same maximum for 5-day periods; the highest maximum temperature was also 25°F (-3.8°C). The exposures were different at Crane Court and Somerset House, but means for winter (Dec-Feb) suggest that, relative to Manley's CET, the Crane Court site used in 1776 was 0.5degF (0.3K) warmer than the 1795 site, and the mean diurnal range, taken as the difference between the 14h and 08h observations, was over 0.2degF (0.1K) greater in 1774-80. Both these differences tend to make the 1795 spell appear colder relative to Crane Court. The Mongewell record also shows the 1776 spell had a lower 5-day maximum than that in 1795, the maxima being 22°F (-5.6°C) and 26°F (-3.3°C) respectively.

In an analysis of temperatures (Table 1) for at least one of London and Oxford after 1800, it eventually is not generally possible to use afternoon temperatures and use must be made of maximum temperatures. The 5-day periods with lowest 5-day maximum temperature after 1800, having at least one temperature below -3°C, were in the Januaries

of 1820 and 1838. I should comment that the maximum temperatures in January 1838 in the Royal Society record (in *Phil Trans Roy Soc*) exhibit some curiosities, such as the 15h temperature exceeding the maximum. Taking the highest afternoon (15h) temperature instead of the maximum gives a higher figure, 28.0°F (-2.2°C), rather than -2.4°C! For Oxford from 1853, the lowest 5-day maximum temperature was in February 1929 (-1.4°C). None of the 5-day spells after 1800 compare with those of 1776 and 1795. It may be noted that eight of the spells in Table 1 occurred in 24 years at the close of the 18th century, compared with 10 in the whole 19th century and seven in the 20th century.

A month which is surprisingly absent is February 1895, which fails by 0.1K on its highest temperature with -0.2°C. More recently, January 10-14 1987 easily qualified on coldest day (-6.2°C maximum at London Heathrow on the 12th), but the warmest day in the 5-day spell had a 0.7°C maximum there. However, using afternoon temperatures from my record for Crowthorne, Berkshire, this 5-day spell has a highest temperature of -2.0°C - the temperatures falling below freezing during the morning of the 10th - and lowest maximum of -7.9°C. In the Crane Court record for January 1776, the highest 08h temperature for 27th January to February 1st was 19.5°F (-6.9°C), so there is little doubt that it would have qualified using maximum temperatures. This is supported by the data from the other available stations.

Although we are necessarily comparing temperatures for fixed times with maximum temperatures, it is clear that the afternoon temperatures in late January 1776 were exceptional in southern England, and probably unparalleled in the last 240 years.

Table 1: 5-day afternoon and maximum temperatures all <=-0.3°C for 5-day spells with lowest maximum <=-3°C (rounded) for London (Crane Court, Syon House, Somerset House, Tottenham and Stratford) for 1774-1852, then Oxford and Crowthorne, Berkshire

Max Temp					Afternoon Temp. (14h or 15h)			
Year	Location	Date	Lowest	5-day highest	Location	Date	Lowest	5-day highest
1776					Crane Ct	Jan 27-31	-6.4	-4.4
1785-6					Syon H	Dec30-Jan3	-2.8	-1.1
1786						Mar 4-8	-5.0	-1.1
1788					SomersetH	Dec 13-18	-4.4	-1.1

1789					Jan 4-9	-4.2	-2.8
1795	SomersetH	Jan 20-25	-6.7	-3.9	Jan 20-26	-6.7	-3.9
1798		Dec 24-28	-8.3	-1.7	Dec 24-28	-8.3	-2.8
1799		Feb 3-8	-2.8	-1.1	Feb 3-8	-3.3	-1.1
1814	Tottenham	Jan 9-14	-3.9	-1.1	SomersetH Jan 7-15	-4.4	-1.1
1820	Stratford	Jan 12-16	-4.4	0.0	Jan 12-16	-5.0	-2.2
1829	(London)	Jan 20-24	-5.0	-0.6	Jan 20-24	-3.7	-0.3
1830		Jan 31-Feb 5	-5.0	-1.7			
1838	SomersetH	Jan 10-16	-4.9	-2.4	Jan 9-15	-4.8	-2.2
1841					Feb 3-7	-4.0	-1.9
1859	Oxford	Dec 14-19	-5.4	-0.7			
1881		Jan 15-22	-3.4	-0.9			
1890		Dec 18-22	-6.7	-0.4			
1894		Jan 3-7	-5.9	-0.8			
1929		Feb 11-16	-3.8	-1.4			
1947		Jan 26-30	-3.9	-0.6			
"		Feb 16-22	-2.8	-1.1			
1963		Jan 9-13	-2.8	-0.6			
"		Jan 17-24	-6.7	-0.6			
1987		Jan 8-14	-7.1	-0.6			
"					Crowthorne Jan 10-14	-7.9	-2.0

Note: Before 1838, and for Oxford in 1947 and 1963, temperatures used have precision only to 1degF, occasionally 0.5degF.

References

- Cavendish, H. 1776, *Philos. Trans. Roy. Soc.*, 66, 375-376.
- Greenoak, F (Ed.), 1986-89: *The Journals of Gilbert White (1754-73, 1774-83, 1784-93)*. 3 volumes, Century, 1547pp. (531pp., 520pp., 496pp).
- Kington J. (Ed.), 1988. *The Weather Journals of a Rutland Squire - Thomas Barker of Lyndon Hall*. Rutland Record Society, Oakham, 217pp.
- Jurin, J. 1722. *Invitatio ad Observationes Meteorologicas Communi Consilio Instituendas*. *Phil. Trans. Roy. Soc.*, 32: 422-427.
- Pearson, M. (Ed.), 1994: *More frost and snow: The diary of Janet Burnet 1758-1795*. Sources in Local History, No. 2, Canongate Academic, Edinburgh, 127 pp.
- Pearson, M., 1977: The Great Frost of January 1776, *Weather*, 32, 8, 310.
- Rowntree, P.R., 2014: Daily observations of outdoor temperatures in England in the 1770s and early 1780s. *Royal Meteorological Society History Group Newsletter*, Issue No. 1, 2014.
- Smith, C.G., 1979: The cold winters of 1767-68, 1776 and 1814, as observed at Oxford. *Weather*, 34, 9, 346-358.
- White, G, 1788: *The Natural History of Selborne*. Letter LXII to Daines Barrington, (Ed. James Fisher, The Cresset Press, 1960, 296pp.) (reprinted in *Weather* (1977, 32, 3, 106-108).
- Woodforde, J., 1978: *The diary of a country parson 1758-1802*. J Beresford (Ed.), Oxford University Press, 622 pp.

Peter Rowntree
Crowthorne, Berkshire

Faces from the Past – Introduction

The Met Office Roll of Honour plaque

In about 2005 I was researching the life of Squadron Leader Campbell Crichton-Miller, Senior Meteorological Officer of HQ 38 Wing at Netheravon, who died when the Halifax bomber in which he was flying, was shot down whilst attacking an electricity transformer at Distré in France during the early hours of 20 February 1943.

Although he was a meteorologist, the aircraft manifest listed Crichton-Miller as being a flight engineer! His forage cap was 'rescued' from a pocket by a young French boy who found his body when dawn broke that morning, and returned to his family nearly 70 years later.¹

How he came to be on the aircraft is just one element of a remarkable story, and it made myself and Peter Davies, with whom I was collaborating, wonder what stories the names of the other casualties of the two World Wars could tell. This became the catalyst of an idea of putting faces, either by written word or photograph, to the names of those who did not survive. The biggest problem was that the Met Office had no written record of the casualties, while the Roll of Honour plaque, which had been displayed by the library entrance in the foyer of the Headquarters building at Bracknell, had been damaged in the move and (at the time) had disappeared.



Bracknell entrance foyer, 1961. Roll of Honour plaque on wall above seats. (© Crown Copyright. Met Office Library and Archives)

Our starting point proved to be the 1919 Annual Report of the Meteorological Committee, which recorded four WW1 casualties (we later found there were five), and an incomplete list of WW2 casualties which appeared on page 241 of the 1951 Meteorological Magazine. From these we managed to compile incomplete biographies of most of the names for a Book of Remembrance in time for the dedication of a new memorial plaque on 6 June 2008; the plaque is in the foyer of the Met Office Headquarters at Exeter.

The intention was always to explore the stories further, but none would equal the unbelievable bravery of the six meteorologists who served on the wartime weather ships - Leslie Portass, Stanley Proud, Edwin Hedley-Smith, Richard Wrighton, Percy Short and Forbes Thom.² Two of their relations, Lesley Millard, niece of Leslie Portass, and Elizabeth Proud, Stanley Proud's daughter, were at the dedication; Elizabeth's reading from some of her father's letters revealed the men's utter feeling of abandonment serving in the tempestuous North Atlantic, with no indication as to when their ordeal would end.



Roll of Honour dedication, 6 June 2008;
Lesley Millard (left), author, Elizabeth Proud.

It is doubtful if the search for the stories of the 'little' men and women without whom the Met Office would have been unable to function during the two conflicts, will ever be completed, but what follows will be the first of a series of biographies of 'Faces from the past'.

1. B J Booth (2008) *Squadron Leader C Campbell-Miller and the origins of meteorology for the Army's airborne forces in the Second World War*. Weather, Vol 63, pp 71-75
2. <https://www.rmets.org/sites/default/files/presentations/22032014-booth.pdf>

**Brian Booth,
Devizes**

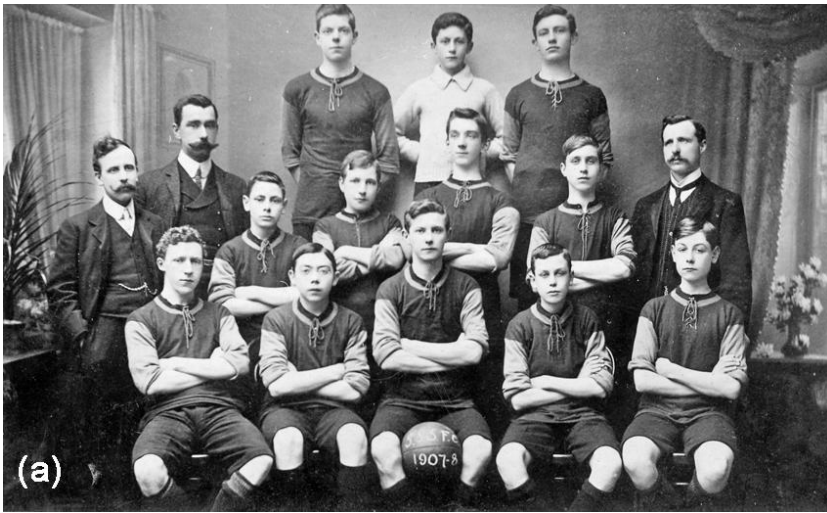
Faces from the Past

Harold Billett 11 April 1890 - 18 October 1916

Harold was born in Keynsham, Somerset, the third of Edwin and Fanny Billett's six children. His father was a railway signalman with the Great Western Railway, and although the family moved a couple of times during Harold's childhood, he spent most of it in Swindon, Wiltshire.

Like two of his brothers Harold won a scholarship to Swindon and North Wiltshire Secondary School

(later Swindon College). In 1908 he was awarded a further scholarship to study Physics at the Royal College of Science (RCS), where he was awarded a 2nd Class Honours in 1911. Both at school and the RCS he was remembered as being a sociable young man who made his mark in the sporting arena, where he was an exceptionally able footballer.



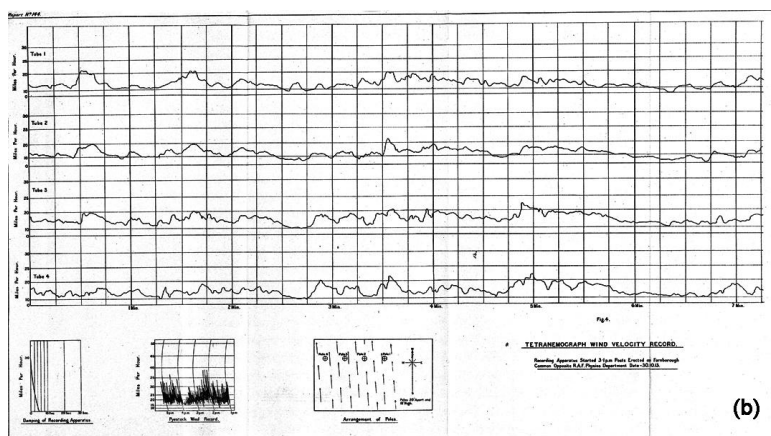
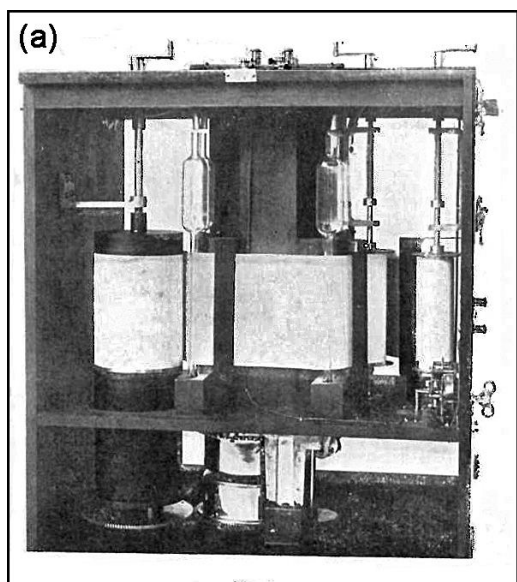
a. Swindon Secondary School football team, 1907-1908; Billett (captain) on right of back row. f
 b. Harold Billett, Farnborough 1914 (Both photographs courtesy of P Summerhayes)

On completing his degree Harold remained at the RCS as a junior teacher, but during the summer of 1913 he was engaged by the Meteorological Office to act as assistant for J S Dines at Farnborough. In the event the Farnborough office had not then been built so Harold was employed at Central Office (the contemporary name for the Meteorological Office Headquarters at Victoria St in London), mostly working for the Director of the Meteorological Office, Dr W N Shaw, on calculus associated with the upper air. He gained some relief from this by visiting South Wales in late October 1913 to collect data in the aftermath of a tornado; his findings being published in 1914 as *Geophysical Memoir No 11: The South Wales tornado on 27 October 1913*.

Harold eventually joined Dines at Farnborough on New Year's Day 1914. In addition to sharing the routine work, measuring the upper winds by pilot balloon and synoptic observations, he worked on a

number of research projects, including one attempting to define the structure of gusts using a tetranemograph, repairing and modifying the instrument as necessary and liaising with the Farnborough scientists who were responsible for the original design. When the final report was published Harold was not best pleased; Dines claimed credit for the whole project with Billett only receiving a passing mention in a footnote.

The outbreak of war in August 1914 found the Meteorological Office short of staff, a shortage that required Dines to spend increasing amounts of time working at Central Office. This left Harold running the Farnborough office with just one assistant, but a request for some financial recognition for his added responsibility, long hours and the expense of living in Farnborough was met with an offer of books in lieu of cash.



(a) The Royal Aircraft Factory tetranemograph used by Billett.

(b) A tetranemograph trace showing wind speeds recorded by four sensors at the same moment; 15 second vertical line spacing. (From Advisory Committee for Aeronautics; Report no 144).

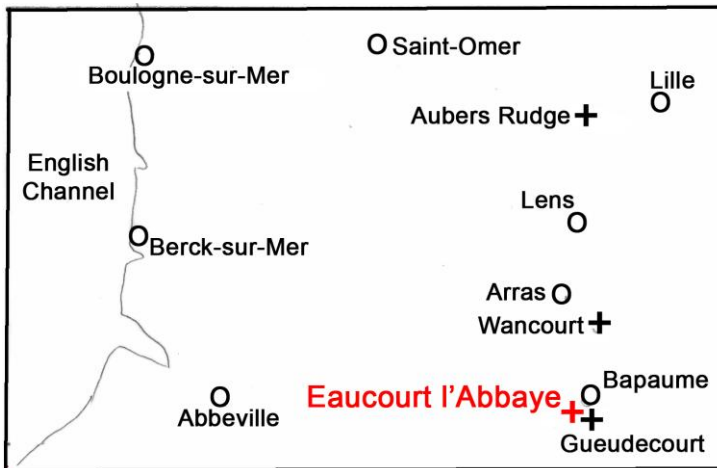
It was the straw which broke the camel's back, he resigned his post and on 15 February 1915 left the Meteorological Office for the post of Scientific Assistant to the Chief Meteorologist of the Irrigation Department of the Union of South Africa. On 27 February he married his fiancée, Alice Maylott, in Bath – then promptly left her there a week later when he sailed from Southampton for aboard the *RMS Londoverly Castle* bound for Cape Town! Rather ironically Harold was elected as a Fellow of the Royal Meteorological Society on 17 March, his address being given as Meteorological Department, Pretoria, Transvaal.



Although his work was valued by the Irrigation Department Harold appears to have had second thoughts about leaving England, when others were serving their country in France. During December 1915 he enlisted as a Private with the South African Infantry at Potchefstroom; the Regiment subsequently sailed for England, arriving on the last day of February.

In early August his unit was sent to France and became involved the fighting at the front. Two months later, on the evening of 17 October 1916 his platoon was one of several ordered to conduct a night attack on German positions near Eaucourt l'Abbaye during the early hours of the 18th.

Private Harold Billett, March 1916 (P Summerhayes)



Location of the night action on 18 October 1916; red cross indicates place where Harold was killed. The other crosses identify the locations where Meteorological Office personnel were killed whilst serving in the British Army during WW1. (© B Booth)

Three Companies of 1 South African Infantry had to make their way along a narrow trench from the place at which they were resting, to the start point of the attack on the British frontline trench. From there they had to cross some 300 m of glutinous mud and shell-holes to reach the German trenches. As one of the officers leading the attack, 2nd Lt P F Stafleach(?), reported, things did not go as planned:

Owing to the extremely narrow trench the Company had great difficulty in reaching its prearranged jumping off point. Furthermore the trench was very wet and slippery, and the men could not mount the parapet except at one point where it had been damaged. This meant that little, if any, time was left for us to organize the arranged formation for the attack. In fact the order to advance came before all the men of the 3rd wave had left the trench.

It appears from Stafleach's report that Billett's platoon failed to reach the German lines and was never seen again.

Probably the best description of the general conditions was provided by the Special Correspondent of *The Times* on 21 October 1916 when writing about the action. His description made any photograph superfluous:

"We have had more rain here now than we were entitled to expect, more, at all events, than had

fallen by this time in either of the last two autumns, and it is not easy to convey what the effect of rain is on this battlefield. You must not reason from what rain does to a compact, well-ordered country like England, nor even must you think of ordinary ploughed fields. The ground here is ploughed to a depth of many feet into huge crater-like shell holes, and when a shell explodes in the earth it throws the stuff up in a heaped rim all round it. As the rain falls on it this loose earth dissolves, the crater partially fills with water, and the sides melt away. To attack over such country in the dark, as we did this morning, is a big undertaking."

Having no known grave Harold's name is remembered on the Thiepval Memorial, just 8 km to the southwest from where he was last seen, and by a stunning memorial window in the library of Swindon College.

Acknowledgements

I am extremely grateful for the help given by Harold's niece, Pamela Summerhayes of Swindon, for her kindness in making available family documents and photographs without which this biography could never have been written. I must acknowledge the help offered by Karin Marais, Principal Librarian of the South African Weather Service, and Steve Jebson of the Meteorological Office Library and Archives.



Swindon College WW1 Memorial Window (left), plus detail with Billett's name (right). This photo was taken in 2006, but the building in which it resided was demolished a short while later. It can be seen in the Library of the new Swindon College. (@ B Booth)

Sources

- Meteorological Office Circular No 15; Wednesday, 23 August 1917
- Minutes of the Meteorological Committee 1913-1915
- "An Experimental Measure" (<https://www.rmets.org/sites/default/files/hist09.pdf>)
- Report of the Director of Irrigation of the Union of South Africa; 1 April 1913 – 31 March 1917
- National Archive file: WO 95/1780 (War Diary of 1 South African Infantry Regiment)

**Brian Booth,
Devizes**

Faces from the Past

John Alfred Hodgson 2 December 1919 - 7 July 1944

John, the second of Fred and Amy Hodgson's three children, was born on 2 December 1919 in Hartlepool, where his father was a teacher. The family moved to Baldersby St James, a small village near Ripon, following his father's appointment as headmaster of the village school in 1923.¹

John began his secondary education at Ripon Grammar School at the start of the autumn term in

1930, and remained there until the end of the autumn term 1938. Whether he was as sports-minded as his elder brother, who taught physical education and once competed against Jesse Owens, is not recorded, but having successfully passed his Higher School Certificate examination (the equivalent of post-war GCE 'A' levels), John joined the Meteorological Office.²

On 2 January 1939 he reported to the meteorological office at RAF Linton-on-Ouse, for training as a meteorological observer.^{3,4} Four months later, by now fully qualified, John was posted to RAF Dishforth.⁵ Such was the shortage of trained observers at the time that there were just three at Dishforth to cover 24 hours. Although at first sight it seemed a convenient distance to cycle, five miles from home to Dishforth, cycling and such an intense work-load was not an ideal combination.

Although a fourth observer eventually arrived, days off were still a rarity. John remained at Dishforth for the next three and a half years before enlisting in the Royal Air Force Volunteer Reserve on 1 August 1941. Having been assessed as suitable for aircrew duties he sailed for Canada and 31 Elementary Flying Training School (EFTS) at De Winton, Calgary, as a Leading Aircraftsman.



31 EFTS at De Winton airfield near Calgary in 1941.

Apart from a month's break whilst in Calgary Isolation Hospital, John underwent pilot training from March 1942 until the end of the year; being promoted to Pilot Officer when awarded his 'Wings' in November.⁶

Following his return to the UK during the winter of 1942-43 John underwent further instruction at

advanced flying training units at Tern Hill (Shropshire) and Annan (Dumfriesshire). After successfully completing these courses John was posted to his first operational unit in August 1943 - No 1449 Flight based at St Mary's airfield (the Scilly Islands). Flying Hawker Hurricanes 1449 Flight was tasked with the protection of the islands, reconnaissance and convoy escort duties.



John with his sister, Catherine, after returning home from Canada in 1943

Although John's service record indicates he was posted to 263 Squadron at Harrowbeer on 2 April 1944, there is no record of his name in the unit's Operations Record Book (a diary of operational flying) until D-day, 6 June. Piloting a rocket-firing Typhoon fighter-bomber, his first operation was a

reconnaissance sortie that evening, during which a German vessel was attacked near Granville on the French coast. On the 19th June the squadron relocated to RAF Bolt Head, a grass airfield 2 km south-west from Salcombe.⁷



263 Squadron pilots in June 1944. John is sitting second from left in the front row.

Weather permitting John was often in action over the English Channel and north France, and it was from Bolt Head, in company with seven colleagues, that he took off at 6 pm on 7 July; their task was to

find and attack two small ships they had located earlier in the day off Pointe de L'Armorique (Brest). During the attack John's rockets were seen to hit one of the ships, but his aircraft failed to recover from its dive and disappeared into the sea.



Some of the places John 'visited' during 1944

Although his body was never recovered, John's name is inscribed with those of his parents on the family grave in Ripon Cemetery. In his home village

of Baldersby St James, John's name is remembered by the congregation of St James every Remembrance Sunday.¹



*(a) The grave of Amy and Fred Hodgson in Ripon Cemetery. (©Mary Moseley Via Roz Norris)
(b & c) Roll of Honour in Baldersby St James Church. (© Roz Norris 2017)*

Acknowledgements

This biography could not have been written without the support of Roz Norris of the Ripon Historical Society and Family History Group (RHSFHG). Her extensive knowledge of the Ripon area, plus the all important fact that she once lived in Baldersby and still worships at St James church, has proved invaluable.

I am extremely grateful for the kindness of John's niece, Judith Whetton, and her extended family, for the photograph of John and his sister, Catherine.

The assistance given by Catherine Ross and Mark Beswick in tracking John's Met Office career at Linton on Ouse and Dishforth is greatly appreciated.

Notes

1. Private communications from Roz Norris
2. Ripon Grammar School admission slip, via Roz Norris
- 3 There was no centralised training for Assistants in the Met Office in 1938. Basic training was provided on-the-job until an assistant was considered competent by the officer in charge. (Ogden R.J. 1987. Meteorological Office training of assistant staff: 1939-1951. *Met Mag.*, **115**, 200-213)
4. Met Office Orders (MOO) Supplement 1939/1 dated 10 January 1939
5. MOO Supplement 1939/4 dated 30 April 1939
6. Hodgson's RAF Service Record
7. National Archives file AIR 27/1548

**Brian Booth,
Devizes**

Reviews of key historical publications in meteorology

Enjoy Cumbria's Climate Gordon Manley 1974

By placing the author of this publication at the start of this review, no-one will be surprised that this has been chosen as a member of this particular series of articles. But for a moment, imagine you are an 11 year old on holiday in the Lake District with just a vague interest in the weather. A walk on the fells has been rained off and you return with your parents to the roadside village where you started the walk and take shelter in a gift shop. Your weather curiosity overrides the apparent irony of the title and you spend 40p of your pocket money on this slim 32 page booklet.

That was how I discovered this book on a wet August day in 1974. No-one would describe this paperback as a meteorological treasure but value can take many forms. This was the book that started my interest in the weather. I had read it from cover to cover within the next 24 hours and I invested more of my pocket money in a simple rain measure bought just a few days later. Of course, I had no idea that the author had ever written anything else until I started university in the 1980s. Therefore, his words were read not because of who had written them but because of how they evoked the links between weather and landscape.

The book is simply an essay by Gordon Manley (introduced as Emeritus Professor of Environmental Sciences at the University of Lancaster) accompanied by photographs of the Lake District

chosen by the Cumbria Tourist Board, the publishers of the book. It is written more in the style of a chat around a hotel bar rather than an academic lecture, owing something to Manley's classic book *Climate and British Scene* (Collins, 1952).

After an introduction discussing the benefits of travel, the main weather elements are discussed in turn ending with some tables of climate statistics. Historical references include quotations from Wordsworth and references to the pioneering scientists who explored the climate of the Lake District. Reading the text again today I am struck by the fact that Manley's prose brings with it another historical aspect, the detailed description of weather and local climate from careful observation. Nearly half a century later, the internet provides much climatic data for anywhere you wish in the world, but it surely lacks the local insight and anecdote we find here. Examples include references to the lack of snow around the shores of Morecambe Bay and the Helm wind of the Eden valley.

A further aspect of Manley's storytelling that might have been welcomed by the publishers was his dislike of London and the south of England and his clear love of the North of England and its climate; 'rarely does enough snow fall in the valleys and lowlands to impede the motorist, so that he can find his way to the music, the theatre, the various indoor pleasures with little trouble'. While remarking on

the colours of the landscape under cloudy December skies, he observes that it 'surpasses that of the prevailing dull and misty south of England' at this time of year.

Manley implies that Cumbria offers a variety of weather over both time and space that the English lowlands cannot rival. On days of incessant rain in the mountains, he suggests a trip to Carlisle or Penrith 'where indeed the streets will be wet, and a little gentle rain may blow from time to time along them, but you will find the town going cheerfully about its affairs.....after you have done your Roman antiquities and enjoyed your tea, you will drive home with the clouds beginning to lift, the sun breaking through as the wind goes round into the west...roadside fields and hedges will glitter after the rain'. This is one of several gently amusing

references to holiday pursuits possible in the region; 'At eight in the evening after dinner one goes out to play a round of golf in the evening sunshine' while advising that 'on the long light evenings it is wise to adopt the Scandinavian convention that formal evening dress does not appear until evenings are dark again and people have returned to town and to their winter occupations'.

Compared with the banal lists of climate statistics found on travel websites today, Manley's essay provides a kind of travelogue that informs the reader not just of the variation of weather and climate but also of the geography, people and landscape of the area. He sums the Lake District up with the following phrase that illustrates the point rather nicely 'climatically almost anything can happen....and that is where the enjoyment lies'.

*Julian Mayes,
Molesey, Surrey*

Memories of the MMO in Germany

It is now 60 years ago that I served as a 19 year old National Service airman in Germany. These are some memories of a time long past and almost forgotten.

I served at the Main Met Office HQ no 83 group situated within the RAF Wahn complex. RAF Wahn was a huge sprawling site and allegedly the second largest RAF station in the world. It was an old German military barracks, and the accommodation was quite good with central heating and fairly cool in the summer. This is now the site of Koln Bonn airport. I arrived at Wahn on Burn's Night and my introduction to German food was a haggis!! But I soon developed a taste for sausages schnitzel and salami but never sauerkraut.

This was the time of the "Cold War" and we all had regular NBC(Nuclear Biological and Chemical) attack training. I remember asking a RAF Regiment instructor the best place to be for

one of these attacks. "Some other place" was the laconic reply!

The Main Met Office was responsible for the collection and dissemination of weather records from all Royal Air Force Met Offices in the former British Zone of Germany. This comprised 2 Group in the north and 83 Group in the south. The southern stations were mainly the "clutch stations" on the German Netherlands border. Forecast guidance was provided for all the RAF bases in Germany

The senior staff, admin and forecasters and some assistants were all Met Office staff on a posting to Germany with the associated perks of overseas postings and "free" accommodation. The assistant and telecoms staffs were civilians both British and German, a few redundant RAF Sergeant Signallers and us "metmen". We were all SAC (Senior Aircraftmen) and were either assistants before National Service, had completed apprenticeships or A levels and were

drafted into the grade of Airmen (met). Some of these so enjoyed the job they joined the Met office after completing their time with the RAF. Our pay was £2.50 a week paid fortnightly in BAFVs (British Armed Forces Vouchers) to spend on the camp or Marks for within Germany. We were a fairly special shift working lot who did not do parades or station duties. We could sometimes evade official inspections with a sign "Sleeping after Night Duty, do not disturb". One of our number was charged for a minor offence and as we did not officially have a RAF officer, the charge was dropped. We kept within our own group and were regarded as odd by the other airmen.

Although we did not have much money, it was pocket money and some of us took great advantage of living in Germany. One bought a 1935 BMW Tourer which did 100KPH on the Nurburg Ring race track. Another bought a 1930 Mercedes Limousine, with cut glass ashtrays and hot water pipes inside to keep the passengers warm. Some of us went to the Brussels exhibition in this car. There were four of us with all our camping gear. It was great fun when driving into the camp to get salutes from the guards who assumed only officers had Mercedes!

I bought a Zundapp two stroke motor bike, which had the odd quirk of four reverse gears. During a trip to southern Germany it was stolen but I managed to get it back and eventually brought it to England.

Most of us were interested in the weather and found the job interesting. Our job was mainly

plotting synoptic charts, with the two pens tied together, and tephigrams.. I remember sliding up to the office late one evening to find out the cause of the freezing rain. During the very hot summers our RAF uniforms were hot and uncomfortable during "night duties" and we were allowed to wear "civvy" clothes. But we had to wear our uniform for visits to the Airman's Mess in the middle of the night for our breakfast

One particular summer quiet night a group of us considered pretending we were going to mutiny (a treasonable offence if carried out). The teleprinter operators doctored the collectives from the two Group stations. The code for present weather and past weather all contained 9's and a message was printed to say that now was the time to rise up against our oppressors and 99 (Heavy Thunderstorm with hail) present weather was the signal for this. Obviously this was not sent out but it was presented to the Senior Forecaster, who nearly had a heart attack before the hoax was explained.

When my two years were up I did not expect to return to Germany. Many RAF stations were being returned to the German authorities and Wahn became a civil airport. HQ 83 Group was now two accommodation blocks, and the civilian staff lived in Cologne. However I did return, firstly at 29 to one of the "Clutch stations" until that ceased to be an RAF station and then, at 39, to the Main Met Office, now at HQ Germany, Rheindahlen which also ceased to exist!.

**Mick Wood,
Bracknell**

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We welcome all offerings, from letters, to brief articles – it does not take long to write a short item – just drop me an e mail. Finally, I would like to thank all those who have contributed to this issue. My contact details are as follows (please note the change from my old e-mail address):

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Julian Mayes, Hon. Secretary, Molesey, Surrey, March 2018