A history of the BAA in Australia: the fate of the Branches

Wayne Orchiston & John Perdrix

Four Branches of the British Astronomical Association were formed in Australia between 1895 and 1951, but only the first, the New South Wales Branch (1895) has survived. The others, the Victoria Branch (1897), Western Australian Branch (1927), and Victorian Branch (1951) were all short-lived. A short account of each Branch is given and the reasons for their success and failures are examined. The main reason for the three failures was a lack of a role model for observational astronomy.*

Introduction

The development of specialist groups and societies is an important element in the evolution of any discipline, and is an area of particular interest to historians of science. Many newly-founded nineteenth century groups were short-lived, and their histories can be as revealing as those of well-established enduring societies. In the field of astronomy, one of the latter is the British Astronomical Association (henceforth BAA), which in 1990 celebrated its centennial. ²

The early development of the BAA took place while Britain was still a scientific colonial power, and it was no surprise therefore to see the emergence of branches in Sydney and Melbourne in 1895 and 1897 respectively, and in Perth in 1927 (for localities mentioned in the text see Figure 1). More unexpected, though, was the appearance of a second Melbourne-based branch in 1951. This paper reviews the formation and major achievements of the four different Australian branches, all of which, except for the New South Wales Branch, were comparatively short-lived. Scientific astronomy has a long history in Australia, 3 and

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Figure 1. Australian localities mentioned in the text.

consequently the BAA branches were not the first formal astronomical groups to be established.⁴ During the 1870s, Astronomy Sections were associated with the Royal Societies of New South Wales,⁵ and Victoria,⁶ while in 1882 John Tebbutt of Windsor (Figure 2) founded the short-lived national corps of comet observers.⁷ During the 1890s, when the first BAA branches were formed, other local astronomical groups were also established in Adelaide⁸ and Brisbane,⁹ though the former group could very well have become Australia's first BAA branch, as the following narrative will indicate.

Early developments

Once the BAA in England ratified the formation of localised branches, it was inevitable that a branch would sooner or later be established in Australia where there was a rapidly-growing band of active members. One of the first Australians to join was Port Macquarie's W. J. Macdonnell, and on 25 March 1891 a long letter by him appeared in the pages of the *Sydney Morning Herald*:

Scattered throughout the colony [of New South Wales] there must be many owners of telescopes and others interested in astronomy. To these, therefore, I would suggest that a branch of the British Astronomical Association be established in New South Wales, with the headquarters to be in Sydney, or some other convenient centre. In the meantime I shall be glad to receive the names of any lady or gentleman wishing to join ... In our southern skies there is practically an unworked field, especially in the departments of stellar, cometary and meteoric astronomy. By co-ordinated and regular work much can be done to promote the cause of and interest in astronomy, so I trust there will be sufficient response to warrant the establishment of a branch of the British Astronomical Association in the colony. 10

Later in the year, the Reverend W. Swindlehurst of Newcastle expressed similar sentiments in a letter to John Tebbutt, but did not focus specifically on New South Wales

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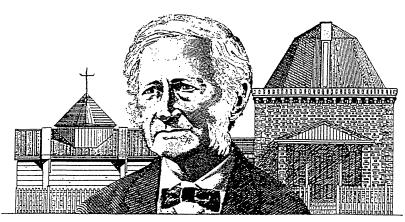


Figure 2. John Tebbutt (1834–1916), founding President of the NSW Branch and Australia's foremost astronomer at the time (*Orchiston Collection*).

(henceforth NSW): "... I trust it is not hoping too much to expect before long to be able to set up an Australian Branch of the BAA". 11

The possibility of setting up branches in Australia was then taken up seriously in both Sydney and Adelaide. In late 1891 a group of Adelaide amateurs joined with their professional colleagues from the Adelaide Observatory to discuss the formation of a local astronomical society which, amongst other things, would '... popularize and spread the knowledge of astronomy in the State.' ¹² Three different possibilities were actively debated: a BAA branch; an independent society; and an Astronomy Section of the Royal Society of South Australia.8

The apparent merits of attaching the new group to an existing local society eventually prevailed, but in the long-term this turned out to be a less than judicious choice, and in 1901 continuing friction between the Section and its parent society forced the secession of the former. Thus the Astronomical Society of South Australia came into being; it is currently the longest-surviving

At the very time the Adelaide discussions were in train, two noted amateur astronomers, Walter Gale (Figure 3) and Robert Innes (Figure 4), were investigating the formation of a similar group in Sydney. Innes wanted to set up a totally new society, with a national rather than regional geographical focus, and during the second half of 1891 and early in 1892 he actively lobbied for his mooted 'Australian Astronomical Society'.13 Gale was keen to work with Innes, but was not fully convinced of the wisdom of founding a totally new society. When consulted on the matter, Tebbutt '... did not think an

attempt to form an independent soci-

ety would succeed, and ... suggested

an effort should be made to resusci-

tate the astronomical branch of the

astronomical society in Australia.

Figure 3. Walter Gale (1865–1945), a founder of the NSW Branch and a stalwart of the group for half a century (*Photograph courtesy British Astronomical Association*).

Royal Society [of New South Wales] ... or to form a branch of the British Astronomical Association ...'14

When Innes continued to meet opposition to his Australian Astronomical Society he and Gale abandoned the attempt – but not the notion of a Sydney-based astronomical group.

The New South Wales Branch (1895–)

Gale and Innes then examined Tebbutt's alternative strategies, and because of 'The high fees ... and 'clique' rule ...' quickly eliminated the

possibility of a Royal Society Astronomy Section.¹⁵ Gale then took the initiative and during 1894 canvassed support for a NSW Branch of the BAA, after having fruitful discussions with the Council of the parent body when in England the previous year. By July 1894, forty-six local astronomers had indicated their support for the Branch, the only notable opposition coming from New South Wales Government Astronomer and Director of the Sydney Observatory, Henry Russell.¹⁶

Despite this, in early October 1894 Gale teamed with Innes, Tebbutt, and ten other 'local' BAA members and petitioned the parent body for the formation of a NSW Branch. Council issued its approval on November 28, and the inaugural meeting was held on 1895 January 30. Tebbutt was elected foundation President, a fitting tribute to Australia's leading astronomer.¹⁷

During the first five years (the 'formative era') the Branch flourished under the guidance of what was collectively the most influential group of amateur astronomers in

the country. With the likes of Tebbutt, Gale, Innes, Macdonnell, T. H. Furber, G. Hirst, G. H. Knibbs, C. J. Merfield, T. A. Roseby, and H. Wright, the early Branch Councils read like a 'Who's Who' of NSW astronomy, 18 although Innes was lost to the Branch in early 1896 when he left to take up a position at the Cape Observatory.

Conspicuous by their absence from Council were the State's two leading professional astronomers, Russell¹⁹ and the Lands Department 'Field Astronomer', Joseph Brooks.²⁰ By this time, Russell was estranged from the Sydney amateur astronomical fraternity,²¹ while Brooks was immersed in a feud with one of the Branch's Councillors (but he would not divulge which one). Nor was there any love lost between Brooks and Russell.²⁰ The only substantial professional input to the new Branch came from Sydney Observatory Deputy Director, H. A. Lenehan.



Figure 4. Robert Innes (1861–1933), co-founder of the NSW Branch, later became a well-known professional astronomer in South Africa (Photograph courtesy The South African Astronomical Observatory)

Meteor Sections in 1897. Some members had access to large telescopes: Gale and Innes used 457mm and 419mm reflectors, respectively, while Gale and Innes, Merfield, and Tebbutt could resort to 152-, 165- and 203mm refractors (Figure 5).²³ Merfield and Innes also pursued mathematical astronomy, and published a number of significant papers

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Figure 5. The 203mm Grubb refractor, used extensively by John Tebbutt, Walter Gale, and Mark Howarth (Orchiston Collection).

in leading overseas journals; in this way they quickly established international reputations.

This flurry of research activity resulted in more than forty research papers by Sydney and Windsor astronomers appearing in the Journal of the BAA during the first five years of the Branch's existence - a phenomenal effort - and further papers by Tebbutt, Innes, and Merfield appeared in other journals (e.g. Astronomische Nachrichten and Monthly Notices of the Royal Astronomical Society).

Its formative years were marked by rapid growth and notable achievement, and the Branch quickly became one of the key elements in the evolution of Australian astronomy at this time.18

The interval between 1900 and 1945 can rightly be called the 'Gale Era'. As Australia's leading amateur astronomer during this period, he was the Branch's guiding light. A Council Member for much of this interval, he made prolific planetary and cometary observations, and added Comets 1912II and 1927VI to his earlier discovery of Comet 1894II.

Other notable observers were E. H. Beattie, G. Hoskins, M. Howarth, and J. Nangle. Beattie and Nangle used

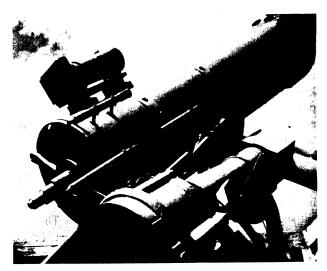


Figure 6. The 508mm Grubb reflector acquired by Walter Gale and later owned by Dr Con Tenukest (Orchiston Collection).

152mm refractors, and Hoskins a 457mm reflector, while Howarth was loaned the ex-Tebbutt 203mm refractor. Gale at one time or another had access to the 203mm refractor, and a 508mm Grubb reflector (Figure 6) and two different 457mm reflectors.²⁴ Given these telescopes, and others, the Branch was well stocked with research-quality instruments, and variable stars joined planets and 'current phenomena' as favourite objects of study. Nova Aquila 1918 received special attention.

Despite these observational efforts, the deaths of Macdonnell (1910) and Tebbutt (1916) and the absence of Innes prevented the Branch from replicating its prodigious publications output of the formative years. As the twentieth century progressed, Australian observations increasingly became raw data to be synthesised and written up by Section Directors back in England, and individual research papers and notes by Australian amateur astronomers became a rarity in the pages of the BAA Journal.

In 1905 Merfield followed Innes's example, becoming a

professional astronomer (first at Sydney Observatory and from 1907 at Melbourne Observatory), thereby depriving the Branch of yet another leading member. Nangle also joined the ranks of the professionals upon his appointment to the Sydney Observatory Directorship in 1926, and he was able to build on the close Observatory-Branch links established by Lenehan when he had become Director in 1905, and developed further by W. E. Cooke from 1912.25 Because of their variable star interests, the staff at the Riverview Observatory were also able to play a major part in Branch activities at this time.26

The end of World War II brought with it the death of Walter Gale (in 1945) and the com-

mencement of the 'post-war era' (1946–1980). The astronomer who undoubtedly had the greatest influence on the Branch during this period was Dr Harley Wood (Figure 7), Government Astronomer of New South Wales and Director of Sydney Observatory. He was a staunch believer in amateur–professional co-operation, a view that was equally supported by his senior staff, W. H. Robertson (his ultimate successor) and K. P. Sims. As Orchiston has noted,

Collection).

Figure 7. Sydney Observatory Director, Dr

Harley Wood (1911–1984), a stalwart of the NSW Branch for more than thirty years (Orchiston

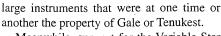
Collectively Wood, Robertson and Sims had a profound impact on the Branch for more than forty years, and through their involvement reinforced its status as one of Australia's most senior astronomical societies.²⁸

The observational focus among the amateurs in the Branch remained with the planets and variable stars. Dr C. Tenukest, a Mars specialist, employed a succession of large telescopes, including 152- and 165mm refractors and 457- and 508mm reflectors (see Figure 8),²⁹ while his successor as Director of the Planetary Section, Dr A. J. Way, had the use of a 305mm reflector with a historic Calver mirror. Another active observer, H. Pinnock, was also an expert in 'telescope-broking', and over the years owned a number of



Figure 8. Dr Con Tenukest using the 457mm reflector for planetary work; this instrument was originally owned by Walter Gale (*Orchiston Collection*).

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Meanwhile, support for the Variable Star Section continued, and flourished under I. Debono from 1959. Apart from Debono, the principal observers during the 1960s and 70s were S. Elwin, R. Giller and F. Traynor.²⁸

Members were encouraged to make telescopes, and a number of individuals attended Tenukest's classes at the University of New South Wales where long focal length reflectors of 203- and 254mm aperture, ideal for planetary observations, were the norm.²⁹ But while Tenukest was a skilled practitioner, the Branch's telescope-maker *par excellence* was K. Beames of Linden. By combining his engineering and optical skills he was able to produce a magnificent 610mm Nasmyth reflector, together with an accompanying 432mm reflector and 152mm refractor (guidescope), all on the one massive precision equatorial mounting (see Figure 9).³⁰

One other area of Branch activity that witnessed a rapid emergence during the 1960s and 70s was research into the history of Australian astronomy by both W. Orchiston and T. Tooth.

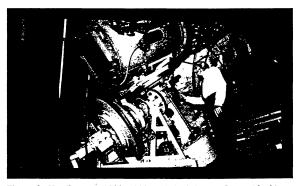


Figure 9. Ken Beames (1899–1989) and his 610mm reflector (Orchiston Collection).

Between 1980 and 1990, during the 'recent era', the Branch witnessed a flurry of activity and achievement reminiscent of its first five years.³¹ One of the principal driving forces was Colin Bembrick (Figure 10), a geologist who for a time was a member of the Astrophysics Group at the University of New South Wales. Through Bembrick, the Branch became involved in photoelectric photometry of comets, minor planets, and variable stars using a number of different telescopes at Mount Stromlo and Siding Spring Observatories,³² and astrometry of comets with the Sydney Observatory astrograph.³³ Bembrick and others also engaged in a wide range of observational programmes under the auspices of the Occultation Section.

Not unexpectedly, the Comet Section under Dr D. Seargent flourished during the Halley era, and as well as the research programmes already referred to, and others, Branch members played an important part hosting large numbers of overseas astronomers who visited Australia at this time.

The Branch also found itself immersed in local politics in 1982 when the State Government announced its intention to close Sydney Observatory as a research institution. Notwithstanding a carefully planned and orchestrated 'Save Sydney Observatory' campaign (see Figure 11) the Government had its way, and upon the retirement of Robertson and Sims the Observatory was transferred to the Museum of Applied Arts and Sciences and turned into Australia's only public museum of astronomy.²⁵

Sydney Australia



Figure 10. Colin Bembrick (1942–), a driving force behind the NSW Branch during the renaissance of the 1980s (Orchiston Collection)

Despite this change of function. the Observatory retained its close links with the Branch, but the latter also forged an excellent working relationship with Macquarie University in suburban Sydney, inheritor of the Sydney Observatory astrograph. and home of the Branch's 457mm 'Hoskins Reflector'.

In comparison to earlier times, the manufacture of large amateur telescopes has not been a feature of the recent era

(with the notable exception of the 203mm refractor assembled by Debono, T. Buckley, and K. Lockley), but Branch members have actively promoted monthly 'coffee clubs', occasional deep-sky viewing nights, and biennial 'Astro Mini Cons' (conferences); participated in the National Australian Conventions of Amateur Astronomers and in selected IAU meetings; supported the *Australian Journal of*

Astronomy and helped develop Sky and Space, a new magazine for southern observers; and hosted distinguished guests from the parent body such as Dr Patrick Moore, Heather Couper and Nigel Henbest.²⁸

The NSW Branch remains a vital force in Australian amateur astronomy, and proudly celebrated its own centennial in 1995.

The Victoria Branch (1897–1906)

When the BAA was formed in England in 1890 there was no formal astronomical group or society in Victoria, the Astronomy Section of the Royal Society of Victoria having become defunct, 6 so two Victorian amateur astronomers, J. Melvin and W. H. Wooster, immediately joined the new society as 'original members'. Several

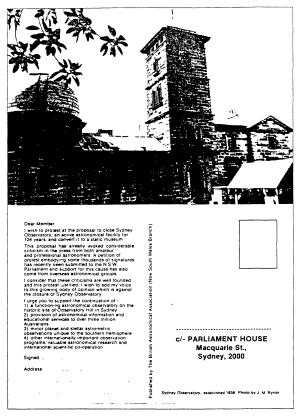


Figure 11. Obverse and reverse of the postcard used as part of the 'Save Sydney Observatory' campaign (Orchiston Collection).

other Victorians (including P. Baracchi (Figure 12), R. L. J. Ellery, and R. W. Wigmore) joined in 1891 and 1892.

Robert Ellery, one of Australia's most respected professional astronomers, was at that time Government Astronomer for the Colony of Victoria,³⁴ and Pietro Baracchi³⁵ was to be his successor (in 1892). A Ballarat school teacher by profession, Wooster (Figure 13) was committed to the popularisation of astronomy,²² while the

Figure 12. Pietro Baracchi (1851-1926), Melbourne Observatory's strongest supporter of the Victoria Branch (*Perdrix Collection*).

Melbourne solicitor Wigmore was Victoria's leading telescope-maker and in 1893 began constructing a 457mm Newtonian reflector. Another active Melbourne telescopemaker at that time was a bank officer named David Ross (Figure 14), who in 1884 had discovered a comet. In addition to this band of talented amateur and professional astronomers, there were a number of senior staff at the Univer-

sity of Melbourne with strong astronomical interests.

At the end of 1896, Ross and Wigmore teamed with two other amateurs, A. C. Macdonald and G. Smale, to investigate the possible formation of a local branch of the BAA. On 1897 February 1, Macdonald wrote Tebbutt that 'Steps are being taken with the view to ascertain whether 15 or 20 members can be induced to join in forming a branch.'36 Following a public meeting on February 12, Wigmore advised



W. H. Wooster Aged 80 years

Figure 13. W.H. Wooster (b. 1844), one of Australia's first BAA members (after Wooster W.H., Sketch of the Life and Work of W.H. Wooster, Sydney, 1924).

London of their intentions on February 22, and forwarded a number of applications for membership. In the meantime, Wright sent Macdonald a copy of the Rules of the NSW Branch.³⁷ With the scene now set, Wigmore wrote to the Secretary of the BAA on June 15 '... forwarding for presentation to your Council application for permission to form the above branch.'³⁸ In this and other letters there is a sense of urgency, as if all the arrangements could fall through if something was not done immediately.

This concern was groundless, for the application was approved by Council on October 11, and the Warrant was received by Wigmore at the end of November. Just two weeks later, on December 16, the inaugural meeting of the Branch was held.³⁹ Ellery was appointed founding President, with Baracchi and Professor Kernot as Vice-Presidents. Wigmore was Secretary, Macdonald the Treasurer, and other members of the first Committee included E. F. J. Love and T. W. Fowler from the University of Melbourne, and Ross.

The Branch moved quickly to organise regular monthly meetings, occasional field-trips, and a small library. In 1899 August, a Planetary Section was formed, though there is no evidence that this achieved anything of note (despite Baracchi's offer to assist with advice and guidance). However, between them, Love, Ross, and Dr J. G. Sprigg had managed to observe five different comets in 1898. 40 Another keen University-based observer (apart from Love) was Professor R. J. A. Barnard whose speciality was variable stars, and he spoke on these interesting objects at the 1899 October 5 meeting of the Branch. 41 At the time, Baracchi took the opportunity to explain that in contrast to double stars, which required skill and a micrometer, variable stars offered a particularly fertile field for the amateur observer.

Meanwhile, Ross persevered with his telescope-making, replacing his home-made 229mm reflector with a 260mm instrument around the turn of the century. He also contin-

ued to observe comets and to experiment with astrophotography, and his photographs were a great drawcard at Branch meetings. Ross was one of only a few Australian amateurs at that time who made their own telescopes *and* systematically used them. A detailed account of his varied achievements was published in this *Journal* in 1990,⁴² and some of his cometary work is discussed in a more recent paper.⁴³

Wigmore also continued to build telescopes, with the Branch's encouragement. He completed the 457mm reflector (see Figure 14), and mounted this on a brick base at his home in Caulfield. When not in use, this instrument stood vertically, shielded by a large black-painted cover. He also finished a second 457mm mirror, which was later acquired by the NSW Branch member, G. Hoskins. Wigmore also made many reflectors in the 228- to 305mm range, and exhibited one of these, a 254mm Newtonian, at the 1905 May meeting of the Branch.

While the Victoria Branch was well off in the telescope-making domain, it was very poorly furnished with observational astronomers when compared to the NSW Branch. But, unlike the latter Branch, it did have its adherents to the 'new astronomy', astrophysics. The University men, Barnard, Kernot, and Love, were all *au fait* with recent developments, and Love went so far as to publish a number of papers on stellar and nebular spectroscopy. One of these generated some controversy. 46

In 1903 February, the Committee decided on only four General Meetings for the year, and although special invitations mailed out for the April meeting resulted in a full house, this decision spelled the beginning of the end. The



Figure 14. One of the 457mm reflectors manufactured by Robert Wigmore, a leading Victoria Branch member and pioneer telescope-maker (Photograph courtesy *Melbourne Herald*).

last General Meeting recorded in the Minutes Book was on 1905 October 5,45 but there was a further Council Meeting on 1906 May 3. The final letter in the Letter Book is dated 1906 June 9,38

Thus, after an interval of only eight and a half years the Victoria Branch came to an end, its demise prompted by '... the failure to induce a sufficient number of its members to use their tele-



Figure 15. David Ross (1850-1930), Victoria's leading amateur astronomer at the end of nineteenth century, and a mainstay of the Victoria Branch (Orchiston Collection).

scopes for some definite astronomical purpose, and in accordance with a suitably prep[a]red plan.'⁴⁷ To Kelly, the life of the Branch was analogous to that of a nova: '... it appeared, bursting into prominence of no mean magnitude, and then gradually declined into obscurity.'⁴⁸

The Western Australian Branch (1927–1929)

Australia gained its third BAA Branch in 1927 when the Western Australian Astronomical Society evolved into the Western Australian Branch. Founded in 1912 by amateur astronomer, Hilton, and Perth Observatory's Curlewis, the rules of the Society were modelled on those of the BAA in England,⁴⁹ and when the Society experienced difficulties Professor A. D. Ross pointed to the advantages of forming a Branch. This was subsequently agreed to, and in July 1926 the parent body was successfully petitioned.⁵⁰

The inaugural meeting of the Western Australian Branch was held in Perth on 1927 March 29, and Ross (who was Professor of Physics at the University of Western Australia) was elected President. ⁵¹ Despite the new name and support from the parent body in London, membership was never substantial, and the internal dissension which had characterised the earlier society continued. In 1929 the *Journal* reported that attendance at meetings '... has not been altogether satisfactory ...', ⁵² and at the end of that year the Branch folded. It achieved little during its slightly less than three-year existence.

The Victorian Branch (1951-1963)

Fourteen years after the demise of the Victoria Branch, there was agitation to form a new Melbourne-based branch. Three prominent amateur astronomers, J. Michie, W. H. Robb, and F. J. Edwards, with help from N. H. Seward,

bookseller and instrument supplier, and J. A. Moroney of the Melbourne Observatory, forwarded copies of a circular letter which outlined their proposal to about 50 people they knew of who were interested in astronomy.⁵³ Twenty replies favoured the reformation of the Branch; however, the fourteen who attended a meeting on 1922 June 10 decided otherwise, and thus the Astronomical Society of Victoria (henceforth ASV) was born. Chief Assistant Government Astronomer, C. J. Merfield, who had been a prominent figure in the NSW Branch, was appointed founding President.

The 1922 decision merely served as a delaying tactic for on 1950 October 12, eighteen local members of the BAA (two-thirds of whom were also ASV members) forwarded a request to London to form a Victorian Branch. Given that the ASV had a healthy membership of some 250, the question must be raised as to why it was thought necessary to establish a new group. Key personality clashes, the desire on the part of a few to wield more power, and some degree of competition regarding the use of the instruments at the Old Melbourne Observatory were among the prime reasons.

London gave its approval, and on 1951 April 24 the inaugural meeting was held with seven of the eighteen attending. The prominent broadcaster and author, P. Crosbie Morrison, was appointed founding President (in his absence), on the understanding that '... we could act in complete amity with the ASV ...'.54 For their part, most members of the ASV would have wished the new group well, judging by comments in the Society's *Journal*: 'There is plenty of room for two, and there is no reason why relations between the societies can fail to be of mutual benefit.'55

The first two years under Morrison were formative ones.



Figure 16. John L. Perdrix (1926—), Secretary/Treasurer for most of the existence of the Victorian Branch (Orchiston Collection).

Attendances at meetings ranged from five to fifteen, with the same old faces asserting the same familiar protestations as some of the personality clashes had unfortunately been carried over from the ASV. Membership gradually increased, reaching forty in 1956, but attendances at meetings remained low, averaging only thirteen. Nevertheless, members enjoyed the informality of the meetings, and particularly the lively discussions afterwards. Over the years, there were a number of debates and discussion meetings with the ASV, some of which were highly successful.

Although several members possessed and used telescopes, only one meeting was of an observational nature (and this featured a movie made with a 305mm Springfield-mounted reflector by N. L. Jones and J. Perdrix). Rather, the emphasis was on non-observational astronomy, as reflected in the primary interests of the most active members: instrumentation and telescope design (J. P. Hamilton and C. S. Middleton), history of astronomy (J. Perdrix and P. Simon), popularisation of astronomy (W. G. H. Tregear), and positional astronomy and astrology (E. B. Walton).

From 1954, Perdrix (Figure 16) was Secretary/Treasurer, and with his continued input the Branch survived. But from 1958 he became more involved in the ASV, serving two sessions as President (in 1960 and 1961). It was his election as Editor of the ASV that sounded the death-knell for the Victorian Branch. The demands of this new appointment allowed him less and less time for the Branch, and at the 1963 March meeting he tendered his resignation as Secretary/Treasurer. In the following three minutes, a motion was moved, seconded, and passed winding up the Branch.

Unlike its predecessor, the Victorian Branch had no meteoric rise in size or status. It simply plodded along for twelve years, satisfying a need that could easily have been filled had the ASV thought to form a Technical Section.

Discussion

Four Branches of the BAA have been formed in Australia, but only one of these survived more than a dozen years. Was there a common denominator in the three as distinct from the surviving one? Let us first look at the objectives of the Association:

- (1) The association of observers, especially the possessors of small telescopes, for mutual help, and their organisation in the work of astronomical observation;
- (2) The circulation of current astronomical information;
- (3) The encouragement of a popular interest in astronomy.

While all of the Branches had their observers, the NSW Branch was the only one to actively promote systematic observational astronomy in a substantial way and achieve obvious success. Rather, most Australian BAA members preferred general 'sky-browsing' or armchair astronomy, although a few (generally with the universities or at the government observatories) indulged in mathematical astronomy or astrophysics. There were also those whose sole interest was in instrumentation. So, in reality, the first objective (above) was not achieved to any degree, except in New South Wales.

The second objective fared much better in all of the Branches, through dissemination of astronomical information at meetings and via newsletters, while membership of the parent body gave members access to the *Journal* where they could – if they wished – share the fruits of their astronomical labours with colleagues. As we have seen, certain members of the NSW Branch were the only ones to frequently exploit this opportunity.

The third objective was achieved at the membership level through the monthly meetings, observing nights, newsletters, and the like, while popularisation of astronomy among the general public was only avidly pursued by the NSW Branch (mainly through such people as Tebbutt, Roseby, Gale, and Wood).²² It was not an overwhelming preoccupation of the other Branches, although Perdrix lectured on astronomy for the Council of Adult Education and spoke regularly at meetings of service clubs.

What all of the Branches did do was to bring astronomers together, amateurs and professionals in the case of the first three Branches formed, and help cement the predominantly amiable relationships that existed between these two diverse groups. Lying somewhere in the middle were those serious research-oriented amateurs, who were highly regarded by their professional colleagues, and were the first to make the transition to professional ranks when the opportunity arose.

Balance between the amateurs and professionals was important. When there was too much input from the professionals and senior amateurs at meetings and lectures became abstruse, the 'run of the mill' amateurs withdrew. On the other hand, total control by amateurs tended to alienate the professionals and research-oriented amateurs. Personality conflicts merely compounded matters, as in the case of the Western Australian and Victorian Branches.

The survival of each Branch depended largely upon the continued commitment of a small number of dedicated astronomers who were prepared to put in the requisite time, effort, and leadership. Critical were the President, Secretary, and Treasurer. Also important, from a public point of view, was the perceived status of the President, and it is interesting to note that all Branches chose as their inaugural Presidents people who were recognised authorities and were well known and highly respected. However, attendance records are telling, for both Ellery (Victoria Branch) and Morrison (Victorian Branch) were frequently unable to attend meetings and could not provide adequate time for their respective Branches.

Professor Ross, on the other hand, achieved an almost perfect record, yet the close association of the Western Australian Branch with the University of Western Australia (rather than Perth Observatory), the absence of a telescope for general use by members, and the complexity of some of the lectures, all acted as a deterrent. Nor did the Branch possess an obvious amateur role model for newer members to attempt to emulate. All Branches needed viable role models if they were to survive, and the NSW Branch was well endowed with the likes of Tebbutt, Macdonnell, Merfield (until he turned professional) and Gale. For its part, the Victoria Branch had Ross and Wigmore, but there is some

difficulty identifying specific role models for its successor – it was rather a case of 'too many chiefs'!

As time and fate have demonstrated, the NSW Branch was the only one with the right combination of elements to assure its survival, even during times of turbulence. The interplay of amateur and professional, the prevalence of the role models, the numerical strength of the membership, and the continuing dedication over the years of what was never more than a small band of Committee members, were all crucial ingredients.

Conclusion

Four different BAA Branches were formed in Australia: the NSW Branch (1895), Victoria Branch (1897), Western Australian Branch (1927) and the Victorian Branch (1951).

The last three Branches formed were all relatively short-lived, and two of them achieved little of note. The Western Australian Branch was really nothing more than an abortive attempt to stave off the imminent demise of the Western Australian Astronomical Society, while the Victorian Branch served as little more than a *de facto* Technical Section of the Astronomical Society of Victoria.

Of more substance was the Victoria Branch, which for a time played a useful role in stimulating interest in observational and theoretical astronomy among Melbourne's amateur and professional exponents at the end of the nineteenth century. Among its most active members were two of Australia's leading amateurs of the day, David Ross and Robert Wigmore.

The NSW Branch is Australia's only surviving BAA Branch. As the second-oldest functioning astronomical society in Australia, it has a proud and distinguished record in amateur astronomy, and has also helped cement amiable amateur—professional relations. Amongst its strongest supporters have been world-ranked amateurs like John Tebbutt, R. T. A. Innes and C. J. Merfield (the last two becoming professional astronomers), and Sydney Observatory Director, Dr Harley Wood, one of Australia's foremost professional astronomers during the 1950s, 60s and 70s.

This antipodean paper is, we hope, a fitting centennial tribute to the parent body. What began in 1890 as a purely British phenomenon, in the best tradition of Victorian science took little time to reach and impact on Australian science. Notwithstanding a somewhat patchy local record, without the BAA and its various Branches, Australian astronomy would have been very much the poorer.

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Addresses: (WO) Anglo-Australian Observatory, PO Box 96, Epping, NSW 2121, Australia. [wo@aaoepp.aao.gov.au] (JP) Astral Press, PO Box 107, Jolimont DC, WA 6913, Australia. [astral@iinet.net.au]

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