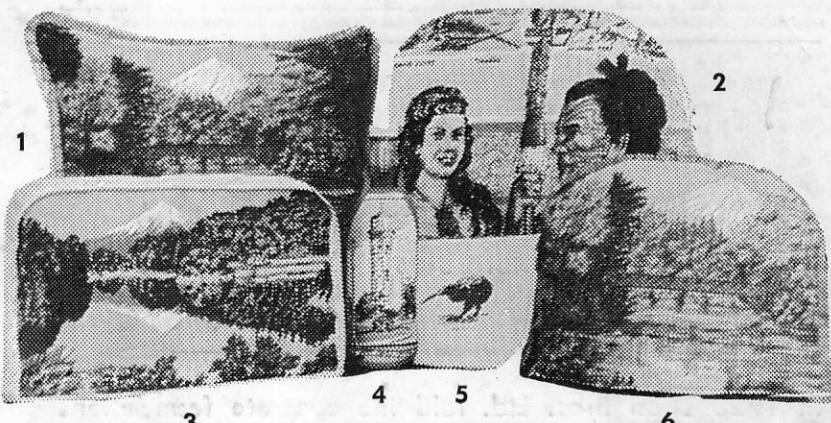


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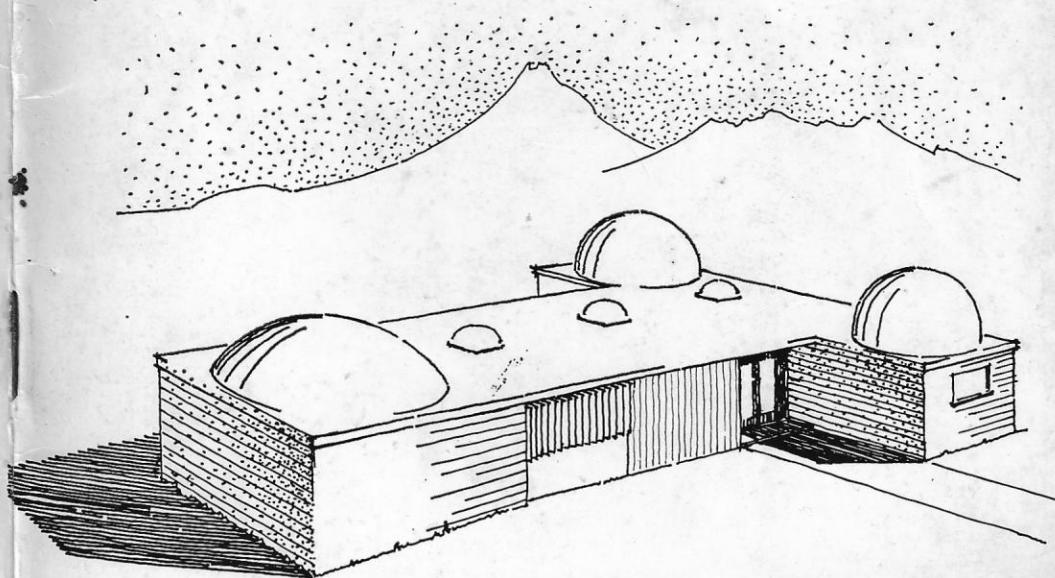
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NEW PLYMOUTH OBSERVATORY

FIRST 50 YEARS
1920 – 1970

Editor

P. F. WOODS

Secretary New Plymouth Astronomical Society

1967 - 1970

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(INC.)

(Founded 1919 — Incorporated 1953)

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FOREWORD

By S. L. DICKSON,

Secretary of the Society 1959-61,

Hon. Assistant, Carter Observatory, Wellington.

The retirement in 1958 of the late Mr. F. J. Morshead, after 33 years as Director of the New Plymouth Observatory, came during a watershed not only in the history of the New Plymouth Astronomical Society, but also of man's exploration of space.

I remember one evening in the dome at the time of his retirement. We switched on the old pre-war radio to hear the latest news bulletin on the progress of an early Pioneer moon probe. It missed the moon, but I will never forget the look on the veteran observer's face as he heard the words: "A gold-plated American spacecraft is now heading for the moon."

There was a smile, for trips to the moon still seemed incredible in those days. But there was also a wistful look in his eyes, the realisation that henceforth astronomy would take on a different significance to that he had known for more than half a century.

The universe that Mr. Morshead studied, with quiet and fascinated awe, was still the untouchable sky. Now we have touched the sky, we have walked on the moon and this century will walk on the planets. How does this society and its observatory, with their traditions, fit into this new age of astronomy?

One of the surest signs that New Zealand, 130 years after its founding, is "growing up" as a nation is the belated establishment of a firm basis for professional astronomy. Astronomy is the oldest science—it was study of the perplexing problems presented by the heavens which first led the ancients to consider basic scientific concepts—and it flourishes in most advanced nations.

It is worth noting that Australia's current industrial and mining boom has been accompanied by a rapid expansion in both optical and radio astronomy. In New Zealand, astronomy was almost entirely promoted and preserved by amateurs until after the end of the Second World War.

A decade ago the late Mr. Ivan Thomsen, then director of Wellington's Carter Observatory, wrote in a foreword to the society's 40th anniversary booklet: "The state of professional astronomy in the country is almost 100 years behind the times. To

a large extent it might be said that the history of astronomy in New Zealand is the history of the amateur astronomer."

Since 1960, the situation has changed significantly. Under Mr. Thomsen's direction the Carter Observatory expanded its facilities, and acquired a new research telescope housed in a dome which had languished empty for a quarter of a century.

Official university interest in astronomy emerged with the establishment of Mount John Observatory at Lake Tekapo jointly by the Universities of Canterbury and Pennsylvania. For the first time facilities for the training of students in astronomical research techniques exist in New Zealand.

Meanwhile amateur astronomy in New Zealand has kept up with the pace, losing none of the vigour which it showed earlier this century. The expansion of the New Plymouth Observatory is part of this.

Auckland's astronomical society has established an observatory equipped with a large reflecting telescope, while in Canterbury a well-equipped observing station has been established at West Melton near Christchurch.

The New Plymouth Astronomical Society, at 50 years of age a doyen amongst amateur groups in New Zealand, can take justifiable pride in the role it has played in promoting astronomy.

It was a young man trained at New Plymouth Observatory, the late Murray Geddes, who was appointed first director of the country's first professional observatory, Carter Observatory, when it was established at the start of the Second World War. My own association with the Carter Observatory, as a staff member from 1961 to 1964, and since then as an honorary assistant, is a result of the existence in New Plymouth of an observatory.

New Plymouth provided a president of the Royal Astronomical Society of New Zealand in 1948 when Mr. Morshead was elected, in recognition of his many years of reliable astronomical observation. When he retired as director of the New Plymouth Observatory a decade later, he undertook the training of a number of young observers, one of them myself, to avert its closing.

Referring to this, Mr. Thomsen wrote in 1960: "Indications are that the new generation in New Plymouth have accepted the torch gladly and fully realise the value of their inheritance."

BIOGRAPHY

These words have been borne out, and as a former secretary of the society I am proud to note the continued educational and scientific work being carried on.

In the space age, knowledge of the astronomical facts of life, especially concerning the solar system, is now of more value than aesthetic and intellectual pleasure alone. For men now travel the space between the worlds—they are places we can go to, or at least send machines to photograph, measure, sift and analyse.

Every city today needs an observatory to act as a centre where young people can satisfy their natural curiosity about the universe in which they live, and adults can catch up with a world barely dreamed of in their youth. For 50 years the New Plymouth Observatory has not only carried out this function, but has acted as a general scientific information centre as well.

It is deserving of support, both generally and financially, from local authorities throughout Taranaki. This has been forthcoming at times in the past for particular projects, but in this space age, with greatly stimulated interest in astronomy, there is a case for regular financial assistance from local bodies.

Your society has shown it is able and willing to maintain such a cultural asset as the observatory over a long period, and this service to the community deserves appropriate acknowledgement.

S. L. DICKSON

In the 50 years of its existence the Society has had some notable and illustrious members whose life stories make fascinating reading. Unfortunately space does not permit the relating of them all, but the following shortened biographies are presented for the readers interest.

THE REV. OSCAR BLUNDELL

The Rev. Oscar Blundell was Minister of St. Andrew's Presbyterian Church, New Plymouth from 1917 until his death from exposure on Bell Falls Track, Mount Egmont on 11th November 1925 at the age of 52.

Mr. Blundell was trained for the Ministry at Knox College Dunedin and his Pastorates were in North Auckland and Te Raha.

Two memorials stand in Mr. Blundell's honour, The Blundell Memorial Annexe at N.P. Observatory and the Blundell's Track in Egmont National Park.

Mr. Blundell chaired the meeting at which the Society was formed and was the first Secretary and Observatory Director from the opening of the Observatory in 1920 until his death.

STEPHENSON PERCY SMITH

The First President of New Plymouth Astronomical Society was one of the truly great men of New Zealand.

He was born in June 1840 at Beccles Suffolk. The family came to the colony in the ship PEKIN landing at New Plymouth—where the railway station stands today—on 2 July, 1850.

Mr. Smith Senior was at one time, Commissioner of Crown Lands in Taranaki and his son entered the service of the provincial government in February 1855.

He did important survey work in many parts of the country, in particular the triangulation of the North Island, which work was commemorated by a small plaque on Mt. Eden, Auckland.

He was serving in the Chatham Islands at the time of the Te Kooti escape; he made an important investigation of the Tarawera eruption in 1886; visited the Kermadecs 1887 to report on the Islands and to confirm New Zealand's annexation.

After his retirement he was appointed Governor, resident at Niue, where he not only performed his administrative duties but made studies on ethnology and the language of the island.

His appointment as Surveyor General of New Zealand in January, 1889 was, as A. G. Bagnall says "The culmination of a career marked by energy, application, tact and originality."

During his early survey work in Taranaki he learned the Maori language and commenced that study of Maori life which culminated in the monumental work "HISTORY AND TRADITIONS OF THE MAORIS OF THE WEST COAST" generally known by its short title "Maori History of The Taranaki Coast".

Percy Smith realised the importance of recording the passing knowledge of the Maori before it was beyond recording and with this in view he called a meeting in Wellington in January 1892 which was chaired by Col. W. E. Gudgeon. The POLYNESIAN SOCIETY which was formed at this meeting has in its Journal "Richest depository of the lore of the people of Oceania". Percy Smith became the editor which position he held (with Edward Tregear until 1901) until he died in 1922.

In 1919 he was elected President of the Society which he held until his death at his home in Rogan (then John Street) New Plymouth 19th April 1922.

Of his work his one time colleague Edward Tregear said on Percy Smith's death: "The Thirty Volumes of the Polynesian Journal will be Percy Smith's splendid monument, more enduring than the tomb of kings".

This was the man who first held the position of President of New Plymouth Astronomical Society taking office at the advanced age of 79 years but still strong in mental vigour even if the body was slowing down.

FRANCIS JOSEPH MORSHEAD

The death of Mr. F. J. Morshead at the age of 83 years not only severed a link with the New Plymouth Astronomical Society but also with early New Plymouth where he spent his entire life.

He served as Observatory Director for 33 years (1925-58). He was one of those instrumental in the development of Pukekura Park and the Pukeiti Rhododendron Trust.

His parents, William Joseph Morshead and Sophia Morshead came to New Plymouth in 1882 and set up the Morshead Nursery which their son carried on for many years.

Mr. F. J. Morshead was a Past President and Fellow of The Royal Astronomical Society of New Zealand and was also a Fellow of the Institute of Horticulture.



His two main interests were Astronomy and Horticulture, he also did some landscape gardening. The Taranaki Club's gardens and the stone gardens around St. Andrew's Presbyterian Church, New Plymouth are his work.

MURRAY GEDDES

Murray Geddes, the second son of Mr. and Mrs. J. Geddes was born in New Plymouth, educated at the local Boys' High School, trained at the Dunedin Teachers' College and graduated Master of Arts at the University of Otago in 1937. His first teaching appointment was at Westown, New Plymouth, during which time he joined the Society.

While working in Southland he was appointed Director of the Auroral and Zodiacal Light Section of the New Zealand Astronomical Society in which capacity he performed outstanding service. Geddes had the ability to work in well with others and had some 700 names on the register of the Carter Observatory most of whom were working in co-operation with him.

Joining the New Zealand Society in 1931 he occupied the position of President in 1940-41 and continued as a member of the Council until his death.

His discovery of the Comet Geddes in 1932 was honoured by the award of the Comet Medal by a United States Society and the Donovan Prize and Medal from Australia.

In March 1939 Murray Geddes was appointed Director of the newly established Carter Observatory in Wellington but he did not for long occupy this position. As sub-Lieutenant of the Royal New Zealand Naval Volunteer Reserve he sailed from New Zealand early in 1942 and his short service in the Navy revealed a technical knowledge and research ability which resulted in speedy appointment to a higher position in the service with the rank of Lieutenant Commander. He served the cause of freedom with ability and distinction and New Zealand and the astronomical societies of the world suffered a severe loss in his death in Glasgow on 23 July 1944.



MARSLAND HILL

The New Plymouth Observatory, now 50 years old, has established its rightful place in the annals of Taranaki's history. Our story begins with an account of the historical site on which the familiar white domed building now stands.

The hill was originally known as Pukaka which may indicate that the native bird of that name frequented the locality.

It is believed to have been fortified by the Taranaki Tribe during the period that this same tribe occupied the Atiawa territory (approximately 1720-1760). After the Taranaki tribe had captured the Rewarewa Pa at the mouth of the Waiwakaiho River in 1805, the invaders planned an attack on Pukeariki Pa (site now occupied by War Memorial and other buildings) marching across country the war party approached from the south at the back of Pukaka. The noise made by the attackers was heard by one of the scouts stationed on the hill, he gave the alarm to the Atiawa at Pukeariki, an ambush was laid in what is now Fulford Street and the invaders were driven back across Huatoki with heavy loss. It would seem that Pukaka was deserted at this particular time because of the fear of this impending attack.

When the pioneer English settlers arrived the hill was covered with a luxuriant growth of Karaka, Rewarewa, Kohekohe and other native trees. Mr. Percy Smith states in his writings that the present flat top was the original level of the fourth terrace from the top, the summit of which arose fifty or sixty feet above the present level, there were six or seven terraces all palisaded.

When the Governor decided to station Imperial troops in New Plymouth, Marsland Hill was chosen as the site. Percy Smith tells that he and Mr. Charles W. Hursthause were directed to make a detailed survey of the hill. They commenced work on 1st August, 1855, Colonel Badderley representing the Military in the work.

A detachment of the 58th Regiment landed on the 19th August and camped on Poverty Flat (Central School grounds) other troops followed. The full list of Regiments engaged in the Taranaki wars is recorded on the Marsland Hill Memorial.

The Barracks were demolished in the 1890's part being used in the Drill Hall in Kawau Street and portion for the Old Mountain House opened in 1892.

Although in the original survey the hill was reserved for a cemetery it was apparently not used for this purpose except in one instance. When Charles Armitage Brown died he was buried on the slope of the hill, there was no cemetery in the town and for some unknown reason he was not interred in the Wesleyan Mission

Cemetery at Ngamotu which was being used by settlers at the time.

During the work of levelling the hill Brown's grave was lost until in the 1920's it was uncovered and a member of the family built a concrete wall in which was placed a marble slab inscribed:—

"CHARLES ARMITAGE BROWN—THE FRIEND OF KEATS"

Brown's life of his friend Keats was used by early biographers but was not printed until comparatively recent years. The Taranaki Herald records that during the excavations by the military in 1855 a coffin and skeleton with military buttons were found on the slopes, but nothing further is known of this 'Mystery' burial.

The Chief Surveyor Fred Carrington named the hill Marsland, it was said that he did so at the request of a settler who had a friend in England of that name.

Later in 1920 the southern end of the hill was to be chosen as the site for an Astronomical Observatory.

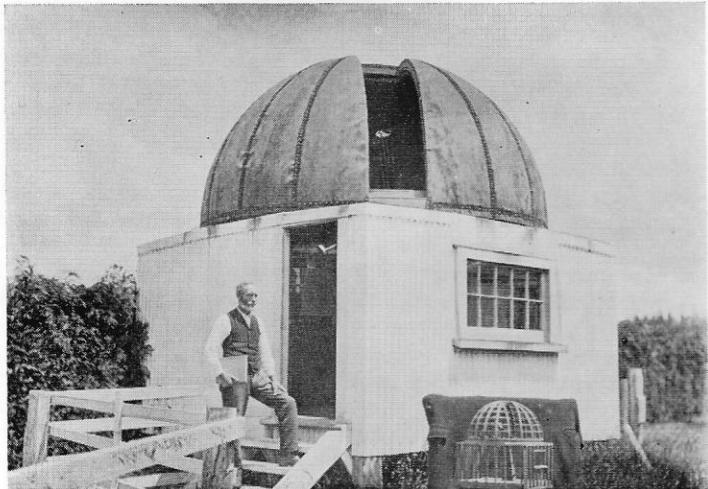
THE BEGINNING

Since its six-inch refracting telescope began probing the skies above Taranaki in 1920 more than 30,000 people have visited New Plymouth Observatory, through this instrument many people have seen the wonders of the universe for the first time.

It all began one evening in May 1919 when a group of nine men held a meeting in The Soldiers' Club where the library and museum building now stands, their purpose? to form an Astronomical Society and to establish an Observatory.

The inaugural meeting was held later that year on 3rd July and was attended by a gathering of "Interested Ladies and Gentlemen" a committee was appointed and soon began the search for an observatory site. At it's first general meeting eight days later the Executive appointed a sub-committee to inspect Fort Niger, Marsland Hill and other areas, a decision was soon made and on July 30th an application was made to the New Plymouth Borough Council for permission to erect an Observatory on the south end of Marsland Hill. By September permission had been granted and Mr. A. W. Burrell, Stratford, who had a private observatory, was invited to prepare estimates for the building. The next month a contract for the concrete foundations was let to Messrs. Boon Bros. and Mr. Burrell was asked to proceed with the work of erecting the observatory.

A year later on 19th August 1920 the Observatory (domed portion only) was officially opened at a cost of £568 which had



been raised by subscriptions, donations and the proceeds of lectures, it was opened free of debt.

The public flocked in those early years to see for themselves this new marvel that the town had aquired. In the first three years the numbers of visitors recorded was 943, 851 and 1,270.

At first the Observatory was open to the public on four nights a week, two nights for adults and two for primary and secondary scholars.

THE TELESCOPE

In February 1920 the Society agreed to purchase a six-inch refracting telescope and a 12-inch unmounted mirror for a reflecting telescope from Mr. W. F. Gale, Sydney, for £165.

Though the mirror was specially tested in Wanganui, a telescope was never constructed to hold it, apparently because a second telescope would require a further dome, and the Society could not afford the cost involved. The first mounting of the telescope had to be replaced in 1921 by an equatorial with a clock-drive.

It was originally proposed that the old mounting should be used to carry the 12-inch reflector it was hoped would be constructed, but this never eventuated, however the Society did not give up the idea of building a second dome but this was not to become a reality until the 1970's. The first extension took the form of an annexe which was built in 1936 after the Borough Council had decided upon a grant of £140. This was named the Blundell Memorial Annexe in honour of the Rev. Oscar Blundell who was the Society's first Secretary. The opening ceremony was conducted by Dr. S. E. Adams F.R.A.S. who had just retired as New Zealand Government Astronomer.

WITHOUT POWER !!

Almost from the establishment of the observatory, the Society endeavoured to get electric light installed but negotiations with the Borough Council over several years failed to produce any result. Wryly commented the Rev. Blundell in the 1924 Annual Report: "It had been expected that the electric light would have been installed at the Observatory during the year, but owing to circumstances, over which the executive had no control, the matter has had to be classed with those comets whose times are calculated but which, owing to unaccountable perbutations exercised by certain great celestial bodies, arrive overdue". Later that year electric light came to the Observatory!

THE ENTHUSIASTS

It is a cold clear night in the early 1930's. Somewhat carefully you climb New Plymouth's Marsland Hill in the starlight, at the top you stop, startled. Gazing skyward is a young man sitting at a table, using a sack to keep warm. It is after midnight—because more "shooting stars" or meteors, are seen in the morning sky than in the evening.

The man is Murray Geddes, destined to become the Director of Wellington's Carter Observatory and to die a tragically premature death while serving with the Royal New Zealand Navy. But at this moment, in the early 1930's, he is just an enthusiastic amateur astronomer—so enthusiastic that he braves the inhospitable Taranaki winter nights to make careful records of meteor showers.

This is typical of the enthusiasm which for half a century has made the New Plymouth Observatory a respected astronomical observing station. Above all else, useful astronomical observation requires patience, the enthusiasm to carefully watch the skies at the most inconvenient hours, and to record the observations.

It was these qualities that enabled Mr. F. J. Morshead to carry out his duties as Observatory Director for 33 years—1925-1958. Week after week during those years he made the trek from his Gilbert Street home to Marsland Hill, to open the Observatory on public nights, show the wonders of the skies to the public and special parties of visitors, or to make some observation.

COMET SWEEPING

It was these qualities which led him to sweep the skies with the telescope for a total of more than 250 hours, searching for comets.

The same enthusiasm led Mr. D. Wilkinson, a fellow observer of Mr. Morshead, to make hundreds of observations yearly of selected variable stars.

Enthusiasm for the stars led the Rev. Oscar Blundell to begin moves for the founding of the New Plymouth Astronomical Society in 1919. He was the dominant figure of the Society's early days, until his death from exposure on Mount Egmont on November 11th, 1925.

His death was one of the greatest shocks the Society has ever suffered. A respected Presbyterian minister, he was mourned by the whole community.

"Of all his interests, and he had a good many, he loved astronomy best. When he started with astronomy he had no

equipment of his own and met with many disappointments, but his enthusiasm conquered them all". This tribute to his enthusiasm was paid by his widow, Mrs. Blundell, at the official opening of the Blundell Memorial Annexe more than a decade after his death.

Enthusiasm led the Society's first president, Mr. S. Percy Smith, an ex Surveyor General of New Zealand and a man well respected in scientific circles, to take an active interest in astronomy in New Plymouth.

Enthusiasm enabled the late Dr. George Home to be the Society's President for 34 years, from 1921 until his death in 1955.

These enthusiasts, and many others who, as observers, officers and members of the Society, have worked devotedly for the observatory in different ways and for different reasons . . . But all had one thing in common: they were held fast by the fascination of the heavens.

COMET DISCOVERED

In late 1923 Mr. Morshead met with success in his comet sweeping. Says the Annual Report for 1924: "The year has been marked as containing the first independent astronomical discovery made at the Society's Observatory. The credit of this is due to Mr. Morshead, whose patient and long continued sweeping of certain portions of the heavens was rewarded on November 6th (1923) by the discovery of an object which ultimately proved to be Dubiago's Comet.

The Comet was entered in the Observatory's log book as "Morshead's Comet"—it was not found out until later that the comet had been sighted in Russia.

NOVA DISCOVERED

In what was to be his last Annual Report, the Rev. Blundell in June 1925, described observations of a Nova or "New Star" made at the Observatory that year. The Star increased suddenly in brightness until it was one of the brightest in the sky, then declining "with many fluctuations".

"Nova Pictoris is the first naked eye Nova to have been discovered since the founding of New Plymouth Observatory" he commented.

END OF AN ERA

The first era of the Observatory's history ended on November 11th 1925, when the Rev. Blundell, who had completed five years

as Director, died of exposure on Mount Egmont during a tramping trip.

The shock suffered by the town as well as the Society by his death is reflected in these words of a newspaper editorial of the time, headed "A Splendid Man Gone". "Rarely does a community receive such a shock as that which came upon the people of New Plymouth yesterday . . . Outside his religious duties . . . he was probably best known as a well informed and instructive astronomer, his love for the wonders of the heavens being a corollary of his religious faith".

The flag on the New Plymouth Prison was flown at half mast when the news of Mr. Blundell's death was received, a tribute to his work among the prisoners as a Probation Officer.

"He passed away on the mountain he loved, under the stars he watched for eternity". These words from one of the many tributes paid to him, form a fitting epitaph.

GAINING SCIENTIFIC RECOGNITION

From 1926, with only two qualified observers available the Observatory was opened on only two nights a week. Mr. Morshead was appointed as the new Director.

The next year marks the beginning of the Observatory's most valuable contributions to the science of astronomy. A letter was received during 1927 from Dr. L. J. Comrie, then deputy-superintendent of His Majesty's Nautical Almanac Office, asking the Observatory to undertake the observation of lunar occultations (the passing of the moon in front of the stars). These observations from all over the world provide information about the moon's motion in space, resulting in improved lunar tables for computing purposes. Since 1927 nearly 200 occultations have been observed at the observatory, and the observations accepted by international authorities.

MARINE CHRONOMETER

To enable the occultations to be accurately timed, a marine chronometer was purchased for the Observatory by Dr. Home and donated to the Society.

The most interesting astronomical event of the year 1927-28 was the appearance of the brightest comet for many years, Comet Skyellerup 1927k. More than 400 people saw this comet through the Observatory's telescope.

A mathematical astronomer who had become one of the Society's observers, Mr. P. W. Glover, later to join the Observatory

at Apia, Western Samoa, computed preliminary determinations of the comet's orbit, using co-ordinates determined with the Observatory telescope.

The year 1928 saw the start of the Society's regular public lectures, and the programme of observations was extended to include variable stars.

By 1929 the Observatory was only open to the public one night a week, because the programme of observations had increased considerably.

Mr. Morshead was able to report that year "It is gratifying to note that the extension and progress of our purely scientific work has been due to the recognition of our Observatory by the astronomical authorities."

THREE DECADES OF PATIENT OBSERVATION

The year 1929-30 was notable for the start of systematic observing and recording of sunspots. Since then over 3000 observations have been made of the sun at the Observatory. Filed at the Observatory are sunspot records covering nearly three decades, a tribute to the patient work of the observers.

Mr. Geddes played a prominent part in the observational activity of the 1931-32 year, plotting the paths of 1509 'shooting stars', then a record for one observer in New Zealand, and discovering a comet while in Central Otago, in June, 1932. For this discovery he was awarded the medal of The Astronomical Society of the Pacific and The Donovan Prize and medal from Australia.

EARLY MORNING VIGIL

On June 11th 1934 Mr. Morshead and Mr. Wilkinson watched a region of the sky from 1 a.m. to 4 p.m. taking half hour spells, one observing and one recording. A total of 44 meteors were seen and their angular positions estimated. These observations were made in conjunction with Admiral Bird's Antarctic Expedition, astronomers in New Zealand and Antarctica watching the sky at the same times.

At the 1939 Annual Meeting, Mr. Geddes, by now Director of the Carter Observatory, delivered an address on the planet Mars. He paid tribute to the valuable work done at the New Plymouth Observatory, where he himself had gained his first interest and training in astronomy.

A resolution was passed at the 1944 annual meeting placing on record the society's sense of "irreparable loss". "His untimely

death while on active service abroad deprives science in New Zealand of one of its most capable and promising exponents."

Another death reported to that meeting was of the designer and builder of the Observatory, Mr. Burrell.

THE BLACK-OUT

If the war brought tragedy to the Society, it also brought its compensations from an observational point of view. The black-out eliminated sky-glare previously caused by street illumination and neon signs, making possible more detailed observation of very faint comets and the Zodiacal light.

The Observatory was frequently used during the war years by the navigation class of the R.N.Z.A.F. learning star names and positions.

BUDGING ASTRONOMERS

A Junior Astronomy Club, formed in 1942 and comprising pupils of the Girls' and Boys' High Schools, remained strong throughout the war, and its members made a number of observations at a time when observers were very scarce throughout New Zealand.



The New Plymouth Astronomical Society received added fame in 1948 when Mr. Morshead was elected President of the Royal Astronomical Society of New Zealand.

In December that year the brightest comet since Halley's Comet of 1910 appeared in the southern sky, and attracted intense interest

More visitors than in any other year—1,480—visited the Observatory in 1949-50.

In 1953 the Society was incorporated, and the Observatory's lighting system was modernised by Mr. R. F. Fish. He installed a faint red pilot light, an extension light to use around the telescope, and three lights of different intensities and colours for use when observing, all controlled by a handy system of switches.

LINKS SEVERED

A transitional period began for the Society when Mr. Wilkinson resigned as a full time observer. With the exception of a few months when he was living elsewhere, Mr. Wilkinson had given continuous service to the Society since 1920.

Dr. Home's long Presidency ended with his death the following year, and another link with the Society's early days was severed.

The new President elected after Dr. Home's death was Mr. P. O. Veale. He held the position until 1958.

After a number of postponements, Mr. Morshead finally resigned as Director in 1958. Presenting his last annual report to the Society, Mr. Morshead said he wished to express sincere regret that his resignation had become necessary.

"During the years of my association with the Observatory, I have had the assistance of a fine band of observers, the majority of whom were students of the Girls' and Boys' High Schools. Particularly during some of the war years, . . . they gave wonderful service to astronomy in New Zealand. Of special merit was the fine series of sunspot drawings made during a period when that class of observation was not being made anywhere else in the country."

LOW EBB

The loss of both its President and Director in the one year left the Society at its lowest ebb for some years, and the closing of the Observatory and storing of the telescope was seriously considered.

Mr. Morshead and Mr. Wilkinson offered to train any prospective observers, however, and a meeting of all interested people was called in the Observatory in 1958. The meeting was well attended, training classes began and continued while the Observatory was temporarily closed to the public.

THE NEW LIFE

In January enough observers had been trained to re-open the Observatory to the public. Mr. R. O. Henderson was appointed as Director and President.

By the Society's 40th Annual Meeting in October 1959 the Society was fully active again and Archdeacon Gavin expressed his appreciation of the 'New Life' in the Society. Mr. C. Jemison was elected President, Mr. Henderson remaining as Director.

There was much discussion concerning the Society's future and Mr. Henderson reminded the committee that the following year marked the 40th Anniversary of the Observatory, this he hoped would be instrumental in attracting new members.

The 40th Annual Meeting concluded with an illustrated talk on "The 1958 Solar Eclipse" by the then Director of Carter Observatory, Mr. I. L. Thompson.

The new committee in its determination to keep the Society 'alive' decided that many improvements could be made to attract members of the public. These improvements were to include renovations to the Observatory and its surrounds and to make the public more aware of the existence of the Society and its work, with this in mind a clean-up campaign got under way, the City Council was approached concerning the state of the pathway from Robe Street to the Observatory entrance, the Council quickly responded by providing a new sealed path and in addition erected a light at the half-way point on the hill.

The Automobile Association kindly offered to erect signposts at strategic points in the city and this was favourably accepted.

At the second Executive Council Meeting of that year Mr. Henderson was able to report that large crowds had streamed up to the Observatory and he congratulated Mr. Trevor Simons who had made himself available to 'Open Up' for the extra holiday crowds.

FOUR DECADES OF SEEING STARS

The Anniversary of the Society's first forty years was marked by a special Planetary week when Jupiter, Saturn and Mars, all in the sky at once, attracted hundreds of visitors to the Observatory.

This and other programmes proved to be a great success and was enhanced by the publication of a booklet organised by a sub-committee comprising Mr. Jemison, Mr. Morshead, Mr. Wilkinson and the secretary (1959-60) Mr. S. L. Dickson.

Mr. Dickson was instructed to write the booklet and the result proved to be a first class publication entitled "Seeking the Stars". The historical content was so accurate and the presentation so professional that a great proportion has been incorporated in this our "50th Year" booklet.

It is interesting to note that the Foreword to the "40th" booklet was written by the late Mr. I. L. Thomsen, Director of Carter Observatory and Mr. Dickson was destined to take up a position at Carter soon after the fortieth year celebrations.

DIRECTOR RESIGNS

In the months following the Anniversary, the Society under Mr. Henderson's Directorship continued to progress with much enthusiasm and many new projects. Organised lectures on all aspects of Astronomy were given and although the crowds on public nights began to dwindle this was only due to the fact that Taranaki was having its wettest spell for seven years, but this did little to dampen the spirit of the committee which by the 41st Annual Meeting could be proud of the start it had made in getting the Society back on its feet. What did cause concern however, was the resignation of Mr. Henderson who was leaving Taranaki that year, his services to the Society were recognised by the presentation of a book on Astronomy.

The succeeding Director, Mr. D. W. Daniel, was appointed on the 30th November, 1960, and Mr. Jemison, who remained on the Executive Council was succeeded by Mr. F. M. White.

In the tradition of their predecessors, Messrs. Daniel and White gave most of their free time to the Society and set for themselves the task of modernising the observatory to bring it in line with the Space Age.

Mr. Daniel organised the members into separate 'specialised' groups each to study one particular subject, this would provide club nights with ready made lecturers within the Society. These evenings proved to be very instructive and sometimes very amusing, such as the debate between Mr. S. L. Dickson and Mr. B. Aris on "Is Venus Inhabited?"

In the drive to attract new members, proposal forms for membership were printed and a newsletter was initiated in order to create more interest among existing members; Mr. R. Petch was appointed as editor.

The problem of Taranaki's many cloudy nights was solved by the Society applying for membership of the National Film Library and the acquisition of a 35mm slide projector.

In order to broaden its horizons the Society became affiliated to the British Astronomical Association and The Royal Astronomical Society of New Zealand.

RECOGNITION OF SERVICE

At an Executive Council meeting on February 15th, 1961, it was moved by Mr. Daniel that Mr. Morshead's 33 years as Observatory Director should be marked by the placing of his photograph in the Annexe as a permanent fixture.

At the commencement of the meeting that followed on the 15th April, members stood in silence as a mark of respect for Mrs. Morshead who had died two weeks previously.

EXTENDING THE BUILDING

With the increase in membership and the escalation of club activities it soon became apparent to Mr. Daniel that the hiring of halls for lectures was becoming too expensive and the Observatory was bursting at the seams on club nights. In view of this Mr. Daniel moved that the building be extended by the construction of a 2nd Dome and provision for kitchen and toilet facilities, Mr. John Fathers was asked to draw up a plan and a sub-committee was appointed to look into the possibilities.

In the meantime however, the existing building was beginning to show signs of age; the Dome was leaking and the fence surrounding the Observatory needed repairs and a new coat of paint. This would have been depleting precious building funds and with this in view the call for 'REAL' finance became necessary.

A stand at the Taranaki Winter Show attracted much public interest and undoubtedly assisted in swelling public night crowds which provided the main source of revenue, but this alone only kept the Society's 'head' above water—or perhaps we should say clouds! However enough funds were found to have the repairs attended to and in addition Mr. G. Pomeroy assisted by Mr. D. Stewart made things easier for observers by fitting an electric motor to the dome.

Further avenues were explored in order to swell the Building Fund with applications being made to various organisations for assistance. Unfortunately these overtures met with very little success. However, the Society did have some response in the form of private donations from ex members and/or their families.

The Taranaki (then New Plymouth) Savings Bank made a donation of £25 and have continued with this much appreciated practical assistance annually. The City Council also offered to assist the Society with an interest free loan of £500. This was the sum total of many months of hard campaigning by the committee but unfortunately it was not enough to effect the 'go-ahead' with the extensions.

A second plan was put into action; appeals were made to the Timber Merchants Association and other similar organisations who all gave the same reply—"contact individual companies". This advice was taken but achieved nothing.

In sheer determination to achieve his goal Mr. Daniel was not going to let it rest. He suggested that under the supervision of a qualified builder the members could carry out a major part of the extensions, but despite the holding of several sub-Committee meetings it looked as though the position was hopeless.

Besides the countless hours of work and worry on the building project Mr. Daniel and Mr. White kept the Club activities at a high standard with a full scientific programme including Sunspot recording and Occultation observations being diligently carried out. The Observatory's telescope, in need of a complete overhaul, was dismantled by Mr. M. Gray who later was elected to the newly created post of Honorary Curator of Instruments—a position he ably holds to the present day. About this time Mr. Pomeroy was elected Honorary Electrician—another new and much needed position within the Society.

At the 44th Annual General Meeting in 1963 it was discovered that the rule book allowed for a Society Patron and the obvious choice was Mr. Morshead. The present Patron is Mr. Bernard Aris the well known artist whose excellent painting of the Moon now graces a wall in the Blundell Memorial Annexe.

In 1963 Mr. Daniel stressed the need for more young blood in the Society and with this in mind he organised lectures at many schools and as a result was approached by Mr. D. Whelan of the New Plymouth Boys' High School. Mr. Whelan, an experienced Astronomer and Director of the Tikorangi Observatory, was welcomed by the Society and his group greatly assisted in increasing the ranks of the Junior Club. In addition to his school visits Mr. Daniel was invited to lecture at many Societies and Clubs throughout the province and these lectures were instrumental in attracting more new members.

At the 49th Annual Meeting on 26th February, 1969, a letter was received from Mr. Daniel requesting a leave of absence for one year, and instructing the President to appoint an Acting Director.

Mr. R. A. Lemon was appointed and he expressed the hope that with the assistance of the President and Executive Committee he would be able to continue with the progress of the Society until Mr. Daniel's return.

Mr. Lemon's first concern was the lack of Junior members and the gap between Juniors and Seniors in the Club. With this in mind he asked the Committee to consider the election of a Junior Delegate to sit on the Committee. Consideration was given and Miss Rosemary Wilson duly elected.

THE POWER GAME

The electricity supply to the Observatory was inspected and it was found to be in need of replacement. A verbal estimate of \$120 was received from the Electricity Department and this came as a 'shock' to the Committee.

The Secretary was instructed to obtain a firm written quotation which resulted in the Society purchasing the cable and laying it with their own "working bee" labour under the supervision of a new member, who being a registered electrician had joined the club at a most appropriate time. This do it yourself project resulted in the original estimated cost being reduced to the sum of \$35. This project encouraged members to look into other faults in and around the building. The main item turned out to be the dome, the outer coating of which badly needed re-roofing. Again the Society found a way of having this attended to without taxing the building fund beyond its limits when one of the Society's friends Mr. H. E. Nation carried out the work for the cost of materials. Many other renovations were carried out, including the fence which had received several knocks from cattle. This was repaired with the help of a donation from the City Council, and the old turn-stile was replaced by a strong tubular gate. Even such unseen pests as borer received attention and the building was duly fumigated.

Having achieved all this the Director and Executive Committee tackled the task of boosting the Society's membership. Recognising the new member potential of special groups the Director asked the Committee to consider a letter of invitation which would be sent to schools and clubs throughout the district. Although approved the scheme has never been used as attendance figures began to rise steadily following one or two initial approaches to schools and clubs by Senior members. Membership began to rise dramatically especially through group visits. An example of this was the Bell Block Primary School which provided the Society with over 30 new Junior members.

But this was only the beginning; a full page article in the Sunday Express dealing with the Bell Block Primary School Group brought in numerous enquiries including yet another series of organised lectures for pupils of Spotswood College and the Vogel-town Boys Brigade. The Sunday Express was also approached regarding monthly articles which resulted in 'Astronomy Notebook' by Mr. L. Stephenson who had written such articles for the Press in other parts of the country.

With the Society gaining an improved financial foothold the Director urged the Committee to consider once again the building extensions. It was apparent that appeals were useless and if the matter was left in abeyance much longer the ever increasing building costs would price the Society right out. Immediate action was therefore taken, plans were laid in the hands of interested builders and after many sub-committee meetings a tender was finally let to Mr. A. T. Davies of Fitzroy and the plumbing contract let to Mr. C. L. Copestake.

ONE GIANT STEP

The Society was brought to the public's notice with an impact, the like of which had never been known until Neil Armstrong set foot on another world, which until that time had been just another object throwing a bright light into the Observatory's 6" telescope. Now everyone wanted to see it, and Mr. Lemon realising the fact approached the American Embassy for films and data to assist the Society in organising a special week to mark the historic Apollo flight. During the week of the flight of Apollo 11, films of Apollo 8 and 9 were screened 24 times to 2,186 people.

In the week of the second Moon Landing (Apollo 12) the films "One Giant Leap for Mankind" and "Bridge to Space" were shown to 12 schools and a total of 6,619 people. By the time the Apollo 12 film arrived in New Plymouth, Committee members were exhausted and decided to take it easy but this film still attracted 574 people to 10 separate shows.

NINE YEARS OF DEVOTED SERVICE

At the 50th Annual Meeting on 9th February, 1970, Mr. D. W. Daniel resigned as Observatory Director as he was leaving the city. He commended Mr. Lemon on the work carried out on his behalf and expressed the wish that he be appointed Director.

In his resignation speech Mr. Daniel outlined his experiences during his term as Director, and said that he was appointed with very little knowledge of Astronomy but he had acquired a

THE SOCIETY TODAY

A report by R. A. Lemon,
Observatory Director.

considerable amount of knowledge of the subject as his term was like a nine year long Quiz Show, with the contestants asking questions about anything and everything that was above the ground.

Miss R. Wilson who had been appointed the first Junior Delegate moved into the Secretary's chair and her brother Mr. A. Wilson was elected Treasurer.

Mr. Lemon pointed out that the Director's job was becoming too great for one man to cope with, due mainly to the membership which was rapidly approaching 150. In view of this Mr. Pomeroy was appointed as Assistant Director. The meeting unanimously re-elected Mr. F. M. White as President for the 10th successive year.

The new Executive Committee's first task was to organise a programme to mark the Society's 50th Anniversary to be held in August, 1970. The Official Opening of the building extensions in August was to have been carried out by Mr. I. L. Thomsen Director of Wellington's Carter Observatory, but his sudden death in December, 1969 came as a great shock to his friends in the Society and well known astronomer Mr. Peter Read was invited to take his place.

It is interesting to note that part of the Anniversary celebrations—in the form of a Buffet Dinner and a lecture by Peter Read—would be held in the War Memorial Hall which stands on the site where the Rev. Oscar Blundell inaugurated the New Plymouth Astronomical Society in 1919.

1970 is proving to be an extremely interesting and eventful year for the Society in more ways than one. At the beginning of the year Comet Tago-Sato-Kosaka closely followed by Comet Bennett provided Society members with plenty of scientific work. In addition considerable public interest in these two visitors from outer space boosted attendance figures at the Observatory appreciably. The Society also received a good deal of publicity from the press—a most valuable ingredient to the very existence of any voluntary organisation.

April saw the dreams of Society members coming true with the start to the building extensions and general improvement to facilities. The weather over the period of construction was generally good so progress was steady. Early in May the builder moved out and the Society moved in to complete such things as linings, electrical work and painting. In most voluntary projects sufficient manpower is often a problem but in this particular instance it has been most encouraging to see 'working bees' of Senior and Junior members at the Observatory almost every weekend either painting, putting, sanding or generally renovating existing facilities. This is a healthy sign as it shows there are members who are keenly interested in the welfare and very existence of their Society.

Membership has increased steadily during the year and now stands at 160. Under the supervision of the Society's Instrument Curator Mr. M. Gray a training programme has been undertaken to instruct several more Senior members in the handling of the Observatory's telescopes and allied equipment. This programme culminates in the members gaining their Trained Observers Certificate and subsequently releases the strain placed on the existing team of observers who are having to cope with more visitors. So far this year nearly 1300 people have visited the Observatory; this number includes visits from special groups such as Scouts, Cubs, Church and Youth organisations.

With an increase in the amount of science within their curriculum today, schools are making ever increasing use of the Observatory and its facilities. In 1969 a pilot scheme was tried with a special group of Form 1 and 2 children from the Bell Block Primary School. Monthly lectures were held at the Observatory and the youngsters were taken through a fairly extensive study of Astronomy. Practical work with the Observatory's instruments and visual aids such as models, slides, filmstrips, and movies were all incorporated in the course to help stimulate the pupils' interest. Each lecture was followed by discussions, projects and further research back in the classroom. The response from the children was wonderful and they assimilated the material given

with very little difficulty. A number of facts and benefits became apparent from this experiment; several Senior Society members were involved and gained valuable training in the conducting of lectures. Contacts were made into the community through the class teacher Mrs. M. Wall and the children's parents thus creating goodwill, publicity and interest in the Society. The word soon spread about this particular scheme and other schools have since tried it with good results.

The genuine interest and generous assistance of the United States Information Service in Wellington together with local business houses such as Camerland, Hobarts Furniture Ltd., Hughsons Hardware Ltd., and Manchester House has given the Society confidence to carry on this particular service to the community. This, together with the support of the general public and all the activity from within the Society, has encouraged the Executive Committee to prepare plans for further extensions the details of which are dealt with in another chapter. It is an ambitious—and expensive—project; but then, nothing worthwhile is easily accomplished.

RICHARD LEMON,
Director.

August, 1970.

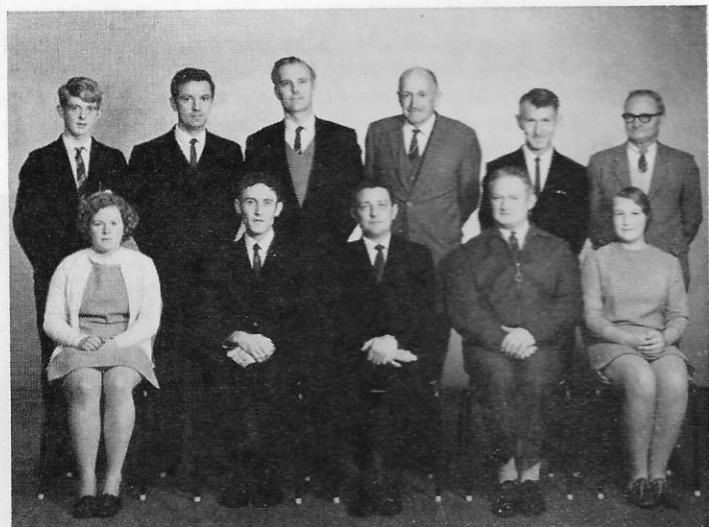


Photo: Charters & Guthrie Associates Ltd., New Plymouth.

EXECUTIVE COMMITTEE 1970

Back Row, from left to right: Messrs. A. WILSON (Treasurer), P. F. WOODS, J. P. CHAPPLE, L. M. STEPHENSON (Electrician), J. BELL, M. E. GRAY (Instrument Curator).

Front Row, from left to right: Miss R. WILSON (Secretary), Messrs. R. A. LEMON (Director), P. Y. HOSKIN (Vice President), G. POMEROY (Assistant Director), Miss B. HALES.

Absent: Messrs. F. M. WHITE (President) and J. FATHERS.

SCIENTIFICALLY SPEAKING

A report on the Observatory's scientific programme
by the Assistant Director, Mr. G. Pomeroy

Man in his relentless pursuit of the unknown has crossed space and set foot on our Moon thus opening up an exciting new era of exploration. As astronaut Armstrong said as he stepped down to be the first human on the lunar surface; 'That's one small step for man. One giant leap for mankind'.

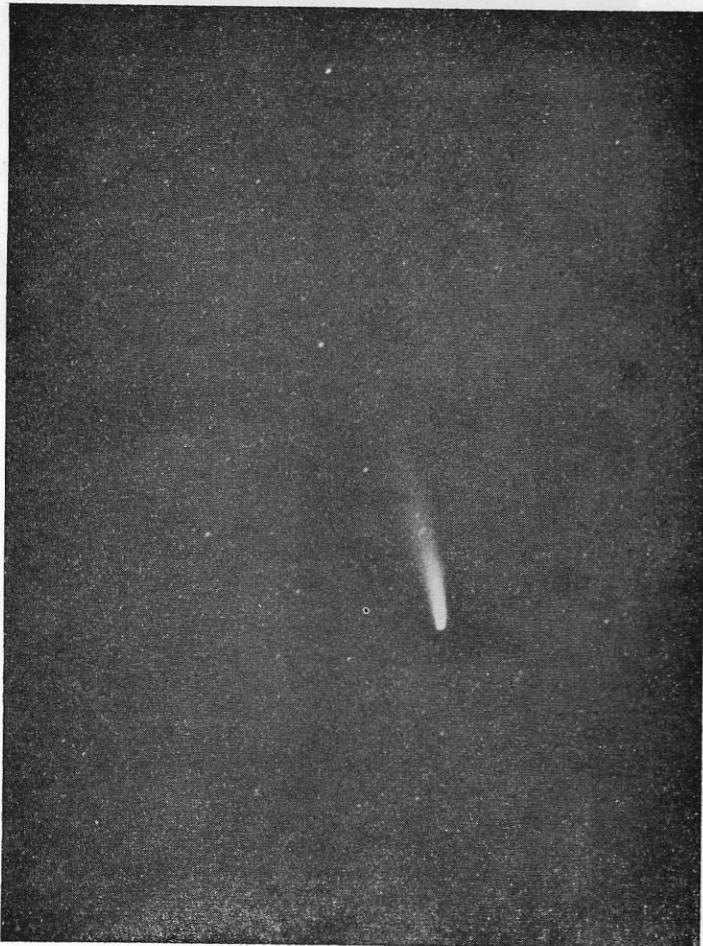


Photo: M. J. Bell

COMET BENNETT FROM MARSLAND HILL

Mankind's courageous astronauts, comets Tago-Sato-Kosaka and Bennett, the transit of Mercury, and the occultation of the first magnitude star Antares by the Moon have all helped to make this a memorable and busy year for the Marsland Hill Observatory. The public interest has been at times overwhelming and both Senior and Junior membership has gone beyond all expectations. Besides catering for public interest the Observatory staff has undertaken scientific study of celestial phenomena.

For the American authorities diligent 'Moonwatch' programmes prior to the Apollo 11, 12 and 13 missions were carried out to determine any unusual occurrence on the lunar surface most spectacular being Bennett —a magnificent sight. This particular object gave the Society's astro-photographers a chance to take some good photos.

The occultation of Antares by the Moon recently was only observed in its latter stages thanks to scattered cloud cover. Speed, size and proximity to Earth can all be determined from studying occultations such as this one.

The transit of the planet Mercury across the Solar disk early in May was hopefully attempted. Despite poor weather conditions, enthusiasm never waned amongst those who attended.

With the very favourable Inferior Conjunction (opposition) of Mars in August, 1971 direct viewing will be of great interest and just one of the unending celestial activities to look forward to in the coming year.

The enthusiastic activities behind the scenes of many of our younger members is most impressive. The careful recording of meteors and meteor showers by Bruce Smithers is most commendable. Also in the offing is a Radio Telescope being manufactured by Franz Mundt and Robert Fuller from Inglewood. Several other youngsters are engaged in the planning or construction of optical telescopes of various shapes and sizes. These young members, along with many other youngsters all over the world, are the pathfinders in man's future attempts to understand our abounding Universe and reach for the stars.

GORDON POMEROY,
Assistant Director,

August, 1970.

WHAT NEXT?

What will be the Society's role during the next 50 years? This mainly rests with the future of Astronomy itself. The New Plymouth Observatory is already involved in the Space Age. With further exploration of space planned using both robot and manned vehicles, the Society will be playing a very important role.

Astronomers are making new discoveries at such a rate that it is impossible to learn everything there is to know from books, therefore the only way to learn is to join a group such as the New Plymouth Astronomical Society and be on the spot to keep up with the ever changing Universe.

The plans for modernisation are still progressing; the housing for the Society's second main telescope (possibly a 15" Reflector) is already built and the somewhat costly project for the dome is now being closely looked into. In addition to this within the next five years the Society aims to provide the people of Taranaki—and especially of New Plymouth—with a Planetarium, which will show the wonders of the Universe at any time, any weather, at the flick of a switch.

If present trends continue it is obvious that the Society's role in the educational field—let alone any other—will become increasingly more important. The usefulness of the Society in this respect has been proven beyond doubt and with the improved facilities envisaged in the not too distant future, serious thought will have to be given to the idea of a full time Scientific Adviser within the Society available to the district's schools and to any other interested organisations.

We, the members of the Astronomical Society, are moving with the Space Age. The 1970's will see increasing activity in the heavens. The interest of people in Taranaki and throughout the world will be turned in the remaining years of this century towards the new frontier of the sky—a frontier stretching to infinity.

The sky is a vast arena of ever changing activity. Its wonders, revealed by the telescope and the instruments used with it, ensnare both the professional and amateur Astronomer with their fascination.

The facts of Astronomy encourage humility in the observer, most people today however, are still surprisingly unaware of the Universe in which they live. In this day and age, such an attitude becomes a decided handicap.

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