

Copied for J.E.

ASTRONOMICAL SOCIETY OF SOUTHERN AFRICA

Minutes of Annual General Meeting held at the S A Astronomical Observatory, Cape Town on Wednesday 1979 July 25 at 20h00.

PRESENT Mr R F Hurly (in the chair) approximately 20 members and 20 visitors.

APOLOGIES for absence received from Prof. Warner, Drs. Fairall and Wild, Messrs Bennett, Bondietti, Krumm, Morresby Parker, Vincent Uttley.

MINUTES of previous Annual General Meeting held 1978 July had appeared in MNASSA and were therefore taken as read and adopted.

MATTERS ARISING nil

FINANCE The financial statement was read by the Hon. Treasurer Mr Orpen and adopted. This appears as an annexure to the minutes.
Mr Turk presented the financial statement relating to the Endowment Trust. This was at the 31 December 1978. At the current date the credit balance had reached R500-. The statement appears as an annexure to these minutes.

AUDITORS Mr H Larmuth and Mr H Molyneux were re-elected.

OBSERVING SECTION REPORTS

Mr Turk read the reports of the Comet and Meteor and Nova Search sections received from the Director Mr J Bennett. Mr Turk also presented the report of the Occultation Section received from its Director Mr Morrisby. The outstanding contribution by

Dr Fuhr was noted as well as the sterling work done by others, notably Messrs Morrisby and Vincent. Mr J Hers, Director of the Variable Stars Section had made a special journey from Sedgefield to be present. He was warmly welcomed by the Chairman Mr Hurly. Mr Hers read the report of his section, comment on the good observing work done by many but stressed the need for more members to assist in this valuable contribution to astronomical research. MR Hers also read the report of the Grazing Occultation Section, of which he is Director.

These reports appear as an annexure to these minutes.

COUNCIL REPORT for the year ended 30 June 1979. This was read by Mr Hurly and adopted.

NEW COUNCIL

The new Council for the year 1979/80 was announced to be as follows:-

President	Dr M Feast
Vice Presidents	Dr E E Baart
	Mr M A Gray
	Mr R Hurly
Members	Mr J Hers
	Prof B Warner
	Mr G Muller
	Mr J Vincent
Hon. Treasurer	Mr G Orpen
Hon. Secretary	Mr T W Russo

Only sufficient nominations to fill the positions had been received, and a ballot had not been necessary.

Mr Hurly then vacated the chair, which was taken by Dr Feast.

Dr Feast called upon Mr Hurly to deliver his Presidential address on Surveyors and Astronomers. This proved to be enjoyable and informative and was followed by rapt attention by the audience. This will appear as an annexure to the Minutes and will appear in MNASSA for the benefit of those not privileged to attend.

Dr Feast thanked the speaker and referred to his sterling work in Society affairs and for his year in office as President.

The meeting adjourned at 22h00 for tea and biscuits and social get-together.

T W Russo
HON. SECRETARY

CHAIRMAN

ASTRONOMICAL SOCIETY OF SOUTHERN AFRICA.

FINANCIAL STATEMENT FOR THE YEAR ENDED 30th JUNE 1979.

EXPENDITURE.

RECEIPTS.

	R. c.		R. c.
Subscription to "Sky & Telescope" for the year	4365-96	Credit Balance at 1/7/1978	80-13
Cost of production of M.N.A.S.S.A., May 1978 to April 1979	1904-44	<u>Subscriptions.</u>	
Expenditure on reproduction of Back Numbers of M.N.A.S.S.A.	10-48	Arrears	34-50
Cost of reprints of articles in M.N.A.S.S.A.	120-88	Current	6434-25
Cost of production of Handbook for 1979	714-48	Advance	<u>250-98</u>
Addressing & despatch of publications	221-95	Entrance Fees	147-50
Postage on publications (current)	559-09	Sale of M.N.A.S.S.A.	915-94
Postage on M.N.A.S.S.A. Back Nos.	5-95	Sale of reproduced Back Numbers of M.N.A.S.S.A.	110-90
Stationery and equipment	414-37	Page charges for articles in M.N.A.S.S.A. and sale of reprints	182-58
Postage, other than above	44-32	Sale of Handbooks	469-00
Import Surcharge on "Sky and Telescope"	301-82	Sale of back nos. and extra copies of "Sky & Telescope"	36-68
Essay Competition Prizes	40-00	Donations	8-00
December 1977 "Centrepiece" Christmas Competition Prizes	12-00	Advertisements in M.N.A.S.S.A.	75-00
Variable Star Charts	10-00	Interest on Building Society Shares (Forbes Bequest)	18-17
Insurance of Society's Telescopes	24-24	Interest on Fixed Deposit	100-00
Fire Insurance premium	20-20	Interest on "Plusplan" Savings Account	170-34
Transferred to "Plusplan" A/c., August and September 1978	3700-00	Repayment of loan arranged to establish Endowment Trust	30-00
Bank charges	96-25	Withdrawn from "Plusplan" A/c., October 1978 to June 1979	3500-00
Credit Balance at 30/6/1979	103-76	Commission on cheques, airmail postage paid and exchange gains	106-10
	<u>R.12670-17</u>		<u>R.12670-17</u>

An amount of R1000-00 is on Fixed Deposit with the United Building Society at an interest rate of 10%. An amount of R700 was held in a "Plusplan" Savings Account with the Standard Bank, Heerengracht Branch at 30th June 1979. This amount varies according to requirements and reached a maximum of R4200 during September 1978. The interest rate was 8%; but has now been reduced to 6%.

The Society also stands possessor of four shares in the S.A. Permanent Building Society to a total value of R200, per Certificate C.15778, dated 18/5/1960, and of equipment and apparatus insured against fire under Policy A.01/01314, dated 27/2/1960 in the amount of R1000 with the Southern Insurance Association. The Society's telescopes are also insured against all risks under Lloyd's Policy no. DCP. 278 with the firm of Stenhouse, Hogg, Robinson, Pty. (Ltd.) of Durban. The Centres which have telescopes on loan to them pay a pro rata share of the premium.

The balance in the McIntyre Award Account is now R1474-98, of which R1000-00 is on Fixed Deposit with the United Building Society at interest rates of 8% for R450 and 10% for R550. There has been no award during the year.

Gerrit Oshen
HON. TREASURER.

A. Samuel
HON. AUDITORS.

ASTRONOMICAL SOCIETY OF SOUTHERN AFRICA

Report of Council for the year ended 1979 June 30.

Five Council meetings were held during the year with an average attendance of 12 members/alternates.

The total membership as at June 30 was 488 of whom 7 are still suspended for non-payment of 1978/79 subscriptions.

Comparative figures for last year are 507 and 30. While there is an improvement in the position as regards the number of suspensions the total membership shows a slight drop. It should be mentioned that at the end of October last year the number of members in default was 61. This was four months after the start of the Society's year on July 1. The Hon. Treasurer would feel happier if members could remember to meet their dues at an earlier date. Apart from laying extra burden on the Hon. Treasurer, there is the uncertainty as to how many will still be continuing their membership. The Society still has to meet its financial obligations as they fall due.

Publications

Publication of MNASSA has continued on a bi-monthly basis.

The editors are grateful to Professor Brian Warner for allowing the Notes to be typed in the Astronomy Department, and to Mrs. P. Dobbie for the efficient way in which she deals with this work.

Mr. David Block has agreed to become co-editor and Mr. J.

Spencer-Jones is now the Advertising Manager.

Forbes Essay Competition

In view of the small number of entries in 1978, it was decided not to hold a competition this year. It is anticipated that the matter will be reviewed by the new Council for the ensuing year.

McIntyre Award

No award has been made.

Finance

The cost of Sky & Telescope to the Society is increasing from July 1. The effect on the finances of the Society is uncertain and a close watch will be kept on the situation.

The Society Trust Fund has a balance of R361.00 as at 31 December.

Proposed Revised Constitution

A draft agreed upon by Council, has been circulated to all members with a ballot form, giving them the option to accept or reject the proposals. The result is not yet known.

Personal

It is with regret that we record the death of Dr W S Finsen, a past president of the Society. He was a keen member for many years and in recognition of his services to Astronomy was made an Honorary member. Prior to his retirement he was Director of the Republic Observatory in Johannesburg. He was awarded the Society's Gill medal in 1967.

MNASSA

Mr D Block of the University of Cape Town has now agreed to assist Mr J Churms with the Editorship of this publication of the Society. Further assistance is still very necessary and is being sought. Grateful thanks to Mr Churms for carrying the responsibility for MNASSA on his own.

Annual Handbook

This is increasingly popular. All members receive a copy gratis and many are supplied to non-members at a reasonable cost. The Society is indebted to Mr Hurly and his helpers, Mr C Larmuth and Mr ⁹Larmuth.

Acknowledgements

Once again we must place on record our appreciation of the duties undertaken by the Director of Observing Sections and all those taking an active part in the observing.

Committees of the various Centres are thanked for the enthusiastic activities provided for members in their particular areas.

Thanks are also due to the Director of the S A Astronomical Observatory for facilities provided for meetings and accommodation for the Hon. Secretary.

Thanks to Mrs P J K Dobbie for typing of MNASSA. Thanks especially are also due to the Hon. Secretary, Mr Russo and to the Hon. Treasurer Mr Orpen, and to Mr W C Bentley the Business Manager.

Members will be pleased to hear that, the Provincial Administration has voted R15 000 towards the interest and redemption charges for the New Planetarium to be erected at the S.A. Museum, Cape Town.

R F Hurly
PRESIDENT

ASSA ENDOWMENT TRUST (ASSET)


Balance Sheet as at 31st December, 1978.

<u>Trust Capital</u>		^ 335-10
Creditors: Interest-free loan		^ 30-00
Postage (Secretary)		^ 1-00
		<hr/> <u>R 366-10</u>
 <u>Represented by:</u>		
Investments:		361-01
United Building Society 8,5% Shares	^ 300-00	
" " " Savings A/c	^ 1-02	
Nedfin Bank Ltd., Savings Account	^ 59-99	
Excess of Expenditure over Income		5-09
		<hr/> <u>R 366-10</u>

Income and Expenditure Account
for the year to 31st December, 1978.

Income:		
Dividends and interest received		^ 23-57
Deduct Expenses:		
Postages		^ 1-00
Excess of Income over Expenditure for the year:		^ 22-57
Excess of Expenditure over Income from previous period:		^ 27-66
Excess of Expenditure over Income carried forward:		R ^ 5-09

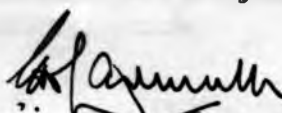
- Notes
1. The Building Society Shares may be converted to Fixed Period Shares with a guaranteed interest rate of 9% p.a. for a period five years, subject to a minimum holding of R500-00.
Present Shares: R100-00 from 23 August, 1977.
R200-00 from 19 December, 1978.
 2. It will be possible to repay the interest-free loan in full from income by the end of March 1979, after which the Trust will be fully self-sufficient.


.....
Trustee


.....
Secretary

REPORT OF THE AUDITOR TO THE TRUSTEES OF ASSA ENDOWMENT TRUST

I have examined the above balance sheet and income and expenditure account which in my opinion respectively give a true and fair view of the state of the ASSA Endowment Trust's affairs as at 31st December 1978, and of its income and expenditure for the year ended on that date.


G.H. Larmuth.
Honorary Auditor.

COMET AND METEOR SECTION

COMETS

P/Haneda-Campos 1978j. The highlight of the year under review was the discovery on 1978 September 1.88 by Section member José A. da Silva Campos of this comet which has a period of only 5.989 years. Omitting a few apparently lost comets which have not been observed for more than 30 years, there are only 9 known comets of shorter period than José's. From magnitude ~ 8.5 at discovery, the comet was fainter than 11th magnitude when observed by the Director from Pretoria on September 6 (not October 6 as erroneously stated in his report in MNASSA 37, 119, 1978.)

The following comets were also observed from Pretoria with a 12cm s.f. refractor and a 20cm Celestron telescope:-

Machholz 1978L.

1978 UT
October 6.94: Position (1950) R.A. 6h 02m, Decl. $-41^{\circ}55'$. Comet small, diffuse, 11th magnitude; just visible in 12cm refractor. Conditions very good after weeks of poor weather.

Seargent 1978m.

1978 UT
November 6.87: Small, faint diffuse patch, no central condensation seen. Magnitude 9 approx. Conditions poor; moonlight a hindrance.

Meier 1978f.

November 9.09: Comet almost stellar, estimated magnitude 6.0 (comparison star SAO 204992).

29.09: Still stellar, but magnitude 7.3 (comparison stars SAO 225845/6 and 225852).

On both occasions the comet was at a very low altitude and the dawn not far away. Owing to adverse weather conditions these were the only two observations the Director was able to make of the comet when it appeared in the morning sky after conjunction with the sun.

Comet-sweeping was undertaken as follows:

	<u>Evening sky</u>	<u>Morning sky</u>	<u>Total</u>	<u>Instrument(s)</u>
J.A. da Silva Campos, Durban.	59h 40m	18h 20m	78 hrs.	12cm s.f. refractor.
J.C. Bennett, Pretoria	39h 30m	7h	46½h.	12cm s.f. refractor, & 20cm Celestron.

Bradfield 1979c.

William A. Bradfield of Dernancourt near Adelaide, Australia, found this, his ninth comet, on 1979 June 24.417. The tenth-magnitude object was in position R.A. 8h 37m 15s, Decl. $-1^{\circ}20'$ (1950) and was moving North-Westwards. After perihelion on

/1979 July.....

1979 July 23.405 the comet will become observable from the Northern hemisphere in early August when the magnitude will be $\sim 8-9$. No reports have as yet been received of observations made from Southern Africa.

Thanks are expressed to the Director of the IAU Telegram Bureau and to the Director of the SAAO for the supply of IAU circulars and copies of IAU comet telegrams respectively.

METEORS

New Shower in Pyxis? Mr T. P. Cooper of Sasolburg reported that on the night of 1979 March 6 between 21h and 23h 11m S.A.S.T. he observed a total of 14 meteors coming from a radiant in the approximate position 9h (135°), -35° . The meteors ranged in brightness from 1st to 4th magnitude. A watch should be kept on this position in future years.

April June Lyrids. In a watch of one hour beginning at 23h 30m S.A.S.T. on 1979 April 21 at Mount Edgecombe, Messrs José Campos and Raymond Field recorded only one probable Lyrid of magnitude 2, and four sporadic meteors of magnitude 4 to 4.5. Cloud interfered, making conditions rather poor.

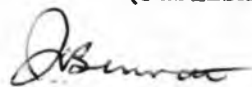
Ophiuchids. At Woodhaven, Durban, on the night of 1979 June 23 in an hour's watch from 21h S.A.S.T., José Campos recorded no Ophiuchid meteors and only one sporadic meteor. The limiting magnitude of stars near the radiant was 5.0. There is some doubt as to the date of maximum of this shower. The American Meteor Society gives 13th June as maximum for the "Theta Ophiuchids" and the British Astronomical Association 20th June for the "Ophiuchids". (See *MNASSA* 33, 129, 1974.)

New Shower in Cetus. On the morning of 1979 June 27 the Director observed four meteors coming from the suspected radiant (2h, -15°) in one hour, and on June 28 only two shower meteors were observed in a watch of one hour. The radiant undoubtedly exists, but ^{the shower} is not as prolific as seemed indicated by the fine display of 1977 June 28. (Published separately.)

Fireballs. Reports were received from the following persons concerning phenomena observed on the dates mentioned:-

1978 September 2:	Master Kevin Engelbrecht, near Pretoria.
1978 December 19:	Mr W. Keet, Menlo Park, Pretoria.
1979 February 5:	Mr W. R. Douglas, Pinelands, Cape Town.
1979 May 14:	Mr José Campos, Woodhaven, Durban.

(Published separately.)


J. C. BENNETT
DIRECTOR.

VARIABLE STAR SECTION

Director: J. Hers

REPORT FOR THE PERIOD JULY 1978 - JUNE 1979

The number of observations made during the year shows a healthy growth of nearly 50% when compared to the previous year. While most observers confined themselves to long period variables, M.G. Jackson gave particular attention to the dwarf novae, and about half his observations are of stars of this type. Unlike LPV's, for which one observation about every 10 days will suffice, the dwarf novae - or eruptive variables - need to be observed on every possible occasion, so that no outburst will be overlooked, and even the shortest outburst carefully followed from beginning to end.

It is therefore of the greatest importance that this work should be shared by as many observers as possible, preferably located in different parts of the country, where weather conditions are different. As many of the dwarf novae are rather faint, there is a special need for observers with instruments of large aperture, say 20 cm and over.

The fact that about half the number of observers are responsible for some 95% of all observations may well deter prospective new observers, who might feel that their relatively small output is of no importance when compared to the large output of others. Actually this is very far from being the case. An accurate assessment of a variable star's magnitude calls for the averaging of the estimates of a large number of observers, working with different instruments, and under different conditions. It is undesirable to rely on the measures of a few observers only, and new observers can rest assured that even a few measures - if conscientiously made - will be given full weight when the final light curves are established.

Observations reported during 1978/1979 are as follows:

<u>OBSERVER</u>	<u>NO. OF OBSERVATIONS</u>	<u>NO. OF STARS</u>
D.L. Blane	51	7
J.A. da Silva Campos	223	29
T. Cooper	18	1
W.R. Douglas	4	2
K. Engelbrecht	9	5
J. Hers	186	71
M.G. Jackson	1917	147
M.A. Komorous	560	24
G.L. Prosser	381	84
D. Strydom	43	6
J. Vincent	181	27
TOTAL	<hr/> 3573	

GRAZING OCCULTATION SECTION

Director: J. Hers

REPORT FOR THE PERIOD JULY 1978 - JUNE 1979

It was suggested recently that the present fuel difficulties might possibly mean the end of grazing occultation expeditions. While it is doubtless true that expeditions to very distant sites will become more difficult, there will always be events which can be observed so near home that transport is really no problem.

On 1979 March 3 a team from Durban organised a highly successful expedition to Mtwalume, on the South Coast, proving - if this were indeed necessary - that even on the Natal coast observing conditions can at times be excellent. The Durban observers are now impatiently waiting for the next event, and we wish them even better results next time.

One way in which some of the problems of distance can be overcome is by the use of better equipment, to observe grazes which occur nearer home, but which, being rated as 'marginal', are usually beyond the scope of smaller instruments. To give an example: both grazes at Plettenberg Bay were marginal ones, but with a Celestron 8 both could be timed without difficulty. With an instrument like, say, a 75 mm refractor, this would have been very difficult, if not impossible.

The larger instrument proved equally effective on April 16 at Uniondale, where separate timings were obtained of the two components of a double star (ZC 2495, magnitudes 6.3 and 7.4). With a smaller instrument this would not have been possible.

On April 21 the successful observations by the Johannesburg team of a graze at Pienaarsriver nearly came to grief by strong radio interference of ZUO, radiated by nearby power lines. In future it should be a matter of high priority for observers to carry their own time with them, and not to rely solely on radio time signals. Now that accurate digital watches are commonplace, this is not as great a problem as it used to be, although some ingenuity will be needed to use such watches for timing multiple events.

After the end of 1978 it became impractical to continue the local computation of graze predictions, and this work is now done by the International Occultation Timing Association (I.O.T.A.) in the U.S.A. We are very grateful for the predictions and profiles supplied by messrs Joseph H. Senne and Tom L. Webber.

The following list shows a gratifying increase in the number of grazes observed.

	<u>DATE</u>	<u>STAR</u>	<u>LOCATION</u>	<u>ORGANISER</u>	<u>NO.OF STATIONS</u>	<u>NO.OF TIMINGS</u>
1978	July 31	ZC 862	Randburg (Lanseria)	J. Hers	2	7
	Aug. 7	SAO 119009	Nigel	L. Pazzi	1	miss
	Oct. 26	ZC 1442	Reddersburg	G.N. Walker	2	8
	Dec. 22	SAO 118917	Randburg (Riversands)	J. Hers	1	2
1979	Feb. 25	SAO 164138	Plettenberg Bay	J. Hers	1	2
	Mar. 3	ZC 3015	Mtwalume	S. Appleton	5	14 ?
	Apr. 16	ZC 2495	Uniondale	J. Hers	1	18
	Apr. 21	ZC 3131	Pienaarsriver	J. Barsby	7	12
	June 28	SAO 98715	Plettenberg Bay	J. Hers	1	2

NOVA SEARCH SECTION

Section members made a total of 1208 searches of their allotted areas during the year ended 1979 June 30.

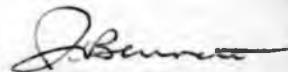
Reports were received from the following observers:-

	<u>Searches.</u>
S. J. Vercueil, Johannesburg	439
Dr G. Conradie, Cape Town	217
J. Mc Bain, Bulawayo	121
T. Cooper, Sasolburg	119
R. Gordon, Durban	116
M. Poll, Bulawayo	111
C, A. Pereira, Johannesburg	63
A. G. F. Morrisby, Bulawayo	11
W. R. Douglas, Cape Town	11

Thanks are expressed to ~~the~~^{the} stalwarts who carry on the work so faithfully.

The Director would like to hear from any members who are experiencing difficulty, or who wish to be given new search areas. Newcomers will be very welcome.

Members who find that they are unable to do any searching are requested to return their charts for re-allocation.



J. C. BENNETT
DIRECTOR.

Report of the Occultation Section

It is always a pleasure to prepare the annual report; the stark figures given in the table represent a great deal of work. I am particularly pleased, this year, to be able to include Dr. Fuhr's totals which reached me, this year, in good time to meet the deadline. Dr. Fuhr is not a young man and was laid up for some weeks this year following a bad fall. We all wish him well again.

I would have liked to have included Norrie Macdonald and Richard Fleet in the report. I know they have made occultation timings, but I believe they are at present "somewhere in the bush".

The following table gives the breakdown of observations received:-

K.G. Fuhr	<u>Disappearance</u>	<u>Reappearances</u>	<u>Total</u>
K.G. Fuhr	218	184	402
J. Hers	28	3	31
A.S. Hilton	73	18	91
H.E. Krumm	88	-	88
G.R. Marshall	18	6	24
A.G.F. Morrisby	76	54	130
L. Pazzi	37	9	46
G. Richardson	3	-	3
C.R.G. Turk	23	4	27
J.V. Vincent	136	71	207
	<hr/>	<hr/>	<hr/>
Totals	554 700	340 349	894 1049

Arthur Mainby.

A.G.F. Morrisby

DIRECTOR