

Registrar of Companies



UNITED KINGDOM MATHEMATICS TRUST

Report and financial statements

Period ended 31 July 1997



Officers and advisors

DIRECTORS

Dr R W Bray
Professor J Brindley
Mrs M T Fyfe
Dr A D Gardiner
Mr T J Heard
Miss S G Jameson
Dr A C McBride
Dr P M Neumann
Mr D J Orton
Mr W P Richardson
Dr A B Slomson
Professor J Wiegold

SECRETARY

Dr R W Bray

REGISTERED OFFICE

21 Albemarle Street London W1X 4BS

ACCOUNTANTS

BDO Stoy Hayward Mander House Wolverhampton West Midlands WV1 3NF

BANKERS

Lloyds Bank plc 4 West Street Havant Hampshire PO9 1PE and 6/7 Park Row Leeds LS1 1NX

Company registration number 3271283

Registered charity number 1059125

Report of the Trustees for the year ended 31 July 1997

1. Constitution of the Trust

The Trust was incorporated on 30 October 1996. It is a company limited by guarantee, registration number 3271283, and is registered with the Charity Commission as Charity No. 1059125. It was founded under the patronage of the Royal Institution of Great Britain and its registered address is that of the Royal Institution, 21 Albemarle Street, London W1X 4BS. The governing document is the Memorandum and Articles of Association.

The directors of the Trust are also the Trustees for charity law purposes.

The governing body of the Trust is its Council, and its Trustees are precisely the members of the Council.

2. Main Objects

The Trust is established to advance the education of children and young people in mathematics, in particular by organising and running mathematics competitions.

3. Foundation of the Trust

In recent years mathematics competitions were run for the schools and school children of the United Kingdom by a number of different bodies. There were the British Mathematical Olympiad Committee, the National Committee for Mathematical Contests, and the UK Mathematics Foundation. Between them, these ran some nine or ten competitions each year. At meetings of interested parties held in York in February 1995 and the Royal Institution in September that year it was agreed to seek ways of setting up a body which would be well enough established that it could make contracts for the large amount of administrative work required, and which would be flexible enough to coordinate efforts. Accordingly, the Director of the Royal Institution invited a working party to draw up plans. In March 1996 the working party sought legal advice on the form that the UKMT should take and the steps necessary to found it. Although the legal drafting of the Trust's constitution is considerably different from what had originally been envisaged by the working party, the form and operation of the Trust is close to what had been recommended.

There were considerable costs billed for the legalities of the foundation of the UKMT. These were met by generous grants from the following bodies (listed in alphabetical order):

The British Mathematical Olympiad Committee;

The London Mathematical Society;

The Mathematical Association;

The Royal Institution of Great Britain;

The UK Mathematics Foundation.

The Trust was formed during the summer of 1996. The Royal Institution of Great Britain has accepted appointment as its Parent Body under Article 1.1 of the constitution. Under the same article The Mathematical Association has accepted appointment as a Participating Body and the Association of Teachers of Mathematics, the Edinburgh Mathematical Society,

the Institute of Mathematics and Its Applications, the London Mathematical Society and the Royal Society have accepted appointment as Supporting Bodies.

Under Articles 42 and 52 the Royal Institution appointed the Chairman and two of the Members of Council. Thereafter the Council was put together by a 'bootstrapping' mechanism. Initially the appointment of The Mathematical Association as a Participating Body was approved and the first additional members of Council were appointed or co-opted. The first Council meeting was held in Birmingham on 11 September 1996 and by the second meeting, on 25 October, 1996 at the Royal Institution, the first Subtrust had been established and Supporting Bodies appointed. Further appointments have subsequently been approved but a few vacancies in membership of Council still remain.

4. Membership

The Trustees during the period, all of whom were appointed on incorporation except where otherwise noted, were:

Dr R W Bray

Professor J Brindley

Dr A D Gardiner

Mr T J Heard

Miss S G Jameson

Dr A C McBride

Dr P M Neumann

Mr D J Orton

Mr W P Richardson (appointed 21 March 1997)

Dr A B Slomson

Mr P A J Thomas (resigned 1 January 1997)

Professor J Wiegold (appointed 21 March 1997)

Peter Thomas remains a member of the UKMT, although not on Council. As a member of the original working party set up by the Royal Institution he invested a large amount of time and successful hard work in getting the UKMT started. Council's very warm appreciation of his major contributions were recorded in the Minutes of the Council meeting of 21 March 1997.

Mrs M T Fyfe was appointed a trustee on 1 August 1997.

5. Structure of the UKMT

The Trust has four 'subtrusts' (termed 'Represented Branches' in the Articles). Each of these subtrusts is in charge of one of the spheres of UKMT activity; each has its own membership and its own financial arrangements subordinate to those of the main trust. These subtrusts are as follows:

- The Junior and Intermediate Challenges Subtrust (JICS), whose major responsibility is the running of the mass entry mathematics challenges for school pupils aged between 12 and 16 approximately;
- The Junior Olympiad Subtrust (JOS) which runs the more advanced, more specialised competitions and selective training for school pupils aged between 12 and 16 approximately;
- The Senior Challenge Subtrust (SCS) which runs the mass entry challenge aimed mainly at school pupils aged 16 or over;
- The Senior Olympiad Subtrust, known as the British Mathematical Olympiad Committee (BMOC), which runs the selective olympiad activities for school pupils aged 16 or over.

Of these, the JICS was formed in September 1996 to oversee the operations of the UK Maths Challenges Office in Leeds which was taking over the administration of the Junior and Intermediate Challenges from the UK Mathematics Foundation in Birmingham. The SCS was formed

in February 1997 to take over responsibility from the former National Committee for Mathematical Contests. The former British Mathematical Olympiad Committee became, with some administrative changes, the Senior Olympiad Subtrust. The JOS is in process of being formed and has, as yet, only a Chairman and one other member.

6. Junior and Intermediate Challenges Subtrust

The membership of the JICS is:

Professor J Brindley (University of Leeds, Chairman);
Dr A B Slomson (University of Leeds, Secretary and Treasurer);
Dr A D Gardiner (Birmingham University);
Mr A Jobbings (Bradford Grammar School);
Profesor J C Robson (University of Leeds).

The Maths Challenges Office at the University of Leeds was established when the Administrator, Heather Macklin, took up office on 8 July 1996. During the first year of operation both the Junior and Intermediate Mathematical Challenges (UKJMC and UKIMC) have been successfully organised and administered. There have been 4 subtrust meetings held at Leeds during that year.

- UKIMC 97 was held on Thursday, 6 February 1997: it attracted 125,180 entries from 1,644 schools (average entries per school: 76).
- UKJMC 97 was held on Tuesday, 29 April 1997: it attracted 131,970 entrants from 1,771 schools (average entries per school: 75).
- Junior Mathematical Olympiad papers and answer sheets were mailed to qualifiers with their JMC results. This mailing took place on 29 May 1997.

Administrative assistance was extended to the National Committee for Mathematical Contests: in November 1996 the Senior Mathematical Challenge answer sheets from participating schools (approximately 800) were processed in Leeds.

The UKMT and JICS acknowledge with gratitude a grant of £20K from the UK Mathematics Foundation to the UKMT earmarked for the work of the JICS. Fee income for the year amounted to a little over £130K and running costs were just over half of that sum.

7. Junior Olympiad Subtrust

At its meeting on 21 March 1997 Council agreed that the JOS was not to be formally constituted until 1 August 1997, just after the end of the period covered by this report. Nevertheless, some information is available. Membership presently is as follows:

Dr A D Gardiner (Birmingham University, *Chairman*); Mrs M T Fyfe (Hutchesons' Grammar School, Glasgow); Three vacancies.

The JOS is to be responsible for the UK Junior Mathematical Olympiad (approximately 1300 children from Years 7 and 8), the European Kangaroo (approximately 3000 Year 9), the International Intermediate Invitational Mathematical Challenge (approximately 600 Year 10 and 600 Year 11), and the Summer School that was founded in 1993 by Dr Gardiner for 60 students in Years 10 and 11. The major complexities of organising these activities were undertaken this year by Dr Gardiner single-handedly. For the future the JOS will spread the work-load more equitably.

8. Senior Challenge Subtrust

The membership of the SCS is:

Mr W P Richardson (Elgin Academy, Chairman); Miss P Smart (Dean Close School, Cheltenham, Secretary); Mr D F Archer (Bedales School, Petersfield, Treasurer); Mr C Dixon (Royal Grammar School, Newcastle); One vacancy.

As the direct successor of the National Committee for Mathematical Contests, a committee of The Mathematical Association that completed its work and was disbanded on 31 December 1996, the SCS has accepted responsibility for the UK Senior Mathematical Challenge (UKSMC). The first Challenge to be organised by the SCS will be held as usual on the third Friday of November, this year 21 November 1997. Over the last few years the UKSMC had grown to cater for 32,000 students from about 800 schools. On the basis of their performance in the 1996 Senior Challenge approximately 800 students were encouraged to enter BMO1, the first round of the British Mathematical Olympiad 1997.

9. Senior Olympiad Subtrust (BMOC)

The membership of the BMOC is:

Professor J Wiegold (University of Wales, Cardiff, Chairman); Dr C J Bradley (Clifton College, Bristol, Secretary); Dr A R Pears (University of London, Treasurer); Dr B J Wilson (Royal Holloway, University of London); Dr A C McBride (University of Strathclyde); Dr A D Gardiner (Birmingham University).

The former British Mathematical Olympiad Committee (BMOC) held its last meeting on 10 April 1997. The Senior Olympiad Subtrust is its successor, formed on that day. It held its inaugural meeting at Queen's College, Birmingham on 3 July 1997. At that meeting the five members appointed by the UKMT Council agreed to co-opt Dr Gardiner as an additional member. It was then also agreed to retain the name British Mathematical Olympiad Committee for the subtrust. The subtrust intends to meet four times per year. On two of those occasions its membership will be enhanced with (non-voting) co-opted members who perform various important tasks on behalf of the subtrust.

Most of the year's activities were organised by or on behalf of the BMOC in its previous form.

- In the 37th International Mathematical Olympiad at Bombay in July 1996, the six UK participants won two gold and four silver medals between them. Although the IMO is formally a competition for individuals, informally the UK came fifth out of seventy-five countries. The BMOC and UKMT are grateful to the Royal Society which kindly hosted the celebration on 16 September 1996 at which the Medals were presented by Sir Michael Atiyah and the annual lecture was given by Professor J C Robson on bell-ringing.
- The British Mathematical Olympiad 1997, Round 1, was organised by Dr Alan West of the University of Leeds. It took place on 15 January 1997 and was sat by about 800 students; 100 prizes were awarded.
- BMO 1997, Round 2 was organised by Dr Brian Wilson and Dr Christine Farmer of University of London, Royal Holloway, and took place on 27 February 1997. About 100 students were invited to take part. Of these 20 received invitations to the Trinity College training session in Cambridge.

- The annual Training Weekend was organised by Dr A C McBride, the IMO Team Leader, and was held at Trinity College, Cambridge, 10-13 April 1997. The BMOC and the UKMT are most grateful to Trinity College for having hosted for several years what is a unique opportunity to provide valuable instruction for twenty students. The Weekend closed with the Final Selection Test, a $4\frac{1}{2}$ hour paper of IMO standard. On the basis of all the information then available eight students were chosen for a correspondence course conducted by Dr McBride, during May and June, leading to the final selection of a team of six (with one reserve).
- Final Training: after the correspondence course, the team assembled at Queen's College, Birmingham for final training (held at the same time as Dr Tony Gardiner's Summer School for Years 10 and 11) 2-6 July 1997.
- The 38th International Mathematical Olympiad took place in Mar del Plata, Argentina 21–31 July 1997. The UK team with Adam McBride as Leader and Philip Coggins (Bedford School) as Deputy Leader was accompanied by Mr Michael Davies (Westminster School) as Observer. The six participants won 1 gold, 2 silver and 2 bronze medals between them. Unofficially the UK came 16th out of 82 countries.

For a number of years BMOC has published an account of the British Mathematical Olympiads, including the question papers and full solutions, with names of prizewinners. The Committee is indebted to Mr Tim Cross for the 1997 publication. One of the tasks that lies ahead for the Committee is to ensure the continuation of this publication and the possible development of publications to include much-needed further resource material for able pupils in schools.

During 1997 there were two Regional Circles encouraged and financed by BMOC. One was organised by Professor Piper at Royal Holloway, University of London and another by Dr Christopher Bradley at Clifton College, Bristol.

BMOC income and expenditure in 1996-97 were in balance at £20K. The main sources of income are a DfEE grant (£10K), donations from sponsors (£5K) and BMO entry fees (£4K). The main expenditure is on the training and travel of the IMO Team and on the BMO competitions.

10. Treasurer's report

Lloyds Bank Treasurer's Accounts have been opened for the UKMT, for the JICS and for the BMOC. Lloyds Bank Premier Interest Accounts (deposit accounts) have also been opened for the UKMT and BMOC. In each case two signatures (from the Chairman, Treasurer and Secretary for the UKMT account, and the Treasurers of the UKMT and the subtrust for the others) are required for sums of £1000 and more. For amounts less than this one signature is required. The accounts incur no banking charges and interest is paid at gross. Similar banking arrangements will be made for the other subtrusts in due course.

Subtrusts are expected to report regularly to the UKMT Treasurer. The JICS reports on a monthly basis and this has worked well. The BMOC will be reporting quarterly.

Inland Revenue have agreed that the Trust's income and gains, to the extent that they are applicable and applied to charitable purposes only, are exempt from tax. HM Customs and Excise have confirmed that the examination services the Trust provides are exempt from VAT.

Council appointed BDO Stoy Hayward (Wolverhampton) as reporting accountants for the year ending 31 July 1997. Their estimate for the work to provide an 'Accountant's Report', as opposed to a 'Full Audit' (which is not a legal requirement for the Trust), is £2950 plus VAT. The company provided advice and a written report to the Trust in setting up its financial structures.

11. Appreciation

Very many volunteers have been involved in all aspects of the successful setting and marking of competition papers, training of bright young mathematicians, and all the secretarial, financial and administrative work that is necessary to make the activities which are the objects (see §2 above) of the UKMT succeed. Council, and especially its Chairman, are glad to have this opportunity to record public thanks to all—too numerous to be individually named—who have contributed.

It may seem invidious, then, to pick out one person for special appreciation. But, although the work of running the various competitions during the last several years has been spread across several committees, a considerable proportion of the drive and vision that has allowed them to succeed and grow has been provided by Dr Tony Gardiner, working partly through the committees, partly through the UK Mathematics Foundation that he instituted in Birmingham. It was his perception that the time had come to set up a body such as the UKMT which ultimately led to its creation. We congratulate him on his successes, both those of the last few years and the many that are surely to come.

12. Review of the unaudited financial statements for the period

Since this is the first year of the UKMT, no comparative figures have been included in the financial statements. Although the company was only incorporated on 30 October 1996 the accounts cover activities of the subtrusts from 1 July 1996 (JICS) and 1 August 1996 (BMOC). This reflects the need for the accounts to include a full cycle of activity for the individual subtrusts.

The funds of the former British Mathematical Olympiad Committee, the forerunner of the Senior Olympiad Subtrust (known as BMOC), were transferred to UKMT and have been shown as income in these accounts.

The surplus for the period was £108,296. A sum of this order was anticipated and is necessary to underwrite the operations of the subtrusts for the school year 1997–98. During the year to 31 July 1997 there were approximately 266,000 entries for UKMT mathematics competitions. Considerable growth is envisaged in future years.

13. Trustees' responsibilities

Company and charity law require the trustees to prepare financial statements for each year which give a true and fair view of the state of affairs of the Trust and of its profit or loss for that period. In preparing those financial statements the trustees are required to:

- select suitable accounting policies and apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going-concern basis unless it is inappropriate to assume that the Trust will continue in operation.

The trustees are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Trust and enable them to ensure that the financial statements comply with the Companies Act 1985 and relevant charities regulations. They are also responsible for safeguarding the assets of the Trust and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

By order of the Trustees

Dr R W Bray, Trustee

17 October 1997

R.W. Bay



Accountants' report to the members of United Kingdom Mathematics Trust

We report on the financial statements for the period ended 31 July 1997 set out on pages 8 to 13.

Respective responsibilities of directors and reporting accountants

As described on page 9 the company's directors are responsible for the preparation of the financial statements and they consider that the company is exempt from an audit. It is our responsibility to carry out procedures designed to enable us to report our opinion.

Basis of opinion

We conducted our examination in accordance with the Statement of Standards for Reporting Accountants and so our procedures consisted of comparing the financial statements with the accounting records kept by the company and making such limited enquiries of the officers of the company as we considered necessary for the purposes of this report. These procedures provide only the assurance expressed by our opinion.

Opinion

In our opinion:

- the financial statements are in agreement with those accounting records kept by the company under section 221 of the Companies Act 1985;
- having regard only to, and on the basis of, the information contained in those accounting records:
 - (i) the financial statements have been drawn up in a manner consistent with the accounting requirements specified in section 249C(6) of the Act; and
 - (ii) the company satisfied the conditions for exemption from an audit of the financial statements for the period specified in section 249A(4) as modified by section 249A(5) of the Act and did not, at any time within that period, fall within any of the categories of companies not entitled to the exemption specified in section 249B(1).

Chartered accountants

Wolverhampton

17 October 1997

Statement of Financial Activities for the period ended 31 July 1997

	N I-4-	Restricted Funds	1997 Unrestricted Funds	Total
Income and Expenditure	Note	£	£	£
Incoming Resources				
Grants and donations		36,000	6,019	42,019
Interest receivable		0	2,836	2,836
Examination entry fees and related income Amount transferred from the former		0	135,092	135,092
British Mathematical Olympiad Committee		0	26,855	26,855
Total Incoming Resources		36,000	170,802	206,802
Resources Expended				
Direct charitable expenditure Management and administration	2	30,000	55,519	85,519
of the charity	3	5,000	7,987	12,987
Total Resources Expended		35,000	63,506	98,506
Net Incoming Resources for the Period		1,000	107,296	108,296

All amounts relate to continuing activities.

All recognised gains and losses are included in the statement of financial activities.

There were no movements on funds other than the net incoming resources for the period.

The notes on pages 10 to 13 form part of these financial statements.

Balance Sheet at 31 July 1997

		1997		
	Note	£	£	
Fixed Assets				
Tangible fixed assets	5		12,908	
Current Assets				
Debtors	6	20,278		
Cash at bank and in hand		80,061		
		100,339		
Liabilities: amounts falling due within one year	7	4,951		
			05.000	
Net Current Assets			95,388	
Total Assets less Current Liabilities		-	108,296	
		-	· · · · · · · · · · · · · · · · · · ·	
Capital and reserves				
Unrestricted funds			107,296	
Restricted funds	10		1,000	
		_	109 206	
		_	108,296	

The trustees have taken advantage of the exemption conferred by S249A(2) not to have these financial statements audited and confirm that no notice has been deposited under S249B(2) of the Companies Act 1985. The trustees acknowledge their responsibilities for:

(a) ensuring that the company keeps accounting records which comply with S221 of the Companies Act 1985; and

(b) preparing financial statements which give a true and fair view of the state of affairs of the company as at 31 July 1997 and of its surplus for the period then ended in accordance with S226 and which otherwise comply with the requirements of the Companies Act 1985 relating to financial statements, so far as applicable to the company.

The financial statements were approved by the trustees on 17 October 1997

D J Orton

Trustee

The notes on pages 10 to 13 form part of these financial statements

Notes to the financial statements for the period ended 31 July 1997

1 Accounting Policies

Accounting Conventions

The accounts are prepared under the historical cost convention and in compliance with all the relevant Statements of Standard Accounting Practice and Financial Reporting Standards. They follow the requirements of the Statements of Recommended Practice "Accounting by Charities".

Income

Income is shown gross and is accounted for when received with the exception of income promised for earmarked grants which is shown as soon as it is reliably reported as receivable.

Expenditure

Expenditure is shown gross and accrual adjustments have been made for all known liabilities at the year end.

Format of financial statements

The Trust has had to adjust the formats from those prescribed by the Companies Act, 1985 to include headings which are relevant to its activities to enable it to show a true and fair view.

Depreciation of Tangible Fixed Assets

Tangible fixed assets are stated at cost less depreciation. Depreciation is provided on all tangible fixed assets at rates calculated to write off the cost of each asset over its expected useful life, as follows:

All fixed asset purchases are used for direct charitable purposes.

Period covered by the financial statements

These financial statements incorporate the activities of the sub-trusts for the periods commencing 1 July 1996 for JICS and 1 August 1996 for BMOC. These are the dates on which the sub-trusts commenced their annual cycle of activities. The company itself was not actually incorporated until 30 October 1996, but the Trustees are of the opinion that it is necessary to include a full year's income and expenses in order to give a true and fair view of the Trust's activities.

Notes to the financial statements for the period ended 31 July 1997 (continued)

	1997		
	Restricted Funds	Unrestricted Funds	Total
	£	£	£
2 Direct Charitable Expenditure			
Printing and stationery	0	22,892	22,892
Postage	0	10,992	10,992
Administrator's salary and assistants' fees (note 4)	20,000	7,599	27,599
Markers' fees and prizes	0	1,358	1,358
Training weekends and regional circles	0	4,253	4,253
Travel and accommodation	10,000	2,939	12,939
Depreciation	. 0	3,747	3,747
Other direct costs	0	1,739	1,739
	30,000	55,519	85,519
3 Management and Administration of the Trust			
Legal and professional fees	5,000	1,653	6,653
Accountancy fees	0	3,466	3,466
Cost of meetings	0	2,868	2,868
	5,000	7,987	12,987
4 Staff costs			
Salaries			23,139
Social security costs			1,523
Pension contributions			2,937
			27,599

Staff costs represent the cost of the administrator and clerical assistants of the Junior and Intermediate Challenges. These individuals are employed by the University of Leeds on behalf of the Trust and their costs are recharged.

Notes to the financial statements for the period ended 31 July 1997 (continued)

5 Tangible fixed assets	
	Furniture,
	fittings and
	equipment £
Cost	*
Additions	16,655
The state of	
Depreciation Charge for the year	3,747
Charge for the year	3,141
	•
Net book value at 31 July 1997	12,908
6 Debtors	100
	1997 £
	T.
Prepayments and accrued interest	219
Grant receivable	10,000
Other debtors	10,059
	20,278
	20,276
7 Liabilities: Amounts falling due within one year	
	1997
	£
Accruals	4,951

8 Trustees' expenses

During the year, twelve trustees were reimbursed from charity funds for expenses incurred by them for work performed on behalf of the charity.

The total amount reimbursed was £2,685, and related to travel, printing, postage and telephone expenses.

Notes to the financial statements for the period ended 31 July 1997 (continued)

9 Rights of members

The Trust is a company limited by guarantee. Each member undertakes to contribute such amount as may be required (not exceeding £1) to the assets of the Trust if it is wound up while he is a member, or within one year after he ceases to be a member, for the payment of its debts and liabilities.

The income and property of the Trust must be used solely towards the promotion of its objects and no amount can be paid to any member by way of dividend or other share of profit. In the event of the Trust being wound up with a surplus, that surplus must be transferred to another charitable body with similar objects.

Because of the restrictions on the distribution of any surpluses, there are no equity interests in the Trust's reserves.

10 Restricted funds

The terms of certain grants and donations received during the period restricted the way in which the income could be used. The amounts involved were given to be used for the following purposes:

	t
Running costs of the Junior and Intermediate Challenges Sub-trust	20,000
Training, travel and accommodation in respect of the 1997 IMO	10,000
Towards the legal costs of setting up the UKMT	5,000
Running costs of the Senior Challenge Sub-trust	1,000
	36,000

All these funds have been used during the period in line with the restriction, with the exception of the amount of £1,000 in respect of the running costs of the Senior Challenge Sub-trust, which has been carried forward to be used in the future. The fund is held as cash in the main UKMT bank account.