

REPORT ON XXIII IMO, HUNGARY, JULY 5-14, 1982

The following papers are attached:

- (a) The two problem papers
- (b) Brief solutions of the problems
- (c) Official list of results, showing each country's mark per competitor (numbered but unnamed), total marks and prizes.

1. 30 countries participated, Kuwait and Tunisia for the first time. Countries which have taken part in previous years but not this year are Italy, Luxembourg, Turkey and Mexico. Those participating are shown on (c). Each country's team had four competitors except Algeria which had three. Czechoslovakia, Israel, Hungary and Mongolia each had one girl in their team, Venezuela had 2 and Tunisia 3. The Hungarian girl won a 3rd prize.
2. I arrived at Budapest Airport in the early afternoon of July 5 and was transferred to Cegled, a country town 50 miles away, where the Jury of 30 leaders (to be increased later by deputy leaders) met to select problems for the Contest. The British team left Heathrow on July 7 and was accompanied by David Monk (deputy leader) and his wife, Isobel, and by John Hersee the secretary of the IMO Site Committee. Their arrival at Budapest was 5 hours late. (Suspect landing gear - 4 hrs - and safety precautions - 1 hr - at the airport because of President Mitterand's visit). One boy had not travelled by air before and another caused concern to the Hungarian English-speaking schoolteacher who looked after the British team (most kindly and conscientiously) because he 'ate hardly anything'.
3. Jury Sessions. The Hungarian chairman of the Jury with his committee of co-ordinators, had chosen 22 problems from those submitted by Leaders for the Jury to select 6. 3 were British and 2 of the three were ultimately chosen. Both originated from David Monk. The Chairman spoke English, French and Russian fluently. There are now a large number of Spanish-speaking countries and there was a suggestion that Spanish should become an official language. Most of the proceedings were in English.

The Chairman had decided views but when out-voted (eg. on what was or was not 'difficult') he became amenable and took no umbrage. It seemed to me again that there should be prior agreement on what should or should not be in the 'syllabus'. This year the Hungarians had decided that linear recurrence relations, twice before present in IMO, were too difficult and that on the other hand inversion geometry could be expected.

After the papers had been taken the co-ordination went smoothly if very slowly on some questions. The Jury decided that the 1:2:3:6 ratio should be used and gave 10 first, 20 second and 31 third prizes. These and a further 58 certificates were awarded at the closing ceremony.

4. The British Team and their performance. They were numbered -
 - GB1 P.N. Balister (King's College School, Wimbledon)
 - GB2 D.A. Chalcraft (Latymer Upper School, Hammersmith)
 - GB3 P.J. Coxon (Dulwich College)
 - GB4 W.J. Sutherland (Monmouth).

Cont'd...

4. Cont'd.

Problem No.	1	2	3	4	5	6	Total	Prize
GB1	4	0	3	7	5	4	23	3rd
GB2	3	1	4	5	7	3	23	3rd
GB3	7	0	3	7	7	4	28	3rd
GB4	7	0	2	7	7	6	29	3rd
	21	1	12	26	26	17	103	

The maximum mark was 7 for each question. We were promised an analysis showing each country's total mark per question but this has not yet arrived.

It was foreseen that there were no high-fliers in this year's British IMO team. None of the prize-winners in the British Mathematical Olympiad did well enough on the Further International Selection Test to make the IMO team. This has never happened before. The team did creditably on what was generally considered to be one of the hardest set of IMO problems (Q5 excepted) for some time.

5. The Future

At the final banquet Claude Deschamps the French leader gave a speech of thanks to our hosts and said that it was very probable that next year's IMO will be in France. At the final meeting of the Jury, several leaders spoke with varying degrees of certainty about being hosts in the near future. Czechoslovakia, Finland, Colombia, Australia. Jim Williams spoke of the forthcoming 150th anniversary of the Australian federation and the Australian government's invitation to all countries to participate in their celebrations. This had already been sent. He suggested that one kind of participation might be to send a team to the International Mathematical Olympiad which Australia would host that year, 1988.