27th International Mathematical Olympiad Warsaw, 1986

Report by Dr David Monk, Leader of British team

The Olympiad was held in Warsaw from Monday 7th July to Tuesday 15th July. The team leaders arrived in advance, on Friday 4th July, and were accommodated in college hostels in a southern suburb. The deputy leaders joined them immediately after their arrival in Warsaw with the teams. This arrangement was different from that adopted in the last three Olympiads, when the deputy leaders stayed with the teams until after the start of the second day's competition; it represented a reversion to earlier practice. A number of "observers" from various countries also attended. The teams were lodged in a hostel on the opposite side of the city and the examinations were held in a college nearby. Mr Paul Woodruff of Dulwich College was deputy leader. Mr John Hersee, Secretary of the IMO site Committee, travelled out on Thursday 10th July. The whole party returned together on Tuesday 15th July with the exception of one team member, Dominic Joyce, who came back two days early in order to compete in the International Physics Olympiad in London.

Thirty-seven countries participated; a few had teams smaller than the normal six, so the total number of competitors was 210. There were no new countries this year and one regular participant, the Netherlands, was absent. The formal opening ceremony on the eve of the first day of competition included, besides the usual speeches, performances by youth dance troupes. As is customary the competition comprised two sets of three problems worked on consecutive days; $4\frac{1}{2}$ hours were allowed each day. The six problems were chosen by the Jury from those proposed by participating countries, a preliminary selection having been made by a subcommittee of the Polish organizers. It is interesting that two countries which submitted problems used in the Olympiad, Iceland and China, competed for the first time last year. The formal proceedings closed with the prize giving. There was the usual programme of sightseeing and receptions, and a splendid final dinner.

Three contestants (two Russian, one Hungarian) gained full marks of 42 - each problem was rated at 7 marks as in recent years. The minimum marks for prizes were agreed as 1st: 34; 2nd: 26; 3rd: 17. This meant that the British team gained two 2nd and three 3rd prizes. Our best performer, Dominic Joyce, missed a 1st prize by only one mark; the quality and clarity of his solutions was admirable. It was unfortunate that he had to leave before the prize ceremony but his prize was brought back for him by John Hersee.

Our team was selected by means of the National Mathematics Contest, British Mathematical Olympiad and Further International Selection Test followed by some postal tuition and a residential selection/training session which also included a test. This session was held at the Ship Hotel, Reading from Friday 9th to Sunday 11th May 1986. It was staffed by Paul Woodruff, John Hersee, Dr Judita Cofman, Mr T.J. Heard and myself. The training programme consisted of short lectures and tutorial periods during which the participants had opportunities to expound their own solutions to problems. It proved extremely helpful. All these activities are the responsibility of the Mathematical Association's National Committee for Mathematical Contests.

The team were lively and pleasant, getting on well together. I think that an incidental advantage of the residential training session is that they get acquainted before leaving for the Olympiad. I am most grateful to Paul Woodruff and John Hersee for their help in many ways. We were received with kindness and hospitality by the Poles and this added greatly to the enjoyment and interest of the visit. We thank the Olympiad organizers, guides and interpreters for all their hard work which made this a most successful event.

The next three IMO's will be held in Cuba (1987), Australia (1988) and West Germany (1989). We look forward to competing in spite of the heavier-than-usual burden of travel expense posed by the first two of these venues!

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