24 sites of possible injury are then dealt with systematically and comprehensively from the foot up to the shoulder and then along the arm to the wrist and each "chapter" is given a similarly methodical sequence passing from an explanation of structure, through to function, then symptoms, types and possible treatment of injuries and self-help measures and finishing with a clearly explained list of rehabilitation exercises. The silhouette type drawings accompanying these lists are particularly effective.

The last decade has seen an enormous growth and intensification of athletic competitions and, in step with this, many more athletes now submit their physical and mental systems to much more demanding training regimes. The "danger" period arrives as the athlete reaches the "knife edge" of competitive fitness, when accurate regulation of the volume and intensity of both training and competition becomes absolutely vital. It is during this "peak" period that injuries can become more likely and are more devastating to the athlete's morale. There is an urgent need for a more scientific and more readily available system of monitoring of the athlete's reaction to the stress of training and competition. But there is also a necessity for athletes and coaches to be made fully aware of the risks entailed, the precautions that can be taken and the way in which they can best assist the sports medical officer and the physiotherapist to put things right should the unfortunate necessity arise. Miss Grisogono's book does all this excellently and deserves to be recognised as an official manual in its particular field.

J.W. Alford
Development Programme Co-ordinator

IAAF BIOMECHANIC RESEARCH:
SCIENTIFIC REPORT ON THE 1st WORLD JUNIOR CHAMPIONSHIPS
ATHENS 1986

The IAAF Biomechanical Research Team (see announced programme in NSA No. 2/1986) finished four days after the end of the competition a complete report on all events as well as a video cassette. A free copy of both has been given to IAAF Member Federations.

Additional copies of the written report and the cassette are available for all coaches and athletes at a price of £ 7.50 / $ 10.00 for the report; for the cassette: VHS PAL £ 15 / $ 23.00; VHS SECAM £ 30 / $ 45; VHS NTSC £ 25 / $ 38; BETA NTSC £ 25 / $ 38.

To order please send a cheque or
money order to IAAF HQ, 3 Hans Crescent, Knightsbridge, London SW1X 0LN, England.

The written report contains approximately 250 pages including a short review on the Biomechanics of each event and data from previous research on top adult athletes. The video runs approximately (2h30') not only showing the events together with additional biomechanical data and graphs but also giving a full view of the whole Championships, including ancient places of Greece, Opening Ceremony, etc.

Helmar Hommel

INTERNATIONAL PHYSICAL PERFORMANCE TEST PROFILE

There has been, for many years, an inconclusive debate on the definition of "physical fitness". A satisfactory solution to the problem has never been reached because, it would seem, of the impossibility of defining something which actually does not exist. The inevitable question asked is "Fitness for What?" To the "man in the street", fitness is looked upon as an amalgam of robust health, efficient respiration and circulation, strength, agility and good posture. The modern trend has been towards efficiency of "heart and lungs"; hence the craze for "aerobics" and fun runs, which have contributed substantially to the tremendous growth in popularity of marathon running.

The difficulty of making a general definition has usually led to the conclusion that physical fitness must be recognised as "specific"; i.e. it refers to a competence of performance at a definite activity. Authors Klaus Boes and Heinz Mechling have avoided the pitfall inherent in any attempt to construct a test of "physical performance". They postulate that all physical activities require, in varying proportions, certain abilities, which they call "Fitness related factors".

The authors make no claim to any original experimental research. What they have done, in fact, is to make a very thorough analysis of all the important research conclusions, experimental data and theoretical constructs published during the last 20 years.

They have considered the ideas of the most reportable psychologists in the field of fitness testing and, from these studies, they have been able to isolate the various abilities which were used as a basic for evolving tests of physical fitness. Eight well-know tests were evaluated and a chart constructed comparing the relative content, in each test, of 8 fitness-related factors, such as endurance, strength/power, speed and agility etc, with several subdivisions of most of these factors. The methods of measurement used were also listed.