THE AUSTRALIAN INSTITUTE OF SPORT: THE QUEST FOR EXCELLENCE

John A. Daly

This issue continues the series of reports on institutions that provide a service for coaches and sport scientists. (see NSA, 1/86; 2/86; 3/86; 1/87 and 3/87).

We now present a report on a sports institution which is centred on the athletes in contrast to previous reports on institutions centred mainly on the coaches. The Australian Institute of Sport aims at bringing together the most talented Australian athletes under the guidance of the best coaches available.

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The Australian Institute of Sport was opened in Canberra in 1981. It was a welcome addition to the national sporting scene and a reponse to the question "Where have all our heroes gone?".

Australia had been used to a level of success in the international sporting arenas quite out proportion to its comparitively small population (16 million in 1986, but there was a dearth of national sporting heroes and heroines in the seventies and eighties. Since the halcyon days of the fifties and sixties Australia had had little success in international sporting events like the Olympic Games and "something had to be done".

Sport, acknowledged as "the Australian obsession", had supplied the nation with a succession of folk heroes – John Landy, Shirley Strickland,

Betty Cuthbert, Dawn Fraser, the Konrads, Ron Clarke, Rod Laver, Herb Elliott, John Newcombe - to mention just a few; but by the seventies the so called "Lucky Country" (Donald Horne) seemed to be running out of luck. Of course luck had nothing to do with it! By the seventies other countries were taking their sport seriously and were competing in earnest. They recognised the value of sporting success but also the need to locate talent and develop it using scientific methods of measurement, evaluation, and training. Australians found themselves amateurs in a world of professionals, possessing a proud sporting past but no future unless they were prepared to plan for and buy success. The Australian Institute of Sport was the result of such planning.

Prime Minister Fraser in his opening address on January 26th, 1981 reassured Australians that we were "no longer going to allow the world to pass us by". The new sports institute, he promised, would bring together Australia's most talented youngsters, "guided by the best coaches that can be found. Young men and women will be given opportunities that are second to none in any country anywhere". That promise has become a reality in a little over five years even though there has since been a change of government. It would seem that given the sporting obsession of Australians and the nation's expressed need for international success the Institute of Sport has the support of both major political parties and will not be a passing whim or fancy with either of them.



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Models for the A.I.S.

When it was agreed that a scientific approach to elite sport development was necessary for Australia, a study group was appointed and, under the leadership of Dr. Allan Coles, visited the major sports institutes in Europe. Among them were:

Cologne Sports High School in West Germany;

Leipzig Institute in East Germany; Lenin Central Institute for Sport in USSR:

Wingate Institute in Israel;

National Institute of Sport & P.E. in France;

Swiss School for P.E. & Sport, Magglingen.

No single institute became a model for the A.I.S. but ideas were gleaned from all of them. Initially the Australian Institute was to cater for "national fitness, coaching accreditation, sports administration courses, post graduate preparation of sports medicine specialists, a national documentation service" as well as the development of elite athletes. The appointment of expatriate Australian Don Talbot as first director of the A.I.S. soon put paid to such wide sweeping goals. Renowned throughout the world as a successfull swimming coach Talbot was well aware of Australia's immediate needs - the retention of the nation's best sporting talent and the development of their skills in a suitable environment. "To achieve sporting excellence the nation's most talented athetes must be provided with suitable indoor and outdoor training facilities. They must be exposed to the best coaching, given

sports science/medicine backup and frequent opportunities have compete at challenging levels both nationally and internationally". He was an unabashed elitist who recognised that while Australia had no more talent than any other country, what did exist had to be found and nurtured. He was a realist though, and warned that Australia, hungry for new national folk heroes, must not expect too much too soon. The new Australian Institute of Sport was established in 1981 in the national capital, Canberra, under Talbot's direction. Eight sports were selected to begin the chase for international excellence - Basketball, Gymnastics, Netball, Soccer, Swimming, Tennis. Track and Field. Weightlifting. Coaches were appointed and scholarships awarded to 150 athletes. Facilities at first were minimal (national indoor and outdoor stadiums, Canberra community facilities) but the dream of Australians achieving excellence in sport was becoming a reality. Hopefully it would also yield success in international arenas.

The development of the A.I.S. 1981-1986

Under the terms of the scholarship scheme athletes were required to be gainfully employed (usually part time) outside the Institute or attend an educational establishment in Canberra. The latter course has been the favoured option of most young athetes who attend the National University, the Canberra College of Advanced Education or Bruce College of Tech-

	14	15	16	17	14	10	20	21	22	13	24	25	26	11	28	20	311	41	21	1	fotal
Basketball		,	10	• •			20	2.	2.1.	2.5	21	LJ	20		2.13	2.0	3,	٠,	3		117,01
Male					6	6															12
Female TOTAL		1	3	4	5 12	2	2	1													18 30
Diving					, T. W.																
Male					1		2	1								1					3
Female TOTAL					2	1	1	1 2					2			1					10
Gymnastics																					
Male	2	1	3	1	2			1	1	5	1			1							15
Female	2	2	1	3	1					**											9
TOTAL Hockey	4	3	4	4	3			1	1	2	1			1							24
Male						7	2	3	3	2	2										19
Female					2	6	1	2	2	2.	1										16
TOTAL					2	13	3	5	5	4	3										35
Netball Female				1	3	8	4	2	1												19
Rowing Male					1	1	2		6	2			1								13
Female					•	•	1	2	3	-		1	•	1				1	1		10
TOTAL					1	1	3	2	9	2		1	1	1				1		1	23
Soccer Male				6	6	5															17
Squash				0	U	J															1 /
Male				2	1	2	3	1													9
Female				1	2	4															7
TOTAL				3	3	6	3	1													16
Swimming Male				3	4	6	Ω	5	2	2	1										31
Female		1	2	3	4	3	8	2	2	2	1										14
TOTAL		1		5	4	9	9	5 2 7	4	2	2										45
Tennis						-															
Male Female		2			1	2															5
TOTAL		3				2															15
Track & Field			_		•	-															
Male					100	5	3			3	6			1	3	1		1			26
Female TOTAL				2	2	6	2 5	1		7		3	1 2		1	1	1				13
Water Polo				2	2	0	3	1		3	6	3	2	1	4	2	1	1			39
Male					1	5		2		5	1		1								15
Weightlifting Male		2	3		2	1	2	1			1	1					1				14
MALE	2								12	16		_		2	3	2				1	18
FEMALE	2	5				25					_	-	3	1	1	1	1	1		1	120
TOTAL		10								_										1	302

nical and Further Education. This pattern of employment or education which fits in with an elite athlete's training competition programme is now well established. Over 300 athletes currently attend the A.I.S.

The facilities have been rapidly developed by the Australian Government and indeed are probably now unmatched anywhere in the world. \$64 million has been spent in the last 5 vears on construction of suitable facilities for the A.I.S. The Institute now possesses a swimming centre, gymnastics, tennis and basketball halls, an athletic stadium and training arena, weight training centre, indoor and outdoor soccer pitches. The athletes live in halls of residence on site and have access to a well stocked library and information centre. The sports science and medicine building is

acknowledged to be "one of the best in the world". So it was judged by athletes, officials and sports science personnel from around the world, who attended the World Cup Athletics in Canberra in 1985. The sports science centre is staffed by two medico's, two exercise physiologists, two biomechanists, three sport psychologists, a nursing sister and three siotherapists. Information from research undertaken by this staff is disseminated to the wider sporting community through a quarterly publication Excel.

A.I.S. Sports science staff are leaders in their fields in Australia and besides servicing the day needs of resident athletes (fitness testing, skill analysis, psychological preparation for competition, rehabilitation from injury etc.) also engage in sports research. Current projects include:



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The Sport Science and medical extention of the Australian Institute of Sport

- a vitamin/mineral study;
- body composition changes and menstrual cycle;
- acclimatization;
- anaerobic threshold measures for cyclists;
- haematological/biomechanical responses to training;
- effect of massage on performance;
- blood rheology as an index of training response;
- effect of biocarbonates on performance;
- anabolic effect and dietary procedures;
- regeneration nutritional supplementation;
- biomechanical analyses of:
 - pistol shooting;
 - cycling technique;
 - rowing;
 - gymnastics;
 - swimming;
- hypnosis and visualization in testosterone production;
- effects of float tanks on mood states;

A number of new sports have been added to the original 8. They are Diving, Field Hockey. Cycling, Rowing, Squash and Waterpolo. Of these, only rowing and waterpolo are located in Canberra. The rest are located in other cities - cycling in Adelaide, squash and diving in Brisbane and field hockey in Perth and operate under the aegis of the A.I.S. in Canberra but use the backup service of local (State) institutes of sport. The development of State Sports Institutes is actively encouraged and decentralisation away from Canberra for new Institute sports investigated.

Sports not included in the A.I.S. can use the facilities and staff as a national

training centre. National teams frequently assemble in Canberra prior to departure for overseas competition and use the institute for pre-embarcation preparation. Over 50 additional sports took advantage of the National Training Centre Programme in 1986 including disabled sports people – a total of over 2000 athletes.

The Institute caters for those elite Australian sportsmen and women who, for a number of good reasons (such as employment, family etc.) cannot reside in Camberra by offering "visiting scholarships". Athletes visit the Institute for short periods of time at regular intervals. Their development is monitored and assistance given where required. Over 1,000 sports people attended A.I.S. in this category in 1986. Regular visitors to the A.I.S. include Olympic gold medallist Glynis Nunn, silver medallist Gary Honey and 400 metre star Darren Clark.

Administration of the A.I.S.

An organization structure diagram illustrates the various arms of the Institute and a staff listing indicates the allocation of personnel to the various areas. The Institute is administered by an Executive Director (Ron Harvey) who is responsible to a Board of Management and for 130 staff. The Board is chaired by Professor John Bloomfield and members include a number of prominent Australian sportsmen and women (swimming stars: Michael Wendon and Lisa Curry for example). Two assistant directors (sport, corporate services) work under a general manager or deputy director. Coordinators of the various sections - Sport Science, Marketing and Public Relations etc. operate with reasonable day-

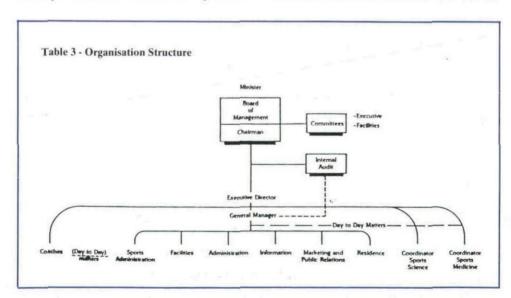
Table 2 - Staffing of the Australian Institute of Sport at 30 June 1986 was as follow:

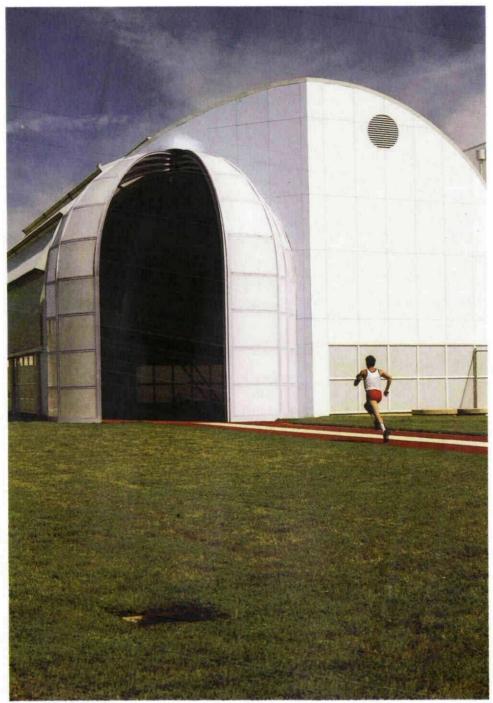
	Full-time	Part-time
Executive	3	-
Coaches	38	7
Administration	14	6
Sports Science	14	1
Sport Medicine	7	2
Marketing and		
Public Relations	3	1
Sports		
Administration	6	1
Residence	17	6
Information		
Centre	4	-
	106	24

to-day autonomy but are responsible to the general manager and ultimately to the executive director and the board. The A.I.S. operates as a statutory authority with direct funding from the Australian Government. Sponsorship by large Australian companies has assisted the Institute but these funds are usually directed toward a specific project or group. Essentially the funding of the A.I.S. is by the Government and so far it has been very generous. The Australian Government has been genuine in its desire to help reestablish our international sporting reputation. Decentralised sports are financially supported from Canberra with some local community support.

The A.I.S. - success or failure?

Don Talbot, the Institute's first director warned the Australian public not to expect too much too soon. However if the demand to be included in the A.I.S. is any index of success then the Institute has "made it". Many sporting groups now want to be included with the "lucky eight" and their recent additions! National teams in Institute sports include a high percentage of A.I.S. athletes. The most recent team selection for the World Championships in Athletics in Rome include 12 A.I.S. athletes. It is not uncommon for the bulk of a national team to in-





Cliff Russell/AUS

clude A.I.S. athletes. There are concommitant values in the existence of an institute of this kind in Australia. The professional standards set by Institute coaches and sports science staff are being emulated by coaches of elite athletes throughout the country.

Obviously success will ultimately be measured only by the numbers of Australian athletes who reach finals in major sporting internationals. Given a little more time the Australian sporting public will need to evaluate the worth of its dollars spent on the development of elite sportsmen and women. I doubt that the outcome will be other than support for the A.I.S. It is now an established institution on the Australian sporting scene catering for a large number of the nation's talented

athletes. Athletes who deserve the best possible facilities and support if that talent is to succeed against others who have similar support elsewhere.

Current Prime Minister Bob Hawke, in a speech at the Sportswriters Association Annual Dinner (July 29th, 1983) confirmed the view of the nation that "... by any measure the A.I.S. has already achieved much... it has the support of both parties and is developing into a world class institution". It has developed into a world class institution and is seeking to assist in the development of new Australian sporting heroes and heroines. Australia is on the way back and the A.I.S. in Canberra is playing its role in the quest for sporting excellence!

The address of the Australian Institute of Sport, is: Leverrier Crescent, Bruce, Canberra. Australian Capital Territory. Tel. (062) 521111 Telex AWIS AA 62400