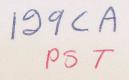
CA1 EA907 93B63 DOCS

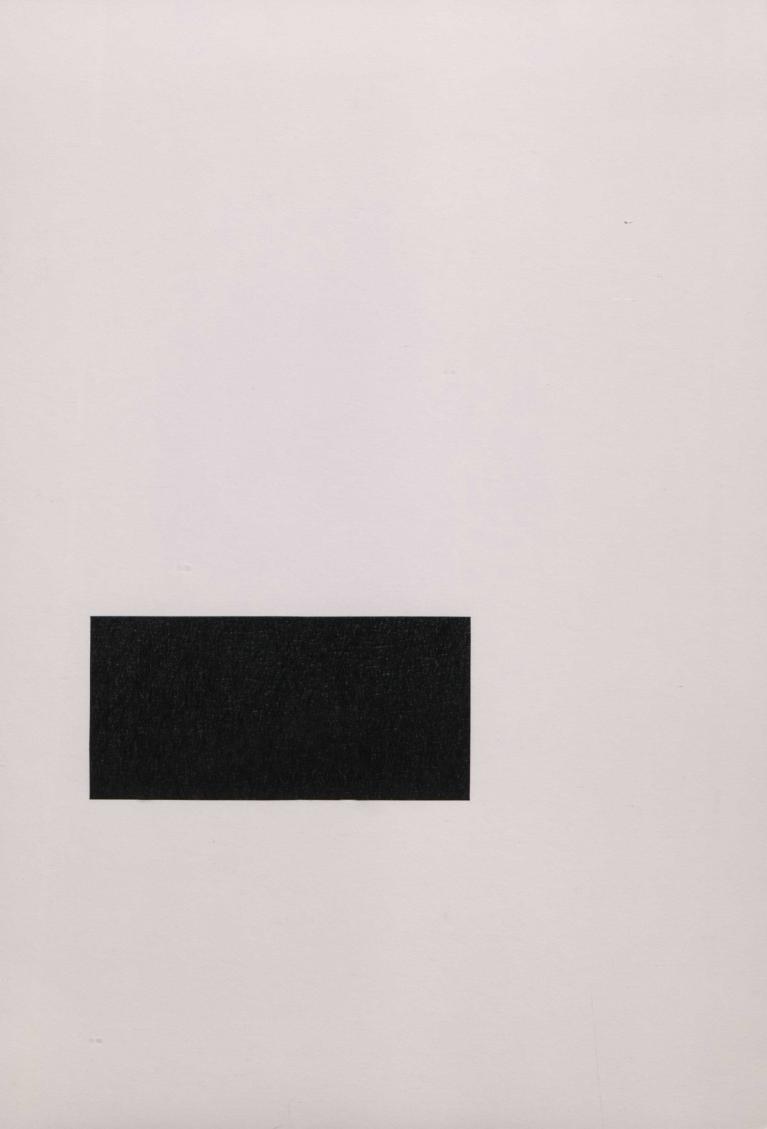


# MARKET STUDY SERIES

A BRIEF FOR CANADIAN MANAGERS

A BRIEF GUIDE TO THE REMOTE SENSING INDUSTRY IN AUSTRALIA

CANADIAN TRADE COMMISSIONER SERVICE – AUSTRALIA EXTERNAL AFFAIRS AND INTERNATIONAL TRADE CANADA



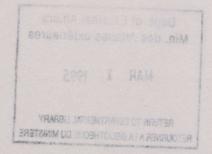
Dept. of E Min. des Aff	ixter aires	nal Alfairs s extérieures				
MAR	1	1995				
RETURN TO DEPARTMENTAL LIBRARY RETOURNER A LA BIBLIOTHEQUE DU MINISTERE						

## A BRIEF GUIDE TO THE REMOTE SENSING INDUSTRY IN AUSTRALIA

PREPARED BY:

Canadian Consulate 6th Floor 1 Collins Street MELBOURNE VIC 3000

Contact: Helen J. Rowell, Commercial Officer Tel: (03) 654 1433 Fax: (03) 650 5939



Canadian Consulate 6th Floor 1 Collins Street attra prot River VIC 300

Consuct: Heles J. Rowall, Commercial Officer Tale (13) 654 (#33 Fax: 103) 650,5939

### TABLE OF CONTENTS

- 1. Australia in Brief
- 1.1 Scope of Report
- 2. Market Structure
- 2.1 The Australian Market
- 3. Summary
- 4. Remote Sensing Organisations
- 5. Publications Available
- 6. Industry Conferences
- 7. Canadian Trade Offices in Australia

	~

#### 1. <u>AUSTRALIA IN BRIEF</u>

Australia is almost 7.7 million square kilometres in size, making it the sixth largest country in the world. It has a relatively modest population of 17 million. Seventy five percent of Australians reside along the eastern seaboard; the major cities of Sydney and Melbourne account for 40 percent of the total population. There are six states, one territory and a national capital region whose respective populations and surface area are as follows:

#### TABLE 1.

State & Major City	Population (millions)	Surface Area (km square) (thousand km.sq)
New South Wales (Sydney) Victoria (Melbourne) Queensland (Brisbane) Western Australia (Perth) South Australia (Adelaide) Tasmania (Hobart) Northern Territory (Darwin) Australian Capital Territory (Canberra)	$\begin{array}{ccccc} 5.8 & (3.62) \\ 4.4 & (3.03) \\ 2.9 & (1.27) \\ 1.6 & (1.15) \\ 1.4 & (1.03) \\ 0.4 & (.18) \\ 0.1 & (.07) \\ 0.3 & (0.3) \end{array}$	802 228 1727 2526 984 68 1346 2
Total	16.97 (10.38)	7683

Australia's economy has traditionally been based on natural resources, including minerals, grains and wool, thereby prompting observations that the economy "rides on the sheep's back". In recent times, wool prices have dropped and the agricultural sector, traditionally a crucial export earner, is generally experiencing a slump in export earnings. These factors, together with heavy overseas borrowings have contributed to a sizable current account deficit. Economists and analysts believe indicators point to a slow economic recovery commencing mid-late 1991 after reaching a low point in early 1991, on the heels of two consecutive quarters of negative economic growth.

While Australia's economy is largely based on primary products there has been a push in recent years to improve productivity in the manufacturing sector as a reaction to the government's policy of phasing in lower import tariffs in many product areas. However, in many sectors Australia's high technology capabilities are dominated by multinationals, as the indigenous high technology firms suffer from lack of venture capital and a small domestic market. The total market for advanced technology products in Australia is estimated at \$14 billion, of which about 50% is imported. For every \$100 of exports, Australia imports \$900 of advanced technology products. There are obviously exceptions to this trend and a number of excellent niche products have been developed and exported successfully.

#### ALIM VI ALIANTRIA.

Austracia a allocat 7.7 million square kilometres in size, making it the sixth largest country in the world. It has a relatively modest population of 17 million. Sevenny five persont of Australians reside along the castern stationed, the major critics of Sydney and Melitourne accourt for 40 percent of the tastern of the restore are six states, one territory and a national capital region whose respective populations and surface are as follows:

#### L. B. BLAL

Australia's containty has indepionally been based on natural resources, including materials, grains and wook, thereby phomoting observations that the econtomy 'ndes on the sheep's wark". In mean times, wood prices have dropped and the agricultural society, in mean times, wood prices have generally experimenting a sheep's ward catalings. These factors, together with heavy overceas furnowings have contributed to a intactive contraint account denot. Economists and analysis believe indicators point to a size economic sterior, the contrained analysis believe indicators point to a size economic denot. Economists and analysis believe indicators point in each 1991, are overy commencing mid-into 1991, after contributed to a some point in each 1991, are the bests of two consecutive quarters of measures community arowing

While Australity's economy is largely based on primary products there has been a pash in recent years to improve productivity in the manufacturing sector as a reaction to the government's policy of pleasing in lower import taills in many product areas. However, in many sectors scattralia's high technology of product areas are dominated by mutinationals, as the indivenous high technology frime suffer from lack of venue capits and a meal domestic antreat a \$14 bitties and which about 50% is imported in Auguratia is estimated at \$14 bitties of which about 50% is imported for every \$100 of exports. Australia bitties of which about 50% is imported for every \$100 of exports. Australia bitties of which about 50% is imported for every \$100 of exports. Australia bitties of which about 50% is imported for every \$100 of exports. Australia bitties of which about 50% is imported for every \$100 of exports. Australia bitties and supported and a maniput of excellent of the products have been developed and exported successitivity.

#### 1.1 SCOPE OF REPORT

This report provides an overview of the Australian remote sensing sector and examines the potential for collaborative ventures between Australian and Canadian organisations. Canada's geography and demography are similar to Australia's, consequently Canadian expertise and the long term commitment to remote sensing development provide an instructive model for Australia. There are clearly commercial opportunities in Australia for Canadian remote sensing firms..

#### 2. MARKET STRUCTURE

The Australian Space Office (ASO) has been given the task of developing an Australian remote sensing industry as one of the major objectives in the implementation of the National Space Policy. This being said, it should be recognized that the Australian remote sensing industry plays an integral role in an array of industries and as such envelopes research and commercial activity from the private sector, federal and state government agencies, academic institutions and the CSIRO (Commonwealth Scientific and Industrial Research Organization). The latter can be viewed as the Australian counterpart to Canada's National Research Council.

In respect of research and development, a number of organizations have been involved, ranging from institutions such as the University of New South Wales to private companies; however, by far the most active proponent of research and development in the remote sensing area is the internationally respected CSIRO, who's work has provided the foundation for numerous successful commercial initiatives.

Remotely sensed data supply in Australia is available through ACRES (Australian Centre for Remote Sensing) and Technical and Field Surveys. The Bureau of Meteorology, a longstanding service organisation, is also beginning to adopt a commercial approach in this area.

#### 2.1 <u>THE AUSTRALIAN MARKET</u>

Remote sensing activity in Australia can be expected to increase as the monitoring of global environmental factors from a southern hemisphere vantage point assumes greater importance. However, it was the requirement to provide credible data to the mining industry which fostered early initiatives and developments. Currently, in excess of 50 percent of remotely sensed data in Australia, which was estimated at \$A40 million in 1990, is used by mining organizations; a further 30-40 percent is accounted for by natural resource monitoring and management activities in the forestry, fisheries, and agriculture sectors.

The Australian remote sensing sector has probably developed in a less coordinated manner than its Canadian counterpart. This in part is attributed to a fragmentation of effort and resources between federal and state departments, academic and private industry. However, the recently received mandate of the ASO to foster and promote remote sensing in Australia should henceforth produce a more national, co-ordinated approach.

#### VROUP MENORY

tells repert promates an overview of the Australian reputte actusing sector and maturines the potential for collaborative vertures between Australian and Canadian originatelloin. Canada's geography and demography are similar to Australif's consequenties Chuadian expensive and the long term commitment to remote meeting development provide an instructive model for Australia. There are deadly connerreal opportunities in Australia for Canadian remote searing fights.

#### MARKERSTRUCTURE

The Numerican Space (Other (ASD) has been given the task of developing an Australian namete versing industry as one of the major objectives in the impletiventation of the Mattalian remote sensitig industry plays an integral rule are a sensy of futuration and as such envelopes resourch and commercial activity from the private sector, redensi and state government agencies, activity from the private sector, redensi and state government agencies, because fusion Organization and the future can be thewed as the Australian developing to Canades and the future can be thewed as the Australian presenter of the state sector for the state government agencies.

The respond of research and development, a number of organizations have been involved, ranging from institutions such as the University of New South Whites to private companies; however, by far the most atfive proponent of research and development in the terroic sensing area is the internationally respected CSRRO, work has provided the foundation for numerous atoressite commercial initiatives.

Memoraly sensed data supply in Australia is available through ACRES (Australian Caute int Ramote Sensing) and Technical and Field Surveys. The Bureau of Matericelegy, a longstanding service organisation, is also becausing in adopt a commercial autorescentic this area.

#### THERADA MALTANIA REFER

Remote sensing activity in Anatrain can be expected to increase at the monitoring of global environmental factors from a southern hemisphere ranges point assumes greater importance. Its even, it was the requirement of provide credible data to the musing industry which formered carly solutions and developments. Currently, it access of 30 percent of remotely formed data in Anatrai-a, which was callacted at State million in 1990, is used by million in 1990, is used for million in 1990, is used to provide monitoring and assossement accelerates in the forestry, financies, and second data in the solution of the second of the forestry, financies, and second data in the solution of the solution in the forestry, financies, and second data solutions and assossement accelerates in the forestry, financies, and second the society.

The Australian remote sensing sector has prebably developed in a lass coendinated manner than its Canadian connectpart. This is part is staticated to a tropromition of effort and resources between federal and state departments, scalenic and private industry. However, the recently received mandates of the ASO to foster and promote remets tending in Australia should beneforth produce a more national, co-ordinated approach. The following brief analysis of the Australian market is broken down into four categories widely recognized throughout the industry.

#### a) <u>SPACE INDUSTRY</u>

Only 5-20 percent of remote sensing activities in Australia are attributed to the space sector. The space industry is dominated by international aerospace companies and Australian involvement has been limited, the one notable exception being the Along Track Scanning Radiometer (ATSR) sensor development for ERS-1. The ASO is actively encouraging development of a competitive space industry to combat Australia's position as a substantial net importer of space hardware, software and services. Factors contributing to Australia's limited capability include a small domestic market, high venture capital costs and insufficient qualified personnel. Contrary to the previous statement, however, potential opportunities for Canadian collaboration exist in this area, specifically from research and development generated in Australia. Organizations such as the CSIRO, together with Australian companies possessing good engineering and design capabilities would be receptive to a Canadian commercial partner as the latter are viewed as being of more appropriate size than other, larger foreign firms.

#### b) AIRBORNE MANUFACTURING SEGMENT

Australia has achieved reasonable success in the design and production of scanners and sensors. Research and development by the CSIRO and the Defence Research Establishment in conjunction with companies such as Geoscan and BHP have resulted in marketable products. Once again, should a Canadian firm be interested in joint development activities there are opportunities to participate, as Australia continues to seek international collaboration. Estimated earnings in the airborne and space manufacturing sector for the near future in Australia are \$A5-10 million.

#### c) <u>GROUND RECEPTION FACILITIES</u>

Australia has some expertise in the design and development of low cost data reception facilities. At the opposite end of the scale, one of the leading Canadian manufacturers of large receiving stations was the prime contractor in supplying the LANDSAT ground station system in Australia in 1979. A substantial upgrade was completed in 1988. Development of links between the ACRES (Australian Centre for Remote Sensing) reception facilities at Alice Springs and the Canberra processing facility and onto the end user for data transfer is cited as a potential opportunity, among other smaller contracts.

#### d) <u>IMAGE PROCESSING AND ANALYSIS SYSTEMS</u>

As indicated earlier in this report, Australia's economic dependence on natural resources, especially minerals, has led to a particularly strong capability in this area of remote sensing. A large number of commercial image processing systems and software packages have been developed by Australian companies; however, a few Canadian systems have also gained acceptance. This is an extremely competitive segment of the industry and applications-driven systems tailored to particular organisations are envisaged for the near future. the balowing brief analysis of the Australian market is broken down into

#### A SUCCEDUDINESS (S

-

Note that a start of remote reasing activities in Aostralia are attributed to the thate sector. The space industry is dominated by international accorpance companies and Arstralian moolvement has been littined, the one notable exception being the Along Track Scanning Radismeter (ATER) sensor development for ERS-1. The ASO is actively encouraging development of a compatitive space lindustry to combal Australia's presented is a compatitive space lindustry to combal Australia's services. Factors contributing to Australia's limited capability induces a qualitation personaet. Contrary to the previous statement, however, apprend demessio market, high venture capital costs and tradificient postential opportunities for Canadian collaboration exist in Australia's postential opportunities for Canadian collaboration exist in the area postential opportunities for Canadian collaboration exist in the area postential opportunities for Canadian collaboration exist in Australias account and the companies for Canadian collaboration exist in the area postential opportunities for Canadian collaboration exist in Australias account and the companies for the previous statement, however, a canadis provide a company of the previous statement, however, a canadian opportunities for Canadian collaboration exist in the area postential provide and design capabilities would be toccplice to account postential contract and design capabilities would be toccplice to account account of the previous statement and the statement a Canadian continue rescared and design capabilities would be toccplice to

#### N ARRENESS MANU ACTURING SEGMENT

Automata has achieved reasonable success in the design and production of semanaes and samore. Research and development by the (SIRO and the Defearce Research Establishment in conjunction with companies such as descares and BMP have resulted in marketable products. Once again disards a Caraoina firm be interested in joint development sectorities there are opportunities to participate, as Australia Continues to seek tratemetional collaboration. Estimated estaings in the airborne and space enanulycements sector for the near future in Australia are \$A5-10 enanulycements.

#### GEOLIND RECEPTION FACILITIES

Australia has some expertise in the dasign and development of low cost data reception facilities A1 the opposite end of the scale, one of the leading Canadina manufactarers of large receiving stations was the price contractor in supplying the LANDSAT ground stations was the ameratic in 1979 A substantial upgrade was completed in 1988. Development of links between the ACRES (Australian Contre for Remote Sensing) noception facilities et Alice Springs and us Camberra processing facility and onto the end user for data transfer is clued as a potential degleritation, among other smaller contracts.

#### MAGE PROCESSING AND ANALYSIS SYSTEMS

As indicated earlier in dits report, Assettatia's economic dependence on natural resources, especially mineraic, has led to a particularly strong capability in this area of remote sensing. A large mumber of commercial intage processing systems and software particulars investigated by Australian companees; however, a few Camaban systems save also gained acceptance. This is an extremely associative segment of the intastry and applications-driven systems restored to particular cryanisations are substanced for the near future.

#### **SUMMARY**

3.

The remote sensing market worldwide has generally grown much more slowly than first anticipated; this has also been the case in Australia. While Canadian remote sensing capabilities have strengthened in several areas, including hardware, software and applications, Australian capabilities are at an earlier stage of development, except in the area of image processing and analysis. The ASO, charged with fostering the growth of an Australian remote sensing industry as part of a National Space Policy, has recognised the need for continued international collaboration.

Canada's commitment to the commercial development of remote sensing through forward planning and co-operation between government and industry is highly regarded by the Australian remote sensing community. In light of the many commercial, economic and political similarities between Canada and Australia, it is not surprising that Canadian remote sensing firms have achieved some successes to date in the Australian market. Obviously, both government and industry in Australia are supportive of joint ventures rather than direct sales, and regulations and offsets policies are geared to encourage the former.

Future opportunities for Canadian firms appear to be significant relative to the size of the market. Along with France and the U.S., Canadian technology and expertise are highly regarded both in academic and commercial circles; also to our advantage is the off-heard preference of Australians "to do business" with Canadians rather than other prospective international partners.

For more specific information on any particular segment of the industry please contact the Canadian Consulate in Melbourne, or the Consulate General or High Commission in Sydney and Canberra, respectively.

#### X REALINGS .

When first anticipated; this has also been the case in Australia. While then first anticipated; this has also been the case in Australia. While Castachas remote sensing capabilities have strengthened in several areas, or helling hardware, software and applications, Australian capabilities are at an earlier stage of development, except in the area of image processing and allshals. The ASO, distigat with fostering the growth of an Australian remote sensing industry as part of a National Space Policy, has recognised the need for continued functional collaboration

Carraca's commutated to the commercial development of remote tensing allowing thread planning and co-operation between government and industry is havely regarded by the Australian remote sensing community. In light of the many connercial, commut and political similarities between Canada and Australian in 5 not surprising that Canadam remote sensing firms have accessed to be successed to date in the Australian market. Obviously, both government and industry in Australia are supportive of joint ventures rather than used successes to date in the Australian market. Obviously, both than oncert taket, and regulations and offsets policies are geared to encourage use former

France apportunities for Canadian firms appear to be significant relative to use are of the market. Along with France and the U.S., Canadian technology and expanding are highly regarded both in academic and commercial circles; also to also advantage to the off-heard preference of Australians 'to do masters' with Canadians rather than other prospective international perimers.

For more specific unformation on any particular segment of the industry prease contact the Canadian Consulate in Melhourne, of the Consulate Constal or Figh Commission in Sydney and Canberra, respectively

#### 4. REMOTE SENSING ORGANISATIONS IN AUSTRALIA

Australian Space Office 51 Allara Street CANBERRA ACT 2601

Tel: (06) 276 1915 Fax: (06) 276 1942

Implementation of the National Space Policy, a major objective of which is the future development of the Australian remote sensing industry.

Australian Centre for Remote Sensing Dunlop Court, Fern Hill Park BRUCE ACT 2617

Tel: (06) 252 4411 Fax: (06) 251 6326

Provider of satellite digital data to government and industry acquired by DAF in Alice Springs - SPOT, Landsat and National Oceanic & Atmospheric Administration (NOAA) (AVHRR)

Commonwealth Scientific and Industrial Research Organisation (CSIRO) Office of Space Science and Applications PO Box 225 DICKSON ACT 2602

Tel: (06) 270 1811 Fax: (06) 273 3958

Manages space related research, operates research aircraft & participates in worldwide space programs.

South Australian Centre for Remote Sensing Suite 10, Innovation House Technology Park THE LEVELS SA 5095

Tel: (08) 260 8134 Fax: (08) 349 7003

Provides consulting services, and education nationally and internationally. Also provides information to the mining industry and undertakes environmental monitoring.

ESRI Australia 18 Prowse Street WEST PERTH WA 6005

Tel: (09) 481 1143 Fax: (09) 322 3133

Distributor of image analysis systems and geographic information systems.

ALLASTEUA MI 200 ORGANISATIONS IN AUSTRALIA

CANBERRA ACT 2603

Tel: (06) 276 1915

Implementation of the Netional Space Policy, a major objective of which is the

Australian Centre for Regione Sensing Dunlog Court, Fern Hill Pad BRUCE ACT 281

> Tel: (06) 252 4411 Par (56) 251 6326

DAF in Alice Springs SPOT Landsat and industry acquired by

Comparison with Sciences and Industrial Research Organisation (CSIRO) Office of Source Science and Applications PO Box 225

Tal: (05) 270 1811

salanagos space related research, eperates research aircreft & participates in worldwide space programs.

> 20021 ADSTRAMA (EDITE for Remote Scatting Suite 16, famoyation Playse Technology Park THEPLEVELS SA 2009

> > Tel: (08) 260 8134 Pax: (08) 349 7003

provides consulting services, and education nationally and internationally. Also provides information to the mining industry and undertakes environmental monitoring.

REPARENCES IN Provise Street WEST PERTH WA 6005

Fat: (09) 481 1143

sentrolnee or image analysis systems and recentable information systems

<u>Clough Engineering Group</u> 246 Church Street RICHMOND VIC 3121

Tel: (03) 427 1955 Fax: (03) 427 1779

Co-developed with CSIRO (and markets) the DISIMP (Device Independent Image Processing) system.

Image Tech. International Pty Ltd 1st Floor, 192 Cambridge Street WEMBLEY WA 6014

Tel: (09) 388 1555 Fax: (09) 381 4148

Distributes the A-Image software system.

International Imaging Systems (Aust) Pty Ltd 27 Wilde Street WYNNUM OLD 4178

Tel: (07) 396 5796 Fax: (07) 396 5796

Distributes an image processing system and film-writers.

<u>Trippet Sheddon Pty Ltd</u> 136 Buckhurst Street SOUTH MELBOURNE VIC 3205

Tel: (03) 693 5779 Fax: (03) 699 2279

Systems engineering company. Has collaborated with a U.S. firm in the development of image processing products.

Kevron Aerial Surveys Pty Ltd PO Box 6325 Hay Street EAST PERTH WA 6004

Tel: (09) 325 2644 Fax: (09) 421 1658

Involved in the acquisition and processing of airborne geophysical data.

No Charles Street

Feb. (03) 427 1955 Fax: (03) 427 1779

Co-developed with CSIRO (and markets) the DISIMP (Device Independent Image Processing) system.

Image Toch, Informational Pro Lid Net Block, IV: Cambridge Street Withhull BY WA 6014

> Pet. (49) 388 1555 Carr (49) 387 4148

meters such the sentiles solution watern.

international integrat Systems (Aust) Pro 1.16 27 Wilde Street WyNVMM (31 D) 4178

> Call (127) 395 5745 Fax: (127) 196 5795

Distance on page processing system and film-writers.

Tripper Sheddar Fr Lid M Singilarri Sheet SOUTH MCLBOURNE VIC 32

Fab. (03) 693 5779

bysieurs engineering company. Has collaborated with a U.S. firm in the development of image processing products.

Cavron Action Surveys Pty Ltd PO Rux 6325 Hay Street EAST PERTH WA 6004

> Let: (99) 125 2644 Fau (99) 421 1658

investorian the acquisition and processing of airbome geophysical data.

Dames and Moore Pty Ltd 26 Lyall Street SOUTH PERTH WA 6010

Tel: (09) 367 8055 Fax: (09) 367 6780

Consulting services.

<u>Geoscan Pty Ltd</u> 24 Outram Street WEST PERTH WA 6005

Tel: (09) 481 3466 Fax: (09) 481 1530

Complete remote sensing services offered, particularly in mining exploration.

PHM Survey Centre Unit 3, 18 Main Street OSBORNE PARK WA 6017

Tel: (09) 444 0233 Fax: (09) 443 2598

Distributor of global positioning systems.

MPA International Pty Ltd 37-51 Lusher Road CROYDON VIC 3136

Tel: (03) 724 4444 Fax: (03) 724 4455

Commercial development and marketing of the micro BRIAN image processing system.

World Geoscience Corporation 17 Emerald Terrace WEST PERTH WA 6005

Tel: (09) 322 1799 Fax: (09) 481 0709

Specialists in earth resource mapping.

Dames and Moore Pry Ltd

Tel: (09) 367 8055 Fax: (09) 367 6760

Consulting services

~

Greoscal Payling 24 Octavit Street WLST PERTIT WA : 6005

Pate (09) 487 1500

Complete remote sensing survices othered, particularly in mains exploration.

THE SHORE CONTRO Date of the Mail Stream

And the second second second second second

APA INTERNITION PALAC

Pate (65) 724-4444

Commercial development and marketing of the micro BRIAN image processing

Mark Secondance Consolution

Tell. (09) 322 1799

Seessificts to cartin resource mapping

Earth Resource Mapping Pty Ltd 316 Churchill Avenue SUBIACO WA 6008

Tel: (09) 388 2900 Fax: (09) 338 2901

Developers of image processing software.

#### 5. PUBLICATIONS AVAILABLE

Australian Remote Sensing Industry Strategy and Action Plan (July 1989) Australian Space Industry Development Strategy

Both publicaions available from:

Australian Space Office Department of Industry Technology and Commerce 51 Allara Street CANBERRA ACT 2601

Tel: (06) 276 1915 Fax: (06) 276 1942

#### 6. INDUSTRY CONFERENCES

Sixth Australasian Remote Sensing Conference Wellington, New Zealand

November 2-6, 1992

Contact: Ms. Stella Belliss DSIR Physical Sciences Box 31-311 Lower Hutt NEW ZEALAND

> Tel: 64 4 66 6919 Fax: 64 4 69 0067

Earth Resource Margang Phy L10 316 Churchill Avenue SUBLACO WA 6008

> Tel: (09) 388 2900 Fel: (09) 338 2901

Developers of image processing software.

Australian Remote Sensing Industry Strategy and Action Plan (July 1939) Australian Space Industry Development Strategy

licent ensuresions available from:

Australian Space Office Department of Industry Technology and Commerce SI Aliara Street CAMBERRA ACT 2001

Tal: (06) 276 1915

Sitth Australissian Remote Sensing Conferen

COOL 91C ABCHREVOW

Contacts Mr. Stella Bellias DSIR Physical Sciences Box 31-311 Lower Frunt NBW ZEALAND

> Fel: 64 4 66 6919 Pax: 64 4 69 0967



### 7. CANADIAN TRADE OFFICES IN AUSTRALIA

Canadian Consulate 6th Floor 1 Collins Street MELBOURNE VIC 3000

Tel: 61 3 654 1433 Fax: 61 3 650 5939

Canadian Consulate General Commercial Division 8th Floor, AMP Centre 50 Bridge Street SYDNEY NSW 2000

Tel: 61 2 231-7022 Fax: 61 2 223-4230

Canadian High Commission Commercial Division Commonwealth Avenue CANBERRA ACT 2600

Tel: 61 62 73-3844 Fax: 61 62 73-3285

#### ANADIAM TRADE OFFICES IN AUSTRALIA

Canadian Consulata 9th Floor 1 Collios Street MELBOURNE VIC 360

> Tel: 61 3 654 1433 Fex: 61 3 650 5939

Commencial Committee Commen Commencial Division Sta Floot, AMP Centre Stablidge Street SylDivis Y NSW 2000

Petr 61 2 231-7022

Canadian Abgh Camanisan Commercial Division Constionwealth Avenue CAMPEREA ACT 2600

Tel: 61 62 73 3844



