



Annual Report 2004



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Adacel is a leader in air traffic control simulation and training.



Adacel is a leader in satellite-based air traffic management systems.

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Board of Directors

Julian Beale (Chairman)
Silvio Salom (Managing Director)
Alex Waislitz
Kevin Courtney
David Smith
Peter Landos (Alternate to Mr Waislitz)

Company Secretary

Errol Turner

Bank

Westpac Banking Corporation
360 Collins Street
Melbourne Victoria 3000

Solicitors

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Auditor

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452 Johnston Street
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Adacel's strategic focus is on aviation and defence simulation and control for the aviation and defence markets. From our North American operational base, Adacel is already a world leader in air traffic control simulation and training systems and satellite-based air traffic management software for airspace over oceans. Adacel's strategy is to build on this position and take our industry-leading products and technology into associated markets by leveraging our excellent reputation for innovation and quality solutions and our extensive customer base.

SIGNIFICANT EVENTS

Strategic restructure after disappointing financial result

With the group restructure completed, Adacel is a leaner company competitively positioned in attractive international markets.

\$27.3 million US Air Force order

Adacel awarded order to supply the US Air Force with an additional 42 air traffic control tower simulators as part of the \$100 million USAF Tower Simulation Systems program.

\$21 million contract expands existing cooperation and takes Adacel into new areas of air traffic control

Adacel is a member of the Lockheed Martin team working on development of new US air traffic automation systems while continuing to provide software support for the new US Oceanic air traffic management system. A major milestone has been achieved with the first stage of the new Oceanic system entering initial service at the Oakland control centre in June.

Voice-based automation for Joint Strike Fighter

Adacel is developing voice-based cockpit automation systems for the US\$200 billion global F-35 Joint Strike Fighter program. Adacel was selected against tough international competition.

Portugal Oceanic Air Traffic Management Contract

Adacel awarded contract by Portuguese civil aviation authority, NAV Portugal, to support the Adacel Oceanic system used in the country's North Atlantic flight region.

THE YEAR IN REVIEW

OVERVIEW

The 2004 financial year was a most disappointing period for our company. With continued losses in Australia, the impact of the higher Australian dollar and delays to anticipated contracts, we moved to complete the restructuring of the group by exiting the last of the loss-making non-core operations and strengthening our strategic focus.

We are now focused exclusively on simulation and control for the aviation and defence markets, with our primary operations in North America servicing global markets. The actions taken also significantly reduce our operating cost base.

In our core operations we continued to be successful in our international markets in 2004, with numerous major procurements, including a \$27 million simulation order from the US Air Force, a \$21 million order from Lockheed Martin and a contract for work on Portugal's Oceanic system. We further extended our simulation product range with the launch of the ARTT Tower simulation system.

The company also advanced its strategy of taking our existing technology into adjacent markets with our selection by Lockheed Martin to supply voice-based cockpit automation systems for the global F-35 Joint Strike Fighter program.

FINANCIAL PERFORMANCE

For 2004, the financial performance of the company was poor. The operating result before tax and one-off adjustments was a loss of \$11,266,000 caused largely by the losses in the non-core businesses prior to closure, the adverse impact of the appreciating Australian dollar and timing delays associated with anticipated contracts. The net after-tax group loss was \$23,451,000 after allowing for restructuring costs and the write down of intangible and other balance sheet items, which totalled \$11,612,000.

STRATEGIC INITIATIVES

The over-riding objective of the strategic restructure has been to focus the company exclusively on simulation and control for aviation and defence. The initiatives undertaken also improved our operating base. The exit of non-core operations, cost reductions in North America and integration of e-learning simulation into North America are largely complete. Corporate overheads have been substantially reduced and the functions are being moved to North America. Across the group, the initiatives implemented reduce staff numbers from around 310 at June 2003 to around 180 at December 2004.

MARKETS AND OPERATIONS

With the completion of restructuring, Adacel's operations are now primarily based in North America, where our largest market is located, and from where we service customers throughout the world. Further support is provided from smaller operations in Australia and the UK.

Through the restructuring, the company is focused on simulation and control for the aviation and defence markets where we have an established global competitive position.

During 2004, we continued to hold our competitive market position, winning new contracts and repeat business from long standing customers.

Operationally, we have significantly reduced our cost base while investing to build a position in adjacent market segments.

In July, we appointed Frederick L. Sheldon as Chief Executive Officer of the North American operations to add to the management capability in our key market. Fred has an extensive and successful background in leading and managing major aviation and defence technology businesses in North America, including experience with DRS Technologies, Rockwell Collins and Boeing.

These actions strengthen our position in our markets and enable us to leverage the company's existing technology and customer relationships to address adjacent market segments.



Julian Beale **Chairman**

ATC Simulation

Air traffic control simulation continues to be a core market for Adacel and we continued to be recognised as the market leader during 2004.

In December, Adacel was awarded an additional order from the US Air Force under the Tower Simulation System (TSS) program for which Adacel was selected in April 2002. Under this order, valued at \$27.3 million, the company is supplying air traffic control tower simulation systems to the Air Force with work due for completion by June 2005. Support and maintenance for this TSS program is scheduled to continue through to 2011.

In addition to the US Air Force, we continued to generate repeat simulation business from our extensive customer base during the year, including the US Federal Aviation Administration (FAA), NASA, Austria, Canada, Hungary and Italy.

For the future, we expect growth in civil and military aviation simulation markets due to the increasing demand for trained professionals and growing importance of simulation in mission rehearsal.

Air Traffic Management

Adacel's Air Traffic Management operations continued to operate profitably from a solid revenue base in 2004. The company continued to build on its strategic position in satellite-based air traffic management systems during the year with its work on programs such as the US Oceanic ATM system, Portugal's Oceanic system and work with Lockheed Martin that has taken us into new aviation markets.

Under a \$21 million order, Adacel is working with Lockheed Martin on development of new US air traffic automation systems and other areas, while continuing to work together on the US Oceanic system. Adacel supplied the core air traffic management automation software for the FAA's Oceanic modernisation program, for which Lockheed Martin is the overall systems integrator.

A major milestone was reached in this program in June when the first stage of the new system went live for initial daily use at the FAA's Oakland, California, control centre. The system will be implemented progressively through to 2005 at the FAA's two other Oceanic control centres, New York and Anchorage, Alaska. Adacel will provide ongoing support to Lockheed Martin for the life of the Oceanic program. Adacel is working with Lockheed Martin to address additional US and international Oceanic opportunities.

During the year we were also awarded a contract by Portugal's civil aviation authority, NAV Portugal, for the support of our Oceanic system used in that country's North Atlantic flight region.

Adjacent Markets

Our strategy is also targeted at adjacent market segments using our existing technology and customer relationships. These include providing our unique voice controlled ATC simulation technology into the aircraft simulation and training market as a significant upgrade to existing flight and training simulators. In addition, the application of voice control technology to operational ATM challenges offers significant opportunities in improved air vehicle control and airport safety.

To assist in market entry we are pursuing new relationships with major companies operating in these areas.

During the year we achieved a milestone with our selection to develop a speech-enabled cockpit control system for the US\$200 billion global F-35 Joint Strike Fighter program. This initial order from Lockheed Martin is for the System Development and Demonstration phase of the JSF program, with options to licence the technology for each manufactured aircraft. Under current program plans, 3000 of the multi-role stealth fighter are expected to be manufactured.

Adacel was selected as preferred supplier against strong competition on the basis of our technological capability. This has provided further international recognition for our speech-enabled system control and automation technology in the aviation and defence environments.

The JSF program win opens up potential new markets for us in retrofitting speech-enabled cockpit control into other existing aircraft and supplying systems for new and future aircraft.



Silvio Salom **Managing Director**

THE YEAR IN REVIEW

BOARD CHANGES

Since our last Annual Report, Kerry Adby and Ian Shiers left the Board. Kerry was a non-executive Director for six years until October 2003 and Ian was Chief Operating Officer and an executive Director from 2002 until July this year. Directors would like to thank both Kerry and Ian for their contributions to the company.

During the year, Directors reviewed their remuneration levels and agreed to reduce annual non-executive Director fees by 25 per cent.

OUTLOOK

Adacel is now clearly focussed on its core international markets of simulation and control for aviation and defence. Here we will continue to consolidate our strong position and use this to build a presence in adjacent segments.

With the restructuring largely complete, we have a renewed focus, a significant reduction in operating costs, and a drive for financial returns.

The recent appointment of Fred Sheldon as CEO for North America will further strengthen the management capability of our business.

On the basis of the actions taken, we look ahead into 2005 with cautious optimism.



Julian Beale
Chairman



Silvio Salom
Managing Director

Group Financial Performance

 Year ended June 30

\$'000	2004	2003
Operating Revenue	55,576	92,580
Other Income	2,006	4,425
Total Revenue	57,582	97,005
Loss before tax & one-off adjustments	(11,266)	(2,854)
Writedowns & accelerated depreciation & amortisation	(9,889)	(2,283)
Redundancies & costs of business closures	(1,781)	(1,536)
Net profit on disposed businesses & premises	58	892
Loss before tax	(22,878)	(5,781)
Tax expense/(benefit)	573	(2,113)
Net loss after tax	(23,451)	(3,668)

Group Financial Position

As at June 30

\$'000	2004	2003
Total Current Assets	31,745	41,429
Total Non-Current Assets	7,289	21,662
Total Assets	39,034	63,091
Current Liabilities	28,240	27,508
Non-Current Liabilities	456	672
Total Liabilities	28,696	28,180
Net Assets	10,338	34,911



ADACEL BOARD OF DIRECTORS

Julian Beale

BE (Syd), MBA (Harvard)

Non-Executive Chairman

Appointed as an independent non-executive Director in June 2003. Mr Beale has extensive international business and capital markets experience and a background in private and public companies at both Board and management level. Mr Beale held senior positions in a range of Australian companies including English Electric and Esso Australia (now Exxon) and was Managing Director of a resources group with interests in petroleum production, pipelines and minerals. He also established a plastics processing company in Melbourne and was a key participant in the successful transition of Moldflow, a developer of software for injection moulding machines, to the United States NASDAQ capital market. Mr Beale was also a member of the Federal Parliament for 11 years from 1984 as the Member for Deakin and later Bruce. During this time he held many Shadow Ministerial portfolios.

Silvio Salom

BEng (Electrical)

Managing Director

Managing Director of Adacel Technologies Limited since incorporation in October 1997, Managing Director and founder of the predecessor Adacel Pty Ltd from establishment in 1987. Mr Salom has extensive experience in the strategic and operational management of hi-tech companies with particular expertise in information technology related to the manufacturing, environmental, defence, transport, multimedia and telecommunications industry sectors.

Alex Waislitz

BEc (Mon), LLB (Mon)

Non-Executive Director

Non-executive Director since August 2003. Mr Waislitz is Executive Chairman of the Thorney Investment Group. He has extensive business experience, and is a director of various Pratt Group and Visy Board companies. Mr Waislitz is a Director of McPhersons Limited and Collingwood Football Club.

Kevin Courtney

FCA FAICD

Non-Executive Director

Independent non-executive Director since October 1998. Mr Courtney is a chartered accountant and a former regional managing partner of Ernst & Young. He is a Director of MLC Nominees Pty Ltd, National Markets Group Limited and National Australia Superannuation Pty Ltd, members of the National Australia Bank group of companies. He is Chairman of Adacel's audit committee. Mr Courtney has been a Commissioner of the City of Melbourne and a Director of Connect.com.au, the internet service provider sold to AAPT Telecommunications Ltd. He has been Chair of the audit committees of the Victorian Workcover Authority, the Sunraysia Rural Water Authority and the National Competition Council. Mr Courtney is a Director of the DOXA Social Club assisting underprivileged youth.

David Smith

BE (Electronics)

Non-Executive Director

Non-executive Director since July 2000 and prior to that date an executive Director from incorporation in October 1997. Mr Smith was a senior executive of the company and has extensive experience in software development, project and operations management in the military, aviation and transport domains.

Peter Landos

BEco (ANU)

Alternate to Mr Waislitz

Non-executive Director alternate to Mr Waislitz since August 2003. Mr Landos is an Investment Manager with the Thorney Investment Group. He joined Thorney in 2000 after five years at Macquarie Bank Limited. Mr Landos is an alternate Director to Mr Waislitz on the McPhersons Limited Board.



Julian Beale



Silvio Salom



Alex Waislitz



Kevin Courtney



David Smith

CORPORATE PROFILE

Adacel is a leading developer of advanced simulation and control systems for aviation and defence. The company is the world leader in air traffic control simulation, providing simulators for training air traffic controllers in both civil and defence environments and for research, planning and modelling of air traffic procedures. Adacel is also a world leader in satellite-based air traffic management automation software for Oceanic airspace as well as being recognised for its industry leading intelligent speech-driven systems for cockpit and simulator automation.

Through its technological leadership and customer commitment, Adacel has built an international reputation for its products and services and has been awarded some of the industry's most prestigious programs. This includes being awarded the industry's largest ever air traffic control simulator program by the US Air Force.

Adacel systems are in civil and military operation in more than 30 countries throughout the Americas, Europe, Asia and the Pacific and its customers include civil and military organisations, aeronautical universities and large international aviation and defence suppliers.

Adacel was established in 1987 in Melbourne, Australia, and through an IPO became publicly-listed on the Australian Stock Exchange in 1998 (ASX code: ADA). With international success in aviation simulation and control, Adacel's main operating base is in North America. Adacel has offices in Melbourne, Montreal, Orlando, Washington and the UK.



A MaxSim simulator in operation.



Airport simulation from a MaxSim system.

ADACEL'S STRATEGIC RESTRUCTURING

The Adacel group has been restructured to focus exclusively on simulation and control solutions for the aviation and defence markets, primarily from its North American base. In Australia, Adacel has exited non-core operations outside of this area of activity and has integrated the e-learning simulation business into the North American operations.

With the completion of the group restructuring, Adacel's main operations are located in North America. US operations are based in Orlando, Florida, with an office in Washington, and Canadian operations are based in Montreal. Adacel's head office is in Melbourne and the company also has an office in the United Kingdom.



Airfield simulation from MaxSim simulator.

ADACEL'S PRODUCTS AND SERVICES

Adacel develops advanced simulation and control systems for aviation and defence. Our core areas of operation are:

- air traffic control simulation and training systems
- satellite-based air traffic management automation systems
- associated aviation and defence segments where we can utilise our existing simulation and voice recognition technologies

Adacel's core products are:

- MaxSim: Market leading advanced air traffic control tower and radar simulators for training and research that range through to fully-immersive 360 degree airport tower replicas
- ARTT (Aviation Research and Training Tools): Cost effective entry to medium-level range of tower, radar and driver simulators for research and training
- Aurora: The most advanced automation system available for satellite and data-linked air traffic control for Oceanic and large continental air space
- Adacel's intelligent speech-driven technology for automation of simulation and control systems

Adacel also provides support and maintenance services to customers throughout the world.



Adacel's MaxSim simulation system.

ADACEL'S MARKETS

Adacel's largest market is the United States, which accounted for more than 80% of group revenues in 2004. The key market sectors we are targeting in the US are the defence forces, the civil aviation and airports sector, aerospace universities and major suppliers to these markets. Our US customers during 2004 included the Air Force and Army, the Federal Aviation Administration, NASA, Lockheed Martin and aeronautical universities such as University of North Dakota, Embry-Riddle Aeronautical University and University of Alaska.

In Canada and international markets outside the US, our primary segments are civil and military aviation organisations. During 2004 we provided products and services to customers in Canada, Europe, the Middle East, Australia, Asia and South America in addition to those in North America.

OFFICE & CUSTOMER LOCATIONS



REVIEW OF OPERATIONS

Simulation Highlights of 2004

- \$27 million USAF tower simulator order
- Adacel assists NASA's VAST (Virtual Airspace Simulation Technology) project
- FAA Tech Centre installs additional MaxSim capability

ATC SIMULATION

Adacel continues to be recognised as the market leader in simulation systems for training civil and military air traffic controllers and for research on airport traffic procedures and processes.

With a \$27 million order from the US Air Force during 2004 for an additional 42 MaxSim tower simulators, as well as other deliveries to civil aviation organisations, Adacel's MaxSim was again the industry's largest selling air traffic control simulator. Adacel's simulators are operational in civil aviation training establishments in 30 countries and are being supplied to US Air Force bases and training centres in the US and throughout the world as well as to Canadian and other defence forces.

Adacel's largest simulator market is North America, which we service from centres in Orlando and Montreal. Here we continue to develop ongoing relationships with key training and operational sections of the US defence forces, the FAA, NASA, NAV Canada and US aerospace training universities. For example, during the year, the FAA's William J. Hughes Technical Centre installed additional MaxSim simulation capability for airport control tower planning studies. Adacel also worked with NASA to link NASA's FutureFlight Central tower simulator – which is driven by Adacel's MaxSim software – to NASA's Boeing 747 flight simulator and other simulation facilities as part of the VAST (Virtual Airspace Technology) project.

We also have a strong position in international markets outside North America, and continued to generate repeat business from, and provide support services to, our customer base throughout the world.

To build on our market lead, we continued to develop our simulator technology during the year, including introducing a Tower simulator to the ARTT (Aviation Research and Training) range of simulators. Adacel is driving technological change in the industry with higher fidelity visualisations and adoption of voice recognition and synthesis to increase reality and efficiency of the training process.



Adacel's MaxSim system in use at the US Army's Fort Rucker. (photo by Andrew Stamer – Fort Rucker Public Affairs)

Adacel's simulator range

Adacel develops a comprehensive range of air traffic control simulators, from full 360 degree replicas of airport control towers to radar simulators and desktop part-task trainers.

MaxSim

Adacel's MaxSim tower and radar simulator range is recognised as incorporating the industry's leading simulation technology, including Adacel's internationally-awarded voice recognition and synthesis system. MaxSim Tower provides the most advanced training simulations of both civil and military control tower operations, while MaxSim Radar provides en route, terminal and procedural simulation. MaxSim can be used in a variety of advanced research and training roles from airport siting studies and advanced air traffic controller training to disaster management planning and traffic flow evaluations.

ARTT

Aviation Research and Training Tools (ARTT), is an integrated family of compact, entry to medium-level solutions that combine realistic and effective air traffic simulation performance and flexibility with affordability and scalability. The range includes tower and radar simulators, as well as a driver simulator for airport driver training.

Services and support

Adacel provides a full range of training, e-learning and support services to assist its customers in maximising the value of their systems.

Market opportunities

Adacel's strong position and technological lead continue to give us an edge in our ATC simulation markets. We expect to see solid opportunities in both the civil and military markets due to increased demand for trained professionals. In addition, in the defence sector, simulation is being increasingly adopted as a key part of mission rehearsal and operational readiness.

ATM highlights of 2004

- \$21 million Lockheed Martin contract extension
- Contract award for work on Portugal's Oceanic system
- Key milestones achieved for US ATOP program
 - Government acceptance of first stage system
 - First stage system goes live at Oakland control centre
- Entering into new US ATM activities

AIR TRAFFIC MANAGEMENT

Adacel continues to be at the forefront of satellite-based air traffic management systems through its work on Oceanic systems in the US and internationally.

Partnered with prime contractor Lockheed Martin, Adacel is providing core automation software for the US FAA's Advanced Technologies and Oceanic Procedures (ATOP) program, which passed major milestones during the year.

This program will modernise the FAA's three Oceanic centres in Oakland (California), New York and Anchorage (Alaska) that control international air traffic into and from the US Oceanic airspace. ATOP will be the world's most advanced Oceanic system when fully implemented in 2005.

Key milestones passed by ATOP during the year were government acceptance of the first stage of the system – Build 1 – and the Build 1 system going live for initial daily use at the Oakland centre on June 30 this year.

Adacel's relationship with Lockheed Martin was further strengthened during the year with a \$21 million contract extension for work on ATOP as well as for other Lockheed Martin air traffic management programs outside the Oceanic field.

Adacel's position in Oceanic systems internationally was also reflected in the award of a contract in February this year from NAV Portugal for work on the Portuguese Oceanic system controlling air traffic in the North Atlantic. Adacel Oceanic systems are also in operation in New Zealand and Iceland.

Adacel's Aurora

Adacel's Aurora Oceanic automation system is at the core of these systems. Widely recognised as the leading technology in satellite-based Oceanic systems, Aurora uses satellite-based data links, information from global positioning and provides radar-like displays for controllers. Satellite-based technology is revolutionising the management of air traffic across Oceanic flight regions, enabling airlines to fly optimal flight paths, which allows fuel savings, shorter travelling times and increased efficiency on congested international air routes.

Market opportunities

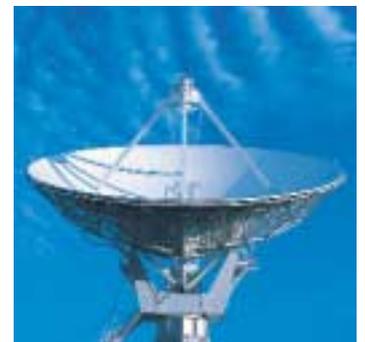
With more than a decade's experience in the evolution of Oceanic systems, and with our Aurora system automating management of air traffic in key flight regions in the Atlantic, Pacific and Arctic oceans, Adacel has a strong competitive position in this satellite-based technology.

We expect the Oceanic market to continue to generate opportunities for new installations, upgrades and support, particularly once the US ATOP system goes live and becomes a benchmark for the rest of the world.

Our experience with these systems is also opening up opportunities in other areas of air traffic control. Our relationship with Lockheed Martin and the recent contract extension is assisting our move into these areas.



Adacel's technology in operation at Airways New Zealand's Oceanic Centre in Auckland.



REVIEW OF OPERATIONS

Adacel achieved a milestone during the year with our selection to develop a speech-enabled cockpit control system for the US\$200 billion F-35 Joint Strike Fighter program.

NEW INITIATIVES

Adacel's strong market position and technological lead in air traffic management simulation and airspace control provide a strategic foundation to expand into associated sectors using our existing technology and customer relationships.

The technologies and components that have given us an international lead in our air traffic management simulation market also give us products that have a competitive advantage in associated markets. This includes our MaxSim simulation and Aurora systems, our ATC environment model, visual databases, aircraft models, and our internationally-acclaimed speech recognition and synthesis systems as well as conflict prediction and other components.

These have attractive and innovative applications in other areas of aviation and defence training. These include incorporating speech-automated intelligent ATC environments into flight simulators for civil and military pilot training, and voice-controlled automation of aircraft cockpits and UAVs (Unmanned Air Vehicles) and in airport safety systems.

Adacel's selection in March this year to develop a speech-enabled cockpit control system for the F-35 Joint Strike Fighter program has significantly progressed our New Initiatives strategy. This voice control system is being developed by Adacel under an order from Lockheed Martin. This initial order is for the System Development and Demonstration phase of the JSF program, with options to licence the technology for each manufactured aircraft. Under current program plans, 3000 of the aircraft are expected to be manufactured in the production phase. Speech controlled cockpit functions are a new area for civil and military aircraft and are expected to have a significant impact on pilot efficiency and effectiveness.

Adacel was selected against strong competition from major international companies on the basis of our demonstrated technological capability in this area. This recognition and technological lead gives us a solid base from which to build our involvement in this area.

Market outlook

Adacel has acknowledged industry leadership in these technologies. To help enter these associated markets, we are working closely with our existing customer base in the development of applications that use this technology and also developing new relationships with companies already operating in these areas.

Our selection for the JSF program will open up opportunities for retrofitting speech-enabled cockpit control into existing aircraft and supplying systems for future aircraft. In addition, the combination of our simulation and voice control technologies provides new opportunities in the emerging area of UAVs.



Lockheed Martin Joint Strike Fighter.



Adacel is developing a speech-enabled cockpit control system for the F-35 Joint Strike Fighter program.

