

CANBERRA AIRPORT

MAIN CONSTRUCTION COMPANY : Construction Control
DEVELOPER/CLIENT : Canberra Airport
COMPLETION : 2012
ARCHITECT : Guida Moseley Brown
ENGINEER : AWT Structural Engineers, Hughes Trueman, Rudds Consulting Engineers, Fire Safety Science, Heggies and Aurecon.
PROJECT END VALUE : \$350 million

THE 'AIRVOLUTION' PROJECT - ALL UNDER CONTROL

Established in 1998, Construction Control has been providing the ACT and surrounding region's construction industry with high quality project management resources and advice.

Specialising in construction management, fit-outs and building refurbishments, Construction Control has completed a number of high profile projects for a range of companies, organisations and government departments.

Given this experience and reputation within the building industry, Construction Control was appointed the Project Manager for the new \$350 million terminal redevelopment at Canberra Airport. This 'AirVolution', as the redevelopment has been termed, incorporates a new 50,000m² terminal, two 83,000m² multi-storey car parks, two 5,500m² office developments, a central elevated road and an extension of the aircraft parking hardstand.

Given the enormity of this re-development, Construction Control's planning and staging of the development has been critical to

reducing any disruption to the public. The terminal building is a post-tension, concrete structure with a structural steel frame and a metal deck roof. In addition, the public areas of the Terminal feature cutting-edge terrazzo floors, stone clad walls and modern pre-finished metal ceiling panels.

The installation of the baggage handling system and the aerobridges are two further examples of the unique aviation services of the new terminal building.

The current car parks and Terminal Circuit are being replaced by two structured car parks and a new road system, featuring an elevated roadway to separate the departures and arrivals levels. One of Construction Control's directors, John Gasson, said the car parks were architecturally stunning in their own right.

"All of the car park levels will have a façade using structural steel frames with unique aluminium louvres. In addition, the escape stairs will feature pre-cast concrete walls and steel stairs clad

with glass planks," Mr Gasson said. "The last component of the re-development is the construction of a new aircraft parking hardstand that will act to service the new terminal building.

"Basically, this involves the installation of new services, 45,000m² of concrete and flexible pavement, all with the intention of having completed this by 2012," he said. During the construction of the new road system and while all of the major utility services are being installed, Construction Control plans to minimise the amount of temporary works required, in order to keep the terminal and other facilities operational.

"One of the major keys to a successful project is time management and co-ordination with the other builders and businesses on-site," Mr Gasson said.

"Generally speaking, since our initial involvement on the 'AirVolution', the project has run smoothly and everyone involved has fostered productive and professional relationships. At the end



CONSTRUCTION CONTROL
1 Torrens Street
Braddon ACT 2612
t. 02 625 74775
f. 02 624 89094
e. info@ccontrol.com.au

FLYING HIGH AT CANBERRA AIRPORT

Formed in 1999 by John Collet and Greg Spencer, Cercol Construction Services boasts more than 48 years of carpentry and construction experience within the industry.

With eighteen staff on board, Cercol Construction Services' primary focus areas range from small to large commercial and industrial construction projects, as well as a wide variety of subcontract carpentry works on other commercial projects.

Since their involvement with Capital Airport Group, Cercol Construction Services has completed a number of refurbishments, fit-outs and new construction projects to a net worth of \$25 million. As a result of their experience and project flexibility, their involvement with the 'AirVolution' re-development of Canberra International Airport is testament to the high calibre of work Cercol Construction Services continues to deliver. Since their initial involvement on the \$1 billion re-development project, Cercol Construction Services have been responsible for completing a number of projects onsite. This has included refurbishing several existing buildings, as well as building two new ones.

One of their major responsibilities has been the refurbishment of three aircraft hangars, initially built in 1939. As conserving the heritage aspects of the hangars was of paramount importance to Cercol Construction Services, intricate and detailed work was carried out to ensure this was maintained. Greg Spencer, one of Cercol Construction Services' Directors, said although the hangars were restored and given a complete makeover, the heritage theme of the buildings remained intact. "Cercol

Construction Services is passionate about preserving the original facade of buildings. The historical features of the hangars at Canberra International Airport were deemed both unique and important elements to preserve, hence we aimed to ensure this occurred throughout the re-development stages," Mr Spencer said.

Given the fact the hangars dated back to 1939, one of the challenges Cercol Construction Services faced was having to carry out extensive brickwork demolition, a process that in order to be successful, relied on the knowledge and skill set of an experienced and traditional builder, such as Cercol Construction Services.

Another challenge they faced was that the entire structure of the hangars needed to be completely converted, with the central area left vacant for other aviation companies to take up future residence.

The hangar's bookends also needed to be replaced and Cercol Construction Services were responsible for transforming these into A-grade office spaces. In addition to the

refurbishment of the three hangars at the Canberra International Airport, Cercol Construction Services also built a brand new major building for Brindabella Airlines and constructed an Australian Air Express building. In order to suit the developer's, Capital Airport Group 'AirVolution' vision, the buildings Cercol Construction Services were required to build within the precinct needed to reflect a standard of high quality and a sense of the 'unique', a challenge they were only too happy to meet. In fact, Mr Spencer said Cercol Construction Services felt honoured to work alongside Construction Control during the Canberra International Airport re-development.

"To be involved in this project and work alongside the Capital Airport Group, as well as knowing the significance and success of this major airport re-development has been the pinnacle of my career.

"Unlike the other building sites we have been involved with, the Canberra International Airport re-development project has fostered great working relationships, rather than competition, between the various developers," Mr Spencer said. "Furthermore, it has been an absolute honour to work with such a passionate and professional group of people in order to achieve this innovative and collaborative vision for the Canberra International Airport," he said.



CERCOL CONSTRUCTION SERVICES PTY LTD
 14 Geelong Street
 Fyshwick ACT 2609
 t. 02 6239 3735
 f. 02 6239 3734
 e. info@cercol.com.au
 www.cercol.com.au





BELLCHAMBERS ASBESTOS REMOVAL – KEEPING WORKPLACES ASBESTOS-FREE

Bellchambers Asbestos Removal is the largest asbestos removal company in Canberra and the wealth of experience they've acquired over the years ensures they remain at the forefront of the industry.

In addition to an in-house decontamination unit for servicing equipment and decontaminating material, they're also the only asbestos removalists in Canberra to have an asbestos 'chain of custody'.

This means that Bellchambers Asbestos Removal can track the waste from the job site to its safe disposal at the waste factory.

As part of the \$1 billion 'AirVolution' re-development of the Canberra International Airport, Bellchambers Asbestos Removal have been continually involved, ensuring any underground asbestos discovered was removed and that the area remained a safe place to work.

George Bellchambers, Director of Bellchambers Asbestos Removal, said the majority of the asbestos at the airport had been discovered in underground telecommunication pipes onsite. As a result, they faced a number of challenges in its removal.

"As asbestos needs to be manually removed by hand to ensure there are no spillages or ruptures, some of the initial trenching had to be made

quite wide as some of the asbestos contaminated pipes were set deep underground. "However, we were able to overcome this using our specific machinery, knowledge and expertise so that all of the asbestos was safely removed and disposed of," Mr Bellchambers said.

As Bellchambers Asbestos Removal's head office is located at a close proximity to the site, another advantage for the developers has been that any unexpected asbestos discovered can be removed almost immediately.

The fact Bellchambers Asbestos Removal continues to meet the high standards of safety and expertise expected on such a prominent project is testament to the quality of work they continue to perform.

BELLCHAMBERS ASBESTOS REMOVAL

10 Railway Street
Oaks Estate ACT 2620
t. 62 997 332
f. 62 997 985
e. george@bellchambersasbestos.com.au
www.bellchambersasbestos.com.au

CEMENTING THE AIRPORT'S FUTURE

Since their establishment forty years ago, CPS Concretors Pty Ltd have been providing their concrete placing and finishing expertise to the building and construction industries.

Operating within the Canberra region, as well as the South Coast, CPS Concretors Pty Ltd and their concrete pumping partnership, were involved in a number of high profile projects, including the Batemans Bay Retail Development Project and the Illawarra Retirement Apartments.

Since August 2008, CPS Concretors Pty Ltd have also been involved in the \$1 billion re-development of the Canberra International Airport, which incorporates new car parks, a southern and western concourse terminal and a new airport gateway road intersection.

Working with the major builders, Construction Control, CPS Concretors Pty Ltd have been responsible for the placing and finishing of concrete, as well as being the major supplier of concrete pumps for the Canberra Airport Terminal and car parks.

Given their ability to complete large projects within tight deadlines and cost restraints, CPS Concretors Pty Ltd have successfully been fulfilling their concreting responsibilities at the airport, ensuring the projects are meeting the highest standards.

Managing Director of CPS Concretors Pty Ltd, Rocco Sergi, said that as a result of his experienced team and years of expertise, CPS Concretors Pty Ltd had not faced any major challenges whilst carrying out their concreting responsibilities.

"The Canberra Airport re-development project incorporates a team of building professionals and industry leaders, which has resulted in the project running smoothly," Mr Sergi said.

"Offering only the highest quality concreting expertise, we are proud to be associated with Construction Control for the work we are providing at the airport," he said. With a plethora of 'Excellence in Building' awards, CPS Concretors Pty Ltd continue to provide their professional services and equipment for concreting projects, regardless of their size. In addition, their unquestionable commitment to excellence, ensures they remain one step ahead of their industry competitors.

CPS CONCRETORS PTY LTD

PO Box 2047
Kambah ACT 2902
t. 02 6231 8367
f. 02 6231 7197
e. cpssc@infinite.net.au





EXPERTISE IN FORMWORK



REINFORCING THE CANBERRA INTERNATIONAL AIRPORT

Capital Reinforcement and Stressing Specialists (CR and SS) is a concrete reinforcement company that has been providing fixing and post-tensioning services to builders across the ACT, NSW and Queensland.

With over thirty years experience and a highly experienced and professional team, CR and SS have been involved in providing their services to a number of prolific projects, such as the Canberra National Museum, Parliament House and the Magistrates Court.

As part of the \$1 billion re-development of the Canberra International Airport, CR and SS have also been responsible for providing the reinforcements for a number of the buildings being developed as part of the 'Airvolution' project.

Since their involvement seven years ago, CR and SS have supplied the reinforcement for all of the main airport buildings, which consisted of putting steel and post tensioning in the concrete slabs of the building. In addition, they have also been providing their reinforcement expertise on the elevated road which once completed, will lead up to the departure terminals of the airport.

Geoff Kalsbeck, Director of CR and SS said working with the Capital Airport Group as part of the 'Airvolution' project had been a fantastic

experience and as a result of their professionalism on-site, CR and SS had faced no challenges during their involvement.

"Working on this project has been sensational, only the best professionals have been involved in this re-development making the experience smooth-flowing and hassle free," Mr Kalsbeck said.

"In addition, there has been the same foreman working with us on-site over the seven years, which has given the project a much needed sense of continuity, which most other building sites lack," he said.

Given the fact CR and SS constantly provide quality services and products to the building sector, it is without a doubt they will continue to be one of the reinforcement and stressing specialists industry leaders.

CAPITAL REINFORCEMENT AND STRESSING SPECIALISTS

78 Babylon Road
Queanbeyan NSW 2620
t. 6297 0663
f. 6297 0664
e. geoff@crss.net.au
www.crss.net.au



I.C Formwork has been providing their building services and expertise to the formwork industry since 1983. With more than 170 employees, I.C Formwork has been involved in a number of prolific projects, in both Canberra and NSW.

As part of the \$1 billion dollar re-development of the Canberra International Airport, which is comprised of a series of key infrastructure projects, collectively termed the 'Airvolution', I.C Formwork has been responsible for the construction of formwork for the multi-storeyed aviation buildings.

Since I.C Formwork's initial involvement on the project, they have provided the formwork for the newly completed multi-storey car park. In addition, they are currently working on the first stage of the southern concourse, as well as assisting the development of the elevated road within the airport's precinct.

Throughout these construction phases, I.C Formwork has provided the highest quality formwork materials, such as falsework and formwork in order to complete the original moulds of the 'Airvolution' infrastructures. I.C Formwork's Director, Steve Peter, said as with any building site, the Canberra International Airport project had its' fair share of ups and downs.

"In the building industry, every day can be a challenge. On this particular site, we've definitely had to work around difficult time and design restraints," Mr Peter said. "However, as a result of I.C Formwork's experienced team, we've been able to overcome these particular obstacles and complete our responsibilities on time."

In addition, Mr Peter said working on this re-development had been both a honourable and pleasurable experience.

"I.C Formwork has really enjoyed working with the building team on this project and as a result have fostered a fantastic and beneficial working relationship with all those involved," he said.

Given their ability to provide high quality products, as well as reliable and affordable services, it is without a doubt that I.C Formwork should be the pick of the bunch when choosing your next formwork specialist.

I.C FORMWORK
5 Daly Street
Queanbeyan NSW 2620
t. 6297 7137
e. steve@icformwork.com.au
www.icformwork.com.au



a. Canberra International Airport, the Beginning for KKS Waterproofing.
 b. The start of Paraseal application on the basement level.
 c. Paraseal is rolled out and joined together with seam tape.
 d. Roughly 4,000 square meters of Paraseal has been installed at Canberra International Airport.
 e. Protection sheets of compressed fibro are laid over the top of the Paraseal to prevent punctures.
 f. Paraseal is installed following compressed fibro for protection then steel in preparation for concrete slabs.
 g. Next stage of concrete is ready to be poured.

KKS AUSTRALIA – SEALING THE DEAL

Established in 1980 by Ray and Marlene Kasurinen, KKS Australia have been supplying and installing quality waterproofing and sealant solutions to companies across the Canberra and Sydney regions.

With a strong commitment to local infrastructure and a policy of purchasing from local suppliers, KKS Australia continue to provide quality workmanship and high standards to all projects they are involved with.

Given their extensive local experience, KKS Australia use products best suited to extreme weather temperature variations and the conditions unique to the Canberra region. These include the intense ultra-violet radiation and the extreme, daily thermal movement.

Recently, KKS Australia have been involved in the \$1 billion re-development of the Canberra International Airport. Responsible for the installation of the waterproofing membrane systems of the buildings onsite, KKS Australia have applied both their expertise and professional staff to complete the job.

Ray Kasurinen, Director of KKS Australia, said that as a result of their experience they had been able to identify problem areas and develop maintenance plans and budgets. “As of our industry knowledge and expertise, we have been able to provide

quality services and products to ensure the demands and needs of Construction Control have been met,” Mr Kasurinen said.

“In addition, KKS Australia has really enjoyed working on the Canberra International Airport re-development.

“Throughout the project, we have formed a professional working relationships with Tremco who were very efficient in supplying the Paraseal LG System, which has allowed the project to run within the scheduled time constraints,” he said.

With such a strong commitment to the provision of quality waterproofing systems, KKS Australia will continue to meet the demands of companies, regardless of the size of the job they are responsible for.

KKS AUSTRALIA
 PO Box 3893
 Weston ACT 2611
 4 Manton Place
 Duffy ACT 2611
 t. 02 6287 1271
 f. 02 6288 0336
 e. kksaust@bigpond.net.au
 www.kksaust.com.au

BUILDING THE FUTURE AT CANBERRA INTERNATIONAL AIRPORT

Erincole Building Service (EBS) is an innovative and progressive building company that prides itself in the installation and repair of new façade products.

Specialising in external building façades, timber construction and flat bed routing, EBS also have state-of-the-art facilities that can process aluminium composite panel and medium-density fibreboard materials. With over 20 years of industry experience, EBS has the well-deserved reputation for delivering innovative and complex external façades, as well as being able to ensure projects are completed on time and within budget.

As a result of their expertise, EBS were chosen to work on the ‘Airvolution’ Canberra Internal Airport re-development project. As part of their involvement, EBS were responsible for constructing the external façade of the five-storey airport car park. In addition, they also constructed the external façade for the award-winning Brindabella Business Park. Throughout their involvement at the Canberra International Airport, EBS were able to meet the expectations of Construction Control by offering innovation, flexibility and quality products.

Although time constraints and adherence to budget constraints were major challenges EBS faced during their involvement at the Canberra International Airport re-development, these were obstacles that, as a result of their experienced team of supervisors and tradesmen, they were able to overcome. Wayne Richards, Director of EBS said the company had been honoured to provide their façade services to the project.

“Working alongside the professional and focussed Construction Control has been an honour,” Mr Richards said.

“We’ve been really happy to offer our industry expertise and services to this successful project,” he said.



Given the fact EBS received MBA awards for External Building Facades in 2003, 2004, 2005, 2007 and 2008 and was named ACT sub-contractor of the year in 2007 and 2008, it is without a doubt they have been the ideal choice for the ‘Airvolution’ project.

ERINCOLE BUILDING SERVICES

14 Silva Avenue
 Quenbeyan NSW 2620
 t. 02 6297 1399
 f. 02 6284 4099
 e. erincole@erincole.com.au
 www.erincole.com.au





BUILDING PARTNERSHIP'S

Ramset™ is a market leader providing construction product systems and engineering design solutions to important bridges, tunnels, roads, rail and desalination projects under construction around Australia. Equipped with a range of quality anchoring, fixing, drilling and suspension systems, Ramset™ recently supplied product systems and anchoring design solutions for the \$350m redevelopment of the Canberra airport.

Working across all the construction mediums, from concrete & steel to blockwork and metal studs, Ramset™ supplied heavy duty chemical and mechanical anchoring systems as well as high volume, repetitive fixing product systems. Throughout the project, Ramset™ worked closely with both head contractors, sub contractors and engineering consultants on site to deliver construction works to schedule and design.

O'Donnell Griffin used the Ramset™ Cablemaster™ gas tool and cable clip system for fast fixing of in excess of 20,000 metres of cables to the concrete ceilings. O'Neill & Brown utilized Ramset™ fire rated and suspension product systems for pipe installations throughout the airport buildings.

Pyramid Masonry sealed thousands of metres of concrete wall, floor and ceiling joints with Ramset™ fire rated sealants. More than 20,000 brick ties were installed to concrete columns quickly and easily with the Ramset™ Cablemaster™ Pulsa™ gas tool system. EVZ National Engineering and Walpett Engineering used Chemset™ Reo 502™ chemical injection and stud anchoring systems to secure steel framework, external safety barriers and signage throughout the airport buildings and external surrounding areas. Ramset™ DynaDrills and carbide drill bits were used extensively to drill the large diameter holes required for this purpose.

IC Formwork used Ramset™ powder actuated tools and product systems to complete all formwork fixing throughout the project. During the course of the redevelopment Ramset™ addressed several challenging issues. One of these was the lack of an adequate anchoring system to use on lightweight hollow concrete blocks, which provide minimal resistance for traditional anchoring systems. However, due to their expertise Ramset™ resolved the issue by testing different anchoring solutions on site to arrive at a recommendation for the best anchoring system for the job. This anchoring solution was specified for use by all trades fixing facades, fire services or switchboards throughout the project.

Ramset™ believe their longstanding professional relationship with Construction Control, the head contractor at the Canberra Airport project, provided the best possible service and innovative solutions to improve efficiency, cost savings and safety on site, for both them and their sub trades. It could be said that Ramset™ with their innovative project solutions and product systems, hold much of today's construction together. In fact as many of their product systems are so widely used, they're accepted as the benchmark standard for anchoring solutions on complex projects.

RAMSET™
296-297 Maroondah Hwy
Mooroolbark VIC 3138
t. 1300 780 063
f. 1300 780 064
e. enquiry@ramset.com.au
www.ramset.com.au



AUSTRALIAN AIRPORT-ABLE BUILDINGS

With over thirty years experience, Australian Portable Buildings (APB) has a wealth of knowledge in building and supplying quality modular and portable buildings at a competitive price to the government, construction, mining, education, commercial and industrial sectors.

With Australian-owned manufacturing facilities in Sydney, Townsville, Brisbane and Perth, as well as regional offices in Melbourne and Canberra, APB are able to provide a complete range of services to manage projects from the initial conception and design, right through to the final handover.

As part of the \$1 billion 'AirVolution' re-development of Canberra International Airport, APB have been responsible for supplying and installing temporary office accommodation for the Principal Contractor, Construction Control.

In doing so, APB was able to meet Construction Control's total needs, providing both newly manufactured and hire buildings from their fleet, which were specifically selected to cater for such a prestigious project. Not only was the main office complex manufactured brand new to suit Construction Control's specific requirements, however APB also used Energy Efficient Insulation to ensure the complex was of the utmost quality and standard.

APB have always been willing to accept challenging briefs in the design, construction and installation of modular buildings and has consequently built some very complex structures and placed them

in un-seemingly impossible places. As a result, their involvement in the re-development of Canberra International Airport has been seamless, with APB overcoming any of the minor challenges they faced throughout.

In addition to APB's involvement at Canberra International Airport, they are also currently working on projects for the NSW Department of Education, (Modular Design Range Buildings Contract), Private School projects across NSW and ACT, as well as several Mining Company projects in the Hunter Valley and Illawarra.

In March 2010, APB moved to a new factory, which has doubled their production capacity. It is without a doubt they will continue to deliver reliable, cost-effective and modern portable buildings across Australia.

**AUSTRALIAN PORTABLE BUILDINGS
Canberra Branch**
22/27 Monaro Street
Queanbeyan NSW 2620
t. 02 6284 2231

Head Office/Factory
21 Cox Place
Glendenning NSW 2761
t. 02 9604 9888



MEETING INDUSTRY EXPECTATIONS

With over fifty years of civil, traffic, structural and building hydraulics experience, Hughes Trueman have provided their considerable expertise to the building industry throughout Australia.

Given their high quality of professional engineering services, Hughes Trueman have recently been involved with one of the largest public infrastructure projects in the ACT – the re-development of the Canberra International Airport.

As part of their involvement, Hughes Trueman have provided civil, traffic and hydraulic services for the major components of the project. One of these project components included the construction of a new, five-storey airport Terminal and adjacent new apron works.

Using comprehensive staging strategies and effective traffic management skills, Hughes Trueman also provided professional services associated with the airport's internal road works. These incorporated grade car parks, over two kilometres of roadway, four roundabouts and various other intersection works.

Drawing on their experience and time management skills, Hughes Trueman played a major role to allow for existing airport facilities to operate whilst new amenities were being constructed. This approach assisted the team to ensure that the projects were completed on time and that the expectations of the major builder, Construction Control, were met.

With the ability to offer civil, traffic, structural and building hydraulics services to projects of any size during the design, construction and master planning stages, it's without a doubt Hughes Trueman will continue to meet expectations within the building and construction industry.

HUGHES TRUEMAN
 28-30 Traeger Court
 Bruce ACT 2617
 t. 02 6253 1555
 f. 02 6253 1666
 e. mbreen@hughestruman.com.au



RAR - A LOCAL SUCCESS

Since 1993, Canberra's own RAR Group - originally Rumbles Cranes - has been providing the ACT region with the largest and latest range of cranes, access equipment and aluminium and steel scaffold. RAR's team of experienced riggers also specialise in the erection of pre-cast concrete, structural steel and machinery movements.

Most recently, RAR Group has played an integral part in the "Airvolution" re-development, the \$1 billion redevelopment of Canberra International Airport. RAR Group has had extensive involvement with this project since its initial stages, supplying the mobile craneage, aluminium scaffolding and the majority of on-site access equipment: currently RAR are supplying up to six cranes (including the Liebherr LTM 1200-5.1 which lifts up to 200 tonne) and in excess of sixty access machines throughout the various building stages.

Director of RAR Group, Jeff Rumble, said a major challenge whilst working on-site had been adhering to the strict crane height restrictions set due to the continuous air traffic.

"As we have been working on buildings located at a very close proximity to the runway, we've had to substantially decrease the amount of boom height

we needed to deploy in order for us to complete the job successfully," Mr Rumble said. "However, we have been able to overcome this obstacle by working closely with both the airport and Construction Control to reach a satisfactory medium," he said. Mr Rumble also said the 'Airvolution' re-development had been a fantastic opportunity for local companies to participate in such a prolific project.

"This re-development has demonstrated that good service and quality products go a long way and it is because of this, the majority of the sub-contractors, including RAR Group, have been repeatedly involved throughout the project," he said.

Given their superior service and quality equipment, there is no doubt that RAR Group will continue to be one of the building industry's first choices for cranes and access equipment.

RAR GROUP
 32-36 Bedford Street
 Queanbeyan NSW 2620
 t. 02 6299 6100
 f. 02 6299 6101
 www.rargroup.com.au