IN THE BIG CHAIR

Interview: David Dowsey

BRIAN TANTI HAS been 'In the Big Chair' at AutoHorizon Foundation (AHF) since February 2009. In 1979 he began a panel beating apprenticeship, later working in the UK for a company specialising in restoration and prototype work. On his return, he worked for a business which restored cars for Lindsay Fox. The trucking entrepreneur eventually offered Tanti a job and he stayed for 19 years, restoring many of Fox's world-class cars, eventually becoming Director of the Fox Car Museum.

Brian Tanti

CEO AutoHorizon Foundation

What do you want AutoHorizon to achieve?

We plan to be a valuable resource to the Automotive Industry and augment State and Federal Government programs to promote Australia's automotive manufacturing capabilities. With our first project, FR-1 (Fund Raiser One), in conjunction with our program partner VCAMM (Victorian Centre of Advanced Materials Manufacturing), we want to demonstrate the major role locally developed lightweight technology can play in the development of future eco-friendly passenger cars. At an education and career showcase level, we want to utilise the development of FR-1 to inspire and attract the curiosity of young people, so as to help educate and promote auto careers to the next generation of automotive engineers, designers and trades people.

When did the concept occur to you?

It grew organically over a period of 10 years, in my capacity as Director of the Fox Car Collection. On a regular basis, I was working with a diverse section of Industry, Government and Automotive peak bodies, such as the VACC and RACV. Government was seeking to expand the scope of automotive manufacturing abroad through programs like the Victorian Technical Presentation Program. Within education, VCAA (Victorian Curriculum and Assessment Authority) was advancing it's VCAL (Victorian Certificate of Applied Learning) programs and at a more general level within education, work was being undertaken to promote careers to help address the skills deficits facing all areas of manufacturing, not just automotive.
At a personal level I got to speak and interact with teachers, students and parents on a regular basis who were all interested in knowing more about the industry their children had expressed a desire to work in. I learned that the parents were a factor in holding back their children from automotive careers. So much needs to be done to remove the unfair prejudice and stigma towards careers in the automotive trades. Through the Fox Collection and visits by schools and young people, I began to notice a change in the attitude of students when asked about considering a career in the Automotive Industry. Students cited their interest and influences being US-based auto cable TV shows and most school visitors were surprised to see similar equipment being used in the Fox workshop as they had seen on TV. The work we were undertaking with our concept car had the potential to spark interest in young people and satisfy a number of community objectives that went beyond our initial fundraising objective.

Tanti with, from left, FR-1 show car, scale model and tub mock-up at AutoHorizon's facility at the Automotive Centre of Excellence in Melbourne

When was AHF officially launched?

We were formally recognised as a foundation entity in February 2009, just before our launch at Melbourne International Motor Show. But in practice we had been operating as a resource to education for the last seven years.

What was the genesis of FR-1?

FR-1 was about some of the Automotive Industry's most talented people getting together to work as a team. For many of us, it was the first time we had worked together. We decided to design and build a car using all the state-of-the-art resources and relationships at hand and then put it into the public domain to either auction or raffle for four nominated charities. FR-1 is about the gathering of skills and ideas of a committed team of auto enthusiasts and artisans to produce a unique and stylish concept car. The project combines training and innovation, skills and ideas in a quest to develop and build a car which impresses immediately. But, in many ways, the process that has produced FR-1 is a more important outcome than the car itself. It is a process that has embodied teamwork, problem solving, the acquisition and sharing of skills, and the strategic response to engineering and environmental challenges.

When you sell the car, why don't you use the money to self-fund?

An undertaking was given to the four charities when we started the project. Our objective was clear: we were all volunteering our time to raise money for the nominated organisations that were serving people less fortunate than ourselves. The four charities were notified and were supportive of our program and will put those funds to good use when AHF achieves its final objective.

What work have you done on FR-1?

FR-1 was an interesting project on a number of levels. FR-1 started off as a scale model that I had designed in my garage at home, almost 10 years ago. I then worked with a colleague and friend of mine, Jeff Edwards of Artisan Coachworks, and he and I then enlarged it to 1:1. Jeff is an exceptional tradesman/coachbuilder and he was able to extrapolate math surface information, make the adjustments and create a full-size model of the car. Holden Design (see page 20) then became involved, with HD staff volunteering valuable time and skills. A full-size scale model was then photometrically scanned to become CAD math data, which was done by Scan Express, and Holden designers and engineers became involved and evolved the whole exterior and interior design. The exterior final render was a reflection of the design talent GM Holden has at their disposal. The final render retained the overall provenance of what we were trying to do; but they elevated it to another level.

At what stage during those nine years did you think you could do it?

From the beginning I knew we could deliver the project; all of the volunteer team had strong backgrounds in high-end vehicle design/prototype engineering and construction. But having the support of GM Holden Design and VCAMM really did galvanise the program.

How did you fund FR-1 to bring it to the Motor Show?

We were fortunate that the VACC Board and (Executive Director) David Purchase, together with (Melbourne International Motor Show Director) Russ Tyrie, came to our support. VACC provided professional marketing resources and cash towards the project. We were also well supported by the Graphic Design Department and the many printing companies associated with Gary Heath, graphic design coordinator at Chisholm Institute.

What happened when the Motor Show finished?

We came down from the high of the launch we had all worked so hard to achieve. There had been such a high energy in the build-up towards it and we were very successful. We were on the front cover of the Melbourne International Motor Show lift-out magazine and the media around the program was very favourable. We then started to process the feedback we had from both industry and schools; we had educators asking how they could access FR-1 for their curriculum. So we started to put together a framework for an education program based on feedback from teachers at the motor show and the education focus group hosted pre-motor show. We also started to plan the delivery for the car and approached the Government about possible funding and the technical presentation program planned for the US this year.

What needs to happen for the next project?

We need funding to underwrite FR-1 completion and our technical presentation program in the US. We need $1.4 million to finish the first car and we are planning another project beyond that; the budget is yet to be worked through. The challenge always has been that, as volunteers, we have all had to juggle workshop time around work and family commitments, hence the down time and lack of funds to finance the hours needed to deliver the car in a realistic commercial time frame.

What are you hoping to achieve by taking FR-1 to SEMA?

We plan to display the car as a practical demonstration of the capability and capacity of Australian Manufacturing in 2009/10; we have 90 separate suppliers that have contributed to FR-1. SEMA (Specialty Equipment Market Association) is an opportunity to showcase our manufacturing partners and know-how. By design, FR-1 is a perfect fit for SEMA. I went to the 2009 SEMA to learn about the event. It was pointed out to me by some of the long-term exhibitors that show cars on stands play a strategic role in communicating the scope of expertise, and brand building. They further act as a marketing hook to bring people onto their stands. Some of these companies have been known to spend up to 20,000 hours on show cars.

When do you need to finish FR-1?

We would need to have the car finished by October 2010 to get it to SEMA for the first week of November. So, this year, we will be looking to partner with Government, possible Austrade to meet our build and SEMA show deadline.

How can all this benefit the Australian Automotive Industry?

As manufacturing shrinks in Australia, and the growth of Chinese and Indian manufacturing capacity is realised, Australian manufacturing will need to continue to augment its commercial links with Europe and the US. The auto export market is a $5 billion industry; we need to be proactive in protecting our markets around the world. Brad Dunstan, CEO of VCAMM, makes the point that as a strategic marketing exercise, we need to build show cars, as they demonstrate a capacity that goes beyond designing and manufacturing of automotive component parts, like nuts, bolts and springs. We need to demonstrate a capacity to design and deliver a motorcar.

Is this actually going to attract dollars and employ Australians?

The economic fallout, as demonstrated by the aXcess (Australia) car program, will be measured in both dollars and employment.

What can you say about the next AutoHorizon project?

Not much; other than it is a lightweight, high-speed, electric car that has an iconic link with Australia and the Australian identity. FR-2 is already well advanced.

What do you need in terms of money and skills to complete FR-2?

It is still being costed. We have identified that we may employ 40 people with a cross section of disciplines for an 18-month period to complete the scope of work.

What are you hoping to achieve with the building of this car?

Again, the building of a lightweight, eco-friendly vehicle. A senior engineer associated with the program described it as 'building a bridge to the future'. We learn a great deal from the design and construction of a car such as the one suggested. It is about demonstrating green technology and advanced design technologies to the next generation.

The plans are not to bring these cars to production then, but to showcase skills and technologies and to promote the Automotive Industry as a career?

Yes. But this is not just a skills showcase, technology, or education opportunity; all of which are important goals. We also want to fundamentally demonstrate the capacity of Australian auto component suppliers at a global level. When prototype programs like this are undertaken, much practical knowledge is gained and business relationships are established, which ultimately translate to jobs and employment security.

Why should young people consider a career in automotive?

If you take the career of an apprentice from Day One to Year 15, and an undergraduate attending University, the apprentice earns money from Day One while an undergraduate incurs a HECS debt. By the time the undergraduate completes his or her degree, he or she will leave Uni owing a considerable amount of money, while the apprentice on the other hand is receiving on-the-job training and is payed to do so. At the end of that 10-year period, the apprentice (now a qualified trades person) could go on to undertake an MBA and move through to senior management. Who is better off at the end of that 15-year period?

How is AutoHorizon linking in with the education community?

Apart from the tours and lectures AutoHorizon has been hosting, AHF has been working closely with VCAL, VCAA and educators to work through how and what the insertion points into education should be for a program like ours. There is scope to incorporate FR-1-based curriculum resources into existing VET (Vocational Education and Training) and trade training courses that are offered to students across the network of schools. Through our education program sponsors, 'Newspots', we have hosted Design and Technology teachers' focus groups to tailor an education framework from FR-1 build property that will be both effective and a relevant resource, that in time will be embraced by teachers and schools in general. To take a car and design and build it, takes a wide and comprehensive range of professions and resources. From the FR-1 program comes the unique opportunity for schools to link in with industry and enhance curriculum provisions for students. We have been in discussions for some time to utilise new education facilities being created around the Melbourne Metropolitan area, through Prime Minister Rudd's Education Revolution. We have identified three sites that could act as a 'host' to our program.

Are secondary school students going to help build it?

There is potential for that to happen. We also have had a number of Engineering undergraduates express interest in volunteering their time for the job experience, (which will) add to their own professional development. Moreover, there is scope to develop short courses, or extension activities, that could be provided outside of normal business hours. Building the second car within new ATC (Australian Technical College) and TAFE facilities has the potential to engage young people in developing greater insights and skills in subjects like design innovation and future career options associated with the Automotive Industry.

Why did you link the Fox Car Collection to the foundation?

Linfox and the Fox Trust, through Bill Kelty, have kindly given our program a home for the completion of the second car. We are very grateful to the Trust and the Fox Family to have such a central location to operate. One of the lessons I learnt from being involved in the Fox Trust, is that I really enjoyed working in the not-for-profit area. It is very rewarding. By and large the people working in not-for-profit are motivated for the right reasons. I enjoyed that aspect of my job very much and now look forward to continuing to achieve community outcomes and build industry relationships through AHF.

AutoHorizon Foundation

Established in early 2009 by CEO, Brain Tanti, AutoHorizon Foundation (AHF) is an independent, not-for-profit organisation that provides a platform to augment research, development and the commercialisation of new emerging Australian automotive technologies. It also aims to further promote attainable career opportunities within the automotive manufacturing and service repair industry for young Australians. AHF, through its volunteers, is representative of a cross-section of automotive peak bodies such as the VACC, auto manufacturing, component suppliers, designers, engineers, technicians, trades and the media. Their first project, FR-1, debuted at the 2009 Melbourne International Motor Show. Chairman, Ian Knight, is a founding member of AHF and partner at KPMG, Adam Levine, lawyer and Director of Law firm Rockwell Bates, is also a fellow founding member and more recently, Glen Ridge, Director Q-Media Group has joined the Board. In future, AHF plans to expand the Board to include representatives from education, technology, academia and automotive peak bodies. FR-1 is nearing completion at ACE.

THE GREEN ROUTE

The FR-1 concept shown at the 2009 Melbourne International Motor Show was not a complete road-going vehicle, but, at that time, the roadster was specified to have a 270kW/530Nm Holden 6.0-litre V8 engine mated to a Ferrari 355 six-speed manual gearbox. Sitting on 20-inch alloy wheels, suspension was by a multimatic in-wheel system (front) and double independent wishbone (rear).

In order to increase the green credentials of FR-1, Tanti now intends to run the car with a 'flex fuel' engine running on E85. FR-1's projected combined cycle fuel economy is 7.8L/100km using PULP and about 9.7L/100km using E85. Using 85 percent ethanol will result in 17 percent less greenhouse gases. The extensive use of high-tech lightweight body and suspension structures contributes significantly to the high performance car's lower carbon emissions.

What's next for AutoHorizon?

Long term, there is scope to work within the area of technology transfer with emerging technologies development agencies like VCAMM and CSIRO. AHF will be in a position to test those emerging technologies and engage with industry on future projects in a practical way. We see scope to work closely with education, we see an opportunity to do more community-based work and run mentoring programs with disadvantaged children that might be interested in careers in the Automotive Industry. AHF, in conjunction with our industry stakeholders, wants to be able to deliver across a spectrum of interests to the Australian Automotive Industry.

Is AutoHorizon your future?

I would like to think that this is where I end up seeing out my time.

What is the future of the Australia Automotive Industry and how does AutoHorizon plug into that?

Our future is in IP (Intellectual Property) development and specialised manufacturing. We have always had, but it is not widely acknowledged, a strong skills base and great capacity to meet new challenges. AHF plans to continue to work with the manufacturing sector; we plan to merge our skill sets with leading edge and emerging technologies partners.

Is the Australian Automotive Industry already doing this?

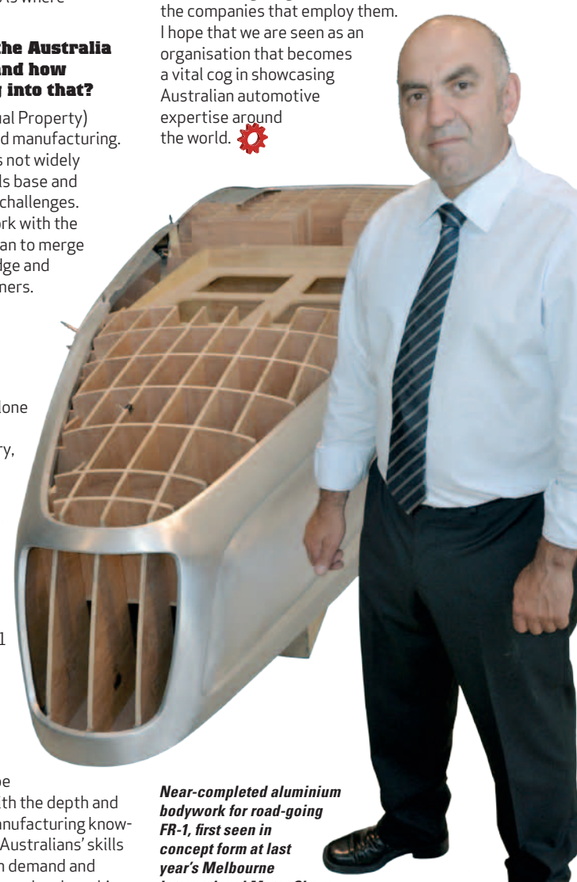
Yes, but for the first time, Australia now has a stand-alone entity that can work closely with the Automotive Industry, Commonwealth Research Centres, Government, Academia, Education, and the Service Repair Industry. We have demonstrated our ability to work with all industry and Government agencies very successfully. FR-1 is an example of that.

What is the impression of what we do here overseas?

They always seem to be genuinely surprised with the depth and breath of skills and manufacturing know-how. Having said that, Australians' skills around the world are in demand and enjoy a solid reputation as hard-working and adaptable professionals. As individuals, we are prized employees, considered to have a strong work ethic and highly skilled.

What do you want the AutoHorizon legacy to be?

That AutoHorizon, in time, is viewed by the Automotive Industry and community as an organisation that added great value to the community across all spheres; that we helped spark the interest of talented individuals across Australia to aspire to a career of excellence in the Automotive Industry. I would like to think that AHF provided that incubator and platform for undergraduates and apprentices to hone skills on real world projects with AHF and industry, interacting with all auto disciplines, including research, to achieve higher goals for themselves and the companies that employ them. I hope that we are seen as an organisation that becomes a vital cog in showcasing Australian automotive expertise around the world.



Near-completed aluminium bodywork for road-going FR-1, first seen in concept form at last year's Melbourne International Motor Show

AUTOHORIZON FOUNDATION

EMPLOYEES: 20 volunteers

ESTABLISHED: 2009

BASE: Automotive Centre of Excellence, Melbourne

WEBSITE: conceptfr1.com