



NATA Accreditation

ATTAR is currently the only testing laboratory that has NATA Accreditation for slip resistance testing in all of the following test methods:

- Wet Pendulum (AS/NZS 3661.1, AS/NZS 4455, AS/NZS 4586 & AS/NZS 4663)
- Dry Floor Friction (AS/NZS 4586 & AS/NZS 4663)
- Oil-Wet Ramp accreditation (AS/NZS 4586)

As well as:

- Calibration of the British Portable Skid Resistance Testers (BS 7976-3), which is a calibration method required by AS/NZS 4586 and AS/NZS 4663.

What is NATA?

The National Association of Testing Authorities (NATA) is Australia's national laboratory accreditation authority, and the largest such system in the world. NATA accreditation recognises and promotes facilities competent in specific types of testing, measurement, inspection and calibration.

NATA is:

- Australia's Government-endorsed provider of accreditation for laboratories and similar testing facilities
- a private, not-for-profit company, owned and governed by its members and representatives from industry, government and professional bodies.

What is Accreditation?

NATA accreditation provides a means of determining, recognising and promoting the competence of facilities to perform specific types of testing, measurement, inspection and calibration.

Technical Competency

NATA accreditation uses criteria and procedures specifically developed to determine technical competence. Specialist technical assessors conduct a thorough evaluation of all factors in a facility that affect the production of technical data. The criteria are based on an international standard

called ISO/IEC 17025, which is used for evaluating laboratories throughout the world. NATA uses this standard specifically to assess factors relevant to a laboratory's ability to produce precise, accurate test and calibration data, including:

- technical competency of staff
- validity and appropriateness of the methods
- traceability of measurements and calibrations to national standards
- appropriate application of measurement uncertainty
- suitability, calibration and maintenance of test equipment
- the testing environment
- sampling, handling and transportation of test items
- quality assurance of test, inspection or calibration data

For further information on our NATA Accredited slip resistance testing services please contact **Marcus Braché**.

New Tortus

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After 14 years of production, earlier this year Severn Science announced the successor to the Tortus II Floor Friction Tester, the Tortus 3 (surprise, surprise). At quick glance the only difference would appear as a change of colour to the outer case, but inside the case is a complete redevelopment.

In principle the Tortus 3 works just as the Tortus II does, and therefore still complies with all of the Australian and New Zealand Standards for slip resistance testing.

The measurements recorded are date/time stamped and can be printed from an integral printer, or downloaded as data files onto a USB memory stick. The test data files are stored as one file per run as a legible ASCII file in Comma Separated Variable format which is easily read by Microsoft Excel which can then be plotted or graphed.

New additional features of the Tortus 3 include:

- USB memory stick for data retrieval
- Easy to use LCD operator commands throughout operation
- Date/time stamp on printouts and data files
- Easy to operate, lighter (6 kg vs 8 kg) and even more portable
- Integral lock for use whilst in transit
- The internal memory can store up to 32 test runs

For further information on ATTAR's slip resistance testing equipment sales and services please contact **Marcus Braché**.



Slip Resistance Testing Services

ATTAR provides a comprehensive slip resistance testing services both on site and in our laboratory. We have many years experience in slip resistance testing, including slip accident investigations and routine testing conducted in shopping centres and public buildings.

ATTAR owns an Inclined Ramp Tester (German Ramp Test) which enables testing to be carried out to Australian Standard AS/NZS 4586: 2004 - Appendix D. This testing produces a slip resistance classification of the floor surface using an "R" rating such as R9, R10, R11, R12 & R13.



ATTAR is NATA (National Association of Testing Authorities) accredited for slip resistance testing, and is **currently the only laboratory that holds Wet Pendulum, Dry Floor Friction, and Oil-Wet Ramp accreditation.**

Slip resistance testing can be carried out your own requirements or to one of the following Australian Standards:

- AS/NZS 3661.1: 1993 Slip Resistance of Pedestrian Surfaces Part 1 Requirements
- AS/NZS 4455: 1997 Masonry Units & Segmented Pavers
- AS/NZS 4586: 2004 Slip Resistance Classification of New Pedestrian Surface Materials
- AS/NZS 4663: 2004 Slip Resistance Measurements of Existing Pedestrian Surfaces

Slip accident investigations are conducted by Engineers with years of slip accident investigation and testing experience. Evidence has been presented in the Supreme, Federal, County, Magistrates and Coroners court.

Routine testing is conducted in shopping centres and public buildings on monthly, quarterly or yearly basis, dependant upon customer's requirements. This provides an independent risk assessment of the floor

surface to AS/NZS 4663: 2004 and monitors variations in cleaning programs or environmental changes caused by such things as wear or building renovation. Routine testing can reduce the risk of slip accidents and subsequent litigation by taking a proactive approach to potential risks.

ATTAR can assist you in setting up regimes to evaluate the slip resistance of a surface, changes to that surface due to maintenance products or the application of "anti-slip" agents. We can also conduct risk assessments to meet your OHS requirements.

To help reduce certain risks recommendations in HB 197: 1999 An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials can be used as a guide to specify pedestrian surface materials for various locations.

ATTAR also provides slip resistance testing equipment, equipment hire and consumables.

ATTAR services also include:

- The Australian Agent for the sale of Tortus II & 3 Floor Friction Tester, which is used for dry slip resistance testing.
- The Australian Agent for the sale of Wessex Skid Resistance Tester and suppliers of the Munro Portable Skid Resistance Tester, used for wet slip resistance testing.



- Suppliers of the Slider 96 (Four S) and Slider 55 (TRL) rubber sliders used with the Tortus and Pendulum Machines, complete with batch certificates.

- Suppliers of the 3M 216X Imperial Lapping Film Grade 3MIC (Pink Lapping Paper), complete with a certificate of verification of "X" and "Y" values for Slider 96 and Slider 55 Rubber Sliders.
- Suppliers of the Taylor Hobson Surtronic Duo Rz roughness meter.
- Calibration of the British Portable Skid Resistance Testers (Pendulum) to BS 7976-3: 2002 Pendulum Testers - Part 3: Method of Calibration.
- Provides hire of the Pendulum Skid Resistance Tester, Tortus II Floor Friction Tester and the Taylor Hobson Surtronic Duo Rz roughness meter.
- Performance checks and certification of Tortus instruments and equipment repairs.

ATTAR's NATA accreditation ensures we deliver quality practises consistently which means our clients can expect outstanding service whether the testing is routine, once-off or for a legal case. ATTAR strives to help wherever possible and is always happy to discuss results, standards and recommendations for your particular situation. The following is an example of a client's testimonial received by ATTAR

De Fazio Tiles & Stone have had many tests conducted by ATTAR over the last 5 years, their **Senior Sales Manager Mario Bisinella**, had this to say about ATTAR:

"I have found all the staff at ATTAR to be very helpful and prompt in information, advise and test results. They are very approachable, and are always able to explain the test results in a simple manner so most people are able to understand the results. I would not have a problem in recommending ATTAR to prospective clients. Keep up the good work!!!!"

And the Award goes to...ATTAR

Brett Burden ActionCOACH

At the recent "Massive Action Day", an event organised by ActionCOACH the worlds largest Business coaching organisation, ATTAR walked away with one of the top accolades of the day. Admittedly it wasn't a huge surprise to me considering the work and perseverance the group committed to over the past 12 months, but I can assure you they were up against some 50 Plus heavy hitting clients nominated. Perhaps before I explain why I think ATTAR got the votes I should explain a little more about the event itself and the voting process.

"Massive Action Day" is an event where ActionCOACH clients from all over Australia gather to network with other business people, listen to case studies of business success from many and varied styles of business, and to gain knowledge and stay abreast of all that's new. The criteria that the awards are awarded come down to the improvements to the business in the following categories:

"Time": In other words has the business owner has been able to regulate the amount of hours they are working in the business to a manageable whilst maintaining or increasing business performance.

"Team". Do we have the right people on board to take the business to the next level and are they working in synergy to achieve great results, and therefore the energy increases along with job satisfaction?

"Money". This one's easy to explain. Is the company more profitable? This comes about once the inefficiencies of the business are unearthed and systems are implemented to increase productivity.

ATTAR showed massive improvement across all 3 areas and here are just a few of the things achieved in the last 12 months.

- Devised a plan to set up an effective 'Board of Management'. The Board has since proved to be extremely effective for debating future business and product development strategies.
- Analysed the TEAM at the time, determined areas of concern and made some tough decisions on staffing. This was made a lot easier due to the vast recruitment experience of ATTAR management combined with the ActionCOACH recruitment system.
- Team meetings become more regular and included Agendas & Minutes ensuring information was evenly dispersed amongst the team.
- An ongoing 90 day marketing plan was produced complete with action plans so everybody knows well in advance what they are responsible for.
- An appropriate chart of accounts devised helping produce true job costing ensuring each job remains in the black.
- Introduced new, and refined existing systems, procedures and company policies.
- Implemented time audit on Managers to find time leaks and increase management productivity.

And wait there's more!! In actual fact what you see above is truly only half of what was achieved but I won't go any further except to say now you can understand why ATTAR won their award. Was it all worth it? Well I guess you'd have to ask Gary and crew, but for me as the Coach there was nothing more exciting to see the 2 original Directors, Gary & Robyn take a well deserved, overdue 7 week holiday overseas!

Well done ATTAR crew and all the best for the future! The next "Massive Action Day" is on the 27th of November in Brighton. If you'd like to attend you could either ask ATTAR, as they are now the experts or call me, Brett Burden on 0418 339 757.



Advanced Ultrasonic Te

Introduction

There has been an increasing trend to more advanced Ultrasonic Testing (UT) methods such as Phased Array (PA) and Time of Flight Diffraction (TOFD) in the past 10 years. The following is a brief outline of the methods and why there is a requirement for training.

Phased Array Outline

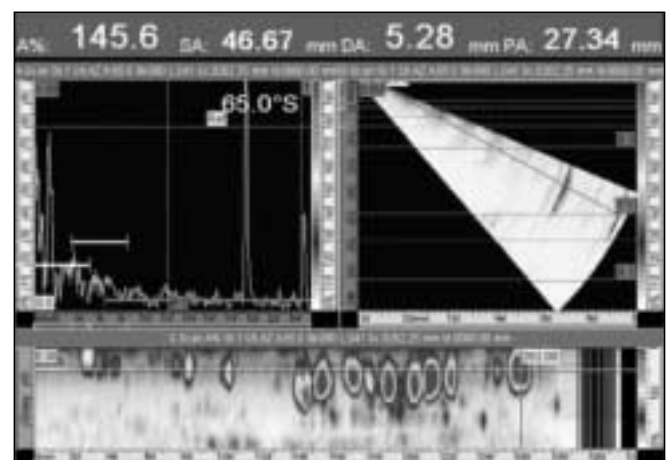
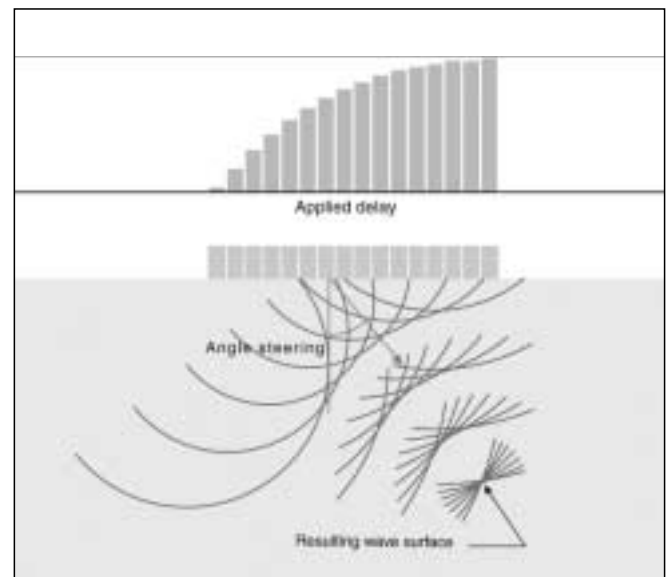
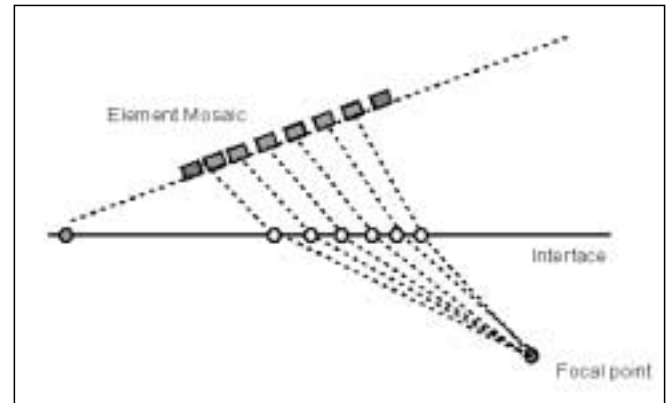
Images below showing steering and focusing controlled by excitation timing

PA use in the industrial area has been developed from its use in the medical field much like many other NDT methods. Phased array technology can be applied to most of the common UT applications. The multiple element probes have the advantage that the sound beam can not only be focused but it can be steered as well. The steering and focusing is controlled through a computer which allows the application of energy to each individual element at different timings. This principle increases the inspection capability in more difficult to access areas as well as different orientations. A single probe (group of elements) can be focused at several depths without changing the probe or the sound beam can be steered either in a linear manner (in a line parallel to the entry surface) or sectional manner (in an arc from the entry point). Multiple views can be displayed at once allowing for complete analysis of the exact discontinuity. PA has all the normal limitations of ultrasonic testing in that one scan does not see all discontinuities and there are the normal problems with focused beams, worn wedges and lack of training.

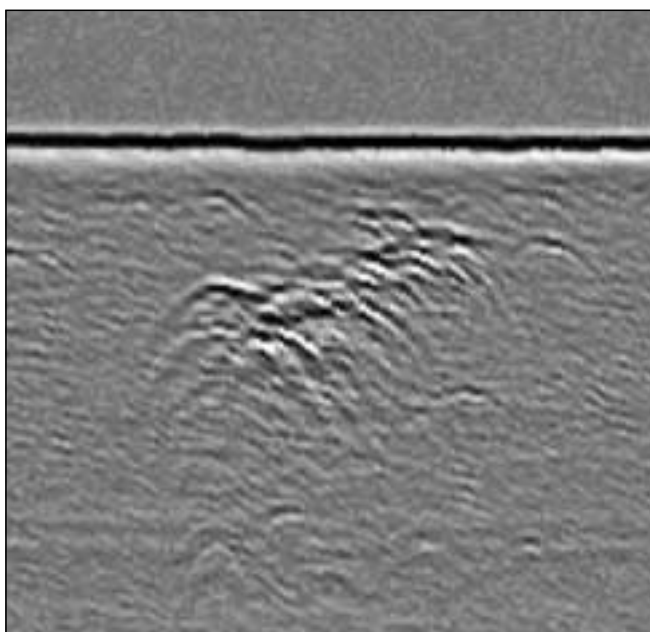
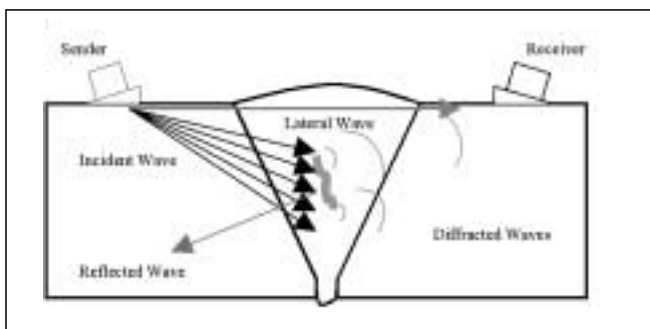
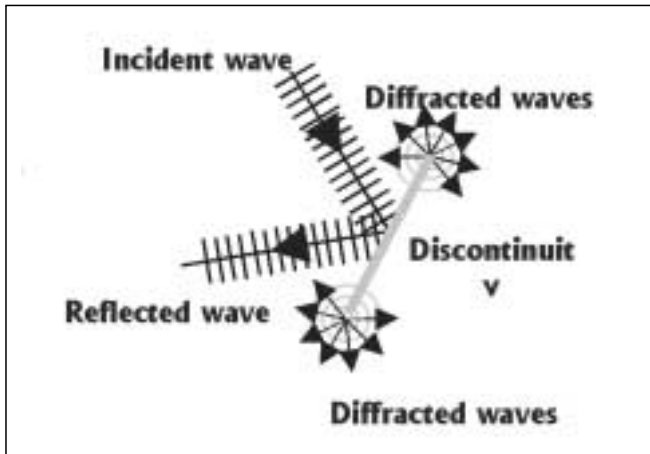
Time Of Flight Diffraction Outline

TOFD uses a pair of ultrasonic transducers on the same material surface to give a wide coverage area, one as the transmitter and the other as the receiver. The sound striking the discontinuity causes vibration which in-turn leads to production of low energy sound waves from each point of the discontinuity. The diffracted waves at the tips of the discontinuity are detected (based on arrival times) and displayed in a gray scale B-Scan presentation. TOFD has the limitation of two dead zones, one due to the lateral wave and the other due to the back-wall echo. This factor means that TOFD should be used in conjunction with conventional pulse-echo techniques to ensure complete coverage.

Images Below showing steering and focusing controlled by excitation timing



sting Methods/Training



Images above showing porosity indications

Training

The trend to more advanced UT methods has led to the need for training within these areas. Due to the continuing development of these technologies by equipment manufacturers the training has initially been developed by them as they have improved/updated their equipment capabilities. The need for technician training is instrumental in the development of knowledge of the principles of the method and operation of the equipment as with any of the Non-Destructive Testing (NDT) methods. Further experience in the field also plays a vital role in the ability to correctly interpret displays with these methods. Due to the demand from industry and certification authorities for suitably recognized/certified courses organizations such as Advanced Technology Testing and Research (ATTAR) have been required to develop new courses in these fields. ATTAR personnel have attended training courses run by manufacturers in the principles and the operation of their particular equipment, which will allow ATTAR trainers to impart this knowledge to technicians in the PA and TOFD training courses offered by ATTAR.

Summary

Both these methods allow digital data storage which enables the information to be recalled at any later stage for analysis or comparison. They also offer faster scan rates and more accurate sizing without the need for probe movement. However as stated the need for training in these advanced UT methods is essential in producing technicians who can make accurate interpretations/decisions and be productive in the field. Like all NDT methods nothing compares to experience, but without training there is no knowledge base for that growth to start from.

If you would like further information on these methods or associated training courses, please contact

Stephen Saunders BA (T&D)
Senior NDT Trainer & Consultant
ATTAR

What a Traveling Roadshow!

It has been a busy couple of months in the ATTAR Exhibition Calendar and here is why!

AUGUST

Defence & Industry – Adelaide

The Defence & Industry Expo in Adelaide was an important event for ATTAR. ATTAR has certainly worked with the various Defence groups on a variety of matters such as NDT Training, Level 3 Procedure Writing and Specialist Testing; however our aim was to better understand how to work further with Defence.

A huge 1450 delegates were present at the Expo & Conference and there were approx 200 stands! An additional Conference Dinner allowed for further networking and great entertainment!

The ATTAR stand managed to attract a number of the management within Defence and delegates were interested in our services on NDT Training, Level 3 Services and Forensic Engineering.

ATTAR was also proud to announce the winner of the business card competition, Eugene J. (Gene) Manzie from L3 Communications/SPAR Aerospace who won the two bottles of quality Australian wine and a stunning leather wine case!



SEPTEMBER

NZILA The Ties that Bind National Conference – Auckland NZ

The NZ Insurance Law Association 'The Ties that Bind' Joint National Conference was generously hosted by our neighbours, New Zealand. ATTAR was a Silver Sponsor and as such had a Stand, information packs in all the conference backpacks & ATTAR logo's

everywhere! We also hosted a table at the superb Conference Dinner, held at the Wigram Air Force Museum, where we met some fantastic people!

The Conference was attended by Insurance firms, Loss Assessors, Barristers, Solicitors, Advocates and Judges from Australia, New Zealand & even internationally. The Social events were extremely well planned, and provided both unique entertainment and the opportunity for real networking.

ATTAR assisted many delegates with information on Forensic Engineering, Specialist Testing and Failure Analysis in relation to Expert Witness Services. Many delegates entered the business card draw and Congratulations goes to Nick Webb from Amicus Insurance Brokers who won the wine bottles this time!

OCTOBER

Condition Monitoring National Forum – Sydney

The Condition Monitoring National Forum was held on the 16th & 17th October at the AJC Convention Centre at the Randwick Racecourse in Sydney. Approximately 200 delegates attended, with the likes of Maintenance Operation Managers, Condition Monitoring Technicians, Trades Persons & many others from across the land amongst them; all with an interest in improving equipment, plant or materials reliability in their specialised industries.

With such a brilliant turn out at the event we were able to meet a large number of Condition Monitoring professionals who were eager to learn more about the services that ATTAR can provide, particularly in relation to Acoustic Emission Testing & Materials Failure Analysis.



The Forum was extremely successful, as Aimee Hawkins from Chevron International Technical Center would agree. Aimee dropped her business card into our draw and won the two bottles of quality Australian wine and the leather wine case, Congratulations Aimee!

Thank-you to the SIRF for organising outstanding event, we look forward to seeing you all again in Melbourne in 2008!

Land Warfare Conference 2007 – Adelaide

It was back to Adelaide, (which seems to be fast becoming Australia's defence capital) to attend the much anticipated Land Warfare Conference, held again at the Adelaide Convention Centre.

This is the largest Exhibition ATTAR has attended this year, with over 200 stands and 3000 delegates in attendance. Predominantly Defence Personnel, delegates were treated to a variety of exhibitors with new technology, weapons, vehicles and armory. ATTAR complimented this mix with offerings on NDT Training, Level 3 Services and Failure Analysis.



This event even attracted the Prime Minister, Mr John Howard who launched a number of new policies regarding Defence & Education as part of his campaign for re-election!

As at previous events ATTAR attendee's Gary & Georgina manned the stand and invited visitors to enter the business card draw to win the bottles of wine! The winner this time was Christine Scala from DSTO. Congratulations!

Like the delegates here, if you would like to know more on how ATTAR's services may be of relevance to your business, please contact us on or visit our website for further information!

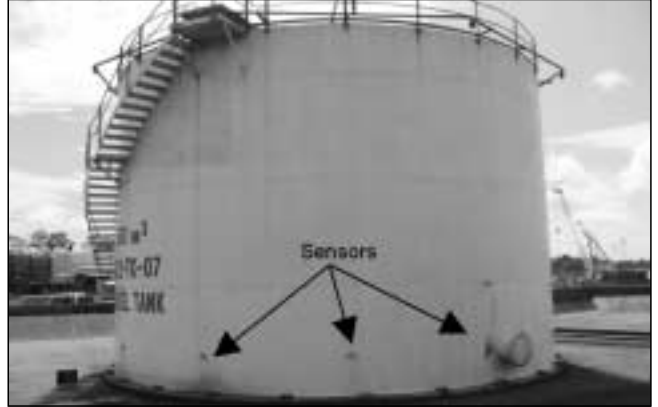
Acoustic Emission (AE) testing of flat bottom tanks in Western Australia

ATTAR has been conducting Acoustic Emission testing of flat bottom tanks in WA.

Acoustic Emission (AE) is being used by ATTAR clientele to enable grading of tank floor bottoms. Grading of floors allows for tanks to be prioritised for upcoming inspections.

Acoustic Emission testing of tank floors when used in a Risk Based Inspection (RBI) program such as one adopted around American Petroleum Industry Standard API653 may be used to extend the internal inspection intervals of tanks from 10 years to 20 years and beyond if the RBI indicates fitness for purpose thus allowing for a significant cost saving.

AE testing is usually conducted with minimal disruption to operations. Tanks are required to be filled to approximately 70% before allowing it to settle for 12 to 24 hours, after which testing is conducted by listening to the tank floor using very sensitive sensors located on the external circumference of the tank.



For more information do not hesitate to contact: Dr. Gary Martin, Marcus Braché, David Padfield or John Cacic.

Training Talk

New Technology:

With the constant progression of technology ATTAR, is continually striving to meet the demands of industry in areas of new development. A recent addition to the ATTAR portfolio is the Introduction to Phased Array Course.

This course has successfully been run twice over the past few months, and with valued input from students, ATTAR and internal review this new course is providing an excellent base from which Phased Array Operators can develop!

The course is primarily hands-on, with a strong focus on practical applications, equipment calibration and setup.

ATTAR will be expanding our Phased Array Training in 2008 with a Level 2 Course scheduled for May.

Upcoming Courses:

With the addition of our new NDT Trainer & Consultant – Ken; ATTAR plans to continue increasing the range, frequency and venues available for our training in 2008.

The ATTAR Training Calendar for 2008 has now been released and enrolments are now

being accepted! Log onto the ATTAR website for the most up-to-date Calendar and Enrolment form.

Some of the courses to be delivered in early 2008 include Ultrasonics Level 2 (Welds), Liquid Penetrant Level 2, Multisector (Materials Engineering), Magnetic Particle Level 2 and Radiation Safety.

Make sure you secure your place on these courses early!

For more information on our NDT Training and Consulting Services please contact Paul Grosser - Technical Director NDT.



Happy Festive Season!

As the end of the year is fast approaching, the ATTAR Team would like to take this opportunity to thank-you all for your support during 2007.

We wish you and your families a very Happy Christmas and a safe and prosperous New Year!

Please note that ATTAR will be closing for the Christmas Period on Friday the 21st December 2007 at 12pm and will re-open at 8am on Monday 7th January 2008.

We look forward to working with you again in 2008!

Gary Martin

Georgina Ablett

Staff on View

Liz (just turned Saunders) - Office & Executive Assistant

Liz (just turned) Saunders joined ATTAR on Tuesday 4th September as Office & Executive Assistant. Liz has previously worked as an Office Manager/PA with Caltex and in similar roles in the past and this combined with her quirky sense of humour means she is a great match for the role and ATTAR!

Liz joined the ranks of the married people here at ATTAR and had her nuptials on November 11th Liz married the charming Mr Jim Saunders so we will end up with

another Saunders in the ATTAR ranks! (We currently have Stephen Saunders in WA – no direct relation though!).

Liz is a big fan of her dog Eddie, and has a great singing voice and already feels like part of the ATTAR furniture! No doubt you will soon speak to Liz as she works on Reception with Jacqui!



Ken Willimason - NDT Trainer & Consultant

A CONVOLUTED JOURNEY TO ATTAR
My name is Ken Williamson and I am 41 and live in Coburg with my partner Kerry and our one year old son Nathan. Kerry is a biochemist who works part time as a research fellow at Latrobe Uni. Nathan has just started walking and is an absolute joy to both of us. I love spending time with my family and am also a keen windsurfer and sometime home renovator.

I came to end up working at ATTAR through a convoluted route. After growing up in Cheltenham and finishing year 12 in 1983 I decided to travel to expand my horizons. Over the next decade I covered much of the globe and financed these trips through returning periodically to Melbourne and working in NDT. Eventually I decided to get that tertiary qualification and did a Science Degree at Deakin University and then a Diploma of Education at Melbourne University. In practice, however, I found that teaching children and teenagers was not for me and returned to NDT full time as a Senior Technician with INTICO.

Over the last seventeen years I slowly built up my NDT qualifications and



skills. I especially enjoyed the role of Team Leader and mentoring the less experienced Technicians. When my son Nathan was born I knew I needed a better work-life balance and new challenge and I began looking around for opportunities to use both my NDT skills and teaching qualifications. The ideal opportunity soon presented itself with ATTAR as NDT Trainer & Consultant where I could teach adults who are interested in their future careers about a field I have experience in. At the same time I can continue to learn new technical and

teaching skills whilst 'keeping my hand in' with some consulting work. Sometimes I miss the perks of working in the field (eg. On-call extra pay, travel, company yacht – only kidding), but it is worth it to get a better work-life balance whilst doing something I enjoy. So I would like to thank all of you for being so welcoming, supportive and understanding while I transition from the field to the classroom. And if someone could show me where the ATTAR yacht is moored I'd be most appreciative!

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