



Issue Highlights

From the Chair	1
NDT Newsletter – News to you??	2
Nadcap Meeting Schedule	2
Supplier Perspective - Preparing for a Nadcap Audit	3
Nadcap Training	4
Nadcap Auditor Brochure	4
Audit Observers	5
Fluorescent Penetrant – Indication Verification / Erase Bleed Back Technique Issues	6-7
AIA Eye Sight Interpretation ...	8
Revisions to the ASTM's	8
Prime Representatives of the NDT Task Group	9
Supplier Voting Member Representatives of the NDT Task Group	10
NDT Word Puzzle	11
Welcome Mercedes	12
In Step with the CSR	12
Staff Engineer Contact Details	12

Editors

- Phil Keown
- Mark D. Aubele
- James E. Bennett
- Louise Belak

From the Chair

The globalization of the Nadcap program continues. Those of you who were able to attend the recent meeting in Beijing know that we had a great Supplier Symposium where the Asian community showed great enthusiasm, tremendous preparation and much participation. Obviously, a lot of homework was done by the Asian suppliers as they had a lot of comments, a wealth of questions and wanted to know as much as they could about the Nadcap program and how it was going to affect them.

I would like to take a moment to offer my special thanks to Xiangning Kong (Rolls-Royce, China) and Jeff Su (GE On-Wing Support, China) for their tireless efforts acting as our translators for the various presentations. They were also a tremendous help in facilitating the dialogue between the Task Group and the suppliers. This symposium would not have been anywhere near the success that it was without their help! And, once again, the Staff Engineers, Phil Ford and Mark Aubele, were the glue that held the whole day together.



Jeff Su (GE On-Wing Support, China) and Xiangning Kong (Rolls-Royce, China)

Li Xiu Fend (Xi'An Aircraft Co., China) gave a most interesting presentation on the Supplier Perspective. This presentation is available on eAuditNet (Public Documents / Non-Destructive Testing) and offers a great many tips to any supplier interested in getting the most from their Nadcap audit.

The baseline checklists (at the time of writing the article) are currently on ballot with the Nadcap Management Council for approval, then implementation. This baseline effort not only establishes a more level playing field within the Nadcap program, but it has

provided a great first step in reducing the number of Prime Specific requirements. The Task Group is committed to continuing these efforts and working toward a single standard that all of the member companies can use. This level of standardization may not be available tomorrow, but we are a lot closer than we have ever been thanks to the efforts of the Task Group, both Primes and Suppliers.

I would also like to recognize the contributions of a long-time task group member who is moving on to other duties and will no longer participate in Nadcap activities. Keith Fightmaster, Honeywell, is the past Task Group Vice-Chair, a member who gave many years to the advancement of the program, and a friend who was of great help to me during his involvement in the Task Group. Thanks, Keith, for everything!

The next meeting is going to be in Madrid, Spain, and I hope that we will see as great a turnout of European suppliers as we saw from the Chinese and other Asian suppliers in Beijing. This high level of participation is needed if we are going to continue to meet the Nadcap goal (expressed by NMC Chair, Chet Date at every Management Council meeting). "To develop a world class special process supplier base for the global aerospace industry using a cost-effective Industry managed accreditation program".

Phil Keown – Chairman NDT Task Group

NDT Newsletter – News to You?

Are you a new reader of the NDT newsletter? If so, here is some information: The NDT newsletter is published four times a year prior to the quarterly Task Group meetings. The newsletters are read by the subscribing Primes, Suppliers, Auditors and anybody that happens to click on the latest NDT newsletter on the PRI website (www.pri-network.org). The aim of the newsletter is to communicate information relating to NDT within the Nadcap program to improve our process and to promote the sharing of best practices at all levels. If you have any articles that you feel would benefit the program, feel free to forward these to one of the NDT Staff Engineers (contact details at the end of the newsletter) for future inclusions.

James E. Bennett – NDT Staff Engineer

Nadcap Meeting Schedule

Month	2006	2007
January	-	Redondo Beach, Los Angeles, USA 22-26
April	-	Paris, France 23-27
July	Auditorium Madrid Hotel, Madrid, Spain 17-20	Istanbul, Turkey 16-20
October	Marriott Downtown Pittsburgh, USA 16-20	Pittsburgh, USA 22-26

Supplier Perspective - Preparing for a Nadcap Audit

Preparing for a Nadcap audit is of extreme importance in order to have success. The experience your organization has with the Nadcap process will depend on how well you prepare for the audit.

Some questions you need to ask yourself:

- Where to start?
- Who needs to be involved?
- When do I start?
- How do I get started?

The best place to start is through eAuditNet. Download the checklists for the methods that you will be audited to. Once the checklists are downloaded, distribute to the key people in your organization. Key people are the individuals who will be involved in the audit. Distribute to Level 3's, managers, supervisor's etc. Having one person responsible for the completion of the checklists will set you up for failure. Everyone in the organization needs to play a role in the audit process. This includes senior management. Senior management needs to support the Nadcap process because preparation requires much effort and will take time for those involved. If your organization is preparing for an initial audit, it may be a good idea to start one year in advance. For re-accreditation audits, three to four months in advance may be sufficient.

Set up a time line for your audit. This will help track your progress.

Consider setting up a time line to include:

- SPA – Who has Single Point Accountability for the time line and all checklists. This person will be responsible for distributing the checklists and to monitor the progress. The SPA should develop a list to include:
 - Distribution List – Who in the organization is responsible for completing each checklist
 - Completion Date – When do the checklists need to be completed
 - Help Chain – Who/Where can the person completing the checklist go for help with any questions/issues

When completing a checklist –

- Answer all questions
- A yes answer may require objective evidence. Reference procedure numbers/forms/process controls
- A no answer may result in an NCR if it is not a positive “no” answer
- Any N/A's will need an explanation

Once the checklists are complete –

- Make corrections
- Revise documents as needed
- Train your personnel on the changes
- Implement what you changed
- Sustain the changes

Involve the shop –

- Operators/Inspectors need to be familiar with the process
- Use the compliance portion of the checklist to perform an audit of your personnel. This will help them become comfortable with the process

Remember that the key to a successful audit will depend on how much effort you put into it. After all, you're paying for the audit so make the best of it!

Gary White – Orbit Industries, Inc. – Ohio, USA (Nadcap accredited since 1993)
Supplier Voting Member – NDT Task Group



Nadcap Training –

Nadcap Customer Support Initiative (NCSI):

A free, web-based training program that suppliers can access from their workplace. The training discusses everything from audit preparation to nonconformance responses, as well as the additional training tools provided by PRI. All sessions are conducted by PRI Staff and hosted by a Nadcap Management Council User Member. The upcoming dates for this program are:

US Office – Sessions for Initial audits

12 July 2006 2:00pm eastern time
9 August 2006 2:00pm eastern time
13 September 2006 2:00pm eastern time

US Office – Sessions for Recreditation audits

15 August 2006 2:00pm eastern time
19 September 2006 2:00pm eastern time

Europe Office – Sessions for Initial audits

10 August 2006 10:00am UK time

Europe Office – Sessions for Recreditation audits

7 September 2006 9:30am UK time

Please contact the PRI Training Department at PRITraining@sae.org for more information or to register for a session.

Root Cause Corrective Action: This 7-hour training class is based on the flow chart used by Nadcap and the course promises a proven method to improve root cause analysis and prevent the same mistakes from occurring over and over again. The program is taught by a Nadcap audit reviewer and auditor. Suppliers who have participated in our training have shown improved root cause techniques and on average, their audits close faster than those who have not attended a training course. Upcoming dates:

16 August 2006 Seattle, WA, US
27 September 2006 Birmingham, UK
18 October 2006 Pittsburgh, PA, US

AMS 2750D - Pyrometry Training: This 14-hour training course provides an in-depth review of the Nadcap Heat Treat Task Group interpretation of the AMS2750D specification with a focus on temperature sensors, furnace classification, system accuracy tests and temperature uniformity tests. Next sessions:

17-18 August 2006 Seattle, WA, US
28-29 September 2006 Birmingham, UK
19-20 October 2006 Pittsburgh, PA, US

The above two sessions require pre-registration and a training fee. For more information, please contact Jennifer Gallagher, +1 724 772 1616 ext 8194, jgall@sae.org.

Nadcap Auditor Brochure

At the Nadcap meeting in April in Beijing, China, a new Nadcap brochure entitled "Auditing - A World of Opportunity" was made available to all attendees. The brochure features profiles on Nadcap auditors, who between them carry out Nadcap audits for seven special processes in Americas, Europe & Asia. The auditors provide their perspective on Nadcap and how it impacts the industry. The brochure also includes benefits of becoming a Nadcap auditor and details of Nadcap audit growth in recent years. The brochure will be available in Chinese and Japanese at the Madrid meeting.

With 36 NDT auditors already performing Nadcap audits worldwide and 771 Nadcap NDT audits out of a total 3295 performed in 2005 (approximately 23%), the NDT department utilizes technical experts and this brochure is a tribute to their excellence.

Want to read more? Check out the PRI website for more details, including a link to the brochure <http://www.pri-network.org/Nadcap/Auditor-Info.id.44.htm>

The NDT department welcomes any potential auditor candidates or individuals who are simply interested in learning more about the role of the Nadcap auditor - to contact Wendy Grubbs at wendyg@sae.org for a copy of the brochure.

Audit Observers

What is that you might ask? Some know some do not. The majority who do, know because they have experienced Audit Observers during a Nadcap Audit. It is not rocket science to realize that this involves an individual or a team of individuals observing an audit, namely a Nadcap audit.

Why observe a Nadcap audit, are the Nadcap auditors not performing to expectation? The main reasons for observing a Nadcap audit is as follows:

1. Nadcap Process Oversight: The Nadcap Subscribing Users have the overall responsibility of the program, remembering this is an Industry Managed Program. They need to witness first hand how the audit process is evaluating a company's capability of performing a special process to the industry / customer standards in accordance with the outlining Industry Managed Checklists and Standards. Remember the Nadcap Users also have customers and hold accountabilities for their supplier base.
2. Auditor Oversight: Yes the Nadcap Users are watching the auditor performing the audit, not because they are not meeting expectation. Due to the changes over the years with requirements from customers, regional standards and an increase in Nadcap Subscribers, there is a need to review the program to verify that it can meet these changing requirements within the Nadcap Program. Is there sufficient time for the auditor to perform the audit to meet the expectation? Is there a need to perform additional training to address recent changes in Industry? Is the auditor's approach when asking questions from the checklist effective? Does the auditor meet the Nadcap Users expectation when they initially approved the auditor?
3. Process Improvement: Yes we have all heard those word's so many times in Industry, however it is a necessity. How can Nadcap Users improve the program to meet their expectations efficiently and effectively? BASELINE.....

Observing Audits can be a sensitive issue, consequently the Nadcap Program has controls in place to address this. Nadcap Operating Procedure NOP-007 is the procedure controlling this.

To summarize this procedure:

1. The Nadcap User requests that they observe a Nadcap audit with PRI. PRI notifies the applicable Supplier and Auditor.
2. PRI informs the Auditor and the Nadcap User Representatives of the responsibilities (via NOP-007) of performing / observing the audit.
 - Auditor
 - i. Shall manage the audit.
 - ii. Shall provide the Nadcap Observer a copy of the checklist.
 - Observer
 - i. Shall not interfere with the audit.
 - ii. Shall remain with the auditor during the course of the audit and not roam freely through the facility.
 - iii. Questions from the observer should be directed to the auditor and not the supplier. Observer questions should not be disruptive to the audit.
 - iv. Questions or comments regarding the audit itself or the auditor's interpretations should be directed to the cognizant staff engineer.
 - v. Unique requirements of the observer shall not be verified or audited during the Nadcap audit. The observer shall schedule a separate time with the supplier to address any unique issues beyond the scope of the Nadcap audit.

Should you be at all concerned with Observed Audits? NO. It is the perfect opportunity to demonstrate your system is in working order to Nadcap and the Nadcap User, with the knowledge that you are contributing to the continuous improvement of the Nadcap Program.

Do you want to see this procedure? Go to eAuditNet (www.eauditnet.com) select View User Documents (under Applications on the left hand side of the screen) and select NOP-007.

James E Bennett – NDT Staff Engineer

Fluorescent Penetrant – Indication Verification / Erase Bleed Back Technique Issues

Greetings fellow aerospace NDT peers. This article is being written on a subject that should be near and dear to everyone's hearts – the famous "Indication Evaluation Process", or as some may call it, the "Erase Bleed Back Technique". For all of you people who dabble in the green stuff probably know, this is a critical aspect when it comes to the fluorescent penetrant inspection process. This is the part of the process where the technician actually determines if there are any relevant discontinuities on the part that may not meet the applicable acceptance criteria. Is this therefore an important part of the process? You bet your life it is – literally. When it comes to aerospace hardware, there are lots of lives depending on us NDT folks doing this process correctly. So one would think that extra emphasis is being placed on this part of the process and that there is no problems, right? Wrong! Unfortunately, almost every fluorescent penetrant audit performed by Honeywell NDT Auditors within the last couple of years has found deficiencies when it comes to this very part of the process. To help illustrate the problem there are 7 recently documented, actual findings that are listed at the end of this article.

So, why are we having all of these problems you ask? Let us take a look. The following is an actual quote from one of Honeywell's suppliers that was recently given as part of their corrective action response: "Operators have trouble remembering which wipe technique to apply due to multiple customers' requiring multiple wipe techniques." This issue may very well be part of the problem and all of the aerospace primes who flow down these requirements need to be partners in the solution. Granted, technicians should be following their customer's specifications, but could we as an industry do something to help ensure a more consistent approach? We probably can and should.

Below is how the "Indication Evaluation Process" is flowed down from ASTM E1417. ASTM E1417 is the industry specification that Honeywell, and many other aerospace primes, use to base their fluorescent penetrant specifications on. However, most of the primes, including Honeywell (See EMS52309 and 91547-P6808 versions of this requirement below), have added some additional requirements to this process. Is this an indicator that the industry specification is not adequate on its own? Possibly, but it probably is not realistic to think that one industry specification can accommodate the needs of many different product lines within the aerospace industry, and not only that, but the needs of multiple industries?

ASTM E1417 – 05e1, Par. 7.6.3.1 - Indication Verification — If allowed by the specific procedure, indications may be evaluated by wiping the indication with a solvent-dampened swab or brush, allowing the area to dry, and redeveloping. Redevelopment time shall be at least ten minutes, except nonaqueous redevelopment shall be three minutes minimum. If no indication reappears, the original indication is considered false. This procedure may be performed twice for any given original indication.

EMS52309, Rev. Y, Par. 3.1.2 - Indication Evaluation. Indications on parts shall be evaluated as follows. A) Lightly wipe the indication with a soft artist-type brush, cotton tipped applicator, or lint free cloth dampened with solvent. Do not permit solvent to flood the surface. Unless otherwise specified, indications shall not be wiped and developed more than two times. B) After the solvent evaporates from the surface, apply Form a or d developer. If an indication reappears, evaluate it immediately. If the indication is smaller than the rejection size or does not immediately reappear, evaluate it after the proper redevelopment time. If a relevant indication does not reappear, it is considered false.

91547-P6808, Rev. K, Para 3.3.7.3 - Evaluation. All relevant indications shall be evaluated against the appropriate accept/reject criteria. Linear indications shall be defined as those with at least a four to one ratio of length to width. Components with relevant indications that exceed the allowable limits shall be rejected. Templates or flat wire gauges shall be recommended for defect size determination. Magnification (10x maximum) and/or white light may be used to determine discontinuity type. Indications on parts exhibiting fluorescent background which interferes with evaluation of questionable indications shall be evaluated as follows:

- a. Lightly wipe the area once with a soft brush or Q-tip dampened with chromate free solvent. Do not permit solvent to flood the surface.

b. After the solvent evaporates from the surface, re-inspect. If an indication reappears, evaluate it immediately. If a relevant indication does not reappear, evaluate it after redevelopment. The redevelopment time shall equal the original development time.

So what is this variability between aerospace primes when it comes to the Indication Evaluation Process / Erase Bleed Back Technique? The variability is in multiple areas; e.g., some primes allow the indication to be wiped and evaluated without re-development, some restrict what tools you can use to wipe the indications with, most have differences in what the required developer dwell time is after re-development, some restrict the number of times you can wipe an indication, some restrict the direction you can wipe an indication, etc., etc. So as you can see, this can be hard for technicians to keep all of these different requirements straight.

Let us now take a look at some actual examples of product audit findings:

Finding (Major): The supplier's PT Level 2 did not re-develop all indications as required after performing the solvent wipe technique. NOTE: This is a repeat finding from the last audit.

Finding (Major): When evaluating P/N: XXXXXXX, the supplier's Level 2 swabbed some indications more than twice and didn't redevelop all of the indications that were swabbed.

Finding (Major): The supplier's PT Level 2 (On contract from their customer) – did not re-develop all indications as required after performing the solvent wipe technique.

Finding (Major): When evaluating P/N: XXXXXXX-X, the supplier's Level 2 was deficient in meeting the requirements of the specification by: A) He swabbed some indications and didn't redevelop the indications that were swabbed. B) He did not take appropriate measures to ensure that the brush used for the solvent wipe process was only damp with the solvent used. Therefore there was too much solvent applied to the parts which could wash out the small indications required to be detected; i.e., may be as small as 010" (0.254 mm) on machined areas.

Finding (Major): The following deficiency was identified with two of the supplier's Level 2's while processing P/N: XXXXXXX-XXX and Honeywell P/N: XXXXXXX-XXX. Neither Level 2 utilized developer after wiping of indications during the evaluation process. The requirement is properly addressed in the supplier's internal FPI procedure; i.e., XXXXXX, Issue X, Par. X.X, but not followed. NOTE: Form d developer was available in both inspection areas, but not used.

Finding (Major): The supplier's PT Level 2 did not re-develop all indications as required after performing the solvent wipe technique.

Finding (Major): The suppliers PT Level 2 used a solvent soaked rag which completely flooded the area of concern and 1/3 of the casting. He did not re-apply developer and did not evaluate to the appropriate standard.

In reviewing the above examples of actual violations, you can see that most were related to not re-developing indications after they had been wiped. This is a very serious error especially when someone is required to inspect critical hardware with rejectable indications in the range of: .010" – 015" inches (0.254 - 0.381 mm) in diameter. The bottom line is that NDT technicians and Level 3's need to put much more emphasis on this part of the process and realize that each customer is likely to flow down different parameters for performing the Indication Evaluation Process / Erase Bleed Back Technique. These parameters are currently based on the type and criticality of the parts that are required to be inspected. Also, the Level 3's need to ensure that these differences are part of the formal training program and the internal audit program.

In closing, everyone responsible for inspecting aerospace hardware needs to ensure that they review their customer's specific requirements and conform accordingly.

D. Scott Sullivan - Senior Engineer – NDE , Honeywell Aerospace / NDT Task Group Representative

AIA Eye Sight Interpretation

It has been brought to the attention of the NDT Task Group that the method of approval, being used for the designation of personnel performing the visual acuity test, is not in accordance with NAS 410. A request for interpretation to AIA was sent and the response stated:

Response:

Paragraph 7.1.1 requires that visual acuity tests "be administered by personnel designated by the Responsible Level 3, NANDTB, or the outside agency utilized for the qualification examination of personnel." Qualified personnel must therefore be designated in advance.

The current method is after the fact. Previously the NDT Task Group had allowed this as an option, which is now deemed invalid.

Suppliers are therefore advised to follow the interpretation requirements and designate the personnel performing the visual acuity test in advance of the test being carried out.

Phil Ford – NDT Senior Staff Engineer

Revisions to the ASTM's

By now, unless otherwise specified by the customer, all suppliers that are required to meet the applicable ASTM specifications (ASTM E1417, 1444, 1742) should be working to the 05 revision. If not, consider this an opportunity to set things right!

What does your procedural system require in terms of specification reviews? Are you required to perform a review? Of course you are. Do you have objective evidence of that review and are the applicable forms as defined by your system used? It is not acceptable to tell the auditor during the audit that a review was performed; however no changes were necessary, therefore no evidence is available. You must provide objective evidence that a review was performed. Objective evidence can be provided in a number of ways and will be dependant on what is specified within your quality system. Using a procedure review template or signing the applicable standard stating that it is was reviewed against relevant procedures for compliance are typical examples. Failing to have the necessary evidence may result in the issuing of an NCR by the auditor.

On a final note. If your system requires the revision of the ASTM specification to be specified on the NDT technique, e.g. ASTM E1742-05, ensure that your NDT techniques are current and reflect the latest specification / revision (unless otherwise specified by your customer). At a minimum, the revision used must be designated somewhere in the documentation package for that test. The NDT Group is experiencing an increase in NCR's associated with NDT Techniques referencing the wrong revision (previous revision) of the ASTM when the latest revision applies.

James E Bennett – NDT Staff Engineer

Prime Representatives of the NDT Task Group

Prime	Representative	Status	E-mail contact
Airbus SAS Toulouse Cedex, France	Yves Esquerre	User / Voting Member	yves.esquerre@airbus.com
Airbus SAS Filton Bristol, UK	Trevor Hiscox	User / Voting Member	trevor.hiscox@airbus.com
BAE Systems (Air System)	Chris Dootson	User / Voting Member	chris.dootson@baesystems.com
BAE Systems (Air System)	Chris Young	Alternate / User / Voting Member	chris.young@baesystems.com
Bell Helicopter Textron Ft. Worth, TX	Jim Cullum	Alternate / User / Voting Member	jcullum@bellhelicopter.textron.com
Bell Helicopter Textron Ft. Worth, TX	Tyler Ribera	User / Voting Member	tribera@bellhelicopter.textron.com
The Boeing Company Mesa, AZ	Bob Reynolds	User / Voting Member	bob.s.reynolds@boeing.com
The Boeing Company Seattle, WA	Peter Torelli	User / Voting Member	peter.p.torelli@boeing.com
The Boeing Company St. Louis, MO	Douglas Ladd	User / Voting Member	douglas.l.ladd@boeing.com
Bombardier Belfast, UK	Bobby Scott	User / Voting Member	bobby.scott@aero.bombardier.com
Cessna Aircraft Company Wichita, KS	Greg Hall	User / Voting Member	ghall2@cessna.textron.com
Eaton Aerospace Jackson, MS	Steven Garner	User / Voting Member	steveugarner@eaton.com
Eurocopter	Thierry Jacques	User / Voting Member	thierry.jacques@eurocopter.com
GE Aviation Lynn, MA	Phil Keown	Chairman / Alternate / User / Voting Member	philip.keown@ae.ge.com
GE Aviation Cincinnati, OH	Ron Rodgers	User / Voting Member	ron.rodgers@ae.ge.com
Goodrich Aerostructures Group Riverside, CA	Chuck Alvarez	User / Voting Member	chuck.alvarez@goodrich.com
Hamilton Sundstrand Windsor Locks, CT	Michael Mitchell	User / Voting Member	mike.mitchell@hs.utc.com
Hamilton Sundstrand Rockford, IL	Roger Eckart	Alternate / User / Voting Member	roger.eckart@hs.utc.com
Hèroux Devtek, Inc. (Landing Gear Div) Longueuil, Quebec	Kirk Whalen	User / Voting Member	kwhalen@herouxdevtek.com
Hèroux Devtek, Inc. (Landing Gear Div) Longueuil, Quebec	Serge Labbè	Alternate / User / Voting Member	slabbe@herouxdevtek.com
Honeywell Aerospace Phoenix / Tempe, AZ	D. Scott Sullivan	Alternate / User / Voting Member	dscott.sullivan@honeywell.com
Honeywell Aerospace Phoenix, AZ	Robert Hogan	User / Voting Member	robert.hogan@honeywell.com
Lockheed Martin Corp	Ron Levi	User / Voting Member	ron.levi@lmco.com
MTU Munich, Germany	Manfred Podlech	User / Voting Member	manfred.podlech@muc.mtu.de
MTU Munich, Germany	Juergen Burchards	Alternate / User / Voting Member	juergen.burchards@muc.mtu.de
Northrop Grumman Corporation Little Rock, CA	Stephen Bauer	User / Voting Member	stephen.bauer@ngc.com
Pratt & Whitney UTC East Hartford, CT	David Royce	Secretary / User / Voting Member	david.royce@pw.utc.com
Pratt & Whitney UTC East Hartford, CT	Jim Korenkiewicz	Alternate / User / Voting Member	james.korenkiewicz@pr.utc.com
Raytheon Aircraft Company Wichita, KS	Brian D. Young	User / Voting Member	brian_d_young@rac.ray.com
Rolls-Royce Corporation Indianapolis, IN	Andrea Steen	User / Voting Member	andrea.m.steen@rolls-royce.com
Rolls-Royce PLC Derby, UK	Andy Statham	Vice Chair / User / Voting Member	andy.statham@rolls-royce.com
Rolls-Royce PLC Derby, UK	Chris Stevenson	Alternate / User / Voting Member	christopher.stevenson@rolls-royce.com
SAFRAN Group France	Alain Bouchet	User / Voting Member	alain.bouchet@snecma.fr
Spirit AeroSystems Wichita, KS	David H. Vaughn	User / Voting Member	david.h.vaughn@spiraero.com
Textron Systems Wilmington, MA	Carl Roche	User / Voting Member	croche@systems.textron.com
Vought Aircraft Industries, Inc. Dallas, TX	Greg Rust	User / Voting Member	rustgr@voughtaircraft.com
Vought Aircraft Industries, Inc. Dallas, TX	Mike Shiplett	Alternate / User / Voting Member	shiplmi@voughtaircraft.com

Supplier Voting Member Representatives of the NDT Task Group

Supplier	Representative	Status	E-mail contact
E. M. Inspection Leicester, United Kingdom	Andy Bakewell	Secretary/Supplier Voting Member	andy.bakewell@emcol.co.uk
West Penn Non-Destructive Testing Inc. New Kensington, PA	N. David Campbell	Supplier Voting Member	ndcampbell@westpenntesting.com
AAA Plating & Inspection Inc. Compton, CA	Robert Custer	Supplier Voting Member	bob@aaaplating.com
NDT Inspection & Testing Ltd Worcester, United Kingdom	Paul Evans	Supplier Voting Member	paul.evans@ndt-inspection.co.uk
New Hampshire Ball Bearings, Inc. Peterborough, NH	Richard King	Supplier Voting Member	rking@nhbb.com
Mitchell Labs Pico Rivera, CA	David Mitchell	Chair/Supplier Voting Member	david.mitchell@mitchell-labs.com
West Penn Non-Destructive Testing Inc. New Kensington, PA	Mark Pompe	Alternate Supplier Voting Member	mpompe@westpenntesting.com
Team Cooperheat MQS Cincinnati, OH	Cindy Roth	Supplier Voting Member	croth@teamindustrialservices.com
Howmet Research Ctr Whitehall, MI	Ryan Soule	Vice Chair/Supplier Voting Member	rsoule@howmet.com
Orbit Industries Inc. Middleburg Heights, OH	Gary White	Supplier Voting Member	gwhite@orbitndt.com
Alcoa Fastening Systems Portet sur Garonne France	David Yates	Supplier Voting Member	David.yates@alcoa.com

Nadcap Word Puzzle

The aim of the puzzle is to see how many words you can find associated with the Nadcap Program and NDT. The words can be found in various ways, such as the first letter of the word beginning at the top, bottom, or diagonal. The word could flow from left to right or even right to left. How many words can you find?????. Oh and do not forget of course the bonus word.

Answers will be posted in the next edition of the newsletter.

M	I	R	C	A	Z	M	T	B	O	N	M	A	O	V	W	T	R	G	D
E	R	I	A	S	N	I	G	A	M	L	F	G	P	R	Y	L	T	N	U
M	A	X	E	D	R	N	U	L	T	R	A	S	O	N	I	C	I	E	R
U	T	H	T	C	E	O	I	L	X	A	O	T	R	M	N	H	C	F	E
L	I	W	A	P	P	R	W	O	R	Q	I	K	P	Y	I	E	L	F	V
S	O	K	I	R	B	T	Q	T	X	D	P	E	T	H	T	C	E	A	G
I	N	F	D	E	M	A	K	X	U	I	H	Q	W	R	I	K	S	T	E
F	B	O	E	V	A	L	U	A	T	I	O	N	N	C	A	L	H	S	J
I	C	J	M	E	E	N	S	B	B	M	P	P	C	B	L	I	W	Q	T
E	T	A	M	N	B	T	E	O	E	J	W	B	M	R	T	S	J	G	W
R	Q	E	I	T	A	X	R	A	A	L	O	U	I	S	E	T	D	C	Z
A	S	G	K	A	R	S	H	A	D	L	E	A	U	D	I	T	N	E	T
D	J	E	E	T	E	S	T	R	E	P	O	R	T	Q	C	S	I	M	E
I	V	R	F	I	I	I	B	H	N	M	U	Y	A	R	X	C	P	Y	C
O	I	X	I	V	R	U	C	Q	R	Z	I	F	O	E	N	H	E	T	H
G	W	R	L	E	W	L	E	V	E	L	A	J	U	N	G	E	N	I	N
R	X	T	M	A	R	Y	C	T	I	X	A	Z	E	G	K	D	E	D	I
A	P	N	U	C	T	K	W	P	L	M	V	R	S	A	B	U	T	O	Q
P	N	E	R	T	Q	D	A	L	P	R	I	M	E	W	O	L	R	M	U
H	W	C	O	I	R	C	M	Z	P	T	P	N	B	N	G	I	A	M	E
Y	O	S	U	O	U	D	A	B	U	B	R	U	S	X	E	N	N	O	F
K	E	E	Q	N	O	N	S	U	S	T	A	I	N	I	N	G	T	C	T
I	K	R	A	A	V	P	R	T	S	W	C	U	W	I	R	P	H	W	P
D	O	O	Z	E	E	C	O	W	Q	E	T	E	Z	B	L	Y	O	H	A
O	R	U	J	C	A	E	Z	C	A	L	I	B	R	A	T	I	O	N	C
N	N	L	I	H	X	Y	V	V	W	H	C	T	P	T	C	I	L	I	D
M	J	F	E	E	D	B	A	C	K	O	A	M	J	O	Q	U	O	M	A
O	I	Y	T	L	M	D	E	I	F	I	L	A	U	Q	R	W	Z	X	N
C	O	M	P	L	I	A	N	C	E	S	E	D	E	C	R	E	M	E	A

Courtesy of Mike and Mary Gutridge (whilst on vacation)

Welcome Mercedes

Most of you know that our London based CSR, Jennifer Walker, moved on to other endeavors a few months ago. Well I am very pleased to announce that Mercedes Rodriguez is now filling that position. Now you will see from her bio below that she is learning her way through far more processes than just NDT, but hey, we in NDT consider her our very own, but in our generosity, we graciously share her with the other commodities. Mercedes has been a real joy to this point and we are very pleased to welcome her to NDT. Mercedes; remember; "COU".

Mark D. Aubele -
NDT Senior Staff Engineer

In Step with the CSR

Name: Mercedes Rodriguez

Title: NDT, Welding, Heat Treatment and Chemical Processing Committee Service Representative

Duties: Provide administrative support to the NDT, Welding and Chemical Processing Staff Engineers, Task Groups, Suppliers, Committees and Councils. Process audit reports upon submittal and issue certificates upon audit review and completion and to provide general administrative support to ensure the smooth running of the European office. Other daily tasks include processing NCR response extensions, and maintaining projections.

Background: I began work at PRI in March 2006 as the Team CSR Support. I started with Welding followed by NDT and then Chemical Processing. Currently in the process of starting training in Heat Treatment, which would make me a Jack of four trades!

I am a qualified Spanish interpreter and achieved a Diploma in the School of Languages and Communications at the Central Metropolitan College of Perth, Western Australia.

After living in the UK for five years and not being able to exercise my language skills I was thrilled when I began working for PRI. I get to speak to Spanish suppliers on an almost daily basis and thoroughly enjoy working in the European office with such wonderful colleagues.

Personal: A little history on why my name is Mercedes: apart from the fact that it's a Spanish name, my father originally wanted to call me Gertrude, so, my mother saving me from a fate worse than death, decided to call me after herself!

I was born in Las Islas Canarias, which are a bunch of very cool islands off the coast of Morocco, to an Andalusian father and a Basque mother, add to that a Catalán boyfriend, and I pretty much have most of the best parts of Spain!

When I was five my father decided to pack up the whole family and immigrate to the wonderful land of OZ. So now I consider myself totally Australian but with the added skill of speaking Spanish!



PRI Staff Contact Details - NDT Group

Name	Position	Location	e-mail Contact	Telephone
Mark Aubele	Senior Staff Engineer	Warrendale, PA, USA	maubele@sae.org	+1 (724) 772-1616 ext 8127
Louise Belak	Committee Service Representative	Warrendale, PA, USA	belak@sae.org	+1 (724) 772-1616 ext 8115
Jim Bennett	Staff Engineer	Warrendale, PA, USA	bennet@sae.org	+1 (724) 772-1616 ext 8122
Phil Ford	Senior Staff Engineer	Wales, UK	phil.ford@pri-europe.org.uk	+44 (0) 870 350 5011
Mike Gutridge	Senior Staff Engineer	Granville, OH, USA	mikeg@sae.org	+1 (740) 587 9841
Samantha Jeswald	Committee Service Representative	Warrendale, PA, USA	samanthajeswald@sae.org	+1 (724) 772-1616 ext 8161
Mercedes Rodriguez	Committee Service Representative	London, UK	Mercedes.Rodriguez@pri-europe.org.uk	+44 (0) 870 350 5011