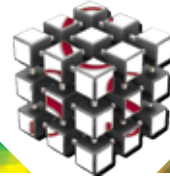




# Non-Destructive Testing Newsletter



June 2011

## Issue Highlights

From the Chair .....	1
Nadcap Meeting Schedule .....	1
NDT Newsletter – Want to be on Circulation? .....	2
Audit Scope Verification .....	2
Supplier Symposium .....	2
Magnetic Particle Testing – Discussion / Thoughts .....	3
Advisories .....	3
Responding to Nadcap Non-Conformances – From a Supplier Perspective .....	4
CSR Perspective .....	5
Subscriber Voting Member Representatives of the NDT Task Group .....	7
Supplier Voting Member Representatives of the NDT Task Group .....	8
In Step with – Andy Statham .....	8
PRI Staff Contact Details .....	8

## From the Chair.....

The NDT Task Group has lost another of its valued members. Andy Statham, the Vice-Chair of the Task Group for a number of years, and a shoulder on which I leaned often and with great confidence, has decided to seek a different career path. The good news, however, is that he has chosen to cast his lot with the Nadcap NDT Task Group as the new Staff Engineer! So Andy will still be an active member of the Task Group, he will just be wearing a different logo on his jacket and shirt. Glad to know that you haven't abandoned us, Andy!

Although it is somewhat daunting to realize that half of 2011 is gone, it is time for the NDT Task Group to start preparing for Auditor Conference in October. As is the case every year, we strive to provide a program that is beneficial to the Auditors, the program, the Suppliers and the Subscribers. The Task Group welcomes input from all to help us make this a value added endeavor. The ever recurring adage that you get from the program what you put into the program comes to mind. If you feel there are areas where the Auditors need improving, please provide suggestions on how to get that done.

NDT has nearly completed a number of new checklists. The Filmless Radiography and the Eddy Current checklists are ready and the teams are hoping to set up a couple of pilot audits to "test drive" them before sending them out for ballot. The Task Group is also working to establish a checklist for the Repair and Overhaul part of the aerospace business. This effort will be ready to pilot very soon as well. Finally, we will be looking to enhance the Ultrasonic checklist to make it more useful to the Engines community, not just the airframers.

As ever, NDT is a dynamic group, constantly changing as we strive for standardization. I look forward to seeing you all in London and wish you safe travels, wherever you go.

Phil Keown – NDT Task Group Chair

## Nadcap Meeting Schedule

2011	Location
October 18-22	Pittsburgh, Pennsylvania, USA
2012	Location
February 20-24	San Diego, Ca USA
June 25-29	Berlin, Germany
October 22-26	Pittsburgh, Pennsylvania, USA



## Audit Scope Verification

Since the implementations of the baseline checklists in December 2006, there has been an added step in the NDT audit process...audit scope verification. Previously, audit scope was defined as the methods that the audit would cover. It was simple to define and, consequently, no additional verification was required. However, with the baseline checklists, it now becomes critical. Suppliers must define the audit scope according to who their customers are, as well as the methods to be audited.

Scope verifications are required for all Nadcap commodities with the exception of AQS AC7004 audits. It is expected that the Supplier will have identified all Nadcap Subscribers for which they hold NDT process approval. This is key in establishing which questions will apply from the NDT Supplemental checklists.

Scope of the audit is established initially when the audit is scheduled. The Supplier can access the information in eAuditNet and check the appropriate box next to the name of the Nadcap Subscriber for whom they hold approvals. Remember, just because you may not have performed work for this customer lately does not mean you do not have to meet the unique requirements. If you are still listed as an approved source you must continue to meet all requirements.

An additional form (*Subscriber Matrix*) for identifying Nadcap NDT Subscribers is located in eAuditNet, under 'Public Documents', scroll down to 'Nondestructive Testing'. This form can be printed or downloaded and completed to assure all Subscribers are identified. The Auditor will attach a completed copy of this form in the audit.

When the Auditor arrives on-site at the Supplier's facility it is required that

both the Auditor and Supplier log on to eAuditNet to verify the audit scope. This entails the Auditor accessing eAuditNet, and then the Supplier logging into eAuditNet and verifying that all Subscribers have been included in the scope of the audit. Please keep in mind it is the responsibility of the Supplier to identify all Nadcap Subscribers.

The baseline Nadcap NDT checklists establish a minimum set of criteria the Supplier must meet to become accredited. In addition, it also verifies compliance to unique customer requirements that go beyond the basic Nadcap checklist. These are referred to as the supplement checklists, identified with the letter "S" at the end of the checklist number (example, AC7114/1S). All Nadcap Subscribers that have supplemental criteria have been assigned a "user number" (example, U-1, U-2, U-3...). For those Subscribers that have supplemental questions they will be listed at the beginning of each supplement checklist. Therefore if they do not appear in the list they do not have additional questions for compliance.

So why is scope verification so important? Based on what I have told you so far the Auditor will only ask questions pertaining to those customers you have identified. As a supplier if you fail to identify a customer in your scope then most likely another audit (scope addition) will be conducted at the Supplier's expense to address the items previously missed. The impact is immediate when the Subscriber states the Supplier is on their approved list but failed to address the customer's unique requirements noted in the supplement. The actions taken may also include removal as a Supplier to that Subscriber and no further processing allowed. All of these impact the business and flow of

## Supplier Symposium

At the Nadcap NDT meeting in Barcelona a few Suppliers requested that the next NDT Supplier Symposium focus on RCCA. More specifically, what was really at issue was the way that the four Staff Engineers respond to Supplier responses in regards to RCCA. The NDT Task Group is happy to say that we will respond to this request by presenting a symposium in London on RCCA, RCCA with a twist. Though not completed as of the date of this printing, we envision a program

that will first go through some basic RCCA details, principles and examples. Secondly the symposium will address a host of good root causes/preventive statements and of course bad statements with explanations on how to improve them. To wrap up the presentation, the third part will be a comparison of Staff Engineer responses and how they compare with each other combined with much discussion; this should prove to be a very interesting presentation indeed.

## NDT Newsletter – Want to be on the Circulation?

The NDT newsletter is published periodically throughout the year. The newsletters are read by the subscribing Nadcap Users, Suppliers, Auditors and anybody that happens to click on the latest NDT newsletter on the PRI website ([www.pri-network.org](http://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.

Have you stumbled across the NDT Newsletter by chance? Want to receive it on a regular basis? Keep up-to-date of the latest Nadcap NDT information by getting added to the distribution list! To receive notification when a new edition has been published, please e-mail Rhonda Joseph at [rjoseph@sae.org](mailto:rjoseph@sae.org) with your name, company and email address.

hardware to meet defined schedules.

The bottom line is take time to review who your customer base is. Identify those you currently hold approvals for, not just those you have performed work for recently. Complete the attachment identifying the Nadcap Subscribers that are customers and give a copy to the Auditor during the scope verification process.

If you have any questions please contact a PRI NDT Staff Engineer for guidance. All of our contact information is noted within this newsletter or in eAuditNet.

**P. Michael Guttridge** – Senior NDT Staff Engineer

The Task Group hopes that many of you can and will attend this symposium currently scheduled for Wednesday morning, June 22, 2011. If this proves a successful and well received presentation we will offer it in Pittsburgh in October and then again in San Diego California in February of 2012.

**Mark Aubele** – Senior Program Manager NDT, ETG & AQS

## Magnetic Particle Testing – Discussion / Thoughts

Following a recent audit, the issue of analogue meters was brought up. The unit witnessed during the audit was an older conventional MPI unit with an analogue ammeter. During the audit, the machine occasionally fluctuated to an extent preventing consistent amperage values. While this is an issue, in this case the company personnel demonstrated control over the whole process. This is not grounds for a non conformance, but an issue when it comes to quality and economics of performing the required number with the usual 'day to day' pressures of a normal working day. Consider the following:

- Originally quoted "x" amount of parts to be inspected per hour. Can this be maintained?
- How much time is lost – how much does this fluctuation cost the company?
- Is more time taken to perform system performance checks?
- Do non-conformances occur because of the fluctuation?
- How many times does the machine need to be adjusted to maintain current values?

- Is the inspector placed under undue pressure to maintain inspection efficiency when additional time is required on the machine to complete the inspection effectively?

Perhaps it is more cost effective to repair the machine or at least verify everything is in working order. It can be frustrating for inspectors to operate equipment if irregular readings are achieved and can affect overall productivity with the potential for errors to take place. Does your company have these issues? Perhaps it should be discussed further with the NDT inspectors at your company.

Analogue meters again!! This is not to disapprove or encourage analogue meters to be replaced with digital meters, but merely to consider such issues that come up from time to time in the Nadcap NDT Program. Analogue meters have been used for many years and proven their worth, but do not last forever without being maintained effectively. Enough said? So analogue meters! When writing techniques or conducting the system performance checks, is it possible to read x 10 units (10, 20, 30, etc) on an analogue meter? If not, do not have an amperage value of 1510 amps on a technique or

a value that must be obtained for the system performance check. Consider the readability of the meter, maybe it is not possible to read x 100 units (100, 200, 300, etc) either. In reality amperages should be set to a unit line identified on the analogue ammeter. Anything in between is not accurate enough.

So what about the +/- 10% rule that is used? For example if a technique requires 1000 amps, is it acceptable to use the range of 900 – 1100 amps? The answer is no. "What?! But we have applied this method for years and been trained in this!!" Well unfortunately, there are few or no customer specifications allowing this and the Nadcap checklist certainly does not address the issue, although proposals have been put forward to include this. While this could be considered 'Tribal Knowledge' in the Industry, the author knows of no 'official' allowances for this. Note: The Task Group has rejected recommendations to include a statement regarding the required amperages and the +/- 10% tolerance.

**James E. Bennett** – Senior Staff Engineer, NDT

## Advisories

Due to the sheer number of questions received about several issues of late, the Task Group thought it pertinent to run an article that reviews some of the previous Supplier Alerts of 2010. Here they are in abridged format. Please feel free to continue to call in with questions about these issues or any other.

### Supplier Alert NDT – Eye Exams and Outlines

The following represents the Nadcap baseline position regarding the following issues.

1) Trainee Eye Exams, AC7114, 5.4.5 – Eye exams are required for certification in accordance with NAS 410, at some point prior to certification, every trainee shall be given an eye exam. However, trainees do not require an eye exam to function as trainees.

2) Training Outlines, AC7114, 5.6.15 – The issue here is the requirement that the outlines address the time to be spent in each subject area. There are a couple of parts to this issue, first, the "subject area".

The subject area must be defined by the Supplier on the outline and may be very specific such as "Type 1, Method A" or be very general, such as "Type 1 Penetrant". This is left up to the Supplier to define on the outline. The second issue is that of "time". The outline itself is required to list the time spent in each of the subject areas as defined by the Supplier, see previous explanation. Therefore the Supplier has met the baseline requirement for the outline (in regards to this issue) if the outline defines the time spent in each subject area as defined by the Supplier.

### Supplier Alert NDT – MT System Performance Baseline

Based upon discussion at a Nadcap NDT meeting, it was agreed there is no Nadcap requirement to establish a baseline when using the tool steel ring, either Ketos or AS5282. All that is required by AC7114/2 is that the actual results be recorded, the amperages do not exceed what is defined in the standard or checklist for each hole checked, and the minimum number of holes be evident.

### Supplier Alert NDT – Clarifications

The NDT Task Group has made clarifications on existing checklist requirements as defined below. The checklists and paragraphs defined below are those most commonly represented by the issue.

**Issue:** "Observation" vs "Supervision"  
- AC7114, 5.1.6; AC7114/1, 6.17.2;  
AC7114/2, 7.8.2; AC7114/3, 6.14.2 and  
AC7114/4, 6.8.2.

**Clarification:** It is acceptable to the NDT Task Group if a Supplier's Written Practice defines supervision consistent with what NAS 410/EN4179 defines as observation, and no NCR shall be initiated for the use of the word, supervision. It is understood that the definition in the Supplier's Written Practice must be consistent with NAS 410/EN4179 and that the activities in regards to this issue as witnessed by the Auditor, if applicable, are acceptable.

*Continued on next page*

Continued from previous page

**Issue:** "User Member Signatures of approval on Techniques" - AC7114/1, 6.3.4; AC7114/2, 7.3.4; AC7114/3, 6.3.4 and AC7114/4, 6.3.4.

**Clarification:** It is acceptable to the NDT Task Group if an approval block on a technique is not completed if it has been determined that the User Member signature is indeed not required.

## Supplier Alert NDT – Specific Exams

Based on recent AIA clarifications the following documents what is required by the AC7114 baseline checklist and should be considered by Auditors when reviewing Supplier's procedures and exams for adequacy and compliance.

The baseline reads in part; *"The specific examination for all levels shall be an open*

*book examination (Reference material such as specifications, tables, formulas, etc. may be provided as determined by the Responsible Level 3 or Examiner. Questions utilizing such material shall require understanding of the information contained therein rather than merely finding its location)."*

1) The "Written Practice" must specify that the specific exam be an "open" book examination.

2) The exam must be given as "open", that is, some portion of the exam, as defined by the Responsible Level 3, must be questions formulated as "open" requiring the use of reference material, usually specifications.

3) Since as in item two above, some portion must be "open" that allows the other portion to be formulated as questions that do not require the use of

reference material. This again is to be determined by the Responsible Level 3.

4) Questions that utilize reference material (open questions) must not be "look up" type questions, that is, they must be formatted to require understanding of the material rather than simply finding the answer in the reference material. These questions require interpretation of the specification by the examination candidate.

5) The exam shall cover the requirements and use of the specifications, codes, equipment, operating procedures and test techniques the candidate may use in the performance of his/her duties with that employer.

**Mark Aubele** – Senior Program Manager  
NDT, ETG & AQS

## Responding to Nadcap Non-Conformances – From a Supplier Perspective

Responding to non-conformances can be a challenging task if you do not have a structured approach for responding. It is necessary to know and understand what Nadcap is looking for when responding.

The expectation from Nadcap is:

- Immediate corrective Action Taken
- Root Cause
- Impact on Hardware
- Preventative Action
- Objective Evidence
- Implementation Date
- Immediate Action Taken – When a non-conformance is found, what action did you take to stop the issue?

Did you contain the issue?

Did you look outside the area where the issue arose to be sure it's not happening elsewhere (systemic issue)?

➤ Root Cause –

Why was there an issue?

The root cause of an issue is when you can describe the issue in terms of an activity, connection or flow. Root cause analysis requires a problem solving method. The root cause is the most difficult to solve because people do not truly look for the "Why Answer". A common approach for determining the root cause is using the "5 Why Method".

The 5 Why's is a simple approach to problem solving. People stop looking for the root cause once they find the symptom of the issue. Solving the symptom will not solve the problem.

As an example, an air compressor has failed.

"Why" did the compressor fail? Because the electrical circuit tripped.

"Why" did the electrical circuit trip? Because the compressor overheated.

"Why" did the compressor overheat? Because it wasn't getting enough air.

"Why" wasn't it getting enough air? Because the air filter was dirty.

"Why" wasn't the filter replaced? Because there was no preventive maintenance to do so.

With the above scenario, we can now solve the root cause (set up a maintenance plan). If you replace the filter, you are just fixing the symptom. The compressor will eventually overheat once the filter becomes dirty. The maintenance plan should prevent this with regular replacement of the filter.

You must keep asking "Why" for each answer you give from the original issue statement. You can test each answer to your "Why" by asking, "If I remove this, will the previous answer go away? If the answer is no, you have not found the root

cause. Keep asking "Why".

➤ Impact On Hardware –

Did the non-conformance affect parts already inspected? Did parts affected ship to your customer? If yes to one of these questions, did you re-inspect the affected hardware or notify your customer?

➤ Preventative Action –

What steps or actions will you put in place to prevent the non-conformance from happening again? How will you verify and document this?

➤ Objective Evidence –

Your corrective action response will be rejected if you do not submit objective evidence. Training documents, revised procedures, forms etc will need to be submitted as evidence with the corrective action package.

➤ Implementation Date –

Not all non-conformances will be completed within the allotted time frame. Equipment may need to be purchased or calibrated. List a planned implementation date. Make sure you follow up with this date if it is going to exceed your completion date.

When answering a non-conformance, take the problem solving to where the non-conformance was issued. If it involves the shop floor, go to the shop floor and solve. Have all personnel affected by the issue

help resolve it. Use personnel outside the affected area to participate. It doesn't hurt to have a separate set of eyes looking on. Questions may be raised that no one thought to ask. Use visuals when problem solving. Map out the issue and current condition on a white board.

Using the 5 Why method is one tool you can use to develop a structured approach. Other methods, such as a fish bone diagram, will also provide a structured approach. These two methods work well together.

Whatever method you use, it is important to keep in mind, emphasis should not be placed on who did wrong, but rather why. Each step of the corrective action process needs to be documented. Turn the non-conformance into a positive and learn from it.

**Gary White** – Orbit Industries, Inc.  
Supplier Voting Member

*For more information on the Nadcap approach to Root Cause Corrective Action please go to <http://survey.constantcontact.com/survey/a07e2q113yqg5ib444p/start> to download a whitepaper on the subject.*

## CSR Perspective - Supplier Quality Systems

Prior to scheduling a Nadcap audit, Suppliers must provide PRI with a quality system accreditation certificate (defined by NOP-002) valid through the last day of the Nadcap audit. Suppliers can upload their own quality system certificate into the eAuditNet system by using the 'Supplier Quality Systems' application. This can be done by clicking on the Supplier Quality System link under the Supplier Applications menu. If your company's current quality certificate is already listed with the correct expiration dates, there are no steps to take. It is very important not to create duplicate entries for the same quality system in eAuditNet. However if there is no quality system listed, or if the listed certificate is incorrect or expired, then you may add the correct information by completing the information in the "Add New Certification" section. To add a new quality system certificate, the supplier must state the issuing registrar company, the quality system type (for example: AS9100) and the expiry date and then click "Add New System Certification". Once this is completed, the supplier can then attach a copy of the certificate itself into the system by clicking on "Manage Attachments". Please note, It is very important that all information is listed correctly in the system. The company name and address on external quality system certificates must match the name and address for the locations being audited as shown in eAuditNet. Satellite facilities, as defined in NIP 7-01, must either be listed on the Main site certificate or have their own certificate.

As always, if you have any questions, please feel free to contact any of the Committee Service Representatives for NDT at the contact information listed at the end of this newsletter.

**Kellie O'Connor, Rhonda Joseph, Amanda Bonar**, NDT Committee Service Representatives

## eQualLearn – A Year of Learning

eTo assist Nadcap customers, PRI's eQualLearn Program is offering a variety of training programs designed to improve audit performance by increasing the skills and knowledge of your employees. eQualLearn offers two types of training options: Regional Session (public) and Onsite Training at a corporate location. Onsite learning solutions can be customized to meet corporate business needs.

### Atlanta, GA

13-14 July 2011 – Nadcap Audit Preparation-Non-Destructive Testing

15 July 2011 – Strategic Process Control

### Dallas, TX

29-30 August 2011 – Internal Auditing

31 August 2011 – Introduction to Aerospace Quality

01-02 September 2011 – Introduction to Pyrometry

### Barcelona, Spain

07-08 September 2011 – Introduction to Pyrometry

09 September 2011 – Root Cause Corrective Action

### Virtual Training

**AS/EN/JISQ9100 – Changes in Rev C**

15 September 2011 1:00-3:00 pm

**AC7114 Changes in Rev E (Nadcap Audit Criteria for Non-Destructive Testing)**

18 Aug 2011 1:00pm-4:00pm

18 Sept 2011 9:00am -12:00pm

## Subscriber Voting Member Representatives of the NDT Task Group

Prime	Representative	Status	E-mail contact
Airbus Chester, UK	Tony Warren	Subscriber Voting Member	Tony.warren@airbus.com
BAE Systems (Air Systems) Preston, UK	Chris Dootson	Subscriber Voting Member	chris.dootson@baesystems.com
Bell Helicopter Textron Ft. Worth, Texas – USA	Jim Cullum	Alternate Subscriber Voting Member	jcullum@bellhelicopter.textron.com
Bell Helicopter Textron Ft. Worth, Texas – USA	Ed Hohman	Subscriber Voting Member	ehohman@bellhelicopter.textron.com
The Boeing Company Mesa, Arizona – USA	Bob Reynolds	Subscriber Voting Member	bob.s.reynolds@boeing.com
The Boeing Company Seattle, Washington – USA	Peter Torelli	Subscriber Voting Member	peter.p.torelli@boeing.com
The Boeing Company Philadelphia, Pennsylvania – USA	Louis Truckley	Alternate Subscriber Voting Member	Louis.r.truckley@boeing.com
The Boeing Company St. Louis, Missouri – USA	Douglas Ladd	Subscriber Voting Member	douglas.l.ladd@boeing.com
Bombardier – Quebec Dorval, CANADA	Sylvain Héon	Alternate Subscriber Voting Member	sylvain.heon@aero.bombardier.com
Bombardier Belfast, UK	Bobby Scott	Subscriber Voting Member	bobby.scott@aero.bombardier.com
Cessna Aircraft Company Wichita, Kansas – USA	Greg Hall	Subscriber Voting Member	ghall2@cessna.textron.com
Cessna Aircraft Company Wichita, Kansas – USA	Michael Daehling	Alternate Subscriber Voting Member	medaehling@cessna.textron.com
GE Aviation Lynn, Massachusetts – USA	Phil Keown	Chairman / Subscriber Voting Member	philip.keown@ae.ge.com
Goodrich Aerostructures Riverside, California – USA	Chuck Alvarez	Alternate Subscriber Voting Member	chuck.alvarez@goodrich.com
Goodrich Aerostructures Chula Vista, California – USA	Richard Costantino	Subscriber Voting Member	richard.costantino@goodrich.com
Goodrich Landing Gear Cleveland, Ohio – USA	Robert Rainone	Alternate Subscriber Voting Member	bob.rainone@goodrich.com
Hamilton Sundstrand Windsor Locks, Connecticut – USA	Michael Mitchell	Subscriber Voting Member	mike.mitchell@hs.utc.com
Hamilton Sundstrand Windsor Locks, Connecticut – USA	Scott Iby	Alternate Subscriber Voting Member	scott.iby@hs.utc.com
Hamilton Sundstrand Rockford, Illinois – USA	Roger Eckart	Alternate Subscriber Voting Member	roger.eckart@hs.utc.com
Hèroux Devtek, Inc. (Landing Gear Div) Longueuil, Quebec, Canada	Serge Labbè	Alternate Subscriber Voting Member	slabbe@herouxdevtek.com
Hèroux Devtek, Inc. Kitchener, Ontario, Canada	Walter Tonizzo	Subscriber Voting Member	wtonizzo@herouxdevtek.com
Honeywell Aerospace Phoenix / Tempe, Arizona – USA	D. Scott Sullivan	Subscriber Voting Member	dscott.sullivan@honeywell.com
Honeywell Aerospace Phoenix, Arizona – USA	Robert Hogan	Subscriber Voting Member	robert.hogan@honeywell.com
Honeywell Aerospace Phoenix, Arizona – USA	Pat Thompson	Subscriber Voting Member	pat.thompson2@honeywell.com
Lockheed Martin Corp Bethesda, Maryland - USA	Ron Levi	Subscriber Voting Member	ron.levi@lmco.com
General Dynamics Marion, Virginia – USA	Mitchell Birzer	Subscriber Voting Member	mbirzer@gdatp.com
309th Maintenance Wing-Hill AFB Hill AFB, Utah – United States	Timothy Doane	Subscriber Voting Member	timothy.doane@hill.af.mil
MTU Munich, Germany	Juergen Burchards	Subscriber Voting Member	juergen.burchards@mtu.de
Northrop Grumman Corporation Littlerock, California - USA	Stephen Bauer	Subscriber Voting Member	stephen.bauer@ngc.com
Parker Aerospace Fort Worth, Texas – USA	Dale Norwood	Subscriber Voting Member	dnorwood@parker.com
Parker Aerospace Moncks Corner, South Carolina – USA	Gary O'Neill	Alternate Subscriber Voting Member	goneill@parker.com
Pratt & Whitney UTC East Hartford, Connecticut – USA	David Royce	Secretary / Subscriber Voting Member	david.royce@pw.utc.com
Pratt & Whitney UTC East Hartford, Connecticut – USA	Jim Fowler	Alternate Subscriber Voting Member	james.fowler@pw.utc.com

Continued from previous page

Prime	Representative	Status	E-mail contact
Pratt & Whitney UTC East Hartford, Connecticut – USA	Jim Fowler	Alternate Subscriber Voting Member	james.fowler@pw.utc.com
Raytheon Co Tucson, AZ – USA	Donald MacLean	Subscriber Voting Member	damaclean@raytheon.com
Rolls-Royce Corporation Indianapolis, Indiana – USA	Andrea Steen	Alternate Subscriber Voting Member	andrea.m.steen@rolls-royce.com
Rolls-Royce PLC Derby, UK	Chris Stevenson	Subscriber Voting Member	christopher.stevenson@rolls-royce.com
SAFRAN Group France	Alain Bouchet	Subscriber Voting Member	alain.bouchet@sneema.fr
SAFRAN Group France	Dominique Tomasso	Alternate Subscriber Voting Member	dominique.tomasso@aircelle.com
Sikorsky Aircraft Stratford, Connecticut – USA	Mike Clark	Subscriber Voting Member	mdclark@sikorsky.com
Spirit AeroSystems Tulsa, Oklahoma, USA	Frank Whittaker	Alternate Subscriber Voting Member	frank.c.whittaker@spiraero.com
Spirit AeroSystems Wichita, Kansas – USA	David H. Vaughn	Subscriber Voting Member	david.h.vaughn@spiraero.com
Textron Systems Wilmington, Massachusetts – USA	Carl Roche	Subscriber Voting Member	croche@systems.textron.com
United Space Alliance Cape Canaveral, Florida – USA	Brandon Irlbeck	Alternate Subscriber Voting Member	brandon.irlbeck-1@ksc.nasa.gov
Triumph Group. Inc., Inc. Dallas, Texas – USA	Greg Rust	Alternate Subscriber Voting Member	rustgr@voughtaircraft.com
Triumph Group. Inc., Inc. Dallas, Texas – USA	Mike Shiplett	Subscriber Voting Member	shipلمي@voughtaircraft.com
Israel Aerospace Industries	Uri Sol	Subscriber Voting Member	usol@iai.com.il
Agustawestland	Luigi Merletti	Subscriber Voting Member	luigi.merletti@agustawestland.com

## Supplier Voting Member Representatives of the NDT Task Group

Suppliers	Representative	Status	E-mail contact
AAA Plating & Inspection Inc. Compton, CA	Robert Custer	Supplier Voting Member	bob@aaaplating.com
Aubert & Duval Les Ancizes, France	Claude Chambon	Supplier Voting Member	claudio.chambon@aubertduval.fr
BYTEST Volpiano, Italy	Mario Bianchi	Supplier Voting Member	bianchi@bytest.com
BYTEST Volpiano, Italy	Massimo Capriolo	Alternate / Supplier Voting Member	capriolo@bytest.com
E. M. Inspection Leicester, United Kingdom	Andy Bakewell	Supplier Voting Member	andy.bakewell@emcol.co.uk
Hitco Carbon Composites Gardena, CA	D.E. "Skip" McDougall	Supplier Voting Member	mcdougall.skip@hitco.com
Alcoa Power & Propulsion Whitehall, MI	Ryan Soule	Supplier Voting Member	rsoule@howmet.com
Mitchell Labs Pico Rivera, CA	David Gray	Supplier Voting Member	david.gray@mitchell-labs.com
James Fisher IMS 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
Nu-Pro Limited Stroud, United Kingdom	Nick Peters	Supplier Voting Member	npeters@nu-pro.com
Orbit Industries Inc. Middleburg Heights, OH	Gary White	Supplier Voting Member	gwhite@orbitndt.com
TEAM Industrial Services TCM Division Cincinnati, OH	Cindy Roth	Supplier Voting Member	croth@teamindustrialservices.com
West Penn Non-Destructive Testing Inc. New Kensington, PA	N. David Campbell	Supplier Voting Member	ndcampbell@westpenntesting.com
West Penn Non-Destructive Testing Inc. New Kensington, PA	Mark Pompe	Alternate / Supplier Voting Member	mpompe@westpenntesting.com
X-R-I Testing Cleveland, OH	William B. Evridge	Supplier Voting Member	bille@xritesting.com

## In Step with Andy Statham



Name: Andy Statham

Title: NDT Staff Engineer

Allow me to introduce myself; I'm Andy Statham, the latest NDT Staff Engineer.

I have been involved with NDT for over 30 years. I started in forgings as a shop MT Level 1 technician, and have accumulated hands on inspection experience with items varying from ultrasonic immersion testing of raw material, to NDT of finished aero engine assemblies to checking bathroom doors on railway rolling stock for delamination! At different times in my career I have held accreditation in UT, MT, PT, ET, RT and VT.

Some of you may remember me from my previous employer, Rolls-Royce plc, whom I represented on the Nadcap NDT Task Group.

I am a big advocate of Nadcap, and genuinely believe it makes a difference to the safety in aerospace. I find being involved with the process the most rewarding job. The first Nadcap meeting I attended was in Phoenix, AZ in January 2002.

Out of work, I live in beautiful Derbyshire in the UK. Mechanically, if it's got two or four wheels, I'm interested. Bicycles (I currently own seven), British (and some American) sports cars, and motorcycles are of particular interest.

I encourage your attendance sometime at a Nadcap meeting. It is important that those who are subject to the Nadcap/NUCAP should fully understand the process; it is also important that you meet the Team that is the NDT Task Group. Who knows, after attending you may wish to become a Task Group member in the future. Please feel free to ask me about either Nadcap or NUCAP issues when you see me. I can't promise an immediate answer but I will get one for you.

I look forward to seeing you soon.

## Goodbye Kellie

It is with mixed emotions that I will be saying goodbye to the NDT Task Group in June. I have recently accepted the new position of Administrative Coordinator at PRI, some of the duties of which will include Nadcap Meeting logistics. Although I won't be an official member of the NDT Group any longer, I hope you'll still stop by the registration desk at the Nadcap Meetings and say hello. I have greatly enjoyed working and interacting with all of you over the past several years and look forward to continuing to work with you in a different capacity going forward.

## PRI Staff Contact Details

Name	Position	Location	e-mail Contact	Telephone
Amanda Bonar	Committee Service Representative	London, UK	amanda.bonar@pri-europe.org.uk	+44 (0) 207-034-1249
Rhonda Joseph	Committee Service Representative	Warrendale, PA, USA	rjoseph@sae.org	+1 (724) 772-8644
Mark Aubele	Senior Staff Engineer (Lead)	Warrendale, PA, USA	maubele@sae.org	+1 (724) 772-8654
Jim Bennett	Senior Staff Engineer	Warrendale, PA, USA	bennet@sae.org	+1 (724) 772-8651
Phil Ford	Senior Staff Engineer	Wales, UK	phil.ford@pri-europe.org.uk	+44 (0) 870 350 5011
Mike Gutridge	Senior Staff Engineer	Granville, Ohio, USA	mikeg@sae.org	+1 (740) 587-9841
Andy Statham	Staff Engineer	Derby, UK	Derby, UK	+44 (0)133-286-9276