

Editorial Note - Suppliers

The NDT newsletter is not just a means of communicating the word according to the NDT task group or individual primes. It is an excellent tool for the supplier network to communicate issues sharing best practice and experiences with others. These newsletters reach a wide variety of people worldwide, so take this opportunity and communicate. If you have any articles you wish to be included in the NDT newsletter, please forward to Jim Bennett (bennet@sae.org).

Next Meeting

The next Nadcap meeting in **Toulouse France** is looming ever closer, as a reminder the dates are from **April 19 -23**. The meeting after Toulouse will be held in **Indianapolis, USA from July 19 - 23**. Please plan to join us for both these and all future meetings, bearing in mind that the baseline criteria is sure to be the hot topic over the next three meetings for everyone involved in Nadcap.

For more information please reference the [Nadcap](http://www.pri.network.org/Nadcap) homepage at

<http://www.pri.network.org/Nadcap>

And finally..... the new team!



Front Row (from left) : Mark Aubele (Senior Staff Engineer - PA office)
Susan Malsch (CSR - PA office)

Middle Row (from left): Louise Belak (CSR - PA office)
Jennifer Walker (CSR - London, UK office).

Back Row (from left): Phil Ford (Staff Engineer - Cardiff, UK Office)
Jim Bennett (Staff Engineer - PA Office)
Mike Gutridge (Staff Engineer - OH Office)



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Editors

Jim Bennett - Staff Engineer
(bennet@sae.org)

Mark Aubele - Senior Staff Engineer
(maubele@sae.org)

Phil Keown - Task Group Chairman
(philip.keown@ae.ge.com)

From the Chair...

Maybe it was the warm weather; maybe it was the sodas and coffee; maybe it was the chance to partake in Jim Bennett's inaugural meeting as a Nadcap Staff Engineer. I'm not sure of the reason, but the outcome was the best supplier turn out we have had in a long, long time at the January, 2004 meeting. And the suppliers who attended were vocal, were anxious to participate and brought a lot of good ideas to the Task Group.

The supplier representative ranks added two new members, Robert Custer of AAA Plating, and Gary White of Orbit Industries. We welcome their participation and enthusiasm as we work to make this a more productive program.

As mentioned above, Jim Bennett, formerly of Rolls-Royce plc, has joined PRI as an NDT Staff Engineer. Jim brings a new perspective to the position having been a member of the NDT Task Group for a couple of years. It should be interesting. Welcome, Jim.

This issue will also address the new emphasis being placed on the Compliance section of each audit. Additional paperwork packages will be reviewed in each method in an attempt to broaden the participation of the

Prime base in the compliance process. See the article on this subject for more details.

The auditors are also going to be asking to review more X-Ray techniques in order to ensure that there is a system in place for obtaining Customer Approval, when required.

I look forward to seeing those of you who will be in attendance in Toulouse. And, whether you will be at the April meeting or are waiting for the July meeting in Indianapolis, give some thought as to the types of articles you might like to see in future editions of the NDT Newsletter, and send them along to one of the Staff Engineers, your friendly OEM representative or the Task Group Chair.

Phil Keown, NDT Task Group Chair
philip.keown@ae.ge.com

2004 Meeting Schedule

Please note the remaining meeting schedule, and meeting places, for 2004, which are accurate as of the printing of this Newsletter. We post this here in hopes that you may work one or two meetings into your schedule and budget.

April 19 - 23	Toulouse, France
July 19 - 23	Indianapolis, IN
Oct 25 - 29	Pittsburgh, PA

The NDT Task Group schedules their Open Meeting for Monday, however due to the publishing of the draft NDT baseline checklists on the PRI Nadcap website, the open meeting is to be held Monday afternoon and all day Tuesday. Agenda details can also be found on the PRI Nadcap website <http://www.pri-network.org/Nadcap>

For more information on future meetings, please contact Mark Aubele, NDT Senior Staff Engineer.
maubele@sae.org

Nadcap - Message from Rolls-Royce plc

Nadcap, “designed for Americans by Americans” is a common criticism I hear over this side of the Atlantic. As a program conceived then implemented since 1991 within the borders of North America, this should not come as any surprise. Rolls-Royce plc joined Nadcap as a subscribing Prime in 1996 by mandating NDT and MTL accreditation in order to reduce the need to send UK audit personnel to the US. Rolls-Royce plc was sufficiently impressed with the Nadcap process and the benefits it provided to engage with PRI and pursue its implementation across Europe and the rest of the world. This initiative was launched in 2001 with NDT and MTL mandates, to be fully effective across all relevant Special Processes by 2004. Love it or loath it, the Rolls-Royce plc mandate certainly put industry managed Special Process Approval on the European agenda and there has been much debate since. The Nadcap program has risen to the challenge and is evolving accordingly from being an American program to a global program. Much has been achieved; there remains much to be done.

With specific focus on NDT, regardless of whether you are a supplier or prime, Rolls-Royce plc requirements are noticeably different. There is the US supplier who, despite holding Nadcap accreditation, has to implement numerous new requirements to do business with Rolls-Royce plc. Then, there is the European supplier who is audited against Nadcap requirements, many of which, are not Rolls-Royce plc requirements. This can and does give the impression that Nadcap is not as effective as we primes like to make out. In part this is true, but it is an issue that is recognised within Nadcap and is being addressed (ref. Phil Keown’s Baseline Criteria article in the September 2003 Newsletter).

Prime requirements for Special Processes differ for two reasons, technical and historical. Whilst technical differences may be more difficult to resolve, historical differences should be less so and it is the duty of each Prime to strive for the consensus standard, changing their own requirements when necessary. Rolls-Royce plc is fully supportive of Baseline Criteria and our Rationalised Process Specification (RPS’s) will be changed to reflect the agreed consensus view. Certain technical differences are a ‘bridge to far’ such as our position on component cleaning and drying prior to penetrant application. Hopefully these will be minimal and sit in the Prime supplements. Ours is a very competitive industry where the need to reduce costs is equaled by the need to improve safety and reliability. Achievement of single global standards can deliver both, there only has to be the will to succeed on the part of all involved. This also involves suppliers whose voice can be heard by working from within. The next Nadcap task group meetings are being held in Toulouse and I would

recommend that my European colleagues make the most of this opportunity and engage.

Jon Biddulph - Head of NDE
Rolls-Royce plc

Baseline Checklist Effort

By now most of you will be aware of the draft NDT baseline checklists available on the PRI Nadcap website for review. If you were not aware of this, you are now! The website address is as follows:- <http://www.pri-network.org/Nadcap/news/>. You are encouraged to review these documents because once they are issued, you as a supplier undergoing initial / re-accreditation NDT audits will be required to meet these documents in order to achieve and maintain Nadcap accreditation for NDT. If you have any comments regarding these checklists, please feed them to your nominated NDT Supplier Support Committee (SSC) voting member - Ryan Soule of Howmet Castings, who will be coordinating all comments to the task group at the next meeting in Toulouse (contact details on the previously mentioned website). As always, suppliers are welcome to attend the open meeting.

For questions or more information, please contact Jim Bennett, NDT Staff Engineer: bennet@sae.org

Compliance “Flowdown” Audit - reminder

In an attempt to broaden the coverage of the Compliance portion of the NDT audits, the Task Group has instructed the auditors to review up to three “paperwork packages” in addition to the actual hardware reviewed during the Compliance Audit. This review will include the Purchase Order, referenced specifications, work instructions, test results, and evidence of Customer Approval, where required.

If you are a Supplier who does work for one or two Primes, this probably will not impact you. For those Suppliers who do work for several Primes, this is an attempt to get as much involvement as possible for the Prime base. If Compliance jobs are run for 2 of the 5 Primes for whom you do business, the paperwork audits will cover the other three Primes.

This should not impact the duration of the audit as the auditor should be asking you to prepare these packages in advance of his arrival, or during the initial stages of the audit, and the review itself should not significantly impact the timing of the audit.

If you would like more information concerning these “paper audits”, please contact Mark Aubele, maubele@sae.org or Phil Keown, philip.keown@ae.ge.com.

X-Ray Technique Review

Customer Approval, especially when required on x-ray techniques, has proven to be a “weak spot” over the past 12 - 18 months. A number of suppliers have been less than diligent in obtaining the necessary approvals and it has caused a tremendous amount of work and frustration for a few of the Primes. In order to try to alleviate this problem, the auditors have been asked to review the last 10 x-ray jobs shipped to participating Primes (those involved in the Nadcap process), and verify that Customer Approval has been obtained for each of the techniques where it is required. This, like the Flowdown Audits, is aimed at a specific problem and intended to emphasize the importance of this process.

If, in the coming months, we find data that says that this problem is being adequately addressed, we may choose to refocus the auditor’s efforts to another area. However, for now, this is a very important area that needs special attention.

GEAE Requirement - Etching After Benching

The GEAE specifications for FPI, P3TF2 and P3TF48, have been revised to clarify the “etch after benching” requirement. This change was made to put specific guidelines around etching after parts have been reworked to remove indications found at FPI, and before re-inspection. If indications are found, and the part must be reworked to remove said indications, the following criteria apply unless otherwise specified on the drawing or in the material specification:

- Parts made from aluminum alloys, magnesium alloys and copper alloys,
- All P8TF3 Cl A and Cl B tube welds,
- All parts inspected with level 3 or level 4 sensitivity penetrants (Class D and higher).

Exceptions:

- Indications identified as nicks, dents, scratches that must meet the visual indication limits of the drawing
- Indications identified as burrs
- Indications identified as High Metal Spots

However, these exceptions do not apply to parts inspected to Cl D and higher sensitivity that are made from castings.

This change was made to clarify engineering intent. If this has totally confused you, and you would like more information, contact Philip.keown@ae.ge.com or Ron.Rodgers@ae.ge.com.

The Supplier Perspective - Who wrote this response??????

Having trouble making yourself understood when writing answers to Non-Conformances? You are not the only person who deals with this “communication problem”. Let’s take some time to look at how we might improve the situation.

First of all, we need to recognize that communication between people is often confusing. We think that we are talking or writing our thoughts in a clear manner and anyone hearing or reading what we have to say should understand what we wanted to communicate. Is this what happens in real life? No, it is not. Many times we do not transfer the thought in our brain to the person we want to understand that thought. This happens in everyday life between husbands and wives, employees and employers, friends and co-workers. When answering Non Conformances, we should do our best to understand what is being requested of us. **This is not always easy.** The same confusion in communication can happen to the person trying to communicate with you. If you have a question about a Non Conformance, feel free to contact the Staff Engineer. Once you think you understand the issue, write your response. **This is where you have an opportunity to improve communication. Step away from your computer. Busy your mind with a different task. Come back to your response at a later time.** You only have seven days to respond, so don’t wait too long! **Look at your response as if you were reading it for the first time, just like the Staff Engineer.** Does the response make the point that you, the writer, are trying to communicate? If not, do it over until it makes sense. The extra time spent in clarification of your thoughts will result in great dividends.

This simple hint can improve communication and help reduce the number of cycles between PRI and the Supplier. **Your reader will not have to ask, WHO WROTE THIS RESPONSE?**

Robert Custer - AAA Plating, CA, USA