**CONFIRMED MINUTES**

**OCTOBER 19-22, 2015**

**PITTSBURGH, PA, USA**

**These minutes are not final until confirmed by the Task Group in writing or by vote at a subsequent meeting. Information herein does not constitute a communication or recommendation from the Task Group and shall not be considered as such by any agency.**

**MONDAY, OCTOBER 19 to THURSDAY, OCTOBER 22, 2015**

# OPENING COMMENTS

Heat Treat Task Group (HTTG) Chair Tom Norris made opening comments and HTTG members introduced themselves.

## Call to Order / Quorum Check

The HTTG meeting was called to order at 8:00 a.m., 19-Oct-2015.

It was verified that only SUBSCRIBER MEMBERS were in attendance during the closed portion of the meeting.

A quorum was established with the following representatives in attendance:

***Subscriber Members/Participants Present (\* Indicates Voting Member)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | NAME |  | COMPANY NAME |  |
|  |  |  |  |  |
| \* | Pedro | Aranda | Eaton Aerospace |  |
| \* | Nigel | Ashby | GKN Aerospace |  |
| \* | Carolyn | Backus | The Boeing Company |  |
|  | Marcus | Berry | USAF |  |
| \* | Christopher | Borg | Gulfstream Aerospace |  |
|  | Jonathan | Chung | UTC Aerospace (Goodrich) |  |
| \* | Craig | Clasper | Spirit AeroSystems |  |
| \* | Cedric | Colas | SAFRAN Group |  |
| \* | Mike | Corsino | UTC Aerospace (Hamilton Sundstrand) |  |
|  | Karen | Dannis | BAE Systems |  |
| \* | Martin | Day | Honeywell International |  |
|  | Jason | Deysher | Carpenter Technology |  |
| \* | Mark | Emerson | Rolls-Royce |  |
| \* | Ario | Estrada | Rockwell Collins, Inc. |  |
| \* | Melissa | Facas | Pratt & Whitney |  |
| \* | Robert | Faticanti | Textron Systems |  |
| \* | Laurent | Geerts | Sonaca |  |
| \* | Cristina | Gonzalez-Perez | Airbus Defence and Space |  |
|  | Moses | Greasham | Spirit AeroSystems |  |
|  | Eliano | Greco | GE Avio S.r.l. |  |
| \* | Travis | Grohoske | GE Aviation |  |
| \* | Peter | Hammarbo | GKN Aerospace Sweden AB |  |
| \* | Gerald | Harvey | Triumph Group Inc. |  |
| \* | Linnie | Hook | Cessna Aircraft Company |  |
| \* | Dave | Isenberg | Parker Aerospace Group |  |
| \* | Takuya | Konno | Mitsubishi Heavy Industries, Ltd. |  |
| \* | Jeff | Koss | The Boeing Company |  |
| \* | Marc-André | Lefebvre | Héroux-Devtek Inc. |  |
|  | Brett | Luckert | U.S. Air Force |  |
| \* | Will | Macias | UTC Aerospace (Goodrich) |  |
| \* | Steven | MacKenzie | Pratt & Whitney Canada |  |
| \* | Doug | Matson | The Boeing Company |  |
| \* | Marc | Montreuil | Héroux-Devtek Inc. |  |
|  | Timothy | Nance | Rockwell Collins, Inc. |  |
| \* | Tom | Norris | UTC Aerospace (Goodrich) | Chairman |
| \* | Eddy | Pham | Northrop Grumman Corporation |  |
| \* | Earl | Pruett | Lockheed Martin Corporation |  |
| \* | Sunder | Rajan | Raytheon Company | Secretary |
| \* | Alexandre | Richez | Airbus |  |
| \* | Josefa | Rodriguez-Baena | Airbus Defense and Space |  |
| \* | Simon | Scott | BAE Systems, MAI |  |
| \* | Paul | Slater | Rockwell Collins, Inc. |  |
|  | X.Mike | Song | Sikorsky Aircraft |  |
| \* | Takahiro | Tachibana | Mitsubishi Heavy Industries, Ltd |  |
| \* | Jeffrey | Thyssen | GE Aviation |  |
| \* | Cyril | Vernault | SAFRAN Group | Vice Chairperson |
| \* | Tom | Wilson | Bombardier Inc. |  |
| \* | Grzegorz | Wryk | Rolls-Royce |  |

***Other Members/Participants Present (\* Indicates Voting Member)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | NAME |  | COMPANY NAME |  |
|  |  |  |  |  |
| \* | Roy | Adkins | Braddock Metallurgical Daytona Beach |  |
|  | Abdul | Admani | East Carolina Metal Treating |  |
|  | Lucia | Aguilar Yanez | Newton Heat Treating |  |
|  | Zubair | Alam | Exactatherm Ltd. |  |
|  | Daniel | Antos | Canton Drop Forge |  |
|  | Andrew | Bassett | Aerospace Testing and Pyrometry Inc. |  |
|  | Mark | Bennett | Voestalpine Roll Forming Corp. |  |
|  | Tim | Bergquist | Absolute Technologies, Inc. |  |
|  | Paul | Blaisdell | Astro Aluminum Treating |  |
|  | Nicholas | Bradley | Spectrum Thermal Processing |  |
|  | Noel | Brady | Paulo |  |
|  | Tim | Brooks | Advanced Integration Technology |  |
|  | Patrick | Brueckner | Aero Gear Inc |  |
|  | Jason | Chernick | HTG/HiTech Aero |  |
|  | Joanne | Chiarolanzio | Alcoa |  |
|  | Matthew | Clive | Alcoa |  |
|  | Francisco | Contreras Gastelum | Ellison Surface Technologies Mexico |  |
| \* | Tina | Corbin | Haynes International |  |
|  | Tom | Davis | Absolute Technologies |  |
|  | Vicki | Delaney | Haynes International Inc. |  |
|  | Jeff | DeToffol | Heat Treating Services Unlimited,Inc. |  |
|  | Leo | Dooren | Senior Aerospace Bosman b.v. |  |
|  | Nelson | Downey | FPD Company |  |
|  | Paul | Eastwood | Braddock Metallurgical Inc. |  |
|  | Michael | Eddy | Wyman Gordon Ltd. |  |
|  | Gary | Eisenman | Aero Gear Inc. |  |
| \* | Edward | Engelhard | Solar Atmospheres Inc. |  |
|  | Ben | Eubanks | Crow Precision Components dba W. Pat Crow Forgings |  |
| \* | Bob | Ferry | FPM HEAT TREATING |  |
|  | T. J. | Fitzmaurice | TSI Titanium |  |
| \* | Dennis | Fried | Carpenter Technology Corp. |  |
|  | Jose | Fuentes | Vac Aero International |  |
|  | Jenny | Fullum | Parker Aerospace Group |  |
|  | Chad | Funderburk | MMS Thermal Processing |  |
|  | Brad | Gallion | Chromalloy |  |
|  | Tony | Garcia | Blanchard Metals Processing |  |
|  | Michael | Gaspers | FPM Heat Treating LLC |  |
|  | Susan | Generalovich | Solar Atmospheres of Western PA |  |
|  | Jonathan | Gonzalez | Alcoa Fastening Systems and Rings |  |
|  | Rudolf | Graf | Bohler Schmiedetechnik GmbH & Co KG |  |
|  | Justin | Grice | Braddock Metallurgical |  |
|  | Michael | Hanlon | FPD Company |  |
|  | W.M. | Heighton | Aerospace Testing and Pyrometry Inc. |  |
|  | Brian | Hoffa | Carpenter Technology |  |
| \* | Dean | Houser | Applied Thermal Technologies |  |
|  | Kerry | Hunsicker | Canton Drop Forge Inc. |  |
|  | Shaun | Hunter | Solar Atmospheres |  |
|  | Steve | Hutchinson | Braddock Metallurgical |  |
|  | Bryan | Jageman | Modern Industries |  |
|  | Kurt | Jungheim | Modern Forge Indiana |  |
|  | Adeel | Karim | Heat Treat Professionals, Inc. |  |
|  | Zia | Karim | Heat Treat Professionals, Inc. |  |
|  | Keith | Kastner | Metal Finishing Company Inc. |  |
|  | Steve | Kaunike | Carpenter Technology |  |
| \* | Alexander | Klyuch | Blades Technology Ltd. |  |
|  | John | Kuhn | FPD Company |  |
| \* | John | Kunkle | Howmet Castings and Services, Inc. Dover Casting |  |
|  | James | LaFollette | GeoCorp, Inc. |  |
|  | Michael | LaPlante | Flame Metals Processing Corp. |  |
|  | Shelly | Lawless | Meyer Tool Inc. |  |
| \* | Jeremy | Leetz | MMS Thermal Processing |  |
|  | James | Leonard | Carpenter Technology |  |
|  | John | Lewis | Stretch Forming Corp. |  |
|  | Christopher | Love | Ampenol Aerospace Operations |  |
|  | John | Ludeman | Advanced Heat Treat Corp. |  |
|  | Connie | Mackey | Advanced Heat Treat Corp. |  |
| \* | Rich | Madsen | Blanchard Metals Processing |  |
|  | David | Mailes | Paulo |  |
|  | Sarah | Mansuetti | REX Heat Treating |  |
|  | Giuseppe | Marzano | Magellan Aerospace,Haley |  |
|  | Owen | McLain | Bodycote |  |
| \* | Stuart | Mellor | Wyman Gordon Ltd. |  |
|  | Cy | Miller | Jorgensen Forge |  |
|  | Telly | Mitsis | Wyman-Gordon Company |  |
|  | Angelo | Monzo | Barnes Aerospace |  |
|  | Andre | Mulyono | Absolute Technologies |  |
|  | Jeff | Neer | Astro Aluminum Treating |  |
| \* | Ken | Nelson | Continental Heat Treating |  |
|  | Mitch | Nelson | Bodycote Thermal Processing |  |
|  | Van | Nguyen | Vac Aero International |  |
| \* | Michael | Niedzinski | Constellium France |  |
|  | Mark | Nigels | Parker Hannifin Corporation |  |
|  | Jesse | Norris | Stack Metallurgical Services |  |
|  | Gretta | Novean | Magellan Aerospace Middletown |  |
|  | Jon | O'Donnell | Heat Treatment Australia |  |
|  | Brynn-Marie | O'Neil | Ellison Surface Technologies |  |
|  | David | Osenar | Pako Inc |  |
|  | Joe (Rico) | Osequera | Newton Heat Treating |  |
|  | Megumi | Owens | Advanced Nitriding Solutions |  |
|  | Phil | Pacey | Canton Drop Forge |  |
|  | Robert | Peters | R Peters Consulting, LLC. |  |
|  | John | Popovich | Furnace Parts LLC. |  |
| \* | Gordon | Porterfield III | Solar Atmospheres Inc. |  |
|  | Steve | Powell | Akron Steel Treating Company |  |
|  | John | Quaglia | Bennett Heat Treating |  |
|  | Michael | Quann | Pacific Metallurgical Inc. |  |
|  | Barry | Rafan | Dunkirk Speciality Steel, LLC |  |
|  | Patricia | Ramirez | Curtiss Wright de Controls de Mexico |  |
|  | Chris | Reed | Ducommun AeroStructures |  |
|  | Neil | Revis | Heat Treating Services Unlimited,Inc. |  |
| \* | Brian | Reynolds | Alcoa |  |
|  | Danielle | Richesin | Haynes International |  |
|  | Elena | Ritoli | Metallurgical Processing, Inc. |  |
|  | Ed | Rivera | Metallurgical Processing, Inc. |  |
|  | Anthony | Rizzo | Hercules Heat Treating Corp. |  |
| \* | Bill | Rogers | Alcoa |  |
|  | Frank | Saenz | Hi-Tech Metal Finishing |  |
|  | Sal | Santangelo | BEPAC/NEHTS |  |
|  | Bob | Sartori | Accurate Brazing CT |  |
|  | Mark | Scherer | Paulo - American Brazing |  |
|  | Carol | Schmidt | ATI Forged Products - Cudahy Operations |  |
|  | Mark | Sievert | Triumph Thermal Systems |  |
| \* | Jeffrey | Sipf | Haynes International, Inc. |  |
|  | Carl | Shulz | Scot Forge Co., Inc. |  |
|  | Richard | Skebo | Parker Hannifin Corp. |  |
|  | Klaus | Sommerauer | Bohler Schmiedetechnik GmbH & Co KG |  |
|  | Ronald | Stewart | Ellison Surface Technologies |  |
|  | Yuichi | Sugiyama | Mitsubishi Heavy Industries, Ltd. |  |
| \* | Allison | Tackett | Specialty Steel Treating |  |
|  | Gregg | Temple | Winston Heat Treating Inc. |  |
|  | Yoshihiro | Tsuda | IHI |  |
|  | James | Varghese | Pressure Technology, Inc. |  |
|  | Donald | Vierling | Byron Products Inc. |  |
|  | Costantino | Volpe | Senior Operations LLC |  |
|  | Kevin | VonScio | Perryman Company |  |
| \* | Wilfried | Weber | PFW Aerospace GmbH |  |
|  | Noel | Wessely | Rexnord Industries |  |
|  | Aaron | White | Modern Industries Inc |  |
|  | William | White | Haynes International, Inc. |  |
|  | William | White | Universal Alloy Corporation |  |
|  | Kimberly | Woodside | Parker Hannifin |  |
|  | Brian | Yazumbek | Modern Drop Forge Co. |  |

***PRI Staff Present***

|  |  |
| --- | --- |
| Jerry | Aston |
| Marcel | Cuperman |
| Robert | Hoeth |
| Brittany | McSorley |

## Safety Information

The Safety Information was reviewed. If there are any emergencies contact a PRI Staff person immediately.

## Review Code of Ethics and Meeting Conduct – CLOSED

The code of ethics and meeting conduct was briefed to the HTTG.

## Present the Antitrust Video – Video from PRI – CLOSED

Marcel Cuperman briefed the HTTG on the policy of PRI expressly prohibiting video or audio recording of HTTG meetings unless formal approval is received from all attendees and recorded in the HTTG meeting minutes.

The PRI antitrust video was played for the attendees. Chairman Tom Norris emphasized that when Primes review the Supplier Audits during the risk mitigation process, they be cognizant of the Antitrust Policy.

## Review Agenda – CLOSED

The HTTG reviewed the agenda for the week to highlight agenda items, including start time and stop times for each day.

# REview delegation status – closed

The HTTG reviewed the t-frm-07 for delegated Staff Engineers.

Motion made by Cyril Vernault and seconded by Gerald Harvey to continue to delegate Anne Allen. Motion passed.

Motion made by Jeff Thyssen and seconded by Mark Emerson to continue to delegate Jerry Aston. Motion passed.

Motion made by Gerald Harvey and seconded by Tom Norris to continue to delegate Marcel Cuperman. Motion passed.

Motion made by Cyril Vernault and seconded by Gerald Harvey to continue to delegate Rob Hoeth. Motion passed.

# Auditor consistency - closed

## +/-4 NCRs

## Staff Engineers provided data on audits where there had been +/- 4 NCR swing between audits. This information is provided to allow auditors to be highlighted, allowing the HTTG to follow up with these Auditors. The HTTG will continue to collect +/- 4 data and it will be monitored by the Auditor Consistency Team (ACT) which will provide reports and recommendations back to the HTTG. There were two auditors who showed up on the list once each but they are no longer HT Auditors.

## Auditor Variation Data

## Marcel Cuperman presented auditor consistency data, which consisted of the average NCRs for all auditors combined, and the average number of NCRs by auditor from 2009 through September 2015. The average of all NCRs has not changed significantly since 2009; however the average number of NCRs auditor to auditor shows a significant variation. There was discussion regarding the auditors with a low average of NCRs and how this may be accounted for by the auditors combining findings in to one NCR.

Further discussion was tabled to the Thursday Closed Meeting.

## OP 1117

Discussion is tabled until the Thursday, Closed Meeting.

# Auditor Interview – closed

An auditor interview was conducted with the HTTG at the meeting.

# Auditor observations – closed

There were eight Auditor Observation forms reviewed for audit observations conducted since the June 2015 meeting. The value of auditors carrying checklists on the shop for at least the job audit section was discussed and agreed to be best practice. Since there are a number of items to be discussed the item has been tabled for discussion on Thursday

Auditor Observation reports will be reviewed each subsequent meeting and will include Supplier Feedback.

ACTION ITEM: PRI Staff to include Supplier Feedback that corresponds with Auditor Observation Reports for the February 2016 HTTG Meeting. (Due Date: 21-Feb-2016)

A discussion was held on the feedback from the observation audits where it was seen that auditors were not reviewing “secondary” specifications. The Task Group agreed that no action was to be taken at this time.

# laPsed accreditation – closed

Motion made by Tom Norris and seconded by Mark Emerson to extend audit 161621 and 161274 for an additional month to allow for submission, review and completion of the audits. Motion passed with none opposed.

Two suppliers were granted a one month extension by the Staff Engineers according to Task group rules.

# subscriber voting member participation – closed

The Staff Engineers presented to the HTTG a chart showing Subscriber Voting Member (UVM) meeting attendance from June 2012 through October 2015 and HTTG ballots October 2013 to April 2015. Two Subscriber members did not meet the requirements for Balloting. The Task Group Chair will contact the subscribers reminding them of the requirement to ballot.

Two suppliers have been identified as not meeting the balloting requirement, the requirement has been waived by the HTTG Chairperson, Tom Norris and the individuals will continue to have voting rights.

ACTION ITEM: PRI Staff to verify Wayne Hillstead is still supporting the Heat Treat Task Group. If he is no longer supporting he should be removed from the HTTG. (Due Date: 30-Nov-2015)

ACTION ITEM: Earl Pruett to confirm in Thursday Closed Meeting whether Mariusz Stanzyk is to be removed as Alternate Subscriber Voting Member for Lockheed Martin. (Completed)

The following positions in the Task Group were confirmed:

Travis Grohoske (GE Aviation): Subscriber Alternate Voting Member

Earl Pruett (Lockheed Martin): Subscriber Voting Member

Brian P Harvey (Gulfstream Aerospace Corporation): Alternate Subscriber Voting Member

Takuyu Konno (Mitsubishi Heavy Industries, Ltd.): Subscriber Voting Member

Takahiro Tachibana (Mitsubishi Heavy Industries, Ltd.): Alternate Subscriber Voting Member

# risk mitigation team report-out – closed

Tom Norris summarized to the Task Group the latest Risk Mitigation Team performance.

# TAsk group chair – closed

Nadcap procedures require that the initial term for a Chairman is three years and by Task Group approval this can be extended by one year at a time

Motion made by Mark Emerson and seconded by Cyril Vernault to extend the current Chairman’s (Tom Norris) term by one year. Motion passed unanimously.

# Google chat subjects – closed

The Google Chat Group Discussions were reviewed.

## One subject discussed was the Identification of Thermocouples; this was brought forward by Rolls-Royce.

ACTION ITEM: HTTG Secretary to prepare a set of Chat Group Subjects for review a span a 20 minute time slot at the February 2016 Closed Meeting. (Due Date: 21-Feb-2016)

# HT MTL/MOU – CLOSED

A concern was brought forward that there are two subjects that are to be covered with the Memorandum of Understanding (MOU) with MTL:

1. Regarding selective use of the checklists by the Materials Testing Laboratories (MTL) Auditors
2. “External” vs “Internal” round robin for tensile testing and including the cord method on the MOU.

It was decided that these two subjects will be tabled for review during the Thursday Closed Meeting.

# auditor conference – closed

Tom Norris debriefed the major topics covered at the Auditor Conference. He reported that the auditors gave good feedback from an auditing perspective on the new checklists. NMC representatives gave a presentation on Audit Effectiveness to the Auditors and the auditors were asked to provide feedback to a set of questions. The answers given by the auditors were reviewed. These responses were to be given to the NMC at the Planning and Ops meeting.

The AC7102 was reviewed at the Auditor Conference and a question on paragraph 3.1.1 was brought forward. This question was tabled to the Open meeting so that suppliers would have the opportunity to be included in the discussion on flow down, contract review, job trackers, Prime or other specifications and if furnace numbers should be included.

# failure Analysis & vca data – closed

The Staff Engineers presented the Audit Failure Data by sector and in total. To date in 2015 there have been a total of 26 failed audits (3% failure rate) as of 24-Sept-2015. In 2014 there were a total of 36 failed audits which constitutes approximately a 3.2% failure rate. The average failure rate for the last 3 years has been approximately 4.5%.

In 2015 there have been 7 Verification of Corrective Action audits (VCA) performed.

Trends in the failure rate were discussed at length, and will be subject to ongoing review.

# Current risk mitigation audit review – closed

Topic was not discussed.

# appeals analysis & Possible appeals – closed

In 2015 there have been 2 appeals presented to the HTTG.

# HT-STSTG meeting – open

See HT-STSTG minutes posted at <http://www.p-r-i.org/nadcap/nadcap-meetings/>.

Only Suppliers and Staff Engineers are allowed to participate.

Subscribers are welcome to observe.

# opening comments – open

# Task group tutorial – open

Marcel Cuperman presented the HTTG Tutorial.

A microphone is available for anyone who would like to use it. Speak clearly, do not dismiss people’s opinions, emotional and off topics should be avoided.

## Review Subscriber Matrix

## The HTTG reviewed the current Subscriber Matrix.

# june 2015 meeting minutes – open

Motion made by Jeff Thyssen and seconded by Mark Emerson to accept the June 2015 meeting minutes as written. Motion Passed.

The minutes from June 2015 were approved as written.

# closed meetinG report out – open

Tom Norris highlighted the main items discussed during the closed meeting on Monday, 19-Oct-2015. The main points of discussion during the meeting Monday were Auditor Observations, MTL/HT MOU and the Auditor Conference.

# auditor conference debrief – open

The Chairman presented the activities from the Auditor Conference was held 17-Oct-2015 to 18-Oct-2015. In addition to reviewing revised checklists, a presentation was made on combining NCRs. The NMC presentation on Audit effectiveness was shown and auditor feedback discussed.

# rail review - open

The Rolling Action Item List (RAIL) was reviewed.

Item #62 not completed.

Item #66 still on-going. One form (Instrument Calibration) completed.

Item #71 completed – Close.

Item #74 not completed.

Item #78 changed to on-going.

Item #81 completed – Close.

Item #82 not completed.

Item #83 not completed.

For specific details, please see the current (HTTG) Rolling Action Item List posted at [www.eAuditNet.com](http://www.eAuditNet.com), under Public Documents/Heat Treating.

# OP 1117 auditor consistecy sub-team status update – open

The HTTG reviewed the OP 1117 requirements for Audit Observations .Cyril Vernault described the proposed Heat Treat addition to the observation form for feedback from the audit observer.

It was suggested that the suppliers may use a similar set of questions to provide feedback on the audit. This TABLED subject will be discussed on Thursday.

Concern was raised of auditors auditing the same supplier multiple times. This was tabled to the Thursday Closed Meeting.

# failure analysis & vca data – open

The Staff Engineer presented to the HTTG the total number of audits failed sector from Jan 2011 to 24-Sept-2015. The failure rate is trending down. VCA are also trending down in 2015.

# Supplier Support Committee (SSC) report out – open

SSC report will be presented before and after the open meeting. The October 2015 SSC report out (before) was presented by Roy Adkins.

The SSC is to help suppliers navigate the Nadcap process, to find help if suppliers feel the need to escalate issues beyond the Staff Engineer. Suppliers have access to mentors if they wish to find help without asking in HTTG meetings or raising red flags, or just need help understanding Nadcap interpretation of general Nadcap requirements. SSC help is available for all commodities. SSC meetings are always held on Tuesday during the Nadcap meetings from 5:00 to 7:00pm.

Various SSC Activities which took place on Monday were described.

For more detailed information please reference minutes posted on <http://www.p-r-i.org/nadcap/nadcap-meetings/>. Information pertaining to all of SSC activities can be found at [NadcapSSC@p-r-i.org](mailto:NadcapSSC@p-r-i.org).

# HT-STSTG REport out – open

Wilfried Weber gave the HT-STSTG meeting debrief. The main part of the presentation was a draft of an “Instrument Calibration Report Form” that could be used as a standard template for all suppliers to use as is or to use as guidance to create a calibration report that meets all the HTTG criteria for calibration reports. A template for the Instrument Calibration Form has been completed and was presented and accepted at the HT-STSTG meeting held 19-Oct-2015.

There were a few changes recommended by the HTTG and Staff Engineers. HT-STSTG are to take the recommendations from the HTTG and bring the final revision and work instruction to the February 2016 Nadcap Meeting.

Action Item: HT-STSTG to take the recommendations from the HTTG and bring the final revision and work instruction to the February 2016 Nadcap Meeting. (Due Date: 31-Jan-2015)

The HTTG has requested that the HT-STSTG create a template for System Accuracy Test (SAT), Alternate SAT and Temperature Uniformity Survey (TUS).

Motion made by Doug Matson and Jeff Thyssen to develop template for SAT, Alternate SAT and TUS. Motion Passed.

Action Item: The HT-STSTG to create a Sub-Team to create a template for SAT and Alternate SAT. (Due Date: 31-Oct-2015)

See HT-STSTG minutes for meeting details.

# NMC Metrics – open

Marcel Cuperman gave a presentation of NMC metrics in eAuditNet.

NMC metric charts through September 2015 were presented to the HTTG. Supplier merit data was presented by sector. The HTTG Supplier Merit averaged 81% for the past three months. The current metrics are as follows; 76% in Americas, 89% in Asia, 86% in Europe.

HT is rated green for Auditor Capacity. The goal is 130% which has been met.

# AC7102/1 –Brazing Checklist updates – open

The AC7102/1 Rev F has been balloted and the below comments were resolved at the meeting as follows.

Motion made by Earl Pruett and seconded by Cyril Vernault to reject the comments: - the ballot should be held back in order to wait for AWS to conduct a final ballot of C3.14 in order to be certain that the audit criteria aligns with the requirements of the final revision”. Motion approved by 17 voting members and rejected by 9, the motion passed.

Motion Made by Jeff Thyssen and seconded by Tom Norris to add NA as an answer to 12.2.1 - 12.2.10, 14.12.9.1.1, 14.12.9.2 - 14.12.9.3, the NA was not added to 15.12.9.1 as the whole section can be selected as NA. Motion passed.

The comment made on comment on paragraph 12.2.4 was rejected due to whole section being NA.

Proposals made by the Auditors from the Auditor Conference were accepted by the TG with the changes to 12.1.2, 12.2, and 12.2 -12.2.11.

Motion made by Wilfried Weber and seconded by Cyril Vernault to add questions 12.3 that was proposed by the HT auditors from the Auditor Conference with the modification to 12.3 to allow for observation or historic records. Motion Passed.

Motion made by Jeff Thyssen and Cyril Vernault seconded by to accept the questions 12.3.1 that was proposed by the auditors from the Auditor Conference with the modification “ Did the evaluation comply with the requirements?”. Motion Passed.

ACTION ITEM: PRI Staff to send AC7102/1 Rev F to 45 day affirmation ballot to the TG as a result of technical comments being incorporated from the Auditor Conference and the HTTG. (Due Date: 15-Nov-2015)

# auditor advisories – open

Auditor Advisories sent since the June 2015 meeting were reviewed.

There have been 4 advisories issued since the June 2015 meeting; with one being cancelled.

For a copy of these advisories go to [www.eauditnet.com](http://www.eauditnet.com) > Resources > Documents > Public Documents > Heat Treating > Auditor Advisories > 2015.

# Pyrometry guide update – open

There were no updates to the Pyrometry guide during this meeting.

# AC7102 rev I Baseline comments ~~–~~ open

Checklist ballot comments were reviewed at the meeting. There is one comment that required a decision at the meeting.

Two changes were added to support Audit Consistency, paragraphs 1.1.1.1, 1.1.2 and 1.1.3 in regards to self-audit. This is to give the required documents to the auditor prior to the audit, and also to ensure completion of corrective action as a result of that self-audit.

Paragraph 1.1.2 was revised to state “Were all of the non-conformances identified by the Supplier’s self-audit, addressed by their corrective action system prior to the Nadcap audit”.

This document will be sent to 45 Day Letter Ballot due to the addition of these questions and adjustments made during the Auditor Conference.

Section 5.2 was discussed due to a comment in the ballot in regards to cleaning and the AC7102 sub-team will add questions before the next ballot.

ACTION ITEM: The AC7102 Sub-Team to put the questions regarding cleaning in the correct area of the checklist/job audits will ballot to the HTTG for 45 day ballot. (Due Date: 29-Feb-2016)

# ht audit handbook update – open

Audit Handbook was updated in May 2015. No further updates or questions.

# ac7102/4 nitriding sub-team report-out – open

Marcel Cuperman updated the Sub-Teams work on the AC7102/4. Job audits were added to the AC7102/4 to take place of the two job audits that are usually completed in the core checklist. The two job audits will now be completed in AC7102/4. The Sub-Team will continue to work on the revision of the checklist before balloting

# planning and ops – open

An update was given by Tom Norris. There was significant discussion about the Risk Mitigation Process regarding the responsibility for review potentially being shifted to the Staff Engineers.

The Task Group discussed time limits on the review of audits in Risk Mitigation it was agreed that Tom Norris and Mitch Nelson would make proposals and forward to the Risk Mitigation sub-team for review.

ACTION ITEM: Tom Norris to work with Mitch Nelson on a recommendation on new time limits to the Risk Mitigation Process and send to the Sub-Team. (Due Date: 30-Nov-2015)

It was reported out that when there are two observers on an audit both of those observers need to complete the observation form in e-auditnet or the audit will continue to show the observation feedback as incomplete.

# AMEC report out – open

An update was made by Bob Peters that the main tasks addressed by AMEC Committee involved Aluminum Specifications and Portable Hardness Tester usage.

# SSC Report-out – open

Roy Adkins gave the SSC Report-Out; a new presentation was given was the News presentation.

# supplier voting member participation – open

Supplier meeting attendance data was presented to the HTTG. The data showed that the requirements of OP 1114 APP HT section 5.2.5 were being met by all the Supplier Voting Members (SVM).

# AC7102/3 carburizing sub-team update – OPen

A review was made of the AC7102/3 Carburizing checklist

Motion made by Cyril Vernault and seconded by Tom Norris to accept the question 3.2.7.5 as written. Motion passed with 21 accepted and 2 opposed, motion passed.

# Open meeting tabled subjects – open

## A generic question could be added to the AC7102/8 as info only to gather data through eAuditNet on those suppliers who do Pyrometry Testing in-house and who outsource the Pyrometry Calibration Providers. This was to collect data for the NMC Pyrometry Providers sub-team.

Motion made by Mark Emerson and seconded by Roy Adkins to add questions regarding Pyrometry, the calibration of working instruments, thermocouples, TUS and SAT to the AC7102/8. Motion passed.

ACTION ITEM: Robert Hoeth to work with Sub-Team to add questions regarding Pyrometry, the calibration of working instruments, thermocouples, TUS and SAT to the AC7102/8. (Completed)

Ed Engelhard volunteered to give the SSC Report-out in Madrid.

# New business – open

No new business at this time.

# itar/export control – open

Marcel Cuperman gave a presentation of the difference between a Restricted vs Unrestricted auditor. If an auditor identified a given job audit as restricted or unrestricted incorrectly, the supplier should use the Supplier Feedback form to let PRI Staff know.

# audit preperation – open

Cyril Vernault and Marcel Cuperman made presentations on Audit Preparation, including the importance of performing a self-audit. Closure of non-conformances vs Implementation of Corrective Actions of NCRs found during self-audit. (Recommended that self- audit is carried out 6 months before and 1 month before the audit)

It was recommended that when sending pre-audit information package to the auditor that the supplier maintains objective evidence that the data package was sent.

# RCCA responses – open

Linnie Hook made a presentation on Root Cause Analysis.

# Open meeting Question & Answer session – open

## Question: Can a Google Chat be created where a supplier can ask a question anonymously and the answer given a PRI Stamp of Approval.

## A question was raised related to the role of Observer in an Observation Audit.

## Answer: An observer shall not participate in an audit in any manner.

## Question related to Classification of part or raw material for forging. What do you do when your customer classifies the forging differently than the Prime for AMS 2770 Vs AMS 2772.Who is responsible? If flow down comes from the machine shop how do you communicate?

Answer: Try to flow it upstream to your customer for clarification. When unsure, treat it as a part.

## Question: Alternate SAT, If you use tight tolerance Thermocouples is no specific ALT SAT documentation is necessary

## Answer: Yes, a report is required to record the frequency, and the document that tight tolerance thermocouples were used and that they meet AMS2750 SAT requirements.

## Question: If during the contract review it is discovered that flow down is missing how would the supplier perform a Root Cause Analysis.

Answer: This is outside the Nadcap process

# audit allocation – closed

Audit allocations were made up through 29-Feb-2016. Any audits that do not have two reviewers will be assigned by HTTG Secretary, Sunder Rajan.

ACTION ITEM: Sunder Rajan to assign reviewers to those audits that do not have two reviewers. (Completed)

# closed meeting tabled subjects – closed

## Audit Observer Form

When reviewing the Audit Observation report the Supplier Feedback Form that corresponds with that audit should also be reviewed.

ACTION ITEM: Brittany McSorley to update the Audit Observation Tracking form to include a column for the Supplier Feedback. (Due Date: 22-Feb-2016)

C. Backus asked if there was a way for eAuditNet to have a pop up to notify the observer when a question has not been answered. There is currently an action in the NMC Oversight Committee to look into the form to include NAs and to limit submittal unless every question has been answered.

Motion made by Doug Matson and seconded by Mike Corsino that an auditor advisory should be issued requiring auditors to have copies of all applicable audit checklists when conducting the audit on the floor. Voting resulted in 8 Approve and, 7 Opposed. Motion was not passed. This will be tabled until the February 2016 HTTG Meeting.

It was confirmed the OP1117 Sub- Team will be: Mike Corsino, Doug Matson, Carolyn Backus, Jeff Thyssen, Bob Faticanti, Sunder Rajan, Gerald Harvey, Steven Mackenzie, Tom Norris, and Cyril Vernault. Carolyn Backus volunteered to lead the team.

## HT MTL/ MOU

## MTL uses external round robin for tensile tests. Only one Prime requires MTL approval for tensile testing. That Prime also requires round robin testing.

## Motion made by Cyril Vernault and Seconded by Craig Clasper to issue an Auditor Advisory that Tensile Testing for Heat Treat accreditation shall be internal round robin only. Motion passed.

ACTION ITEM: Cyril Vernault to write an auditor advisory that tensile testing for heat treat accreditation shall be internal round robin only. (Due Date: 21-Feb-2016)

## MTL Task Group samples checklists. This means there could be up to 36 months between audits of a particular checklist.

## Motion made by Doug Matson to amend the MOU to add Code L5X Chord Method ARP1820 to the list. Motion was not passed.

## The Task Group requested Staff Engineers to review past audits and report how many instances there were where the accreditation for Material Testing has been performed by an MTL auditor

ACTION ITEM – SE to review past audits and report back at the February 2016 meeting how many instances there were where the accreditation for Material Testing has been performed by an MTL auditor. (Due Date: 21-Feb-2016)

## Auditors auditing at the same supplier for consecutive audits, and returning to same suppliers on multiple occasions.

Marcel stated that only a third consecutive audit at a supplier by the same auditor requires Staff Engineer approval. HTTG alone does not have authority to tighten this procedure on its own.

Tom Norris requested all HTTG members discuss with their respective NMC representatives to ask for this to be discussed at NMC level to change the Nadcap procedures to stop the same auditor auditing a supplier two times in a row.

## Job Audit Tracker

The use of a job tracker by HTTG was discussed. There was concerns about ITAR/EAT information being recorded when job trackers were completed.

Motion made by Gerald Harvey and seconded by Mark Emerson not to implement the Job Tracker at this time. Motion passed.

Motion made by Cyril Vernault and seconded by Tom Norris to add guidance to Section 3.2.2.1 of the HT Audit Handbook advising Auditors to select Job Audits after reviewing past job audits to help maximize diversity of Job selection. Motion Passed.

ACTION ITEM: Cyril Vernault and Marcel Cuperman to add to the HT Audit Handbook in section 3.2.2.1 to select Job Audits after reviewing past job audits to help choose current audit Job Audits. (Due Date: 21-Feb-2016)

## Clarifying Internal Audit NCR Closure by Supplier Core Checklist AC7102 Paragraph 1.1.1.1 and 1.1.2

Motion made by Mike Corsino and seconded by Cyril Vernault to write an auditor advisory clarifying how auditors are to address the expectations of the resolution of 1.1.2 of the Core Checklist. Motion passed.

ACTION ITEM: Mike Corsino and Cyril Vernault to write and Auditor Advisory clarifying how auditors are to address the expectations of the resolution of 1.1.2 of the Core Checklist. (Due Date: 21-Feb-2016)

## Subscriber/Supplier Voting Membership

The following additional positions in the Task Group were confirmed:

Josefa Rodriguez Beana (Airbus Defence & Space): Subscriber Voting Member

Christina Gonzalez-Perez (Airbus Defence & Space): Subscriber Alternate Voting Member

Ario Estrada (Rockwell Collins): Subscriber Voting Member

Gordon R Porterfield III (Solar Atmospheres) Alternate Supplier Voting Member

Kevin VonScio (Perryman Company) Supplier Voting Member

Brett Luckert (309th Maintenance Wing) Subscriber \*No Voting Rights

Rich Madsen (Blanchard Metals Processing) Supplier Voting Member

Tina Corbin (Haynes International) Alternate Supplier Voting Member

# NEW BUSINESS – CLOSED

## The administrator for each company needs to make sure that the employees of their company who have either retired or left the company be made inactive on eAuditNet.

## Need to update the Red/Yellow/Green list of Auditors for audits to be performed in 2016. A new auditor will be in red; also according to the sub-team guidelines an auditor with two +/- 4 issues will be in red.

Yellow is for an auditor with bad feedback from supplier and also one who has not been reviewed in two years.

ACTION ITEM: Tom Norris and Jerry Aston to create a list those auditors to be reviewed and review with the HTTG Subscribers at the February 2016 Nadcap Meeting. (Due Date: 21-Feb-2016)

## Contract Review

Motion made by Cyril Vernault and seconded by Tom Norris to write an auditor advisory to state that a NCR is to be written each time the supplier is unable to show the specification used or that they asked for additional information from the customer. Motion was not passed.

# new rail review – closed

The RAIL was reviewed during the closed meeting. There were several actions added to the RAIL. See the RAIL on www.eAuditNet.com Resources/Public Documents/Heat Treating for details.

# finalize february 2016 agenda – closed

The agenda for the February 2016 Nadcap meeting was discussed.

It was agreed that the Staff Engineers would create the agenda and forward to the HTTG for approval/modification.

ADJOURNMENT – 22-Oct-2015 – Meeting was adjourned at 12:01 p.m.

Minutes Prepared by Sunder Rajan, Raytheon - [**Sunder\_S\_Rajan@raytheon.com**](mailto:Sunder_S_Rajan@raytheon.com)

|  |  |  |
| --- | --- | --- |
| \*\*\*\*\* For PRI Staff use only: \*\*\*\*\*\*  Are procedural/form changes required based on changes/actions approved during this meeting? (select one)  YES\*  NO  \*If yes, the following information is required: | | |
| Documents requiring revision: | Who is responsible: | Due date: |
| s-frm-05 | Marcel Cuperman | 1-Oct-2015 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |