**CONFIRMED MINUTES**

**FEBRUARY 20-24, 2017**

**NEW ORLEANS, LOUISIANA, 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, 20-FEB-2017 to THURSDAY, 24-FEB-2017**

# OPENING COMMENTS

## Call to Order / Verbal Quorum Check – Open/Closed

The Heat Treating (HTTG) was called to order at 8:00 a.m., 20-Feb-2017.

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 Group |  |
| \* | Nigel | Ashby | GKN Aerospace - Filton |  |
| \* | Shaun | Brewin | Rolls-Royce |  |
| \* | Frank | Brungs | MTU Aero Engines AG |  |
|  | Elizabeth | Chapman | Triumph Group |  |
| \* | Craig | Clasper | Spirit AeroSystems |  |
| \* | Karen | Dannis | BAE Systems |  |
| \* | Martin | Day | Honeywell Aerospace |  |
|  | Alexander | Diskin | IAI - Israel Aerospace Industries |  |
| \* | Jean-Luc | Dupain | SAFRAN Group |  |
| \* | Mark | Emerson | Rolls-Royce |  |
| \* | Melissa | Facas | Pratt & Whitney |  |
| \* | Cristina | Gonzalez-Perez | Airbus Defence & Space |  |
| \* | Greg | Haataja | Bell Helicopter |  |
| \* | Peter | Hammarbo | GKN Aerospace Sweden AB |  |
|  | Brian | Harvey | Gulfstream / General Dynamics |  |
| \* | Gerald | Harvey | Triumph Group |  |
|  | Nick | Heiing | Héroux-Devtek Inc. |  |
| \* | Linnie | Hook | Textron Aviation |  |
|  | Akiko | Inoue | Mitsubishi Heavy Industries, Ltd. |  |
| \* | Dave | Isenberg | Parker Aerospace |  |
| \* | David | Knack | Eaton, Aerospace Group |  |
| \* | Jeff | Koss | The Boeing Company |  |
|  | Serge | Labbé | Héroux-Devtek Inc. |  |
| \* | Marc-André | Lefebvre | Héroux-Devtek Inc. |  |
| \* | Hongping | Li | COMAC |  |
| \* | William | Macias | UTC Aerospace (Goodrich) |  |
| \* | Steven | MacKenzie | Pratt & Whitney Canada |  |
| \* | Doug | Matson | The Boeing Company |  |
| \* | John | Merritt | Lockheed Martin Corp. |  |
| \* | Tim | Nance | Rockwell Collins |  |
| \* | Tom | Norris | UTC Aerospace (Goodrich) | Chairperson |
| \* | Eddy | Pham | Northrop Grumman |  |
| \* | Earl | Pruett | Lockheed Martin Corp. |  |
| \* | Sunder | Rajan | Raytheon Co. | Secretary |
|  | Salvatore | Santangelo | UTC Aerospace (Hamilton Sundstrand) |  |
| \* | Simon | Scott | BAE Systems - MAI (UK) |  |
| \* | Paul | Slater | Rockwell Collins |  |
|  | Ranganathan | Srinivasan | ST Aerospace Ltd. |  |
| \* | Marc | Taillandier | Airbus Helicopters |  |
| \* | Jeffrey | Thyssen | GE Aviation |  |
|  | Stanley | Trull | Honeywell Aerospace |  |
| \* | Cyril | Vernault | SAFRAN Group | Vice Chairperson |
|  | Robin | Worley | Parker Aerospace |  |
| \* | Grzegorz | Wryk | Rolls-Royce |  |
|  | Mark | Zelle | Pratt & Whitney |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | NAME |  | COMPANY NAME |  |
|  |  |  |  |  |
| \* | Roy | Adkins | Braddock Metallurgical |  |
|  | Mark | Affolter | Bodycote |  |
|  | James | Ahlemeyer | Ducommun |  |
|  | Sandra | Asset | Asco Aerospace USA |  |
|  | Amy | Azzano | Arrow Gear Company |  |
|  | Stephan | Barrabes | Lisi Aerospace |  |
|  | Andrew | Bassett | Aerospace Testing & Pyrometry, Inc. |  |
|  | Adam | Baxter | Wyman Gordon Forgings Houston |  |  |  |
|  | Kenneth | Chan | Bodycote |  |  |
| \* | Vicki | Delaney | Haynes International, Inc. |  |
| \* | Edward | Engelhard | SOLAR ATMOSPHERES INC. |  |
|  | Chad | Funderburk | MMS Thermal Processing |  |  |
|  | George | Gieger | Braddock Metallurgical |  |
| \* | Jonathan | Gonzalez | Arconic |  |
|  | Rudolf | Graf | Böhler Schmiedetechnik GmbH & Co KG |  |
|  | Paul | Grolla | Illiana Instrumentation |  |
|  | William | Heighton | Aerospace Testing & Pyrometry, Inc. |  |  |  |
|  | Kevin | Hineman | ATI Flat Rolled Products |  |
|  | Kurt | Jungheim | Modern Forge Indiana |  |
| \* | John | Kunkle | Arconic Howmet |  |
|  | Martin | Lapierre | Technologies de Surface Ellison Canada |  |  |
|  | Bruce | Leckey | ATI Specialty Materials |  |
| \* | Jeremy | Leetz | MMS Thermal Processing |  |
| \* | Richard | Lewis | PCC Structurals |  |
| \* | Johanna | Lisa | Continental Heat Treating/Quality Heat Treating |  |  |
|  | James | Lofollette | GeoCorp. Inc |  |
| \* | Iain | Mackenzie | Bodycote Heat Treatments |  |
| \* | Dr David | Mailes | Paulo |  |  |  |
|  | Khinlay | Maung | Air Industries Company |  |  |
| \* | David | McKeagney | Timken Aerospace |  |  |
|  | Adam | Miller | Carpenter Technology Corp. |  |
|  | Oveis | Nayeri | LISI Aerspace |  |  |
|  | Mitch | Nelson | NASA-Jet Propulsion Lab |  |  |
| \* | Ken | Nelson | Continental Heat Treating |  |
| \* | Michael | Niedzinski | COnstellium |  |
|  | Jim | Oakes | Super Systems Inc |  |
|  | John | Ochenjs | GeoCorp. Inc |  |
| \* | Bill | Panaty | Lambda Illinois Thermal |  |  |  |
| \* | Robert | Peters | R Peters Consulting, LLC. |  |  |  |
| \* | Gordon | Porterfield III | Solar Atmospheres, Inc |  |  |
| \* | Barry | Rafan | Dunkirk Specialty Steel (USAP) |  |
| \* | Stan | Revers | Senior Aerospace - Thermal Engineering |  |
| \* | Brian | Reynolds | Arconic |  |  |
| \* | Bill | Rogers | Arconic |  |
|  | Ben | Rupp | Kaydon/SKF |  |  |
| \* | Kevin | Seidel | Dunkirk Specialty Steel - Universal Stainless |  |
| \* | Jeffrey | Sipf | Haynes International, Inc |  |
|  | Mark | Sorrell | Airtech Supply, Inc. |  |
|  | Christopher | Strickler | carpenter technolgy |  |
|  | Russ | Tischer | TECT Power |  |
|  | Jose | Urvieta | Dynamic Aerospace and Defense |  |  |
|  | Kevin | Vecchiarelli | Yankee Casting Co., Inc. |  |  |
| \* | Kevin | Von Scio | Perryman Company |  |  |
|  | Takomitsu | Watanabe | IHI Corporation |  |  |
| \* | Wilfried | Weber | PFW Aerospace GmbH |  |
|  | Brian | Yazumbek | Modern Forge Indiana |  |
|  | Allen | Young | Jones Metal Products |  |  |
|  |  |  |  |  |

***PRI Staff Present***

|  |  |
| --- | --- |
| Mark | Burval |
| Marcel | Cuperman |

## Safety Information – Open/Closed

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

## Review Code of Ethics (Ref: Attendees’ Guide) and Meeting Conduct – Open/Closed

The Code of Ethics and Meeting Conduct was briefed to the Heat-Treating Task Group (HTTG)

## Present the Antitrust Video (Only @ The First Open and First Closed Meeting of The Week for Each Task Group) – Open/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.

## Review Agenda – Open/Closed

Agenda was reviewed in detail by the Chairperson.

# Review Delegation Status – Closed

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

Delegation data was reviewed - Anne Allen met requirements in OP 1115 for maintaining delegation (≥ 10% Oversight, ≥ 90%concurrence, ≥ 10 audits reviewed in the last 12 months).

Motion made by Doug Matson and seconded by Tom Norris to continue to delegate Anne Allen. Motion Passed; Delegation Maintained.

Delegation data was reviewed- Jerry Aston met requirements in OP 1115 for maintaining delegation (≥ 10% Oversight, ≥ 90%concurrence, ≥ 10 audits reviewed in the last 12 months).

Motion made by Doug Matson and seconded by Tom Norris to continue to delegate Jerry Aston. Motion Passed; Delegation Maintained.

Delegation data was reviewed- Marcel Cuperman met requirements in OP 1115 for maintaining delegation (≥ 10% Oversight, ≥ 90%concurrence, ≥ 10 audits reviewed in the last 12 months).

Motion made by Sunder S Rajan and seconded by Jeff Thyssen to continue to delegate Marcel Cuperman. Motion Passed; Delegation Maintained.

Delegation data was reviewed- Robert Hoeth met requirements in OP 1115 for maintaining delegation (≥ 10% Oversight, ≥ 90%concurrence, ≥ 10 audits reviewed in the last 12 months).

Motion made by Doug Matson and seconded by Mark Emerson to continue to delegate Robert Hoeth. Motion Passed; Delegation Maintained.

Data was reviewed- Mark Burval (Non-Delegated) met requirements in OP 1106 & 1114 for a non-delegated Staff Engineer (100% Oversight, ≥ 90% concurrence).

Motion made by Jeff Thyssen and seconded by Martin Day to delegate Mark Burval. Motion Passed; Delegation Granted.

# Auditor Consistency - Closed

## +/-4 NCRs

PRI Staff provided data on audits for the past four months where there had been +/- 4 NCR swing between audits. The HTTG discussed the collective desire to see different auditors at a given supplier for two successive audits versus the challenges faced by PRI in scheduling audits worldwide with a limited pool of auditors. The HTTG will continue to collect this +/- 4 data and it will be monitored by the Auditor Consistency Team (ACT) which will provide reports and recommendations back to the HTTG to help direct auditor observation priority and provide reports and recommendations back to the HTTG. Considerable discussion was given on capturing in the matrix the auditors who require attention and need to be observed.

Tabled Item 1: The procedural requirement to observe all auditors every three years was discussed and tabled for Thursday’s closed meeting review.

Staff Engineer’s procedural question regarding archiving the + 4 NCR e-mails to auditors was answered by recommending to continue the practice.

## 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 2012 through 2016. There was a drop in the average NCRs from 2014 to 2015 from 4.26 to 3.73.

## OP 1117 Standard Data Set

Standard data set results were presented by the Staff Engineer.

Chairperson presented the proposed new rating system which was developed by the sub-team. This involved normalizing the NCRs among a group of auditors to develop an “adjusted score” and applying “2-Sigma” (Standard Deviation).

The HTTG was in general support of this proposal, but asked the Sub-Team to expand the proposal to include scoring of observation audits and to report back to HTTG at the June 2017 meeting in Berlin, Germany.

ACTION ITEM: Auditor Consistency Sub-Team to report back at the June 2017 meeting on further developments in expanding the proposal to include scoring of observation audits in the auditor ratings. (Due Date: 1-Jun-2017).

# Auditor Observations – Closed

Review any observations completed since the October 2016 Meeting.

Discussion on how to deal with negative feedback from Observation Audit. What steps to be taken when Observers note that the auditor did not meet expectations?

Motion made by Cyril Vernault and seconded by Jeff Thyssen, there is enough information to dismiss this auditor. (Name withheld). All in favor: 15, none opposed. Motion Passed.

TABLED ITEM 3: Staff Engineer will report back on Thursday whether the auditor can be dismissed now or whether he must be given a 60-day notice.

Discussion on Lead Auditors’ ability to conduct training.

Motion made by Cyril Vernault and seconded by Tom Norris that the Staff Engineer is to recommend a revised list of Lead Auditors who can perform training. Motion Passed.

ACTION ITEM: Staff Engineer will make the recommended Lead Auditor (Trainer) list available along with the criteria used to create the list. (Due Date: 1-Jun-2017).

# Subscriber Voting Member Updates & Compliance with Voting REQUIREMENTS – closed

The following requests for additions or changes to voting membership were received and confirmed by the Heat-Treating Task Group Chairperson pending verification of PD 1100 requirements:

* Subscriber Voting Member: UVM
* Alternate: ALT
* Task Group Chairperson: CHR
* Vice Chairperson: VCH
* Secretary: SEC

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **First Name** | **Surname** | **Company** | **Position:**  **(new / updated role)** | **Meetings Attended (Month/Year)** | |
| John | Merritt | Lockheed Martin Corp. | ALT UVM  (updated) | Jun-2016 | Feb-2017 |
| Brian | Harvey | Gulfstream Aerospace | UVM  (New) | Oct-2016 | Feb- 2017 |
| Ario | Estrada | Rockwell Collins | ALT UVM  (Removed) | NA | NA |
| Salvatore | Santangelo | UTC Aerospace  (Hamilton Sundstrand) | \*Subscriber no voting rights | Feb-2017 | None |
| Mark | Zelle | Pratt & Whitney | ALT UVM  (Updated) | Oct-2016 | Feb-2017 |

ACTION ITEM: PRI Staff to correct Sunder Rajan’s attendance at the October 2016 meeting. Was present but is shown as absent. (Due Date: 1-Jun-2017).

# 2017 auditor conference preparation – closed

Potential topics mentioned:

Add the following to +/-4:

Review of the Auditor Scoring System Development

Identify/Review Candidate for Audit Observations

Training (Lead) auditor designation discussion

Add the following to Group Discussion:

Combining of NCRs

Job Selection / Job Tracker discussion

Special Situations:

Equipment, People, Hardware leading to change of Scope

Industry Standard Practice:

Portable Hardness Testing

Present comments from Observation Audits:

ACTION ITEM: Staff Engineer to provide a Review of Observation Audits (Cut and Paste into Word Document leaving out names). (Due Date: 1-Jun-2017).

ACTION ITEM: Tom Norris on behalf of the Heat Treat Task Group will request if auditors have any comments or additional recommendations. (Due Date: 1-Jun-2017).

# google chat subjects and discussion – closed

Ten Google Chat Group Discussions were reviewed.

Subject 1:

Sample Sizes and testing procedure flow down to the performing personnel.

No Action.

Subject 2:

Pyrometry Compliance.

ACTION ITEM: Staff Engineer to cancel the Advisory 10-003 Ion Nitriding. (Due Date: 1-Jun-2017).

Subject 3:

Pyrometry Questions from New Auditor (use of Load Sensor); How-to address Broken Sensor, SAT; (non-explainable differences for all process T/Cs).

ACTION ITEM: Pyrometry Guide Sub-Team to address the question and answer from New Auditor (use of Load Sensor); How-to address Broken Sensor, SAT to determine potential inclusion into the Pyrometry Guide. (Due Date: 1-Jun-2017).

Subject 4:

Hardness verification for V-Anvils.

ACTION ITEM: Doug Matson to issue an Auditor Advisory to clarify Hardness verifications for V-Anvils. Please refer to checklist 11.2.3. (Due Date: 1-Jun-2017).

Subject 5:

Outside Service Pyrometry Procedure – evidence of compliance to AMS2750.

Refer to Question 2.1.3.

ACTION ITEM: Jeff Thyssen to write an Auditor Advisor to clarify the Outside Service Pyrometry Procedure – evidence of compliance to AMS2750 requirement that is not clearly covered in Question 2.1.3 of AMS 2750. (Due Date: 1-Jun-2017).

Subject 6:

Requirement of Self-Audit Data package is not included in 1.1.3 of the General Checklist.

ACTION ITEM: Staff Engineer to revise The Heat Treat Audit Handbook to clarify this requirement of Self-Audit Data package not included in 1.1.3 of the General Checklist. (Due Date: 1-Jun-2017).

Subject 7:

Gas cooling during vacuum processing of 440C.

No Action

Subject 8:

Hardness Testing ASTM E18 and E110 when supplier has only portable hardness tester.

ASTM E18 still applies since it is referred to in E110. Also, Audit Handbook addresses this.

Subject 9:

Correction Factor in Celsius V’s expressed in Fahrenheit. Does the Celsius Correction Factor need to be multiplied by 1.8?

ACTION ITEM: Jeff Thyssen to write Auditor Advisory to clarify the conversion of correction factors between Celsius and Fahrenheit. (Due Date: 1-Jun-2017).

Subject 10:

Supplier procedure marked “Proprietary and confidential”.

Refer to Section 1.1.3. Section 1.1.3 applies to external proprietary information. Auditor’s statements referred to supplier’s proprietary document.

ACTION ITEM: Chairperson & Vice-Chairperson to investigate if there is any established Nadcap Management Council (NMC) position on proprietary information. (Due Date: 1-Jun-2017).

# failure analysis & vca data – closed

Motion made by Doug Matson and seconded by Earl Pruett to leave current failure threshold criteria for reaccreditation audits. Motion Passed.

# appeal analysis & possible appeal – closed

Tabled Item 5: In Thursday Closed Meeting.

# audit allocation – closed

Audit Allocations were made up through 30-Jun-2017. HTTG has decided that no more meeting time will be allotted for assigning audits. Any audits that do not have two reviewers will be assigned by HTTG Secretary, Sunder Rajan.

Motion made by Jeff Thyssen and seconded by Tom Norris to send the list to HTTG Secretary and have the audits assigned. Motion Passed.

ACTION ITEM: Sunder Rajan to assign any audits that do not have two reviewers and send to the Heat Treat Subscriber Voting Members. (Due Date: 15-Mar-2017).

# lapsed accreditation – closed

Tabled Item 6: In Thursday Closed Meeting.

# incomplete scope of accreditation – closed

Tabled Item 7: In Thursday Closed Meeting.

# merit consensus – closed

Balloting for Merit: If a HTTG Subscriber Voting Member (UVM) has a pertinent comment after several HTTG UVM’s have balloted on a given audit, how should that be flowed down? Or, should the Staff Engineer have any responsibility. Decision/Action: Tabled Item 8, Thursday.

# mou’S with mtl – closed

Sub-Team has no progress to report.

# ht – ststg – open

See HT-STSTG minutes posted at [www.eauditnet.com](http://www.eauditnet.com) > Resources > Documents > Public Documents > Heat Treating > HTSTSTG.

Only Suppliers and Staff Engineers are permitted to participate. However, Subscribers are welcome to observe.

# 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.

Tom Norris reviewed the meeting agenda.

# review october 2016 meeting minutes – open

Tom Norris reviewed the October 2016 Meeting Minutes.

Motion made by Jeff Thyssen and seconded by Mark Emerson to accept the October 2016 Meeting Minutes as written. Motion Passed.

# closed meeting report out – open

Tom Norris highlighted the main items discussed during the Closed Meeting on Monday, 20-Feb-2017.

Discussed Observation Audits.

Subscriber Voting Member Update.

Reviewed the ten Google Chat Subjects.

Sub-Team reviewed Memorandum of Understanding (MOU) with Materials Testing Laboratories (MTL) Task Group status.

# rail review – open

The Rolling Action Item List (RAIL) was presented by Marcel Cuperman.

Noted during the review was that the Instrument Calibration Form Pilot Testing Sub-Team was launched, with results for review to be presented at the June 2017 meeting.

ACTION ITEM: Pilot Testing Sub-Team testing the instrument calibration form to present results at June 2017 meeting. (Due Date: 1-Jun-2017).

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

# op 1117 auditor consistency sub-team review – open

Cyril Vernault presented the development of the new proposed rating system of auditors.

The HTTG reviewed the OP 1117 requirements for which audits can be observed. Subscribers need to volunteer to observe all identified auditors.

Considerable discussion and questions from Suppliers regarding Observation Audits. Example of questions include; what feedback is given to the auditor being observed; is there a probationary period for the new auditors? Also, a blank observation form was shown to the Suppliers.

A review of the audit training process was given. Typically, the New Auditor Training Process includes a twostep process: First, the “Trainee” observes the “Lead” Auditor and Secondly: The “Trainee” performing an audit while being observed by the “Lead Auditor”.

Supplier questioned whether a similar “Feed Back” process can be established for Suppliers. The PRI position is that this should come by “Standardization” of the process. The Supplier Support Committee (SSC) should flow this up to the NMC who would then establish a procedure for this.

# ac7102/4 Rev D – open

Comments were resolved at the February 2017 meeting and sent back to the HTTG for a Task Group 28-day Ballot. Only comments regarding the “Comments Resolution” and changes incorporated be made on this ballot. The procedure does not require resolution of comments made on sections not part of comment resolution and will be found non-persuasive and incorporated in the next revision.

# ac7102/2 rev d – open

No comment resolution, as the ballot has not been started.

Comment on OP1114 appendix HT were discussed.

Issue discussed: When there is a relocation of the Supplier, the Subscribers should then be notified. A motion was made by Sunder Rajan and seconded by Cyril Vernault to take this to Planning and Ops. The motion failed.

Discussion on OP1114 Appendix HT 4.12.3.8. Issue: When a VCA audit is closed with zero NCR’s, does the audit come back to HTTG or can it be closed by Staff Engineer. This issue is addressed in the procedure and the audit will be sent to HTTG for review.

# ht-ststg report out – open

Wilfried Weber presented the HTSTSTG Report Out.

# auditor advisories – open

Auditor Advisories sent since the October 2016 meeting were reviewed.

16-008 Cyril Vernault – When to address the “/S” questions for U14 –Safran Group.

17-001 Cyril Vernault - Alternate SAT. Clarification of the day when the sensor needs to be replaced.

17-002 – Doug Matson - AC7102 Rev I ITAR/EAR Requirements are not applicable for Raw Stock or “Standard Parts” Discussion on what constitutes Standard Parts. No action.

A proposed Auditor Advisory from Doug Matson was reviewed, 17-XXX.

Calibrating controlling, monitoring, recording instruments “outside” of the furnace qualified operating temperature. Example of Brazing, Heat Treating of Inconel 718 (allowing undershoot the lower, aging temperature) were cited. Discussion ensued; Suggesting that this should be a “/S” flow down. Are we invoking requirements of AMS 2750 for temperatures not covered by the specification?

Motion made by Doug Matson and seconded by Jeff Thyssen to “Disregard the Auditor Advisory as it is written”. Motion Withdrawn.

Doug Matson revised the advisory and resubmitted the advisory for review. There was additional discussion; further discussion tabled until the June 2017 meeting.

# review of procedure changes – open

The changes to the policy and procedures in Operation Procedures and Operating Procedure Appendices for Heat Treat were presented by Marcel Cuperman.

# httg pyrometry guide update – open

Pyrometry Guide Update was presented by Marcel Cuperman.

# ac7102/5 rev d – open

Comment resolution conducted by Marcel Cuperman.

A question regarding presence of electrical or magnetic fields near the conductivity test area was removed from the comments with the understanding that this will be added to the AC7102/5 checklist.

All comments on the AC7102/5 Checklist have been reviewed and addressed, a 28-Day Task Group Ballot is necessary as there were five or more technical changes incorporated as part of comment resolution.

# ITAR Issue (Reviewed on Tuesday 21-Feb-2017)

Letter from Joe Pinto (PRI) regarding MTI 3 Issue was read by Marcel Cuperman.

Open discussion on ITAR/EAR question on HT Checklist AC7102. Discussions occurred surrounding the Supplier’s issues concerning the determination of ITAR work, much of the content was regarding the lack of flow down to the heat treaters. No action.

# ssc presentation – open

Roy Adkins – presented SSC report out.

# supplier voting member updates & compliance with voting requirements – open

The data on Supplier Voting Member Participation was reviewed by Chairperson, Tom Norris.

The following requests for additions or changes to voting membership were received and confirmed by the Heat-Treating Task Group Chairperson pending verification of PD 1100 requirements:

* Supplier Voting Member: SVM
* Alternate: ALT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **First Name** | **Surname** | **Company** | **Position:**  **(new / updated role)** | **Meetings Attended (Month/Year)** | |
| Mark | Affolter | Bodycote | SVM  (New) | Oct-2017 | Feb-2017 |
| Mark | Willis | Arconic | Alt SVM  (Updated) | Jun-2014 | Jun-2016 |
| Bill | Rogers | Arconic | SVM  (Updated) | Oct-2016 | Feb-2017 |
| Brian | Reynolds | Arconic | Alt SVM  (Updated) | Oct-2016 | Feb-2017 |

# failure analysis and vca data - open

The Staff Engineers presented the Audit Failure Data by sector and in total. Failure Analysis for 2016 was 1.9%. The YTD rate for 2017 is at 3.3%.

The failure threshold for reaccreditation audits has not changed.

In 2016 there were 12 Verification of Corrective Action audits (VCA) performed; 2 failed after VCA. None have been performed in 2017.

# ssc report out – open

Roy Adkins presented an update on the activities of the SSC.

OP1123 Operating Procedure for SSC has been approved. Communication Sub-Team finalized 🡪 “Marketing Nadcap Accreditation”.

A suggestion was made to have the “Auditor Training (Conference) after the Nadcap Meeting rather than before. This was well received by the Heat-Treating Task Group.

The Supplier Survey was mentioned; with the thoughts of modeling this like the “Audit Observation”.

Nadcap Technical Symposia: 9 planned with 3 in each sector (America, Europe and Asia).

NMC agenda item being worked on 🡪 Relief to Checklist Requirements for exceptional circumstances.

-To provide quick relief due to an undue financial burden for poorly worded checklist question. Through options of; Shorten ballot from 28 to 7 days. Potentially waive the 90-day notification.

-It could be proposed by Supplier, Staff Engineer or Subscriber. Needing approval by 2/3rds. majority of HTTG members, Task Group Chairperson and NMC Chairperson.

# amec report out – open

Doug Matson presented the report.

AMS2759 Main Spec and /1 through /13 revision. Status of the ballots was presented.

AMS 2769 is being revised and readied for release.

Other Projects in the works were presented.

“Portable Hardness Tester Usage” 🡪 emphasized need for users to get engaged. The HTTG is strongly encouraging Suppliers to get engaged and voice their comments to ASTM E28.06 Committee (Next Meeting is in May 2017, in Toronto, Canada). Contact Doug Matson (douglas.m.matson@boeing.com) for details.

# AUDIT HANDBOOK UPDATES – OPEN

(Original topic was MTL for fasteners – AC7101/11, but was not ready)

Marcel Cuperman reviewed the validity of the old Auditor Advisories.

ACTION ITEM: Staff Engineers to remove old Advisories from the HT Audit Handbook. (Due Date: 1-Jun-2017).

# NMC Mterics

The red metrics for Supplier Cycle Time in January 2017 was reviewed. Stated to probably be an effect of the holidays.

# open meeting new business – open

Coatings Task Group, Welding Task Group performing heat-treating to their respective commodities without an MOU with the HTTG.

A Subscriber (Task Group Member) expressed concern that their company was allowing a Coatings Supplier to perform Coating work for them and perform heat treatment as well. This caused concern especially since AMS 2750 (Pyrometry) was invoked and there is no evidence of understanding with the HTTG.

OP1120 🡪Section 4.1 and 4.4 address MOU’s. Discussion centered around the problems in maintaining the shared checklists, making revisions etc. No action resulted, decision was to table the issue at this time.

MTI Letter (ITAR Issue) was brought up. There was an Aerospace Quality System (AQS) issue and a separate counterfeit material issue. MTI Discussed in SSC.

- Mentioned by Doug Matson - AS9100 recent revision and its impact. May be a potential workshop item.

# open meeting tabled subjects – open

No tabled subjects discussed.

# rail review – open

The Rolling Action Item List (RAIL) was reviewed. The new RAIL items from the Google Subject and Closed meeting were added to the list.

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.

Workshop presentations will be available after the meeting in eAuditNet, Resources > Documents > Public Documents > Heat Treating > Workshops.

# safran pr-0100 nitriding – open

Cyril Vernault presented a description of the Safran requirements and focusing on metallographic and microstructural requirements.

# how to respond to ncr’s – open

Cyril Vernault presented How to Respond to NCR’s presentation.

# Nadcap process implementing procedure – open

Doug Matson presented, discussion centered on whether AS9100 Rev D requires use of specific procedures to monitor special processes. Considerable detailed discussion on maintaining procedures.

# TOP 10 NCRs– open

It was presented that the top NCR (excluding job audits) is written against “Are all corrective actions from the previous Nadcap Audit still implemented”. This was written 94 times in 2016.

When job audits are included, it was presented that the top NCR is written against “Did the treatment of hardware conform to customers specified requirements”. This was written 255 times in 2016.

# q & a session – open

Q1: Cycle time (response to findings) – Working days, is there any allowance for Sick Days, Vacation Days; on holidays, it costs extra to pay someone to work on findings?

A1: This is standardized across the board for all commodities. Delinquency days are available, with the amount depending on Merit. Holidays such as Christmas are planned, you (Supplier) have a 3-month window to schedule an audit.

Q2: Follow on to above, Due to demands on Staff Engineer etc. is there any special allowance which can be made?

A2: The demands on the Staff Engineer is not relevant to the issue. If you have a good proposal you can go through the system (SSC🡪NMC and get a response).

Q3: Self Audit –Supplier does his procedure. If the NADCAP Auditor discovers a failure to address an item and makes a finding, does that constitute a finding – Major? Minor?

A3: If it is a systemic issue, and a Supplier checks off many questions and Auditor discovers discrepancy, then there is an issue. (may be a finding)

Checklist Question 1.1 does specifically ask whether self-audit was performed and findings were addressed through the Supplier Corrective Action System. If there is a discrepancy between Auditor and Supplier, please call Staff Engineer to help resolve the issue.

Q4: Supplier agreed to the Nadcap Audit findings; but there was an issue with properly interpreting customer specs. If during an audit a major finding was made and NCR written; later customer indicated that the finding was due to misinterpretation of their spec. “This was a painful process.”

A4: The NCR should be voided. If there are questions or clarifications needed from a Subscriber during the audit the Supplier can and is encouraged to contact the Subscriber for clarification (to avert a potential NCR).

A5: AC7101/4 – if you are a Heat Treat Supplier can those tests and information be used for the job tracker?

A5: Yes. The Heat Treat job information can be used.

Q6: Does the Supplier have to show that all findings have been addressed and corrective actions implemented?

A6: Audit Advisory 16-003 clarifies this.

# PLANNING & OPS REPORT OUT

Chairperson, Tom Norris presented the Planning and Ops meeting summary from the night of 22-Feb-2017 - One item of concern to HTTG pertained to a Planning & Ops discussion of a possible future reduction of Task Group required pre-audit data. However, the HTTG does not want the list required in AC7102 reduced as proposed during the Planning & Ops.

NMC Standardization Committee requested feedback on the number of Task Group required Job Audits.

The Job Tracker thoroughness of tracking job audit data was brought up by Eddy Pham. The concern is that the Job Tracker does not provide adequate oversight of the job audits.

ACTION ITEM: Auditor Consistency Sub-team to review effectiveness of Job Tracker as the Job Tracker does not provide adequate oversight of the job audits. (Due Date: 1-Jun-2017).

# Closed meeting new business

1) Task Group Meeting in Shanghai in 2020. Will your company object? A survey was taken to determine of the HTTG members will be able to participate. There were 16 HTTG members that stated they will participate in the Shanghai 2020 meeting.

2) Q: Is it allowable to calibrate a working instrument including the lead wire?

A: It is not an issue and is acceptable.

1. MTL Testing Checklist. MOU

Concern was raised about list of HT Suppliers who have received MTL accreditation with number of NCRs in excess of HTTG acceptance criteria. No action taken.

# Closed meeTiNg tAbleD SUBJECTS

Tabled Item 1:

The procedural requirement to observe all auditors every three years was discussed and tabled for later resolution.

HTTG Chairperson: Q: Do we want to continue to have this requirement (which amounts to ~15 audit observations per year minimum) or do we want to change this requirement?

Proposed Agenda Item for June 2017 meeting to:

Have Staff Engineer provide a list to HTTG leadership of all the potential observation auditors to be reviewed by HTTG in the same manner as that of audit allocations, and discuss the following ideas which were brought up.

Idea 1: Doug Matson stated that it is not possible to “force” the issue of observation audits. We need more Subscriber participation. Doug Matson recommended that Subscribers schedule observation audits around HTTG meetings.

Idea 2: Eddy Pham suggested that we (other Subscribers) take time off one of the scheduled Nadcap meetings (which they were planned and budgeted for) so in effect a HTTG member may attend only one or two Nadcap meetings and use the budgeted time and resources to carry out an observation audit.

Idea 3: Allow a non-HTTG member to perform an observation audit.

Idea 4: Allow a Lead Auditor to perform an observation audit.

ACTION ITEM: Staff Engineers to provide a list to HTTG leadership of all the potential auditors that need to be observed. (Due Date: 1-Jun-2017).

ACTION ITEM: Staff Engineers to add to June 2017 Agenda an item to discuss Subscriber Observations audits being scheduled around HTTG meetings. (Due Date: 1-Jun-2017).

Tabled Item 2:

Review of the observation audit and folding the pertinent observations into the rating system. Revisit the quantitative rating system. (Table for discussion in June 2017).

Tabled Item 3:

Staff Engineer will report back on 23-Feb-2017 whether the Auditor can be dismissed now or whether he will be given a 60-day notice. The Staff Engineer Response - 30-day notice is required. Staff Engineer also requested the HTTG to help bring in more new Auditor Candidates, particularly for Non-Restricted Auditors

Tabled Item 4:

Chairperson to investigate if there is any standard NMC position on “Proprietary Information by the Suppliers”?

Response: Continue to push the Suppliers to provide all required data & will try and get a resolution by June 2017.

Tabled Item 5:

Appeals analyses and Possible Appeals:

Marcel Cuperman presented the data. There were a few appeals in 2016 and in 2017. No discussion.

Tabled Item 6:

Lapsed Accreditations: Marcel Cuperman presented the data. Two Suppliers are getting extensions.

Tabled Item 7:

Incomplete Scope of Accreditation: Not Discussed.

Tabled Item 8:

Merit Consensus.

Balloting for merit. If a HTTG Member has a pertinent comment after several HTTG members have cast their ballots on a given audit, how should that be flowed down? Or should the Staff Engineer have any responsibility?

Decision/Action:

Response: It is up to the individual HTTG member and if the person feels strongly that the other HTTG members should consider their comment, mark the ballot comment “send to all Subscribers”.

Motion made by Sunder Rajan and seconded by Earl Pruett that merit on reaccreditation is based on simple majority. Motion passed.

ACTION ITEM: Staff Engineer to write into the procedure that reaccreditation audit will be decided to grant merit by a simple majority of the HTTG Members who cast the ballot. (Due Date: 1-Jun-2017).

# RAIL REVIEW

Reviewed any additional RAIL items.

# JUNE 2017 AGENDA

Mark Burval will create June 2017 HTTG Agenda and send to Task Group for review prior to posting.

ADJOURNMENT – 23-Feb-2017 – Meeting was adjourned at 11:30 a.m.

Minutes Prepared by: Sunder S Rajan, Sunder\_S\_Rajan@raytheon.com

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| \*\*\*\*\* 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: |
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