THE MISSING PIECES – PART 2: VISUAL MANAGEMENT

Submitted by Bob Wolbert – Progress Rail

In the first article we discussed the topic of Goals and their use in promoting improvement using the acronym of SMART. In this article we are following up on that practice by addressing the sometimes overlooked tool of Visual Management.

So let’s define Visual Management (VM). VM can be easily stated as a method to communicate both expectations and results as compared to intermediate goals and results that creates an easy to understand pathway to achieve the desired state in support of management objectives.

VM is a common change agent utilized to support management goals. It addresses the common pitfall of failing to cascade goals through clear and sustained communication of goals and performance in support of our company’s overall objectives. The VM process supports continued awareness by updating the tools (charts / graphs) used to communicate results relevant to the goals.

So why is Visual Management such as valued tool? It’s the communication aspect that we are capitalizing on. VM provides the means to efficiently and clearly communicate specific goals and results. When the measurement is easily understood and routinely updated, it provides for the understanding and desired input from the employees closest to the process and best able to help achieve the desired results.

VM requires specific focused measures as opposed to more general goals. Let’s look at a quick example. Posting a chart / graph aimed at reducing scrap generated from a challenged department by utilizing a Pareto of leading causes each month is more appropriate than placing a chart / graph for the overall scrap rates and company goal.

Creating informative and easy to read postings are key to getting the desired attention and support of the employees viewing them. This process leads toward satisfying another missing piece we sometimes struggle with... Engagement, which will be addressed in a separate article.

VIEWS AND INTERPRETATIONS

Responsible Personnel

MSRP Section J, Specification for Quality Assurance, M1003, Chapter 2
2.21.5 The results of the audits shall be documented and brought to the attention of the personnel having responsibility in the area audited.

2.21.6 The management personnel responsible for the areas with noted nonconformances shall take timely corrective action on the deficiencies per paragraph 2.6.2.

It is the responsibility of the facility quality manager to ensure audit findings are responded to in a timely manner. Sections 2.21.5 and 2.21.6 should not be interpreted to mean that the only responsible person is the facility’s Quality Manager. For example, if a problem is found in shipping, then the management person responsible for shipping would be the “management personnel” that these sections are referencing. Corrective action is a team effort that should engage the responsible manager and their employee(s) involved with support and concurrence of the facility quality manager.

Responding to Proposed AAR Changes

Proposed AAR changes are documented and solicited for comments through the Circular Letter process. Written comments from interested parties are controlled per requirement in AAR Standard S-050. Standard format for communicating written comments between parties is through email.

WE WANT TO HEAR FROM YOU

Submitted by Donna Jacobi - Amsted Rail

This newsletter is put together by the Communications Technical Advisory Group (TAG) made up of members from the AAR Quality Assurance Committee and the RSI Quality Assurance Committee. The Communications TAG would welcome articles from others. Some potential topics for an article include:

- Changes taking place in other industries that may be of interest (PPAP, APQP, etc.)
- Highlights from an auditor (real life stories of best practices or opportunities for improvement)
- Highlights from TTCI and links to TTCI articles
- Railroad profiles
- Nondestructive testing
- Special processes

The list above is not meant to be all inclusive and others subjects are welcome, but all articles should be quality related. Please submit any articles to Donna Jacobi at djacobi@amstderail.com or Gary Alderson at alderson@alltranstek.com.

All submitted articles will be reviewed and approved by the AAR, RSI and TTCI before being published.

Have a Question?
Submit your M-1003 request for clarification or interpretation by emailing QA@aar.com.

Have an Idea for an Article?
Please submit your drafts to Donna Jacobi at djacobi@amstderail.com or Gary Alderson at alderson@alltranstek.com.

Reminder
Per Section J, 1.1.3 “An AAR official representative shall have free entry at all times to all parts of the contractor’s works that concern the processing, test, and inspection of materials for use in interchange service. This access is for the purpose of providing assurance that industry standards are being maintained. The contractor shall afford the AAR representative all reasonable facilities to ensure that materials are being furnished in accordance with the specification.”
HOW TO ADD AN ACTIVITY TO AN EXISTING M-1003 CERTIFICATION

Submitted by Daniel Thielemier - TTCI

It is not uncommon for facilities to expand their products and services (Activities) that they provide to those who operate in the North American Railway interchange. Any time a new Activity is requested to be added to a facility’s list of certified Activities, there is a specific process that must be followed so that the AAR’s M-1003 quality program has proper documentation and accountability, and to ensure that overall quality is not compromised.

When a facility first decides to add an Activity, they must notify QA@aar.com through a formal request on company letterhead. The facility should also copy their AAR Accredited Auditor when sending the request, including an updated contractor profile data sheet (click here to download). This notification must be sent no later than 60 days before the next facility audit. If any of the additional Activities being requested require a technical certification, the next facility audit may need to be a full 24-element re-certification audit.

After the audit is conducted, the addition of a new Activity will need to be reviewed by the AAR Quality Assurance Committee (QAC) during their next facility approval process. Should the QAC approve the audit, the new Activity will be added before the compliance or recertification is issued and will be reflected in the M-1003 registry.

The request for a facility to drop an Activity is not as lengthy of a process, but still requires notification to QA@aar.com via a formal request on company letterhead. As a courtesy, the request to drop may also be sent to the AAR Accredited Auditor for their records. The removal can be reflected in the database immediately or at a designated date depending on the request of the contractor.

Communication is key in the addition or removal of an Activity. It is important to remember that all related correspondence be sent to QA@aar.com. Failing to send proper notification can delay the annual approval of the facility and possibly delay the addition of new Activities until a subsequent audit is conducted.

Save the Date!
The 2019 AAR Quality Assurance Auditor and Industry Conference will be held the week of January 21, 2019 in New Orleans, LA.

AN INTRODUCTION TO TTCI

Submitted by Don Guillen - TTCI

Transportation Technology Center, Inc. (TTCI) is a wholly owned subsidiary of the Association of American Railroads. TTCI is a world-class transportation research and testing organization, providing emerging technology solutions for the railway industry throughout North America and the world. Headquartered in Southeastern Colorado, TTCI manages extensive track facilities, state-of-the-art laboratory facilities, and a highly talented staff to make their facility the obvious choice for meeting research and testing needs. TTCI is also home to the AAR Technical Standards group, who along with the AAR in Washington DC, are responsible for managing the standards, rules and regulations that must be followed for all North American rail interchange traffic.
The facility, Transportation Technology Center (TCC), is operated under a care, custody, and control contract with the FRA. This 52-square mile, secure and remote site operates with a vast array of specialized laboratories and track. TTC enables isolated testing for all categories of freight and passenger rolling stock, vehicle and track components, and safety devices. There are 48 miles of railroad track available for testing locomotives, vehicles, track components, and signaling devices at TTC. Specialized tracks are used to evaluate vehicle stability, safety, endurance, reliability, and ride comfort. Using TTC’s tracks eliminates the interferences, delays, and safety issues encountered on an operating rail system.

To learn more about the variety of in-depth research performed at TTC, consider attending the 2019 AAR Annual Research Review March 26th in Colorado Springs along with a site tour on the 27th.

THE ASSOCIATION OF AMERICAN RAILROAD’S QUALITY ASSURANCE COMMITTEE IS SEEKING HOST COMPANIES FOR THE ADVANCED AUDITOR CLASSES

The Quality Assurance Committee is seeking host M-1003 certified facilities for their 2019 AAR Advanced Auditor classes. For hosting the class, your company will receive two (2) complimentary registrations that can be used at any of the AAR Quality Assurance Training Classes. Another benefit to each facility is that several sets of “eyes” will review your Quality Management System and make suggestions for improvements.

The advanced class duration is three (3) days total, two (2) days in the classroom and one (1) day in your shop performing a mock audit. The classroom training will be held at a hotel near your facility. The elements audited are your choice, and the results are marked as a “Training Audit” and for your information only. We limit the class size to fifteen (15) students and use three (3) instructors to perform the class and lead the audit.
The AAR has been conducting Advanced Auditor Training Classes at AAR member companies for many years now, with positive results in the rail industry. Another benefit for the host company to receive a detailed audit report to help their Quality Assurance Program.

If you are interested in having your facility participate in a training seminar, contact Don Guillen at 719-584-0715 or don_guillen@aar.com for more information.

SPECIAL PROCESS “WELDING” – AUDITING CONSIDERATIONS AND GUIDELINES

Submitted by Jim Shomo – Progress Rail

MSRP Section J, Specification for Quality Assurance, M1003, Chapter 2 addresses the special processes of welding in Section 2.15 Process Control. Companies must ensure special processes are performed under controlled conditions with qualified personnel and processes. The following requirements are evaluated when auditing the special process of welding.

2.15.8 Ensuring that special processes (including but not limited to welding, heat treating, plating, and non-destructive testing) are performed under controlled conditions in accordance with applicable codes, standards, specifications, and governmental and contractual requirements by qualified personnel using qualified equipment and procedures.

Audit guidelines for controlled conditions:

- Is welding being performed to a documented Welding Procedure Specification (WPS)?
- Verify the WPS parameters are being adhered to; Joint design, base metal type, filler metal type and size, heat treatment, shielding gases and electrical requirements (amp and voltage range).
- Is the welder qualified to weld in accordance to the WPS being used?
- Are welding machines calibrated?

Common Points of Failure:

- Welders not aware of the WPS and/or operating outside of the WPS parameters.
- Welder’s Welder Performance Qualification Record (WPQR) limitation of essential variables
  - Change in process from GMAW solid wire, to FCAW flux core wire if not qualified to both processes.
  - Change to a position not qualified. F-Flat, H-Horizontal, V-Vertical and OH-Overhead.
  - Change from a ferrous to a non-ferrous metal if not qualified to both.
  - Change to a base metal thickness greater than their maximum qualified range.
- Welding machines with volt / amp meters not calibrated.

2.15.9 Ensuring that the qualification of personnel, procedures, and equipment complies with the requirements of applicable codes, standards, and specifications.

Audit guidelines for qualification of personnel, procedures and equipment:
- Have welding personnel been qualified in accordance with the applicable codes and standards. (Most commonly AWS D 15.1)?
- Have welding procedure specifications (WPS) been developed in accordance with the applicable codes and standards. (Most commonly AWS D 15.1)?

**Common Points of Failure:**

- Welder Performance Qualification Record (WPQR) was not done in accordance with the requirements of AWS D 15.1 Section 11.
- Welding Procedure Specification is not in accordance with the requirements of AWS D 15.1

2.15.10 Ensuring that documentation for currently qualified personnel, processes, or equipment is maintained in accordance with the requirements of pertinent codes, standards, & specifications.

**Audit guidelines for documentation of currently qualified personnel and processes:**

- Verify Welder Performance Qualification Records for currently qualified welding personnel is available.
- If welding to AWS D 15.1 is required in order to comply with section 11.14.1 verify documentation is available that the welders have been engaged in the process of welding for which they were qualified to for a period not to exceed six months.
- Verify current Welding Procedure Specifications and Welding Procedure Qualification Records (PQR) (if applicable) are available.

**Common Points of Failure:**

- Welder Performance Qualification Record is not available or not maintained current with required review intervals.
- Welding Procedure Specifications or Welding Procedure Qualification Records are not available.
## 2018 Calendar of Events

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<th>Training</th>
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<td><strong>Basic Auditor Training</strong></td>
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<td>Sept 25 - 27</td>
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<td>Sept 25 - 27</td>
<td>Guadalajara, MX</td>
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<td>Nov 6 - 8</td>
<td>San Diego, CA</td>
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<td>Dec 4 - 6</td>
<td>Mexico City, MX</td>
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<td><strong>Advanced Auditor Training</strong></td>
<td>Oct 30 – Nov 1</td>
<td>Topeka, TX</td>
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An AAR Circular Letter will be issued several months prior to each class announcing when registration is open.

## Important Links

- [Registry of M-1003 Certified Companies](#)
- [M-1003 Frequently Asked Questions](#)
- [AAR M-1003 Certification on-line Application](#)
- [AAR M1003, Section J Specification for Quality Assurance](#)
- [AAR Training Schedule](#)
- [AAR Circulars](#)
- [MSRP Publication Current Revision Status](#)
- [AAR Online Material Nonconformance Reporting System (Chapter 7)](#)
- [Railway Supply Institute](#)
- [RSI QAC & Previous Newsletters](#)
- [RSI Tank Car Resource Center](#)

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The AAR /RSI Joint QA Newsletter is provided through the efforts of AAR Quality Assurance Committee and Railway Supply Institute Quality Assurance Committee members in an effort to provide information that is important to our industry in support of improving the quality of products and services provided. You can support this process by submitting your questions and ideas for improvement to [QA@aar.com](mailto:QA@aar.com).
THE FOLLOWING AAR QAC AND RSI QAC TEAM MEMBERS WORKED ON THIS NEWSLETTER AS PART OF THE COMMUNICATION TECHNICAL ADVISORY GROUP:

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