

#### Frequently Asked Questions

#### Q: Why is this new memo and web tool necessary?

A: There have been multiple memos released by OSMA throughout the duration of the COVID-19 pandemic that have provided relief and guidance for manufacturing personnel affected by the closing of NASA centers and training facilities across the Agency. Training credentials for personnel taking workmanship standards training courses that typically expire after a 2-year period had been extended by as much as 18 months through late 2021. This created a need to better understand the risk factors involved in personnel not receiving retraining within the time frame specified by workmanship policy. The result of this work was the development of a tool that would allow consistent and prompt evaluation of the risk factors presented by manufacturing personnel whose training credentials have expired or have been extended beyond their normal expiration due to the limited training availability throughout the COVID-19 pandemic. In addition to this <u>web tool</u>, a memo (*link coming soon*) has been developed that introduces this tool and the process that will be used until the effects of the pandemic on NASA training centers have subsided.

#### Q: What does the web tool do?

A: This <u>web tool</u> collects employee training information such as number of retraining cycles, time since performing duties, and last training date for each applicable area of workmanship to assess the likelihood of negative consequences arising from further extending training credentials and allowing work to continue without immediate retraining. The Workmanship Standards Program will use this evaluation to generate the recommendation to further extend training credentials, allow work to continue with expired credentials, or seek retraining immediately. The evaluation with this recommendation is then delivered back to the employee and their supervisor for signing, retention, and distribution to affected projects. Evaluation of our Level B instructors will also use the same tool and provide a recommendation based on similar criteria.

Frequently Asked Questions



#### Q: Who needs to use the web tool?

**A:** This <u>web tool</u> is designed for use by personnel working on NASA mission hardware that are required to train to the workmanship standards. This includes operators, inspectors, and NASA Level B Instructors who serve as NASA civil servants, contractors, suppliers, and affiliates who work to the following technical standards:

- NASA STD-8739.1, Workmanship Standard for Polymeric Application on Electronic Assemblies
- NASA STD-8739.2, Workmanship Standard for Surface Mount Technology
- NASA STD-8739.3, Soldered Electrical Connections
- NASA STD-8739.4, Workmanship Standard for Crimping, Interconnecting Cables, Harnesses, And Wiring
- NASA STD-8739.5, Workmanship Standard for Fiber Optic Terminations, Cable Assemblies, And Installation
- IPC J-STD-001xS, Space and Military Applications Electronic Hardware Addendum to IPC J-STD-001G Requirements for Soldered Electrical and Electronic Assemblies
- IPC/WHMA-A-620x-S, Space and Military Applications Electronic Hardware Addendum to IPC/WHMA-A-620

#### Q: Does the extension recommendation automatically extend my credentials?

**A:** The credential extension recommendation from the Workmanship Standards Program does not provide direct relief to any requirements but may be accepted by the affected NASA program or project at their discretion.



#### Q: Does this extension affect my IPC CIS, CIT, or MIT certification?

**A:** No, any credential extension does not affect certification status to any Industry Voluntary Consensus Standards training courses. This extension simply allows personnel to continue working with expired credentials for a standard, which may include IPC J-STD-001 and IPC/WHMA-A-620.

#### Q: How does the evaluation and extension process work?

A: 1. Go to the Workmanship Training Credential Extension Risk Evaluator.

2. The employee enters their information in the web tool using the following steps:

a. They should enter their first and last names as well as their work email address.

b. They should enter their direct supervisor's information name and email address. This would be the person responsible for assigning duties or performance evaluation.

c. They would enter their work status in relation to their duties as an operator, inspector, or instructor to the applicable NASA workmanship standards.

d. They would select the role in which they would like to be evaluated. If an employee has multiple roles, they will need to be evaluated for each separately.

e. After choosing the role they would like to have evaluated:

For Operators and Inspectors: They will need to fill in the dates of their most recent training, most recent duty performance, and number of retraining cycles completed for each applicable workmanship area. If multiple certificates are held for a single area of workmanship, use the information of the most recently used in

## **Workmanship Training Credential Extension Evaluator** Frequently Asked Questions



performing official duties. All information MUST be to same standard. This may include J-STD-001 and IPC/WHMA-A-620 for operators and inspectors.

**For Instructors:** They will need to fill in the dates of their date of last evaluation by a Level A instructor or Audit, last course offering date, and number of retraining or audit cycles completed for each appropriate workmanship area. All information MUST be to same standard. This is not applicable for IPC CITs or MITs, they must meet the requirements of IPC's policy and procedures.

3. The employee provides this information to the Workmanship Standards Program via the "Submit" button. Within 5-10 business days after submitting their information, an evaluation in PDF format will be delivered to the email addresses provided in the web tool. The evaluation will contain the Workmanship Standards Program recommended extension date for each specific workmanship area based on the employee's training information. Should the employee not be recommended for an extension they will be given some level of priority by NASA Workmanship Training Centers for retraining to minimize the impact of their lapse in training credentials.

4. Once the evaluation is received by the employee, it needs to be signed by both the employee and their supervisor. The document should be maintained with their training records and provided to any NASA programs or projects that may be affected. If there is a training coordinator within your organization, a copy of the signed evaluation should also be provided to them for their records, and it should be made available to any training facilities that request it as well as the NASA Workmanship Standards Program.

5. The process is complete once the project has concurred with the recommendation. For more information see "What are the possible recommendations?" below.



#### Frequently Asked Questions

#### Q: What are the possible recommendations?

A: The recommendation for each of the applicable workmanship areas will be one of the following:

- 1) **Credential Extension by Supervisor:** The Workmanship Standards Program provides a recommended date of extension to the employee. If recommended for extension, the employee, their supervisor, or the training coordinator provides a copy of the signed recommendation to all programs or projects they are currently working. This should go to the Project's Quality Assurance Lead or Chief Safety & Mission Assurance Officer for their concurrence and to be kept as proof of valid training credentials. Only passive concurrence from programs or projects should be required for extension (i.e., email notification that they received the document should be sufficient). Should a project decide to not accept this extension, they should quickly provide feedback to the employee, their supervisor, and the training coordinator informing them of that decision.
- 2) Expired Credential Acceptance by Project Concurrence: The Workmanship Standards Program can not recommend an extension date, however, the probability of impact to programs or projects is low enough that the individual projects may permit the employee to continue work for their project only. For an employee to continue working despite expired credentials, their organization would need to provide each program or project a copy of the signed evaluation and make that request. It should go to the Project's Quality Assurance Lead or Chief Safety & Mission Assurance Officer in order for them to determine how long they will allow the employee to continue working with expired credentials. Once the project makes this decision, they should provide all parties involved with all relevant information and details. This process can be done without a formal waiver to the NASA STD-8739.6 training requirements and only needs to be documented.
- 3) Training Recommended Over Extension: Provided the potential impact to programs and projects, the employee is recommended to seek retraining as soon as possible prior to working on NASA mission hardware. If the program or project will allow the employee to

## **Workmanship Training Credential Extension Evaluator** Frequently Asked Questions



continue work on their project, they will need to seek relief to the training requirements of NASA STD-8739.6. They may also implement and document some of the recommended mitigations and seek re-evaluation as discussed below in "How does re-evaluation work?".

Note: Since they are still using a certification process, recommendations for Level A or SMAsponsored Level B Instructors may be handled differently than operators, inspectors, and supplier Level B Instructors.

### Q: What's the difference between "Expired Credential Acceptance by Project Concurrence" and "Training Recommended Over Extension"?

**A:** Employees who fall under the 'Expired Credential Acceptance by Project Concurrence' category have been determined to pose a low likelihood of negative impact to the program or project, but the Workmanship Standards Program is unable to determine an appropriate extension date. For this reason, the affected program or project should be involved in the process to determine a timeframe with which they are comfortable.

Employees who fall under the 'Training Recommended Over Extension' category have been determined to pose a medium to high likelihood of negative impact to the program or project. For this reason, the Workmanship Standards Program would not be comfortable recommending extension to credentials or that the project allows them to continue working with expired credentials. If the affected program or project chooses to allow work to continue with expired credentials, they will need to seek relief to the training requirements of NASA STD-8739.6.

# Q: Am I eligible to take the shortened retraining class although my credentials have expired?

**A:** Yes, the memo (*link coming soon*) provided on December 3, 2020 details eligibility for retraining. Employees should be able to provide a copy of the signed training extension recommendation to the training facility if it is requested.



#### **Frequently Asked Questions**

#### Q: What is re-evaluation?

A: Re-evaluation is the process that allows the Workmanship Standards Program to update their recommendation based on a change in an employee's work status. This update could provide the employee with additional time before needing to seek retraining or reduce the time due to an extended gap in performing their official duties. As a part of the evaluation provided to employees, the Workmanship Standards Program has included multiple mitigations that can be used to further reduce the likelihood of negative consequences on their programs when retraining is unavailable or not feasible. A part of the recommendation includes criteria, generally changes in work status, that may require an employee to be re-evaluated. There is no limit to being re-evaluated, but there may be a request for evidence of a work status change or mitigation.

#### Q: When is re-evaluation necessary?

**A:** Re-evaluation is necessary whenever there is a change to an employee's work status (i.e., no longer performing their duties on a consistent basis or performing more frequently than their last evaluation) or when mitigations have been implemented (i.e., performing their duties on non-flight hardware and being evaluated or assessed by knowledgeable personnel). Those who are re-evaluated may be contacted by the Workmanship Standards Program or projects to provide evidence of the mitigations implemented.

#### Q: How does re-evaluation work?

**A:** The re-evaluation process for the employee is the same as the initial evaluation process. Once these mitigations have been implemented and documented, the employee may be re-evaluated to determine if their recommendation changes.

**Frequently Asked Questions** 



#### Q: Why is ESD Control not covered by this memo or web tool?

**A:** Although NASA has adopted ANSI/ESD S20.20-2014 as an Agency-wide ESD Control Standard as well as added ESD Control requirements to NASA STD-8739.6, these documents only provide the guidelines for a facility to develop their own ESD Control Program Plan based on the local work environment. The local ESD Control Program Plan is the document that sets the specific training requirements for certification to their program and as such the local ESD Control Program Manager or Coordinator is responsible for providing guidance to personnel affected by the current situation.