

**BY ORDER OF THE COMMANDER  
WARNER ROBINS AIR LOGISTICS  
COMPLEX**



**WARNER ROBINS AIR LOGISTICS  
COMPLEX INSTRUCTION**

**21-111**

**6 JANUARY 2026**

**Maintenance**

**QUALIFICATION AND  
CERTIFICATION OF  
WELDER/WELDER  
OPERATOR/BRAZER PERSONNEL  
WELDING AEROSPACE  
COMPONENTS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction is the standard written practice for qualification/certification of welder, welder operator, brazer personnel welding aerospace components in Warner Robins Air Logistics Complex (WR-ALC). Technical Order (TO) 00-25-252, *Aeronautical Equipment Welding*, American Welding Society (AWS) D17.1, *Specification for Fusion Welding for Aerospace Applications*, AWS D17.2, *Specification for Welding Aerospace Applications* and AWS B2.2, *Specification for Brazing Procedures and Performance Qualifications* are the controlling documents for this written practice and are made a part of this instruction by reference. This instruction supplements the requirements of the above-mentioned documents to further define procedures as practiced within WR-ALC. In the event of a conflict between the text of this Instruction and TO 00-25-252 and AWS D17.1, the text of above mentioned TOs takes precedence. This instruction applies to welding processes used within WR-ALC. It applies to all personnel welding on aircraft and aircraft support equipment, missile, missile systems, and installed equipment within the 402d Commodities Maintenance Group (402 CMXG), 402d Electronics Maintenance Group (402 EMXG), and 402d Maintenance Support Group (402 MXSG). Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using Department of the Air Force (DAF) Form 847, *Recommendation for Change of*

*Publication.* This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Requests for waivers must come through the chain of command from the commander or civilian director of the maintenance group or staff office seeking relief from compliance. Waiver requests must be submitted to the OPR; waiver authority has not been delegated. This publication is exempt from tiering pursuant to Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW the Air Force Records Information Management System Records Disposition Schedule located at [https://www.my.af.mil/afirms/afirms/afirms/rds/rds\\_series.cfm](https://www.my.af.mil/afirms/afirms/afirms/rds/rds_series.cfm). See **Attachment 1** for glossary of references and supporting information.

### ***SUMMARY OF CHANGES***

This revision has been changed in its entirety and should be completely reviewed. WR-ALC Form 2, *Manual Silver Brazers Inspection/Test Record* and WR-ALC Form 3, *Resistance Welder Operator Inspection/Test Record* were revised, and WR-ALC Form 7, *GMAW/SMAW Visual Inspection Report* was created to supplement this publication.

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## 1. GENERAL.

1.1. For this document, the term welder will be understood to mean welder/welder operator/brazer unless otherwise stated.

1.2. The purpose of welder qualification testing is to determine the ability of the welder to produce a sound weld/brazed joint in the positions that will be encountered in production or support applications. In addition, the purpose of tests for welder operators is to determine the mechanical ability to operate automated welding equipment.

## 2. PROGRAM RESPONSIBILITIES DEFINED.

2.1. **Certifying officials.** The certifying officials and the qualification/certification program management responsibilities, as defined by TO 00-25-252 and AWS D17.1, will reside with the individual welding supervisors within each of the maintenance groups that have certified welders. The certifying officials are designated, in writing, by each group director.

2.1.1. Each group certifying official will be the designated representative (point of contact) for all matters pertaining to welding qualification and certification within that group.

2.1.2. Each group will be responsible for maintaining enough certifying officials to perform these duties.

2.2. **Special Skill Qualification (SSQ) Qualifying Officials.** As required by Air Force Materiel Command Instruction 21-100, Volume 1, *Depot Maintenance Principles*, (AFMCI 21-100V1) SSQ qualifying officials will reside within 402 CMXG and 402 EMXG and be appointed, in writing, by the group commander/director.

2.2.1. SSQ qualifying officials are responsible for performing all applicable functions as specified in AFMCI 21-100V1.

2.2.2. Both 402 CMXG and 402 EMXG will maintain enough SSQ qualifying officials to perform these duties in each organizational group. **Note: 402 MXSG has no SSQ requirements.**

2.3. **Welding supervisors.** Welding supervisors will ensure the candidate completes all prerequisite training and has a current eye exam. Welding supervisors will review all documentation for correctness and discuss the candidate's performance with the SSQ qualifying official or observing official.

2.3.1. Welding supervisors are responsible for maintaining a copy of the completed Department of Defense (DD) Form 2757, *Welding Examination Record* (instructions for completion of DD Form 2757 available at [Attachment 2](#)), and WR-ALC Form 5, *Welding Visual Acuity Test Record (Eye Exam)* (instructions for completion of WR-ALC Form 5 available at [Attachment 3](#)), in the welder's training, personnel, or other readily accessible file.

2.4. **Welders.** Welders are responsible for ensuring the proper identification information is correct on the weld/braze specimen materials and ensuring that the welding/brazing procedures are performed IAW with specific welding procedure specifications (WPS) and this instruction.

### 3. TRAINING PROGRAM.

3.1. **SSQ qualifying officials will complete the Air Force Material Command Structured On-the-Job Training (SOJT) trainer course #CTEMAS0000500SU, SSQ officials' course #CHPMAO0000400SU.** The SSQ qualifying official must be qualified and certified in all tasks for which he/she is appointed to qualify welders.

3.2. **Welders must pass the SOJT requirements, if applicable, which pertain to the certification to be obtained.** 402 MXSG welders must complete on-the-job training (OJT) requirements, which pertain to the certification to be obtained.

### 4. EXPERIENCE REQUIREMENTS.

4.1. **Individual skill and talent will determine the time it takes to become a qualified/certified welder.** The minimum number of hours for OJT will not be less than what is required in the appropriate SOJT package.

4.1.1. The SSQ qualifying official (or observing official for 402 MXSG) administering the training will advise the supervisor when he/she considers the candidate ready for qualification/certification.

4.1.2. The welding supervisor will make the final decision on when the candidate is ready to take the qualification/certification test.

4.1.3. The welding supervisor will certify the welder in the Training Scheduling System Production Acceptance Certification/Electronic Training Records (TSS-PAC/ETR) upon successful completion of the proficiency demonstration and the qualification test.

### 5. EXAMINATION PRACTICES.

5.1. **Examinations to verify the physical and technical qualifications of candidates will consist of a physical examination (visual acuity eye examination) and a practical proficiency examination.**

5.1.1. Physical requirements (visual acuity eye exam): SSQ qualifying officials, welders, welder operators, and brazers will have vision acuity of 20/30 or better in either eye or will be able to read the Jaeger No. 2 Eye Chart at 16 inches. Natural or corrected vision may be used to achieve eye test requirements. Vision should be checked annually and not to exceed 2 years maximum and administered by the local base medical facility.

5.1.2. The visual acuity eye exam will be documented on WR-ALC Form 5.

5.1.3. Practical proficiency examination: the practical examination will consist of a demonstration of proficiency by the candidate on tasks that are typical of those to be accomplished in the performance of his/her duties. The unique task requirements are described in Attachments **4 through 7**.

## 6. QUALIFICATION.

6.1. All personnel assigned to perform welding/brazing on aircraft, missile, engine, accessory, or any other aerospace components will be qualified prior to performing any production welding/brazing.

6.2. Qualification procedures, joint requirements, and unique process requirements are described in Attachments 4 through 7, TO 00-25-252 and America Welding Society Standard.

## 7. CERTIFICATION.

7.1. All personnel assigned to perform welding/brazing on aircraft, missiles, engine, accessory, or any other aerospace components will be certified after the qualification process and prior to performing any production welding/brazing.

7.1.1. 402 MXSG personnel assigned to weld on aircraft support equipment will be certified after the qualification process and prior to welding.

7.2. Certification packages are covered in Attachments 4 through 7.

7.3. Certification maintenance.

7.3.1. Welding supervisors are responsible for making sure employees receive the training necessary to enable performance of all tasks within their area of responsibility. Supervisors will review TSS-PAC/ETR automated listings for accuracy and completeness and ensure employees are scheduled for requalification prior to reaching "overdue" status. They also will rotate job assignments to ensure each employee maintains proficiency in each welding/brazing process.

7.3.2. Maintaining proficiency will be documented via AFTO Form 1, *Welding Proficiency Log*, at least every 180 days.

## 8. FAILED INITIAL CERTIFICATION/RECERTIFICATION ATTEMPT AND DECERTIFICATION.

8.1. Failed initial certification or recertification attempt is covered in Attachments 4 through 7.

8.2. Decertification for each welding/brazing process is covered in Attachments 4 through 7.

9. RECERTIFICATION. Recertification instructions for each welding/brazing process are described in Attachments 4 through 7.

## 10. RECORDS AND DOCUMENTATION.

10.1. **Welder.** The welder is responsible for the completion of the required documentation in Attachments 4 through 7.

10.2. **SSQ qualifying officials.** SSQ qualifying officials are responsible for the completion of the required documentation in Attachments 4 through 7.

10.2.1. SSQ qualifying officials will provide the complete package to the welding supervisor for review and brief the welding supervisor on the performance of the welder/brazer and the qualification test results.

**10.3. Welding supervisors.** Welding supervisors will:

10.3.1. Review all documentation required by Attachments **4 through 7**.

10.3.1.1. If the tests are successful, complete the certification package, and execute the certification process described above.

10.3.1.2. If the tests are unsuccessful, refer to Attachments **4 through 7** for further action.

10.3.2. After the group certifying official has signed DD Form 2757, maintain a current copy on file until the next certification cycle.

10.3.3. Maintain a current copy of WR-ALC Form 5 on file until the next visual acuity eye exam has been accomplished. This file must be readily available for audit purposes.

**10.4. Group Certifying Officials.** Group Certifying Officials will:

10.4.1. Review the welder's complete package, fill out block 20, and sign and date block 21 of DD Form 2757.

10.4.1.1. After the completion of **paragraph 10.4.1**, forward the completed SSQ Worksheet to the appropriate 402 CMXG/402 EMXG training/PAC office for input into Section II of the welder's TSS-PAC/ETR record.

10.4.2. Maintain the official certification folder for each welder currently certified to weld/braze within WR-ALC. The official certification folder will be maintained by the certifying official and will contain:

10.4.2.1. WR-ALC Form 5

10.4.2.2. SOJT Worksheet (for each group or process certified if applicable)

10.4.2.3. SSQ Checklist Initial Qualification (for each group or process certified)

10.4.2.4. SSQ Checklist Recertification (for each group or process certified)

10.4.2.5. DD Form 2757 (covering each group or process certified)

10.4.2.6. Specific forms identified in Attachments **4 through 7**, as applicable (see below):

10.4.2.6.1. WR-ALC Form 4, *Gas Tungsten Arc Welding (GTAW) Visual Inspection Report*

10.4.2.6.2. WR-ALC Form 1, *Rate Gyro Case Welder Operator Inspection/Test Record*

10.4.2.6.3. WR-ALC Form 2, *Manual Silver Brazer's Inspection/Test Record*

10.4.2.6.4. WR-ALC Form 3, *Resistance Welder Operator Inspection/Test Record*

10.4.2.6.5. WR-ALC Form 7, *GMAW/SMAW Visual Inspection Report/Test Record*

**10.5. Group training/PAC office.** The group training/PAC office will maintain a copy of the completed SSQ Worksheet for each welder currently certified with the date matching that in Section II of the TSS-PAC/ETR system.

10.5.1. TO 00-25-252 states the certifying facility will maintain records of training and certification/recertification of all qualified welders for the duration of their use (certification cycle). When the certifying official completes the weld package, he/she will forward a copy of the completed SSQ Worksheet to the appropriate group training/PAC manager (see **paragraph 10.4.1.1.**). The supporting documentation will be maintained in the official certification folder.

10.5.2. If requested, a copy of the following optional records may be kept by the welding supervisor to be maintained in the training record. The official date of training completion, TSS-PAC/ETR Section II, must be the date on the SSQ Worksheet, SOJT Worksheet (if applicable), Initial Qualification Worksheet, Recertification Worksheet, and WR-ALC Form 5.

## 11. SAFETY.

11.1. **Personal Protective Equipment (PPE).** All welding personnel will be required to wear proper PPE while performing qualification procedures per DAFMAN 91-203, *Air Force Occupational Safety Fire and Health Standards*.

11.2. **Health Risk Assessment.** All welding personnel are required to follow the guidelines set forth in the current health risk assessment (also known as “bio survey”) specific to the work area. including the utilization of local exhaust ventilation as required.

DAVID S. MILLER  
Brigadier General  
Commander

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFMCI 21-100V1, *Depot Maintenance Principals*, 22 January 2024

AFSCI 20-114, *Qualification of Nondestructive Inspection Personnel*, 25 January 2024

AWS B2.2, *Specification for Brazing Procedure and Performance Qualification*, 5 August 2016

AWS D17.1, *Specification for Fusion Welding for Aerospace*, 25 March 2024

AWS D17.2/D17.2M:2019, *Specification for Resistance Welding for Aerospace Applications*, 28 February 2018

DAFI 90-160, *Publications and Forms Management*, 14 April 2022

DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, 25 March 2022

National Aerospace Standard (NAS) 410, *NAS Certification & Qualification of Nondestructive Test Personnel*, September 2020

TO 00-25-252, *Aeronautical Equipment Welding*, 15 Aug 2022

***Prescribed Forms***

WR-ALC Form 1, *Rate Gyro Case Welder Operator Inspection/Test Record*

WR-ALC Form 2, *Manual Silver Brazer's Inspection/Test Record*

WR-ALC Form 3, *Resistance Welder Operator Inspection/Test Record*

WR-ALC Form 4, *Gas Tungsten Arc Welding (GTAW) Visual Inspection Report*

WR-ALC Form 5, *Welder Visual Acuity Test Record (Eye Exam)*

WR-ALC Form 7, *GMAW/SMAW Visual Inspection Report/Test Record*

***Adopted Form***

AF Form 1151, *Training Attendance and Rating*

AFTO Form 1, *Welding Proficiency Log*

DAF Form 847, *Recommendation for Change of Publication*

DD Form 2757, *Welding Examination Record*

***Acronyms***

**AFI**—Air Force Instruction

**AFMC**—Air Force Materiel Command

**AWS**—American Welding Society

**CMXG**—Commodities Maintenance Group

**DAFMAN**—Department of the Air Force Manual

**DD**—Department of Defense

**EMXG**—Electronics Maintenance Group

**GMAW**—Gas Metal Arc Welding

**GTAW**—Gas Tungsten Arc Welding

**IAW**—In Accordance With

**MXSG**—Maintenance Support Group

**OI**—Operating Instruction

**OJT**—On-the-job Training

**OPR**—Office of Primary Responsibility

**PPE**—Personal Protective Equipment

**RSW**—Resistance Spot Welding

**SAT**—Satisfactory

**SMAW**—Shielded Metal Arc Welding

**SOJT**—Structured On-the-Job Training

**SSQ**—Special Skill Qualification

**TO**—Technical Order

**TSS-PAC/ETR**—Training Scheduling System Production Acceptance Certification/Electronic Training Records

**UNSAT**—Unsatisfactory

**WPS**—Welding Procedure Specification

**WR-ALC**—Warner Robins Air Logistics Complex

### ***Terms and Definitions***

**Brazer:** An individual who performs a manual or semiautomatic brazing operation with a torch.

**Brazing:** A group of welding processes that produce coalescence of materials by heating them to the brazing temperature in the presence of a filler metal having a liquidus above 840°F (450°C) and below the solidus of the base metal—. The filler metal is distributed between the closely fitted faying surfaces of the joint by capillary action.

**Certification:** The act of determining, verifying, and attesting in writing to the qualification of personnel in conformance to specified requirements.

**Certifying Official:** According to T.O. 00-25-252, the certifying official will be the examining depot facility, the WR-ALC/CC, or designated representative who certifies the brazers, welders, and welder operators.

**Decertification:** The act of removing the certification status of an individual, which prevents that individual from performing the task(s) until satisfactory retraining and proficiency demonstration has been accomplished.

**Gas Metal Arc Welding (GMAW):** An arc welding process that uses an arc between a continuous filler metal electrode and the weld pool. The process is used with shielding from an externally supplied gas and without the application of pressure.

**Gas Tungsten Arc Welding (GTAW):** An arc welding process that produces coalescence of metals by heating them with an arc between a tungsten electrode (non—consumable) and the work pieces. Shielding is obtained from gas. Pressure may or may not be used and filler metal may or may not be used.

**Machine Welding:** Welding with equipment that performs the welding operation under the constant observation and control of a welder operator—. The equipment may or may not load and unload the work pieces.

**Nondestructive Inspection:** The act of determining the suitability of material or component for its intended purpose using techniques that do not affect its serviceability—.

**Peel Test or Pull Test:** A mechanical test in which the corners (or sides) of seam or spot—welded foil or sheet members are gripped and pulled apart to determine if the joint fails by delamination, by fracture of a cleaved surface, or by tearing of a button (plug) out of the parent material. Delamination, in contrast to fracture, is a sign of no fusion between the two adjacent members. A button or plug, which is pulled out of the removed member, is not necessarily equal in size to the cast nugget underlying it.

**Production Acceptance Certification (PAC) Program:** Certifies employees to perform and accept completion of assigned work—. PAC does this through systematic training, qualification, and certification of individuals.

**Qualification:** The documented evidence that an individual has completed required training, testing, proficiency demonstration, and possesses the required knowledge and skills to perform a function.

**Qualified:** Having complied with specific requirements.

**Radiography:** A permanent visible image on a recording medium produced by penetrating radiation passing through the material being tested.

**Recertification:** The formal act of requalification and documenting the performance of an individual to the level necessary to satisfy established certification criteria.

**Requalification:** The act of verifying knowledge and proficiency by testing and demonstrated abilities on a skill or specific group of tasks.

**Resistance Welding:** A group of welding processes that produces coalescence of the faying surfaces with the heat obtained from resistance of the work to the flow of the welding current in a circuit of which the work is a part and by the application of pressure.

**Shielded Metal Arc Welding (SMAW):** Also known as manual metal arc welding, flux shielded arc welding, or informally as stick welding, is a manual arc welding process that uses a consumable electrode coated in flux to lay the weld—. An electric current in the form of either alternating or direct current from a welding power supply is used to form an electric arc

between the electrode and the metals to be joined. As the weld is laid, the flux coating of the electrode disintegrates, giving off vapors that serve as a shielding gas and providing a layer of slag, both of which protect the weld area from atmospheric contamination.

**Special Skill Qualification (SSQ): Skills so specialized they require extensive technical knowledge and proficiency—.** SSQ is a prerequisite to PAC task certification.

**SSQ Disqualification: The act of removing the SSQ qualification status of an individual when requalification requirements are not maintained—.** PAC task decertification follows SSQ disqualification.

**SSQ Proficiency Checklist: Identifies the standards and step—**by-step documentation of SSQ qualification/requalification requirements.

**SSQ Qualifying Official: An individual authorized in writing by the group commander/director to witness and evaluate skill qualifications of welding candidates using appropriate SSQ guides/checklists—.**

**SSQ Requalification:** The act of verifying SSQ knowledge and proficiency by testing and demonstrating abilities on a skill or specific group of tasks.

**Weld:** A localized coalescence of metals or nonmetals produced either by heating the materials to the welding temperature, with or without the application of pressure, or by the application of pressure alone, with or without the use of filler metal.

**Welder:** An individual who performs a manual or semiautomatic welding operation, when used in this document, refers to welder, welder operator and brazer.

**Welder Operator and Welding Operator:** One who operates adaptive control, automatic, mechanized, or robotic welding equipment. This includes spot welding machines.

**Attachment 2****INSTRUCTIONS FOR COMPLETION OF DD FORM 2757, WELDING  
EXAMINATION RECORD**

**Figure A2.1. Instructions For Completion of DD Form 2757, Welding Examination Record.**

## (INSTRUCTIONS ARE SPECIFIC FOR WR-ALC)

## SECTION I

Block 1 APPLICANT NAME: Name of candidate being certified

Block 2 RANK/GRADE: Welder's/welder operator's/brazer's pay grade (i.e., WG-7/8/9/10/11)

Block 3 WELDER IDENTIFICATION: Welder's identification number

Block 4 ORGANIZATION/UNIT ADDRESS: Candidate's unit and unit address

Block 5 WELDING SCHOOL/SOURCE OF TRAINING: 402 CMXG, 402 EMXG, or 402 MXSG

Block 6 DATE OF LAST EYE EXAM: Date of last eye exam

Block 7 QUALIFICATION GROUP: Metal groups submitted for certification

Block 8 WELDING PROCESS: Whatever process certifying (i.e., GTAW or Torch Brazing or Resistance Welding)

Block 9 WELDING PROCEDURE USED: WPS Number from TO 00-25-252 (Note: Resistance Spot Welding enter "RSW")

Block 10 SIGNATURE OF APPLICANT: Self-explanatory

Block 11 SIGNATURE OF OBSERVING OFFICIAL: Signature of the SSQ official who observed the certification weld

## SECTION II

Block 12 WPS #: Enter WPS number from block 9.

Block 13/14 TEST/RETEST SPECIMEN: Will be marked either satisfactory (SAT) or unsatisfactory (UNSAT), IAW the results of the examination, by the SSQ official who observed the certification weld. (The SSQ official will write the test type in block 15, then sign adjacent to it).

Block 15 REMARKS: In addition to the signatures, the SSQ official will record the cause of any unsatisfactory conditions.

Block 18 STATUS OF APPLICANT: select Qualified or Not Qualified.

Block 19 SIGNATURE OF TEST OFFICIAL: Apply signature.

Block 20 ORGANIZATION AND ADDRESS: Organization (i.e., 402 CMXG, 402 EMXG, or 402 MXSG).

Block 21 SIGNATURE OF CERTIFYING OFFICIAL: Group certifying official who certifies the welder/ welder operator/brazer will enter signature and record the effective date of certification.

**Attachment 3****INSTRUCTIONS FOR COMPLETION OF WR-ALC FORM 5 WELDER VISUAL ACUITY TEST RECORD (EYE EXAM)****Figure A3.1. Instructions For Completion of WR-ALC Form 5 Welder Visual Acuity Test Record (Eye Exam).**

The welder/brazer will hand carry the form to the Occupational Medical Clinic in building 207 and present the form to medical personnel administering the eye exam. The medical personnel will complete the vision examination portion of the form using the guidance given in the upper portion of this form. The welder/brazer will return the form to his/her supervisor. If the results are acceptable, the supervisor will keep a copy for the welder's/brazer's shop file and forward a copy to the group certifying official for the official certification folder. If the results do not meet the requirements of AWS D17.1, AWS D17.2, AWS B2.2, and T.O. WP 005 02. The welder/brazer will not be allowed to perform welding/brazing until vision has been corrected by visual aids and the welder/brazer has passed the eye exam. Once the welder/brazer has passed the eye exam, the welder/brazer's supervisor will maintain a copy of the acceptable form and forward a copy to the group certifying official (if different from supervisor) for inclusion into the official certification folder.

**Attachment 4****QUALIFICATION OF WELDING PERSONNEL GAS TUNGSTEN ARC WELDING  
(GTAW) (402 CMXG, 402 EMXG AND 402 MXSG)****A4.1. PURPOSE.**

A4.1.1. A directive is required to specify the technical details of qualification testing of welding personnel for certification/recertification required IAW TO 00-25-252.

**A4.2. SCOPE.** See TO 00-25-252 for requirements on GTAW certification.

A4.2.1. CMXG and EMXG welders will be required to have Level II certification in GTAW using the 6G and 3F coupon for each metal group required.

A4.2.2. MXSG welders will be required to have Level I certification in GTAW using 2G, 3G, and 3F coupons.

A4.2.3. The welding supervisor will ensure the candidate has completed all prerequisite training and has a current eye exam. The welding supervisor will review all documentation for correctness and discuss the candidate's performance with the SSQ qualifying official.

A4.2.4. SSQ qualifying official training requirements. (No required SSQ's for 402 MXSG)

A4.2.5. Must complete both the AFMC SOJT trainer course #CTEMAS0000500SU and SSQ officials' course #CHPMAO0000400SU.

A4.2.6. Must pass the appropriate SOJT course(s) applicable to the metal groups the candidate is seeking qualification.

A4.2.7. Must be appointed in writing.

A4.2.8. Welding candidate training requirements. Welding candidates seeking certification must pass the appropriate SOJT training (if applicable) prior to being tested for qualification if applicable.

**Figure A4.1. Documentation.****Documentation**

Required weld package for initial qualification:

SOJT, Training Work Sheet (if applicable)

SSQ Qualification Checklist (for each group) No required SSQ's for 402 MXSG

WR-ALC Form 5 (current)

WR-ALC Form 4 (for each group)

DD Form 2757 (covering all groups)

Weld specimen

Required associated documentation for requalification:

SSQ Qualification Checklist (for each group) No required SSQ's for 402 MXSG

WR-ALC Form 5 (current)

WR-ALC Form 4 (for each group)

DD Form 2757 (covering all groups)

Weld specimen

Required associated documentation listed below for requalification after failed attempt to requalify:

SOJT, Training Work Sheet (if applicable)

SSQ Qualification Checklist (for each group) No required SSQ's for 402 MXSG

WR-ALC Form 5 (current)

WR-ALC Form 4 (for each group)

DD Form 2757 (covering all groups)

Weld specimen

**Attachment 5**  
**QUALIFICATION OF MANUAL BRAZERS**  
**(402 CMXG, 402 EMXG, and 402 MXSG)**

**A5.1. PURPOSE.**

A5.1.1. A directive is required to specify the technical details of qualification testing of manual brazers for certification/recertification required IAW TO 00-25-252.

**A5.2. SCOPE.**

A5.2.1. See TO 00-25-252 WP005 for required certification.

A5.2.2. No required SSQ's for 402 MXSG

**Figure A5.1. Documentation.****Documentation**

Required brazer package for initial qualification:

SOJT, Training Work Sheet (if applicable)

SSQ Qualification Checklist (No required SSQ's for 402 MXSG)

WR-ALC Form 5 (current)

WR-ALC Form 2

DD Form 2757

Silver braze specimens

Required associated documentation for requalification:

SSQ Qualification Checklist (No required SSQs for 402 MXSG)

WR-ALC Form 5 (current)

WR-ALC Form 2

DD Form 2757

Silver braze specimens

Required associated documentation for requalification after failed attempt to requalify:

SOJT Training Work Sheet (if applicable)

SSQ Qualification Checklist (No required SSQ's for 402 MXSG)

WR-ALC Form 5 (current)

WR-ALC Form 2

DD Form 2757

Silver braze specimens

**Attachment 6****QUALIFICATION PROCEDURE FOR RESISTANCE WELDING MACHINE  
OPERATORS****(402 CMXG)****A6.1. PURPOSE.**

A6.1.1. A directive is required to specify the technical details of qualification testing of resistance welder operator for certification/recertification required IAW TO 00-25-252.

**A6.2. SCOPE.**

A6.2.1. See TO 00-25-252, section 32, for the required certifications process. The qualification period for this process is 1 year.

**Figure A6.1. Documentation.****Documentation**

Required weld package for initial qualification:

SOJT, Training Work Sheet (if applicable)

SSQ Qualification Checklist

WR-ALC Form 5 (current)

WR-ALC Form 3

DD Form 2757

For a satisfactory RSW performance test, produce 10 welds: Five (5) each of 0.063 inch and Five (5) each of 0.032 inch.

Required associated documentation listed below for requalification:

SSQ Qualification Checklist

WR-ALC Form 5 (current)

WR-ALC Form 3

DD Form 2757

For a satisfactory RSW performance test, produce 10 welds: Five (5) each of 0.063 inch and Five (5) each of 0.032 inch.

Required associated documentation listed below for requalification after failed attempt to requalify:

SOJT, Training Work Sheet (if applicable)

SSQ Qualification Checklist

WR-ALC Form 5 (current)

WR-ALC Form 3

DD Form 2757

For a satisfactory RSW performance test, produce 10 welds: Five (5) each of 0.063 inch and Five (5) each of 0.032 inch.

**Attachment 7****QUALIFICATION OF WELDING PERSONNEL****GMAW & SMAW****(402 MXSG, 402 CMXG, and 402 EMXG)****A7.1. PURPOSE.**

A7.1.1. A directive is required to specify the technical details of qualification testing of welding personnel for certification/recertification required IAW TO 00-25-252.

A7.1.2. No SSQ will be required for 402 MXSG.

**A7.2. QUALIFICATION PROCEDURES.** See TO 00-25-252 for GMAW and SMAW certification requirements.

A7.2.1. CMXG and EMXG welders will be required to have certification in GMAW & SMAW using the 1G and 2F coupon for each metal group required.

**A7.2.2. MXSG welders will be required to have certification in SMAW using the 6G, with 4” pipe coupon for each metal group required.**

**A7.2.3. MXSG welders will be required to have certification in GMAW using the 2G, 3G, and 3F sheet coupons.**

A7.2.4. Welding candidate training requirements. Welding candidates seeking certification must pass the appropriate SOJT training (if applicable) prior to being tested for qualification.

**Figure A7.1. Documentation.**

**Documentation**

Required weld package for initial qualification:

WR-ALC Form 5 (current)

WR-ALC Form 7

DD Form 2757 (covering all groups)

Weld specimen

Required associated documentation for requalification:

WR-ALC Form 5 (current)

WR-ALC Form 7

DD Form 2757 (covering all groups)

Weld specimen

Required associated documentation listed below for requalification after failed attempt to requalify:

WR-ALC Form 5 (current)

WR-ALC Form 7

DD Form 2757 (covering all groups)

Weld specimen