

**BY ORDER OF THE COMMANDER
EDWARDS AIR FORCE BASE**



**EDWARDS AIR FORCE BASE
INSTRUCTION 91-101**

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Safety

**NUCLEAR CERTIFIED
EQUIPMENT MANAGEMENT AND
DULL SWORD REPORTING
PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFI 63-125 AFMC Supplement, *Nuclear Certification Program*, AFD 91-1, *Nuclear Weapons and System Surety*, and AFMAN 91-221, *Weapons Safety Investigations and Reports*. It defines responsibilities and establishes local procedures to identify and monitor Nuclear Certified Equipment (NCE) and establishes local procedures for reporting suspected NCE deficiencies (flagword) "DULL SWORD" to the 412th Test Wing Safety Office (412 TW/SE). This instruction applies to all military, civilian and contractor personnel in units associated under the 412 TW that own, handle and/or possess Air Force NCE assets, including those NCE items on loan to a test/program office but not necessarily assigned in the supply/equipment management system. This instruction does not apply to Air Force Reserve Command (AFRC) and Air National Guard (ANG) units. Refer recommended changes and questions about this publication to the 412 TW/SE using the Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Form 847s through the appropriate chain of command. This instruction does not require tiers at or below the Wing level. This publication may not be supplemented or further implemented/extended. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

1. General. Reinvigoration of the Air Force nuclear mission is a high priority. Reporting malfunctions, failures and abnormalities involving NCE in use at non-nuclear units is one aspect of the nuclear reinvigoration effort. The DULL SWORD nuclear deficiency report provides a means of trend analysis to identify issues that could affect the safety and reliability of an NCE asset for use in nuclear operations. This instruction serves to define responsibilities and establishes local procedures to identify and monitor NCE, as well as procedures for reporting suspected NCE deficiencies to the wing safety office for investigation and up-channel reporting as warranted. Furthermore, when a product quality deficiency report is submitted involving a nuclear certified asset, the unit will also complete an EDWARDSAFB Form 6005, *Potential DULL SWORD*. The 412 TW/SE will determine if the product quality deficiency also warrants DULL SWORD reporting.

1.1. NCE is defined as peculiar (i.e., system specific) and common specialized or non-specialized support equipment whose design meets applicable design criteria and is nuclear certified IAW the nuclear certification process outlined in AFI 63-125, *Nuclear Certification Program*, and identified on the Master Nuclear Certification List (MNCL).

1.2. NCE consists of support equipment which is nuclear certified. NCE includes vehicles, aerospace ground equipment, munitions material handling equipment, facility lifting and suspension equipment, test equipment, automatic test equipment (when used in a support function), organizational, field, and depot support equipment and related computer program software.

1.3. NCE does not include aircraft components and suspension equipment (e.g., pylons, rotary launchers, bomb racks). These system components and items are referred to as Nuclear Certified Items (NCI). NCI should not be confused as NCE. NCI deficiencies will be reported in accordance with DULL SWORD procedures in AFMAN 91-221, *Weapons Safety Investigations and Reports*.

1.4. Tie-down chains, adjusters, straps, load binders and shackles, etc., used for weapon restraint during transportation and individual bomb roller assemblies are excluded from NCE management program surveillance and documentation requirements.

1.5. Aircraft cargo pallets (463L), model number HCU-6/E, part number 50018-001, NIIN 00-820-4896 are excluded from NCE management program surveillance and documentation requirements.

2. Responsibilities.

2.1. 412th Test Wing NCE Liaison (412 TW/SEW) will:

2.1.1. Provide guidance to unit NCE monitors and perform staff assistance visits as requested.

2.1.2. Verify group/unit NCE listings are validated quarterly.

2.1.3. Conduct surveys of all units with assigned NCE. Surveys will be documented on an annual basis to ensure legibility of identification information (i.e., data plate, information plate, appropriate markings, etc.) and that the information matches the MNCL listing.

2.1.4. Notify Air Force Test Center (AFTC) NCE Liaison by memorandum not later than 15 August of completion of the annual surveys, including any noted discrepancies.

Additionally, discrepancies will be reported to the appropriate program office with engineering authority for the item or system in question and via the MNCL discrepancy reporting system.

2.1.5. Serve as the installation DULL SWORD program manager.

2.1.6. Investigate and submit reportable NCE malfunctions, failures and abnormalities as DULL SWORDS to the Air Force Safety Center through the Air Force Safety Automated System (AFSAS).

2.2. Unit Commanders/Directors with NCE assigned will:

2.2.1. Appoint primary and alternate unit NCE monitors possessing at least a 5-skill level to serve as liaisons to the 412th Test Wing Weapons Safety Office (412 TW/SEW). Personnel serving as Additional Duty Weapons Safety Representatives (ADWSRs) may be designated as NCE monitors at the commanders' discretion.

2.2.2. Re-appoint NCE monitors within 30 days prior to separation, PCS or deployments in excess of 30 days.

2.2.3. Ensure NCE monitors complete the *NCE Users Course* CBT at the time of appointment and annually thereafter. The course is located on the Air Force Nuclear Weapons Center, Kirtland AFB website address: https://wwwmil.nwc.kirtland.af.mil/NCEMNCL/NCE_lmsFrameSet.html.

2.2.4. Certify unit NCE validation listing quarterly in accordance with AFI 63-125, AFMC supplement, guidance memorandums, and this instruction.

2.2.4.1. In groups with multiple squadrons owning NCE, group commanders will appoint primary and alternate NCE monitors at the group level. In these cases, assigned monitors will consolidate squadron listings into one to be certified by the group commander.

2.3. Unit NCE Monitors will:

2.3.1. Complete *NCE Users Course* CBT at the time of appointment and annually thereafter. The course is located on the Air Force Nuclear Weapons Center, Kirtland AFB website address: https://wwwmil.nwc.kirtland.af.mil/NCEMNCL/NCE_lmsFrameSet.html.

2.3.2. Forward the completed training certificate and signed unit appointment letter to 412 TW/SEW at 412tw.sew@us.af.mil.

2.3.3. Identify, maintain and report serviceability status of all NCE owned/ possessed by their unit. Identify unit NCE by utilizing MNCL. The MNCL website is located at <https://wwwmil.nwc.kirtland.af.mil/MNCL/index.cfm>.

2.3.3.1. If both the owning unit and the possessing unit are located at Edwards AFB, the owning unit will be responsible for validating and reporting on all NCE listed on their unit CA/CRL equipment accounts (or equivalent document).

2.3.4. Compile unit NCE validation lists in accordance with AFI 63-125, AFMC supplement and/or guidance memorandums and submit to the owning commander for

certification (Attachment 2). Once certified, a copy of the validation list must be sent to 412 TW/SEW at 412tw.sew@us.af.mil no later than the 15th of the month following the validation period.

2.3.4.1. Quarterly validation periods are as follows: 1st Quarter – October through December; 2nd Quarter – January through March; 3rd Quarter – April through June; 4th Quarter – July through September.

2.3.5. Report all NCE malfunctions, failures and abnormalities meeting criteria outlined in Section 3 of this instruction to 412 TW/SEW utilizing the EDWARDSAFB Form 6005.

3. DULL SWORD Conditions.

3.1. Refer to AFMAN 91-221 for complete criteria.

3.1.1. Stability, steering or brake system problems that affect the safe steering, stopping, towing or holding in park of a tow or transport vehicle (cargo, loading or lifting). Do not include dents, flat tires, corrosion or electrical malfunctions and failures resulting from fair wear and tear.

3.1.2. Defects or failures in vehicle structural members (including the pintle hooks and mounting structure, fifth wheels) that support the load or transmit the towing or braking force.

3.1.3. Inadequate restraint of loads attributed to trailer tie down points or tie down patterns.

3.1.4. Unsafe condition or improper operation of the hydraulic, mechanical and structural components of lift vehicles (e.g., forklifts and K-loaders) resulting in unresponsive operation, uncontrolled raising or lowering or improper cargo restraint not to include fair wear and tear.

3.1.5. Exceeding the rated load-capacity of any equipment/vehicle listed in the MNCL.

3.1.6. Damage, malfunction failure or anomaly involving test equipment listed in the MNCL.

4. DULL SWORD Reporting:

4.1. In the event a malfunction occurs with NCE, the equipment user is responsible for initiating the EDWARDSAFB Form 6005.

4.2. Within 24 hours of the NCE malfunction, the NCE user is responsible for submitting the EDWARDSAFB Form 6005 to the owning organization; courtesy copies will be sent to the user's unit NCE monitor, unit/squadron supervision and 412 TW/SEW. Email notifications may be accepted with EDWARDSAFB Form 6005 attached.

4.2.1. Courtesy copy the Wing Weapons Manager/Weapons Standardization Superintendent (412 MXG/MXW) if weapons loading NCE is involved. Email notifications may be accepted with EDWARDSAFB Form 6005 attached.

4.3. Within 24 hours of receipt of equipment, the owning organization will troubleshoot the NCE malfunction to determine the cause and severity of the malfunction. The owning

organization will update the EDWARDSAFB Form 6005 with the findings and planned repairs. Notify 412 TW/SEW as soon as the malfunction is isolated.

4.3.1. The 412 TW/SEW will utilize the information from the owning organization and criteria outlined in AFMAN 91-221 to determine if the malfunction warrants a DULL SWORD report. DULL SWORD reports will be input into AFSAS for MAJCOM reporting within 15 days of occurrence in accordance with AFMAN 91-221 Table 6.2, *Report Submission Schedule for Flagwords*.

4.4. The owning organization is responsible for submitting the updated EDWARDSAFB Form 6005 to their section NCE monitor, flight supervision, squadron supervision, quality assurance and group NCE monitor for review.

4.4.1. The owning organization will determine if a Product Quality Deficiency Report (PQDR) will be warranted for the malfunction. The PQDR will be processed in accordance with the owning organization's group policy.

4.5. The quality assurance section or group NCE monitor will forward the completed EDWARDSAFB Form 6005 to 412 TW/SEW for review and filing.

4.6. The 412 TW/SEW will forward the completed EDWARDSAFB Form 6005 to the owning organization for filing in the NCE program management binder.

MICHAEL T. BREWER, Brigadier General, USAF
Commander

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

AFI 63-125, *Nuclear Certification Program*, 8 August 2012

AFI 63-125, AFMC Supplement, *Nuclear Certification Program*, 14 August 2013

AFI 33-360, *Publications and Forms Management*, 25 September 2013

AFMAN 33-363, *Management of Records*, 1 March 2008

AFMAN 91-221, *Weapons Safety Investigations and Reports*, 8 November 2010

AFPD 91-1, *Nuclear Weapons and System Surety*, 13 December 2010

Prescribed Form

EDWARDSAFB Form 6005, *Potential DULL SWORD*

Adopted Form

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

ADWSR—Additional Duty Weapons Safety Representative

AF—Air Force

AFI—Air Force Instruction

AFB—Air Force Base

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSAS—Air Force Safety Automated System

AFTC—Air Force Test Center

ANG—Air National Guard

MNCL—Master Nuclear Certification List

NCE—Nuclear Certified Equipment

NCI—Nuclear Certified Items

PQDR—Product Quality Deficiency Report

Attachment 2

SAMPLE UNIT NUCLEAR CERTIFIED EQUIPMENT LISTING

Figure A2.1. Sample Unit Nuclear Certified Equipment Listing

| MEMORANDUM FOR 412 TW/SEW | | | | | | | | Date |
|---|----------------------------|------------------------------|-----------|-------------|------------|-------------|-------------|------|
| FROM: (Owning Commander) | | | | | | | | |
| SUBJECT: 412TW/XXX Nuclear Certified Equipment (NCE) Listing | | | | | | | | |
| <p>1. This certifies that the XXX XXX/XXXX NCE listing quarterly validation occurred on XX XXX XX. All equipment/items were referenced to the Master Nuclear Certification List (MNCL) located at https://wwwmil.nwc.kirtland.af.mil/MNCL/index.cfm. The MNCL is the sole authority for determining nuclear certification status.</p> | | | | | | | | |
| WEAPON SYSTEM | NOMEN-CLATURE | HARDWARE TYPE | MODEL# | NIIN | PART# | CERT STATUS | LAST UPDATE | Qty |
| Non-Specialized | Adapter Assembly, Fork | Munitions Handling Equipment | MHU-101/E | 00-943-8306 | 65E35468-1 | Nuclear | XX Apr XX | X |
| Non-Specialized | Truck, Tractor, 24,000 GVW | Truck, Tractor | 1750 | 01-022-8438 | None | Nuclear | XX Apr XX | X |
| <p>2. DISCLOSURE STATEMENT: This information is furnished upon the condition that it will not be released to another nation without the specific authority of the Department of the Air Force of the United States; it will be used for military purposes only; individual or corporate rights originating in the information, whether patented or not, will be respected; recipient will report promptly to the United States any known or suspected compromise; and the information will be provided substantially the same degree of the security afforded it by the Department of Defense of the United States.</p> | | | | | | | | |
| <p>3. Types and quantities of NCE equipment have been coordinated with the users.</p> | | | | | | | | |
| <p>4. Direct questions to the XXXXXX Flight NCE Monitor at XXX-XXXX.</p> | | | | | | | | |
| <p>JOHN Q. PUBLIC, Lt Col, USAF Commander</p> | | | | | | | | |
| <p>TEMPLATE MAY BE EDITED AS NEEDED BY UNIT NCE MONITORS</p> | | | | | | | | |