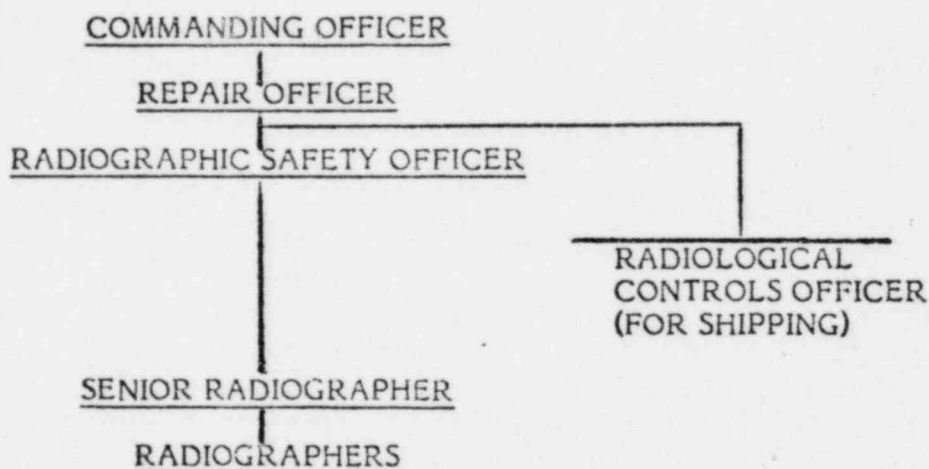


REPDEPTINST 9900.5  
(06)  
4 April 1980

10 CFR PART 71 QA PROGRAM  
FOR INDUSTRIAL RADIOGRAPHY LICENSEES

1. Organization

The final responsibility for the Quality Assurance (QA) Program for Part 71 Requirements rests with CANOPUS. Design and fabrication shall not be conducted under this QA program. The program is implemented using the following organization:



The Radiographic Safety Officer (RSO), is responsible for overall administration of the program, training and certification, document control and auditing.

The Radiographers are responsible for handling, storing, inspecting, testing and operating status and record keeping.

The Radiological Controls Officer is responsible for shipping radiographic sources.

2. Quality Assurance Program

The management of CANOPUS establishes and implements this QA Program. Training prior to engagement, for all QA functions, is required according to written procedures. QA Program revisions will be made according to written procedures with management approval. The QA Program will ensure that all defined QA procedures, engineering procedures and specific provisions of the package design approval are satisfied. The QA Program will emphasize control of the characteristics of the package which are critical to safety.

The Radiographic Safety Officer shall ensure that all radioactive material shipping packages are designed and manufactured under a QA Program approved by Nuclear regulatory Commission for all packages designed or fabricated after the effective date of the QA Program. This requirement can be satisfied by receiving a certification to this effect from the manufacturer.

8006020 579

Enclosure (1)

3. Document Control

All documents related to a specific shipping package will be controlled through the use of written procedures. All document changes will be performed according to written procedures approved by management.

The Radiographic Safety Officer shall insure that all QA functions are conducted in accordance with the latest applicable changes to these documents.

4. Handling, Storage and Shipping

Written safety procedures concerning the handling, storage and shipping of packages for certain special form radioactive material will be followed. Shipments will not be made unless all tests, certifications, acceptances and final inspections have been completed. Work instructions will be provided for handling, storage and shipping operations.

Radiography personnel shall perform the critical handling and storage. Shipping operations shall be supervised by the Radiological Controls Officer.

5. Inspection, Test and Operating Status

Inspection, test and operating status of packages for certain special form radioactive material will be indicated and controlled by written procedures. Status will be indicated by tag, label, marking or log entry. Status of non-conforming parts or packages will be positively maintained by written procedures.

Radiography personnel shall perform the regularly required inspections and tests in accordance with written procedures. The Radiographic Safety Officer shall ensure that these functions are performed.

6. Quality Assurance Records

Records of package approval (including references and drawings), procurement, inspections, tests, operating logs, audit results, personnel training and qualifications and records of shipments will be maintained. Descriptions of equipment and written procedures will also be maintained.

These records will be maintained in accordance with written procedures. The records will be identifiable and retrievable. A list of these records, with their storage locations, will be maintained by the Radiographic Safety Officer.

7. Audits

Established schedules of audits of the QA Program will be performed using written check lists. Results of audits will be maintained and reported to management. Audit reports will be evaluated and deficient areas corrected. The audits will be dependent on the safety significance of the activity being audited, but each activity will be audited at least once per year. Audit reports will be maintained as part of the Quality Assurance records. Members of the audit team shall be assigned by the Repair Officer. Personnel assigned responsibility for safe operation of the program will not be utilized as members of the audit team.

QA PROGRAM IMPLEMENTING INSTRUCTIONS

1. Scope. Design, fabrication, repair or modification of shipping packages for radioactive material associated with radiography shall not be conducted by CANOPUS.
2. Responsibilities. In addition to the responsibilities identified in enclosure (1), the Radiological Controls Officer is responsible for the shipping of all radioactive materials.
3. Training
  - a. Radiographic Safety Officer: shall be trained in accordance with the course of instruction given at the NDT School, San Diego, California, or at the Naval Nuclear Power Unit at Port Hueneme, California and this instruction (A-4J-0017 or A-4J-0016 respectively).
  - b. Radiographers: shall be trained in accordance with course of instruction (A-701-0012) given at the NDT School, San Diego, California and this instruction.
  - c. Radiological Controls Shipping Personnel: shall be trained in accordance with Article 103 of NAVSHIPS 389-0153 (Radiological Controls), Title 10 CFR, Parts 49 and 71, COMSUBLANTINST 9900.8A.
4. Document Control. All documents related to a specific shipping package will be controlled in accordance with COMSUBLANTINST 9900.8A.
5. Handling, Storage and Shipping. Safety procedures concerning the handling storage and shipping of packages and associated work instruction will be in strict compliance with COMSUBLANTINST 9900.8A and REPDEPTINST 9900.2.
6. Inspection, Test and Operating Status. REPDEPTINST 9900.2 and Title 10 Part 71 specify the inspection and test requirements and the required operating status of radioactive material shipping packages. Personnel qualified as radiographers on board CANOPUS shall perform required inspections and tests in accordance with these directives.
7. Quality Assurance Records. A list and locations of required records are to be in accordance with Appendix A to this enclosure.
8. Audits. Audits of the QA Program will be performed using a prepared audit plan provided by the QA Officer (Appendix B to this enclosure). Audit reports will be evaluated and deficient areas corrected. All areas will be audited at least annually. The audit team shall consist of Two Repair Department Officers appointed by the Repair Officer. Audit members will forward a written report of discrepancies noted during the audit to the Commanding Officer via the Radiographic Safety Officer (RSO) and the Repair Officer. Audit team members will have no direct responsibilities in the areas being audited. A file of audit results and corrective action shall be maintained by the RSO.

QUALITY ASSURANCE RADIOGRAPHIC RECORDS AND STORAGE

<u>Record or Document</u>	<u>Location</u>
a. Training of Radiographers	NDT Officer files
b. Training of RADCON Shipping Personnel	RADCON Division files and individual Service Records
c. Shipping Container Certification	NDT files (as relieved)
d. Written Safety proceduress	NDT Officer files (REPDEPTINST 9900.2)
e. Record of Tests and Inspections of containers prior to shipping	NDT Office files and RADCON Division files
f. Written procedures for shipping	RADCON Division files N/S 389-0153 and Title 10 CFR, Part 49
g. Written procedures for handling and stowage	NDT Office REPDEPTINST 9900.2
h. Records of Operational Status	NDT Office files
i. Non-conformance Records	NDT Office files
j. Audit Schedules and Results	NDT Office files
k. Shipping Documents	RADCON Division files
l. Audit Checklist	NDT Office files
m. Written procedures for changes to QA Manual	Navy Correspondence Manual

QUALITY ASSURANCE AUDIT PLAN FOR  
RADIOGRAPHIC SOURCES AND ASSOCIATED  
RECORDS

1. INTRODUCTION

The attributes contained in this plan were developed from an overall review of the reference specifications and as such cannot reflect all of the requirements of the specifications. In general, the attribute questions have been worded in such a manner that a negative answer will indicate a specification violation. Determination of a deficiency or lack of compliance should be written as a finding at the time of discovery or in the remarks section of the audit sheet.

<u>ATTRIBUTE</u>	<u>SAT</u>	<u>UNSAT</u>	<u>REMARKS</u>
------------------	------------	--------------	----------------

A. ORGANIZATION AND TRAINING

1. Are there a sufficient number of qualified personnel in all required NEC's for the Non Destructure testing Laboratory?
2. Have the duties and responsibilities of personnel involved been clearly defined?
3. Does the Quality Assurance Program provide for a review of all Quality Assurance records (at least annually)?
4. Does the Quality Assurance Division have a qualified Radiographic Safety Officer that is a graduate of the RSO course A-4J-0016?
5. Have all Radiogioghers been trained in accordance with the course of instruction given at the NDT School, San Diego California?

ATTRIBUTE

SAT

UNSAT

REMARKS

6. Have all Radiological Controls Shipping Personnel been trained in accordance with Article 108 of NAVSHIP 389-0153, Title 10 CFR parts 49, 71, and COMSUBLANTINST 9900.8A?

7. Is documentation being properly maintained to verify the qualification of personnel addressed in questions 4, 5 and 6 above?

B. SHIPPING AND DOCUMENT CONTROL

1. Are all documents related to shipping packages being controlled and maintained in accordance with COMSUBLANTINST 9900.8A?

2. Are all safety procedures concerning the handling, storage, and shipping of radiographic sources adhered to?

3. Are all shipping containers being inspected in accordance with title 10, Code of Federal Regulations, part 71?

4. Are records being maintained in a neat, orderly manner and in the prescribed locations listed in Appendix (A) of enclosure (2) to this instructive?

5. Are there any suggestions that could be incorporated into the present program to improve the program?