

POGUE INDUSTRIES INCORPORATED

5200 Manchester  
St. Louis, Mo. 63110

Radiation Safety and Control Program

10.6.A

Radiation Safety Control and Organization

8510040314 850909  
REG3 LIC30  
24-24541-01 PDR

: Rev. :	Signature	: Date :
:	:	:
:	:	:
:	:	:
:	:	:
:	:	:
:	:	:
:	:	:
0	President <i>Michael Pogue</i>	7/08/85:
0	Q.A. Manager <i>Glenn A. Burgess</i>	6/24/85:
0	prepared by <i>Michael Pogue</i>	3/04/85:

TABLE OF CONTENTS

Procedure Program Plan

- 1.0 OBJECTIVE
- 2.0 APPLICATION
- 3.0 PROCEDURE
  - 3.1 Radiation Safety and Control Program
  - 3.2 Organization

POGUE INDUSTRIES INCORPORATED

## 1.0 OBJECTIVE

- 1.1 This plan defines the Radiation Safety and Control Program of PII. The elements and methods described herein are based on the Nuclear Regulatory Commission Federal Regulations 10CFR20, 10CFR21, 10CFR30, 10CFR34, and radiography regulations of "Agreement States".

## 2.0 APPLICATION

- 2.1 Pogue Industries Incorporated, hereinafter referred to as PII.

## 3.0 PROCEDURE

- 3.1 The Radiation Safety and Control Program described herein and the Radiation Safety Procedures in this manual outline the basic methods and practices and delineate the organizational elements used by PII to assure the effectiveness of Radiation Safety effort.
- 3.1.1 This Radiation Safety and Control Program is an integrated systems approach to operations, emergency, training, qualifications, organizations, documentation, and audit conditions in PII.
- 3.1.2 Each procedure covers a specific area of Radiation Safety as identified by its title. The controlling documents for Radiation Safety at PII are the following procedure:
1. Operating and Emergency System Procedure
  2. Operating and Emergency Procedure
  3. Maintenance Procedure
  4. Calibration of Radiation Survey Instruments Procedure
  5. Source Shipping/Receiving/Transfer/Disposal Instruction Procedure
  6. Source Changing Procedure
  7. Leak Testing Procedure

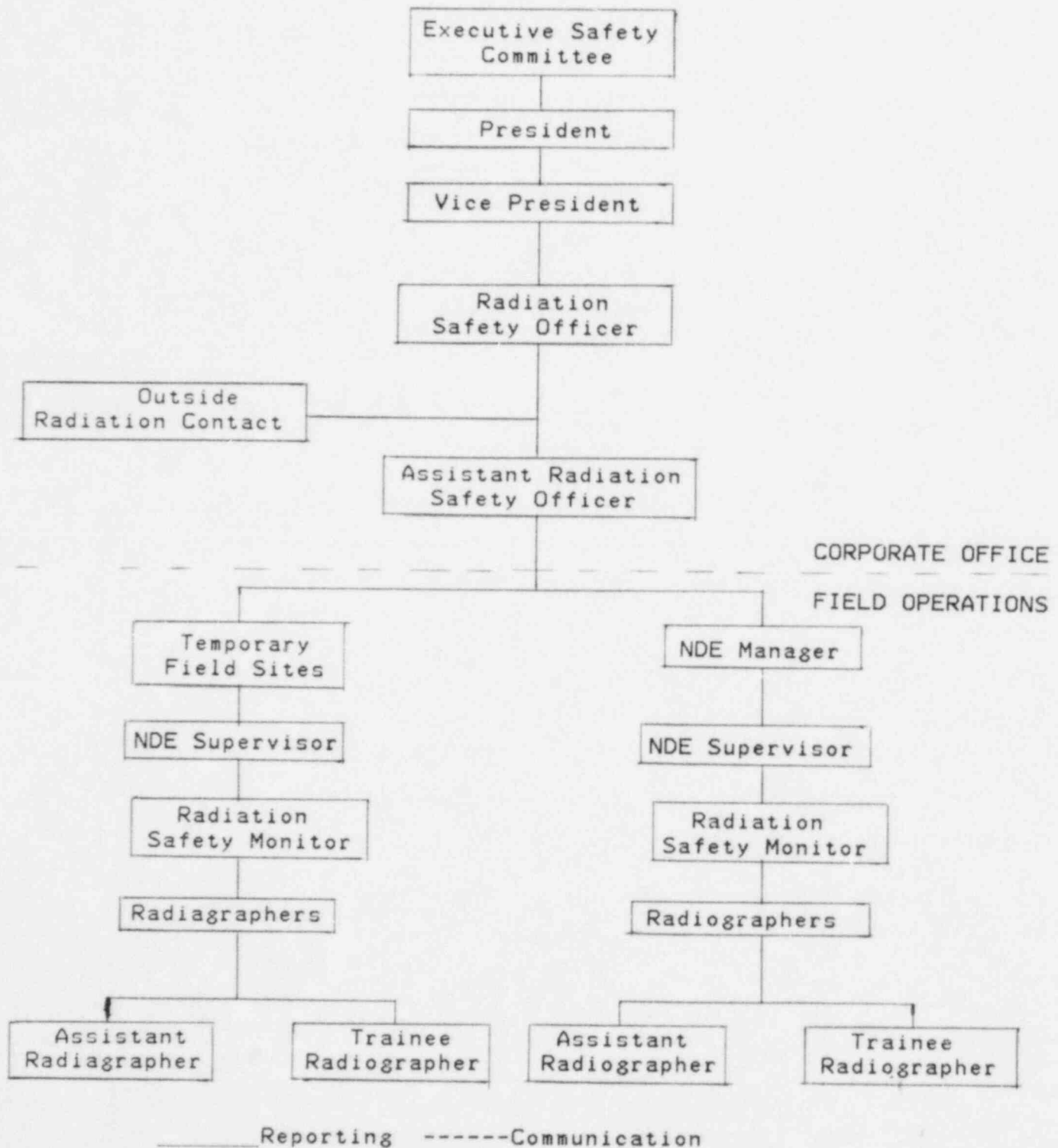
8. Qualification Procedure
9. Training Procedure
10. Audit Procedure
11. Corrective Action Procedure
12. Document Procedure
13. Quality Assurance Program for use maintenance and repair of shipping containers for radioactive material
14. Agreement States Procedure
15. Forms Procedure

### 3.2 Organization

- 3.2.1 The Organization of Radiation Safety in Pogue Industries Incorporated is in accordance with Appendix A.
- 3.2.2 The Executive Safety Committee shall consist of the President, Vice President, Assistant Radiation Safety Officer, and the Radiation Safety Officer (RSO). They will plan and control the execution of the Safety Program. Committee meetings may be held as frequently as determined by the RSO.
- 3.2.3 The responsibility for all phases of the Radiation Safety Program is vested with the RSO, who reports directly to the President and Vice President.
- 3.2.4 The Assistant Radiation Safety Officer (management Representative) is responsible for all phases of the Radiation Safety Program in the absence of the Radiation Safety Officer, and will report directly to the RSO.
- 3.2.5 NDE Supervisor is the administrative head of each lab or project. All NDE Supervisors shall, on matters of radiation safety, report to the Radiation Safety Officer or the Assistant Radiation Safety Officer.
- 3.2.6 Radiation Safety Monitors are the trained and certified Radiation Safety Representatives for every labor project. All Radiation Safety Monitors shall be approved by the RSO or the Assistant RSO.

- 3.2.7 Any delegation of the radiation safety responsibility will be after training, examination, and certification, as directed by the RSO or the Assistant RSO.
- 3.2.8 In the absence of the RSO, responsibility for radiation emergencies shall advance to the Assistant RSO, in his absence, the Vice President, and their absence, the President shall act.
- 3.3 PII utilizes two manuals for control of radiation safety.
  - 3.3.1 The Radiation Safety Program is made up of a set of procedures which define the system of control.
  - 3.3.2 Operating and Emergency Procedures is the working document for Radiographers.
- 3.4 All revisions to the Program Plant or Procedures shall be by letter designation and directed by the RSO, and approved by the Executive Safety Committee.

APENDIX A  
RADIATION SAFETY ORGANIZATION



## RESUME

### Training and Experience in Radiography and Radiation Safety

Steven W. Pogue

#### TECHNICAL TRAINING

February 1971	Completed U.S. Navy Nuclear Power School at Bainbridge, Maryland Course duration: 24 weeks
September 1971	Completed U.S. Navy Nuclear Power Prototype School at Schnectady, New York Course duration: 26 weeks.
January 1972	Completed U.S. Basic Nuclear Qualification USS Enterprise CVA(N)-65 Course duration: 13 weeks
July 1976	Completed Assistant Radiographer Qualifications with Peabody Testing Services, Indianapolis, Indiana Course duration: 12 hours Instructor: Steve Green
January 1978	Completed Radiation Safety Training, Peabody Testing Services, Indianapolis, Indiana. Course duration: 12 hours Instructor: Steve Green
June 1982	Completed Radiation Safety Monitor training, Magnaflux Quality Services, St. Louis, Missouri. Course duration: 16 hours Instructor: Earl Banfield
May 1985	Completed Radiation Safety Training, Pogue Industries Incorporated, St. Louis, Missouri Course duration: 16 hours Instructor: Norm Fergusson (Longview Insprection)

EXPERIENCE

August 1969-October 1971

U.S. Navy - training in Basic Nuclear Engineering Qualifications in Reactor principles, operations and radiation safety.

October 1971-August 1975

U.S. Navy - onboard USS Enterprise CVA(N)-65 Qualification and operation of reactor plants. Began NDE in May 1973 for Quality Control.

June 1976-November 1983

Employed by Magnaflux Quality Services as trainee to Level III (all methods), Manager and Radiation Safety Monitor of St. Louis operation.

November 1983-present

Began and built Pogue Industries Incorporated as a Consultant utilizing Radiographic techniques thru subcontractors. President of Corporation

EQUIPMENT EXPERIENCE

## Gamma Ray Equipment

Iridium 192 Equipment

Magnaflux

Automation

Gamma Industries

MX-IC-100

AII-520

S &amp; SA

Colbalt 60

Gamma Industries

Gammatron 100

## X-Ray Equipment

Andrex

Andrex

Magnaflux

Magnaflux

Gemini II

Norelco

300 KV

250 KV

150 KV

320 KV

300 KV

150 KV



## RESUME

### Training and Experience in Radiography and Radiation Safety

Glenn A Bengert

#### TECHNICAL TRAINING

October 1972

Attended and successfully completed a course pertaining to radiography and radiation health physics at Pittsburgh Testing Laboratory, Indianapolis, Indiana. Course duration: 40 hours  
Instructor: Mr. Andreski

March 1973

Received 40 hours training in radiation safety and their biological effects at the Zion Generating Station for Commonwealth Edison.

March 1977

Received eight hours training in radiation safety and their biological effects at the Duane Arnold Generating Station.

June 1977

Received 40 hours training in radiography and radiation safety. Instruction included an in-depth study of Peabody Testing Services Radiation Safety and control procedures. Training was administered by Steve Green.

September 1980

Helped establish and monitor the radiation safety program for Magnaflux Quality Services at their St. Louis office.

#### EXPERIENCE

October 1972-April 1975

Employed at Pittsburgh Testing Laboratory, Indianapolis, Indiana. Work included duties and responsibilities of a Radiographer.

March 1977-September 1983

Employed at Magnaflux Quality Services. Work included the duties and responsibilities of a Radiographer.

EQUIPMENT EXPERIENCE

## Gamma Ray Equipment

Iridium 192 Equipment

Technical Operations

Gamma Industries

Magnaflux Corporation

T.O. 533

Gamma Century S &amp; SA

MXIC-100

## Cobalt 60

Gamma Industries

Gammatron 50

## X-Ray Equipment

Norelco Portable 360° Panoramic

300 KV

Andrex Portable

250 KV

Andrex Portable 360° Panoramic

300 KV

Magnaflux Directional Portable

150 KV

Magnaflux Constant Potential

320 KV

## RESUME

### Training and Experience in Radiography and Radiation Safety

Terry Bruce

#### TECHNICAL TRAINING

September 1967	Attended and successfully completed a course pertaining to Radiography at Chanute Air Force Base, Illinois. Course duration: 120 hours.
June 1971	Attended and successfully completed a course pertaining to Radiography at Chanute Air Force Base, Illinois. Advanced Course duration: 60 hours.
February 1981	Attended Radiation Safety course at St. Louis Testing Laboratories, St. Louis, Missouri. Course duration: 80 hours Instructor: Paul Sinn
April 1983	Attended Radiation Safety course at Magnaflux Quality Services, St. Louis, Missouri. Course duration: 20 hours Instructor: Steven Pogue
May 1985	Attended Radiation Safety course at Pogue Industries Incorporated, St. Louis, Missouri. Course duration: 16 hours Instructor: Norm Fergusson (Longview Inspection)

#### EXPERIENCE

September 1967-December 1973	Air Force, Supervisor of NDE operations.
December 1973-October 1976	Civil Service, Supervisor of NDE operations at Selfridge Air National Guard, Mt. Clemmons, Michigan, Det. #1.
February 1981-April 1983	St. Louis Testing Laboratories, St. Louis Missouri, Radiographic Inspector.

EXPERIENCE (cont)

April 1983-April 1985

Magnaflux Quality Services, St. Louis,  
Missouri, Radiographic inspection and  
Supervisor.

April 1985-present

Pogue Industries Incorporated/Longview  
Inspection Incorporated, St. Louis,  
Missouri, Radiographic inspection  
services and Manager.EQUIPMENT EXPERIENCE

## Gamma Ray Equipment

Iridium 192 EquipmentMagnaflux  
St. Louis Testing  
Automation IndustriesMX-IC-100  
STL 100  
AII-520Colbalt 60St. Louis Testing  
Gamma IndustriesSTL 50  
Gammatron 100

## X-Ray Equipment

Sperry  
Andrex  
Andrex  
Magnaflux  
General Electric160 KV  
300 KV  
400 KV  
150 KV  
150 KV