

# UNITED STATES NUCLEAR REGULATORY COMMISSION

#### REGION II 230 PEACHTREE STREET, N.W. SUITE 1217 ATLANTA, GEORGIA 30303



Report No.: 50-83/77-4

Docket No.: 50-83

License No.: R-56

Category: 5

Licensee: University of Florida

202 Nuclear Sciences Center Gainesville, Florida 32601

Facility: University of Florida Training Reactor (UFTR)

Inspection at: University of Florida

Inspection conducted: , July 21-22, 1977

Inspector:

Reviewed by: 7

W. BV Kenna, Chief Safeguards Branch

Inspection Summary

Inspection of July 21-22, 1977 (Report No. 50-83/77-4)

Areas Inspected: Announced inspection of physical security program.

Areas inspected were selected portions of security plan, security areas, security systems, security organization, access control, surveillance, procedures and security program review. The inspection involved 13 man hours on site by one NRC inspector.

Results: Within the scope of the inspection, there were no items of moncompliance identified.



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DETAILS I

Prepared by:

. V. Annast, Investigator

Security and Investigation Section

Safeguards Branch

Dates of Inspection: July 21-22, 1977

Reviewed by:

J. /H. Jayner, Chief

Security and Investigation Section

Safeguards Branch

# 1. Persons Contacted

\*Dr. J. Carroll, Acting Chairman, Nuclear Engineering Sciences Department

\*W. Delk, Assistant Reactor Supervisor

H. Gogun, Senior Reactor Operator

G. Fogle, Reactor Operator

D. Deutra, Campus Maintenance Technician

V. Holliman, Executive Officer, Campus Police

J. Ward, Sergeant, Campus Police

\*Denotes those present at exit interview on July 22, 1977.

# 2. Security Plan

The current version of the University of Florida Training Reactor (UFTR) security plan was approved by Licensing on April 18, 1975. A revision, dated September 15, 1976, has been submitted and is presently pending approval. The revised plan does not appear to degrade the existing security posture and conforms to the general outline of inspection procedures 81410 - 81455.

# 3. Essential Equipment

The UFTR is an Argonaut-type reactor fueled with uranium enriched to 93% U-235 and with an authorized power limit of 100 Kw. The authorized SNM possession limit is 4.82 kg of U-235. All essential equipment was adequately described.

# 4. Security Areas

The security areas were established as designated in the security plan and equipped with acceptable barriers.







#### Security Systems

The security systems consisted of locks and keys, alarm systems and communications. Key control was in accordance with the security plan, however no provisions had been made for periodic key inventories and loss of keys. The security alarm system consisted of six (6) ultrasonic motion detection devices within the reactor cell and four (4) magnetic contact switches on the doors to the security area. The alarms had line supervision and were tamper indicating. Each of the motion detection units was equipped with a back-up battery pack. The alarms are computer controlled by the Security and Fire Computer system and annunciate at the campus police station. The annunciation is of a single zone (Building 577) and no provision has been made to differentiate between the various alarms. The alarm system was tested and performance was acceptable.

There were no specific procedures for response to alarms by campus police and no provisions for compensatory measures in cases of alarm system failure.

Communications consisted of telephones and hold-up alarm, located in the reactor control room. A portable hold-up alarm transmitter was also provided to report emergencies in the reactor cell and adjoining areas.

#### 6. Security Organization

The security organization was as described in the security plan. Campus police were aware of their responsibilities to respond to emergencies at the UFTR. A contingency planning meeting had been held with local law enforcement authorities (LLEA) in October 1976. There was no formal description of expected response times or numbers of persons and vehicles responding. No formal procedure had been developed by the campus police to designate which law enforcement organization would be notified to respond for assistance. Usually Gainesvill police are notified but instructions are verbal. It was found the accession, only one campus policeman would be available to to an alarm at the UFTR and may require immediate backup by lacal law enforcement officials.

#### 7. Access Control

The categories of personnel authorized access to the security areas were clearly described and the means used to control access was adequately implemented. The feasibility of maintaining the reactor control room door locked during working hours was discussed with facility personnel.





## 8. Surveillance

Surveillance of essential equipment and security areas was as described in the security plan and was deemed adequate.

## 9. Procedures

Procedures were reviewed and were found acceptable, with exceptions noted in paragraphs 5 and 6 above.

## 10. Security Program Review

The methods and responsibilities for security program review were adequately described in the security plan and were found acceptable.

## 11. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on July 22, 1977. The inspector summarized the purpose and scope of the inspection. The following items were discussed:

- a. The alarm system back-up power and transmission line supervision are not described in the security plan.
- b. Expected LLEA response times as well as expected number of vehicles and/or response individuals are not described in the security plan.
- c. There is no commitment in the security plan to periodic key inventories and other provisions of Regulatory Guide 5.12.
- d. The reactor control room is not locked during times of occupancy. The feasibility of locking this door was reviewed.
- e. There are no written procedures covering campus police response to security alarms or compensatory measures for inoperative alarms.
- f. There are no written procedures for campus police designating the local law enforcement organizations that would be summoned for assistance.

Licensee representatives agreed to consider all of the items discussed for implementation.

