

6.0 ADMINISTRATIVE CONTROLS6.1 ORGANIZATION

- a. The organization for the management and operation of the reactor shall be as indicated in Figure 6.1. The Director, Nuclear Research Center, shall have overall responsibility for direction and operation of the reactor facility, including safeguarding the general public and facility personnel from radiation exposure and adhering to all requirements of the operating license and Technical Specifications.
- b. The Manager, Office of Radiation Safety, shall advise the Director, Nuclear Research Center, in matters pertaining to radiological safety. He/she has access to the ~~Vice President, Interdisciplinary Programs,~~ and/or the President of the Institute as needed.
- c. The minimum qualifications with regard to education and experience backgrounds of key supervisory personnel in the Reactor Operations group shall be as follows:

(1) Reactor Supervisor

The Reactor Supervisor must have a college degree or equivalent in specialized training and applicable experience, and at least five years experience in a responsible position in reactor operations or related fields including at least one year experience in reactor facility management or supervision. He shall hold a Senior Reactor Operator's license for the GTRR.

(2) Reactor Engineer

The Reactor Engineer must have a combined total of at least seven years of college level education and/or nuclear reactor experience with at least three years experience in reactor operations or related fields. He shall be qualified to hold a Senior Reactor Operator's license.

d. Senior Reactor Operator's License

Whenever the reactor is not secured, the minimum crew complement at the facility shall be two persons, including at least one senior operator licensed pursuant to 10 CFR 55.

Amendment No. 10

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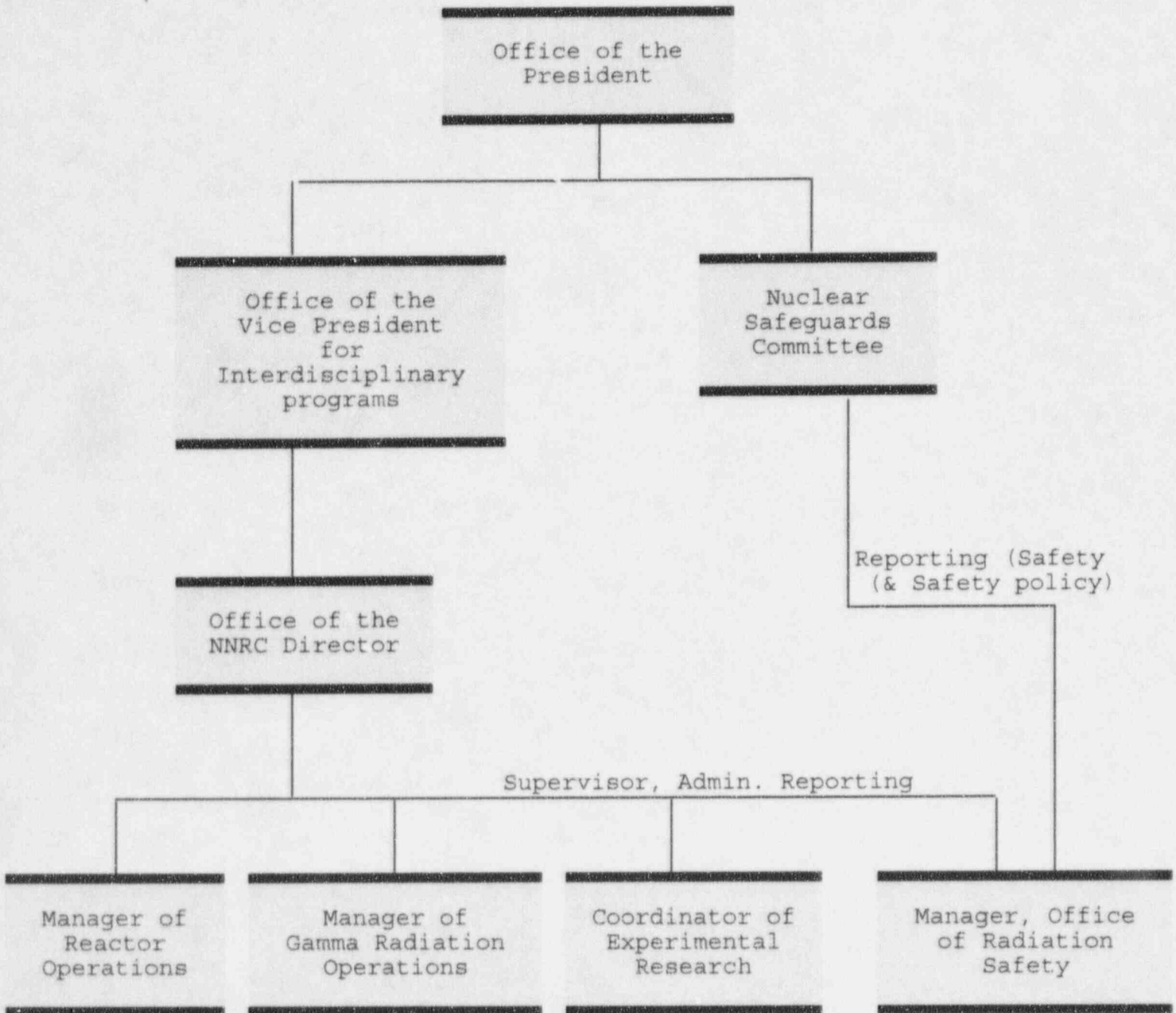


Figure 6.1 Georgia Tech Organization for Management and Operation of the GTRR.

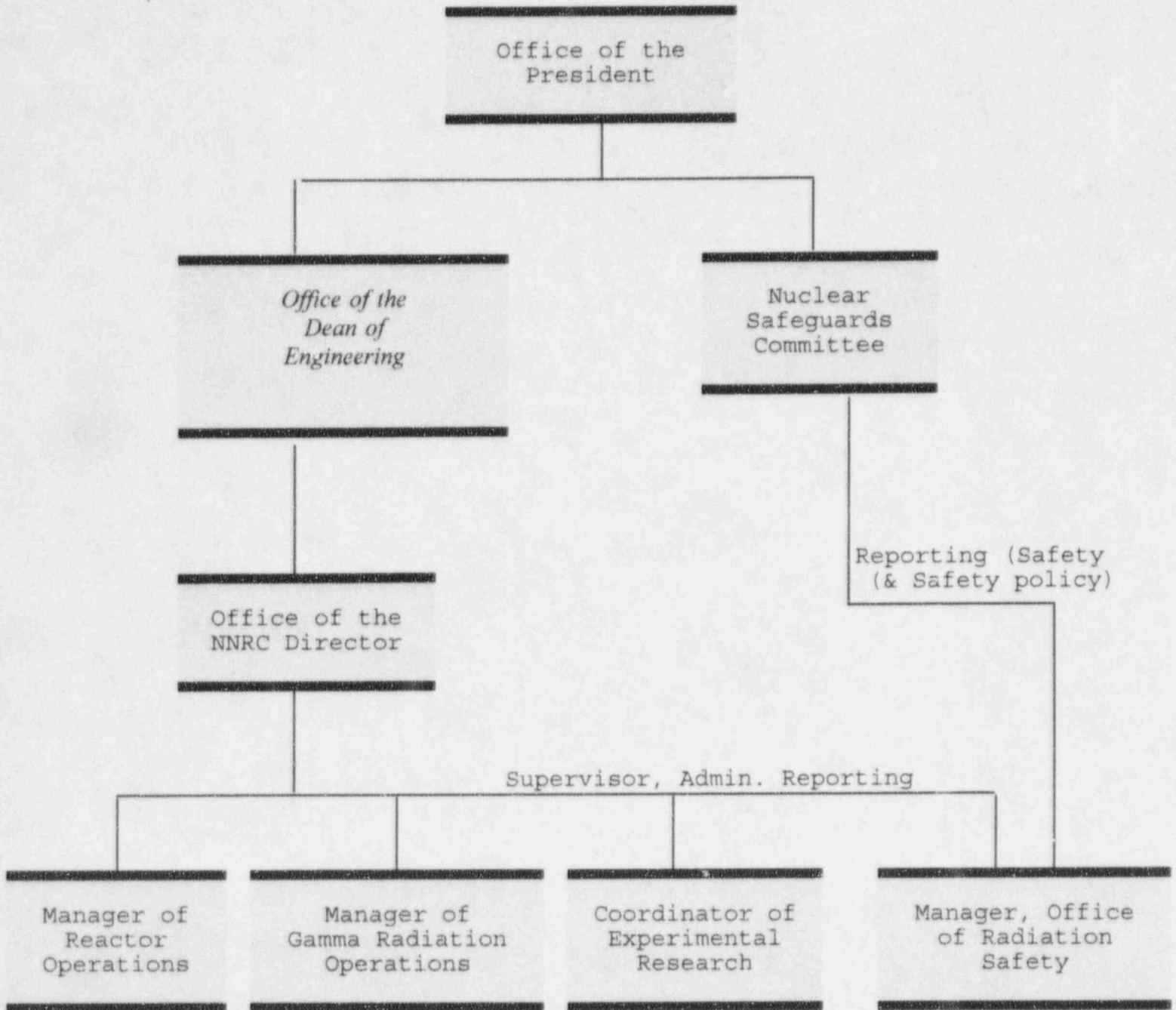


Figure 6.1 Georgia Tech Organization for Management and Operation of the GTRR. (Amendment 11).

Georgia Tech employee, except where special arrangements are made and approved by the Manager, Officer of Radiation Safety (MORS).

Persons who are permitted to work with significant radioactivity or to enter the containment building or high bay area without escort must meet standards of training established by MORS.

Instruments are provided to allow persons leaving the controlled area to monitor their hands and shoes for radioactivity. All persons who are potentially exposed to loose radioactive materials are required to monitor themselves at appropriate times.

Permanent records of personnel monitoring results are maintained by the Office of Radiological Safety. Individuals are permitted to examine their own personal monitoring file upon request.

4.5.3 Area Monitoring

The Office of Radiological Safety conducts a program of routine and special area monitoring of the reactor and laboratory buildings. External radiation levels, airborne activity, and surface contamination are measured. Schedules for routine surveys are determined on the basis of degree of utilization and levels of radioactivity being handled in various areas. Special surveys are performed whenever a non-routine activity takes place involving possible significant exposure to radioactivity. Under certain conditions, established by MORS, persons other than members of the Office of Radiological Safety may be authorized to perform radiation surveys. Each new installation is carefully surveyed when it is first put into operation and, if the potential hazard warrants, it will be added to the routine survey program. The Office of Radiological Safety maintains records of all surveys, and reports significant results to the appropriate persons.

4.5.4 Environmental Monitoring

An environmental monitoring program has been carried on with the cooperation of the ~~Radiological Health~~ Section of the Georgia Department of ~~Public~~

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An environmental monitoring program has been carried on with the cooperation of the Environmental Radiation Section of the Georgia Department of

~~Health~~ since initial reactor startup. Thermoluminescent dosimeters are placed at 50 locations outside the perimeter of the reactor facility and are changed on a quarterly basis. No statistically valid indication of an increase in environmental radioactivity levels has been observed through analysis of the data produced in this program.

All evidence, both theoretical and empirical, indicates that the only radioactive material emitted from the stack in measurable quantities is argon-41. Every attempt is being made to isolate the sources of the argon-41 production and minimize its release. It is highly unlikely that the radioactivity released under reactor operating conditions at 5 MW will cause any person continuously residing or working in the neighborhood to be exposed to more than a small fraction of the total effective dose equivalent permitted in 10CRF 20.1301. However, the environmental monitoring program will continue to demonstrate the validity of this assumption by direct measurement rather than by theoretical analysis. ~~Equipment for continuous, automatic measurement and recording of wind speed and direction has been installed as an aid to the selection of monitoring points and the analysis of the resultant data.~~

The environmental monitoring program includes the following elements:

- A. The State Radiological Health Section will continue their program of thermoluminescent dosimeter (TLD) monitoring which has been in effect since initial reactor startup.
- B. Georgia Tech began a supplementary thermoluminescent dosimeter monitoring program outside of the reactor perimeter fence in December 1966. Currently thirty TLD's are placed in locations which current meteorological conditions indicate will be the most likely to receive the maximum dose from argon-41. These badges are being changed every three months.
- C. The program of monitoring the radiation dose at the reactor perimeter fence will continue.
- D. Special determinations of radiation doses using ionization chambers will be made under specific meteorological conditions which indicate

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