

STATION DIRECTIVE 2.5.1

APPROVAL

DATE

[Signature]
4/21/82

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION
EMERGENCY RESPONSE TRAINING PROGRAM

OBJECTIVE

To provide for the training of personnel and organizations identified in the McGuire Emergency Plan and Implementing Procedures, who directly participate or play a role in emergency response for the station.

GENERAL

In the event of an emergency condition at the station, response personnel must be knowledgeable in their area of responsibility to effectively support the emergency condition. The training program identified in this directive will provide an overview of the entire Emergency Response Organization to those individuals not performing roles outside their normal area, and provide for special training of those individuals or groups who perform a response capability that is outside their normal area of responsibility. In addition, this directive provides for the training of off-site agencies who may be called on to assist in an emergency.

IMPLEMENTATION

- A. Annual training shall be provided to those personnel and organizations listed below:
- 1) All Emergency Response personnel identified in Station Directive 3.8.2, Station Emergency Organization.

- 2) Fire, Ambulance, Rescue, Hospital and Governmental Support Agencies described in the McGuire Emergency Plan and having specific agreements to support a McGuire Emergency.
 - 3) Health Physics Monitoring Teams (Off-site) as identified in the Station Health Physics Manual, Section 5.3, Emergency Response Organization.
 - 4) Personnel responsible for Information Transmission to Off-Site Agencies as identified in the Station Health Physics Manual, Section 5.3, Emergency Response Organization.
 - 5) Personnel responsible for Dose Calculations and Projections as identified in the Station Health Physics Manual, Section 5.3, Emergency Response Organization.
 - 6) Performance personnel responsible for Plant Data Transmission/Retrieval in Station Directive 3.8.2, Station Emergency Organization.
- B. Local Law Enforcement Agencies (LLEA) will be provided training in their Emergency Preparedness functions in support of McGuire Nuclear Station, within the every two year indoctrination program required by the Station Security Plan.

RESPONSIBILITY

Responsibility for the training programs identified in this directive is provided by the following table:

<u>Training Subject</u>	<u>Responsibility</u>
Station Emergency Response Personnel	Emergency Preparedness Coordinator
Fire, Ambulance, Rescue, Hospital	Emergency Preparedness Coordinator
Governmental Support	Corporate Emergency Response Coordinator
Health Physics Monitoring Teams	Station Health Physicist
Information Transmission Off-site	Emergency Preparedness Coordinator

RESPONSIBILITY CONTINUED

<u>Training Subject</u>	<u>Responsibility</u>
Dose Calculations and Projections	Station Health Physicist
Plant Data Transmission/Retrieval	Performance Engineer
Local Law Enforcement Agencies	Emergency Preparedness
(Emergency Preparedness Functions)	Coordinator

Specific Training Guides (Lesson Plans) shall be developed and maintained by the responsible personnel described above for each training subject.

TRAINING CONTENT

Training Guides (Lesson Plans) shall follow the format and content of the Training Outlines provided in the McGuire Emergency Plan, Section O. Training Guides (Lesson Plans) should be tailored to the student needs and provide a source of reference for the instructor. They may also provide documentation of training content.

DOCUMENTATION

Documentation of the training conducted shall be maintained by the Station Training Supervisor. Personnel responsible for the training shall provide the Training Supervisor with the following information:

1. A copy of subject Training Guide (Lesson Plan)
2. List of names and social security numbers of personnel attending the training.
3. Date training completed.

The Training Supervisor is responsible for maintaining records of the training conducted on a completed Training Content Summary FORM TSR-10 and for entry of this information into the individual training records.

EMERGENCY PLAN IMPLEMENTING PROCEDURES

<u>Procedure #</u>	<u>Title</u>
EP/1/A/5000/01	Immediate Actions and Diagnostics
EP/1/A/5000/02	Loss of Reactor Coolant
EP/1/A/5000/03	Secondary Line Rupture
EP/1/A/5000/04	Steam Generator Tube Rupture
EP/O/A/5000/05	Notification of Unusual Event
EP/O/A/5000/06	Alert
EP/O/A/5000/07	Site Area Emergency
EP/O/A/5000/08	General Emergency
EP/1/A/5000/09	Loss of All AC Power
AP/O/A/5500/27	Care and Transportation of Contaminated Injured Individuals
AP/O/A/5500/28	Release of Reactor Coolant Inside Containment
AP/O/A/5500/29	Natural Disasters
AP/O/A/5500/30	Earthquake
AP/O/A/5500/31	Release of Toxic or Flammable Gases
AP/O/A/5500/32	Collisions/Explosions
HP/O/B/1009/02	Alternative Methods for Determining Dose Rate within the Reactor Building
HP/O/B/1009/03	Recovery Plan
HP/O/B/1009/06	Procedure for Quantifying High Level Gaseous Radioactivity Release During Accident Conditions
HP/O/B/1009/08	Evaluation of a Reactor Coolant Leak Inside Containment
HP/O/B/1009/09	Release of Reactor Coolant through Unit Vent Exceeding Technical Specifications
HP/O/B/1009/10	Releases of Liquid Radioactive Exceeding Technical Specifications
PT/O/A/4600/06	Exercises and Drills
PT/O/A/4600/11	Functional Check of Emergency Vehicle and Equipment
Station Directive 2.0.5	News Release
Station Directive 2.5.1	Emergency Response Training Program
Station Directive 3.7.3	Bomb Threat
Station Directive 3.8.1	Site Assembly/Evacuation
Station Directive 3.8.2	Station Emergency Organization
McGuire Nuclear Station	Section:
Health Physics Manual	18.1 Accident and Emergency Response
	18.2 Environmental Monitoring for Emergency Conditions
	18.3 Personnel Monitoring for Emergency Conditions

STATION DIRECTIVE 3.8.2

APPROVAL George W. Cage

DATE ORIGINAL ISSUED 4/8/80

REVISION 7 DATE 5-5-82

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
STATION EMERGENCY ORGANIZATION

OBJECTIVE

This directive establishes the Station Emergency Organization and the functions it is responsible for in effectively supporting the normal operating shift in the management of any emergency condition at the station. It particularly addresses the augmentation of the operating shift resources for accident response situations where the health and safety of station personnel and members of the general public are concerned. It provides a structure by which the normal functions of the operating shift are augmented and immediately directed to accident termination and mitigation, offsite consequence determination, and plant recovery operations.

GENERAL

Initial activities during any emergency condition are directed by the Shift Supervisor from the control room, in accordance with the McGuire Emergency Plan and any Implementing Procedure. The Shift Supervisor shall assume the functions of the Emergency Coordinator until the arrival of the Station Manager or his designee at which time the Station Manager or his designee assumes the responsibility of the Emergency Coordinator. The Emergency Coordinator will assure that the

following emergency objectives are achieved during the initial phases of any emergency condition described in the appropriate Emergency Procedure:

1. Initiation of emergency actions within the provisions of the Emergency Plan, including notification of and protective action recommendations to authorities responsible for coordinating offsite protective actions, enabling the Shift Supervisor to devote full attention to remedial measures within the station. This authority to notify and make protective action recommendations to offsite authorities may not be delegated to other personnel within the emergency organization.
2. Notification and activation of the Station, Corporate, North Carolina, and the Nuclear Regulatory Commission emergency organizations having a response role.
3. Continued assessment of actual or potential consequences both onsite and offsite throughout the evolution of the emergency condition.
4. Effective implementation of emergency measures in the environs including protective actions and or evacuation of affected areas, implementation of emergency monitoring teams and facilities to evaluate the environmental consequences of the emergency condition, prompt notification and communications with offsite authorities.
5. Continued maintenance of an adequate state of emergency preparedness until the emergency situation has been effectively managed and the station is returned to a normal or safe operating condition.

IMPLEMENTATION

Onsite Emergency Organization

1. The Onsite Emergency Organization shall be that organization of normal plant operating shift augmented with additional personnel as deemed necessary by the Shift Supervisor/Emergency Coordinator, the Station Manager or as required by any Emergency Procedure or Station Directive.

2. The Shift Supervisor on duty shall ensure that all actions required by any initiating Emergency Procedure or by any emergency condition have been performed and that all actions necessary for the protection of persons and property are being taken. The Shift Supervisor upon being relieved of the Emergency Coordinator functions shall continue to take all actions necessary to ensure that any emergency situation is brought under control.
3. The Emergency Coordinator shall have the authority and responsibility to initiate any emergency actions within the provisions of the Emergency Plan, including the notifications and exchange of information with those authorities responsible for coordinating offsite emergency measures. The Emergency Coordinator will work closely with the Shift Supervisor, other Station Management and Engineering and Technical support personnel at the Technical Support Center (T.S.C.) (See Enclosure (1)). He shall also maintain communications with offsite personnel at the Crisis Management Center, County Emergency Operations Center(s) and with the North Carolina State Emergency Operations Center initially, then with the North Carolina State Emergency Response Team headquarters as this organization is activated. This function will later be assumed by the Recovery Manager at Duke Power Crisis Management Center.
4. The Control Room is the initial onsite center of emergency control. It is designed for evaluation and control over the initial aspects of an emergency and for those actions necessary for coping with the emergency condition. These actions include but are not limited to:
(a) Continuous evaluation of the magnitude and potential consequences of the emergency condition, (b) Initial notifications and communications with those station personnel and offsite agencies responsible for coordinating effective response measures for the emergency condition. The control room shall be staffed with one operating shift, the Emergency Coordinator and any other personnel the Shift Supervisor, Station Manager or Emergency Coordinator may require in response to the emergency condition.

5. The Onsite Technical Support Center (T.S.C) acts in support of the command and control function of the control room and to display current plant status and diagnostic information to those individuals who are knowledgeable and responsible for engineering, technical, and management support of reactor operation in any emergency condition. The Technical Support Center is located in offices 911, 912, 913, 914 in the service building at elevation 767 (See Enclosure (3), Technical Support Center Layout) and has the capability to house 25 persons, necessary communication equipment, diagnostic display information, plant drawings, layouts, maps, and charts necessary to support the emergency organization. In the event the Technical Support Center located in offices 911, 912, 913, 914 becomes environmentally uninhabitable due to radiological or other conditions and the control room remains secure (habitable), Phase I of the Technical Support Center shall move to offices 930 and 931 inside the control room. Phase II shall evacuate to the administration building, Cowan's Ford Hydro or the Technical Training Center as directed by the Station Manager. In the event the control room also becomes uninhabitable due to radiological or other conditions, Phase I of the Technical Support Center will evacuate to the administration building, Cowan's Ford Hydro or the Technical Training Center as directed by the Station Manager.

The Technical Support Center shall be activated by the Emergency Coordinator in accordance with the applicable Emergency Procedure. The Control Room shall notify and activate the members of the Technical Support Center by notifying the Emergency Coordinator and Superintendents in accordance with Enclosure (4), who shall be responsible for notifying the personnel under their direction for implementation of Phase II of the Technical Support Center. The Section heads in Phase II shall be responsible for notifying the personnel under their direction assigned to the Technical Support Center and any other personnel that they may deem necessary to support the Emergency Condition.

Phase I of the Technical Support organization shall be operational in 60 minutes and will be staffed and organized as per Enclosure (1), or as deemed necessary by the Station Manager.

NOTE: In the event that radiological emergency conditions exist, the Health Physics section of the T.S.C. shall be activated with Phase I of the Technical Support Center organization as deemed necessary by the Station Manager or the Superintendent of Technical Services.

A. Phase I of the Technical Support Center shall include but not be limited to the following personnel:

- (1) The Station Manager (Emergency Coordinator) or in his absence a designated alternate per Enclosure (1). The Station Manager shall have complete responsibility for activation of the Technical Support Center and the Corporate Crisis Management Plan. He shall staff the Technical Support Center with those personnel listed in Enclosure (1) or at his discretion with those personnel deemed necessary to effectively assess the emergency condition. He shall institute those procedures necessary to allow the control room to gain immediate control of the emergency condition. The Station Manager will have direct communications via telephone or radio with the Recovery Manager at the Crisis Management Center, each county Emergency Operating Center, the North Carolina State Emergency Response Team and via telephone only to Nuclear Regulatory Commission. He shall maintain lines of communication and consultation with these agencies to ensure that they are informed of the emergency condition at all times in accordance with the Emergency Plan.

- (2) The Superintendent of Operations when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall ensure that each operating shift is manned with competent personnel trained and prepared to manage all operation emergency conditions and he shall augment his personnel resources as necessary to accomplish this goal. He shall provide technical expertise to other members of the Technical Support Center and shall work closely with the Superintendent of Maintenance in restoring station equipment to an operational status during and after the emergency condition.
- (3) The Superintendent of Technical Services when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall provide technical expertise to the other members of the Technical Support Center in the areas of Health Physics, Chemistry, Performance, and Reactor Engineering and in Licensing and Engineering support programs. He shall ensure that all areas of responsibility under his direction are staffed with competent personnel properly trained and prepared to support any operational emergency conditions.
- (4) The Superintendent of Maintenance when designated shall assume the duties of the Station Manager. He will provide expertise to the Station Manager and the Shift Supervisor regarding solutions to operational problems. He shall provide technical expertise to the other members of the T.S.C. in areas of Mechanical Maintenance, Planning, Instrument and Electrical Maintenance, and Materials Support. He will ensure that all areas of responsibility under his direction are staffed with competent personnel properly trained and prepared to support any operational emergency conditions.

- (5) The Superintendent of Administration when designated shall assume the duties of the Station Manager. He will provide Technical Expertise to the Station Manager and the Shift Supervisor regarding solutions to administrative problems associated with emergency conditions at the station. He shall provide technical expertise to other members of the Technical Support Center in the areas of Contract Services, Administrative Coordination and Training/Safety. He shall ensure that all areas under his direction are staffed and prepared to manage administrative support for any emergency condition.

B. Phase II of the Technical Support Center organization shall be operational in 14 hours and will be staffed and organized as per Enclosure (1), or as deemed necessary by the Station Manager. In the event that radiological emergency conditions exist, the Health Physics section of the T.S.C. shall be activated with Phase I of the T.S.C. organization as deemed necessary by the Station Manager or the Superintendent of Technical Services. Phase II of the Technical Support Center shall include as a minimum the following personnel:

- (1) The Operating Engineer shall assume the duties of the Superintendent of Operations when so designated. He will provide technical expertise to the Superintendent of Operations and other members of the Technical Support Center as required. He will assist the Superintendent of Operations in coordinating Operation activities during the Emergency condition by developing work schedules, equipment and material procurement, guidance and assistance to the Shift Supervisor, communication with the Crisis Management Center incident report preparation, and other support functions as needed or required to restore the plant status to normal. He shall ensure that all areas under his direction are staffed and prepared to manage operational support for any emergency condition.

- (2) The Assistant Operating Engineer shall assume the duties of the Operating Engineer when so designated. He will provide technical expertise to the Superintendent of Operations, the Operating Engineer and other members of the Technical Support Center as required. He shall assist the Operating Engineer in assessment and evaluation of the emergency condition and in any other areas of expertise deemed necessary to the Technical Support Center organization.
- (3) The Health Physics section of the T.S.C. shall consist of the Station Health Physicist or his designated alternate, an Environmental Surveillance Coordinator, a Data Evaluation Specialist and a Radio Operator and other Health Physics personnel as deemed necessary by the Station Health Physicist to support the Health Physics functions during the emergency condition.

NOTE: The Environmental Surveillance teams shall be predesignated in the Station Health Physics Manual.

The Station Health Physicist shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services, the Station Manager, and other members of the Technical Support Center as required. The Health Physics section shall be responsible for gathering and compiling onsite and offsite radiological monitoring data from N.R.C., State, Corporate and Station radiological monitoring and evaluation teams and for providing this information to other members of the Technical Support Center as required. The Station Health Physicist shall provide for input to and distribution of Offsite Dose Calculations for

Airborne Releases (ODCAR) information accessible by Health Physics personnel. The Station Health Physicist shall make recommendations to the Station Manager through the Superintendent of Technical Services on Protective Actions deemed necessary to ensure that station personnel and members of the general public do not exceed exposure limits to radioactive materials. The Station Health Physicist shall also work closely with the appropriate members of the Corporate Crisis Management Center to ensure that radiological hazards during any emergency condition are minimized. The Station Health Physicist shall ensure that all areas under his direction are staffed and prepared to manage health physics support for any emergency condition.

- (4) The Station Chemist shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He is responsible for coordinating chemical technical support and for initiating necessary action to insure adequate chemical sampling and evaluation to support the emergency condition. The Station Chemist shall ensure that all areas under his direction are staffed and prepared to manage chemistry support for any emergency condition.
- (5) The Performance Engineer shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He will assure that adequate levels of technical and engineering manpower are available to: manage test procedure review, carryout special test procedures, ensure control and accountability of special nuclear materials, evaluate plant and reactor performance and provide plant data information from the Operator Aid Computer to the Vax Computer System. The Performance Engineer shall ensure that all areas under his direction are staffed and prepared to manage Performance support for any emergency condition.

- (6) The Reactor Engineer shall assume the duties of the Performance Engineer or the Superintendent of Technical Services when so designated. He will provide technical expertise to the Performance Engineer and to other members of the Technical Support Center as required. The Reactor Engineer shall ensure that all areas under his direction are staffed and prepared to manage technical support for any emergency condition.
- (7) The Projects and Licensing Engineer shall assume the duties of the Superintendent of Technical Services when so designated. He will provide technical expertise to the Superintendent of Technical Services and to other members of the Technical Support Center as required. He is responsible for coordinating station activities with regulating agencies, coordinating the reporting and investigation of all incidents and for providing review of appropriate Station technical matters. The Projects and Licensing Engineer shall ensure that all areas under his direction are staffed and prepared to manage technical support for any emergency condition.
- (8) The Instrument and Electrical Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for maintaining all station I&E equipment in an operational state. The Instrument and Electrical Engineer shall ensure that all areas under his direction are staffed and prepared to manage any I&E support for any emergency condition.
- (9) The Planning Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for the implementation and evaluation of the maintenance management program and for the administration of the materials procurement programs. The Planning Engineer shall ensure that all areas under his direction are staffed and prepared to manage planning and materials support for any emergency condition.

- (10) The Mechanical Maintenance Engineer shall assume the duties of the Superintendent of Maintenance when so designated. He will provide technical expertise to the Superintendent of Maintenance and to other members of the Technical Support Center as required. He is responsible for preventive and actual maintenance for all station mechanical equipment and facilities. The Mechanical Maintenance Engineer shall ensure that all areas under his direction are staffed and prepared to manage maintenance support for any emergency condition.
- (11) The Contract Services Coordinator shall assume the duties of the Superintendent of Administration when so designated. He will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. He is responsible for coordinating Security, Utility Services and Food Vending Service's for the Station. The Contract Services Coordinator shall ensure that all areas under his direction are staffed and prepared to manage Contract Services for any emergency condition.
- (12) The Administrative Coordinator shall assume the duties of the Superintendent of Administration when so designated. She will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. She is responsible for coordinating and maintaining general administrative functions and support for personnel at the station, including a TSC Log Recorder and Clerical Support. This area is also responsible for distribution of plant status sheets and update of the TSC status boards, typing, copy service, and other miscellaneous clerical functions that may be required. The Administrative Coordinator shall ensure that all areas under her direction are staffed and prepared to manage administrative functions during any emergency condition.

(13) The Training and Safety Coordinator shall assume the duties of the Superintendent of Administration when so designated. He will provide technical expertise to the Superintendent of Administration and to other members of the Technical Support Center as required. He is responsible for coordinating the station training and safety activities Fire Protection and Medical Services in support of the emergency organization. He is also responsible for maintaining documentation of those personnel who participate in the emergency response organization during actual emergencies and during exercises and drills. The Training and Safety Coordinator shall ensure that all areas under his direction are staffed and prepared to provide needed training and safety evaluations during any emergency condition.

6. The Onsite Operations Support Center (O.S.C.) shall be located in Room 909 (operators' kitchen). In the event the Onsite Operations Support Center becomes environmentally uninhabitable, personnel assigned shall move to offices 930 and 931 inside the control room ventilation system. It shall be staffed with operators not assigned to the control room, Health Physics personnel and as needed Instrument and Electrical, Maintenance, or Chemistry personnel in support of the emergency condition as per Enclosure (2). The normal station telephone system with a backup radio system (P&T frequency hand held) shall serve as a line of direct communication. The personnel assigned to the Operations Support Center shall be under the direct supervision of the Shift Supervisor.

The Operations Support Center shall be activated by the Emergency Coordinator in accordance with the applicable Emergency Procedure. The Shift Supervisor shall alert the onshift operations personnel and the Health Physics Supervisor listed on Enclosure (5) to the Emergency condition. The Health Physics Supervisor shall alert the Health Physics Technicians listed on Enclosure (5) to the activation of the Onsite Operations Support Center. The Operations Support Center will be staffed and organized as per Enclosure (2), or as deemed necessary by the Shift Supervisor or Emergency Coordinator. The Operations Support Center shall include as a minimum the following personnel:

Operators: Operators on shift who are not actually assigned to the Control Room and additional callout operators as required or deemed necessary by the Shift Supervisor or Emergency Coordinator.

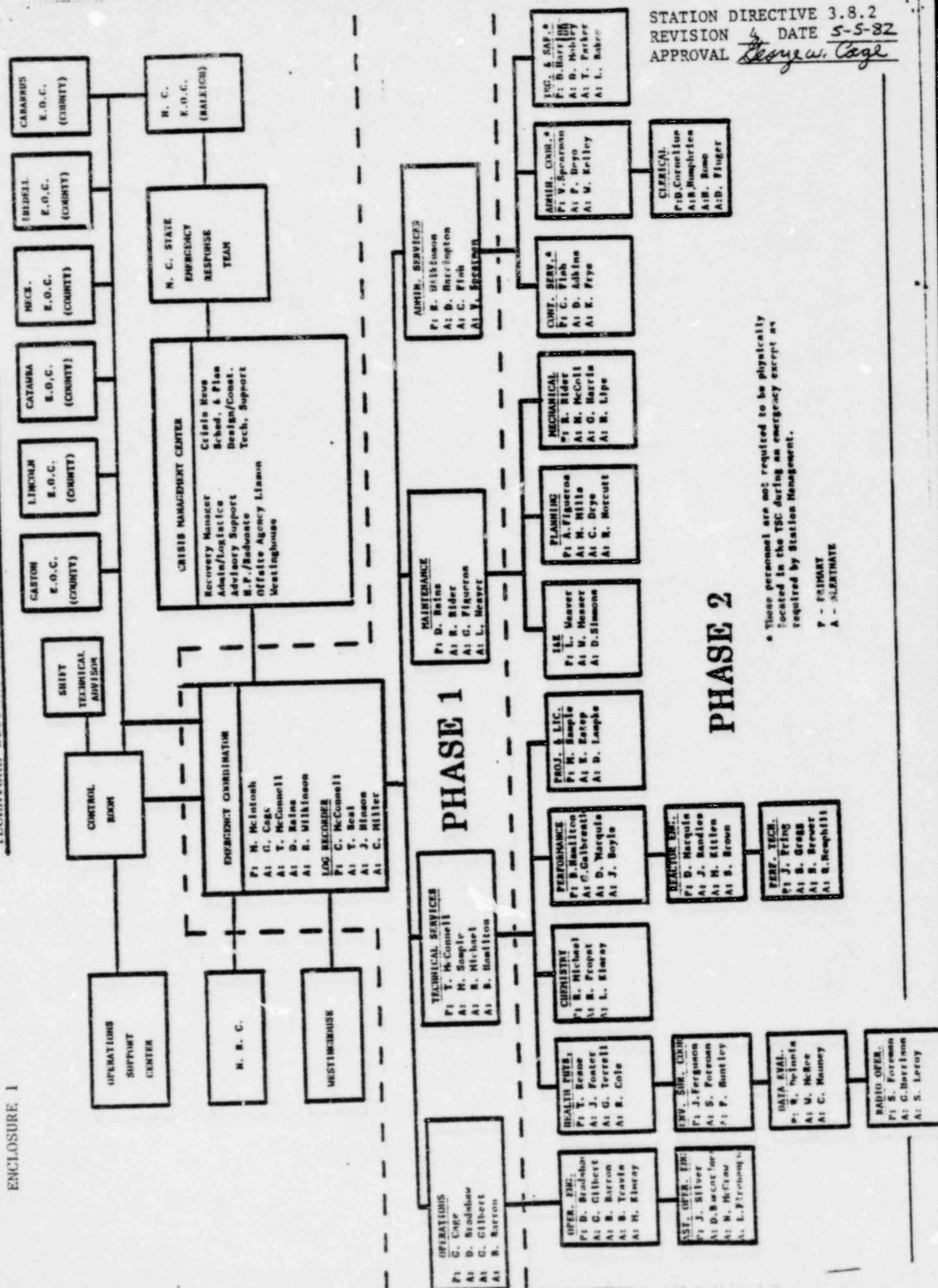
Health Physics: A Health Physics support group consisting of a Health Physics Supervisor and two technicians or additional technicians as deemed necessary by the Station Health Physicist shall be designated to serve in a support function to the Operations Support Center. The Health Physics group supporting the Operations Support Center shall be physically located in the Operations Support Center. The Health Physics Supervisor shall ensure that adequate instrumentation, respiratory protective equipment, protective clothing, and any other material needs are provided in support of the Health Physics coverage for the Operations Support Center.

NOTE: An Emergency Kit containing supplies listed in PT/O/A/4600/11 is stored in the Operators kitchen.

ENCLOSURES

1. Enclosure (1), ONSITE TECHNICAL SUPPORT CENTER AND AUGMENTING AGENCIES
2. Enclosure (2), ONSITE OPERATIONS SUPPORT CENTER
3. Enclosure (3), ONSITE TECHNICAL SUPPORT CENTER, (PHYSICAL LAYOUT)
4. Enclosure (4), ONSITE TECHNICAL SUPPORT CENTER TELEPHONE ACTIVATION
5. Enclosure (5), ONSITE OPERATIONS SUPPORT CENTER TELEPHONE ACTIVATION

ENCLOSURE I



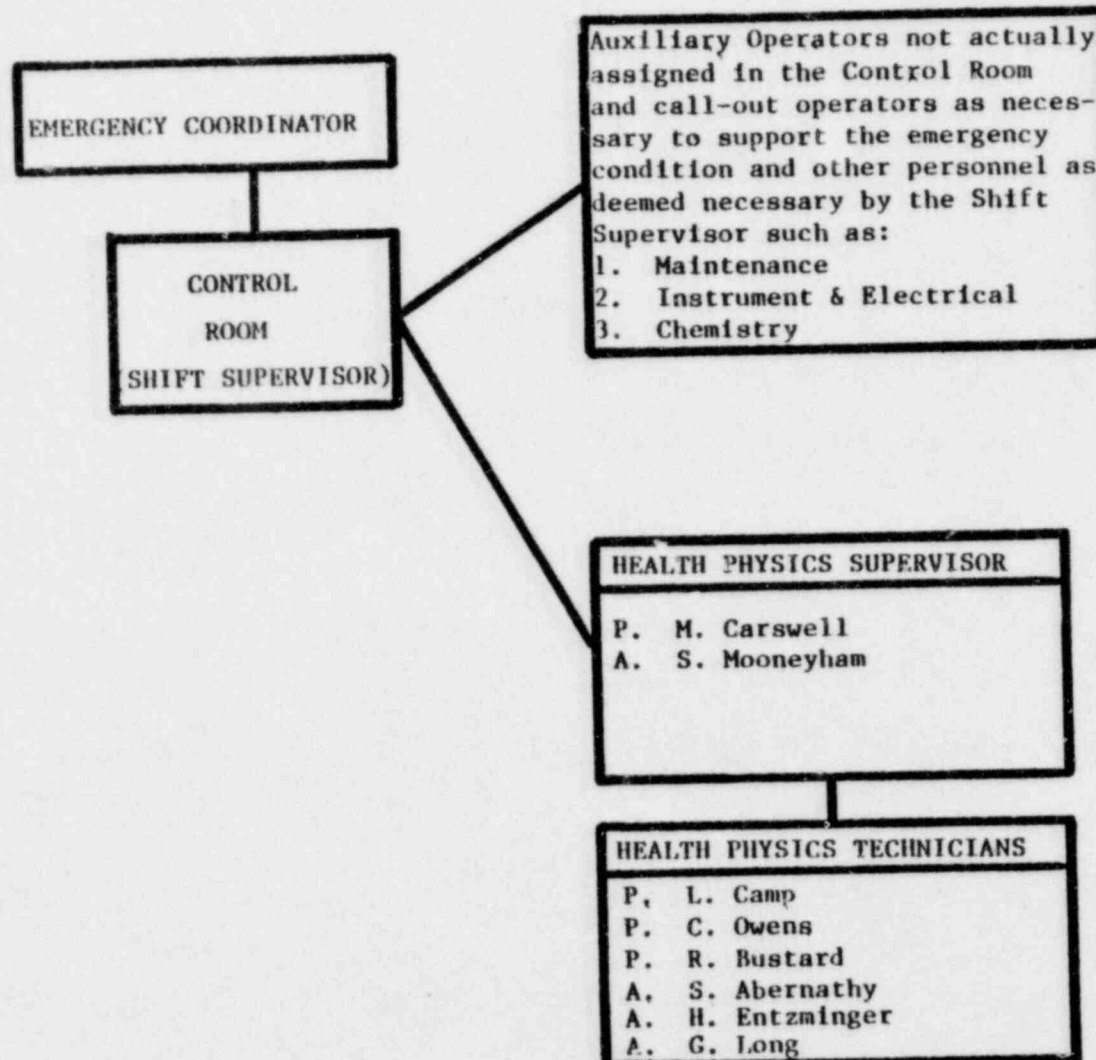
ENCLOSURE 2

OPERATIONS SUPPORT CENTER

STATION DIRECTIVE 3.8.2

REVISION 2 DATE 5-5-82

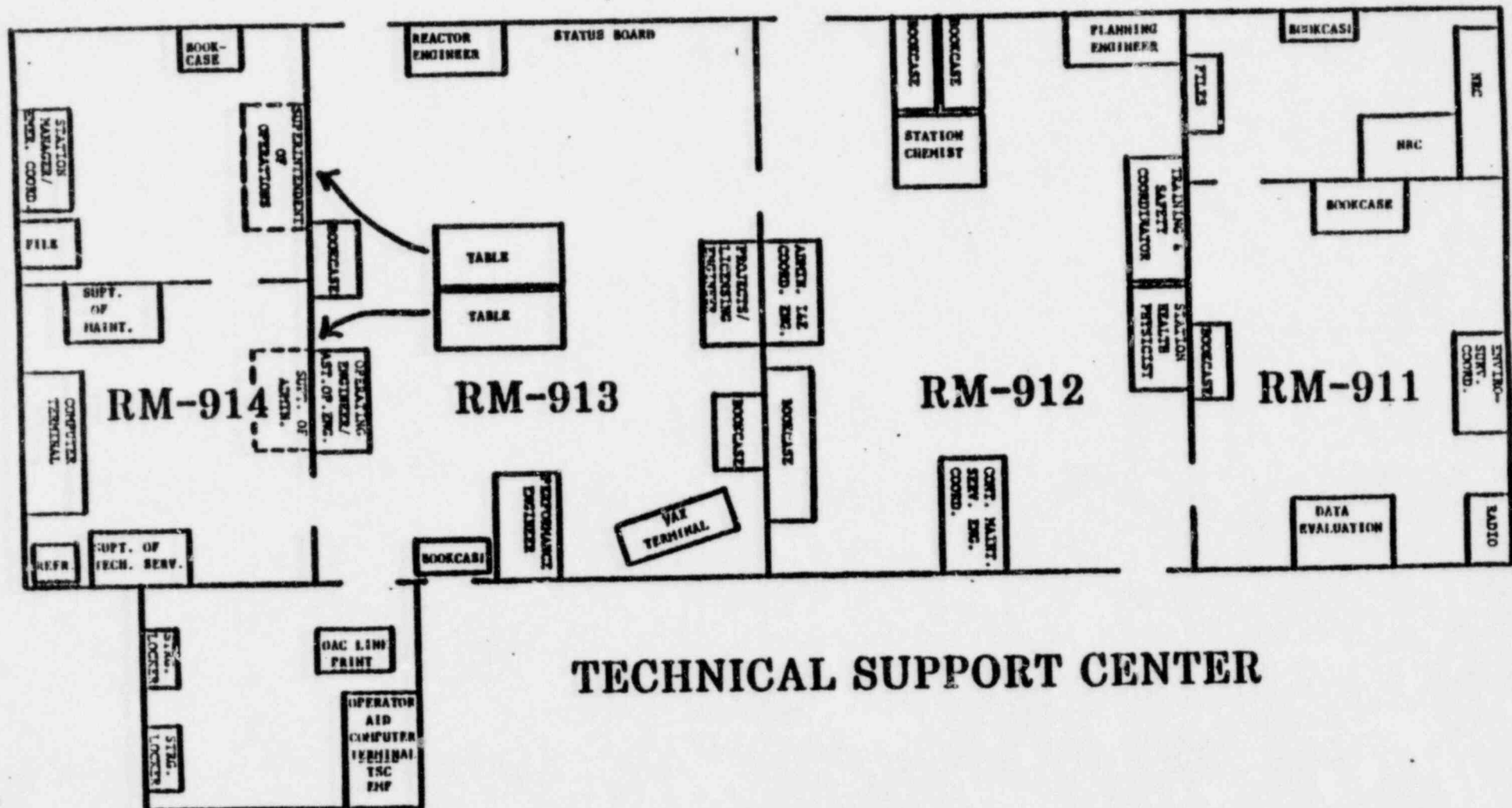
APPROVAL *George W. Cope*



P - PRIMARY
A - ALTERNATE

ENCLOSURE 3

STATION DIRECTIVE 3,8,2
 REVISION 2 DATE 5-5-82
 APPROVAL *George W. Boyle*



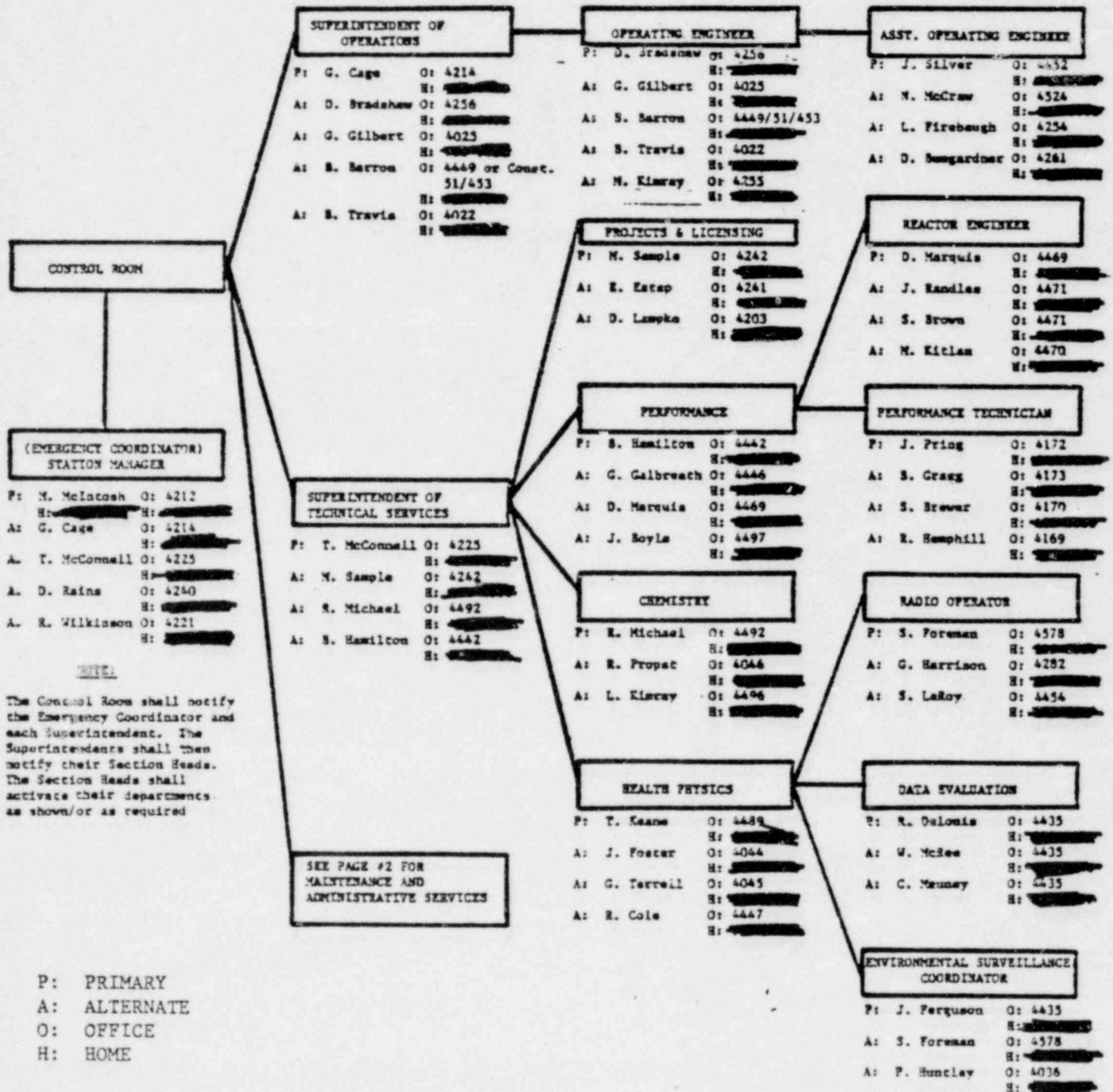
TECHNICAL SUPPORT CENTER

ENCLOSURE 4

TECHNICAL SUPPORT CENTER

PHASE 1

PHASE 2

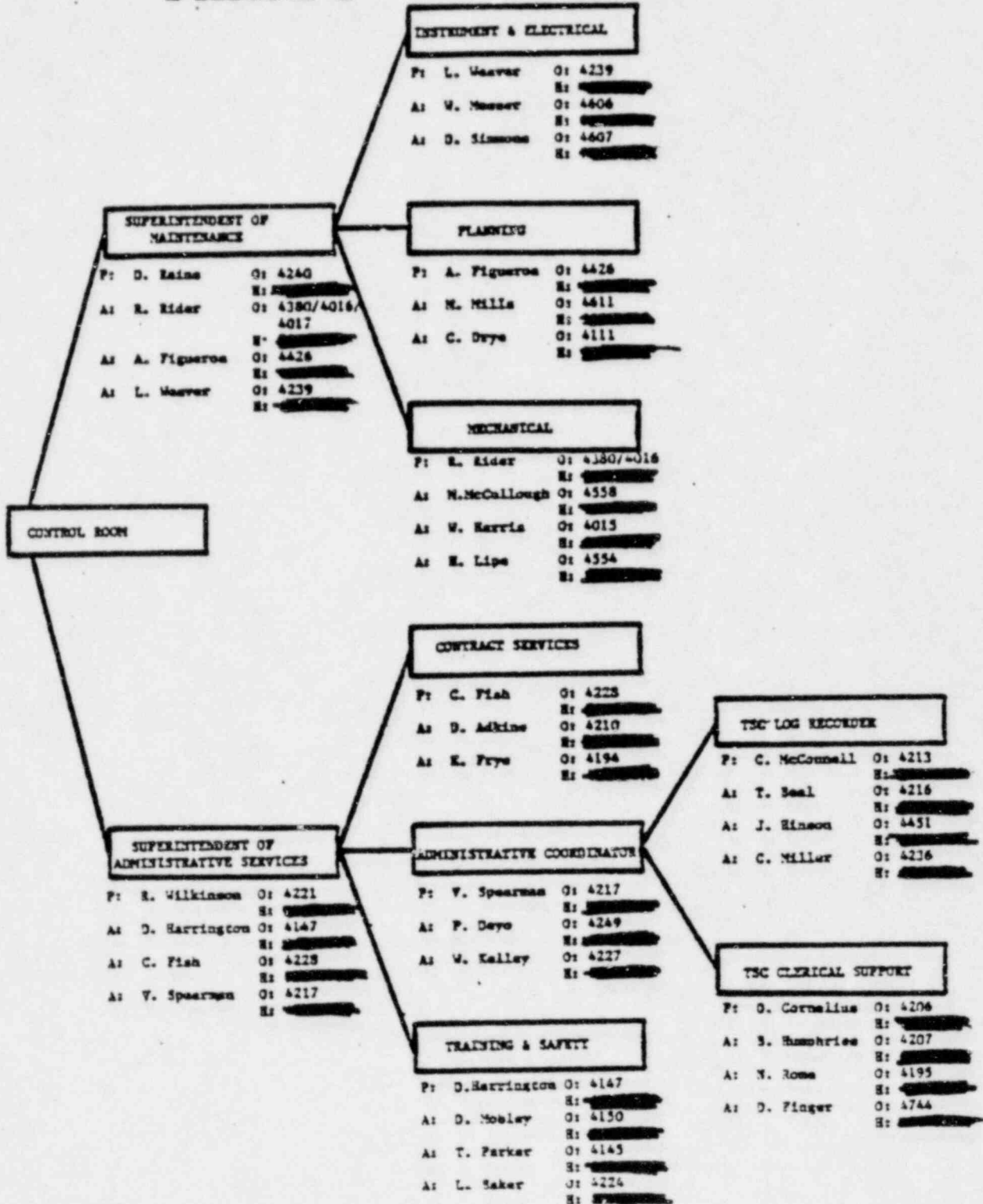


ENCLOSURE 4

TECHNICAL SUPPORT CENTER

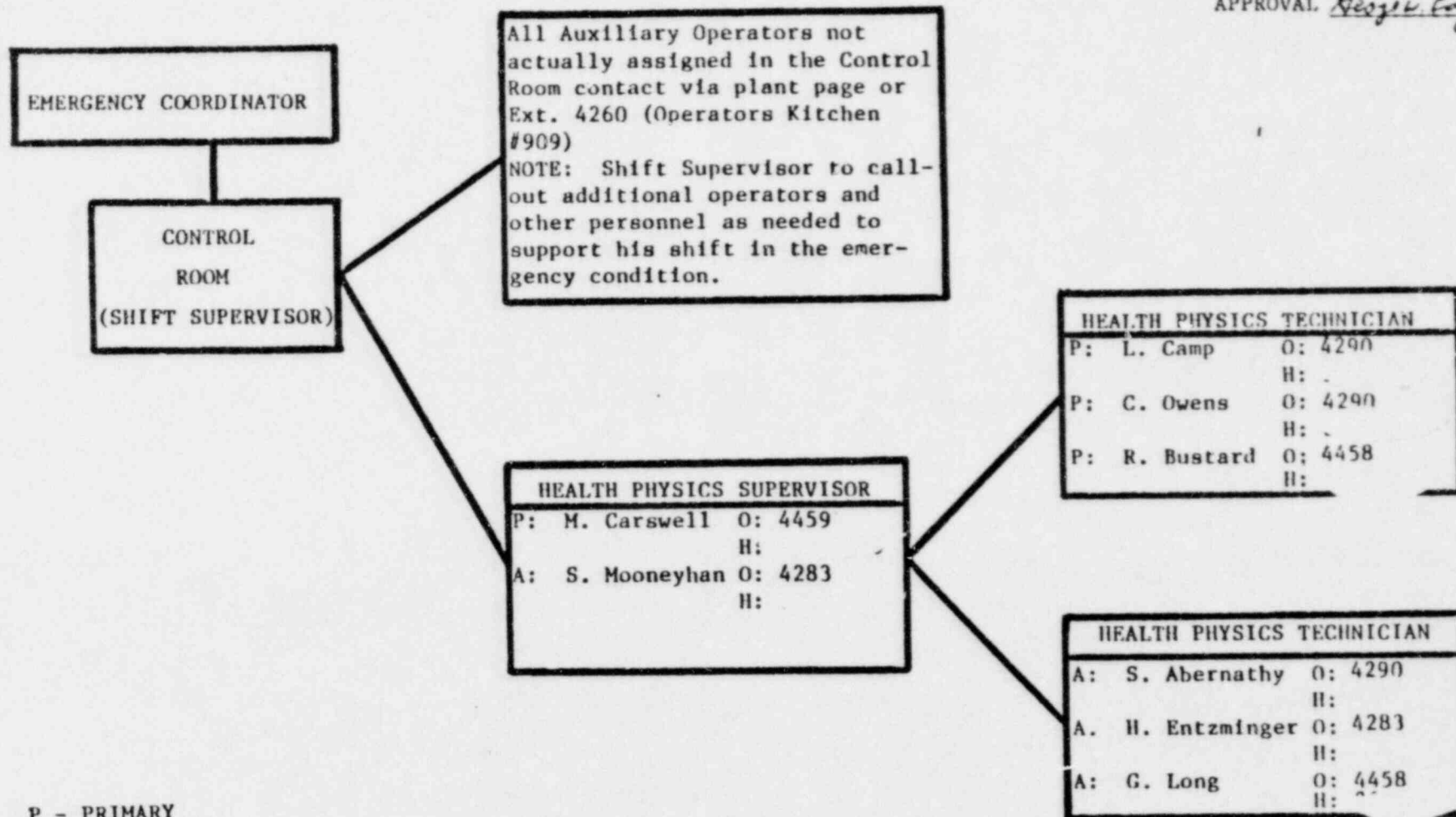
PHASE 1

PHASE 2



OPERATIONS SUPPORT CENTER

STATION DIRECTIVE 3.8.2
 REVISION 2 DATE 5-5-82
 APPROVAL *George Long*



P - PRIMARY
 A - ALTERNATE
 O - OFFICE PHONE
 H - HOME PHONE