The Emergency Broadcast System (EBS)

The role of communications in defending the Nation and protecting the life and property of its citizens has been recognized since the Federal Communications Commission was established in 1934. Over the intervening years, as the international situation has changed and as the Nation's communications systems have vastly expanded and improved, the role of communications in promoting the national defense and protecting life and property has likewise undergone farreaching changes.

Today when the United States has the capability of responding to a national emergency in a matter of minutes, it is imperative that the President be able to communicate with the entire Nation on a few moments' notice. Similarly, other federal officials, as well as state and local authorities, must be able to quickly transmit vital information to the public in times of emergency.

The Emergency Broadcast System (EBS) has been devised to provide the President and the federal government, as well as heads of state and local governments, or their designated representatives, with a means of communicating with the general public during emergency situations. Every home, business and institution will be able, when the EBS is activated, to receive Presidential messages and other pertinent announcements and news by tuning to an emergency broadcast station serving their local area.

The responsibility of the broadcast industry for providing emergency communications capability had its origins a number of years ago with the birth of CONELRAD, an acronym for COntrol of ELectromagnetic RADiation utilizing specially authorized standard broadcast stations. It was developed by the Federal Communications Commission during the period 1951-1953 at the joint request of the USAF Air Defense Command and the Federal Civil Defense Administration and remained in effect until early 1964. It was designed to satisfy the following two requirements:

1. Warn the general public and transmit emergency information during periods of declared national emergency (i.e., imminent threat of war, attack warning). 2. Minimize any radio navigational aid that the signals of the participating stations might furnish to attacking enemy aircraft.

Navigational aid denial was accomplished by restricting all authorized stations to operation on only two channels in the standard broadcast band (640 kHz and 1240 kHz). All nonparticipating stations were required to cease operations during such emergencies, and no transmissions were permitted on the remainder of the standard broadcast channels. In addition, the authorized stations transmitted intermittently. The combination of intermittent operation from any given station, plus the high concentration of signals originating from many different directions rendered radio direction-finding techniques practically useless. However, the high degree of cochannel interference that resulted from this operational mode severely limited the service areas of the participating stations. Initially, there were approximately 200 broadcast stations participating operationally in CONELRAD. This figure increased to approximately 1300 by late 1953 and stayed constant for the remainder of the program. In 1961, as a result of the development of ballistic missiles and the consequent diminishing importance of the tactical role of manned bombers, the Air Defense Command dropped the stringent technical restrictions they had imposed upon CONELRAD operation, and agreed that the authorized stations could operate with their regularly licensed facilities (power, frequency, etc.). The resulting increased service areas produced an improved emergency communication facility.

In 1964, a new improved system designated as the *Emergency Broadcast System* (EBS) was implemented. This name change was accomplished in order to differentiate the former (CONEL-RAD) two-channel 640 and 1240 kHz restricted communication system from station operation with regularly assigned facilities. It was during this change-over period that provision was made for FM broadcast stations to participate in the establishment of State Defense (relay) Networks.

Prior to 1972, in the event of a national emergency, participants in CONELRAD and the later EBS operation were required to possess a special emergency operating authorization

called a National Defense Emergency Authorization (NDEA). Stations desiring to participate had to submit an informal application for a NDEA to the Commission, accompanied by documentary assurance that the station would comply with certain qualifying criteria set forth in the Basic EBS Plan.

In early 1972, all outstanding NDEAs were cancelled and replaced by new emergency operating authorizations called Emergency Broadcast System Authorizations, and the former qualifying criteria were abolished. All existing broadcast stations (unlike during the CONELRAD and early EBS periods which did not include television and all FM Stations) were furnished with new EBS Authorizations, accompanied by a memorandum advising them if they elected not to actively participate in the EBS they were instructed to return their authorizations, accompanied by a written request that they be cancelled. Similarly, all new broadcast stations licensed subsequent to the initial authorization period have been tendered EBS Authorizations, again accompanied by a letter advising that the authorizations should be returned with a written request for cancellation, in event the licensee does not want to actively participate. The abolishment of stringent EBS authorization qualifying criteria plus the expedited authorization distribution procedures have resulted in an increase in active station participation in the EBS from approximately 40 percent to over 94 percent of the total broadcast stations in the United States.

The term "key station" has no official status, and is not formally defined in the Commission's EBS Rules. However, the Number 1 Common Program Control Station (CPCS-1) in an EBS Operational Area is a key station in the system.

Current State Emergency Broadcast System (EBS) Operational Plans have been completed for the 50 states, the District of Columbia, and the three territories (Guam, Puerto Rico and Virgin Islands). These plans are subdivided into 506 Operational Areas, each area containing at least one Common Program Control Station (CPCS). There are other CPCSs in an Operational area but they are considered backups. Therefore, there are 506 CPCS-1 stations in the Emergency Broadcast System that may be considered key stations.

In addition, there are a total of 597 broadcast stations participating in the EBS Protected Station Program that also may be considered key stations. They maintain government loaned auxiliary power generating and other equipment in a fallout protected environment. There are 196 of these stations which are not the CPCS-1. Thus, it may be said that there is a total of 702 key stations in the Emergency Broadcast System;

i.e., 506 CPCS-1s and 196 other stations in the EBS Protected Station Program.

SYSTEM ORGANIZATION

The Emergency Broadcast System (EBS) uses the facilities and personnel of the entire communications industry-broadcast stations, telephone companies and national press services on a voluntary, organized basis to establish an emergency broadcasting network. This network is operated by the industry under government regulations and procedures and in a manner consistent with national security requirements. Broadcast station licensees participating in the EBS have been issued Emergency Broadcast System (EBS) Authorizations by the Federal Communications Commission. Under peacetime conditions, Presidential broadcasts are handled by existing nongovernment radio and television facilities. Under conditions that would call for the activation of the EBS the normal flow of communications could be disrupted, altered, or destroyed.

National-level EAN will be released only upon Presidential authority, and the White House will direct release of the Emergency Action Notification (EAN) which constitutes the notice to all broadcast stations and participating radio and television networks of an emergency situation. Both the Emergency Action Notification and Termination are transmitted only over the Emergency Broadcast System. Upon activation of the National-Level EBS, the White House Communication Agency (WHCA), which is responsible for providing all communications for the President under all conditions, will deliver the Presidential messages to selected origination points. From these points the Presidential messages or broadcast will be distributed to participating EBS stations via the nationwide Radio and Television Broadcast Network program distribution facilities.

The Federal Communications Commission has been assigned the overall responsibility for the development of the Emergency Broadcast System. The FCC ensures effective coordination between that agency, Office of Telecommunications Policy, other required government agencies and nongovernment entities concerned. The National Industry Advisory Committee (NIAC) has been organized to advise and assist the FCC and other appropriate authorities. Membership in NIAC and its subcommittees is restricted to officers and employees of nongovernment Federal Communications Commission licensees (communications industry). It is to study and submit recommendations for emergency communications policies, plans, systems, and procedures for all licensed and regulated communications in order to provide continued emergency communications service during emergency situations.

Key in development of the EBS is the National-Level Broadcast Services Subcommittee. This subcommittee, with the assistance of Special Working Groups, provides the NIAC and the FCC with continuing advice and recommendations to ensure a workable EBS. Members are responsible for providing advice and assistance in programming guidance, production, and other operations of the National-Level interconnecting facilities and systems voluntarily participating in the EBS.

A State Emergency Communications Committee (SECC) has been organized in each of the 50 States, Guam, Puerto Rico, Virgin Islands, and the District of Columbia. The function of the SECC is to prepare coordinated operational emergency communications plans, systems, and procedures for their areas. A Broadcast Services Subcommittee is responsible for a state EBS Plan. State plans must be consistent with the approved National-Level plans.

An Operational Area Emergency Communications Committee, which functions as a subcommittee of the SECC, has been organized within geographical Operational (Local) Areas designated in coordination between SECC and State authorities. An Operational (Local) Area may include one or more communities; portion of two or more states may be included in borderline situations. The function of a Broadcast Services Subcommittee of the Operational Area Emergency Communication Committee is to develop operational emergency communications systems, plans, and procedures for inclusion in the state EBS Plans for use during local level day-to-day emergency situations.

Again, participation in the EBS by FCC licensees is on a voluntary basis. The FCC sends new licensees an EBS authorization and a letter requesting their voluntary participation in the EBS. Licensees subsequently receive an appropriate EBS checklist, a portion of the state plan essential to their operation in the EBS, a special instruction card to be posted at AP/UPI teletypewriter machines and the EBS Rules and Regulations.

Participating stations that remain on the air during a National-Level emergency situation must carry Presidential messages "live" at the time of transmission. Activities of the National-Level EBS will preempt operation of the state or operational (Local) area EBS.

National programming and news which is not broadcast at the time of original transmission will be recorded locally by the Common Program Control Station (CPCS) for broadcast at the earliest opportunity consistent with operational (Local) area requirements.

SYSTEM OPERATION

National Level Activation and Termination. (See Fig. 1.)

Implementation

The Emergency Action Notification (EAN) will be released at the National level upon request of the White House. When the White House directs activation of the National-Level EBS, the White House Communications Agency (WHCA), after a series of interim steps, issues instructions to implement the EBS. The Emergency Action Notification (EAN) message is then released which is eventually received by the Nation's broadcast stations. A dedicated teletypewriter net connecting the radio and television broadcasting networks and wire services transmits these messages. Following the EAN, there is a one-min, pause to allow time for the broadcasting networks to transmit a message over their internal alerting facilities, alerting stations that normal programming will be preempted by the EBS. Simultaneously, the EAN is transmitted over the respective Radio Wire Teletype Networks to alert those stations equipped to receive this service. Broadcast stations not equipped to receive either network alerting information or Radio Wire Teletype Network transmissions must rely on receipt of the EAN via off-the-air monitoring from other stations. Receipt of the EAN by any one of the methods discussed above is sufficient for the broadcast stations to commence emergency actions.

Station Responsibility

Upon receipt of the EAN certain actions are taken by all stations. These actions are:

- Authenticate the EAN.
- b. Discontinue normal programming and broadcast a special announcement alerting the public to the fact that important instructions are forthcoming.
 - c. Transmit the Attention Signal.
- d. Broadcast the message which informs the public of the fact that an emergency situation exists, that some stations will remain on the air, and that additional news and information will follow. Those stations required to cease transmitting will so inform their listeners.

The actions taken by the broadcast stations following transmission of the attention signal depend on the station designation. Stations fall into the categories of:

- a. Primary Station (Primary)
- b. Primary Relay Station (PRI Relay)
- c. Common Program Control Station (CPCS)
- d. Originating Primary Relay Station (Orig. PRI Relay)
 - e. Nonparticipating Station (Non-EBS)

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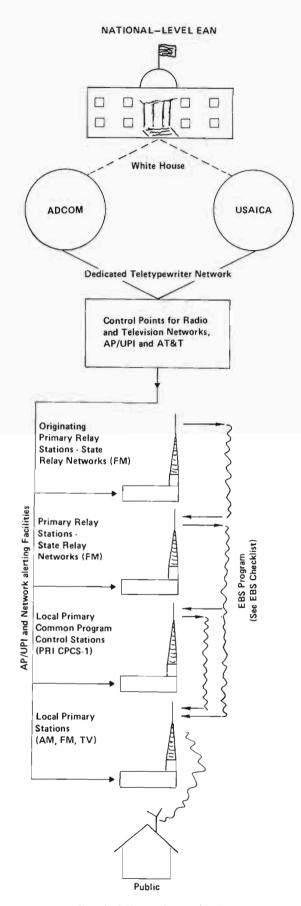


Fig. 1. Off-the-air monitoring.

Participating stations monitor the CPCS or PRI Relay station in their area or radio and television broadcasting networks for further instructions and broadcast emergency programming when it becomes available. Nonparticipating stations remove their carriers from the air and standby for the termination of the emergency. Should it become apparent the CPCS or PRI Relay stations may not be able to provide appropriate emergency program feed, other participating stations may elect to assume the duties by providing program feed.

When the National-level EBS is no longer needed, the Emergency Action Termination Message is transmitted. Broadcast stations receive the notification in the same manner as activation. The Common-Carriers then return the networks to normal configuration, and broadcast stations resume normal programming in accordance with their regular station authorization.

System Tests

Periodic Teletype Test Transmissions. The wire services will separately conduct test transmission to AM, FM, and TV broadcast stations on their Radio Wire Teletype Networks, a maximum of twice a month on a random basis at times of their choice. The subscribing broadcast stations enter the date and time of receipt of these test transmission operating consistently in the (broadcast) station program or operating log.

Closed Circuit Tests. These tests of the EBS will be conducted on a random or scheduled basis not more than once a month and not less than once every three months but only after FCC approval. Scheduled Closed Circuit Tests will be conducted at a time selected by the White House, the National Industry Advisory Committee (NIAC) representatives, and the FCC Defense Commissioner. The Closed Circuit Test Activation Message is disseminated to the various radio stations by:

- 1. The internal alerting facilities of the radio networks.
- 2. The Radio Wire Teletype Networks to all subscribers.

The common-carriers do not add participating independent stations to any of the Radio Networks during a Closed Circuit Test, unless ordered by the FCC.

During a Closed Circuit Test, broadcast stations do not interrupt programming and do not broadcast the message. The radio stations are required to:

- a. Monitor the Radio Network for the Test Program.
 - b. Check the wire services teletype;
 - c. Authenticate the message and;

d. Record the time of the test consistently in the operating or program log.

Because of the limited time available for the Closed Circuit Test, the **Termination** of the test will occur on the following Closing Cue as it appears in the text of the program:

"This concludes the Closed Circuit Test of the

Emergency Broadcast System."

Weekly Transmission Tests. All radio and TV stations are required to conduct a weekly test of the Attention Signal. This must be done once a week at a random day and time between 8:30 am and local sunset.

State Level EBS Operation (See Fig. 2)

Implementation

Upon receipt of a State-Level EAN all broadcast stations, including stations operating under equipment or program test authority, may, at the discretion of management, conduct operations in accordance with the provisions of the

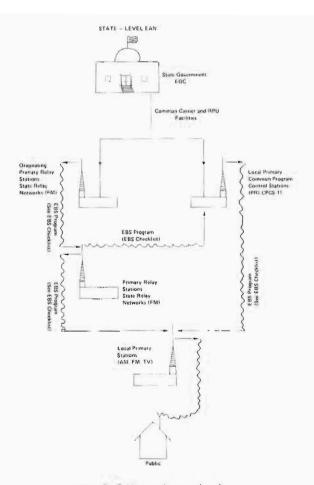


Fig. 2. Off-the-air monitoring.

state-level EBS Plan. Day-to-day emergencies posing a threat to the safety of life and property which could cause activation of the State-Level EBS include tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, discharge of toxic gases, widespread power failures, industrial explosions, and civil disorders. In most instances the State-Level EAN will be released from the State Emergency Operations Center (EOC). Common-Carrier or Remote Pickup Units (RPU) are used to provide communications from the EOC. An FCC EBS authorization is not required for a broadcast station to participate in the operation of the State-Level EBS. Receipt of the State-Level EAN will be through the means of Off-the-Air Monitoring or as otherwise stipulated in the State EBS Plan.

Station Responsibility

Actions to be taken by the broadcast stations after receipt of the EAN are as follows:

- a. Monitor the State Relay Network (PRI Relay Stations) for receipt of any further instructions from the original PRI Relay Station.
- b. Monitor the Primary Station designated as the CPCS-1 for your Operational (Local) Area for receipt of any further instructions.
- c. Discontinue normal program operation and broadcast the alert message.
 - d. Transmit the Attention Signal.
- e. Broadcast the State-Level EBS EAN Message.
- f. Upon completion of the above transmission resume normal programming until receipt of the cue from the CPCS for the Operational (Local) Area, or Primary Relay Station for the State EBS Network. Then begin broadcasting the common state-level program.

Upon receipt of notification of the termination of the State-Level EBS, participating broadcast stations will resume regular operations in accordance with the station authorization.

Operational (Local) Area EBS (See Fig. 3)

Implementation

Upon receipt of an Operational (Local) Area EAN, all broadcast stations, including stations operating under equipment or program test authority, which are voluntarily participating, may, at the discretion of management, conduct operations in accordance with the provisions of the State EBS Plan. Day-to-day emergencies posing a threat to the safety of life and property which could cause activation of the Operational (Local) Area EBS include tornadoes, hurricanes, floods, tidal waves, earthquakes, icing condi-

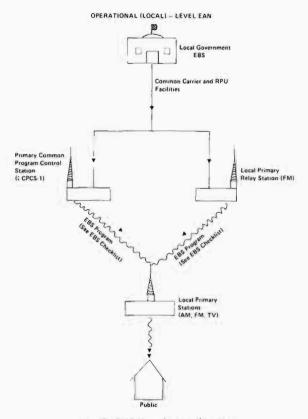


Fig. 3. Off-the-air monitoring.

tions, heavy snows, widespread fires, discharge of toxic gases, widespread power failures, industrial explosions, and civil disorders. In most instances the Operational (Local) Area EAN will be released from the local government Emergency Operations Center (EOC). Common-Carrier or Remote Pickup Units (RPU) are used to provide communications from the EOC. An FCC EBS Authorization is not required for a broadcast station to participate in the operation of the Operational (Local) Area EBS. Receipt of the Operation (Local) Area EAN will be through the means of Off-the-Air Monitoring or as otherwise stipulated in the State EBS Plan.

Station Responsibility

Actions to be taken by the broadcast stations after receipt of the EAN are as follows:

- a. Monitor the Primary Station designated as the CPSC-1 for the Operational (Local) Area for the receipt of instructions.
- b. Monitor the Primary Relay Station for the Operational (Local) Area for receipt of any further instructions.
- c. Discontinue normal program operation and broadcast the alert message contained in the EBS Checklists.
 - d. Transmit the Attention Signal.

- e. Broadcast the Operational (Local) Area EBS EAN Message.
- f. Upon completion of the above transmission, resume normal programming until receipt of the cue from the CPCS-1 for the Operational (Local) Area. Then begin broadcasting the common program.

Upon receipt of the termination of the Operational (Local) Area-Level EBS, participating broadcast stations will resume regular operations in accordance with the station authorization.

State and Local Tests

Test of implementing procedures developed at the state and local level may be conducted on a day-to-day basis as indicated in the State EBS Operational Plans. Coordinated tests of EBS operational procedures for an entire State or Operational Area may be conducted in lieu of the weekly transmission tests.

ORGANIZATION, FUNCTIONS AND **RESPONSIBILITIES OF THE NATIONAL** INDUSTRY ADVISORY COMMITTEE

Introduction

Under normal conditions, the President of the United States and other Federal, National, State, and Operational (Local) area authorities and organizations, and the US population enjoy the benefits of a vast domestic and international communications complex. This vast complex of wire, cable, and radio communications is readily available in aural, visual, and functional forms to provide communications services in the public interest, convenience, and necessity. These nongovernment services rendered may be broadly categorized into Radio Broadcast Services, Safety and Special Radio Services, and Common Carrier Communications Services. (See Fig. 4.)

The Nation's broadcast facilities provide a mass communications medium for the daily dissemination of local, state, national, and international news and programming in the public interest by both aural and visual means.

The Safety and Special Radio Services provide essential communications for a variety of activities ranging from the safety of life and property (public safety, aviation, and marine), to heavy and light industry (industrial and land transportation), to the pleasure and general public use of radio (amateur and citizens).

The Nation's common carrier facilities, wire, cable, CATV, and radio (including satellite) facilities, provide an efficient nationwide and worldwide communications complex rendering

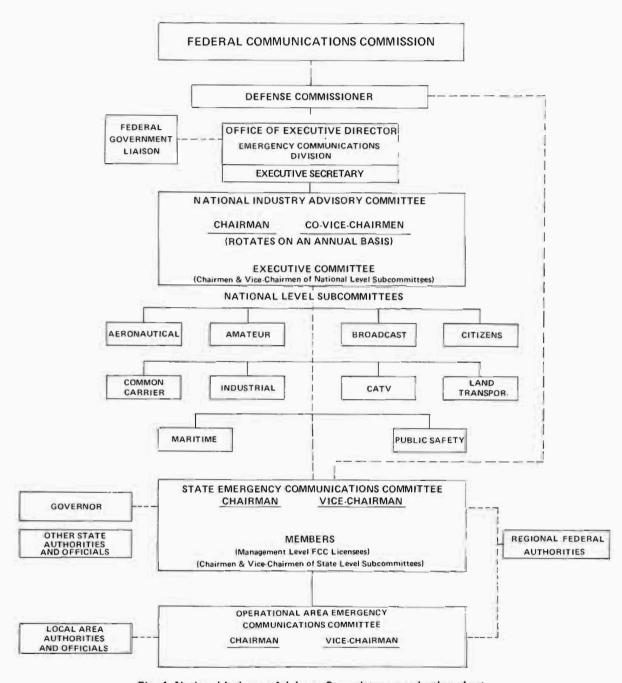


Fig. 4. National Industry Advisory Committee organization chart.

an extensive base of communications services available for hire. These services include telephone, telegraph, radio and television program services, CATV, and a multitude of leased communications services.

Communications in all forms are deeply integrated into emergency activities. During conditions of a national crisis or war, it is essential that the President and other appropriate authorities be able to communicate directly with the US population. The dissemination of Operational (Local) Area, State, and National Pro-

gramming and news is also essential during such periods. If the President of the United States needs to issue an Emergency Action Notification, then specific operational emergency plans for all FCC licensed and regulated communications services are required to provide continued vital and essential communications capability. Both interstate and intrastate nongovernment communications facilities are utilized in fulfilling operational emergency communications requirements and supporting communications interconnections and planned arrangements for a continuity of service.

SCOPE OF PROBLEM

A broad range of emergency contingencies and requirements dictates the necessity for the orderly development, approval and implementation of operational emergency communications policies, plans, systems, and procedures capable of expeditious emergency activation, and utilizing, on a voluntary, organized basis, nongovernment personnel and Federal Communications Commission licensed and regulated facilities, covering:

- 1. Common-carrier services. (a) Extension, discontinuance, or reduction of common carrier facilities or services, and issuance of appropriate authorizations for such facilities, services, and personnel in an emergency; and control of all rates, charges, practices, classifications, and regulations for service to government and non-government users during an emergency, in consonance with overall national economic stabilization policies.
- (b) Development and administration of priority systems for public correspondence and for the use and resumption of leased intercity private line service in an emergency.
- (c) Use of common-carrier facilities and services to overseas point to meet vital needs in an emergency.
- 2. Broadcasting services. The construction, activation, or deactivation of AM, FM, TV, and auxiliary broadcast facilities and services; the continuation or suspension of broadcasting services and facilities; and the issuance of appropriate authorizations for such facilities, services, and personnel in emergency situations.
- 3. Safety and special radio services. Authorization, operation, and use of safety and special radio services, facilities, and personnel in the national interest in an emergency.
- 4. Radio frequency assignment. Assignment of radio frequencies to, and their use by Commission licensees in an emergency.
- 5. Electromagnetic radiation. Closing of any radio station or any device capable of emitting electromagnetic radiation or suspension or amending any rules or regulations applicable thereto, in any emergency, except for those belonging to, or operated by, any department or agency of the United States Government.
- 6. Investigation and enforcement. Investigation of violations of pertinent law and regulations in an emergency, and the development of procedures designated to initiate, recommend, or otherwise bring about appropriate enforcement actions required in the interest of national security.
- 7. Priorities and allocations. Systems for the emergency application of priorities and allocations to the production, distribution, and use of

- resources for which FCC has been assigned responsibility.
- 8. Requirements. Assembly, development as appropriate, and evaluation of requirements for assigned resources, taking into account estimated needs for military, atomic energy, civilian, and foreign purposes. Such evaluation shall take into consideration geographical distribution of requirements under emergency conditions.
- 9. Evaluation. Assessment of assigned resources in order to estimate availability from all sources under an emergency situation, analysis of resource availabilities in relation to estimated requirements, and development of appropriate recommendations and programs, including those necessary for the maintenance of an adequate mobilization base. Provision of data and assistance before and after attack for national resource analysis purposes.
- 10. Claimancy. Plans to claim from the appropriate agency supporting materials, manpower, equipment, supplies, and services which would be needed to carry out assigned responsibilities and other essential functions of FCC, and cooperation with other agencies in developing programs to insure availability of such resources in an emergency.
- 11. Facilities Protection. Facilities protection guidance material adapted to the needs of the facilities and services concerned and promotion of a national program to stimulate disaster preparedness and control in order to minimize the effects of overt or covert attack on facilities or other resources for which FCC has management responsibility, including, but not limited to, organization and training of facility employees, personnel shelter, evacuation plans, records protection, continuity of management, emergency repair, dispersal of facilities, and mutual aid associations for an emergency.
- 12. Warfare effects monitoring and reporting. A capability, both at national and field levels, to estimate the effects of attack on assigned resources and to collaborate with and provide data to the Office of Preparedness, the Department of Defense, and other agencies, as appropriate, in verifying and updating estimates of resource status through exchanges of data and mutual assistance, and providing for the detection, identification, monitoring and reporting of such warfare effects at selected facilities.
- 13. Salvage and rehabilitation. Plans for salvage, decontamination, and rehabilitation of facilities involving resources under FCC jurisdiction.
- 14. Research. Research in areas directly concerned with carrying out emergency preparedness responsibilities, designating representatives

for necessary ad hoc or task force groups and providing advice and assistance to other agencies through FCC in research in emergency communications.

- 15. Stockpiles. Assistance in formulating and carrying out plans for stockpiling of strategic and critical communications materials and survival items
- 16. Direct economic controls. Cooperation with federal financial agencies in the development of emergency preparedness measures involving emergency financial and credit measures, as well as price, rent, wage and salary stabilization, and consumer rationing programs.
- 17. Financial aid. Plans and procedures in cooperation with the federal financial agencies for financial and credit assistance to those segments of the private sector for which FCC is responsible in the event such assistance is needed under emergency conditions.
- 18. Emergency public information. (a) Obtaining and providing information regarding the emergency functions or assignments of the individual departments or agencies for dissemination to the American people via the Emergency Broadcast System during an emergency.
- (b) Determination of requirements and making arrangements for prerecordings to provide continuity of program service over the Emergency Broadcast System.

National Industry Advisory Committee

Introduction

A National Industry Advisory Committee (NIAC) has been organized to advise and assist the Federal Communications Commission, and other appropriate authorities. NIAC's function is to study and submit recommendations for emergency communications policies, plans, systems, and procedures, for all FCC licensed and regulated communications in order to provide continued emergency communications services under conditions of crisis or war. In addition, NIAC considers the adaptation and use of the systems, arrangements, and interconnecting facilities set forth in approved Operational Plans on a voluntary, organized basis during national, state, and operational (local) situations posing a threat to the safety of life and property. Included also are those conditions constituting a state of public peril or disaster. Such use of these capabilities during emergency situations is in accordance with the Commission's emergency and preparedness responsibilities, as defined in sections 1, 4(o), 301, 308(a) and 606 of the Communications Act of 1934, amended, and Executive Order 11490.

Organization

The National Industry Advisory Committee:

A Chairman

A Vice Chairman

Executive Secretary

An Executive Committee composed of the Chairman and Vice Chairmen of National Level Subcommittees

National Level Subcommittees:

Aeronautical Communications Services Subcommittee

Amateur Radio Service Subcommittee **Broadcast Services Subcommittee**

CATV Communications Services Subcommittee

Citizens Radio Service Subcommittee

Domestic and International Common Carrier Communications Services Subcommittee

Industrial Communications Services Subcommittee

Land Transportation Communications Services Subcommittee

Maritime Communications Services Subcommittee

Public Safety Communications Services Subcommittee

Members of the NIAC are appointed for a term not exceeding two years by the Federal Communications Commission, subject to appropriate security clearance when warranted. Membership in the NIAC and its subcommittees is restricted to officers and employees of nongovernment Federal Communications Commission licensees (communications industry), subject to formal waiver when it is deemed in the public interest, convenience, and necessity. ("Nongovernment," as used herein, excludes federal government but includes state and local government Federal Communications Commission licensees. Communications facilities of federal government agencies are not licensed by the Federal Communications Commission.) Since all appointees serve at the pleasure of the Commission, any appointment may be terminated without cause. Such termination will be effective upon receipt of written notification from the Commission.

The Executive Secretary serves as the official correspondent for the National Industry Advisory Committee.

Functions and Responsibilities

The NIAC is concerned with operational emergency communications policies, plans, systems and procedures to fulfill stated requirements under a broad range of emergency contingencies posing a threat to the safety of life and property. The principal functions and responsibilities include but are not limited to:

- a. Studying and submitting recommendations to the Federal Communications Commission concerning operational emergency communications.
- b. Providing advice and recommendations through the Federal Communications Commission to appropriate federal, national, state and local authorities and organizations to enhance emergency communications operations.
- c. Maintaining liaison with the nongovernment communications industry.
- d. Maintaining liaison with all subcommittees, Special National Industry Advisory Committee Working Groups, and ad hoc committees to coordinate and assist in the planning for the utilization of nongovernment communications facilities during emergencies.
- e. Coordinating with the Federal Communications Commission in the establishment of authentication procedures for use during emergencies.
- f. Advising the Federal Communications Commission concerning industry opinion relative to any proposed test or exercise of emergency communications systems, plans, and procedures. Also assisting, observing and evaluating the effectiveness of such activities.
- g. Evaluating proposals for the development and use of operational emergency communications systems, plans, and procedures.
- h. Encouraging studies and research directed towards the improvement of existing and development of new systems, plans, and policies which will improve the overall effectiveness of emergency communications.
- i. Maintaining liaison with State Emergency Communications Committees.

Procedures

Detailed procedures with respect to operation, management, and functioning of the National Industry Advisory Committee, Subcommittees and Working Groups are published in separate documents and are available from the Executive Secretary, National Industry Advisory Committee, Federal Communications Commission, Washington, D.C. 20554.

Over-the-air EBS Station Monitoring

In order to insure the effectiveness of the Emergency Broadcast System, all licensees must have installed and in operating condition, equipment capable of transmitting and receiving the Attention Signal. The receiving equipment must be maintained in operating condition, including arrangements for human listening or automatic alarm devices and shall be installed at the designated transmitter control point and/or studio location in such a way that it enables the broadcast station staff, at normal duty locations, to be

alerted instantaneously upon the receipt of the Attention Signal and to immediately monitor the emergency programming.

The Attention signal consists of the simultaneous transmission of two audio tones for not less than 20 sec. nor more than 25 sec. The characteristics of the two-ton signaling system are as follows:

Encoder

Function. To give an alert by demuting a monitoring receiver at the station receiving the signal. The monitor is continuously tuned to the sending station for EBS information.

Signal. Two simultaneous audio frequencies, 853 Hz and 960 Hz, each \pm 0.5 Hz.

Harmonic distortion. Not to exceed 5 percent of each tone at encoder output.

Minimum level of modulation. Each tone must be capable of modulating the transmitter to not less than 40%, with all equipment ordinarily used in the audio line between the encoder and transmitter. To assure this, the specification further says that the output at each audio tone shall be at least + 8 dBm into a 600-ohm load. The unit shall allow calibration of each tone separately.

Time period. On activation, the two tones shall be generated for not less than 20 sec. nor more than 25 sec.

Operating temperature. All foregoing specs maintained in ambient temperature 0° to 50° C.

Humidity. All specs must be maintained up to 95 percent relative humidity.

Supply voltage variation. Operation must be within tolerances with supply voltage from 85 percent to 115 percent of the rated value.

Testing conditions. Must maintain the frequency, distortion, and time period specs in a minimum RF field of 10 v/M at a frequency in the AM broadcast band, and with a minimum RF field of 0.5 v/M in either the FM or TV frequency band.

Indicator device. A visual and/or aural indicator must show clearly that the device has been activated.

Switch guard. The activation switch must have protection which will prevent accidental operation; this must include remote-control switches.

Decoder

The decoder must be activated only on simultaneous detection of the two audio tones, 853 Hz and 960 Hz. This simultaneous reception must demute the monitoring receiver. The additional capability of activiting an external alarm is not required, but has obvious value.

To prevent falsing, the decoder must have: a time delay not less than 8 seconds, and not more than 16 seconds; must have bandwidth such that there is no response to tones that vary more than ± 5 Hz from each of the frequencies, 853 Hz and 960 Hz.

The decoder must have a reset switch, for returning the receiver to a muted state after activation.

The decoder must maintain all the foregoing specifications in ambient temperature from 0° to 50°C.

For the convenience of operating personnel, the EBS decoder is in most cases muted for normal periods of operation. Such devices are, of course, activated upon receipt of the alert signal.

Special Reception Techniques

In certain instances either where stations are at a critical distance from another station or where receiving conditions are generally difficult by reason of directional operation, atmosspherics, etc., extraordinary means are sometimes necessary to ensure the reception of the alert signal from another station. The Federal Communications Commission has provided information concerning the use of special receiving antennas which are applicable for such purposes. The application of this information, in many situations, will enable satisfactory reception of stations which ordinarily are completely unintelligible.

Shielding and Filtering

In cases where applicable, it is advisable to locate the antenna as far from a source of interference (or radio transmitter antenna) as possible and use coaxial or shielded transmission line to the receiver input terminals. Appropriate filtering and bypassing of power leads in order to eliminate the possible effect of high RF fields on the reception of the desired signal may be required. The antenna transmission line to the receiver may have to incorporate trap circuits to filter out the local transmitter radiation. For low-impedance receiver input, the circuit may be a parallel-resonant trap connected in series with the inner conductor of the coax. For highimpedance receiver input, the trap will perform most satisfactorily if connected directly across the input terminals, tuned to the frequency of the local station. Sometimes, both traps are required when the local RF field is high and/or when the cross-modulation products produced in a superheterodyne receiver cause adverse reception effects or when the undesired radiation is on a different frequency from the desired.

Loop Antenna

When the desired and undesired stations are on the same or very nearly the same frequencies, a directional antenna is often necessary. Such an antenna is also necessary in areas of weak signal strength from the desired station. A simple type of such antenna is the loop antenna, which is of maximum effectiveness only when the signals under consideration are within the ground-wave area. When this antenna is used, the null (obtained broadside to the plane of the loop) is oriented toward the undesired station. Maximum voltage is induced in the loop when the plane of the loop points toward the desired station. Since the antenna is bidirectional, a station on the back side may produce sufficient signal to cause interference, in which case a more elaborate directional receiving antenna may be required (see Fig. 5).

Beverage, or "Wave," Antenna

A very effective receiving directional antenna is the Beverage type. The theory of this antenna has been well covered in texts for many years and is not included here. Among the desirable properties of the Beverage, or the "wave," antenna for reception are:

- 1. It delivers a stronger signal over the entire standard broadcast band than a good simple antenna of the single-wire variety.
- 2. When terminated, it is unidirectional but can be used as a bidirectional antenna either by switching the termination or by being unterminated.
- 3. Atmospherics and industrial interference are considerably reduced, especially when the source is in a direction other than that of the main lobe of the antenna.

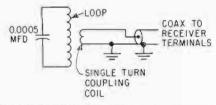


Fig. 5. Simplified schematic of a loop antenna with construction details. Loop dimensions: 13 turns of No. 20 wire wound on a 12-in. square form, with 1/8 in. spacing between turns. The coupling coil is a single turn wound inside the loop and spaced approximately 1 in. from the loop. The mechanical mounting is optional, but for best results the loop should be mounted in the clear and away from metallic objects. Experiments with various turns in the coupling coil and using a coaxial cable from the loop to the receiver might prove beneficial. Shielding the loop is important in direction-finding work but is not important for ordinary reception.

4. The antenna is low in cost, has long life, and is usually easy and simple to erect provided the space is available.

Emergency Broadcast System (EBS) Checklist for Participating Stations

The following checklist is a condensation of the Basic Emergency Broadcast System Plan, and contains simplified instructions for each type of situation. The checklist contains step-bystep procedures for stations to follow when receiving a National-Level Emergency Action Notification. Also the termination procedures to be followed by all licensees at the conclusion of the National-Level Emergency. The checklist provides detailed procedural information as to what action must be taken when in receipt of National-Level Closed Circuit Tests, the periodic Teletype Tests and the Weekly Transmission Tests. Lastly, step-by-step instructions are included for state and local level procedures and tests. More detailed information may be found, concerning these simplified instructions, by referring to Part 73 of the Commission's Rules and Regulations.

NATIONAL LEVEL INSTRUCTIONS

When EBS is activated by the White House, all broadcast stations must take the following actions. Stations should record all emergency broadcast (including notification) and log all significant events in the event these records are required at a later date.

Activation Procedures—All Stations

1. Receive Emergency Action Notification—EAN

(This is the notice which activates EBS—Presidential messages may be received as soon as 5 mins.)

Notification by one of the following methods is sufficient to commence action:

AP and UPI TELETYPE

Preceded and followed by a line of "X's" and 10 bell alarm

RADIO-TV NETWORKS

Affiliates only preceded by network alerting signal—Continue to monitor for further instructions

 EBS MONITOR RECEIVER Preceded by Two-Tone Attention Signal—See Step 5 for message format—Continue to monitor for further instructions—Your EBS Monitoring assignment is specified in the State EBS Operational Plan.

EMERGENCY ACTION NOTIFICATION MESSAGE—AP AND UPI SUB-SCRIBERS/NETWORK AFFILIATES ONLY

"This is an Emergency Action Notification requested by the White House. The AUTHENTICATOR WORD for this notification is (—). All stations follow procedures in the EBS Checklist for national level emergency. The President of the United States or his designated representative will shortly deliver a message over the EMERGENCY BROADCAST SYSTEM. The Authenticator Word is (—)."

2. Authenticate Notification AP and UPI Subscribers/Network Affiliates Only

Compare authenticator words in notification with words on current EBS authenticator list. Take no further action if words do not match.

Different activation and termination words are provided for each date. Words are effective 12:01 a.m. Washington, D.C. time

3. Discontinue Normal Programming And Broadcast Announcement

(TV Stations shall display an appropriate EBS slide and transmit all following announcements visually and aurally in the manner required by Section 73.675(b) of the FCC Rules. Foreign language stations report all announcements in foreign language.

"We interrupt this program; this is a national emergency. Important instructions will follow."

4. Transmit Attention Signal

Broadcast the Two-Tone Attention Signal (see section 73.906 of the rules) for from 20 to 25 secs.

Note. Noncommercial educational FM broadcast stations of 10 watts or less which are exempt from having the capability to transmit the Two-Tone Attention Signal.

Primary Stations Only

(Including PRI CPCS Stations)

5. Broadcast Announcement

"This is an Emergency Action Notification. All stations shall broadcast this Emergency Action

Notification Message. This station has interrupted its regular program at the request of the White House to participate in the Emergency Broadcast System. During this emergency, some stations will remain on the air broadcasting news and official information to the public in assigned areas. This is station (call letters). We will remain on the air to serve the (operational area name) area. If you are not in this area, you should tune to other stations until you hear one broadcasting news and information for your area. You are listening to the Emergency Broadcast System serving the (operational area name) area. Do not use your telephone. The telephone lines should be kept open for emergency use. The Emergency Broadcast System has been activated to keep you informed. I repeat . . ." (Repeat Announcement)

6. Monitor Following Sources For Further Instructions And Broadcast Emergency Programming As Soon As Available:

Sources

- Common Program Control Station For Operational Area
- Radio-TV Network Lines Affiliates & Non-affiliates serviced by participating communications common-carriers
- Primary Relay (FM) Station of State Relay Network
- Any other source that may be available

Priorities

Record lower priority programming for rebroadcast at earliest opportunity.

First-Presidential messages-Must be carried "live"

Second—Operation Area (LOCAL) Programming

Third—State Programming Fourth-National Programming and News

7. Use This Standby Script Until Emergency Programming Available— Later As Filler

"We interrupt our program at the request of the White House. This is the Emergency Broadcast System. All normal broadcasting has been discontinued during this emergency. This is station (call letters). This station will continue to broadcast, furnishing news, official information and instructions, as soon as possible, for the (operational area name) area. If you are not in the (operational area name) area, tune to a station furnishing information for your area. I repeat— We interrupt our program at the request of the

White House. This is the Emergency Broadcast System. All normal broadcasting has been discontinued during this emergency. This station will continue to broadcast, furnishing news, official information and instructions, as soon as possible, for the (operational area name) area. If you are not in the (operational area name) area, turn to a station furnishing information for your area. Do not use your telephone. The telephone lines should be kept open for official use. The Emergency Broadcast System has been activated to keep you informed. To repeat-This is station (call letters). This station will broadcast news, official information and instruction for the (operational area name) area. If you are in the (operational area name) area, keep tuned to this station for further emergency information. It is important that you listen carefully to announcements only on the station broadcasting information for your area." (Repeat as needed.)

8. Monitor For Emergency Action **Termination**

Same methods as for notification—Upon receipt, proceed to termination procedures.

> Primary Relay Stations Only (Including Originating Primary Relay Stations)

5. Broadcast Announcement

"This is an Emergency Action Notification. All stations shall broadcast this Emergency Action Notification Message. This station has interrupted its regular program at the request of the White House to participate in the Emergency Broadcast System. During this emergency, some stations will remain on the air broadcasting news and official information to the public in assigned areas. This is station (call letters). We will be serving as a program distribution and relay channel to other stations. We will remain on the air to serve the (operational area name) area. If you are not in this area, you should tune to other stations until you hear one broadcasting news and information for your area. Do not use your telephone. The telephone lines should be kept open for official use. The Emergency Broadcast System has been activated to keep you informed. I repeat . . ." (Repeat Announcement.)

6. Monitor Following Sources For Further Instructions And Broadcast Emergency Programming As Soon As Available

Sources

 Common Program Control Station For Operational Area

Radio-TV Network Lines

Affiliates and Non-Affiliates serviced by participating communications commoncarriers.

- Another Primary Relay Station of the State Relay Network
- Any other source that may be available.

Priorities

Record lower priority programming for rebroadcast at earliest opportunity.

First-Presidential Messages-Must be carried "live"

Second—Operational Area (LOCAL) Programming

Third—State Programming Fourth-National Programming and News

7. Use This Standby Script Until Emergency Programming Available— Later As Filler

"We interrupt our program at the request of the White House. This is the Emergency Broadcast System. All normal broadcasting has been discontinued during this emergency. This is station (call letters). This station will continue to broadcast, furnishing news, official information and instructions, as soon as possible, for the (operation area name) area. If you are not in the (operational area name) area, tune to a station furnishing information for your area. I repeat—We interrupt our program at the request of the White House. This is the Emergency Broadcast System. All normal broadcasting has been discontinued during this emergency. This station will continue to broadcast, furnishing news, official information and instructions, as soon as possible, for the (operational area name) area. If you are not in the (operational area name) area, tune to a station furnishing information for your area.

Do not use your telephone. The telephone lines should be kept open for official use. The Emergency Broadcast System has been activated to keep you informed. To repeat—This is station (call letters). This station will broadcast news, official information and instruction for the (operational area name) area. If you are in the (operational area name) area, keep tuned to this station for further emergency information. It is important that you listen carefully to announcements only on the station broadcasting information for your area.' ' (Repeat as needed)

8. Monitor For Emergency Action **Termination**

Same methods as for notification—Upon receipt, proceed to termination procedures.

Termination Procedures—All Stations

1. Receive Emergency Action Termination

(Same methods as for notification)

EMERGENCY ACTION TERMINATION MESSAGE-AP/UPI SUBSCRIBERS/ **NETWORK AFFILIATES ONLY**

"This is an Emergency Action Termination. The AUTHENTICATOR WORD for this termination is (-). All stations follow the EBS Checklist for termination procedures. The Authenticator Word is (-)."

2. Authenticate Termination

Compare authenticator words in termination with words on current authenticator list. Do not initiate termination of words do not match. (Red envelope contained in pocket on inside front cover.)

3. Broadcast Announcement:

"This concludes operations under the Emergency Broadcast System. All broadcast stations may now resume normal broadcast operations." (Repeat announcement.)

4. Resume Normal Programming

(In accordance with regular station authorization)

NATIONAL LEVEL TESTS

National interconnecting arrangements and facilities (Networks, Key Stations, AP/UPI, AT&T) will be tested periodically. See Basic EBS Plan for detailed instructions. Procedures for tests which affect all stations are described below.

Closed Circuit Tests

(Radio Network Affiliates and AP/UPI Subscribers)

DO NOT INTERRUPT PROGRAM-DO NOT **BROADCAST TEST MESSAGE**

Notification Methods

RADIO NETWORKS

Affiliates only-Preceded by network alerting signal

AP and UPI TELETYPE

Preceded and followed by a line of "X's" and 10 bell alarm

CLOSED CIRCUIT TEST ACTIVATION

MESSAGE—AP/UPI SUBSCRIBERS/ RADIO NETWORK AFFILIATES ONLY

"This is notification of a closed circuit test of the EMERGENCY BROAD- CAST SYSTEM. The test program will begin at ______, Washington, D.C. time. Radio stations do not broadcast this message and do not broadcast the audio program. The test Authenticator Word is _____. This message authorizes a closed circuit test of the Emergency Broadcast System. Broadcast stations monitor radio network lines for closed circuit test program. All stations follow procedures in the EBS Checklist for closed circuit test. The test Authenticator Word is _____."

Action By Station:

- 1. Monitor Radio Network For Test Program
- 2. Check AP and UPI Teletype
- 3. Authenticate Test Message

Compare Authenticator Words with test words printed on outside of EBS AUTHENTICATOR LIST ENVELOPE (Red envelope). If words do not match take no further action.

4. Record Time Test Received in Station Operating or Program Log

Termination Methods:

RADIO NETWORKS

Affiliates onlyreceive following aural Closing Cue: "This concludes the Closed Circuit Test of the Emergency Broadcast System."

AP and UPI TELETYPE

Preceded and followed by a line of "X's" and 10 bell alarm.

Closed Circuit Test Termination Message

(AP and UPI Subscribers Only)

"This is an EBS Closed Circuit Test Termination. The Authenticator Word for this termination is (-). The Closed Circuit Test was terminated at (Date and Time), Washington, D.C. Time. The Authenticator Words is (-).

Action By Station:

- 1. Radio Network Affiliates Monitor Network For Closing Cue
- 2. AP and UPI Subscribers Check Teletype For Closed Circuit Test Termination Message

3. Authenticate Test Termination Message Compare Authenticator Word with test words

printed on outside of EBS Authenticator List Envelope (Red Envelope). If words do not match take no further action.

4. Record Time Test Termination Message Received in Station Operating or **Program Log**

Periodic AP and UPI Test Transmissions (AP and UPI Subscribers Only)

DO NOT INTERRUPT PROGRAM—DO NOT **BROADCAST TEST MESSAGE**

Notification Method

AP and UPI TELETYPE

Preceded and followed by a line of "X's" and 10 bell alarm

Periodic Teletype Test Message

"This is a test of the Emergency Action Notification Procedures. If this were not a test, you would receive an Emergency Action Notification Message containing Authenticator Words. This is a test of the Emergency Action Notification Procedures. All stations follow procedures in EBS Checklist for periodic teletype tests."

Action By Station

1. Record Time Test Received In Station Operating or Program Log

(No authentication provided)

WEEKLY TRANSMISSION TESTS OF THE ATTENTION SIGNAL AND TEST SCRIPT

(All Radio and TV Stations)

TRANSMIT ATTENTION SIGNAL TEST A MINIMUM OF ONCE A WEEK AT RANDOM DAYS AND TIMES BETWEEN 8:30 AM AND LOCAL SUNSET

Action By Station

- 1. Discontinue Normal Programming
- 2. Broadcast Announcement:

(TV stations shall display an appropriate EBS slide and transmit all following announcements visually and aurally in the manner described by Section 73.675(b) of the FCC Rules. Foreign language stations repeat all announcements in foreign language.

"This is a test. This station is conducting a test of the Emergency Broadcast System. This is only a test."

3. Transmit Attention Signal

BROADCAST THE TWO-TONE ATTENTION SIGNAL (SEE SECTION 73.906 OF THE RULES)

4. Broadcast Announcement:

"This is a test of the Emergency Broadcast System. The broadcasters of your area in voluntary cooperation with the FCC and other authorities have developed this system to keep you informed in the event of an emergency. If this had been an actual emergency, you would have been instructed where to tune in your area for news and official information. This concludes this test of the Emergency Broadcast System.

- 5. Resume Regular Programming
- 6. Record Time Test Conducted in Station Operating or Program Log

STATE AND LOCAL LEVEL INSTRUCTIONS

These procedures may be amended or altered as set forth in procedural guides, SOP's, and other implementing instructions which are considered an appendix to the State EBS Operational Plan.

1. ACTIVATION

STATE LEVEL

A request for activation may be directed to the Originating Primary Relay Station by the Governor, his designated representative, the National Weather Service, the State Civil Defence or State Office of Emergency Services.

LOCAL LEVEL:

A request for activation may be directed to the Common Program Control Station (CPCS-1) by the Weather Service, local Civil Defence, and local government or public safety officials.

2. AUTHENTICATION

The Originating Primary Relay Station and/or Common Program Control Station will authenticate request for activation according to the State EBS Operational Plan and associated implementing instructions.

3. IMPLEMENTATION

- (a) Record emergency program material. (Optional).
 - (b) Broadcast the Following announcement:

"We interrupt this program because of a (state/local) emergency. Important information will follow."

- (c) Transmit the EBS Attention Signal for from 20 to 25 seconds.
 - (d) Broadcast the following announcement:

"We interrupt this program to activate the (name of State or Operational Area) Emergency Broadcast System at the request of (activating Official) at (time)."

(e) Broadcast emergency program material (from (a) above).

NOTE: TV stations participating in the State or local level EBS shall display an appropriate EBS slide and transmit all announcement visually and aurally in the manner required by Section 73.675 (b) of the FCC Rules. Foreign language stations repeat all.

4. TERMINATION

(a) Upon receipt of the termination notice from activating official, make the following announcement:

"This concludes operations under the (name of State or Operational Area) Emergency Broadcast System. All broadcast stations may now resume normal broadcast operations."

(b) Record emergency operation in station operating or program log. Send brief summary to FCC (Optional).

STATE AND LOCAL TESTS

Tests of implementing procedures developed at the State and local levels may be conducted on a day-to-day basis as indicated in State EBS Operational Plans. Coordinated tests of EBS operational procedures for an entire State or Operational Area may be conducted in lieu of the Weekly Transmission Tests of the Attention Signal and Test Script required by Section 73.961 (c) of the Rules.

Station Notes

NATIONAL LEVEL INSTRUCTIONS

Emergency Broadcast System (EBS) Checklist (Nonparticipating Stations)

When EBS is activated by the White House, all broadcast stations must take the following actions. Stations should record all emergency broadcast (including notification) and log all significant events in the event these records are required at a later date.

Activation Procedures-All Stations

1. Receive Emergency Action Notification-EAN

(This is the notice which activates EBS-Presidential messages may be received as soon as 5 mins.)

Notification by one of the following methods is sufficient to commence action:

AP and UPI TELETYPE

Preceded and followed by a line of "X's" and 10 bell alarm

RADIO-TV NETWORKS

Affiliates onlypreceded by network alerting signal—Continue to monitor for further instructions

OFF-THE-AIR MONITOR

Preceded by Two-Tone attention signal-See Step 5for message format-Continue to monitor for further instructions

Your EBS Monitoring assignment is specified in the State EBS Operational Plan.

EMERGENCY ACTION NOTIFICATION MESSAGE—AP/UPI SUBSCRIBERS/ **NETWORK AFFILIATES ONLY**

"This is an Emergency Action Notification requested by the White House. The AUTHENTICATOR WORD for this notification is (-). All stations follow procedures in the EBS Checklist for national level emergency. The President of the United States or his designated representative will shortly deliver a message over the EMERGENCY BROADCAST SYSTEM. The Authentitor Word is (-)."

2. Authenticate Notification AP and UPI Subscribers/Network Affiliates Only

Compare authenticator words in notification with words on current EBS authenticator list. Take no further action if words do not match.

Different activation and termination words are provided for each date. Words are effective 12:01 a.m. Washington, D.C. time.

3. Discontinue Normal Programming And **Broadcast Announcement**

(TV Stations display appropriate EBS slide and transmit all following announcements visually and aurally in the manner required by Section 73.675(b) of the FCC Rules. Foreign language stations repeat announcements in foreign language.)

"We interrupt this program; this is a national emergency. Important instructions will follow."

4. Transmit Attention Signal

Broadcast the Two-Tone Attention Signal (see section 73,906 of the rules)

Note. Noncommercial educational FM broadcast stations of 10 watts or less which are exempt from having the capability to transmit the Two-Tone Attention Signal shall remain quiet for 25 secs.

5. Broadcast Announcement

"This is an Emergency Action Notification. All stations shall broadcast this Emergency Action Notification Message. This station has interrupted its regular program at the request of the White House to participate in the Emergency Broadcast System. During this emergency, some stations will remain on the air broadcasting news and official information to the public in assigned areas. This is station (call letters). We will be leaving the air. You should now tune to other stations until you hear one broadcasting emergency news and information for your area. This station will not be broadcasting news and information for your area. You should now tune until you hear a station broadcasting news and information for your area. Do not use your telephone. The telephone lines should be kept open for official use. The Emergency Broadcast System has been activated to keep you informed. I repeat . . ." (Repeat Announcement)

6. Remove Carrier From Air.

7. Monitor For Emergency Action Termination

Same method as for notification-Upon receipt, proceed to termination procedures.

Termination Procedures—All Stations

1. Receive Emergency Action Termination

(Same methods as for notification)

EMERGENCY ACTION TERMINATION MESSAGE-AP/UPI SUBSCRIBERS/ **NETWORK AFFILIATES ONLY**

"This is an Emergency Action Termination. The AUTHENTICATOR WORD for this termination is (-). All stations follow the EBS Checklist for termination procedures. The Authenticator Word is (-)."

2. Authenticate Termination

Compare authenticator words in termination with words on current authenticator list. Do not initiate termination if words do not match.

(Red envelope contained in pocket on inside front cover.)

3. Broadcast Announcement

"This concludes operations under the Emergency Broadcast System. All broadcast stations may now resume normal broadcast operations." (Repeat Announcement)

4. Resume Normal Programming

(In accordance with regular station authorization)