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REPORT TO THE CONGRESS

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**Fundamental Changes Needed To
Achieve Effective Enforcement Of
Radio Communication Regulations**

B-159895

Federal Communications Commission

*BY THE COMPTROLLER GENERAL
OF THE UNITED STATES*

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NOV. 3, 1972



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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To the President of the Senate and the
Speaker of the House of Representatives

This is our report on fundamental changes needed for the Federal Communications Commission to achieve effective enforcement of radio communication regulations.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget; the Chairman, Federal Communications Commission; the Chairman, Civil Service Commission; the Secretary of Transportation; and the Secretary of the Navy.

A handwritten signature in cursive script that reads "James B. Stacks".

Comptroller General
of the United States

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ABBREVIATIONS

AM	amplitude modulation
CSC	Civil Service Commission
DOT	Department of Transportation
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEB	Field Engineering Bureau
GAO	General Accounting Office
VHF	very high frequency

D I G E S T

WHY THE REVIEW WAS MADE

The radio spectrum--the full range of frequencies suitable for radio communication--is a vital, limited natural resource which must be shared by many users. To achieve maximum use of the spectrum, the Federal Communications Commission has prescribed rules and regulations to be followed by licensed radio operators and authorized radio stations. Scrupulous observance of these rules and regulations is necessary to prevent harmful radio interference.

The General Accounting Office (GAO) has made this review because of indications that serious enforcement problems exist which are hindering effective use of the radio spectrum.

FINDINGS AND CONCLUSIONS

The Commission's enforcement program has been ineffective in achieving compliance with the Commission's rules and regulations; therefore use of the radio spectrum has been impaired. This situation is the result of various factors.

--The Commission does not possess the technical capability to effectively monitor the radio spectrum. The Commission's 19 fixed monitoring stations are the primary means of detecting on-the-air violations of the rules

and regulations. The fixed stations, however, are incapable of monitoring about 90 percent of the existing radio stations.

--Mobile monitoring has long been recognized by the Commission as the only effective means to monitor the bulk of the radio stations. Despite this, the Commission possesses only a limited mobile monitoring capability. This capability is used only a part of the available time. In fiscal year 1971, 94 percent of the monitoring effort was used in operating the fixed stations and 6 percent was used in operating mobile monitoring units. GAO believes that continued operation of the fixed stations at this level is a misallocation of resources. (See p. 10.)

--Because of legislative requirements and a system of priorities adopted in 1961 much of the Commission's field office manpower has been expended on activities that contribute little to the solution of current enforcement problems. GAO believes that:

--Responsibility for inspecting radios on ships should be transferred to the Department of Transportation. (See p. 19.)

--The number of onsite inspections of amplitude modulation (AM) broadcast stations should be

substantially reduced. (See p. 21.)

--Responsibility for administering radio operator examinations should be transferred to the Civil Service Commission. (See p. 23.)

--The Commission has not taken forceful action against repeat and willful violators of the rules and regulations. The number of cases acted upon was small, as was the amount of the fines collected. The practice of routinely canceling or reducing assessed fines, in GAO's opinion, fails to deter future violations, contributes to the disregard of the rules and regulations by many licensees, and undermines the overall enforcement effort to obtain compliance with the rules and regulations. (See p. 29.)

--The Commission has not reevaluated its enforcement objectives; the relative importance of, or the need for, the existing enforcement activities; or the role and program of its field offices.

RECOMMENDATIONS OR SUGGESTIONS

The Commission should:

--Identify its short- and long-range enforcement problems and objectives.

--Determine its total monitoring requirements and acquire the proper mix of fixed and mobile monitoring capability needed to achieve its enforcement objectives and, in the interim, make maximum use of the existing mobile monitoring equipment and halt all planned capital expenditures for the fixed monitoring stations.

--Reevaluate the field offices' system of priorities with a view to establishing a priority structure that will channel resources into the areas of greatest need; periodically reexamine the priorities to insure that they remain responsive to identified needs; and substantially reduce the number of onsite inspections of AM broadcast stations.

--Review the policies for assessing fines for willful and repeated violations of the rules and regulations to determine whether they are adequate to accomplish the Commission's objectives.

--Arrange to have the Civil Service Commission assume responsibility for administering radio operator examinations. 13

AGENCY ACTIONS AND UNRESOLVED ISSUES

The Chairman of the Federal Communications Commission cited the following actions that have been taken recently, or are planned, to improve the overall management of the Commission.

--A recently established priority review system will address itself to enforcement objectives, and resources will be allocated in accordance with priority criteria. To organize and administer the review system on a continuing basis, two highly qualified staff members are being recruited. Consideration is being given to establishing a position of general manager with overall responsibility for evaluating the effectiveness of the Commission's operations and for recommending priorities for effectively and efficiently carrying out the Commission's responsibilities.

--A study will be made to assess the future role and requirements for a fixed station monitoring system and to recommend a total monitoring system which will enable the Commission to carry out its enforcement and regulatory responsibilities most effectively. The Commission awarded a contract for this study on June 30, 1972.

--A study will be made to evaluate the role and the program of the field offices and to examine the short- and long-range enforcement objectives to provide a basis for staffing, operational, and equipment recommendations.

The Chairman also said that:

--Pending completion of the monitoring study, the Commission would withhold planned capital expenditures for the fixed monitoring stations and make maximum use of existing mobile monitoring facilities.

--He would recommend to the Commission that (1) a study be made of the feasibility and practicality of substantially reducing the number of onsite inspections of AM broadcast stations and (2) a comprehensive review be initiated of its program for assessing fines with the objective of strengthening the program.

--The Commission would meet with the Civil Service Commission to discuss the possibility of that agency's taking over the administration of the radio operator examinations.

MATTERS FOR CONSIDERATION
BY THE CONGRESS

GAO recommends that the Congress amend the Communications Act of 1934 to transfer to the Department of Transportation responsibility for inspecting radios on compulsorily equipped ships.

CHAPTER 1

INTRODUCTION

The Federal Communications Commission (FCC) is responsible for regulating interstate and foreign communications under the Communications Act of 1934, as amended (47 U.S.C. 151).

The radio spectrum--the full range of frequencies on which radio communication may be conducted--is a vital, limited natural resource which has been conservatively valued at more than \$20 billion and which must be shared by many users. To achieve maximum use of the spectrum, FCC has prescribed rules and regulations to be followed by licensed radio operators and authorized radio stations. Scrupulous observance of the rules and regulations is necessary to prevent harmful interference.

The Field Engineering Bureau (FEB) is responsible for detecting violations of FCC's rules and regulations. FEB, the largest of FCC's bureaus, with a staff of about 420 persons, expends about one-fourth of FCC's annual appropriation. In fiscal year 1971 FEB had a budget of about \$6.8 million.

FEB operates a network of 19 fixed monitoring stations throughout the country and 30 field offices located in major cities. The fixed stations police the radio spectrum to detect on-the-air violations of the rules and regulations. As a secondary effort, some of the fixed stations use mobile monitoring units that are capable of traveling about to monitor radio stations that are outside the listening range of the fixed monitoring stations. Other functions performed by the fixed stations include assisting the Coast Guard in search and rescue operations and identifying the location of radio signals causing interference.

The field offices investigate radio interference problems and make onsite inspections of radio stations to insure that they are operated in accordance with the rules and regulations. Willful or repeated violations can result in punitive actions ranging from fines to license revocations. In extreme situations violations can result in criminal prosecution.

Within prescribed limits FCC has delegated authority to the Broadcast Bureau and the Safety and Special Radio Services Bureau to take enforcement action against licensees violating FCC's rules and regulations. The Broadcast Bureau is responsible for radio and television broadcast stations and the Safety and Special Radio Services Bureau is responsible for land mobile, citizens band, marine, aviation, and amateur radio stations.

CHAPTER 2

INEFFECTIVE MONITORING OF THE RADIO SPECTRUM

BY FIXED STATIONS

In the past 25 years use of the radio spectrum has grown tremendously. The number of authorized radio stations has grown from about 10,000 at the end of World War II to almost 1.8 million today. However, FCC's ability to monitor the radio spectrum has failed to keep pace with the changes that have occurred in radio communications.

FCC's network of fixed monitoring stations is an outgrowth of this country's wartime monitoring efforts and is intended to pick up long-distance communications. Until the end of World War II, most radio stations transmitted signals which traveled long distances. The fixed monitoring stations were purposely located away from urban areas to be as free from interference as possible and thus enhance their ability to monitor the radio spectrum.

Most of the radio stations on the air today, however, transmit signals that travel a relatively short distance and they are concentrated in and around urban areas. FEB officials estimate that, as a result, 90 percent of the existing radio stations are located outside the effective listening range of the fixed monitoring stations. These radio stations can only be monitored effectively by mobile monitoring units.

Despite their limitations the fixed monitoring stations remain FCC's primary means of on-the-air enforcement. Mobile monitoring has been relegated to a limited, secondary role in FCC's enforcement program. As a result, enforcement problems that hinder effective use of the spectrum have been allowed to continue unabated.

MONITORING OF LAND MOBILE AND CITIZENS BAND RADIO STATIONS

Land mobile and citizens band radio stations account for much of the growth in the use of the radio spectrum.

Together they represent about 60 percent of all authorized stations. These stations, because of the short range of their radio signals, cannot be effectively monitored by the fixed monitoring stations.

The land mobile stations are comprised of a variety of licensees, including public safety agencies (police, fire, forestry, and highway departments), industries (petroleum, forest products, manufacturing, and utilities), and land transportation businesses (railroads, motor carriers, automobile emergency services, taxicabs, and buses). As of June 30, 1971, about 215,000 land mobile stations were operating about 4.2 million transmitters.

On the basis of a limited amount of mobile monitoring, FEB has concluded that the use of the spectrum by the land mobile stations is being impaired by congestion and disruptive radio interference caused largely by improper operations. FEB has stated that the value of many frequencies assigned for public safety, health, local government, and industrial usages is being diminished. Further, FEB has stated that thousands of technically deficient transmitters are being operated in complete ignorance of the rules and regulations and, as a result, are needlessly interfering with other users of the spectrum.

Citizens band radio stations comprise the largest single radio service. It is intended for low-cost, short-range radio communications for businesses and individuals and for radio signaling and remote control of devices by radio. The number of citizens band stations grew from about 40,000 in 1958 to about 868,000 by June 30, 1971.

Since 1958 violations by citizens band radio stations have been one of FCC's most difficult problems and have prompted several studies by both FCC and outside groups. In March 1971 FEB presented the results of its latest study to FCC. The study showed that noncompliance with the rules and regulations was rampant in the citizens band and that the situation had become completely chaotic. Moreover, FEB found that the flagrant disregard for the rules and regulations and the general "anarchy" that existed among citizens band users had spread to other radio services. Insufficient enforcement by FCC was cited by FEB as the major reason for this situation.

In its March 1971 study, FEB recommended that 13 mobile teams be established, each consisting of eight engineers and two clerks, to conduct a nationwide program to eliminate violations by the citizens band radio stations. Only one team has been established and funds to establish two additional teams have been included in FCC's 1973 budget request approved by the Congress.

MONITORING OF SHIPS AT SEA

The fixed stations spend a considerable amount of time monitoring long-distance communications transmitted by ship radio stations. In fiscal year 1971 the single largest category of violations detected by the fixed monitoring stations was on-the-air violations by ships which accounted for almost 50 percent of all violation notices issued as a result of fixed station monitoring. Ship communications have long posed a serious enforcement and spectrum management problem to FCC, because the large number of ships communicating over a small portion of spectrum space has resulted in severe congestion and interference.

In June 1970 FCC adopted rules which require that by January 1, 1977, all ships equipped with radios use only very high frequencies (VHF) for all communications within 20 miles of the coastline. VHF signals travel a relatively short distance. The rules also provide that beginning on January 1, 1977, use of the long-distance frequencies will be limited to communications made beyond the 20-mile limit and will be restricted to those ships with a proven long-distance communication need. In addition, FCC established more stringent technical operating standards for ship radio communications to reduce the amount of congestion and interference.

As a result of these steps, most ship communications will be beyond the reception range of the fixed stations, and additional mobile monitoring will be required if FCC is to continue to maintain the same degree of monitoring coverage for ship radio stations.

CONTINUED RELIANCE ON THE FIXED STATIONS

FEB's policy is to use the fixed monitoring stations as its primary monitoring tool, and its goal is to operate the fixed stations around the clock, 7 days a week. In fiscal year 1971, 94 percent of the monitoring effort was used in operating the fixed stations and 6 percent was used in operating mobile monitoring units.

An FEB official told us that a fixed station would not be closed in order to operate a mobile monitoring unit. However, assuming that the number of monitoring personnel remains the same any significant increase in mobile monitoring will require that most fixed stations be closed part of the time. Therefore no increase in mobile monitoring will occur without a change in the priority given by FEB to fixed station monitoring.

During fiscal year 1971, only nine of the 19 fixed stations used mobile monitoring units and this use averaged only 11 percent of the time. Despite this limited usage, mobile monitoring accounted for 25 percent of on-the-air violations detected by FEB during that year. Violations detected averaged 5.2 for each man-day spent on mobile monitoring compared with only 0.6 for each man-day spent on fixed station monitoring.

FEB officials told us that FCC had not made any studies or evaluations, other than that with regard to the citizens band, to ascertain how it might maximize the effectiveness of its enforcement program. Further, FEB officials advised us that FEB had made no estimate of the number of mobile units needed to effectively monitor the spectrum outside the citizens band area. They indicated to us, however, that several mobile units would be needed to adequately cover a large city, such as Chicago.

In its 1970 annual report, FCC stated that an increase in mobile monitoring facilities and manpower would produce a proportionate increase in the number of violations detected. However, because of budget constraints funds have not been requested from the Congress to enable FCC to increase its mobile monitoring capability other than for the citizens band.

In fiscal year 1972, FEB began a 10-year program to replace existing equipment at its field installations. An FEB official advised us that during this period about \$2 million would be spent for new monitoring equipment. Also, in 1972 about \$160,000 was appropriated for maintenance and for improvements to FEB's field installations, primarily for the fixed monitoring stations.

In May 1972 FCC obtained congressional approval to relocate one of its fixed monitoring stations at a cost of about \$460,000. FEB officials told us that two additional fixed stations were planned for relocation when funds became available.

During 1971 the cost to operate the 19 fixed monitoring stations was about \$1.9 million.

CHAPTER 3

FIXED MONITORING STATIONS INEFFECTIVE IN SEARCH AND RESCUE OPERATIONS AND INTERFERENCE CASES

Of FCC's 19 fixed monitoring stations, 18 are equipped with special direction-finding antennae that enable the stations to obtain bearings on long-distance radio signals. By plotting each of the bearings supplied by the fixed stations on a map, FCC is able to get a fix on the source of the signal; in this way, it is able to assist the Coast Guard in locating a ship or aircraft in distress and to assist in the resolution of radio interference.

FEB's policy of operating the fixed monitoring stations around the clock is closely connected with the role that the fixed stations play in the Coast Guard's search and rescue operations and in solving radio interference problems. However, FCC's direction-finding assistance is not needed for search and rescue operations and the fixed stations are ineffective in eliminating interference in more than half of the cases handled.

SEARCH AND RESCUE OPERATIONS

The United States Coast Guard, Department of Transportation (DOT), has primary responsibility for providing assistance to distressed ships and aircraft at sea. To carry out its search and rescue operations, the Coast Guard maintains a nationwide system of rescue ships, aircraft, lifeboat stations, and coast radio stations. During fiscal year 1971 the Coast Guard made about 50,000 search and rescue operations.

When requested by the Coast Guard, FCC's fixed monitoring stations provide direction-finding assistance in locating a ship or aircraft in distress. Coast Guard officials told us that FCC's assistance was requested only when the Coast Guard could not immediately locate the ship or aircraft. In fiscal year 1971 the Coast Guard requested FCC's assistance in 387 search and rescue operations. FCC was able to provide a fix for the Coast Guard in only 18 cases.

In view of the inability of the fixed monitoring stations to provide fixes in most cases, we discussed with Coast Guard officials the importance of long-distance direction finding in search and rescue operations. They stated that any help they could receive in locating a ship or aircraft in distress was appreciated but expressed the opinion that the Coast Guard could not justify a long-distance direction-finding capability of its own if FCC did not possess such capability.

The Department of the Navy operates a network of fixed monitoring stations capable of worldwide direction-finding operations. Navy officials told us that the Navy had provided search and rescue assistance to the Coast Guard in the past and, on the basis of the number of requests made by the Coast Guard for long-distance direction-finding assistance, the Navy could provide the needed assistance in lieu of FCC without adversely affecting the Navy's military responsibilities.

DOT and the Department of the Navy, in commenting on this portion of our draft report (see apps. III and IV), indicated that expanded use of the Coast Guard's and the Navy's direction-finding systems would adequately compensate for loss of the long-range direction-finding assistance provided by FCC.

Another factor nullifying the need for FCC's direction-finding assistance in search and rescue operations is the changeover to short-range VHF communications by most ships. As indicated earlier, by 1977 all ship communications within 20 miles of the coast will have to be made on VHF. Because most of the Coast Guard's search and rescue operations are conducted within the 20-mile limit, direction finding by fixed stations will be of no assistance in locating most ships in distress. Therefore the Coast Guard is expanding its VHF direction-finding capability and the number of cases FCC will be asked to assist in can be expected to decrease significantly.

RADIO INTERFERENCE

FCC uses its fixed station direction-finding capability to assist in the resolution of radio interference. However,

as with the search and rescue operations, this capability is restricted to radio stations transmitting long-distance signals and can do virtually nothing to resolve interference to 90 percent of FCC's licensees, which operate outside the effective listening range of the fixed stations.

To assess the effectiveness of the fixed stations in locating sources of interference, we reviewed a sample of the interference cases handled in fiscal years 1970 and 1971. In 50 percent of these cases, the fixed stations were unable to provide sufficient information to permit FCC to take action to eliminate the interference.

In the remaining cases where sufficient information was provided, FCC did not maintain records that would enable us to evaluate the action that had been taken. Most of these cases involved interference either by a radio installation of another Government agency or by a station located in a foreign country. When another Government agency has caused the interference, it is so advised by a telephone call from FCC; often no record is made of the call. No formal feedback is ever received regarding the action taken by the agency to correct the interference problem. If no further complaints are received, FCC assumes that the matter has been resolved satisfactorily.

A number of FCC officials told us that the Navy was responsible for most of the interference caused by Government agencies. Navy officials responsible for resolving radio interference problems indicated that most of the interference caused by the Navy was of a one-time nature. They stated that, in most cases, the problem resolved itself before any information could be forwarded to the installation involved. They expressed the opinion that the action taken by FCC in June 1970 to establish more stringent technical operating standards and to require most ships to use VHF communications would substantially reduce the interference problem.

In those cases in which the fixed stations can trace the origin of the interfering radio signals to a particular foreign country, FCC notifies the government of that country of the problem by telegram. The fixed stations cannot identify the specific transmitter causing the interference

with long-range direction finding, and FCC must, therefore, rely on the foreign government to resolve the interference problem. About 21 percent of all the cases we reviewed involved interference originating in foreign countries. In two-thirds of these cases, the Commission was able to identify the specific country.

CHAPTER 4

MANPOWER INEFFECTIVELY USED IN

INSPECTING SHIP RADIOS AND AM STATIONS

FEB personnel assigned to its 30 field offices inspect authorized radio stations to determine whether they are being operated in accordance with FCC's rules and regulations. Due to legislative requirements and a system of priorities adopted by FEB in 1961, ship radios and AM broadcast stations receive higher priority for inspection than all other classes of radio stations. As a result, only 1 percent of all other stations--comprising about 95 percent of the total authorized stations--are inspected each year. Expressed another way, continuation of the existing priorities could mean that most stations would be inspected about once every 100 years.

In fiscal year 1971 about 25 percent of the field offices' manpower was spent in inspecting ship radios and AM stations. In our opinion, this effort is out of proportion to the enforcement problem these stations pose and adversely affects the field offices' ability to devote adequate attention to major enforcement problems, such as those posed by the land mobile and citizens band stations. FEB, however, has not reevaluated its priorities.

SHIP RADIO INSPECTIONS

To provide for safety of life at sea, the Communications Act of 1934, as amended, and the International Convention for the Safety of Life at Sea require that a radio be installed on all large passenger and cargo ships that are navigated in the open sea or on international voyages. The Great Lakes Agreement between the United States and Canada requires radios on large ships operating on the lakes. Annual inspections of the radios are required by the act and the international agreements. Radios on foreign ships subject to the provisions of the international agreements are inspected by FEB upon request of the foreign governments.

The act also requires a radio on all ships that carry more than six passengers for hire and are navigated in the

open sea or adjacent waters but are not otherwise subject to the compulsory radio requirements. FCC's rules require the radios on these ships to be inspected once every 2 years.

In addition to the radio requirements, the ship radio licensees and the masters of the compulsorily equipped ships must meet technical and operating requirements designed to promote safety at sea. About 5,000 U.S. ships are subject to the safety requirements of the act and the international agreements.

During fiscal year 1971, FEB made about 3,500 inspections of radios on compulsorily equipped ships and issued about 1,200 notices of violation. Also, 2,900 other deficiencies had been detected but were corrected during the inspections. Often, repeat inspections were necessary to confirm that violations detected during an earlier inspection had been corrected. In fiscal year 1971, FEB spent about 33 man-years in inspecting radios on ships--more than it spent in inspecting any other class of radio stations.

Responsibility for inspecting radios on oceangoing ships was vested in FCC by a 1937 amendment to the Communications Act. However, this was a continuation of a ship radio inspection program that had been carried on by the Government since before World War I. At that time virtually all transoceanic passenger traffic moved by ship. Today almost all transoceanic passenger traffic moves by air, but FCC does not carry out a program of aircraft radio inspections to insure the safety of airline passengers. This responsibility rests with DOT.

DOT was established in 1966 as the department responsible for developing national transportation policies and programs, including safety programs for all modes of transportation. Within DOT, the Federal Aviation Administration (FAA) has broad regulatory authority over civil aviation. FAA issues and enforces rules, regulations, and minimum standards relating to the manufacture, operation, and maintenance of aircraft.

We discussed with FAA officials the agency's program for insuring that radio equipment on aircraft meets its regulations and standards. The officials advised us that FAA:

1. Prescribes the capabilities that the radios on aircraft must possess.
2. Reviews the commercial airlines' programs for maintenance and replacement of equipment, including radio equipment. If the airlines' programs are deemed to be inadequate they are subject to disapproval by FAA.
3. Certifies aircraft mechanics and repairmen, including those who maintain the radio equipment. All maintenance must be performed by certified personnel.

FAA inspectors make spot checks, by observing the airlines' maintenance work and by reviewing the airlines' maintenance records, to insure that the radio maintenance and replacement programs are actually carried out.

The Coast Guard inspects the same classes of ships that FCC inspects. The Coast Guard inspects passenger ships annually and cargo ships once every 2 years.

We discussed with the Chief, Merchant Vessel Inspection Division, Coast Guard, the feasibility of the Coast Guard's inspecting the radios on compulsorily equipped ships as part of its regular inspections. He advised us that, in his opinion, the Coast Guard would have little problem in inspecting the radios on the smaller passenger ships (more than six passengers for hire) but that, with existing personnel, the Coast Guard could not perform the more technical inspection of radios required for the large oceangoing ships. He also expressed the opinion that it was logical to consolidate all the ship safety functions in one agency.

DOT, in commenting on our draft report (see app. III), deferred taking a position on our view regarding the inspection of radios on compulsorily equipped ships pending further definition and study of problem areas, such as the fiscal and personnel requirements. Subsequent to the receipt of DOT's comments, Coast Guard officials told us that they were not opposed to the idea that the Coast Guard be responsible for ship radio inspections but that they had not had sufficient time to determine what would be required to implement a ship radio inspection program.

In our opinion, the transfer of responsibility for ship radio inspections to the Coast Guard not only would be consistent with its ship safety responsibilities but also would be analogous to FAA's responsibility for regulating radios on aircraft. We believe that the Coast Guard could establish a program, similar to FAA's program with respect to aircraft, under which ship radio inspections could be performed by non-Government personnel and the Coast Guard's role could be limited to spot checks.

AM BROADCAST STATION INSPECTIONS

The high priority assigned to AM broadcast station inspections stems from an internal FCC review in 1959 that showed a disregard for its technical rules and regulations by many broadcasters, particularly AM stations. In April 1960, FCC issued a public notice warning broadcasters of the need for compliance with the technical rules and regulations. About that time, FEB instituted an inspection program that had as its goal the inspection of each broadcast station once during the term of its 3-year license. Then in 1961, FEB adopted a priority system under which AM stations were assigned a higher priority for inspection than all other classes of radio stations except radios on compulsorily equipped ships.

The number of violations by broadcasters detected in fiscal year 1965 prompted FCC to issue another public notice in January 1966 expressing concern over the lack of compliance by broadcasters. FCC instructed the Chief, Broadcast Bureau, to impose fines for repeated or willful violations of the rules and regulations.

The following data shows the results of FEB's inspections of AM stations from fiscal year 1965 through 1971.

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Number of inspections	1,477	1,061	1,382	1,166	939	965	1,135
Number of stations in violation	1,038	799	1,011	808	695	732	851
Percent in violation	72	75	73	69	74	76	75

During fiscal year 1971, FEB spent about 15 man-years in inspecting AM stations.

The Communications Act of 1934, as amended, provides that an AM broadcast station violation must be either willful or repeated before enforcement action can be taken against the station. In addition, action must be instituted within 1 year from the date the violation occurred.

In fiscal year 1971, FEB referred to the Broadcast Bureau, for enforcement action, 396 cases involving willful or repeated violations by AM stations. In 288 cases the Bureau determined that the violations did not warrant any enforcement action. In 43 cases the Bureau notified the stations that they were liable for the violations detected. Action in the remaining 65 cases was still pending at the time our review was completed.

We asked Broadcast Bureau officials why enforcement action was taken against only a few stations. We were told that the Bureau considered only a limited number of technical rule violations serious enough to warrant enforcement action. Essentially, the violations considered serious by the Bureau were those involving the quality of a station's signal or those that could lead to degradation of signal quality, such as a failure to make equipment performance measurements, to properly maintain equipment, or to use a qualified radio operator. The remaining violations were not considered significant enough to institute enforcement action. The Bureau collected \$50,250 in fines resulting from the cases referred in fiscal year 1971 by FEB.

Broadcast Bureau officials told us that the difficulty in proving willfulness had resulted in the Bureau relying almost exclusively on the repetitive criterion. The impact of this on the FEB inspection program is that a violation that is noted during a single onsite inspection of a station normally does not provide a basis for enforcement action.

To demonstrate repetitiveness of violations while making an onsite inspection of a station, FEB engineers review the operating and maintenance logs which the station is required to keep. Reviewing the logs enables the engineers

to examine operations spanning several days or months, thus improving the chances of detecting repetitive violations. Broadcast Bureau officials advised us that most of the cases resulting in enforcement action were attributable to violations uncovered by a review of the stations' logs.

Although we recognize the need for some onsite inspections of AM stations, we question the need to continue the high priority placed on this activity. Considerable effort is spent in detecting unimportant violations--only 13 percent of the cases referred to the Broadcast Bureau in fiscal year 1971 on which the Broadcast Bureau has taken action have resulted in the imposition of fines--although at the same time sufficient manpower is not available to attack serious enforcement problems. We believe, therefore, that FEB should reduce substantially the number of inspections of AM stations made each year and redirect its manpower to the serious enforcement problems caused by the land mobile and citizens band radio stations.

CHAPTER 5

EXAMINING APPLICANTS FOR RADIO OPERATOR LICENSES

ADVERSELY AFFECTS FIELD OFFICES'

ENFORCEMENT PROGRAM

FEB field offices are responsible for administering examinations to those applying for radio operator licenses. A radio operator license is needed by those who operate, maintain, and repair certain types of radios. In fiscal year 1971 about 45 man-years were spent in administering about 150,000 examinations. Over the past 4 years, the number of persons seeking radio operator licenses has increased about 10 percent each year.

Examinations are given at each of the field offices and in about 60 additional cities. Examinations are scheduled at intervals of 3 to 12 months in cities where no field office is located; examinations are given more frequently at the field offices.

FEB, under the priority system adopted in 1961, assigns the radio operator examination function the highest priority, and, to a large extent, examinations are administered by FEB engineers. In addition to consuming a considerable amount of time, this has other adverse effects on the field offices' enforcement program. The schedule of examinations dictates the timing and location of FEB's enforcement efforts.

We visited four of the field offices and found that they did not have sufficient travel funds for the engineers to make separate enforcement trips to a city in which radio operator examinations were to be given. Instead, travel funds had to be conserved by the field offices so that the prearranged examination schedule could be met. Investigations of interference problems, AM broadcast station inspections, and other enforcement activities were, therefore, scheduled to coincide with the examination schedule. Other types of stations in the area were inspected only after these higher priority tasks had been completed and only if sufficient time was available.

We discussed with officials of the Civil Service Commission (CSC) the feasibility of its assuming the responsibility for administering the radio operator examinations. These officials told us that CSC was in the process of taking over the Federal pre-employment-testing program which had previously been operated for CSC in about 1,000 cities by the Postal Service. They also indicated that administering examinations, on a reimbursable basis, for other Government agencies would enable CSC to stabilize its workload to more effectively use its personnel and testing facilities.

CSC, in commenting on our draft report (see app. II), stated that a transfer of the examination function to CSC appeared timely. CSC stated also that it could carry out the examination program with personnel who were experienced in scheduling and conducting tests and in safeguarding test material, and who were generally lower salaried than the FEB engineers. CSC indicated that some problems might arise in conducting examinations which include the Morse code (only about 10 percent of the examinations require testing for the code), but stated that it might be able to assume responsibility for part of the examination program with overall savings to the Government. CSC also indicated that it would be willing to discuss a transfer with FCC.

CHAPTER 6

MODEST FINES IMPOSED FOR MOST VIOLATIONS

FCC has adopted policies that result in the imposition of only modest fines against most violators, even though the violations were either willful or repeated. This practice fails to deter future violations, contributes to the disregard of FCC's rules by many licensees, and undermines FEB's efforts to obtain compliance with the rules and regulations.

COMPULSORILY EQUIPPED SHIPS

Certain classes of ships are required by law and international agreements to be equipped with radios which are to be operated in accordance with the safety requirements included in the law, the FCC's rules and regulations, and the international agreements. Licensees of ship radios found to be in violation of the requirements are subject to a fine of \$500 for each day the ship is operated while in violation, and the shipmaster is subject to a fine of \$100 for each willful violation.

During fiscal year 1971, FEB made about 3,500 inspections of radios on compulsorily equipped ships, issued about 1,200 notices of violation, and referred 115 cases to the Safety and Special Services Bureau for enforcement action. The Bureau's assessment and collection of fines in the 87 cases on which action had been completed at the time of our review are presented below.

Type of vessel	<u>Collections</u>			<u>Cancellations</u>	
	<u>Number of cases</u>	<u>Amount assessed</u>	<u>Amount collected</u>	<u>Number of cases</u>	<u>Amount assessed</u>
Large, ocean-going ships	3	\$ 4,000	\$125	3	\$ 7,700
Ships carrying more than six passengers for hire	43	85,400	745	37	18,000
Great Lakes ships	<u>1</u>	<u>5,000</u>	<u>50</u>	<u>-</u>	<u>-</u>
Total	<u>47</u>	<u>\$94,400</u>	<u>\$920</u>	<u>40</u>	<u>\$25,700</u>

Our inquiries into the Bureau's reducing or canceling fines showed that it was a long-standing practice and one that had at least the tacit approval of FCC.

The requirement that ships carrying more than six passengers for hire be equipped with a radio became effective in March 1957. In a memorandum to FCC dated January 15, 1958, the Bureau indicated that the ship industry was unaware of the new radio requirements, and it proposed that the imposition of a token fine against the first group of offenders would serve an educational purpose and would provide a sufficient deterrent to future violations.

The records we reviewed indicated that FCC agreed with the Bureau's recommendation that fines assessed against licensees of ship radio stations be reduced to \$10 and that the fines assessed against shipmasters be canceled. These modest fines are still being imposed today.

In a memorandum to FCC in 1963, the Bureau detailed its practices concerning the reduction or cancellation of fines assessed against licensees of ship radio stations and shipmasters. The Bureau stated that, for oceangoing ships, its practice was to assess the full fine provided for in the law (\$500 a day for licensees and \$100 for shipmasters) and to reduce the amount when the licensee asked for reconsideration, which, according to the memorandum, almost all licensees did.

In its 1963 memorandum to FCC, the Bureau expressed the opinion that its handling of violations by compulsorily equipped ships had been adequate to achieve compliance using the minimum sanction necessary and with a minimum of administrative burden for FCC.

LAND MOBILE, CITIZENS BAND, AND OTHER RADIO STATIONS

Prior to 1962 the only enforcement tools available to FCC for use against most radio stations--those other than broadcast and compulsorily equipped ships--were license revocation and warning letters. Beginning in 1951, FCC annually sought legislative authority to impose fines against these stations for violations not serious enough to warrant

the more stringent sanctions, such as license revocation. In 1962 the Congress amended the Communications Act of 1934 to authorize FCC to impose fines of up to \$100 for each of 12 specific types of violations, up to a maximum fine of \$500. Under the law, violations must be either willful or repeated before fines can be levied and FCC is authorized to reduce or cancel fines. In its report to the Congress for fiscal year 1963, FCC stated that it intended to forcefully invoke the authority to levy fines and expected that this would deter repetitive violations.

Our review showed that the Safety and Special Radio Services Bureau had followed the practice of collecting only modest fines from licensees who had been guilty of repeated violations. The Bureau's procedure is to notify a licensee after he commits the same violation twice that he is liable for the maximum fine provided by the act. If the licensee responds in writing stating why he should not be held liable for the maximum amount, the Bureau either cancels the fine or reduces it to \$25 for each type of violation. If the licensee commits the same type of violation again, a second notice of liability is sent to him. If the licensee responds in writing, the second fine is either canceled or reduced from \$100 to \$50 for each type of violation. No reductions are made after issuance of a third notice for the same offense; the full \$100 is imposed.

In May 1970, FCC authorized the Bureau to assess fines for first offenses of certain violations that were considered to be willfully committed by citizens band operators. However, the Bureau's policy is to reduce the fine from \$100 to either \$25 or \$50 for each violation.

During 1971, the Bureau issued 1,231 notices of liability for repeated or willful violations of the rules. The Bureau's assessment and collection of fines and termination of licenses in the 946 cases on which action had been completed at the time of our review are shown below.

<u>Radio service</u>	<u>Collections</u>			<u>Cancellations (note a)</u>		<u>License terminations (note b)</u>	
	<u>Number of cases</u>	<u>Amount assessed</u>	<u>Amount collected</u>	<u>Number of cases</u>	<u>Amount assessed</u>	<u>Number of cases</u>	<u>Amount assessed</u>
Citizens band	405	\$ 78,400	\$30,110	87	\$18,500	10	\$1,900
Land Mobile	141	14,700	7,560	39	4,100	-	-
Other stations	<u>235</u>	<u>24,400</u>	<u>8,650</u>	<u>21</u>	<u>2,200</u>	<u>8</u>	<u>800</u>
Total	<u>781</u>	<u>\$117,500</u>	<u>\$46,320</u>	<u>147</u>	<u>\$24,800</u>	<u>18</u>	<u>\$2,700</u>

^aThe full amount of the assessed fine was canceled by the Bureau.

^bMost licensees chose to surrender his license rather than pay the fines assessed.

The Bureau's procedure for determining the amount of a radio station licensee's liability requires that in most cases the same violation be detected a minimum of four times before the maximum penalty is imposed. Considering FCC's limited capability to monitor or inspect these stations, the probability of FCC detecting a station for the same violation four times appears remote at best. The serious enforcement problems posed by the land mobile and citizens band radio stations was discussed in earlier sections of this report. The Bureau's practice does not seem consistent with the enforcement problems caused by the large number of stations operating in violation of FCC's rules and regulations.

CHAPTER 7

CONCLUSIONS, RECOMMENDATIONS, AND AGENCY ACTION

CONCLUSIONS

FCC's enforcement program has been ineffective in achieving compliance with its rules and regulations, therefore the use of the radio spectrum has been impaired. This situation is the result of various factors.

First--FCC does not possess the technical capability to effectively monitor the radio spectrum. The limitations of the fixed monitoring stations coupled with an ever-increasing number of radio stations beyond the monitoring range of the fixed stations make it inevitable that, if FCC is to operate an effective enforcement program, mobile monitoring will have to be its primary on-the-air enforcement tool. There appears to be no controversy over the fact that mobile monitoring is the only effective means of monitoring the bulk of the radio stations. Nevertheless, FEB clings to the belief that around-the-clock operation of the fixed stations should take precedence over mobile monitoring.

To a great degree, this attitude stems from the search and rescue and interference cases that the fixed monitoring stations participate in by virtue of their long-distance direction-finding capability. The Coast Guard and the Navy indicate, however, that their systems can adequately provide direction-finding assistance in search and rescue cases, and our review shows that the fixed stations are not particularly effective in solving interference problems.

FEB officials have told us that FCC has not made any studies or evaluations, other than for the citizens band stations, to ascertain how it might maximize the effectiveness of its enforcement program. Also, FEB had made no estimate, except for the citizens band, of the number of mobile units that would be needed to effectively monitor the radio spectrum.

FCC must determine what its monitoring requirements are and then must employ the proper mix of fixed and mobile

monitoring capability needed to achieve its enforcement objectives.

Second--FEB spends a substantial amount of time on tasks that make little contribution to the fulfillment of FCC's primary responsibility for maximizing the use of the radio spectrum. Thus, much of the field offices' manpower is ineffectively used.

As required by law and international agreement, FEB inspects ship radio stations to insure compliance with safety requirements. Inspections of ship radios, regardless of how important they may be from a safety standpoint, simply have no relationship to FCC's primary responsibility. In 1971 33 man-years were spent on this function.

As many as 76 percent of the thousands of AM broadcast stations inspected annually have been found in violation of the rules and regulations. Yet, only a few were considered to be serious offenders and were assessed fines. About 15 man-years were spent in inspecting AM broadcast stations in 1971.

Administering radio operator examinations required 45 man-years in 1971 and adversely affected the enforcement program in other ways.

Third--FCC has not taken forceful action against repeat and willful violators of the rules and regulations. The number of cases acted upon was small, as was the amount of the fines collected. The practice of routinely canceling or reducing assessed fines fails to deter future violations, contributes to the disregard of the rules and regulations by many licensees, and undermines the overall effort to obtain compliance with the rules and regulations.

- - - -

FCC has not reevaluated (1) the short- and long-range enforcement problems and objectives, (2) the relative importance of, or the need for, the existing enforcement activities, and (3) the role and program of FEB's field offices, including the priority system that has been in effect since 1961.

RECOMMENDATIONS TO THE CHAIRMAN OF
THE FEDERAL COMMUNICATIONS COMMISSION

We recommend that FCC:

- Identify its short- and long-range enforcement problems and objectives.
- Determine its total monitoring requirements and acquire the proper mix of fixed and mobile monitoring capability needed to achieve its enforcement objectives and, in the interim, make maximum use of the existing mobile monitoring equipment and halt all planned capital expenditures for the fixed monitoring stations.
- Reevaluate the FEB field offices' system of priorities with a view to establishing a priority structure that will channel resources into the areas of greatest need; periodically reexamine the priorities to insure that they remain responsive to identified needs; and substantially reduce the number of onsite inspections of AM broadcast stations.
- Review the policies for assessing fines for willful and repeated violations of the rules and regulations to determine whether they are adequate to accomplish its objectives.
- Arrange to have CSC assume responsibility for administering radio operator examinations.

AGENCY ACTION

The Chairman of FCC, in his letter of July 7, 1972 (see app. I), cited the following actions that have been taken recently, or are planned, to improve the overall management of FCC.

- A recently established priority review system will address itself to enforcement objectives, and resources will be allocated in accordance with priority criteria. Two highly qualified staff members are being recruited to organize and administer the review

system on a continuing basis. Also, consideration is being given to establishing a position of general manager with overall responsibility for evaluating the effectiveness of FCC's operations and for recommending priorities for effectively and efficiently carrying out its responsibilities.

--A study will be made to assess the future role and requirement for a fixed station monitoring system and to recommend a total monitoring system which will enable FCC to carry out its enforcement and regulatory responsibilities most effectively. (FCC awarded a contract for this study on June 30, 1972.)

--A study will be made to evaluate the role and the program of the FEB field offices and to examine the short- and long-range enforcement objectives to provide a basis for staffing, operational, and equipment recommendations.

The Chairman stated that, pending completing of the monitoring study, FCC would withhold planned capital expenditures for the fixed monitoring stations and make maximum use of existing mobile monitoring facilities, consistent with national and international commitments to monitor long-distance radio signals. Also, the Chairman said that he would recommend to FCC that (1) a study be made of the feasibility and practicality of substantially reducing the number of onsite inspections of AM broadcast stations and (2) a comprehensive review be initiated of its program for assessing fines with the objective of strengthening the program.

The Chairman stated that FCC would meet with CSC to discuss the possibility of that agency's taking over the administration of the radio operator examinations and meet with DOT to discuss that agency's assuming the responsibility for inspecting radios on compulsorily equipped ships. The Chairman pointed out that a transfer of these functions might also require a transfer of funds and staff. Even if FCC is required to transfer its funds and staff to CSC and to the Coast Guard, we are of the view that FCC would benefit from such a transfer because it would enable FEB to focus on the serious problems impairing the use of the radio spectrum.

The actions taken or planned are consistent with our recommendations.

MATTERS FOR CONSIDERATION OF THE CONGRESS

We recommend that the Congress amend the Communications Act of 1934 to transfer the responsibility for inspecting radios on compulsorily equipped ships to DOT.

CHAPTER 8

SCOPE OF REVIEW

Our review was conducted at the Federal Communications Commission's headquarters in Washington, D.C., and at its field installations in Atlanta, Georgia; Baltimore and Laurel, Maryland; Kansas City, Missouri; New York, New York; and Philadelphia, Pennsylvania.

We reviewed the applicable legislation, regulations, policies, procedures, and practices pertaining to the enforcement of the communications laws and FCC's rules and regulations. We reviewed applicable records and interviewed FCC officials at the headquarters and the field installations.

We also discussed certain of our conclusions and recommendations with officials of the Civil Service Commission, the Department of Transportation, and the Department of the Navy as they affected the programs of these agencies.

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

July 7 1972

IN REPLY REFER TO:

Mr. Irvine M. Crawford
Associate Director
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Crawford:

We have carefully reviewed the report you recently submitted to us - "Fundamental Changes Needed to Achieve Effective Enforcement of Communication Regulations of the Federal Communications Commission." The Commission appreciates the efforts of your staff in performing the program audit of our enforcement procedures. As indicated in your discussion with the FCC staff, there are certain problems with the conclusions reached and the recommendations put forth in the report.

Apart from the GAO Report, the Commission has instituted several programs which we believe will strengthen the overall management of the Commission, especially in control and utilization of personnel and resources. For example, a formal program priority review and the relation of these priorities to personnel and financial obligations has been recently established. A program and resources management survey is under way to more precisely monitor the effectiveness of financial resources. Similar efforts are being expended in reporting and recording manpower outlay to determine how many personnel are required to effectively carry out Commission programs. A centralized unified data processing center is under way to deal with the Commission-wide automatic data processing requirement on a priority basis. I mention these management programs because they relate directly to improvements which will be made in overall Commission operations and, in particular, to our enforcement program.

There is another specific management action which we instituted sometime ago which bears special mention in responding to your report. At the Commission's request, the Office of Management and Budget undertook and recently completed, a diagnostic organization study of the Commission. The Commission is currently reviewing their recommendations which include organizational changes and management improvement studies. A major recommendation of the OMB review which we are now implementing is a study of the Commission's fixed base monitoring system in relation to the increasing needs for mobile monitoring. I believe the results of the monitoring


APPENDIX I

study will provide us with the data and analysis necessary for us to adapt and strengthen our monitoring programs.

As required, there are enclosed Commission comments which you requested for transmittal with the Report to the Congress. In addition, there are some comments directed at what appears to be some inconsistencies in the report which you may wish to consider in preparing the final report.

If you have any further questions, I or members of the staff will be glad to assist you.

Sincerely,


Dean Burch
Chairman

Enclosure

FCC COMMENTS ON GAO REPORT

1. A recurrent theme in the GAO Report is that mobile monitoring can satisfy all of the Commission's spectrum monitoring needs.

Commission Comment -

Mobile monitoring is effective only in the frequency ranges above 30 MHz and is very inefficient and ineffective in the HF and MF bands except for close in operation. Mobile monitoring simply cannot effectively perform either monitoring or direction finding service on skywave radio emissions which is the primary mode of propagation of HF and MF signals. The conclusions in the GAO Report are opinions based on virtually a total lack of technical knowledge.

2. Also recurrent in the GAO Report is a degradation of the importance of the HF spectrum. A conclusion was reached based on the superficial reasoning that because VHF and UHF operations have increased rapidly the importance of HF has decreased proportionately.

Commission Comment -

The Commission recognizes the major growth in the VHF/UHF portion of the spectrum and an outside study is underway which will evaluate our entire monitoring program; however, use of the HF portion of the spectrum is likewise increasing. Commission authorizations in the maritime radio services in the HF band, 4000-25,000 kHz, at the present time are five times what they were at the end of World War II in 1946. ¹ Just because VHF/UHF has increased at a more rapid rate does not, by playing a misleading numbers game, lessen the importance of HF. As another example the Amateur Radio Service, which is a representative cross section of the grass roots of the country, has increased during the same period of time from 70,000 to more than 275,000 authorized stations. As a matter of fact, every major radio service except the Domestic Public Radio Service has provisions for at least part of its stations to operate in the HF/MF bands in order to satisfy long-distance communication requirements.

As satellite technology has become available the major countries have tended to use more of these circuits and less HF circuits but the lesser developed countries because of economic considerations, the ready understanding of HF technology, and the ready availability of equipment have tended to use more HF circuits and represent a problem to us which demands greater utilization of fixed DF monitoring facilities.

3. The GAO Report, page 10, states: ". . . the Commission has not requested funds to increase its mobile monitoring capability."

Commission Comment -

In fiscal year 1970, the year to which the above statement refers, page 92 of the Commission's request to (then) B.O.B.

¹/ 8,028 in 1946 (FCC Annual Report, 1946, p. 51); 41,546 in 1972 (FCC records)

APPENDIX I

requested 13.5 man years specifically for mobile monitoring. In F. Y. 1971 on page 77 of the Commission's request to (then) B.O.B. 32 man years were requested specifically for mobile monitoring. In the fiscal year budget requests listed below, the need for VHF mobile monitoring resources was clearly stated and the manpower requests included the mobile monitoring function:

- 1966 - pages 107, 108, and 110 (7.2 man years).
- 1967 - pages 120 and 123 (7.0 man years).
- 1968 - pages 114, 115, and 116 (11.8 man years).
- 1969 - pages 79 and 83 (9 positions, 3.5 man years).

The fact is, for at least six years in succession, the budget request to (then) B.O.B. clearly pointed out the need for VHF mobile monitoring, and manpower requests were made so that a start could be made toward meeting the need.

In addressing the problem of fixed vs. mobile monitoring, the Commission has recently issued a Request for Proposals, (a copy of which was given to your staff) to obtain the services of a contractor who will conduct a study to assess the future role and requirement for a fixed base monitoring system and to recommend, as appropriate, a total monitoring system which will enable the Commission to carry out its enforcement and regulatory responsibilities most effectively. The results of this study will be used by the Commission in evaluating and developing a comprehensive monitoring system to fulfill the Commission's requirements. Moreover, until the study has been completed, we will withhold planned capital expenditures for new fixed monitoring stations.

4. GAO Recommendation: Identify its short and long range enforcement problems and objectives and undertake a program to acquire the technical capability needed to attack these problems.

Commission Comment -

The Commission has conducted some studies designed to improve the enforcement program. One major enforcement problem has been associated with the Citizens Radio Service. A series of studies has resulted in the development of a plan which involves the establishment of enforcement teams and implementation of this plan will be pursued dependent upon the success of the initial

teams and future appropriations. The results of the monitoring study will also be used in strengthening the enforcement program. In addition, the newly established priority review system will address itself to enforcement objectives and resources will be allocated in accordance with priority criteria. Finally, the recent organizational study conducted by OMB recommended that the Commission obtain the services of an outside contractor to study the role and program of the FEB field offices. The results of this study will also examine the short and long range enforcement objectives to provide a basis for staffing, operational, and equipment recommendations.

5. GAO Recommendation: In the interim, direct FEB to make maximum use of existing mobile monitoring equipment, and ...

Commission Comment -

FEB will continue to use mobile monitoring to the fullest extent possible without abrogating existing national and international commitments in the HF spectrum.

6. GAO Recommendation: Re-evaluate the need for the fixed monitoring stations with the objective of either establishing a monitoring system that consumes resources in proportion to the service it provides or, if that is not a viable alternative, abandoning the fixed stations and reallocating the resources to mobile monitoring or to the field offices.

Commission Comment -

As we have pointed out, the Commission is obtaining the services of a contractor to evaluate the entire monitoring program. When the contract has been completed, the Commission will evaluate the results and recommendations and determine how they may be most effectively implemented.

7. GAO Recommendation: Re-evaluate the priorities followed by the field offices with the view toward establishing a priority structure that will channel resources into the areas of greatest need.

Commission Comment -

The Commission has for some time been studying the problem of examining priorities and allocating the necessary resources in accordance with these priorities. We will

APPENDIX I

strengthen the review program and assign priorities and resources accordingly.

8. GAO Recommendation: Periodically re-examine the priorities assigned to different functions to ensure they remain responsive to the Commission's needs, and ...

Commission Comment -

We are currently recruiting for two highly qualified staff members to organize and administer this program. In addition, the Commission is currently evaluating an OMB recommendation which stemmed from its recent organization study that will establish the position of a general manager. This position will have the overall responsibility for reviewing operations, evaluating the effectiveness of the Commission's operations and recommending the necessary priorities to carry out the Commission responsibilities most effectively and efficiently. In addition, the Commission is instituting a manpower utilization program which will determine with a high degree of specificity, the number and kind of manpower resources required to carry out the essential operations of the Commission. This program will provide a major input for the effective operation of the priority system.

9. GAO Recommendation: As a first step, reduce substantially the number of on-site inspections of AM broadcast stations.

Commission Comment -

I will recommend to the Commission that a study be undertaken to determine the feasibility and practicality of the recommendation.

10. GAO Recommendation: Arrange to have the Civil Service Commission assume responsibility for administering radio operator examinations.

Commission Comment -

In the past, formal and informal efforts have been made by the Commission to have the Civil Service Commission or the Post Office Department assume the burden of giving radio operator examinations currently administered by the FCC. Both agencies have categorically refused to assume this responsibility. We will, nevertheless, again pursue this

matter with the Civil Service Commission. It is doubtful, however, whether the CSC will agree to carry out this function without concomittant transfer of funds and manpower. In that event, the total man years currently assigned to this function may not be available to the Commission for higher priority assignments. In the event that the CSC will agree to undertake this assignment without the transfer of staff, retention of FCC staff to perform work other than that associated with examinations may require Congressional approval.

11. GAO Recommendation: Review the Bureaus' policies for assessing fines for wilful and repeated violations of the rules and regulations to determine if they are adequate to accomplish the Commission's objectives and (b) if not, adopt policies to be followed by all Bureaus to ensure that the FEB does not waste its time detecting violations no one intends to prosecute.

Commission Comment -

I will recommend that the Commission initiate a comprehensive review of its forfeiture program and revise its policies and procedures as necessary to strengthen the program.

The report also includes the following recommendation to Congress.

12. GAO Recommendation to Congress: That the Congress amend the Communications Act of 1934 to transfer to the Coast Guard responsibility for inspecting radios on board compulsorily equipped ships.

Commission Comment -

The proposal will be explored with the Department of Transportation. The projected savings, however, 33 man years does not appear feasible since it assumed that the Department of Transportation may require some additional staff to carry out this new workload. If such a change is made and approved by Congress, in accordance with OMB regulation, where functions are transferred from one agency to another, the Commission would be required to transfer not only the function, but the funds, manpower, equipment and records to do the job.

APPENDIX II



UNITED STATES CIVIL SERVICE COMMISSION
BUREAU OF RECRUITING AND EXAMINING
WASHINGTON, D.C. 20415

IN REPLY PLEASE REFER TO

JUN 14 1972

Mr. Irvine M. Crawford
Associate Director
General Accounting Office
Washington, D.C. 20548

Dear Mr. Crawford:

We appreciate the opportunity to comment on the draft of your recent audit of the Federal Communications Commission. Your recommendation that the Civil Service Commission assume responsibility from FCC for administering the radio operator's examination appears perceptive and timely.

As mentioned in the draft, members of the Bureau of Recruiting and Examining met with your audit team a few months ago to discuss the possibility of such a transfer of examining work. At that time, we tentatively endorsed the idea and indicated that we would be pleased to discuss the details of such an arrangement at the appropriate time.

Supporting our favorable disposition toward the proposal is the fact that the Civil Service Commission is in the process of taking over responsibility from the Postal Service for conducting preemployment tests for Federal jobs. We now have test facilities in 90 major cities and will be extending coverage further this year. This network provides excellent accessibility to the public.

We have carefully supplemented our staff to match the increasing workload. In many locations, because of the intermittent nature of the work, extensive use has been made of part-time employees who are available on an as-needed basis. All of these personnel are experienced in scheduling and conducting tests, and safeguarding test material. They are generally in the GS-3 to-5 grade range and would provide a favorable salary comparison with FCC's engineering staff. Naturally, to absorb the substantial radio operator examining workload (45 man-years, 150,000 examinations), we would need to increase our field staff.

On the minus side--we had initially understood that the FCC tests could be conducted by examiners who did not have subject-matter knowledge.

Subsequent discussion indicates that ability to send and receive Morse code is necessary to conduct some FCC examinations. We would find it very difficult to provide and to maintain this kind of expertise. We expect the costs associated with training our staff to conduct this kind of test would require reimbursements so high that FCC would realize very little cost benefit. We are very willing, however, to explore this in greater detail with FCC. Perhaps we could perform part of their testing work with overall savings to the Government.

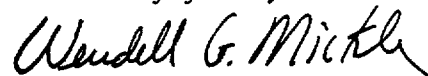
In view of the above comments, we would like to suggest the following language be used in paragraph 2, page 26 of your report.

We discussed with officials of the Civil Service Commission (CSC) the feasibility of that agency assuming the responsibility for administering the radio operator examinations. The officials stated that the CSC is in the process of assuming the Federal preemployment testing program which has traditionally been operated by the Postal Service under the direction of the Civil Service Commission at over 1,000 different locations.

The CSC officials indicated that they would be receptive to explore with FCC the idea of absorbing the radio operator examining workload on a reimbursable basis, and that the timing for this transition is most appropriate since they can build it into the planning for their own testing network.

Keith Roelofs, Chief, Administrative Management Division, has been designated as the Commission coordinator in this matter. He will be glad to furnish any additional information which would be helpful.

Sincerely yours,



Wendell G. Mickle
Acting Director

APPENDIX III



OFFICE OF THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

ASSISTANT SECRETARY
FOR ADMINISTRATION

June 28, 1972

Mr. Richard W. Kelley
Associate Director, RED Division
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Kelley:

This is in response to your letter of May 18, 1972, requesting comments on Chapters 3 and 4 of the GAO draft report on the Federal Communications Commission's activities in enforcing the communication laws, rules and regulations. The GAO found that in most cases during fiscal year 1971, the FCC was unable to provide location fixes on ships and aircraft when assisting in Coast Guard search and rescue missions. The GAO implies that the Commission can close its high frequency direction finding stations, and reports that the Navy can provide the needed assistance to the Coast Guard without adversely affecting the Navy's military responsibilities.

In addition to its search and rescue operations, the Coast Guard inspects the same classes of ships that the Commission inspects. Since ship radio inspection is so far removed from FCC's main function of maximizing the use of the radio spectrum, GAO suggests that the responsibility of ship radio inspection be transferred to the Coast Guard.

We agree that if the Commission's high frequency direction finding capability is removed, expanded use of the Navy systems and the Coast Guard mobile unit equipments can adequately compensate.

The GAO suggestion that the Coast Guard assume the responsibility for the inspection of ship radio systems has been considered only to the extent of the facts presented in the report. There are several problem areas which require further definition and study, such as, legislative authority and fiscal and personnel requirements. In the event GAO pursues this suggestion, we reserve the right to state our position pending further study of problem areas like those mentioned above.

We appreciate the opportunity to comment on the report.

Sincerely,

A handwritten signature in black ink, appearing to read "William S. Heffelfinger".

William S. Heffelfinger



DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20350

15 JUN 1972

Mr. Fred J. Shafer
Deputy Director, Logistics and
Communications Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Shafer:

The Secretary of Defense has asked me to reply to your letter of 18 May 1972 which forwarded Chapter 3 of the GAO draft report on the Federal Communications Commission's activities in enforcing the communication laws and the Commission's rules and regulations (OSD Case #3468).

The proposed Chapter 3 has been reviewed and the Department of the Navy interposes no objection to the contents. The opportunity to review the report section is appreciated.

Sincerely yours,

A handwritten signature in black ink that reads "R. D. Neesen".

ROBERT D. NESEN
ASSISTANT SECRETARY OF THE NAVY
(FINANCIAL MANAGEMENT)

APPENDIX V

PRINCIPAL OFFICIALS OF
THE FEDERAL COMMUNICATIONS COMMISSION
RESPONSIBLE FOR ENFORCEMENT ACTIVITIES

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
CHAIRMAN:		
Dean Burch	Nov. 1969	Present
Rosel H. Hyde	June 1966	Oct. 1969
E. William Henry	June 1963	May 1966
Newton N. Minow	Mar. 1961	June 1963
Frederick W. Ford	Mar. 1960	Mar. 1961
John C. Doerfer	July 1957	Mar. 1960
EXECUTIVE DIRECTOR:		
John M. Torbet	Jan. 1971	Present
Max D. Paglin	Mar. 1966	Jan. 1971
Curtis B. Plummer	Dec. 1962	Mar. 1966
Robert Cox	Nov. 1952	Dec. 1962
CHIEF, FIELD ENGINEERING:		
Curtis B. Plummer	Mar. 1966	Present
Frank Kratokvil	Aug. 1964	Dec. 1965
George Turner	Mar. 1952	July 1964
CHIEF, BROADCAST BUREAU:		
Wallace E. Johnson	Aug. 1971	Present
Francis R. Walsh	Sept. 1970	Aug. 1971
George S. Smith	Sept. 1966	Sept. 1970
James B. Sheridan	May 1963	Sept. 1966
Kenneth A. Cox	Apr. 1961	Mar. 1963
Harold Cowgill	May 1957	Apr. 1961
CHIEF, SAFETY AND SPECIAL RADIO SERVICES BUREAU:		
James E. Barr	Feb. 1963	Present
Curtis B. Plummer	Aug. 1955	Dec. 1962

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