



**DEPARTMENT OF THE NAVY**

ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

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IN REPLY REFER TO:

11320  
09RF

26 SEP 1986

**From:** Commander, Atlantic Division, Naval Facilities Engineering Command  
**To:** Commandant of the Marine Corps  
**Via:** Commanding General, Marine Corps Development and Education Command, Quantico

**Subj:** COMMAND INSPECTION OF FIRE SUPPRESSION AND PREVENTION SERVICES AT MARINE CORPS DEVELOPMENT AND EDUCATION COMMAND, QUANTICO

**Ref:** (a) MCO P11000.1A  
(b) NAVMATINST 11320.12A of 6 Jan 1981, Subj: Fire Marshal Program

**Encl:** (1) Command Inspection of Fire Suppression and Prevention Services at Marine Corps Development and Education Command, Quantico

1. Pursuant to the requirements of references (a) and (b), the Atlantic Division, Naval Facilities Engineering Command Area Fire Marshal staff conducted subject inspection with the following results contained in enclosure (1):

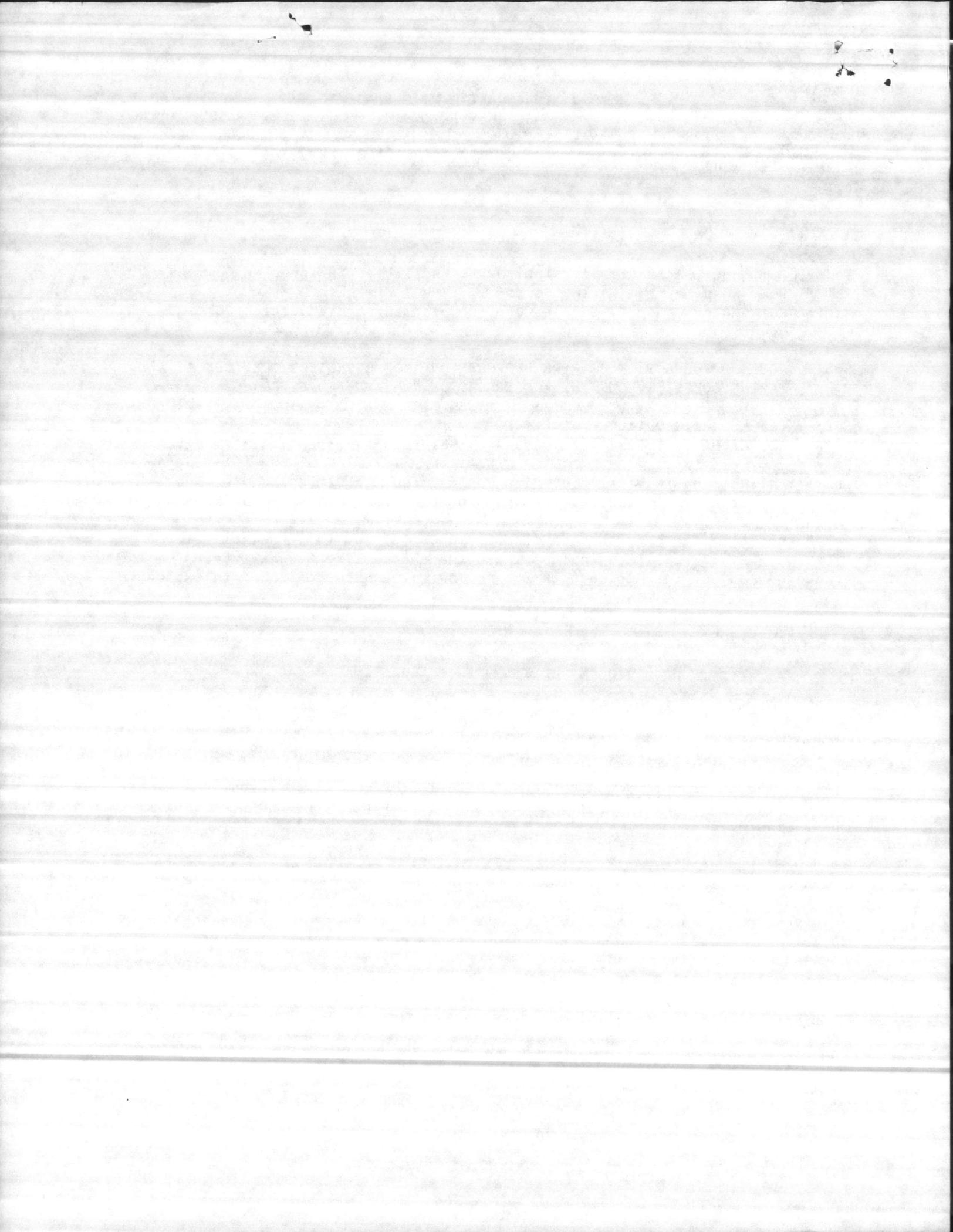
Evaluations:

- a. Fire Suppression Capability- Exceptionally Good
- b. Fire Prevention Program- Deficient
- c. Fire Department Administration- Exceptionally Good

2. The Commander notes with concern the Deficiency in Fire Prevention. Correction of the deficiency to establish a satisfactory evaluation requires the following action:

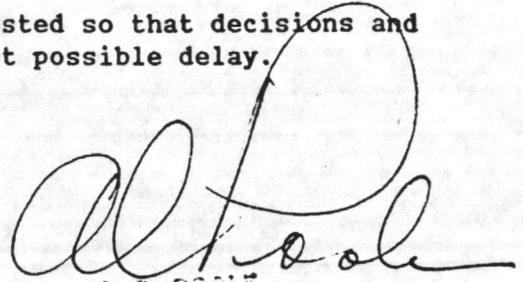
1-86 Recruit and hire two additional Fire Prevention Inspectors to reach the required total of seven.

3. Other required action includes eight additional current recommendations: establish a priority sequence to remove PCB transformers from buildings; publish a contingency spill plan/oil and hazardous waste management plan; test and have the aerial ladder recertified; establish a written test requirement for Fire Department instructors and training officer; pursue the consolidation of fire/police dispatch services; develop a project to enlarge Fire Station No. 3; obtain one additional radio frequency; remodel Fire Prevention Building 1502.



4. The Commanding General, Marine Corps Development and Education Command, Quantico is requested to comment on each inspection recommendation within 60 days, indicating action taken or proposed, and to state reasons for any nonconcurrency. It is requested that copies of all endorsements be furnished the originator, endorsees and information addressees.

5. Expeditious handling of the report is requested so that decisions and corrective action may be effected with the least possible delay.



A. S. POOLE  
Vice Commander

Copy to:  
NAVSAFECEN (44)  
NAVFACENCOM (Code 10F)

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MCDEC QUANTICO (FIRE CHIEF)  
09 (w/o encl)  
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COMMAND INSPECTION OF FIRE SUPPRESSION  
AND PREVENTION SERVICES

MARINE CORPS DEVELOPMENT AND EDUCATION COMMAND  
QUANTICO, VIRGINIA

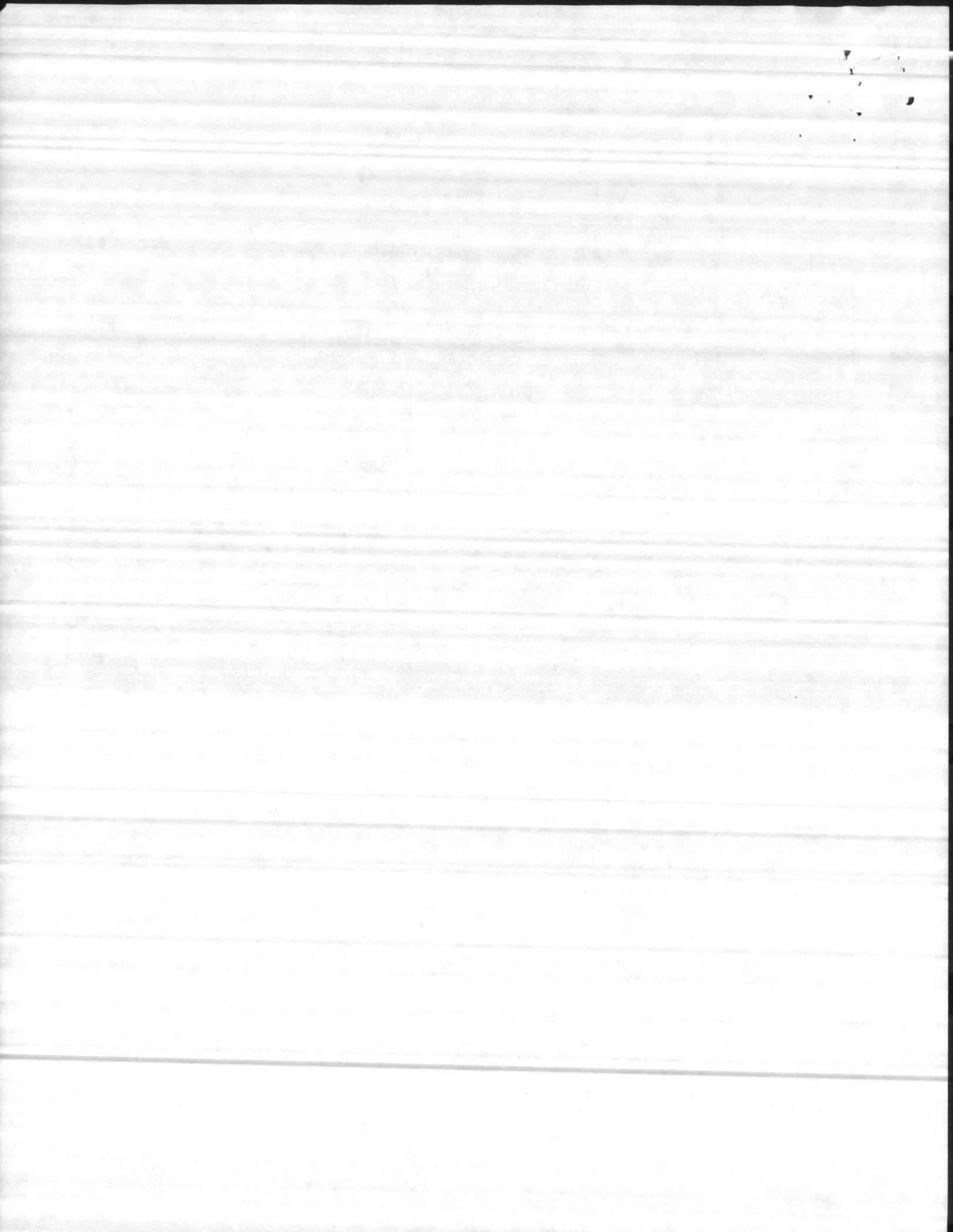
28 JULY - 7 AUGUST 1986

PREPARED BY:

C. A. ROUT, HEAD AREA FIRE MARSHAL

ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND

ENCLOSURE (1)



COMMAND INSPECTION OF FIRE SUPPRESSION  
AND PREVENTION SERVICES

I. FIRE DEPARTMENT: Marine Corps Development and Education Command,  
Quantico, Virginia

II. SHORE INSTALLATIONS SERVED BY FIRE DEPARTMENT: Marine Corps Development  
and Education Command (MCDEC), Quantico

III. INSPECTION DATES: Current: 28 July - 7 August 1986  
Previous: 16 - 24 August 1984

IV. FACILITY CONDITIONS: The Marine Corps Development and Education Command  
is approximately 13 miles south of the Nation's Capital, extending westward  
along the Potomac River. The Activity is divided by both Interstate 95 and  
U.S. Highway 1. The Town of Quantico is completely surrounded by MCDEC. The  
Military Reservation covers 60,000 acres, of which approximately 40,000 acres  
are dense woodland.

Construction of MCDEC started in 1917. Today, the Activity is known as the  
crossroads of the Marine Corps. It is the University of the Marine Corps and  
the cradle of Marine Corps development, education, training and doctrine. The  
Activity is composed of the Main Side, Camp Barrett, the Air Facility, Camp  
Upshur, the Naval Regional Medical Center Complex and the FBI Academy.

The Activity's multiphased mission is to develop doctrine, tactics, techniques  
and equipment employed by landing forces in amphibious operations; to support  
Marine Corps requirements for long range planning; and to support Marine Corps  
techniques of warfare, with particular emphasis on the landing forces aspects  
of amphibious operations. Also, the Activity is tasked with the research,  
development, testing and evaluation of military hardware and the technical  
procedures for landing forces.

The fresh water distribution system for domestic, industrial and fire  
protection services is supplied by a series of pumping stations located  
throughout the Activity. Raw water is stored in three water reservoirs and is  
supplied to the treatment plants by an 18-inch main. Water is supplied to the  
Main Side, the 2700 Area, the 2000 Area and the 300 Area from the pumping  
station located at Building 2031. A 300,000 and two 100,000-gallon elevated  
tanks float on the system. These elevated tanks are supplied by two 350 gpm  
pumps and one 200 gpm pump. The water distribution system at Camp Geiger Road  
and the 800 Area is supplied by a 100,000-gallon elevated tank, which floats  
on the system. The elevated tank is supplied from the pumping station located  
at Building 3201 and consists of two 250 gpm pumps and one 1200 gpm fire  
pump. The Thompson Park Housing and John Russell Elementary School Areas'  
water distribution system consist of a 200,000-gallon elevated tank, which  
floats on the system. The elevated tank is supplied from the pumping station  
located at Building 3302 and consists of two 250 gpm pumps and one 750 gpm  
fire pump. The water distribution system at Camp Upshur is supplied from the  
250,000-gallon Camp Upshur treatment plant. A 100,000-gallon elevated tank



floats on the system. The Camp Barrett water plant supplies water to Camp Barrett, the Rifle Range and the FBI Academy. A 100,000-gallon elevated tank at the Rifle Range; and a 300,000-gallon elevated tank is located at the FBI Academy. These elevated tanks float on the system. The overall water distribution system is considered adequate and produces satisfactory fire flows.

A new 16-inch feed line has been installed to supply water to the main side area from the water treatment plant.

A new 12-inch distribution line was extended from the rifle range area to provide water to the new fuel farm area.

Automatic sprinkler protection is provided in a portion of the industrial warehouses, and is being included, where required, in new construction.

Since the last inspection, 30 buildings have had fire alarm systems installed and three others are being installed. Eleven sprinkler systems have been installed and seven dry chemical systems have been installed. This positive action has reduced the number of buildings that had inadequate fire protection.

Six buildings have been rehabilitated and four other buildings are in the process of being rehabilitated. All fire protection deficiencies will be corrected.

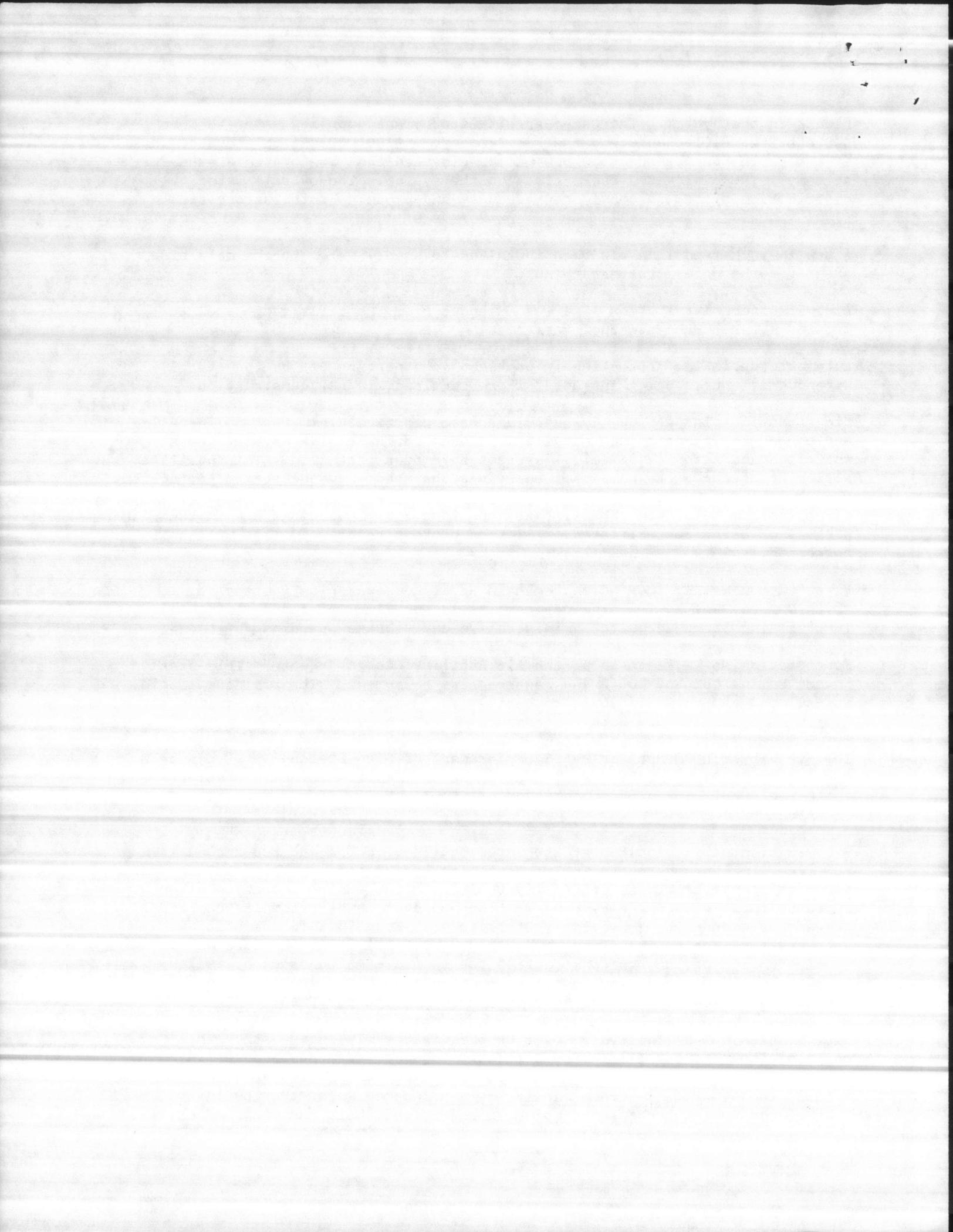
Fire Station No. 1, located on the Main Side, houses Engine Company No. 1, Truck Company No. 1, Training Officer, Assistant Fire Chief and Fire Chief. The building lacks adequate administrative and storage space.

Fire Station No. 2, located at the Air Facility, is inadequate. This station houses Engine Company No. 2 and reserve fire equipment. The building is old, uninsulated and very difficult to heat. The bunk spaces, office, galley and restroom facilities are totally inadequate.

The Activity MILCON Project P-365 replacement of Fire Station No. 2 has been moved from FY-91 to FY-89. The location of the replacement Fire Station needs to be reviewed. The present location of Station No. 2 is not the most ideal location.

Fire Station No. 3, located at the intersection of MCB-1 and MCB-2 road is a new fire station and houses Engine Companies Nos. 3 and 4. This station lacks adequate space, as it was originally built as a one engine company station. Approval for a one engine company station and design was accomplished before it was recommended to consolidate Stations Nos. 3 and 4 into one station. Both stations Nos. 3 and 4 were old, inadequate facilities and were not in an ideal location of the new construction taking place at Quantico. Station No. 3 is an ideal location and all time and distance requirements can be met. An addition needs to be added to house personnel and equipment.

Fire Station No. 5, located at Camp Upshur, is totally inadequate. The building is uninsulated and very difficult to heat. Roaches and vermin present a health problem. The bunk spaces, office and galley areas are totally inadequate. Restroom facilities are located in another building. Most of the work that has been accomplished is self-help and of poor quality.



The Fire Station No. 5 replacement for Camp Upshur is included in the Phase II upgrading Project P-320 in FY-88.

The Fire Prevention Branch is housed in Building 1502 which is located approximately two blocks from Fire Station No. 1, Main Side. This facility provides office space for the five Fire Prevention staff and a work area to recharge fire extinguishers. The facility has no restroom facilities and employees must use restrooms in other buildings. Consideration should be given to remodel this building and move the Fire Chief and training officer into this building which would help eliminate the overcrowding in the No. 1 Fire Station. The recharging of fire extinguishers could be moved to a building next to Fire Station No. 1 that the Fire Department uses for storage.

The Activity ground electronic shop is presently recruiting for three fire alarm technicians. Two of these technicians should be on board by 15 September 1986 and the third one by 30 September 1986. This action will correct a nonexistent fire alarm preventive maintenance program and improve the reliability of the installed fire alarm systems.

Facility maintenance plans to institute a preventive maintenance program on installed fire protection systems by mid October 1986. This action will correct a nonexistent installed fire protection systems program and improve the reliability of the installed fire protection systems.

When action on these two items are completed, the Activity should have a reliable fire reporting system, installed fire protection systems and correct a deficiency that has existed for years.

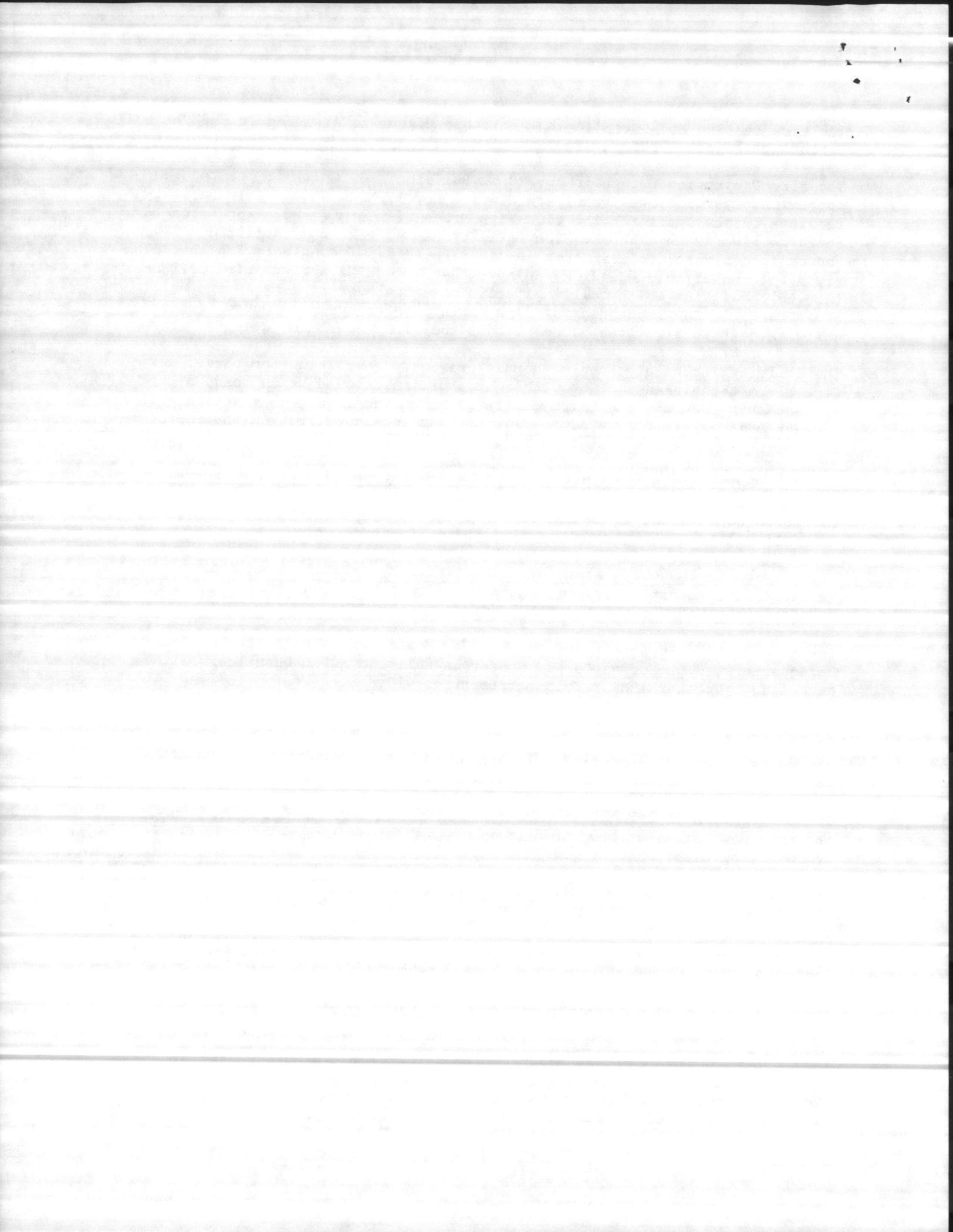
The Interservice Support Agreement between Headquarters Battalion, Headquarters, U.S. Marine Corps, Henderson Hall and MCDEC Quantico will be cancelled 1 October 1986. This agreement provided Fire Prevention services to Henderson Hall. On 1 October 1986, Henderson Hall will hire their own Fire Prevention Inspector and relieve MCDEC of this responsibility.

Since the previous inspection, eight new buildings have been constructed consisting of 84,336 square feet. There are ten new buildings under construction consisting of 352,088 square feet when completed.

Thirteen new buildings have been approved for a total of 41,524 sq. ft. and are awaiting bids.

The Activity has a Class A structural fire protection classification. This is the highest fire classification that can be assigned to an Activity.

ATTACHMENT A displays the present and proposed organization alignment, staffing calculations for Fire Suppression, Fire prevention, Fire Department Training, Fire Administration and fire fighting vehicle allowance. ATTACHMENT B displays the Structural Classification and Water Flow Determination. ATTACHMENT C - Jurisdictional Status of Land. ATTACHMENT D - PCB Transformer Inventory. ATTACHMENT E - Sample of Hazardous Materials Data Sheets carried with pre-fire plans. ATTACHMENT F - Sample of Fire Prevention Handout Material. ATTACHMENT G - Sample of Fire Prevention Report as a member of the Command IG team. ATTACHMENT H - Sample of Fire Prevention Inspection Reports. ATTACHMENT I - Sample of Fire Prevention Design Review and Comments.



V. SUMMARY OF FIRE DEPARTMENT ORGANIZATION AND OPERATIONS:

A. Suppression operations: The Fire Department is a division of the Security Department. The Department operates four-manned 1000 gpm triple combination structural pumpers with four personnel each. An additional manned 1000 gpm triple combination structural pumper is operated from April to September at Camp Upshur with temporary employees. An 85-foot aerial ladder (truck company) staffed with four personnel, is located at Main Side.

The following is a breakdown of engine company responses to meet the first 50 percent of response and the second 50 percent:

(1) Engine Company No. 1 is first response for the Main Side, the Hospital Complex and the housing area. Engine Company No. 2 is second response for these areas.

(2) Engine Company No. 2 is first response for the air facility and the officer candidate school complex. Engine Company No. 1 is second response for these areas.

(3) Engine Company Nos. 3 and 4 are first and second response for Camp Barrett and the FBI area.

(4) Engine Company No. 5, when in operation, is first response for Camp Upshur. Engine Company No. 3 is second response for this area.

(5) The Truck Company responds on box alarms, building fires, and other alarms on an as needed basis.

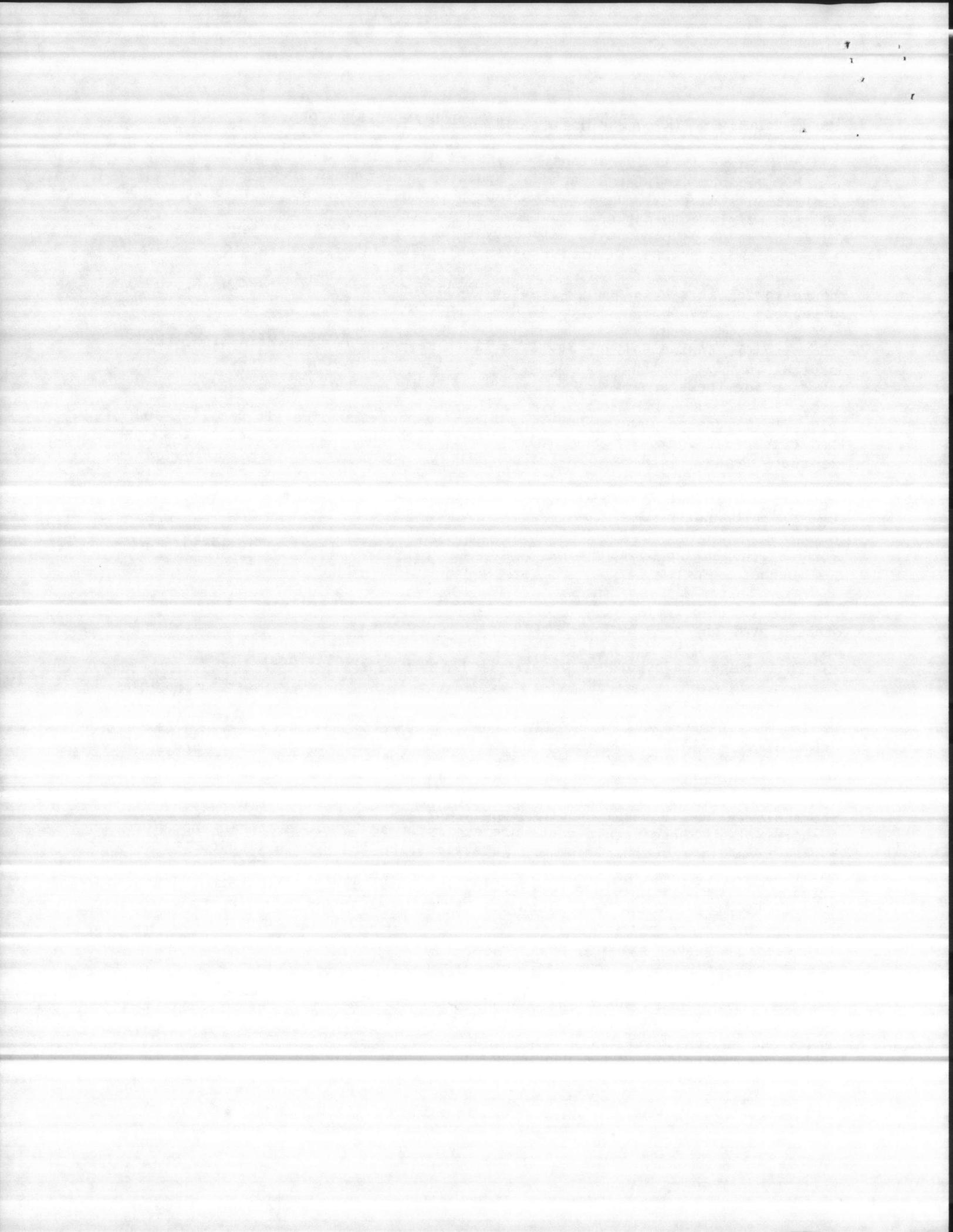
The following is a breakdown of mileage between fire stations:

Fire Station No. 1 to Station No. 2	2.2 miles
Fire Station No. 1 to Station No. 5	21.5 miles
Fire Station No. 1 to Fire Station No. 3	7.7 miles
Fire Station No. 2 to Fire Station No. 3	3.7 miles
Fire Station No. 5 to Fire Station No. 3	13.0 miles

The Activity has Tactical Landing Zone (TLZ) and brush fire fighting requirements. These requirements are accomplished by cross-manning brush trucks from the structural pumpers. Tactical landing zone helicopter operations, by nature, are considered hazardous operations. The location of these TLZ's require unique fire fighting tactics. The two brush trucks are located at Fire Station Nos. 3 and 5. The two 1-1/4-ton, 4 x 4 special forestry units are housed at Fire Station Nos. 3 and 5 and cross-manned by Engine Company Nos. 3 and 5.

The Activity provides assistance to the Range Control Officer for brush fire control. The Range Control Section has two 1-1/4-ton special forestry units and other assorted forestry fire fighting tools. This Section monitors the range and extinguishes small fires. The Fire Department is called when fires cannot be controlled by the Range Section.

The Activity Fire Alarm Communication Center is staffed with five military personnel. The Activity should consider using civilian dispatchers who are dedicated. This would eliminate the problem of personnel turnover and



unfamiliarity with proper dispatch and record-keeping operations. When military personnel are assigned to this duty they are working out of their Military Occupational Speciality.

The Activity is considering establishment of a central dispatch center for emergency services. The concept of having a consolidated police and fire dispatch center is supported and encouraged. Alignment of this function under the Commanding Officer, Security Battalion MCDEC Quantico provides required capability to administer day to day operations in a responsive manner. Local municipalities experiences have established that an emergency Communication Officer under the direct administration of the City Manager is the most effective operation. The central dispatch is being planned in accordance with the Standard NFPA Code 1221-1984 for public Fire Service communications systems.

**B. Fire Prevention Program:** The Fire Prevention Section is staffed with one Assistant Fire Chief for Fire Prevention and four Fire Inspectors. Two additional persons are required to overcome a vital shortfall in this program. The assigned personnel conduct technical inspections of all major buildings, hazardous areas and all types of fire protection systems located on the Marine Corps Base Complex and the FBI Academy. The engine companies and truck company inspect the TBS area and family housing is not being inspected due to the lack of staff in the Fire Prevention Section. Building inspection frequencies are based on the hazard involved.

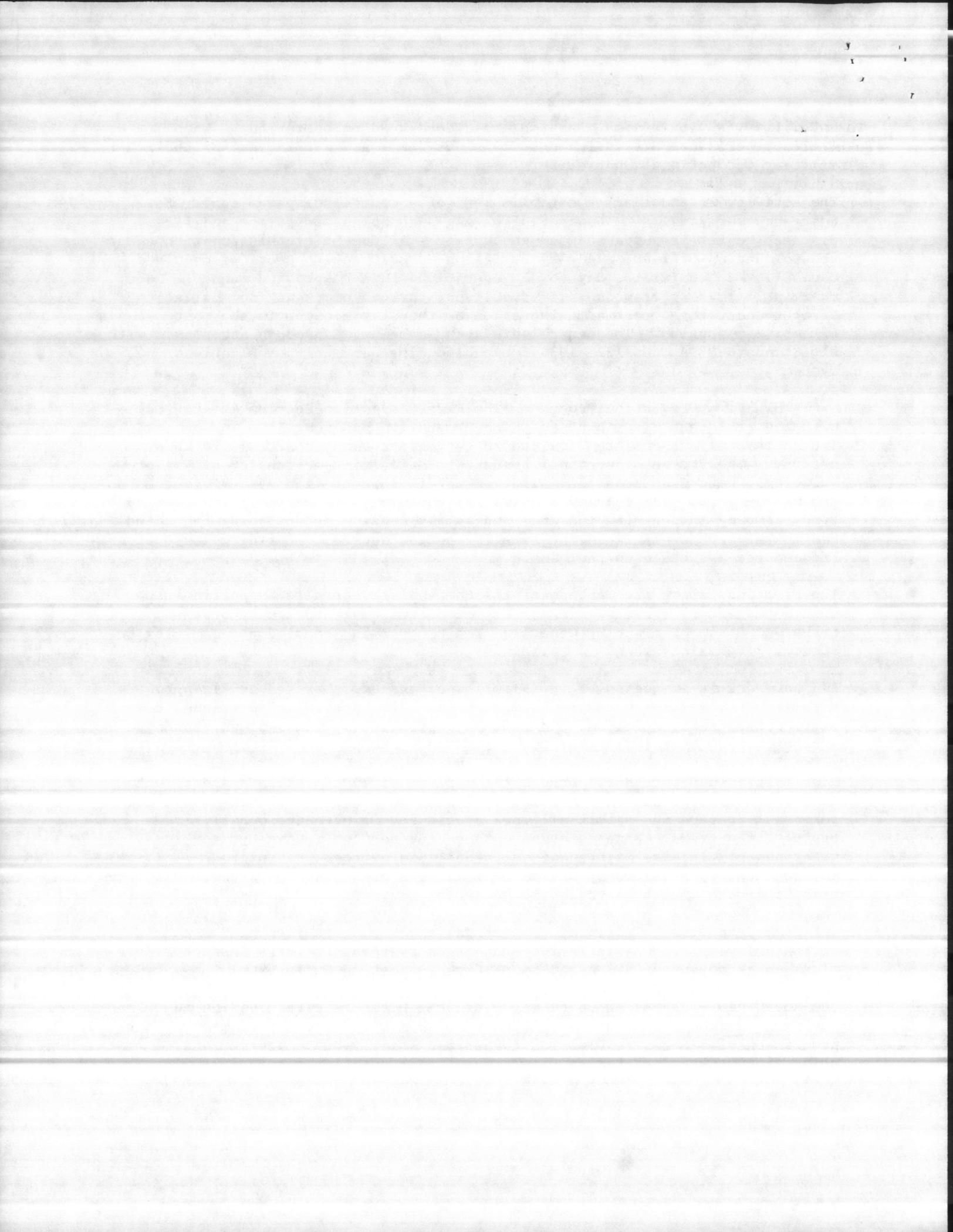
The Fire Inspectors are members of the Commanding General's Inspection team. Once a year for two weeks, life safety items are reviewed and reports forwarded to the Commanding General. The program has enabled the Activity to correct life safety items in buildings.

All hot work is inspected by the Fire Inspectors and approved or disapproved. A permit system is used to control hot work. Fire prevention personnel test alarm boxes, residential smoke detectors, sprinkler systems, flush standpipe systems, dry chemical systems, CO<sub>2</sub> and Halon systems.

Base maintenance personnel perform all work on fire protection systems, with fire prevention personnel providing technical guidance. Fire prevention personnel prepare and submit all work orders for maintenance on all fire protection systems. Base maintenance does not perform routine preventive maintenance. If Base maintenance personnel did perform preventive maintenance, as required by NAVFAC MO-117, fire prevention personnel would be able to devote more time to public education.

One Fire Inspector is assigned to prefinal check outs on fire alarm, and sprinkler systems. On small fire protection systems, the Fire Inspector does final check outs for CHESNAVFACENGCOM Fire Protection Engineers.

The MCDEC new work review board works closely with the fire division in reviewing requests that are submitted by each Activity tenant Command. This program enabled the Fire Division to use \$50 K in Fy-86 to program and prioritize work orders toward fire prevention correction items.



The public education function includes fire hazard awareness lectures, fire extinguisher training and fire evacuation drills. The fire hazard awareness classes include films and slide presentations and handout material. The Activity has a fire safety officers' program which allows the Fire Prevention Inspector to make personal contact with the Activity personnel and get them involved in the fire prevention program.

The Fire Prevention Section reviews all new building and remodeling projects and makes written comments back to Public Works Department or Facility Maintenance to insure that all fire protection requirements are incorporated.

The Fire Prevention Assistant Chief or one of the Fire Prevention Inspectors attends preconstruction conferences to provide guidance to contractors on Marine Corps Base Fire Prevention regulations.

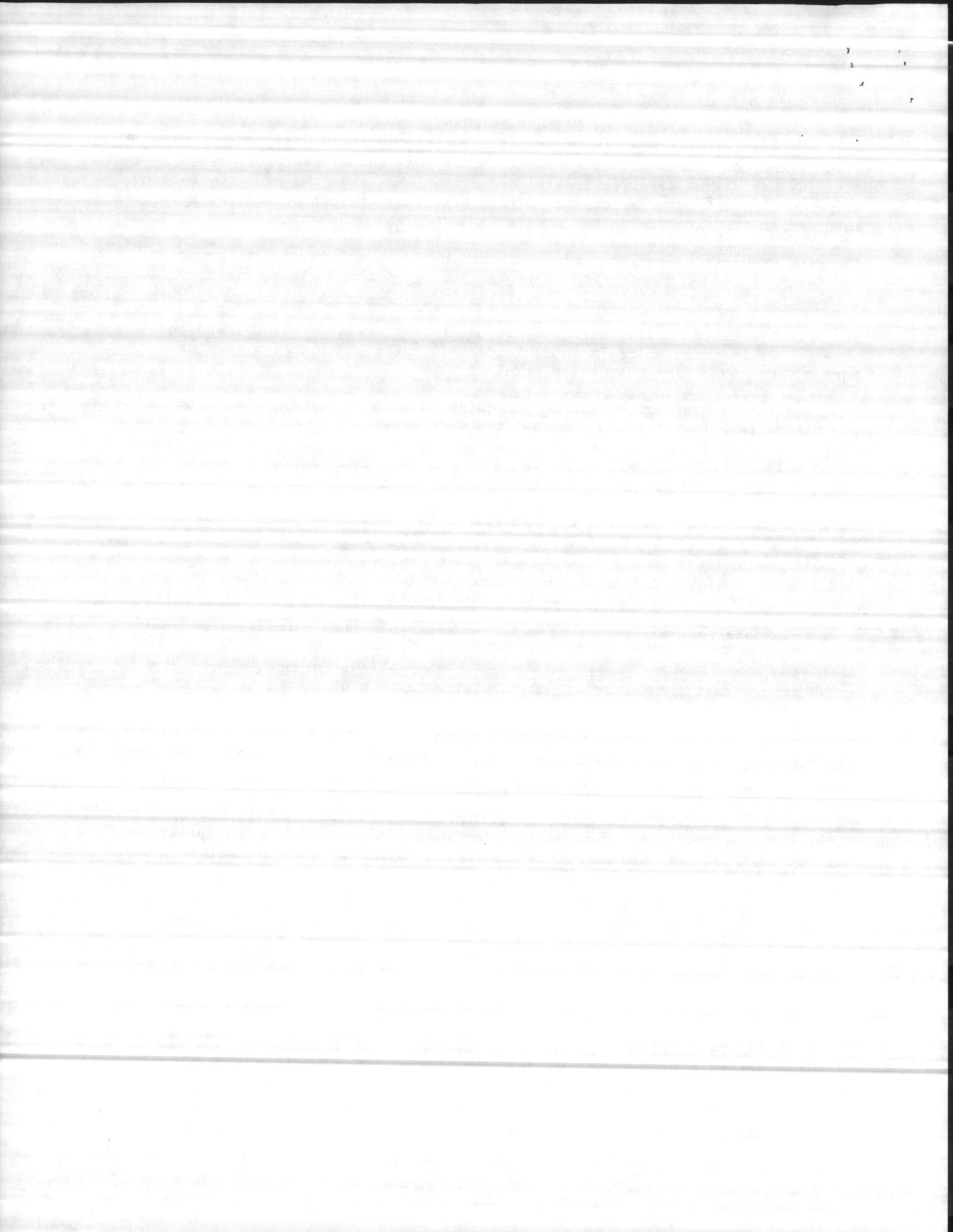
The Fire Inspectors work staggered schedules in lieu of working the standard administration workweek. This allows the Fire Prevention Inspectors to inspect places of public assembly and work areas where there is a second and third shift.

C. Training Program: The Fire Department training program is headed up by a full-time Training Officer. The Fire Chief supervises the Training Officer and monitors the Fire Department training program. The Training Officer develops lesson plans, schedules the type of training classes, reviews training given by others and maintains the individual training records. The Training Officer is a Virginia State Certified Fire Instructor III. The training program is structured around the IFSTA training manuals and the Virginia State certification program. The Assistant Fire Chiefs and Fire Captains conduct most of the training. The training schedules are posted for each Fire Station three months in advance. This allows personnel to prepare and obtain visual aids as required. The Fire Department has an excellent Visual Aids library.

The weak area of the training program involves testing of personnel to see if the instructors are presenting the material properly or if the present training program lesson plans and training are adequate. Instructors need to conduct written tests of material presented. The Training Officer, at least once a month, needs to administer a written test for each crew. The Fire Chief then can review the test results and determine along with the Training Officer what type of training is required. The Training Officer must observe a certain number of training classes to evaluate the training being given by the instructors and provide guidance to improve material presented.

Crash Fire and Rescue (CFR) cross training is conducted jointly with the air facility CFR crews and the live fire training area is used.

The lack of a structural drill facility and training area is a serious deficiency. The Activity presently has an A&E contract to design a Fire Department training facility not to exceed \$185,000 dollars. Although, the CFR fighting facility is used, it does not have the required facilities to conduct realistic in service Fire Department training such as search and rescue, aerial ladder, hose and breathing apparatus evaluations.



At present, Fire Department personnel are Virginia State certified as follows:

- 3 personnel certified as Fire Fighter I
- 42 personnel certified as Fire Fighter III
- 9 personnel certified as pump and aerial operators
- 1 person certified as Crash Fire and Rescue
- 3 personnel certified as Fire Officer I
- 3 personnel certified as Fire Officer II
- 1 person certified as Fire Officer III
- 2 personnel certified as Fire Instructor IV
- 13 personnel certified as Fire Instructor I
- 1 person certified as Fire Instructor II
- 1 person certified as Fire Instructor III
- 5 personnel certified as Fire Prevention Officer I
- 3 personnel certified as Fire Prevention Officer II
- 2 personnel certified as Fire Invesigators II
- 20 personnel certified as EMT's
- 40 personnel certified as Hazardous Materials Level I

Fire Department personnel are involved in off-duty educational programs. Six personnel have AAS Degrees.

The Fire Department has one person who is factory certified to repair and conduct required maintenance on the self-contained breathing apparatus.

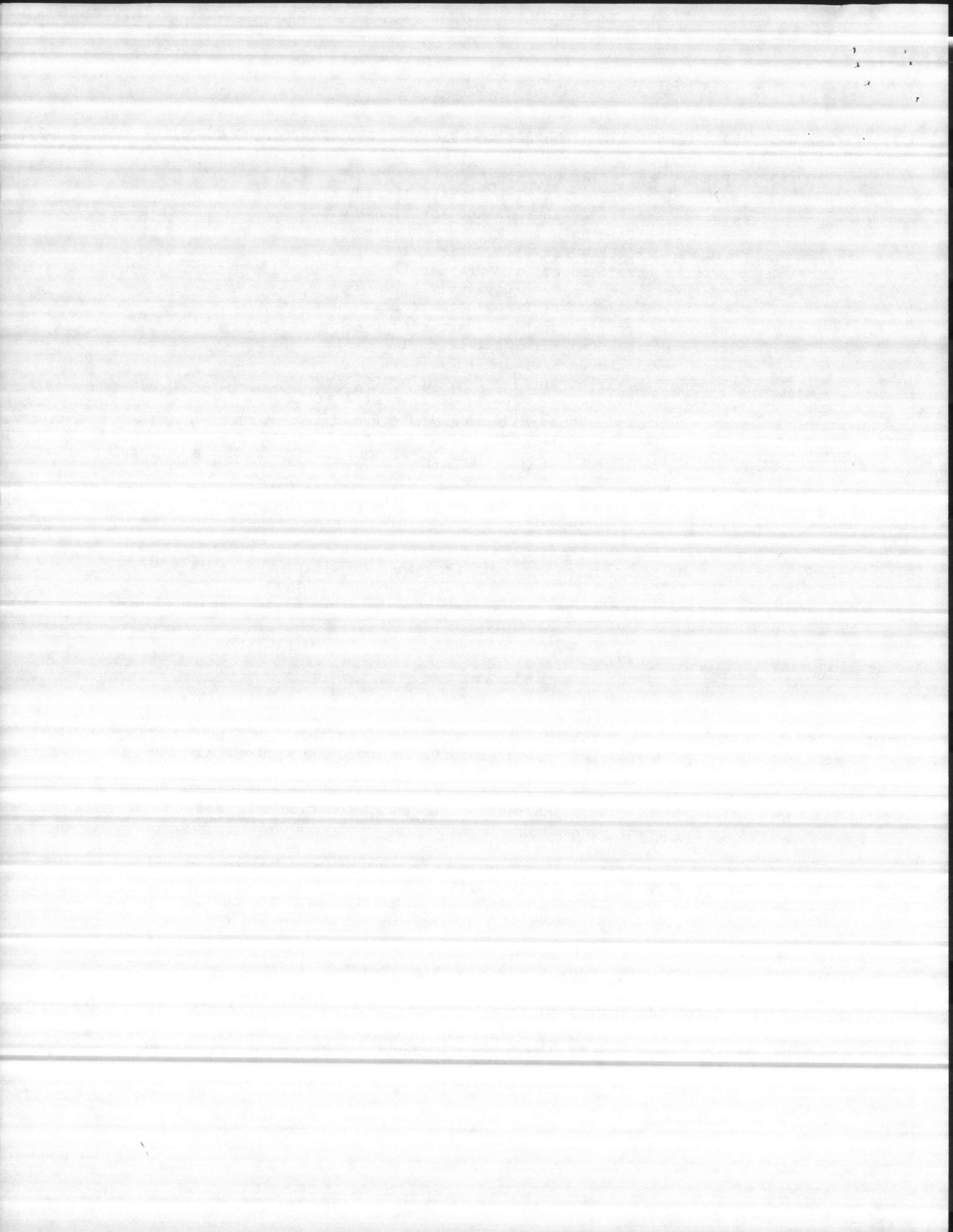
The Training Officer also serves as the Department Safety Officer and monitors safety precautions at the fire scene.

#### VI. EVALUATIONS:

A. Fire Suppression Capability: The fire suppression capability is EXCEPTIONALLY GOOD. The fire fighting suppression forces are properly staffed, well-trained and properly equipped to perform the fire fighting mission. The fire prevention inspectors pass on information about changes in building so the fire suppression forces can keep their pre-fire plans up to date. These plans were reviewed and they contain all pertinent information. Hazardous materials have been indentified and their location and what action is required in the event of exposure to fire.

The Activity has identified all of the PCB transformers on the station and has a replacement program in place. A priority sequence needs to be established for removal of the PCB transformers that are in buildings. The Activity is getting ready to award a 2,097,000 dollar contract to remove all PCB transformers on the Activity.

An area of concern is the lack of a pollution control, oil and hazardous substance contingency plan that clearly spells out the Fire Department's role.



B. Fire Prevention Program: Since the previous inspection, the Department has hired an Assistant Fire Chief for Fire Prevention and two Fire Prevention Inspectors bringing the staff to five of the required seven. Significant improvement has been generated by this action but the composite program evaluation remains deficient pending the filling of the two additional positions. There will be a requirement for clerical support in fire prevention when full staffing is realized.

One Fire Prevention Inspector is assigned to review blue prints, check out new fire alarm, sprinkler and fixed fire protection systems and attend preconstruction conferences. Fifty-four construction plans were reviewed and thirty-three preconstruction conferences were attended in FY-86.

The public fire education includes fire safety lectures, Sesame Street, juvenile firesetters program, spring cleanup campaigns, winter heating safety, learn not to burn and Frankie, the Fire Hydrant.

The public fire education program has had a direct effect on reducing the fire loss at Quantico. In FY-84, the fire loss was 342,000 dollars; in FY-85 117,000 dollars. The fire loss in FY-86 through the 3rd quarter was only 7,800 dollars.

The public education program now is reaching approximately 93 percent of the activities at MCDEC.

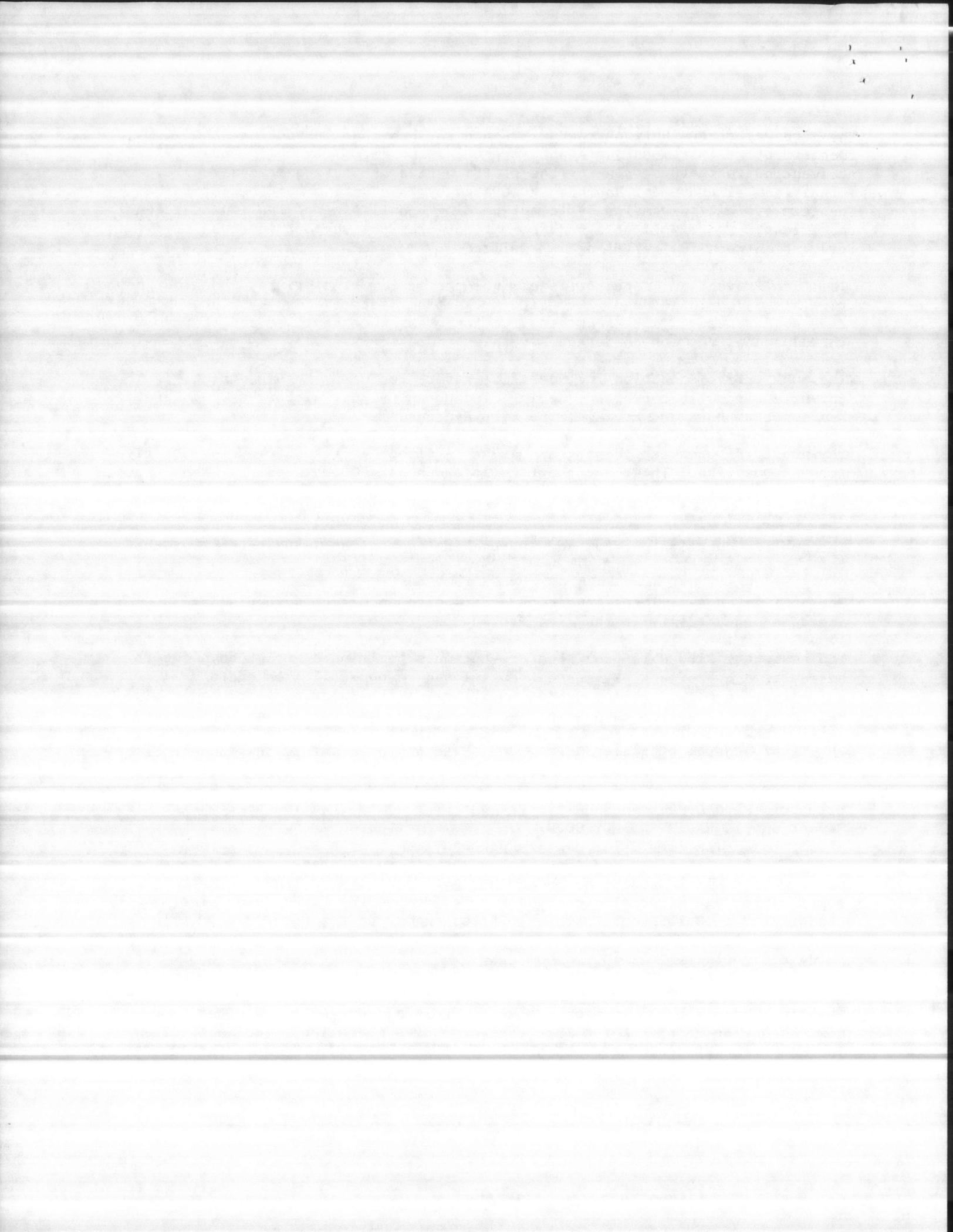
The Activity has a microcomputer on order to enhance record keeping and increase productivity in the Fire Prevention Branch.

The Assistant Fire Chief for Fire Prevention's position description needs to be reviewed to reflect all current duties and responsibilities and one subordinate supervisor is required to distribute the workload more equitably and provide adequate backup. This action will enable career development and provide the resource to make follow-ups and track special hazards. Presently, when the Supervisory Assistant Fire Chief is on leave, etc., the inspectors are all the same grade, and no one is clearly in charge.

C. Fire Department Administration: The administration of the Fire Department is EXCEPTIONALLY GOOD. The Command vigorously supports fire protection. The Fire Chief assigns personnel on a rotational basis between the three fire stations and Camp Upshur when it is in operation, and details personnel to higher positions when other personnel are on leave. The fire organization exercises fire command and control on the fireground. The Assistant Fire Chiefs and Training Officer report to the Fire Chief.

An upward mobility position in the Fire Prevention Branch seeks to attract women and minorities.

The Fire Chief's budget reflects what is truly needed and is adjusted up or down each year to effect the most cost-effective operation. The budget includes special training courses to keep personnel up-to-date in the latest fire fighting methods and provides the opportunity for career development.



The Fire Department's aerial ladder truck is due for testing and recertification by an independent testing company. A nondestructive test is required at least every three years.

The Fire Department requires an additional radio frequency. Presently, only one frequency is assigned and is shared with the hospital. It was observed during this inspection that the hospital users interfere with Fire Department operations and during multiple emergencies it is difficult to use the radio. There should be one channel for normal routine radio traffic and one channel for fireground operations.

The Activity has received a new 5,000 psi breathing air compressor with all required filtering systems that should be operational in the next 30-45 days.

The Activity has programmed and established a priority 11 for the purchase of self-contained breathing apparatus test equipment. They also have one person, factory trained, to do repairs and recertification of self-contained breathing apparatus. When this is in place, it will greatly reduce the cost of maintenance assigned self-contained breathing apparatus. Presently, it costs \$275 dollars to repair a self-contained breathing apparatus regulator by contract, and takes 3 weeks or more to get units repaired. The in-house capability will reduce turn around time and reduce cost to approximately \$40 dollars per unit.

The Fire Chief has an annual leave policy in effect. Annual leave schedules are made up at the start of the calendar year.

Overtime is authorized to maintain minimum staffing of four personnel on the ladder truck, twelve personnel for three engine companies and three personnel on the fourth engine company when required.

#### VII. RECOMMENDATIONS:

##### A. Status of previous recommendations:

All previous recommendations have been satisfied or are in the process of being implemented.

##### B. Current recommendations:

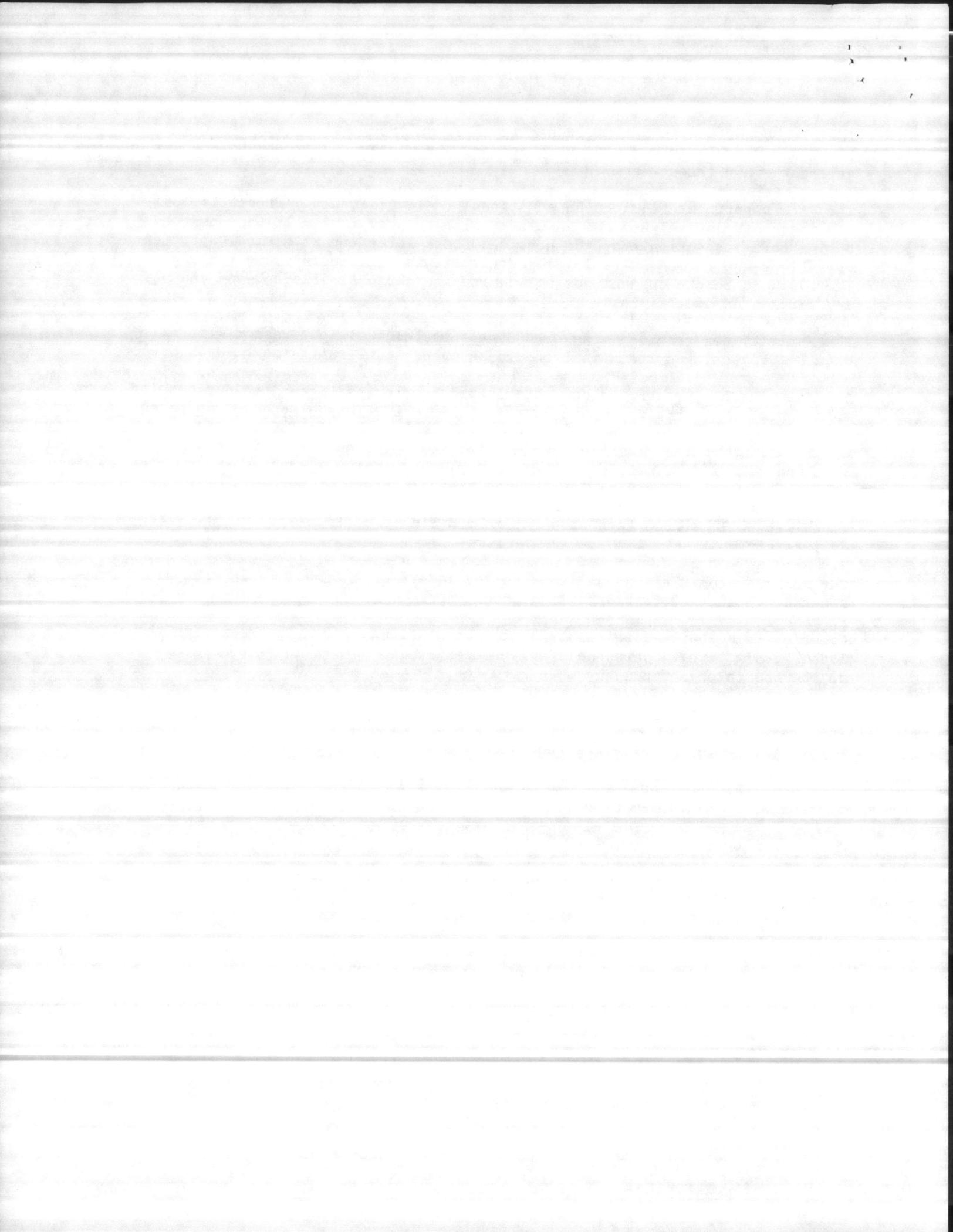
1-86 Hire two additional Fire Prevention Inspectors.

2-86 Establish a priority sequence to remove PCB transformers from buildings.

3-86 Publish a contingency spill plan/oil and hazardous waste management plan.

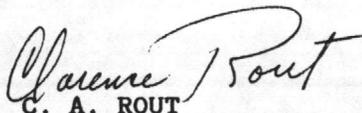
4-86 Have the aerial ladder tested and certified by an outside testing company.

5-86 Establish a written test requirement and procedure for Fire Department Instructors and the Training Officer.



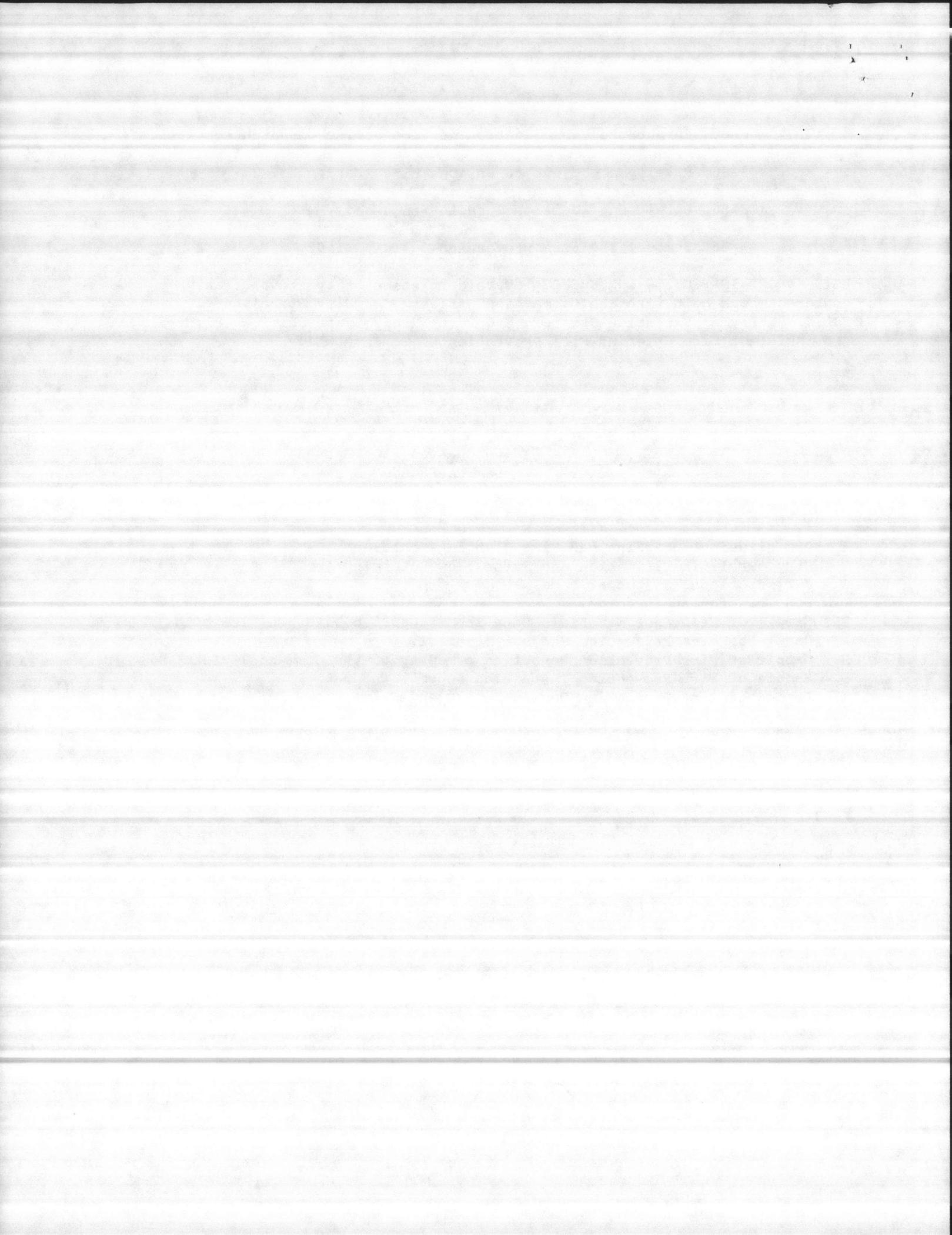
- 6-86 Pursue the consolidation of fire/police dispatch services.
- 7-86 Develop a project to enlarge Fire Station No. 3.
- 8-86 Obtain one additional radio frequency.
- 9-86 Remodel the fire prevention Building 1502.

VIII. POST INSPECTION CONFERENCE: Upon completion of the inspection, a conference was held with the Commanding Officer, Security Battalion, COL D. C. Beyma; Executive Officer, MAJ R. L. Rippey; Fire Chief W. L. Robinson and Assistant Fire Chief of Fire Prevention C. T. Campbell.

  
C. A. ROUT  
Head, Area Fire Marshal  
LANTNAVFACENGCOM

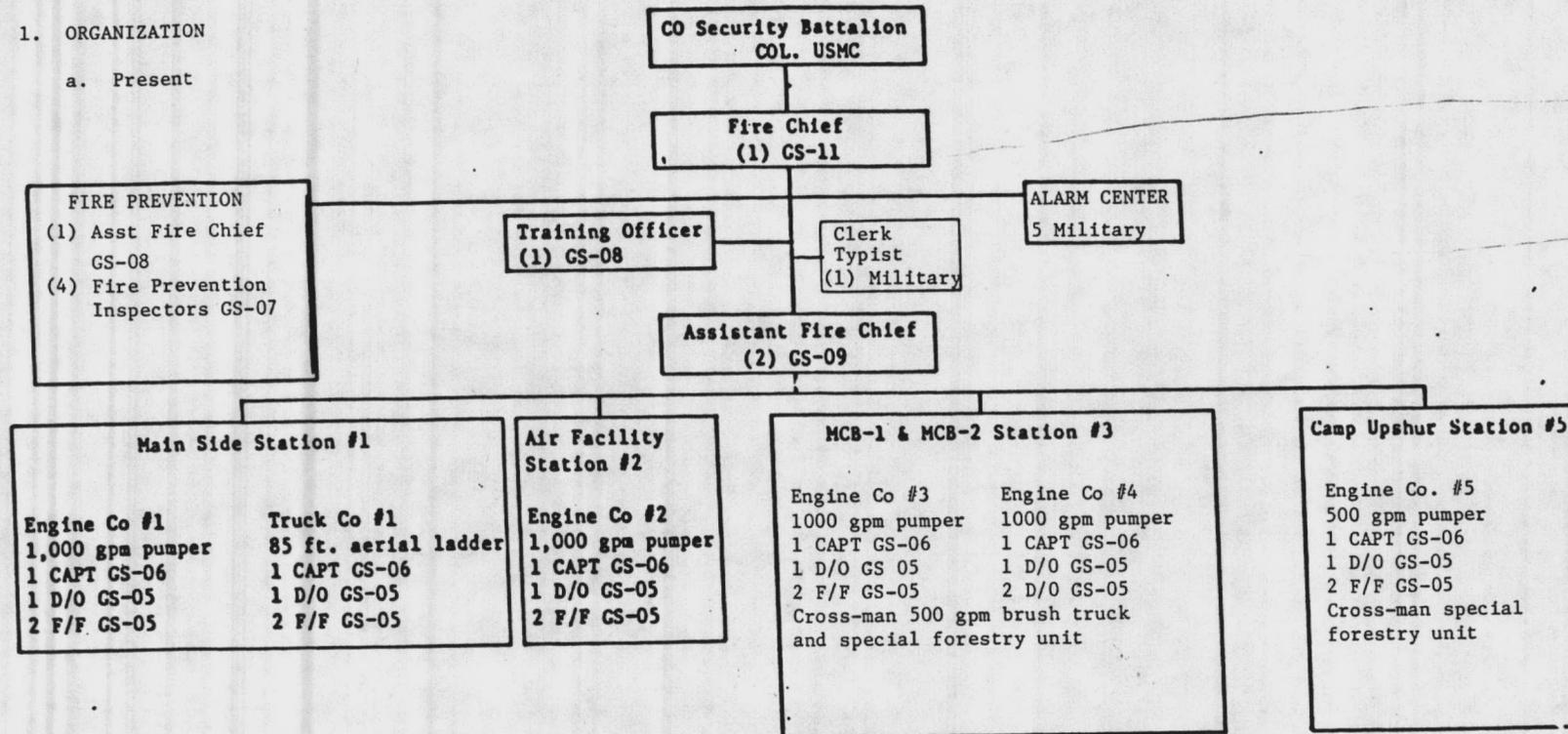
**ATTACHMENTS:**

- A. Organization, Staffing and Fire Fighting Vehicles
- B. Structural Classification and Water Flow Determination
- C. Jurisdictional Status of Land
- D. PCB Transformer Inventory
- E. Sample of Hazardous Materials Data Sheets Carried with pre-fire plans
- F. Sample of Fire Prevention Handout material
- G. Sample of Fire Prevention Report as a member of the Command IG Team
- H. Sample of Fire Prevention Inspection Report
- I. Sample of Fire Prevention Design Review and Comments



1. ORGANIZATION

a. Present



4 Manned Engine Companies  
 1 Manned Aerial Ladder (Truck Company)  
 1 Manned Engine Company at Camp Upshur  
 during operation (approximately 6 months a year)

5 x 4 = 20 x 2.72 = 54.4 = 54 firefighters  
 1 x 4 = 4 x 2.72 = 11 = 11 firefighter  
 (temporary Camp Upshur)  
 12 temporary required due  
 to high turnover of  
 temporary employees to  
 maintain four on-duty at  
 all times

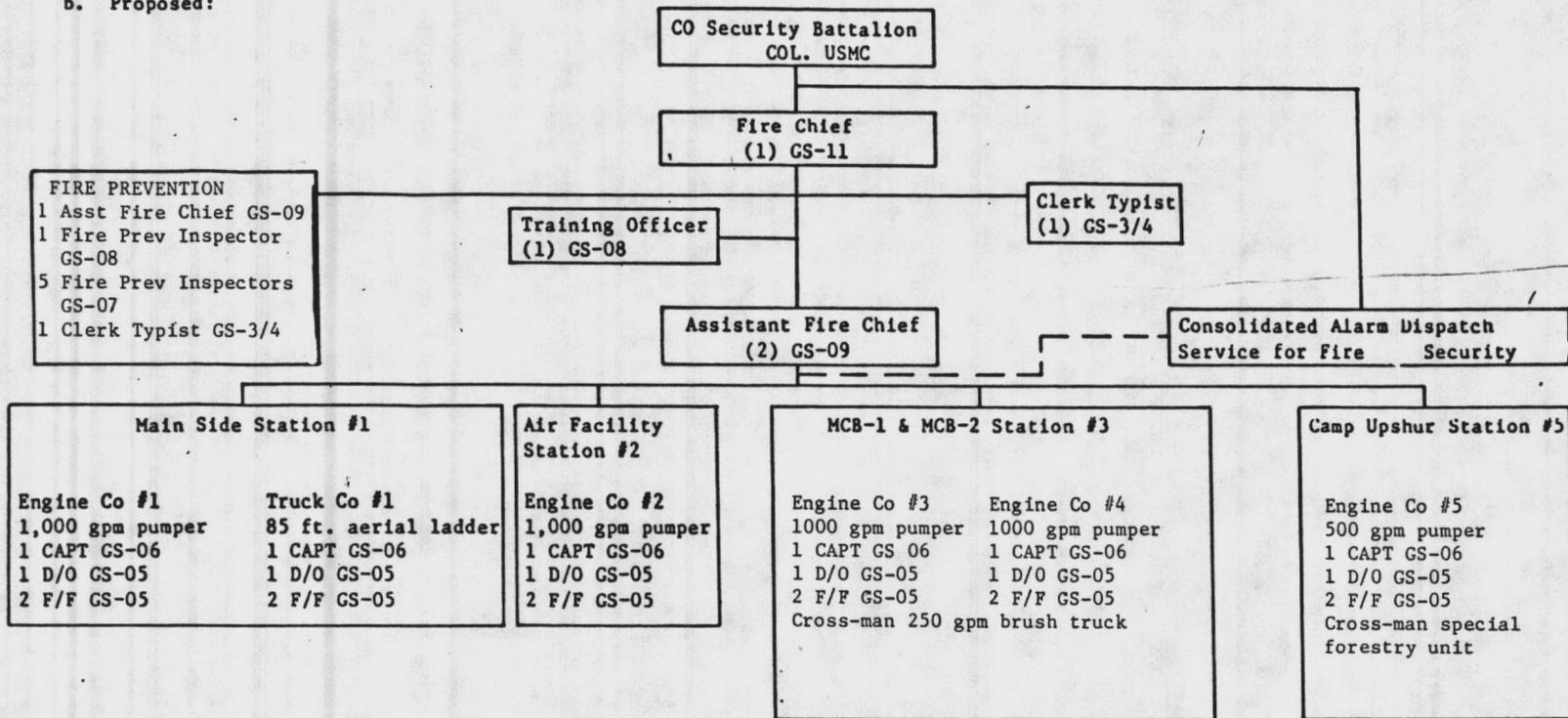
1 Fire Chief  
 2 Assistant Fire Chiefs - Fire Suppression  
 1 Assistant Fire Chief - Fire Prevention  
 1 Assistant Fire Chief - Training  
 4 Fire Prevention Inspectors  
 1 Clerk Typist  
 54 Fire Fighters  
 5 Alarm Dispatchers  
 12 Temporary Employees - Camp Upshur (March-September)

81 Total

ATTACHMENT A



b. Proposed:



**FIRE PREVENTION**  
 1 Asst Fire Chief GS-09  
 1 Fire Prev Inspector GS-08  
 5 Fire Prev Inspectors GS-07  
 1 Clerk Typist GS-3/4

**Main Side Station #1**

<b>Engine Co #1</b>	<b>Truck Co #1</b>
1,000 gpm pumper	85 ft. aerial ladder
1 CAPT GS-06	1 CAPT GS-06
1 D/O GS-05	1 D/O GS-05
2 F/F GS-05	2 F/F GS-05

**Air Facility Station #2**

<b>Engine Co #2</b>
1,000 gpm pumper
1 CAPT GS-06
1 D/O GS-05
2 F/F GS-05

**MCB-1 & MCB-2 Station #3**

<b>Engine Co #3</b>	<b>Engine Co #4</b>
1000 gpm pumper	1000 gpm pumper
1 CAPT GS 06	1 CAPT GS-06
1 D/O GS-05	1 D/O GS-05
2 F/F GS-05	2 F/F GS-05
Cross-man 250 gpm brush truck	

**Camp Upshur Station #5**

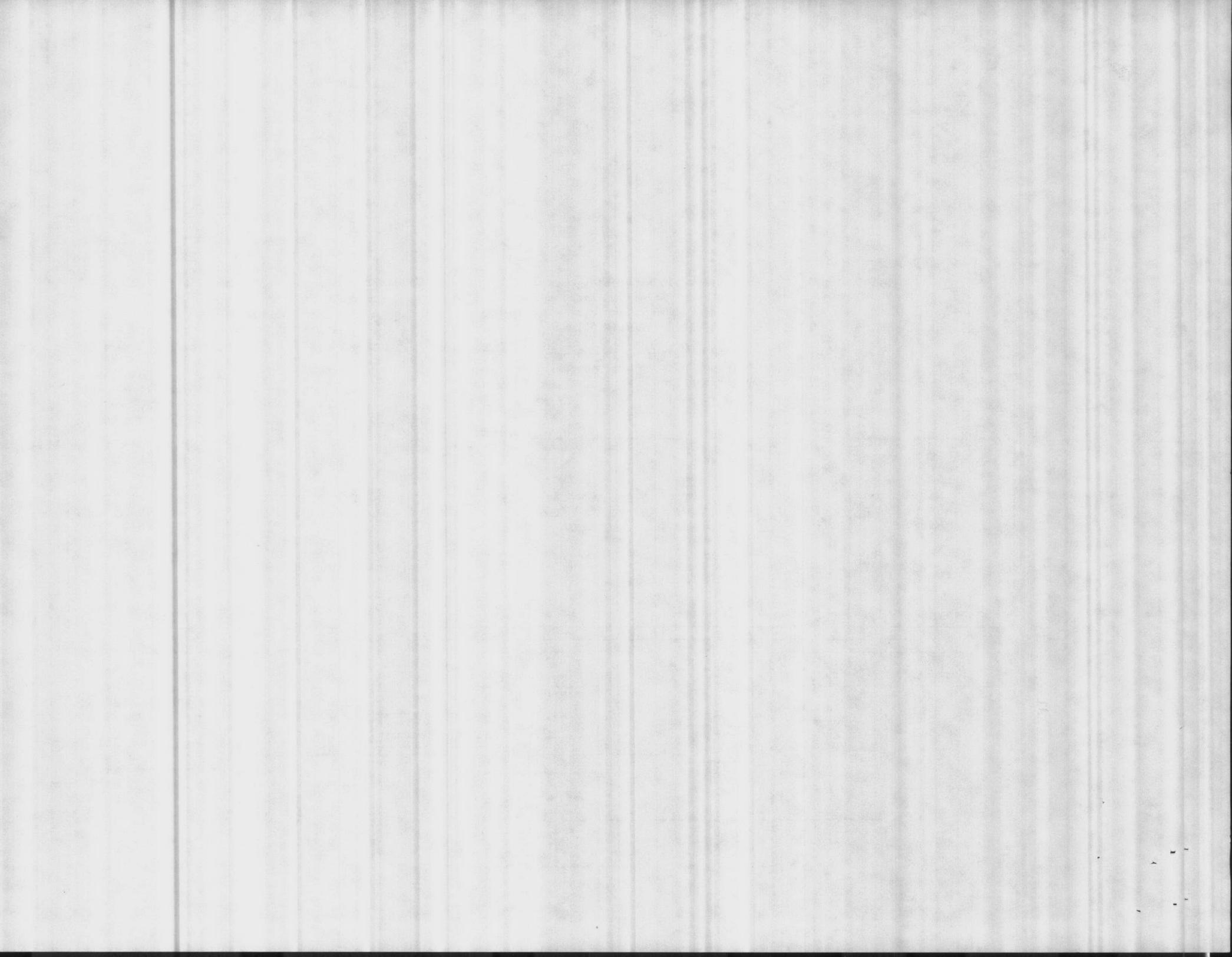
<b>Engine Co #5</b>
500 gpm pumper
1 CAPT GS-06
1 D/O GS-05
2 F/F GS-05
Cross-man special forestry unit

4 Manned Engine Companies  
 1 Manned Aerial Ladder (Truck Company)  
 1 Manned Engine Company at Camp Upshur during operation

5 x 4 = 20 x 2.72 = 54.4 = 54 firefighters  
 1 x 4 = 4 x 2.72 = 11 = 11 firefighter (temporary Camp Upshur)  
 12 temporary required due to high turnover of temporary employees to maintain four on-duty at all times

- 1 Fire Chief
  - 2 Assistant Fire Chiefs - Fire Suppression
  - 1 Assistant Fire Chief - Fire Prevention
  - 1 Assistant Fire Chief - Training
  - 5 Fire Prevention Inspectors
  - 1 Clerk Typist (Fire Chief)
  - 1 Clerk Typist (Fire Prevention)
  - 54 Fire Fighters
  - 12 Temporary Employees (Camp Upshur) March - September
  - 5 Alarm Dispatchers are required for Fire in consolidation
- 84 TOTAL

ATTACHMENT A



2. Staffing:

- a. Authorized positions: 63 civilians, 6 military, 12 temporaries  
Total 81

<u>Position Title</u>	<u>Number of Positions</u>	<u>Civilian Military Foreign Nat</u>	<u>GS-Grade Mil Rate</u>	<u>Comments</u>
Fire Chief	1	Civilian	GS-11	
Assistant Fire Chief	2	Civilian	GS-09	
Fire Prevention Chief	1	Civilian	GS-08	
Fire Prevention Inspector	4	Civilian	GS-07	
Training Officer	1	Civilian	GS-08	
Supervisory Fire Fighter	12	Civilian	GS-06	
Driver Operator	12	Civilian	GS-05	
Fire Fighter	30	Civilian	GS-05	
Fire Alarm Communications Operators	5	Military	CPL	
Administrative Clerk	1	Military	LCPL	
Fire Fighter	<u>12</u>	Civilian	GS-04	Temporaries
Total	81			

- b. Staffing calculations MCO P11000.11A

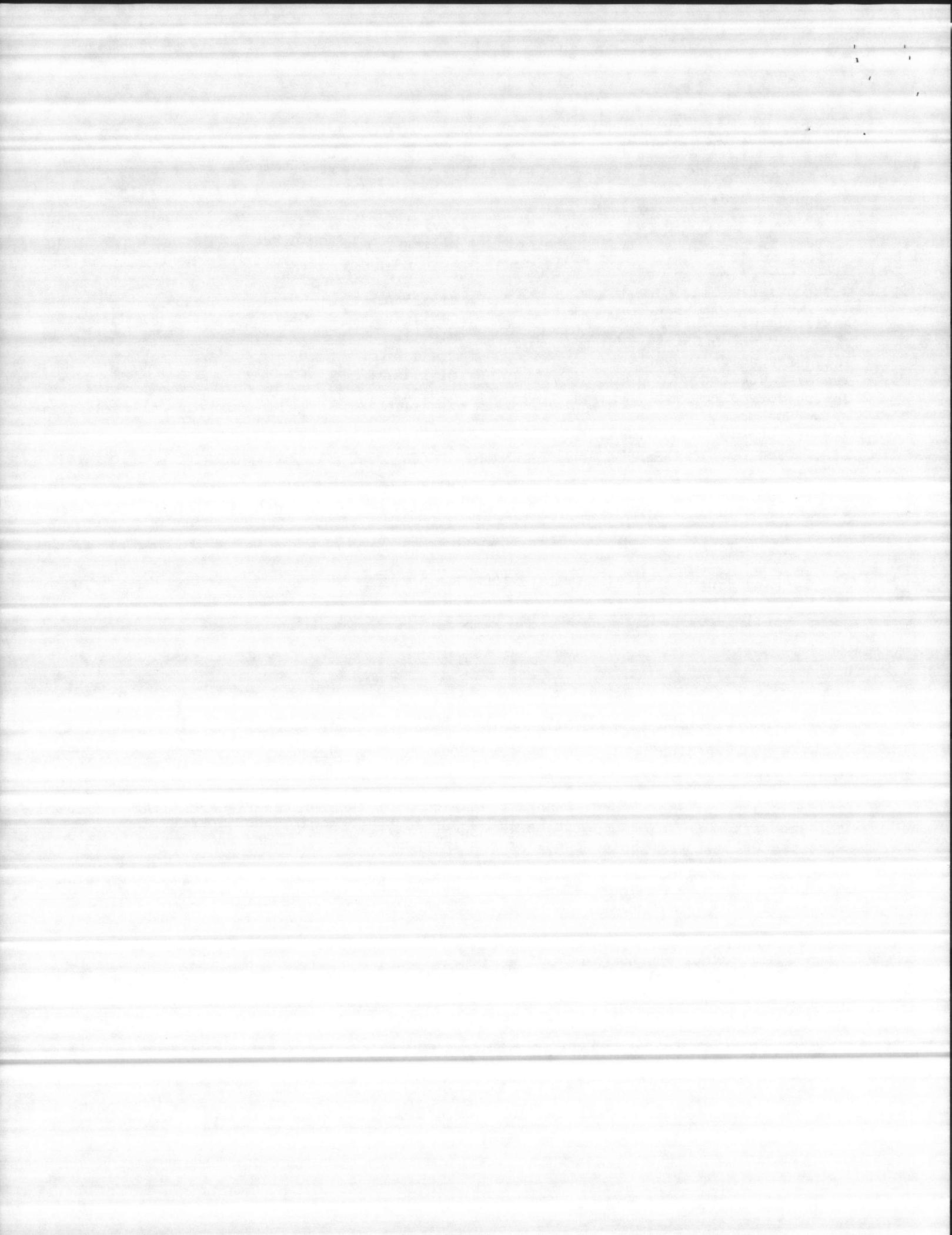
(1) Provide fire protection operations

	<u>Number</u>	<u>Number of Personnel</u>
Triple combination pumpers	4	
Aerial ladder truck	1	
Total 4-man vehicles (20 x 2.72 = 54.4 = 54)	5	54

There is a requirement for a manned engine company at Camp Upshur from March through September. This operation is supported by temporary positions and when the Officer Candidate School is not in operation the manned engine company is deactivated.

	<u>Number</u>	<u>Number of Personnel</u>
Triple combination pumpers	4	12
Manned Mid March through Mid September (temporary employees)		
Communications Center		5

(2) Provide fire prevention inspections



SF-Square feet of buildings (including family housing 2,276,086 divided by 12) =	12,801,222 sq. ft. 189,673 sq. ft.
SY-Square yards of open storage 511,877 square yards x 9 = SF	<u>4,606,893 sq. ft.</u>
Total	17,597,778 sq. ft.

Class A activities

Number of Fire Inspectors required 7

There is a requirement for seven Fire Inspectors provided for in the table in MCO P11000.11A. To have an effective public education program and an effective fire hazard abatement program, special technically qualified personnel are required. It is felt that, with six Fire Prevention Inspectors and an Assistant Fire Chief of Fire Prevention, this can be accomplished as required by DOD and Marine Corps criteria.

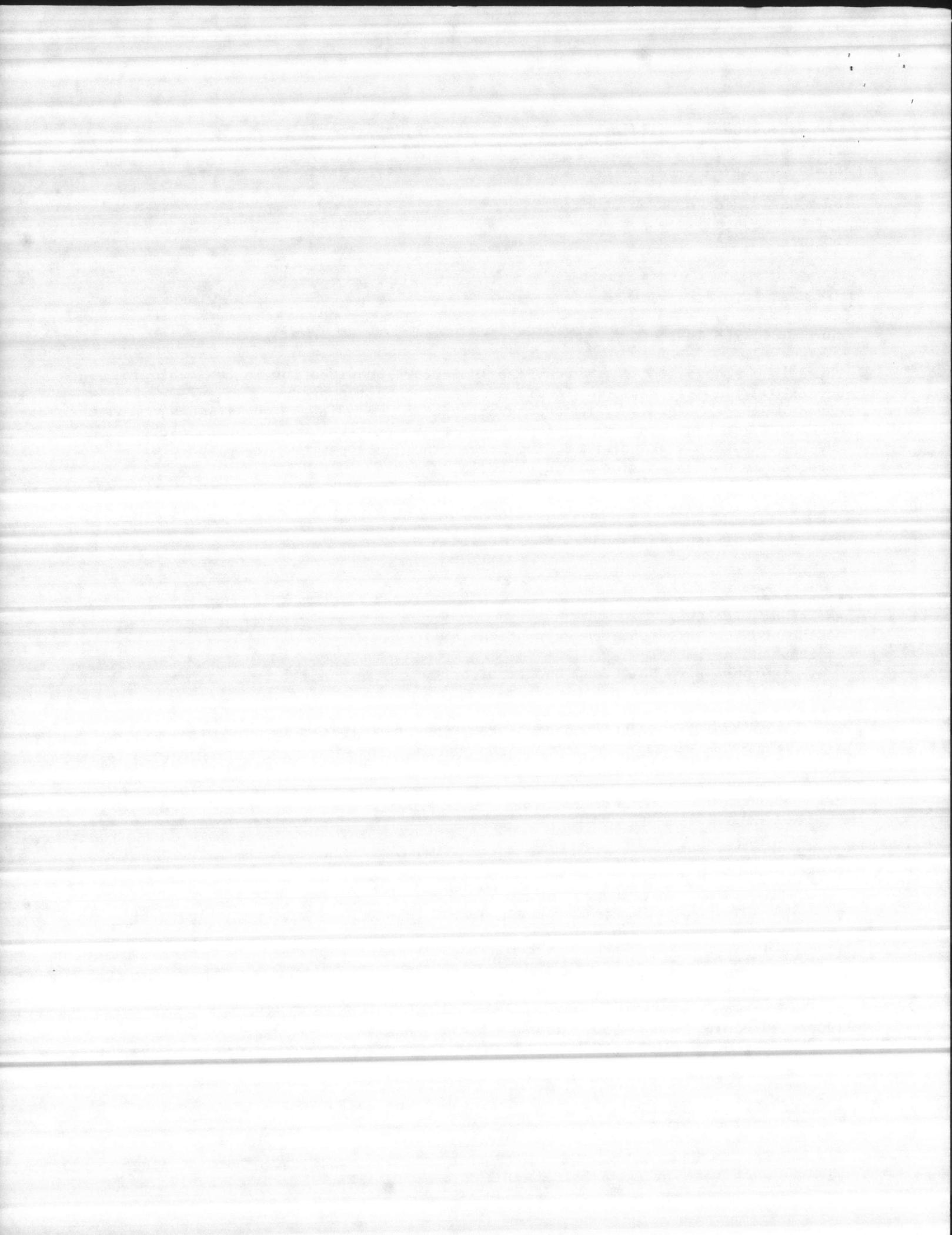
(3) Provide mission area support

Total of positions in 1 and 2	65 12 temporary
Fire Chief	1
Assistant Fire Chief	2
Assistant Fire Chief of Fire Prevention	1
Training Chief	1
Clerk (support Fire Chief and Suppression)	1
Clerk (support Fire Prevention Office)	1
Total personnel required in mission area support	7

(4) Total Fire Department personnel required 72 permanent civilian  
12 temporary civilian  
(Camp Upshur)  
84 Total

3. Fire Fighting Vehicles:

Type of Vehicle	USMC ID	Year & Manufacturer	USMC Assignment Reg. No.	Condition
1000 gpm triple combination pumper	1501	1985 Walters	Engine #1 277625	Excellent
1000 gpm triple combination pumper	1501	1985 Walters	Engine #2 277624	Excellent
1000 gpm triple combination pumper	1501	1985 Walters	Engine #3 263626	Excellent
1000 gpm triple combination pumper	1501	1985 Seagrave	Engine #4 263675	Very Good
1000 gpm triple combination pumper	1501	1978 Seagrave	Engine #5 264510	Very Good



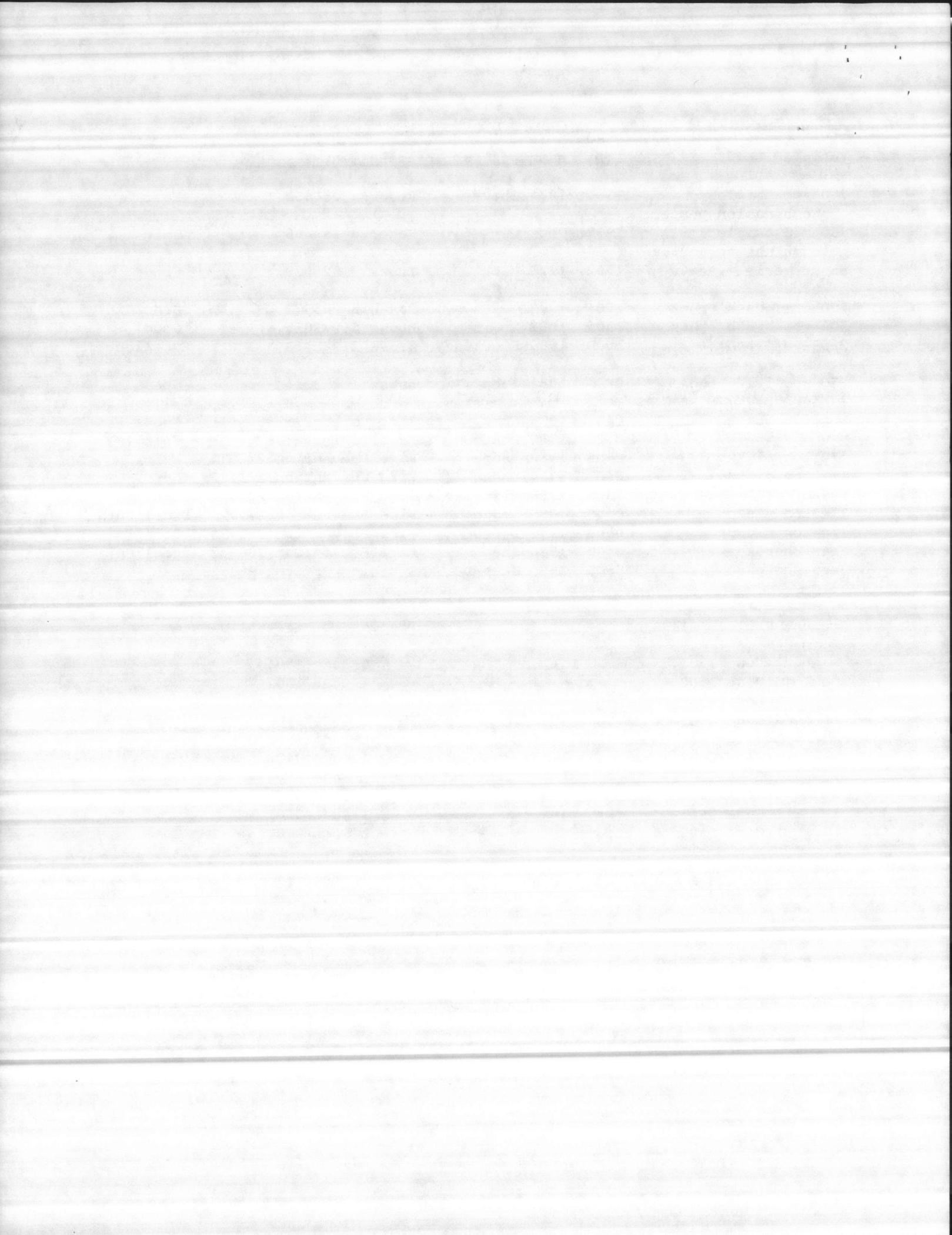
Type of Vehicle	USMC ID	Year & Manufacturer	USMC Assignment Reg. No.	Condition
750 gpm triple combination pumper	1501	1974 Chevy	Reserve 256655	Fair
750 gpm triple combination pumper	1973	GMC	Reserve 254666	Fair
85 ft aerial-ladder truck	1502	1975 Mack	Truck #1 258791	Good
500 gpm brush truck	1505	1982	Brush 3 265971	Good
500 gpm brush truck	1505	1982	Brush 5 273815	Good
250 gpm 1 ton	1508	1985 Emergency One	Brush 2 278413	Excellent
250 gpm 1 1/4 ton forestry	0805	1981 Jeep	Brush 1 273214	Good
Station Wagon	0402	1984 Chevy	Fire Chief 275063	Good
Van	0503	1980 Dodge	Asst. Chief 270685	Fair
1/4 ton pickup	0508	1982 Dodge	Fire Prevention 273935	Fair
1/2 ton pickup	0601	1984 Dodge	Fire Prevention 275420	Good
Sedan	0303	1986 Plymouth	Fire Prevention 281571	Excellent
1/4 ton pickup	0508	1985 Dodge	Fire Prevention 279053	Excellent
1/4 ton pickup	0508	1982 Dodge	Fire Prevention 373936	Good
Jeep Cherokee	0500	1986 Jeep	Fire Prevention 280622	Excellent
Jeep Cherokee	0500	1986 Jeep	Training Officer 280623	

Present Vehicle Allowance

7 Code 1501  
 1 Code 1502  
 2 Code 1505  
 2 Code 0805  
 1 Code 1508  
 1 Code 0402  
 1 Code 0503  
 3 Code 0508  
 1 Code 0601  
 2 Code 0500

Proposed Vehicle Allowance

6 Code 1501  
 1 Code 1502  
 1 Code 1505  
 2 Code 0805  
 1 Code 1508  
 1 Code 0402  
 1 Code 0503  
 3 Code 0508  
 1 Code 0601  
 2 Code 0500



ATTACHMENT B: Structural Classification and Water Flow Determination

Land Area: Total acres - 60,030.882

LEGISLATIVE JURISDICTION	NUMBER OF ACRES	GENERAL LAND USAGE
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See Attachment C

Buildings: Family housing: Number of structures - 663 plus 32 trailers  
 Number of units - 1,568  
 Other than family housing: Approximate number - 373  
 Type of construction by % of number:  
 Fire resistive: 25% Ordinary: 40%  
 Noncombustible: 10% Frame: 25%

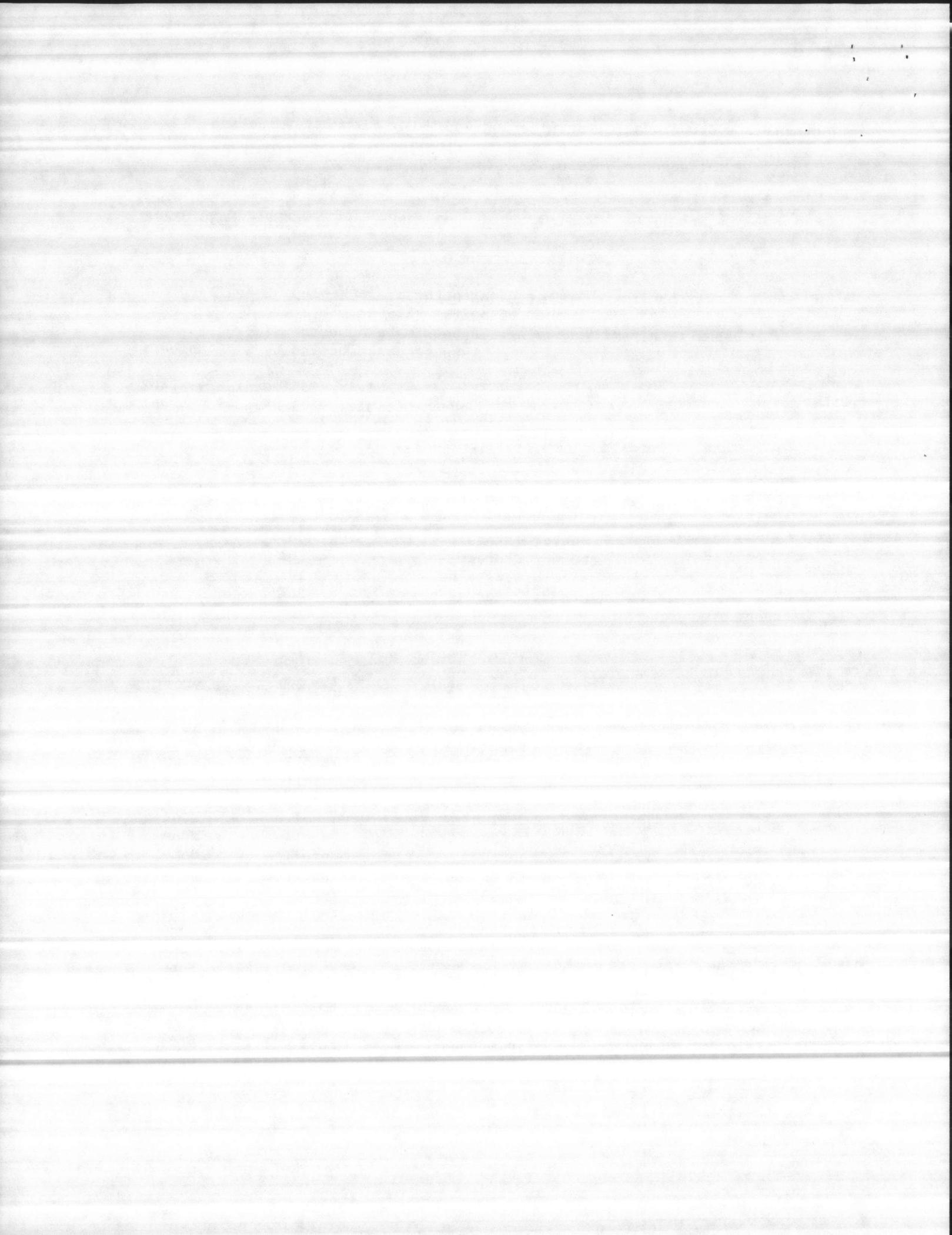
Total square footage of all buildings: 15,077,308

Outside Storage: Total square yards: 511,877  
 General categories of storage by % of square yards:

Vehicle storage -	40%
Lumber storage -	20%
Aircraft parking -	20%
General storage area -	20%

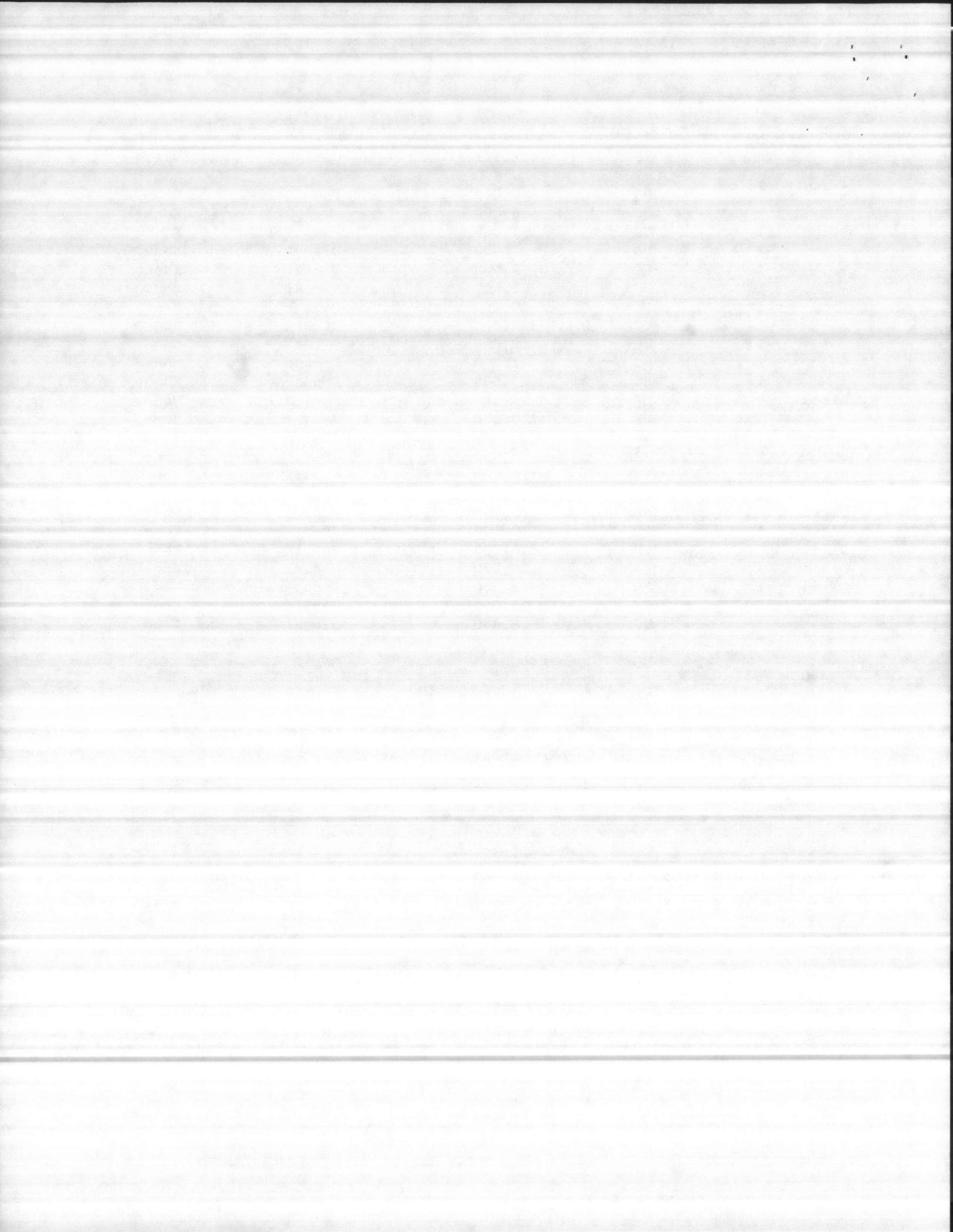
POL Storage:

NUMBER OF TANKS	TYPES	CAPACITY IN GAL	CONTENTS	PROTECTION
1	UG	20,000	Gasoline	None
1	UG	11,400	Gasoline	None
2	UG	1,000 each	Gasoline	None
1	UG	10,000	Gasoline	None
2	UG	825 each	Gasoline	None
1	UG	500	Gasoline	None
1	UG	2,000	Gasoline	None
1	UG	100,000	Gasoline	None
1	UG	133,000	Gasoline	None
1	UG	40,000	Fuel Oil #6	None
1	UG	466,000	Fuel Oil #6	None
1	UG	80,000	Fuel Oil #6	None
1	UG	25,000	Fuel Oil #2	None
1	UG	30,000	Fuel Oil #2	None
31	UG	1,000 each	Fuel Oil #2	None
14	UG	500 each	Fuel Oil #2	None
8	UG	2,000 each	Fuel Oil #2	None
3	UG	10,000 each	Fuel Oil #2	None
4	UG	5,000 each	Fuel Oil #2	None
1	UG	750	Fuel Oil #2	None
1	UG	800	Fuel Oil #2	None
1	UG	100,000	Fuel Oil #2	None



	NUMBER OF TANKS	TYPES	CAPACITY IN GAL	CONTENTS	PROTECTION
	1	UG	50,000	Fuel Oil #2	None
	1	UG	36,000	Fuel Oil #2	None
	1	UG	15,000	Fuel Oil #5	None
	2	UG	500	Diesel	None
	1	UG	4,000	Diesel	None
	1	UG	1,000	Diesel	None
	1	UG	10,000	Diesel	None
	1	UG	24,000	Diesel	None
	1	UG	12,000	Diesel	None
	1	UG	1,000	Kerosene	None
	1	UG	800	Kerosene	None
Diked	3	H	1,000 each	Fuel Oil	None
	1	UG	250,000	JP-4	None
	1	UG	101,000	JP-5	None
Diked	2	FRF	75,000 each	JP-4	None
Diked	1	FRF	75,000	Gasoline	None
Diked	1	FRF	25,000	Gasoline	None
Diked	2	FRF	75,000 each	Gasoline	None
Diked	1	FRF	12,500	JP-5	None
Diked	2	FR	250,000 each	Heating Oil #2	None
Diked	1	FR	25,000	Diesel	None
Diked	1	FR	12,500	Kerosene	None
Diked	3	FR	25,000	Heating Oil	None
	1	UG	6,000	Diesel	None

UG    Underground  
 H     Horizontal  
 FRF   Fixed-Roof with Floater  
 FR    Fixed Roof  
 Total Number of Tanks    110  
 Total Number of Gallons   2,469,250

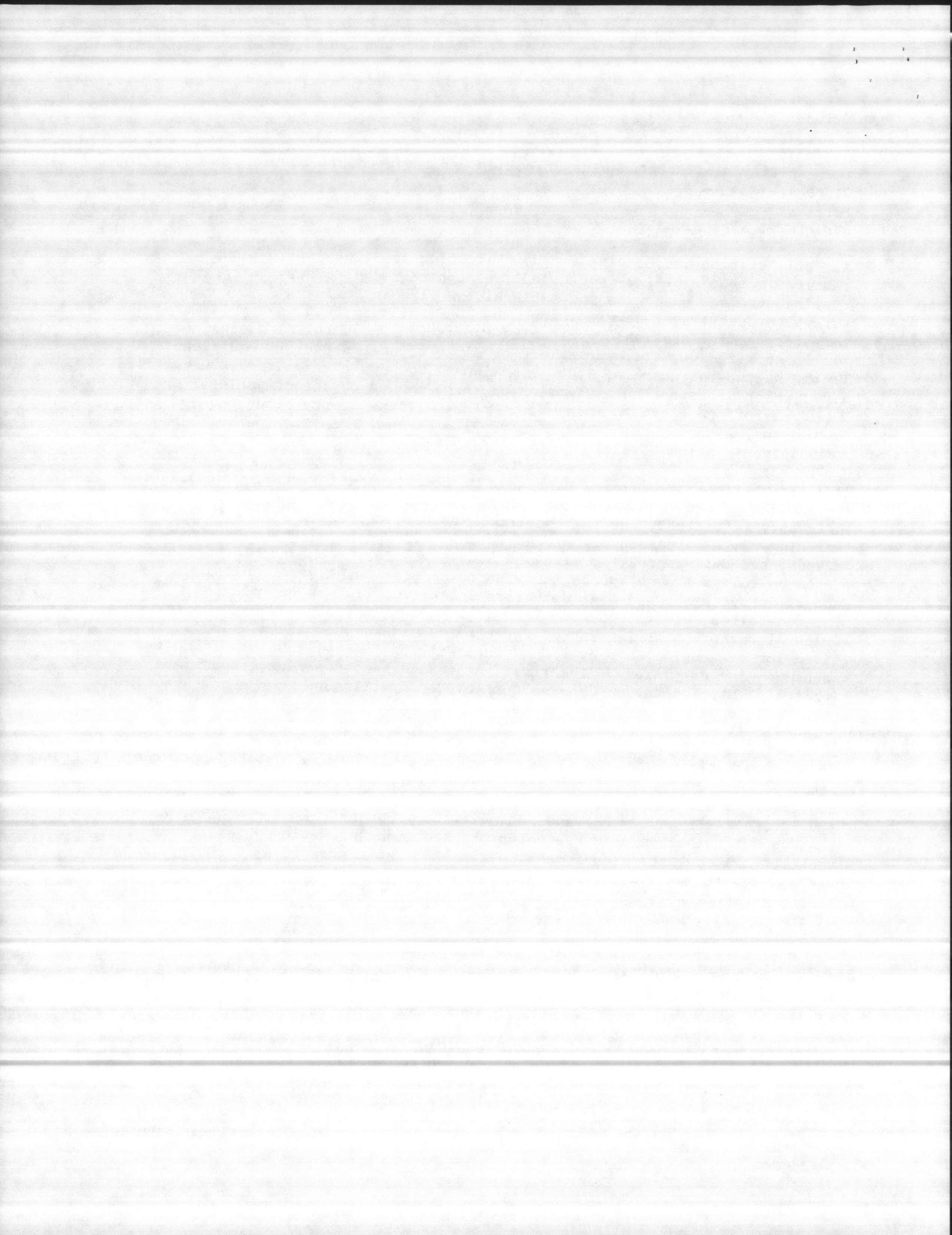


Structural Classification: Class A

The Activity's structural classification was reviewed and should remain as Class A.

Structural Fire Flow Requirements:

1. Main station and housing areas: Fire flow of 3,000 gpm is based upon the required number of 2-1/2-inch hose lines considered necessary to control, confine, protect exposures and extinguish a fire in Building 7, a combustible, general storage, self-service warehouse; and Building 3035, a combustible, two-story administration/dry cleaning facility. These buildings are not protected with automatic sprinklers or smoke or heat detecting equipment. Using the two-thirds rule, 3,000 gpm minus 1,000 gpm equates to 2,000 gpm fire flow, which dictates the assignment of three manned engine companies. Credit is given for one engine company from Prince William County, thus requiring two manned engine companies. (The first engine company from Station No. 2 and the second from Station No. 2.)
2. Air Station and Officers Candidate School Complex: Fire flow of 3,000 gpm is based upon the required number of 2-1/2-inch hose lines considered necessary to control, confine, protect exposures and extinguish a fire in Building 72, a large nonsprinklered butler building housing the USMC Air Museum; and Buildings 2175, 2176 and 2108, two-story, combustible barracks. These buildings are not protected with automatic sprinklers. Buildings 2175 and 2176 have smoke and heat detectors installed; 2108 is unprotected. Using the two-thirds rule, 3,000 gpm minus 1,000 gpm equates to 2,000 gpm fire flow, which dictates the assignment of three manned engine companies. Credit is given for one engine company from Prince William County, thus requiring two manned engine companies. (The first engine and second engine company are located at Station No. 2. Engine Company No. 4 will move to the new station when it is opened. Then, Engine Company No. 1 will provide the second engine company.)
3. Camp Barrett and FBI Complex: Fire flow of 2,000 gpm is based upon the required number of 2-1/2 inch hose lines considered necessary to control, confine, protect exposures and extinguish a fire in the Quonset Hut classrooms (Buildings 24115 and 24128) and the multistory Forensic Research Laboratory. The Quonset Hut classrooms are not protected with automatic sprinklers or smoke or heat detecting equipment. Using the two-thirds rule, 2,000 gpm minus 668 gpm equates to 1,332 gpm fire flow, which dictates the assignment of two manned engine companies. (The first and second engine company will be located at the new Fire Station at MCB-1 and MCB-2 intersection.)
4. Camp Upshur: Fire flow of 2,500 gpm is based upon the required number of 2-1/2-inch hose lines considered necessary to control, confine protect exposures and extinguish a fire in Building 2,600, a large combustible, multisection dining facility and the galley complex. Using the two-thirds rule, 2,500 gpm minus 834 gpm equates to 1,666 gpm fire flow, which dictates the assignment of two manned engine companies. (The first engine from Station No. 5 (when in operation) and second engine company from Station No. 3.) When not in operation the first and second engine company comes from Fire Station No. 3. Credit is given for one engine company from Prince William County.



Outside and Mutual Aid: Written mutual aid agreements are in effect.

1. Marine Corps crash fire rescue crews (Air Facility)
2. Dumfries - Triangle Volunteer Fire Department (Prince William County) - First alarm response includes one 1,500 gpm pumper and four fire fighters. Additional equipment depends upon availability.
3. Widewater Volunteer Fire Department - First alarm response includes one 750 gpm pumper and four fire fighters.
4. Stafford Courthouse Volunteer Fire Department - First alarm response includes one 750 gpm pumper and four fire fighters.
5. Coles District Volunteer Fire Department - First alarm response includes one 1250 gpm pumper and four fire fighters.

In-House Aid:

The Range Control Section has two special forestry units and manpower available to assist in forest fire fighting operations.

Incident Summary:

Data for calendar year: 1985

Number of incidents reported on DD 2324 (loss): 16

Number of incidents reported on Dd 2324-1 (no loss) 1361

Number of times outside aid was requested: 8

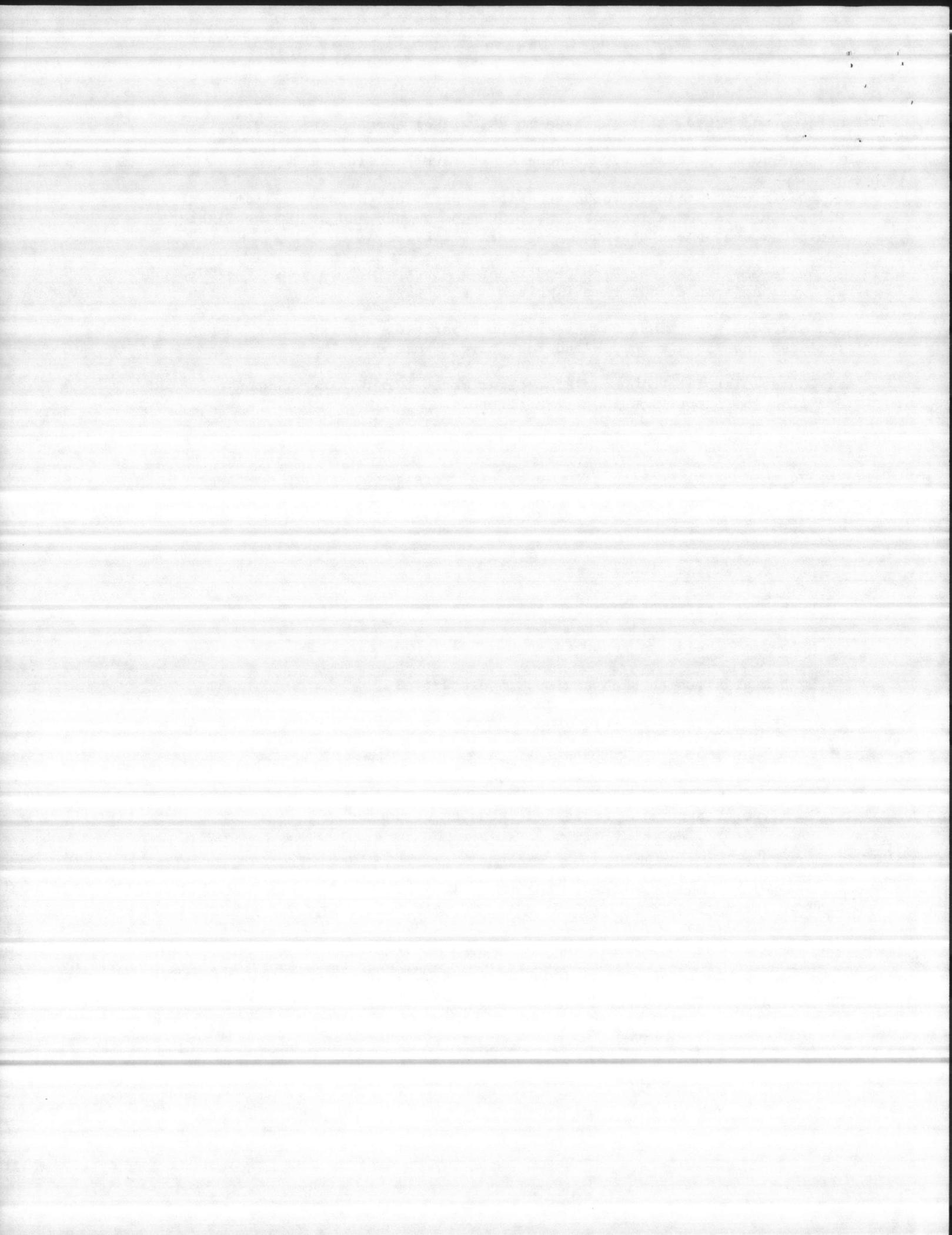
Type of apparatus requested: Engine companies brush units and water tankers

Number of times Fire Department responded off-station: 117

Type of apparatus requested: Engine companies

Financial Summary:

Labor: Civilian	\$1,586,684
Military	23,092
New Equipment	94,928
Training (TAD)	6,267
OPTAR	10,170
Maintenance of Equipment	<u>5,195</u>
Total	\$1,726,336



P.W. 1739

To: Major KINNEER  
From: Allen IRISH

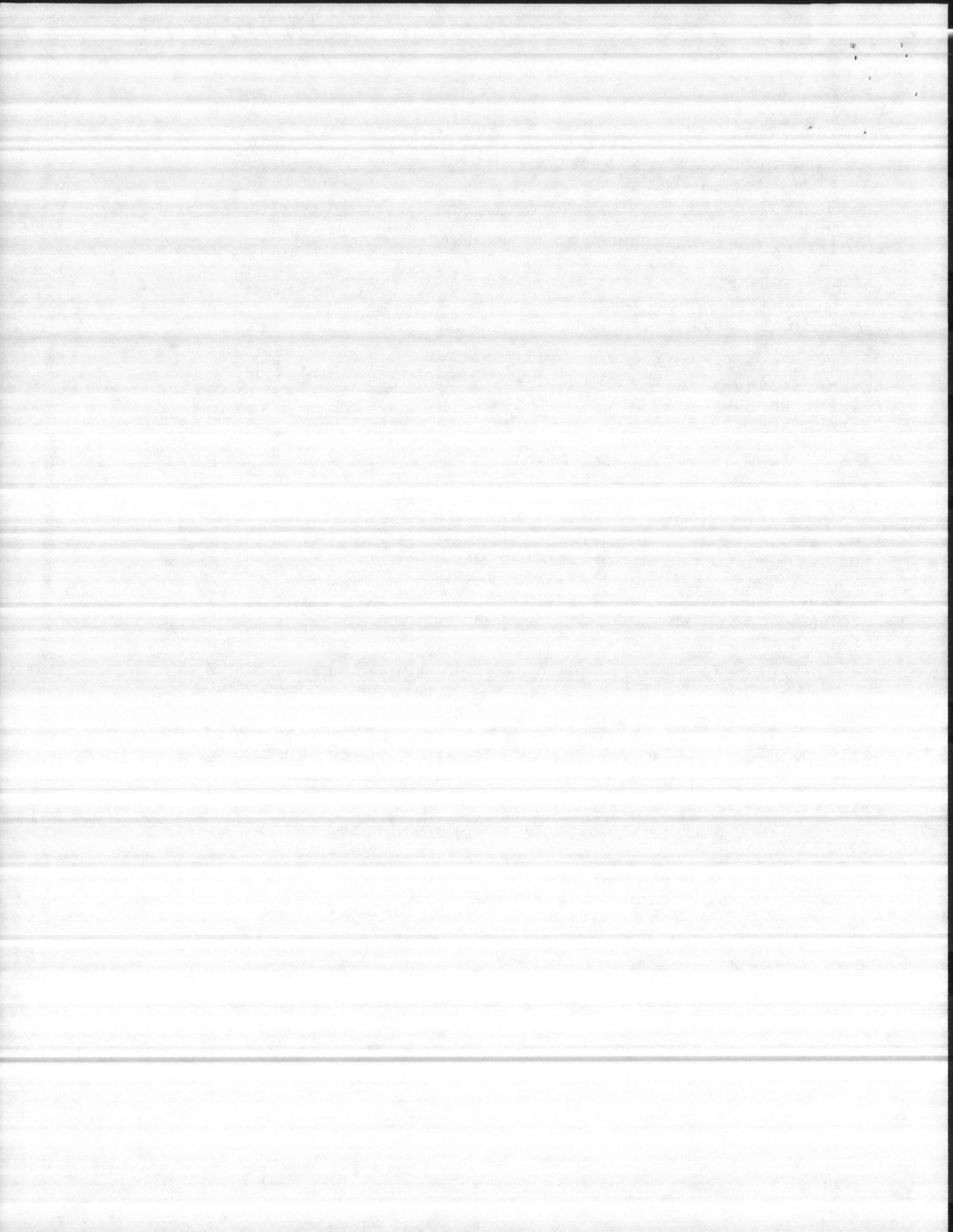
Re: Jurisdictional Status of Land Which Comprises MCDEC,  
Quantico, Virginia

1. In art. 1, §8, cl. 17, the drafters of the Constitution provided that Congress should have the power "...to exercise exclusive legislation...over all places purchased by the consent of the legislature of the state in which the same should be, for the erection of forts, magazines, arsenals, dock-yards, and other needful buildings..."

When the federal government possesses all of the authority of the state, with the state reserving no legislative power (except the power to serve process concerning matters occurring without the enclave) the government is considered to have exclusive legislative jurisdiction over the area. However, the enclave is not "extraterritorial," and the state retains certain powers in the area where the exercise of such powers does not interfere with federal activities. Altieri, Federal Enclaves: The Impact of Exclusive Legislative Jurisdiction upon Civil Litigation, 72 Mil. L. Rev. 55, 65 (1976). The government is allowed to accept varying degrees of jurisdiction over lands it acquires, but is conclusively presumed not to have accepted jurisdiction unless the appropriate official files a notice of acceptance with the governor of the state. 40 U.S.C. A. § 255 (Supp. 1977).

In ceding jurisdiction to the federal government, a state can retain the right to exercise all its powers concurrently with the federal government. However, retaining the right to serve civil and criminal process does not prevent the cession of exclusive jurisdiction to the United States. United States v. Lovely, 319 F 2d 673 (9th Cir. 1963), cert. den., 375 U.S. 913 (1963).

Where the federal government has been ceded certain of the state's authority over an area, but the state has retained the right to exercise by itself or concurrently with the United States, powers greater than the mere right to serve process, the federal government is considered to have partial jurisdiction over the area. J.A.G. School Casebook, Legal Basis of Command: Command of Installations at 1-18 (1974). The power most often



reserved is the power to tax private property within the enclave. An area under partial jurisdiction is treated as if under concurrent jurisdiction with respect to the powers retained, and as if under exclusive federal jurisdiction as to the powers not retained. Id. at 1-19. Full concurrent jurisdiction is where the state retains the powers to tax and regulate nonfederal activities within the enclave and prosecute violations of its criminal code concurrently with the federal government. Id. at 1-18.

Where the United States has only a proprietorial interest in land, it holds the land as a private party, basically. However, the state cannot regulate the federal activities within the area, nor may it tax the federal land. This is the predominant form of federal land ownership, accounting for 95 per cent of the federal land holding. Papcum, Proprietary Jurisdiction, 8 J.A.G. L. Rev. 117, 118 (1971).

2. The land that makes up the Marine Corps Development and Education Command was acquired between 1918 and 1947 and totals 61,991.082 acres. The land comprising the base was acquired in this period in 11 parcels, ranging in size from 50,145.577 acres to 0.348 acres (See composite property map, 1739 Rev., 16 Sept. 1966). The largest section of the MCDEC base has been held in concurrent jurisdiction since 8 September 1966, while another large section, comprising the main base area and the naval hospital area has been held under exclusive jurisdiction since the acquisition of the base area in 1918 - 1919. Another parcel of land, 1209.81 acres in Stafford County, is held under partial jurisdiction, the Commonwealth of Virginia having retained concurrent jurisdiction except for the enforcement of traffic regulations. In addition there are numerous easements and non-freehold interests in land which generally have been granted to governmental bodies and utilities.

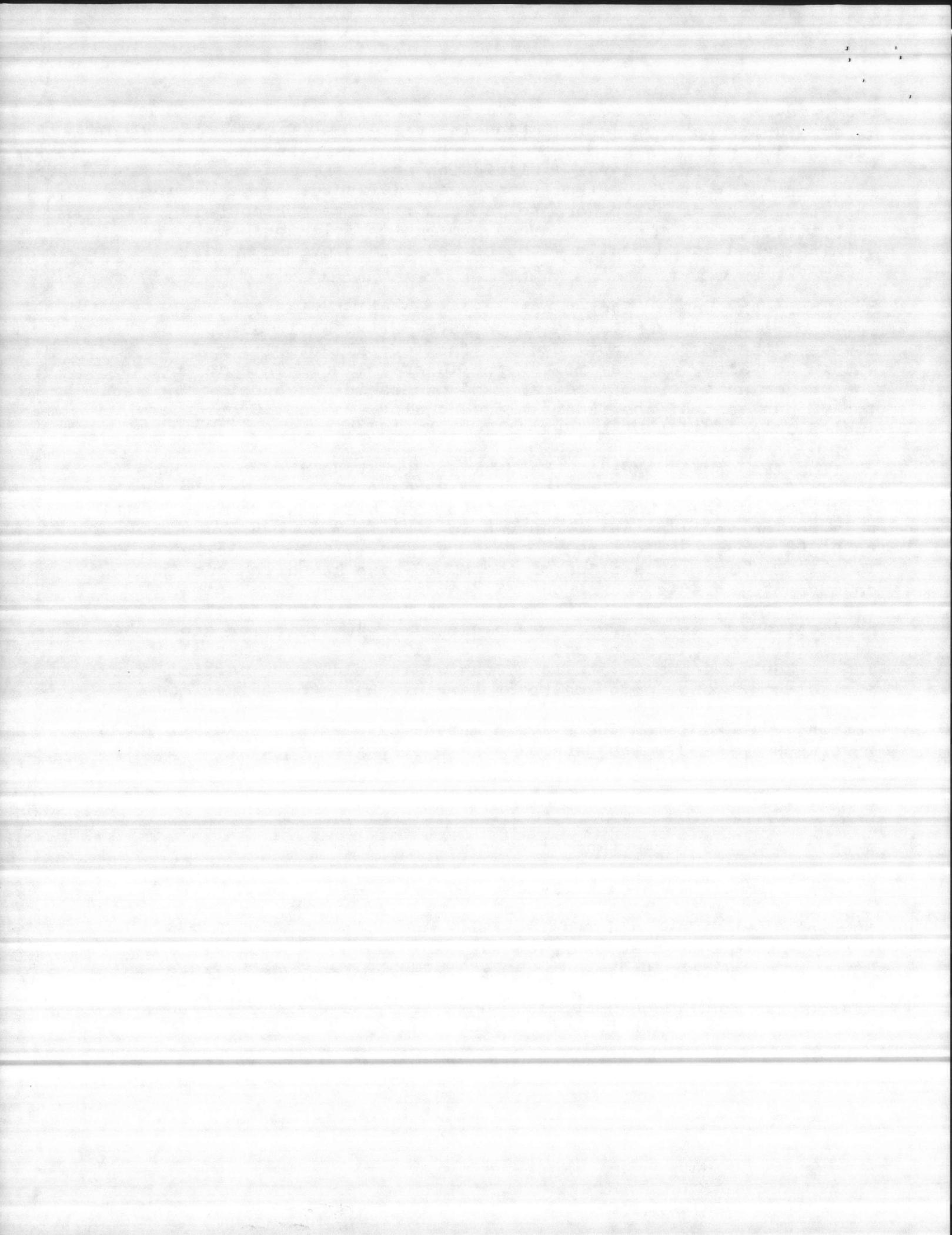
#### Parcel 1\*

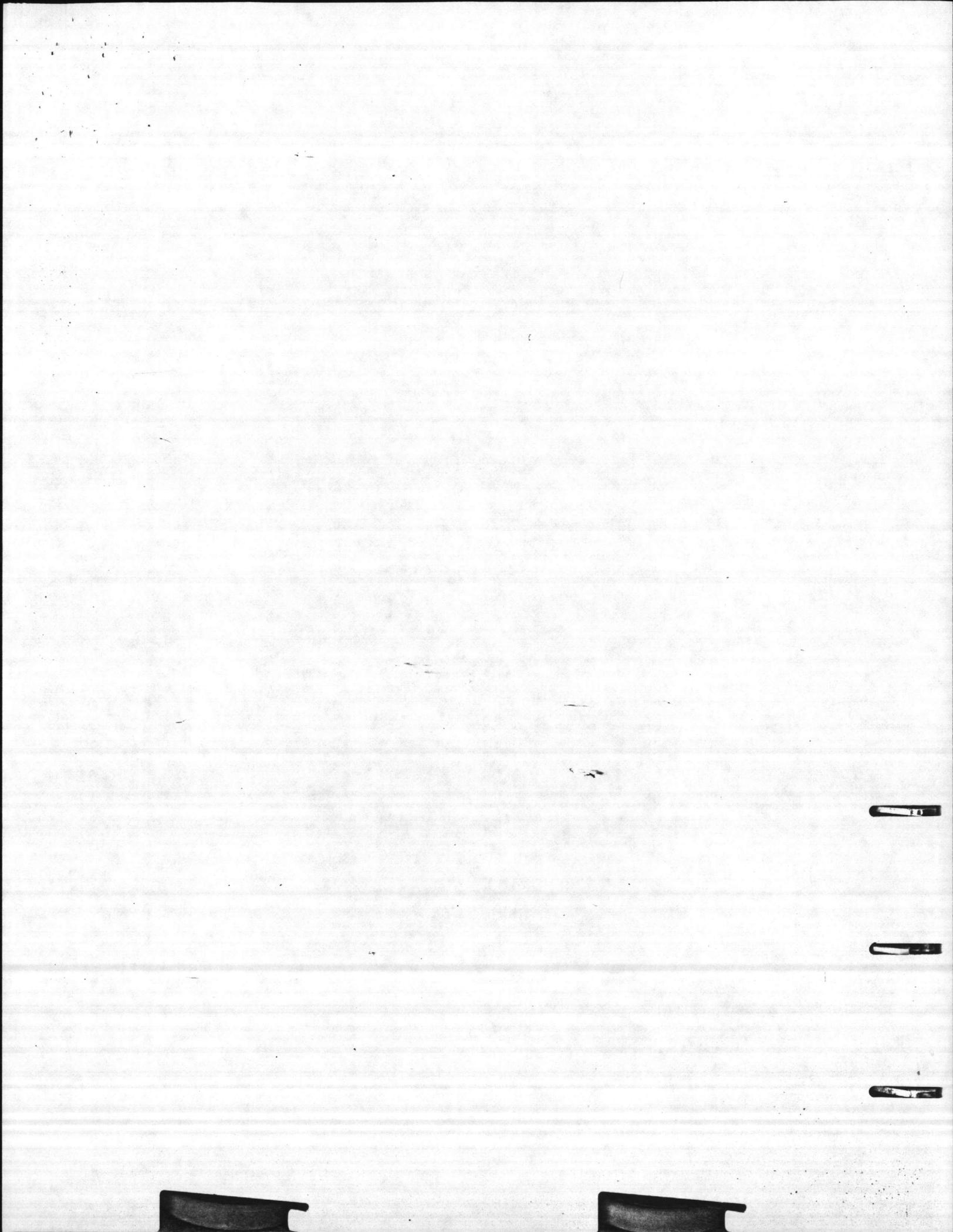
Area: 5238.026 acres (Mainside Area)

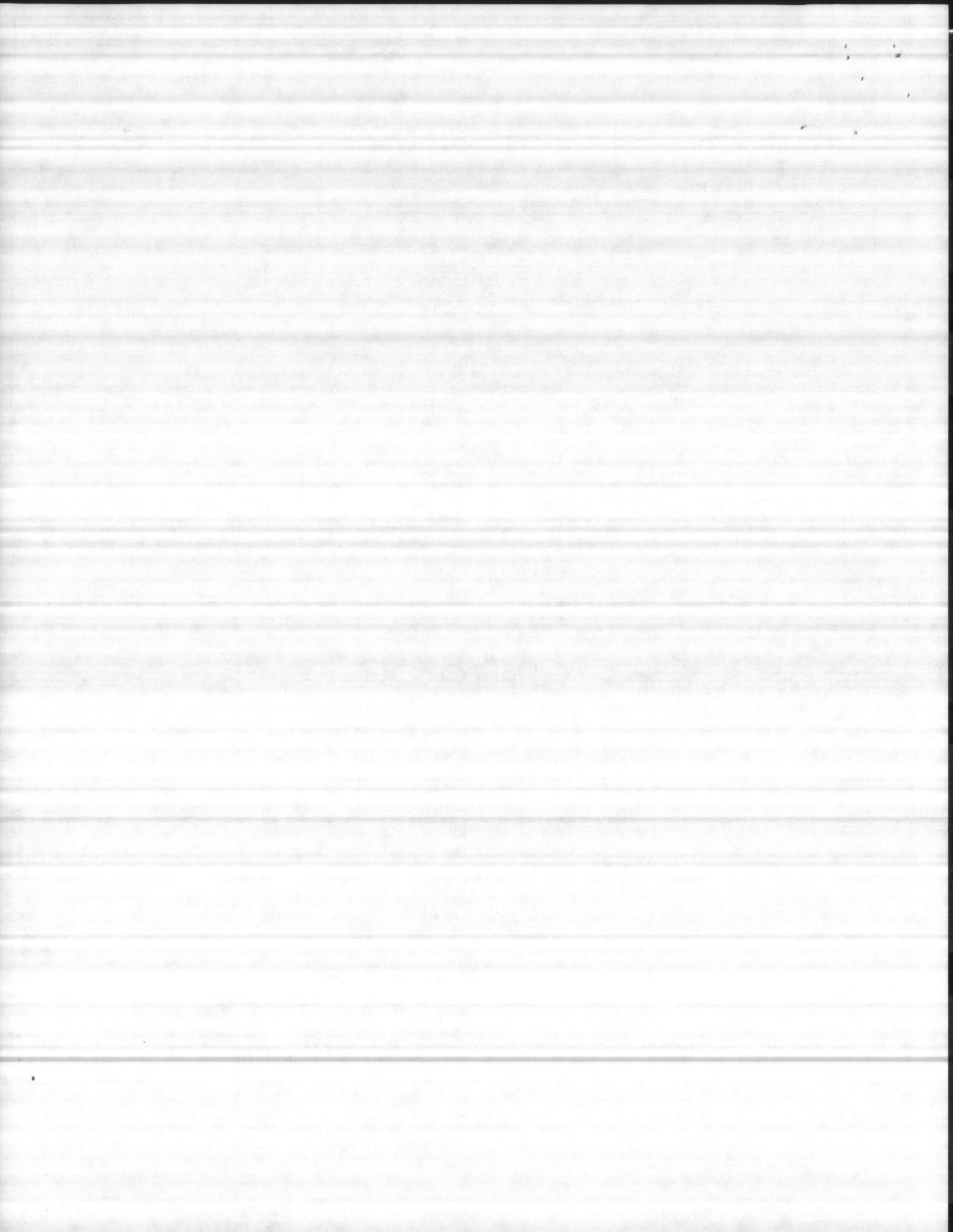
Date Acquired: 4 November 1918

How Acquired: The land was initially acquired by authority of a Presidential proclamation 40 Stat. 1874, 1880-84 (1913). The land, which was held by the Quantico Company was deeded over to the United States (following a period in which the government leased the land) by a quit claim deed from the Quantico Company 73 DBPW 37 (Deed Book Prince William County).

\* Refer to Composite Property Map, 1739 (Revised, (9-16-66)).







concurrent jurisdiction, but the act also granted exclusive jurisdiction with respect to certain police powers. 1936 Acts of Assembly, ch. 382, as amended, 1940 Acts of Assembly, ch. 417. These statutes reserve the power to tax private property to the Commonwealth but cede the power to regulate traffic as well as "all necessary jurisdiction and power to operate and administer said land and property thereon for the purposes for which same may be conveyed to the United States [but not at the expense of the powers reserved to the Commonwealth]." This cession of traffic jurisdiction as well as other necessary jurisdiction probably puts this parcel into a partially concurrent and partially exclusive federal jurisdiction. (See Memorandum from the Commandant of the Marine Corps Schools to the Secretary of the Navy, 12 August 1953).

#### Parcel 5

Area: 4.382 acres (USNH area)

When Acquired: 22 October 1940

How Acquired: By deed from the Richmond, Fredericksburg and Potomac Railroad, quit claim deed, 19 Sep 1940, 106a DBPW 346; Warranty deed referring to a plat, 22 Oct 1940, 98 DBPW 382; and a quit claim from a squatter, 13 Feb 1941 (no deed book citation).

Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction accepted by Acting Commander, Naval Facilities Engineering Command, 31 August 1966 (acknowledged by Gov. Mills E. Godwin, 8 September 1966) pursuant to 40 U.S.C. §255.

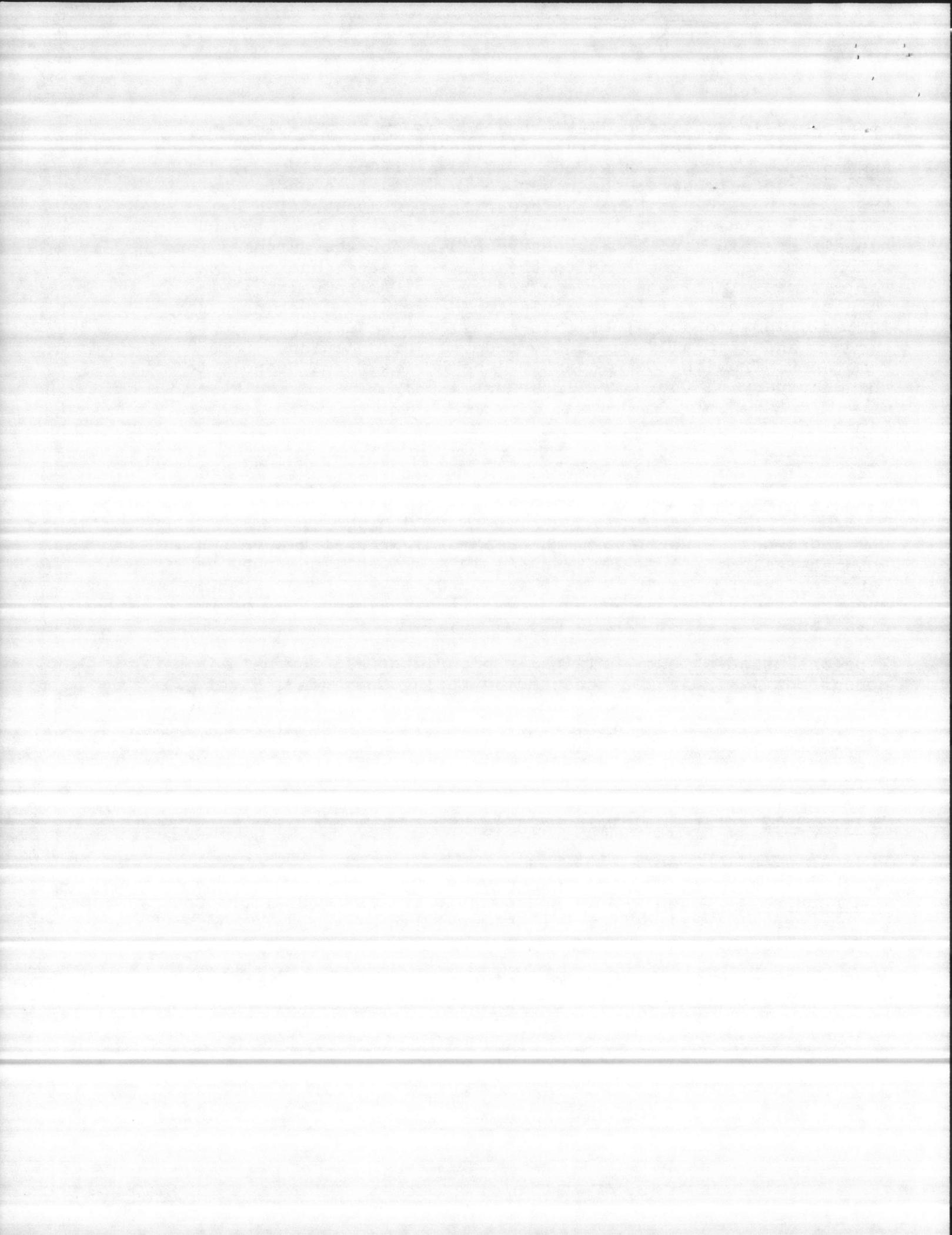
#### Parcel 6

Area: 3.12 acres (adjoining MCAS)

When Acquired: 9 April 1942

How Acquired: Acquired by condemnation, 47 DBS (Stafford County) and a deed of cession from the Commonwealth of Virginia, 14 May 1943.

Type of Jurisdiction: The deed of cession from the Commonwealth conferred exclusive federal jurisdiction over the tract.



Type of Jurisdiction: Exclusive federal jurisdiction pursuant to an Act of Assembly of 16 March 1918, 1918 Acts of Assembly, ch. 382.

Parcel 2

Area: 55.315 acres (Naval Hospital)

Date Acquired: 26 November 1919

How Acquired: Transfer from U.S. Shipping Board Fleet Corporation, which had acquired the land from the Potomac Shipbuilding Co., 71 DBPW 442. The United States also obtained a release from the Quantico Company, 73 DBPW 37.

Type of Jurisdiction: Exclusive, pursuant to 1918 Acts of Assembly, ch. 382.

Parcel 3

Area: 307.142 acres (Marine Corps Air Station)

Date Acquired: 9 June 1932

How Acquired: By purchase, 91 DBPW 73. (Some parts of the Air Station were created by a landfill process (See memo of 25 Sep 1973 from PFC GILLMOR to Staff Legal Officer). Some portion of this land may be in the state of Maryland, since the Maryland boundary is the low-water mark of the Potomac).

Type of Jurisdiction: Concurrent, pursuant to Virginia Act of Assembly of 23 March 1932, 1932 Acts of Assembly, ch. 213, which provides that the Commonwealth shall retain concurrent jurisdiction over lands thereafter acquired.

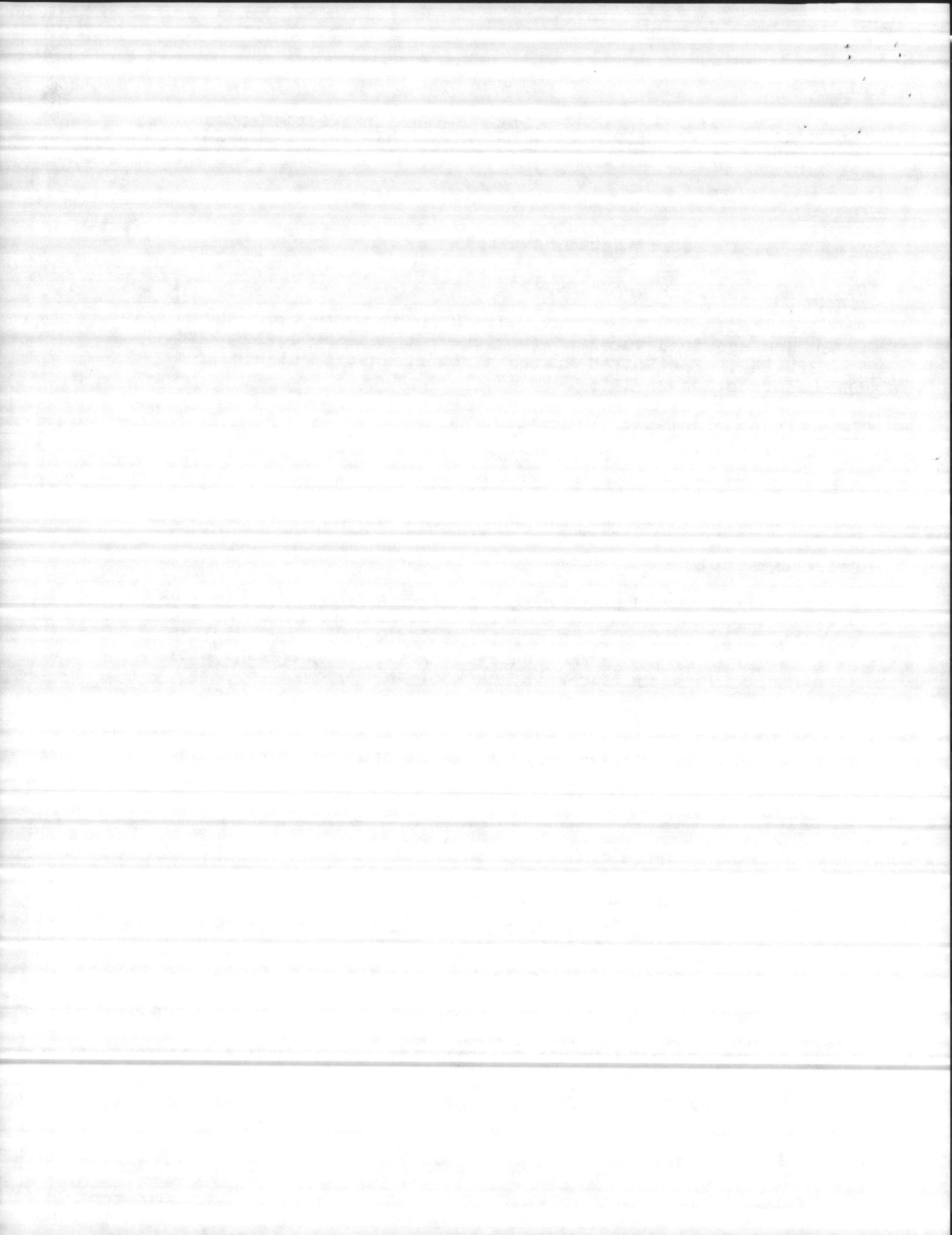
Parcel 4

Area: 1206.81 acres

Date Acquired: 26 March 1941

How Acquired: By condemnation proceedings, 45 D.B.S. 236

Type of Jurisdiction: Jurisdiction over this parcel was accepted in a letter from Secretary of the Navy, James Forrestal, to the Governor of Virginia dated 31 October 1941, pursuant to 40 U.S.C. §255, which requires that a grant of jurisdiction from a state be accepted by the appropriate federal official. The Virginia General Assembly had passed an act granting the federal government at least



Parcel 7

Area: 0.348 acres (USNH area)

When Acquired: 19 August 1942

How Acquired: Acquired by condemnation, 109 DBPW 302, and a deed of cession from Virginia, 112 DBPW 208.

Type of Jurisdiction: The deed of cession from the Commonwealth of Virginia conferred exclusive federal jurisdiction over this tract.

Parcel 8

Area: 4.38 acres (between Quantico town and the Potomac River)

When Acquired: 13 October 1942

How Acquired: Acquired by condemnation, 109 DBPW 507, as amended by 110 DBPW 36, 1 January 1943.

Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction with Virginia. Jurisdiction was accepted pursuant to 40 U.S.C. §255 by Acting Commander, Naval Facilities Engineering Command on 31 August 1966, and acknowledged by Virginia Governor Mills E. Godwin, 8 September 1966.

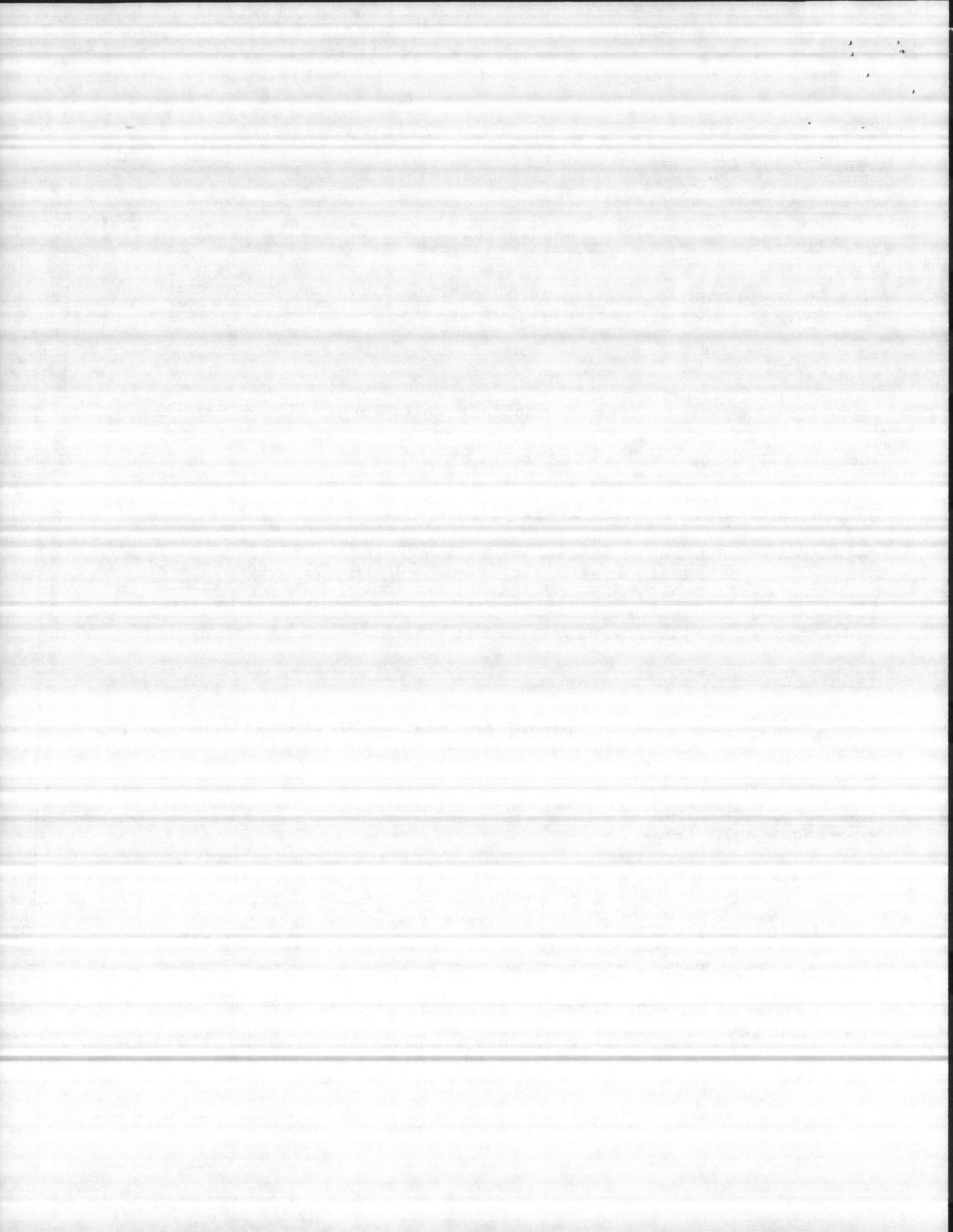
Parcel 9

Area: 55,007.934 acres (most of MCDEC area west of Interstate Highway 95; some parts of parcel are east of Interstate 95)

When Acquired: 31 July 1943

How Acquired: Acquired through a series of ten condemnation proceedings in 1943.

- a. Onville - Chopawansic Unit (5,694.3 acres), 49 DBS 287.
- b. Shiloh - Onville Unit (4,157 acres) - 49 DBS 410
- c. David - Shiloh Unit (6,036.4 acres) - 50 DBS 115
- d. Darrell - David Unit (3,848.5 acres) - 110 DBPW 424
- e. Cedar - Lansdown Unit (6,818.9 acres) - 111 DBPW 117
- f. Mount Unit - (3,382.1 acres) 50 DBS 237
- g. Rectory Unit (1,827.1 acres) 50 DBS 237
- h. Lansdown - Stafford Unit (9,819.4 acres) - 60 DBS 356;  
111 DBPW 124
- i. Kopp - 646 Unit (6,740.9 acres) - 110 DBPW 440. From this parcel, 50.1 acres was deeded to the Air Force on 20 June 1956.
- j. Joplin Unit (700.8 acres) - 110 DBPW 458.



Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction with Virginia. Jurisdiction was accepted pursuant to 40 U.S.C. §255 by Acting Commander, Naval Facilities Engineering Command on 31 August 1966; and acknowledged by Virginia Governor Mills E. Godwin, 8 September 1966.

#### Loses from MCDEC

FBI Academy - In 1966, MCDEC transferred 129.11 acres to the Federal Bureau of Investigation for use as a training center for FBI agents. No jurisdiction was given up, as the Marine Corps retained the right to use the land for military training, for jurisdictional purposes. (See letter from Lieutenant General WIESEMAN to FBI Director, Jdg Edgar Hoover, 29 June 1966).

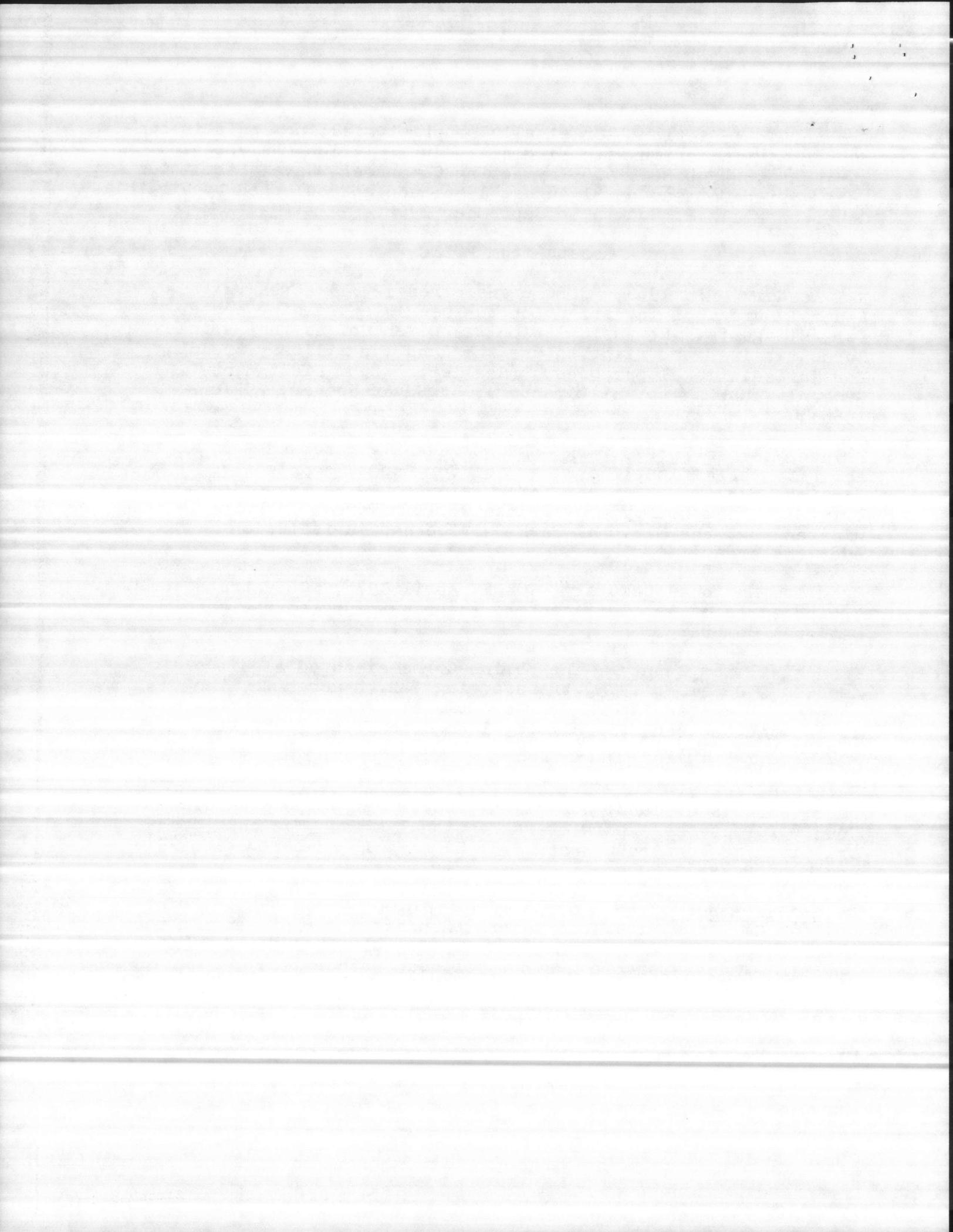
Prince William Forest Park - MCDEC recently returned 348 acres to the National Park Service for use as a primitive camping area. (No further information could be found at Prince William County, but Prince William Forest Park indicated that the National Park Service had jurisdiction over the area.)

Quantico National Cemetery - On 27 April 1976, MCDEC transferred 726.58 acres of land adjacent to Interstate 95 for use as a National Cemetery.

Prince William County - The Marine Corps executed a quit claim deed on 9 December 1975, transferring 782.78 acres to the county for use as a park or recreational area. The parcel is located between U.S. Highway 1 and the Vepco Power Line Easement and Interstate 95.

Stafford County - On 9 March 1976, the Marine Corps transferred three parcels of land, comprising 100.02 acres, to Stafford County for use as a park or recreational area. The bulk of this land is located between U.S. Highway 1 and Interstate 95 south of Russell Road.

Cedar Run Reservoir - A proposed damming of Cedar Run in Prince William County would flood several hundred acres of land in the Camp Upshur area of the base and would isolate or flood Camp Upshur. This reservoir has not yet been authorized.



Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction with Virginia. Jurisdiction was accepted pursuant to 40 U.S.C. §255 by Acting Commander, Naval Facilities Engineering Command on 31 August 1966; and acknowledged by Virginia Governor Mills E. Godwin, 8 September 1966.

Parcel 10

Area: 146.115 acres (Midway Island)

When Acquired: 15 December 1947

How Acquired: Acquired by Condemnation by Federal Works Administration in 1942; 47 DBS 292, 48 DBS 474, and 49 DBS 374, under the provisions of the Lanham Act, 42 U.S.C. § 1517. The tract was transferred to the Marine Corps in 1947 by the Housing and Home Finance Agency (successor to the FWA).

Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction with Virginia. Jurisdiction was accepted pursuant to 40 U.S.C. §255 by Acting Commander, Naval Facilities Engineering Command on 31 August 1966; and acknowledged by Virginia Governor Mills E. Godwin, 8 September 1966.

Parcel 11

Area: 14.510 acres (across RF&P Railroad tract from MCAS)

When Acquired: 24 June 1941

How Acquired: 197 DBPW 141, 47 DBS 223

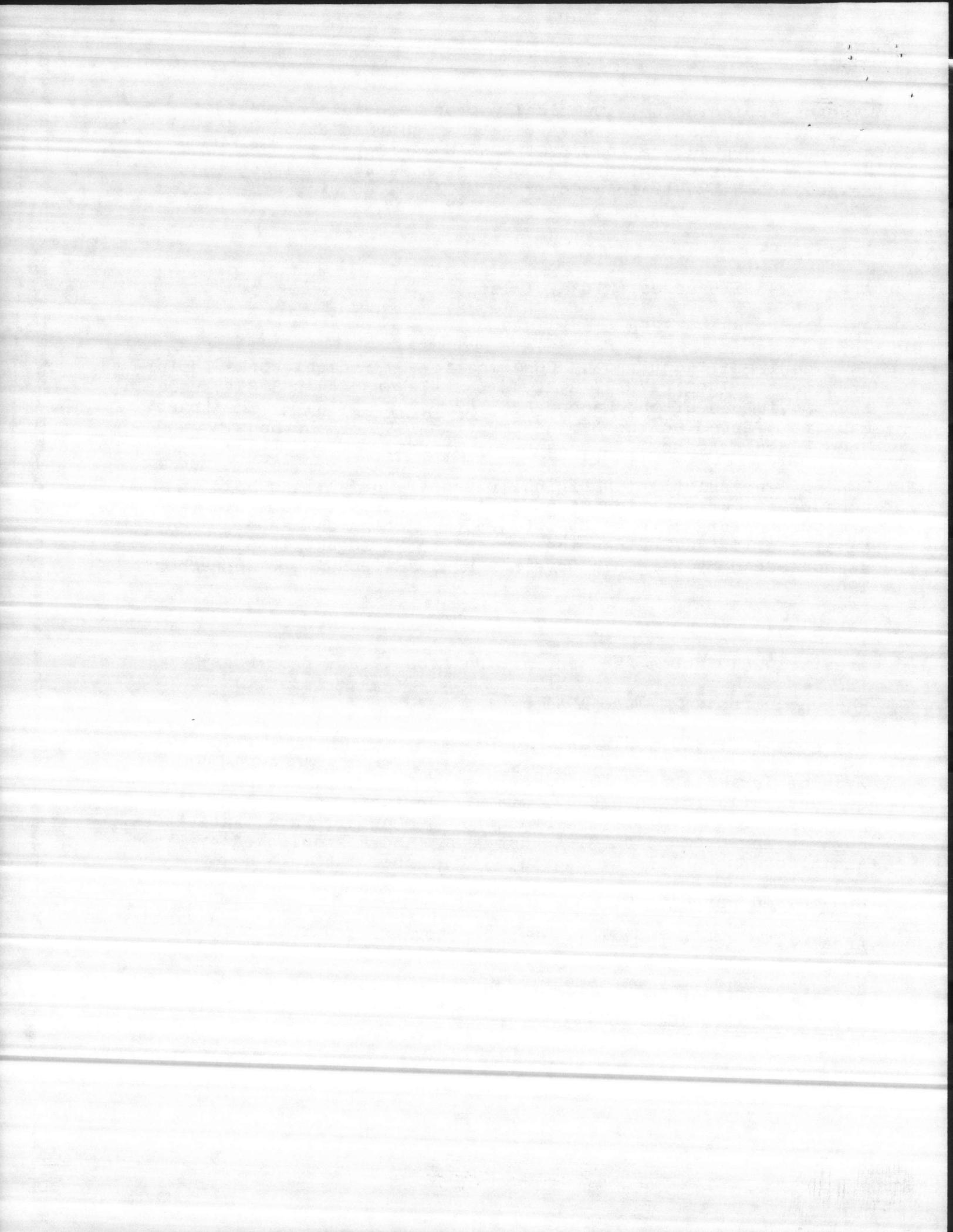
Type of Jurisdiction: Originally proprietorial; now held in concurrent jurisdiction with Virginia. Jurisdiction was accepted pursuant to 40 U.S.C. §255 by Acting Commander, Naval Facilities Engineering Command on 31 August 1966; and acknowledged by Virginia Governor Mills E. Godwin, 8 September 1966.

Unnumbered Parcel

Area: .12 acres (adjoining Quantico town and RF&P Railroad)

When Acquired: 19 September 1940

How Acquired: 106a DBPW 346



ACTIVE PCB TRANSFORMERS/LOCATION

mc DEC

BLDG #	SERIAL #	* KG	GALLONS	** KVA	INSPECTION RESULTS (DATE, INSPECTOR, PROBLEM)	
1	5 (FBI)	1693	298	1500	1/8/86 JE	
2	6 (FBI)	2658	465	200	1/8/86 JE	
3	6 (FBI)	3516	619	2500	1/8/86 JE	
4	7 (FBI)	1295	228	750	1/8/86 JE	
5	8 (FBI)	1295	228	750	1/8/86 JE	
6	9 (FBI)	1698	299	1500	1/8/86 JE leaking top gasket	
7	15	307	54	25	1/8/86 JE	
8	15	1335	235	750	1/8/86 JE	
9	701	795	140	50	1/7/86 JE	
10	705	795	140	50	1/7/86 JE leaking bushing	
11	1280	142	25	15	1/8/86 JE	
12	2000	1306	230	750	1/9/86 JE	
13	2001	966	170	500	1/9/86 JE	
14	2003	966	170	500	1/9/86 JE	
15	2004	1647	290	500	1/9/86 JE	
16	2013	C505016	199	35	1/7/86 JE	
17	2032	2834773	341	60	100	1/7/86 JE
18	2032	F478223-64P	341	60	100	1/7/86 JE
19	2032	F489888-64P	341	60	100	1/7/86 JE
20	2034	F495991-64P	369	65	75	1/8/86 JE
21	2034	167698	239	42	75	1/8/86 JE
22	2034	2710747	244	43	75	1/8/86 JE
23	2034	2710748	244	43	75	1/8/86 JE
24	2034	2710749	193	34	50	1/8/86 JE
25	2034	2762239	193	34	50	1/8/86 JE
26	2034	2762240	193	34	50	1/8/86 JE
27	2034	2762241	193	34	50	1/8/86 JE
28	2044	73985	1431	252	500	1/8/86 JE
29	2045	3060597	284	50	75	1/8/86 JE
30	2048	3154483	114	20	25	1/9/86 JE
31	2104	E695113	562	99	500	1/7/86 JE
32	2112	72V9657	335	59	150	1/7/86 JE
33	2112	6909238	1255	221	500	1/8/86 JE leaking bushing
34	2112	6909239	1255	221	500	1/7/86 JE leaking bushing
35	2117	6909240	1255	221	500	1/7/86 JE
36	2175	143082	454	80	45	1/8/86 JE
37	2176	26270	227	40	38	1/7/86 JE
38	2200	26271	227	40	38	1/6/86 JE
39	2200	952003	131	23	50	1/8/86 JE
		952004	131	23	50	1/8/86 JE

Enclosure (1)

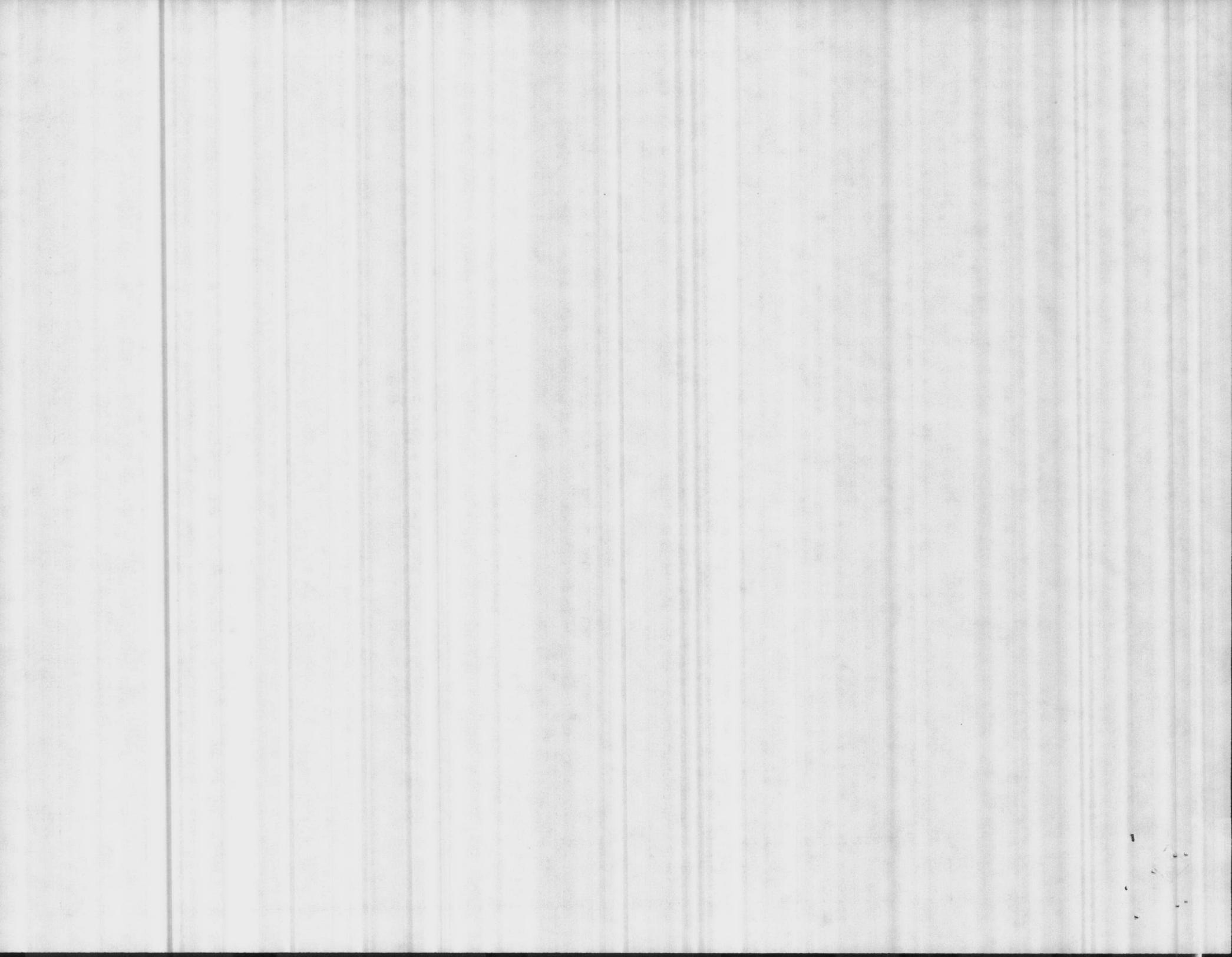


## ACTIVE PCB TRANSFORMERS/LOCATION

BLDG #	SERIAL #	*KG	GALLONS	**KVA	INSPECTION RESULTS (DATE, INSPECTOR, PROBLEM)	
40	2200	952005	131	23	50	1/8/86 JE
41	2200	C862065	1135	235	500	1/8/86 JE
42	2201	3101988	114	20	50	1/8/86 JE
43	2201	31022417	114	20	25	1/8/86 JE
44	2201A	110666	591	104	100	1/8/86 JE
45	3040	3102544	125	22	50	1/7/86 JE
46	3041	70V7360	284	50	75	1/7/86 JE
47	3064	RGD0154	1392	245	150	1/7/86 JE
48	3072	75V7004	738	130	150	1/7/86 JE
49	3073	75V7006	738	130	113	1/7/86 JE
50	3102	2790765	352	62	100	1/7/86 JE
51	3228	75V7001	767	135	75	1/7/86 JE
52	3250	C504209	1704	300	500	1/7/86 JE
53	3251	C379670	1193	210	225	1/7/86 JE
54	3252	377581	1017	179	300	1/8/86 JE
55	5156	69100307	699	123	113	1/7/86 JE
56	24000	12841567	1125	198	300	1/9/86 JE
57	24003	21073-A01	1136	200	750	1/9/86 JE
58	24006	PX047474	460	81	150	1/9/86 JE
59	24144	72V0128	239	42	45	1/9/86 JE
60	24164	4465-1	2357	415	750	1/9/86 JE
61	24165	12841520	1125	198	300	1/9/86 JE
62	24165	4465-1-1	1664	293	500	1/9/86 JE
63	24165	4465-2-1	909	160	150	1/9/86 JE
64	24165	4465-3-1	909	160	150	1/9/86 JE
65	FBI Range	14618	471	83	113	1/8/86 leaking top changer & gasket
66	Tennis Court	RIA-0027	738	130	300	1/8/86 JE

\* KG = kilograms

\*\* KVA = kilo volt amps

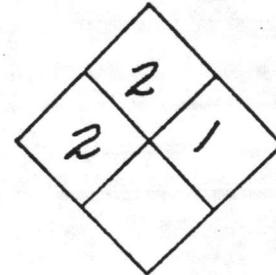


HAZARDOUS MATERIAL DATA SHEET

SPECIFIC NAME: Formaldehyde  
Identification number: 2209  
Classification: \_\_\_\_\_ Bldg # 2004 Supply

HAZARDS:

Health Hazardous  
Flammability \_\_\_\_\_  
Reactivity Unstable if heated



CHARACTERISTICS:

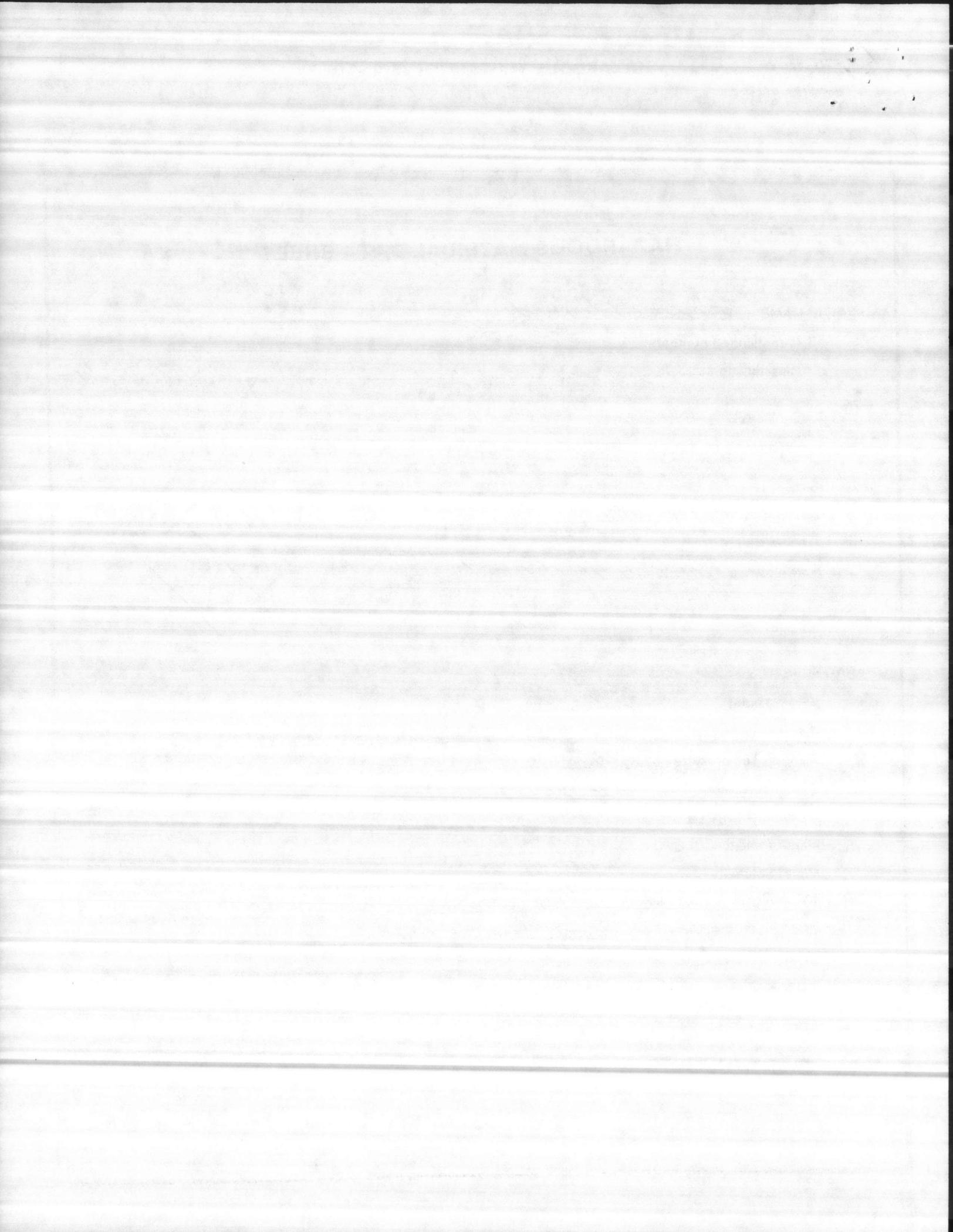
Boiling point 322  
Flash point 140  
Ignition Temperature 600  
Flammable Range 2.1 to 19.3  
Specific Gravity 1.2  
Vapor Density 3.3  
Water Solubility Slight

EXTINGUISHING METHODS: Water Spray, dry Chem, Co<sub>2</sub>, or "Alcohol" Foam

PROTECTIVE EQUIPMENT: Breathing Apparatus

REACTS WITH: \_\_\_\_\_

REMARKS: \_\_\_\_\_



HAZARDOUS MATERIAL DATA SHEET

SPECIFIC NAME: Acetone

Identification number: 1090

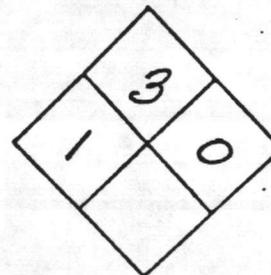
Classification: Bldg # 2004 Supply

HAZARDS:

Health Misc

Flammability \_\_\_\_\_

Reactivity \_\_\_\_\_



CHARACTERISTICS:

Boiling point \_\_\_\_\_

Flash point AT Almost any temp

Ignition Temperature 869

Flammable Range 2.6 to 12.8

Specific Gravity 0.8

Vapor Density 2.0

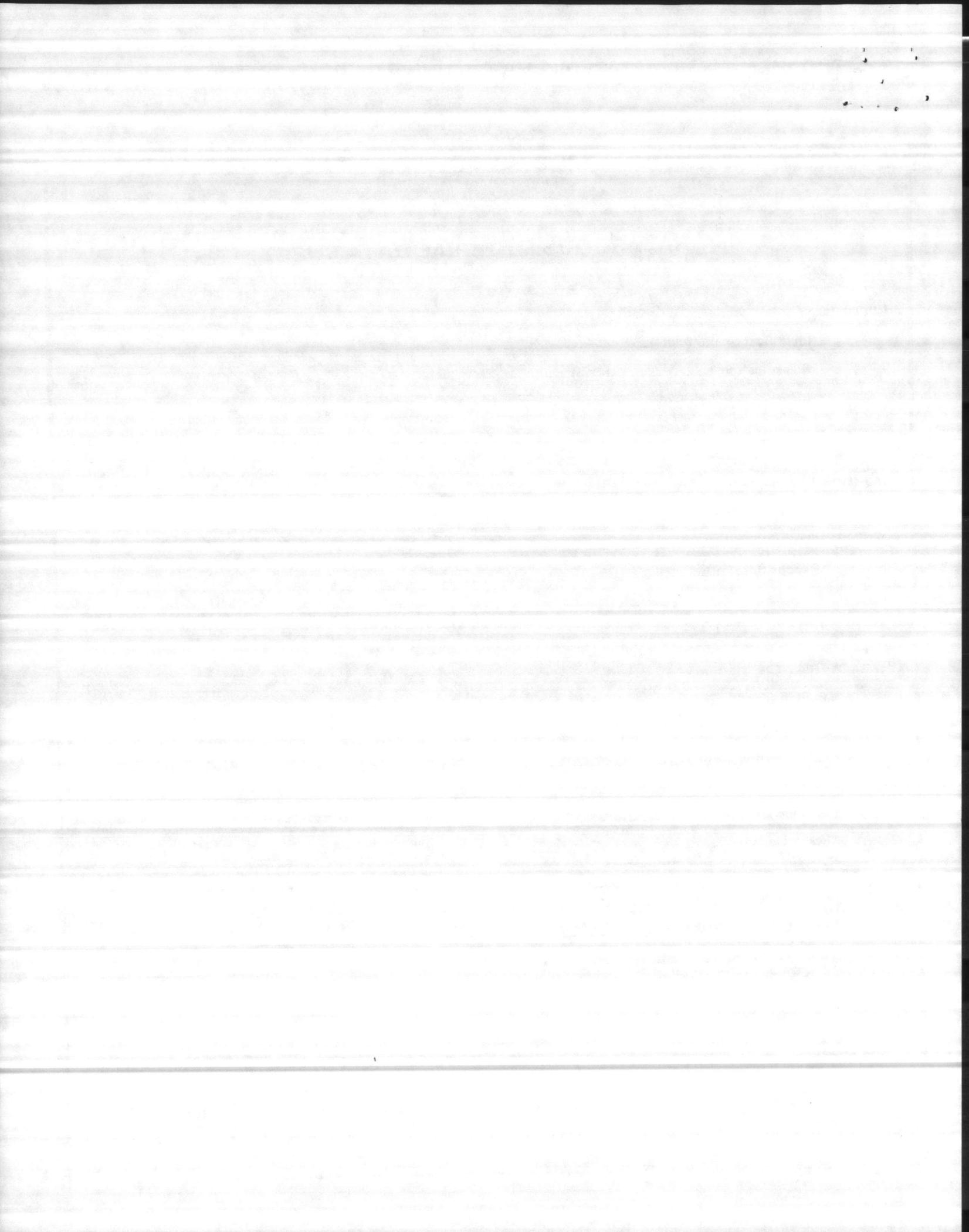
Water Solubility Yes

EXTINGUISHING METHODS: Dry Chem, Co2, Water Spray

PROTECTIVE EQUIPMENT: \_\_\_\_\_

REACTS WITH: \_\_\_\_\_

REMARKS: \_\_\_\_\_



# **FRANKIE FIRE HYDRANT FIRE SAFETY COLORING BOOK**



MARINE CORPS  
DEVELOPMENT AND EDUCATION COMMAND  
FIRE PREVENTION BRANCH  
QUANTICO, VA

ATTACHMENT F

1  
2  
3  
4



FRANKIE SAYS:

"BE SAFE  
WITH FIRE"



Stay away from fire



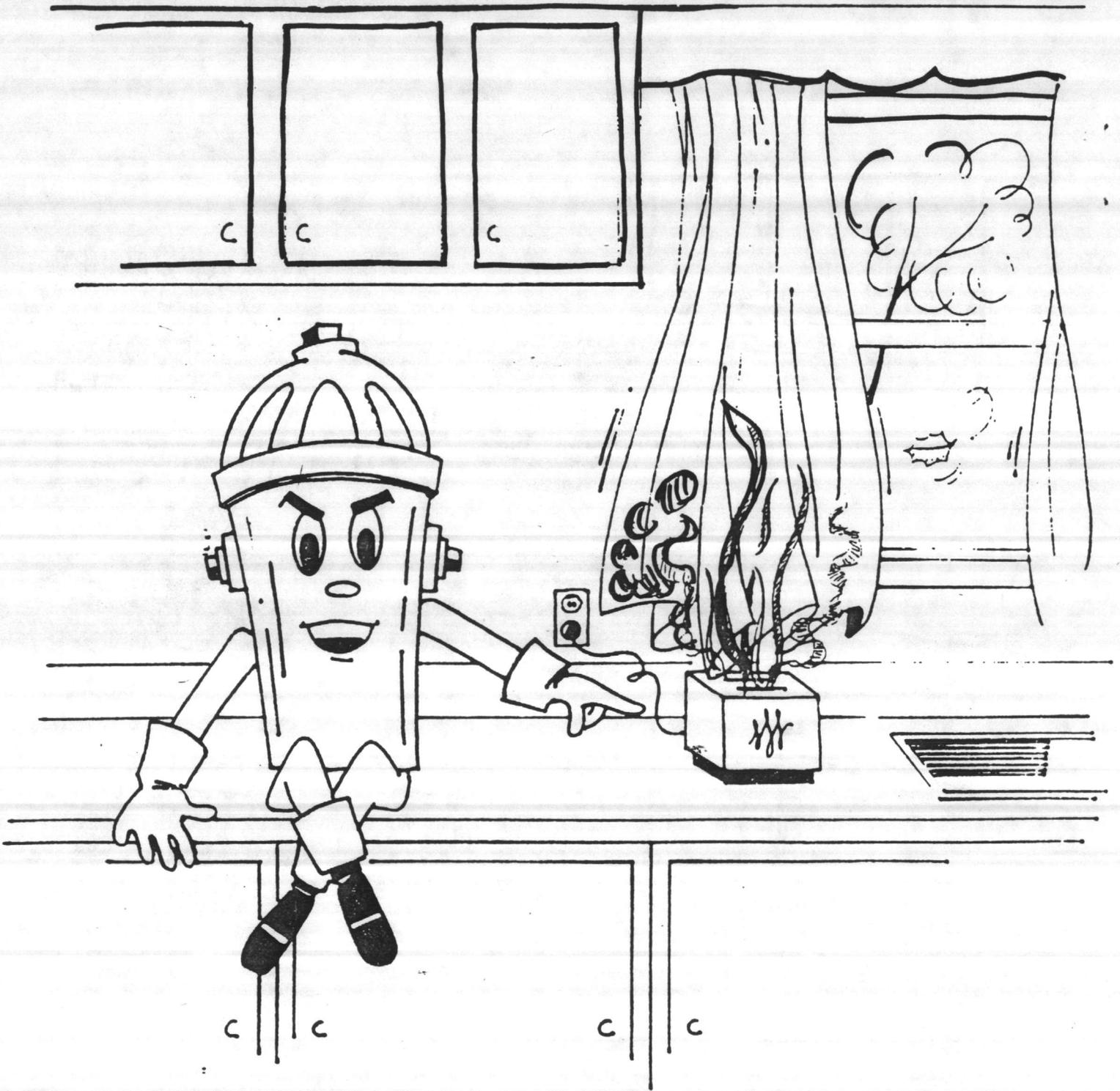
**Keep a safe distance**



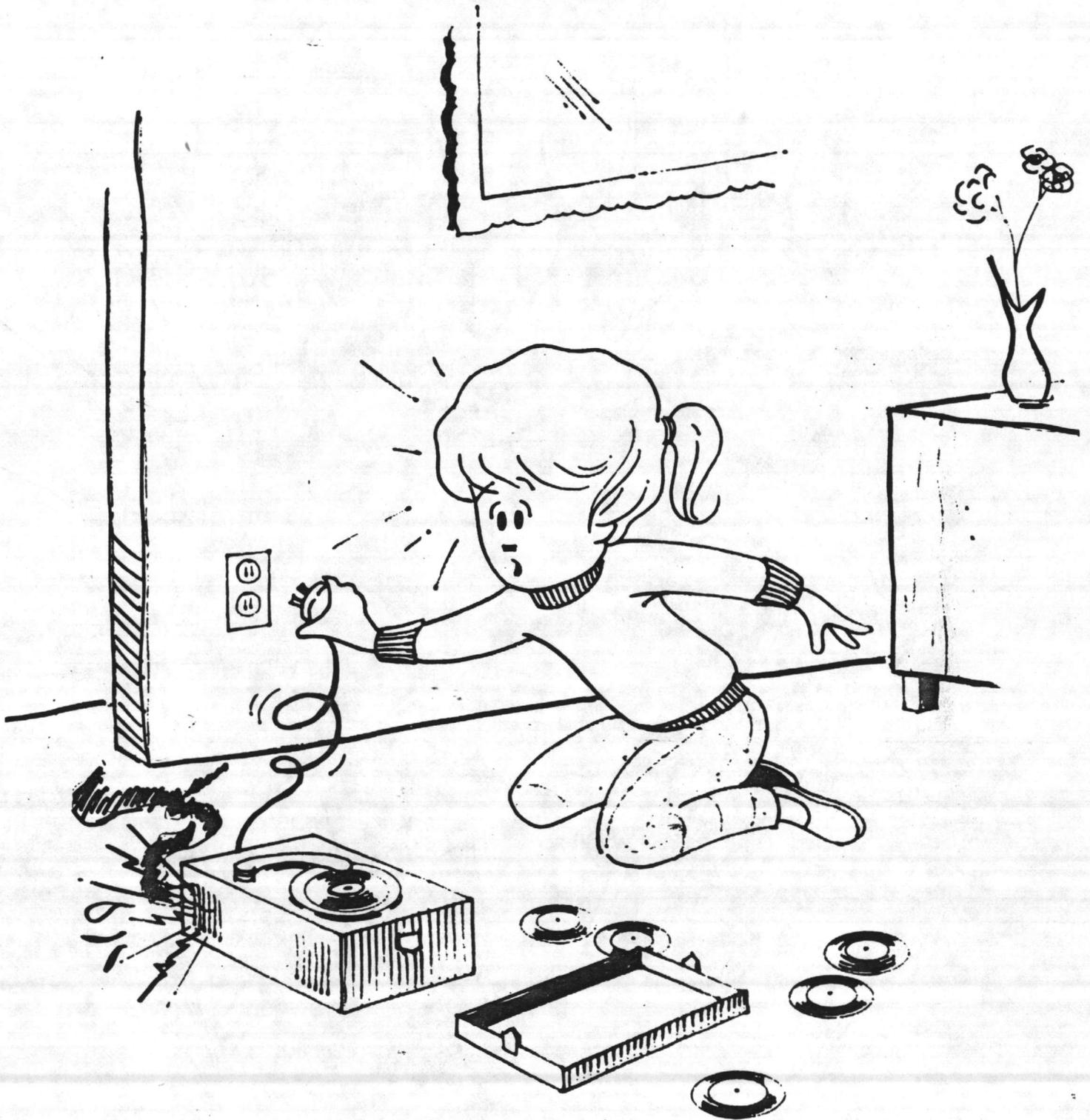
**Charcoal can burn you**



The stove and things on it can burn you



Electrical appliances can burn you and your house

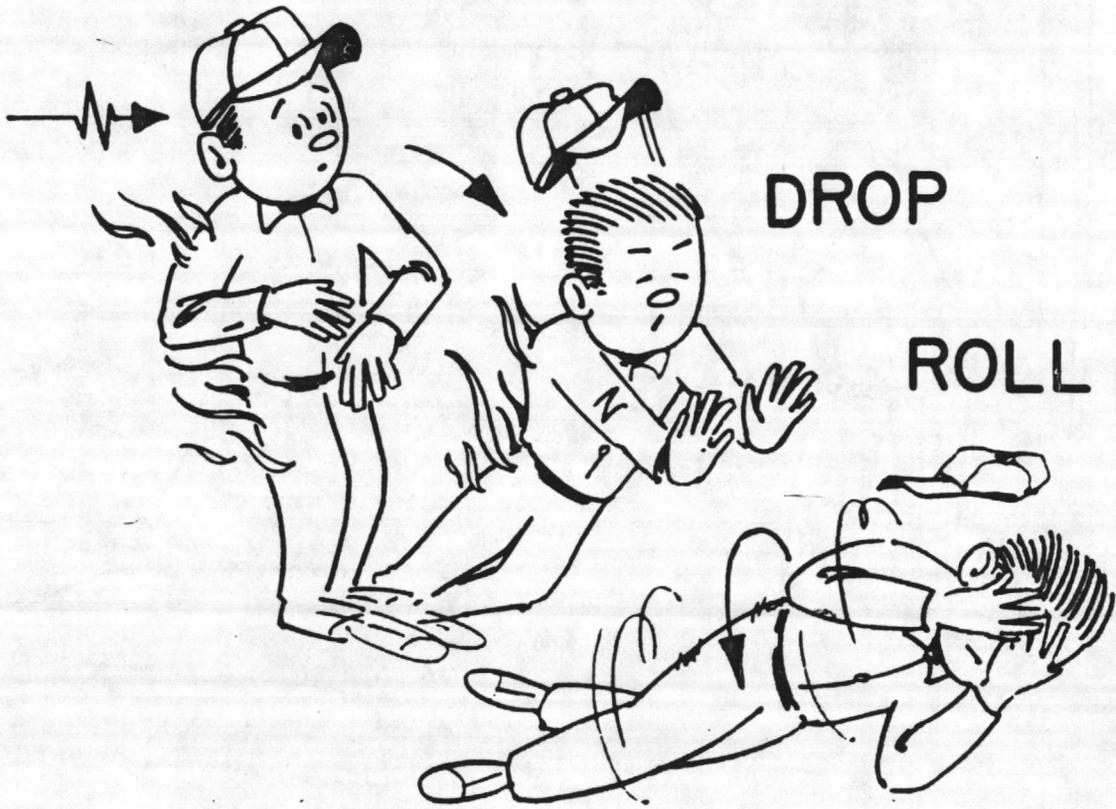


**Unplug electrical toys**

# BOOM!



**STOP**



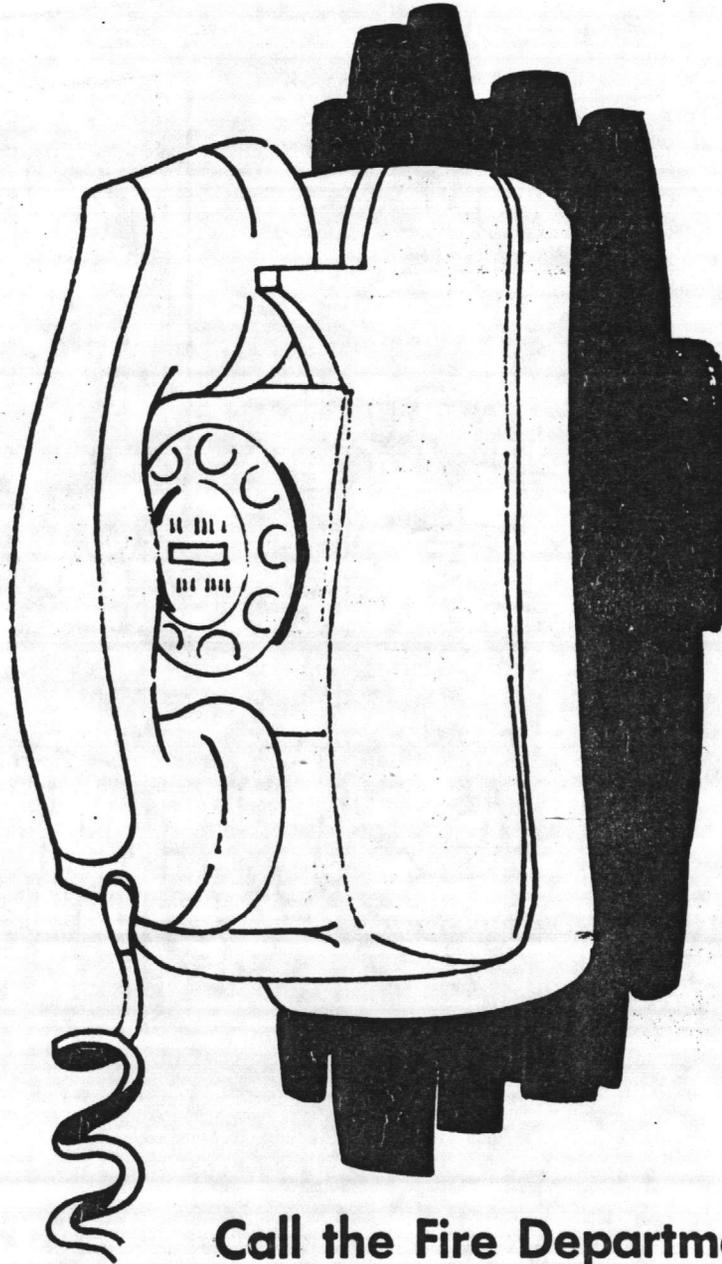
**DROP**

**ROLL**

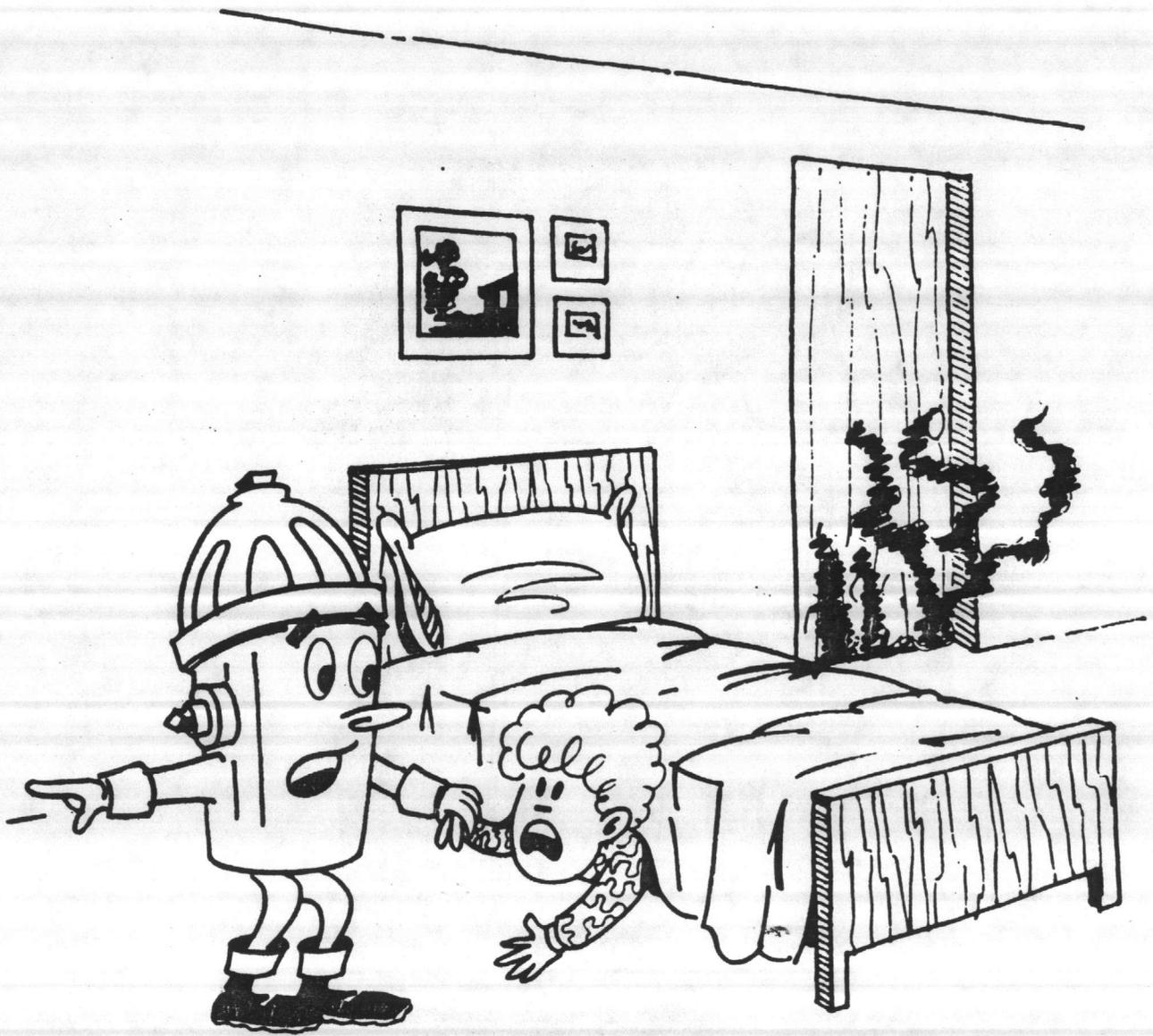
**DON'T RUN**



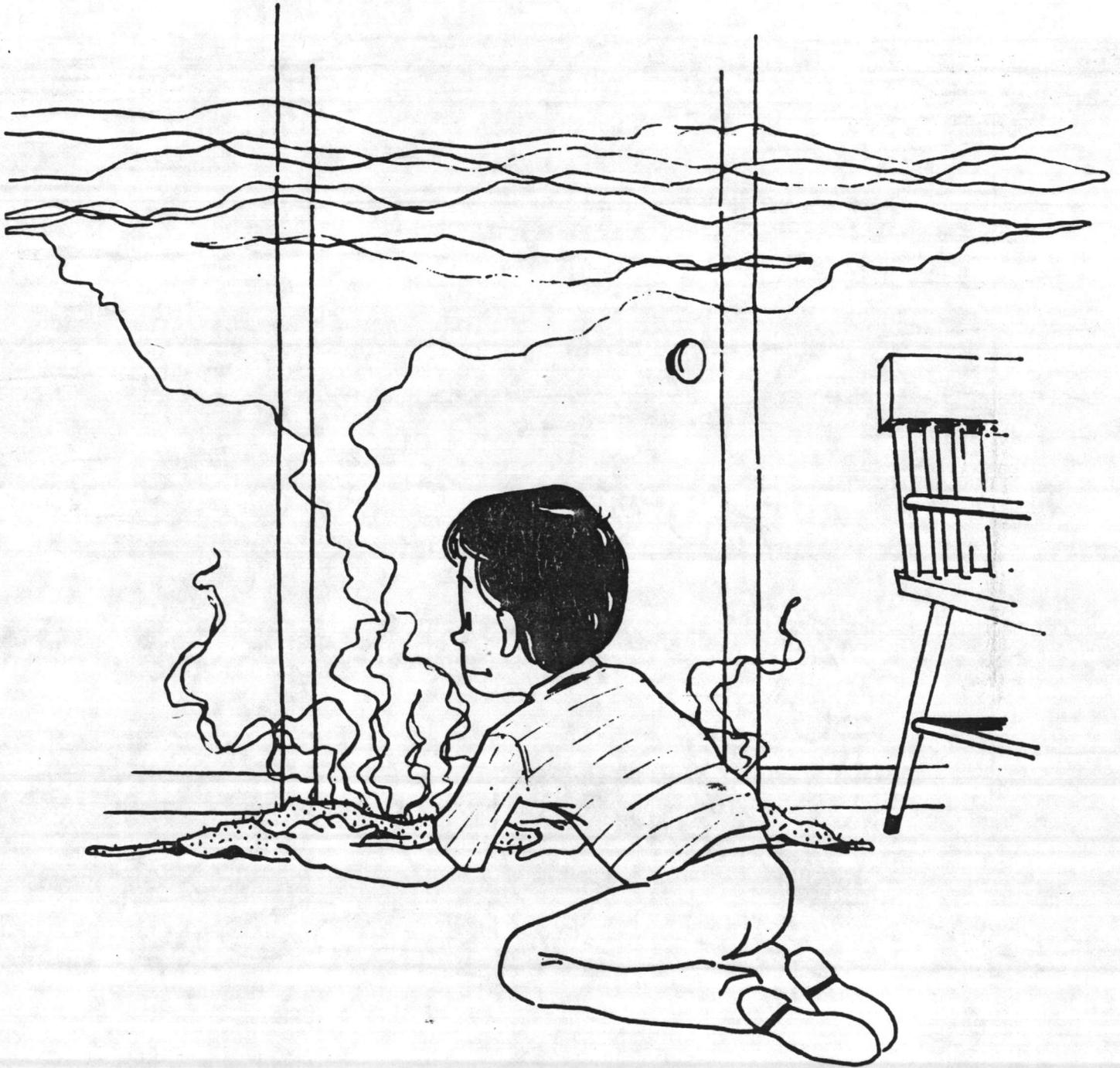
**Warn others**



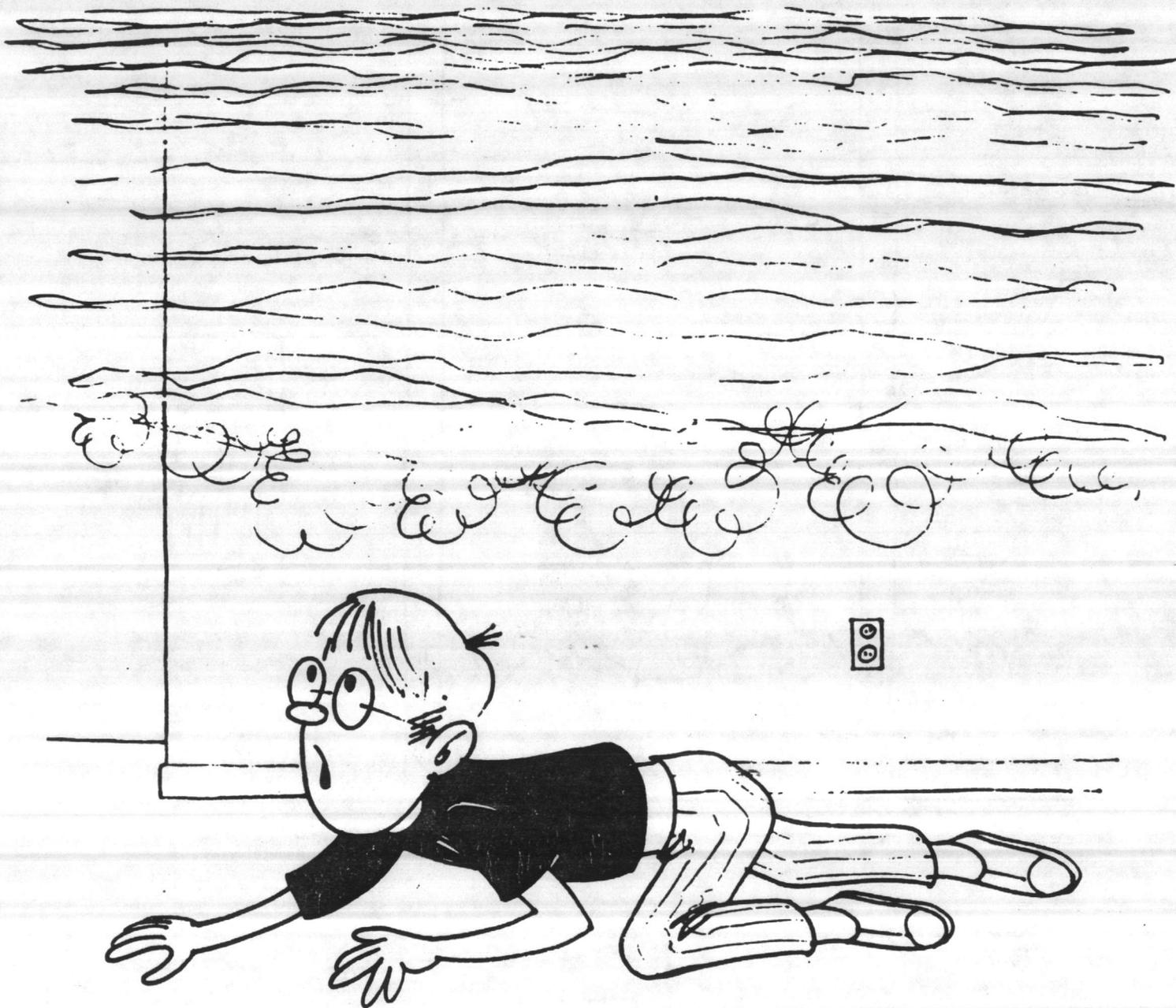
**Call the Fire Department**  
**FIRE AND RESCUE 911**



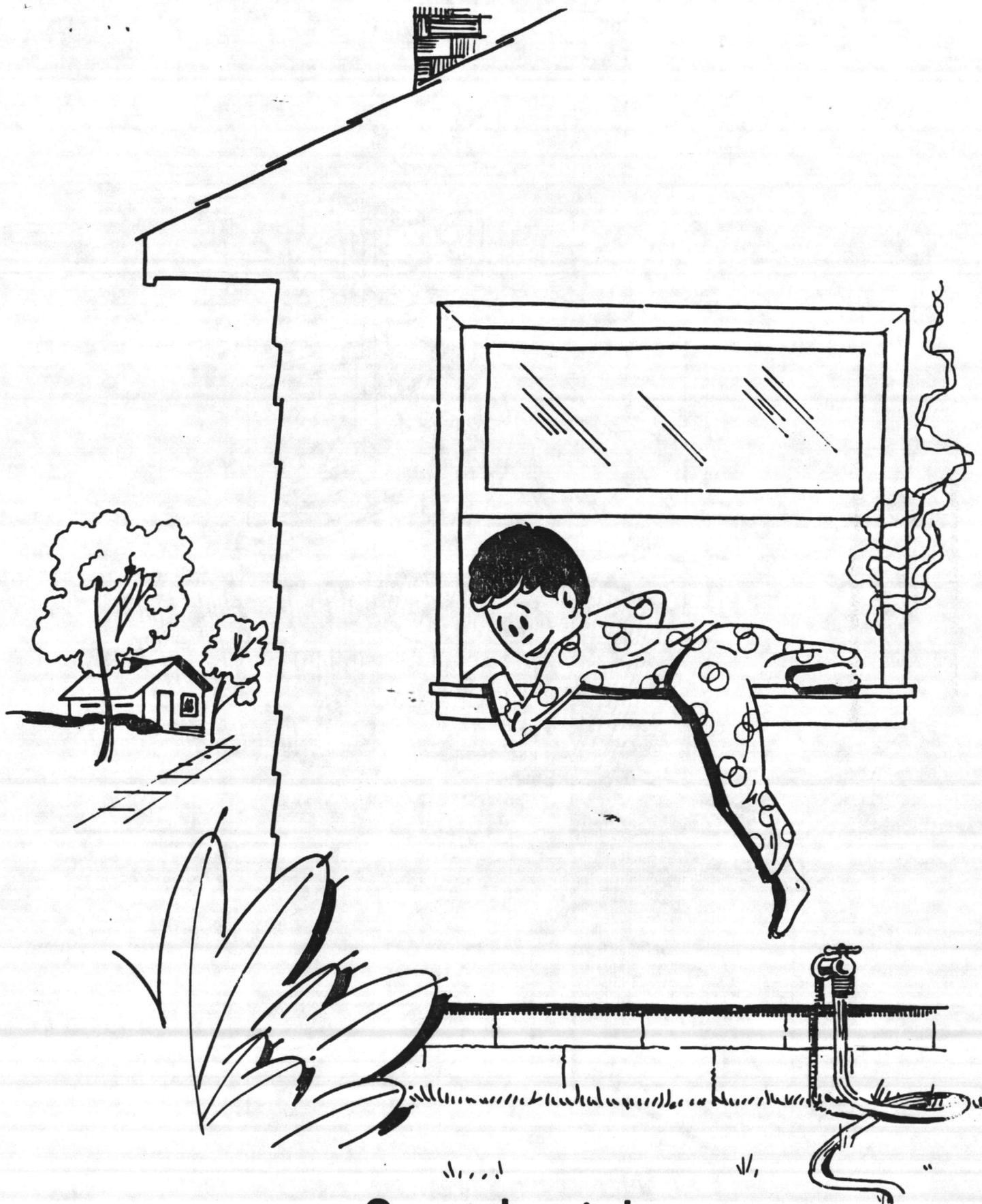
**Never hide**



**Stop the Smoke**



**Crawl under the heat and smoke**



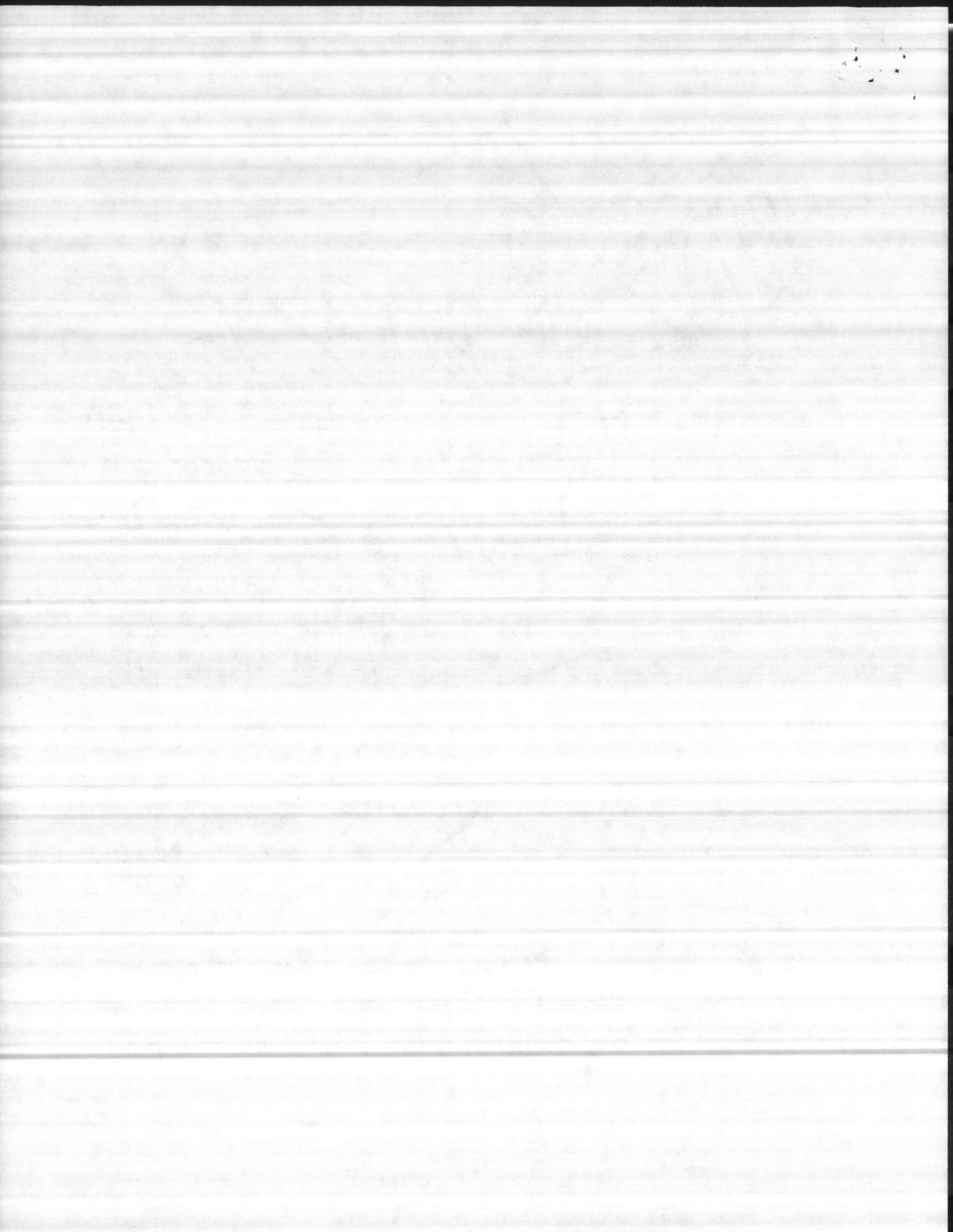
**Go out the window**



Wave and yell for help



Matches can burn



MAIRNE CORPS DEVELOPMENT AND EDUCATION COMMAND

Fire Protection  
INSPECTION CHECKLIST

POINT OF CONTACT G. F. OMOHUNDRO TELEPHONE 640-3281

ORGANIZATION INSPECTED AIR FACILITY DATE 4 June 1985

INSPECTOR G.F. OMOHUNDRO

OVERALL RATING ASSIGNED - Circle applicable word -

OUTSTANDING

ABOVE AVERAGE

BELOW AVERAGE

EXCELLENT

AVERAGE

UNSATISFACTORY

INSPECTOR'S NARRATIVE REPORT

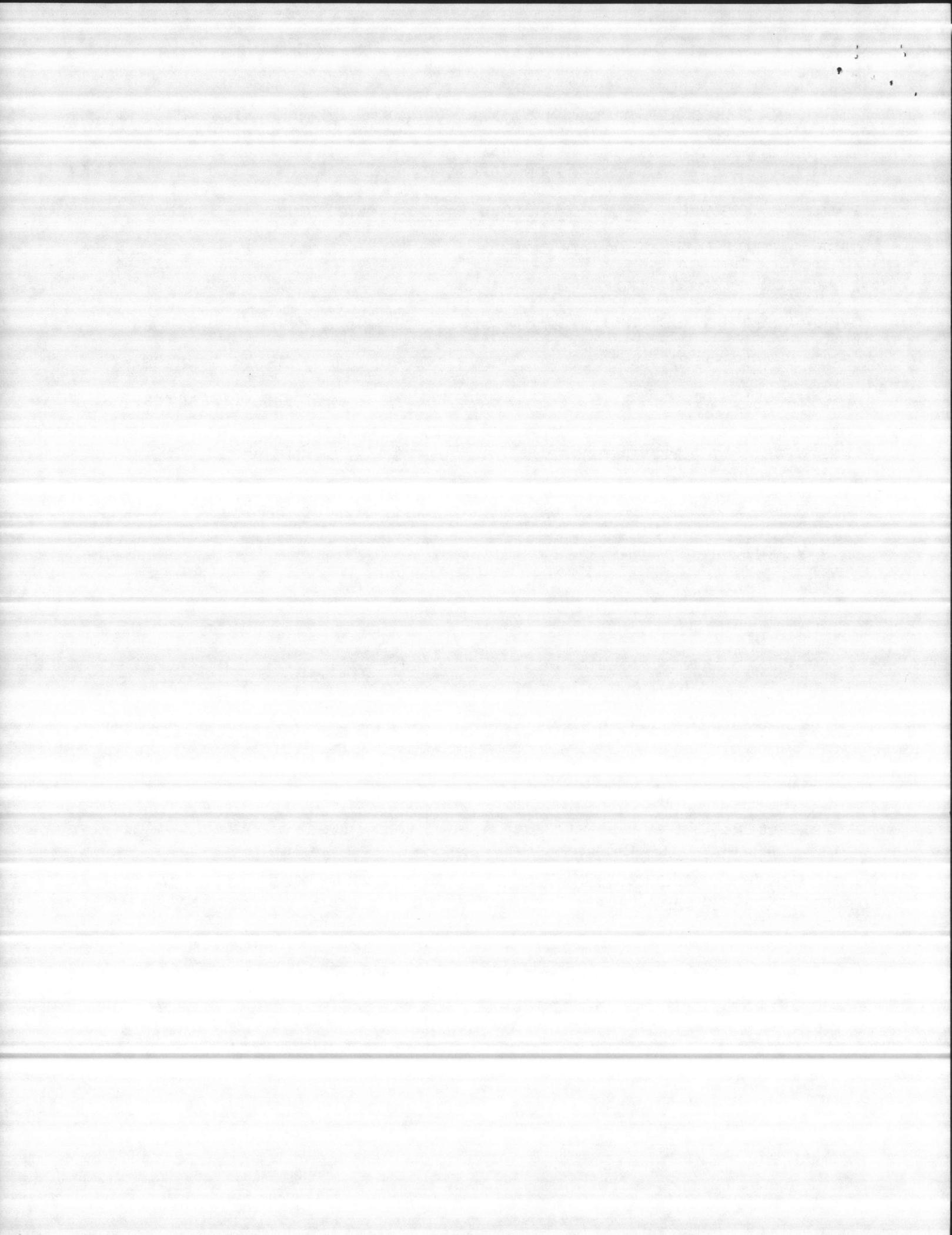
1. The inspected organization is meeting it's goal in fire prevention. However the following recommendations are made. Many of these recommendations can not be corrected by the inspected organization by using self-help programs.

FILE COPY

DISTRIBUTION:

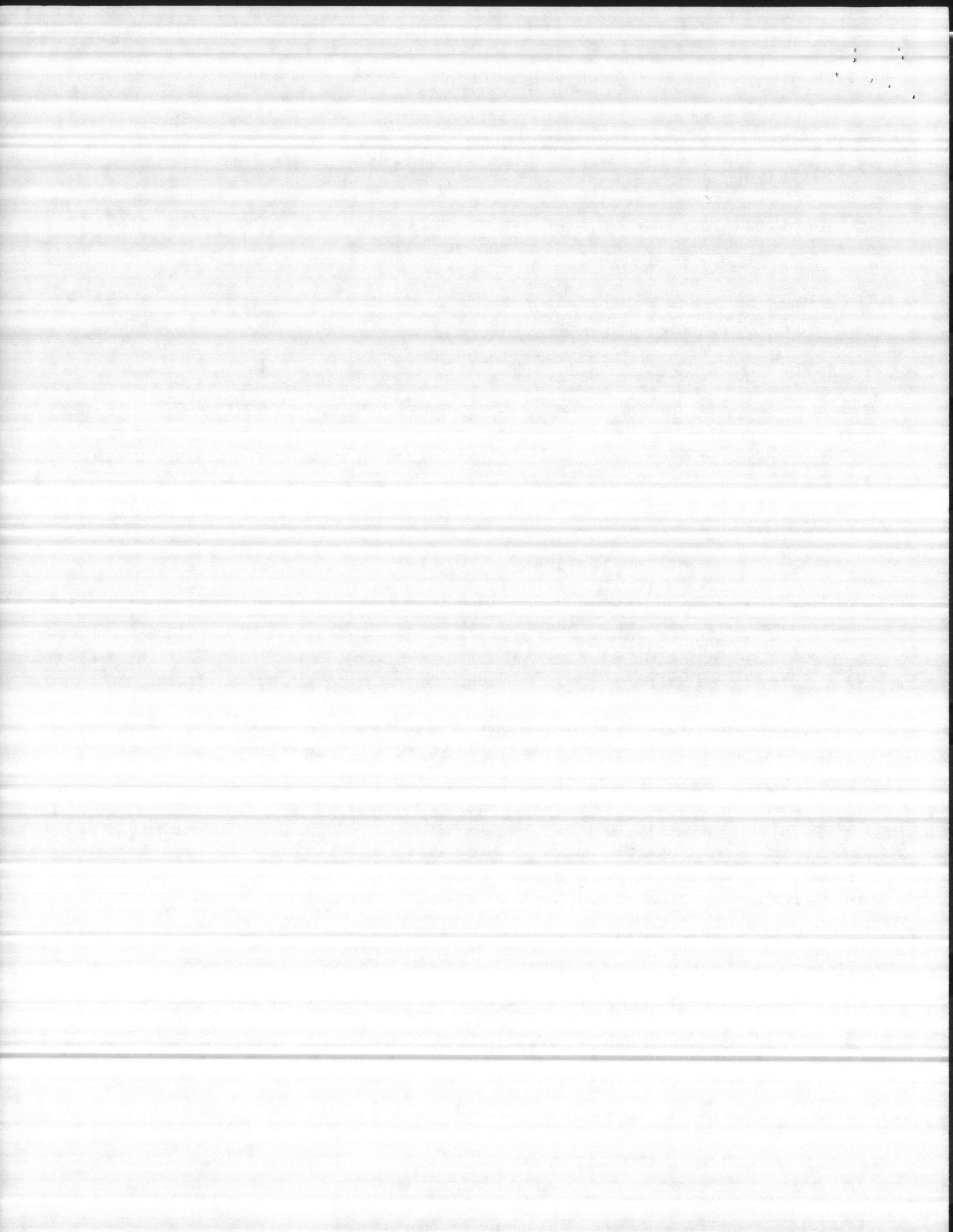
- Original and one to DC/S, CmdInsp
- One to Head of Dept/Organ/Unit being inspected
- One to Individual Inspector's Department Head
- One to Individual Inspector

ATTACHMENT G

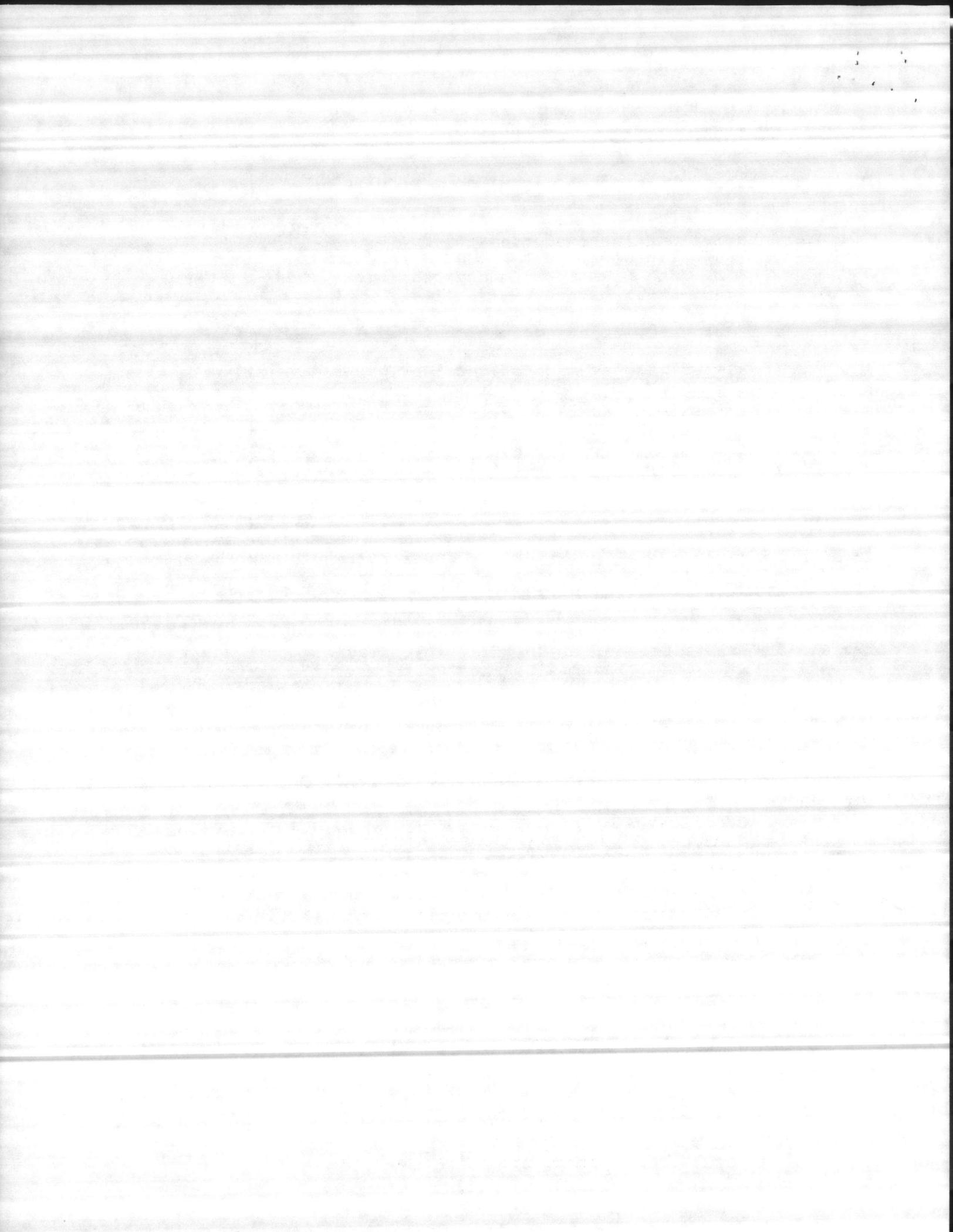


UNIT INSPECTIONS

	<u>YES</u>	<u>NO</u>
1. Does each department have a copy of MCDECO 1320.1, Subj: Fire Protection and Fire Fighting.	<u>X</u>	—
2. Are fire department personnel conducting periodic fire preventive inspections with findings and recommended corrective actions recorded on NAVDocks 2074 (Fire Inspection Check List)?	<u>X</u>	—
3. Are local area inspections being conducted by personnel in charge of such areas as maintenance and industrial shops, storerooms, warehouses, clubs, recreation rooms, and theaters immediately after working hours or after activity in the area has ceased?	<u>X</u>	—
4. Are evacuation plans and instructions, in addition to those detailed in the Fire Bill and activity Fire Regulations posted conspicuously to prevent common and unusual fire hazards incident to specific operations in particular building or area?	<u>X</u>	—
Do these instructions include:		
a. The action required for individual personnel upon alarm of fire?	<u>X</u>	—
b. The location of First-Aid, fire extinguishing equipment nearest fire alarm box, or telephone?	<u>X</u>	—
c. The fire prevention measures required in the particular area?	<u>X</u>	—
5. Are fire alarm and sprinkler systems being inspected? As a result, do these tests indicate that maintenance appears adequate?	<u>X</u> <u>X</u>	— —
6. Is combustible storage located in attic areas of buildings which do not have automatic sprinkler protection?	—	<u>X</u>
7. Is clear access to exits maintained, with aisles clear of obstructions such as bunks, lockers, vending machines, etc.?	<u>X</u>	—



	<u>YES</u>	<u>NO</u>
8. Are all exit doors equipped with hardware of type which permits doors to be opened at all times from inside without requiring use of a key?	<u>X</u>	<u>---</u>
9. Will exit doors open easily without binding? Is door hardware in good repair?	<u>X</u>	<u>X</u>
10. Are interior corridor and stairway doors (smoke-stop and fire doors) kept closed? Are these doors free of hold-open devices (hooks, latches, wedges, etc.)?	<u>X</u>	<u>---</u>
11. Are all emergency lights operational?	<u>---</u>	<u>---</u>
12. Are trash receptacles made of metal or other noncombustible material (not plastic)? Are a sufficient number located throughout building to encourage their use?	<u>X</u>	<u>---</u>
13. Are jury-rigged bunk lights used?	<u>---</u>	<u>---</u>
14. Are ashtrays readily accessible throughout the building?	<u>X</u>	<u>---</u>
15. Are no smoking area restrictions adhered to?	<u>X</u>	<u>---</u>
16. Are all hotplates and coffee pots located on a standard metal shield?	<u>X</u>	<u>---</u>
17. Are buildings free of trash, flammable liquids (paint, thinners, etc.) and oily rags?	<u>X</u>	<u>---</u>
18. Is the standard fire bill (NAVDOCKS 2079) conspicuously posted on each floor of every building?	<u>X</u>	<u>---</u>
19. Are fire drills, with the fire division participating, periodically conducted (at least semi-annually)?	<u>X</u>	<u>---</u>
20. Are fire extinguishers, standpipes, systems for fire alarms free from obstructions, accessibly located, and inspected monthly?	<u>X</u>	<u>---</u>
21. Were any other potential fire hazards observed?	<u>x</u>	<u>---</u>



Building 2100

1. Provide a approved manual fire alarm system throughtout the building.

Code/Criteria Reference  
MCO P11000.11 Section 0604

Life Safety

A fire occuring in this building could go undetected for a long periord of time making egress difficult if not impossible. This could result in a multiple death fire. A fire alarm system would provide early notification to the building occupants and intitiate evacuation efforts.

2. Provide one hour fire rated enclosures for the interior stairwells with a one hour fire rated doors with self-closing devices.

Code/Criteria Reference  
National Fire Protection Life Safety Code # 101  
Chapter 27 Section 2.1.1

Life Safety

A fire starting on the first floor could spread repidly to the second floor via the open interior stairs. This could result in the loss of lives. Enclosure of the stairwells would limit the spread of smoke and heat to the second floor.

3. Reswing the exit doors located on the north end of the building to swing with the means of egress.

Code/Criteria Reference  
National Fire Protection Life Safety Code # 101  
Chapter 5 Section 2.1.1.4.1

Life Safety

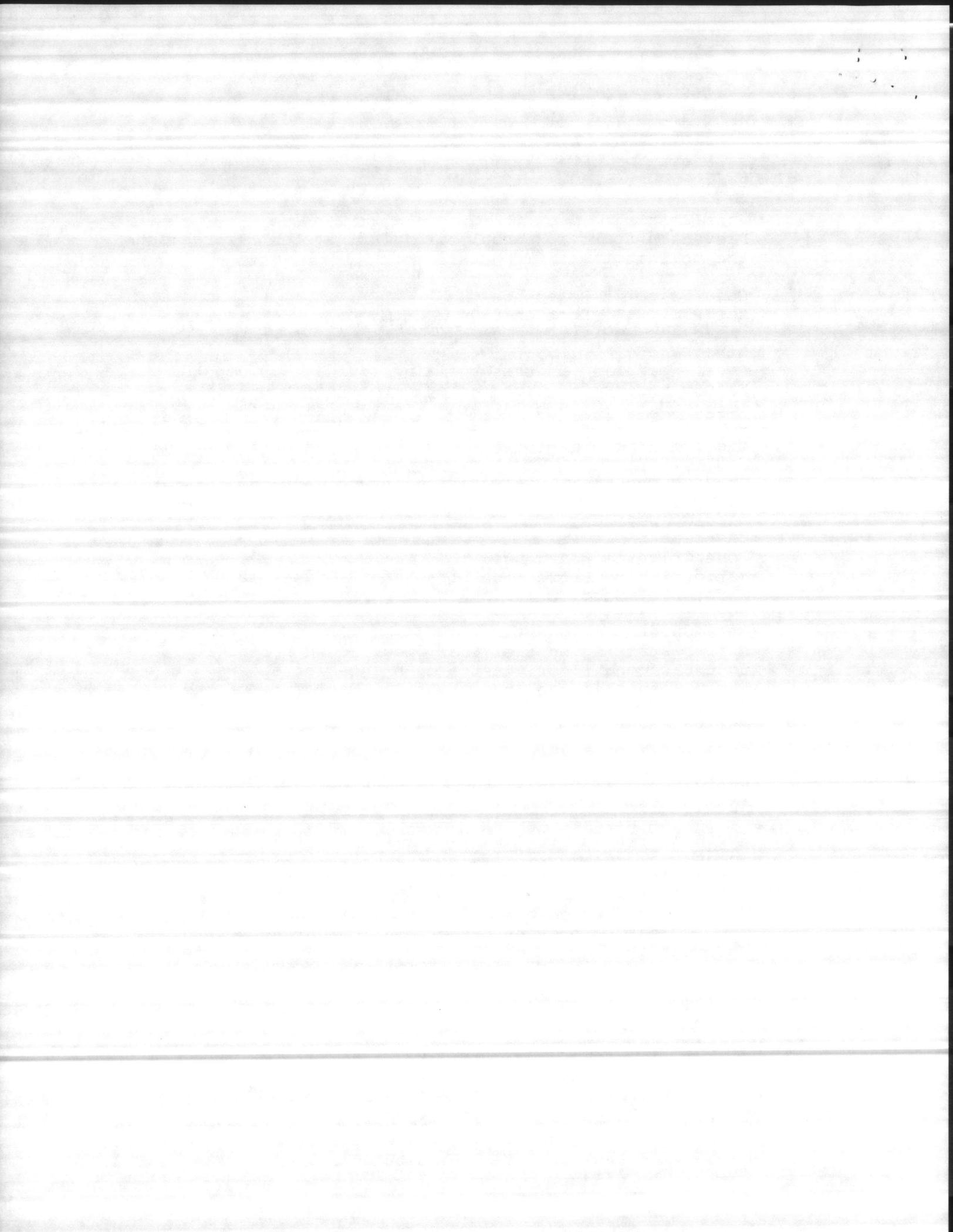
The life safety code requiers all exit doors to swing with egress to prevent panic occuring during a fire emergency.

4. Provide a single station smoke detector in the dutys area.

Code/Criteria Reference  
MCO P11000.11 Section 0612

Life Safety

It is imporant that the duty be aware of a fire emergency occuring in this building. At the present time no fire protection systems are in this building.



Building 2105

1. Reswing all exit doors to swing with egress.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 5 Section 2.1.4.1

Life Safety

It is necessary so the all occupants be able to readily leave the building without having to stop and pull the door back against egress.

2. Provide a second means of egress from the second and third floor and that control tower.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 29 Section 6.2

Life Safety

Due to the lack of adequate ways of exits, fire wall separation of hazards the majority of the personnel on these two floors could be exposed to the fatal effects of a fire.

3. Provide Illumination exit signs above all means of egress.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 29 Section 2.8.1

Life Safety

Access to the exits are to be marked by signs in all cases where the exit or way to reach it are not immediately visible to the occupants.

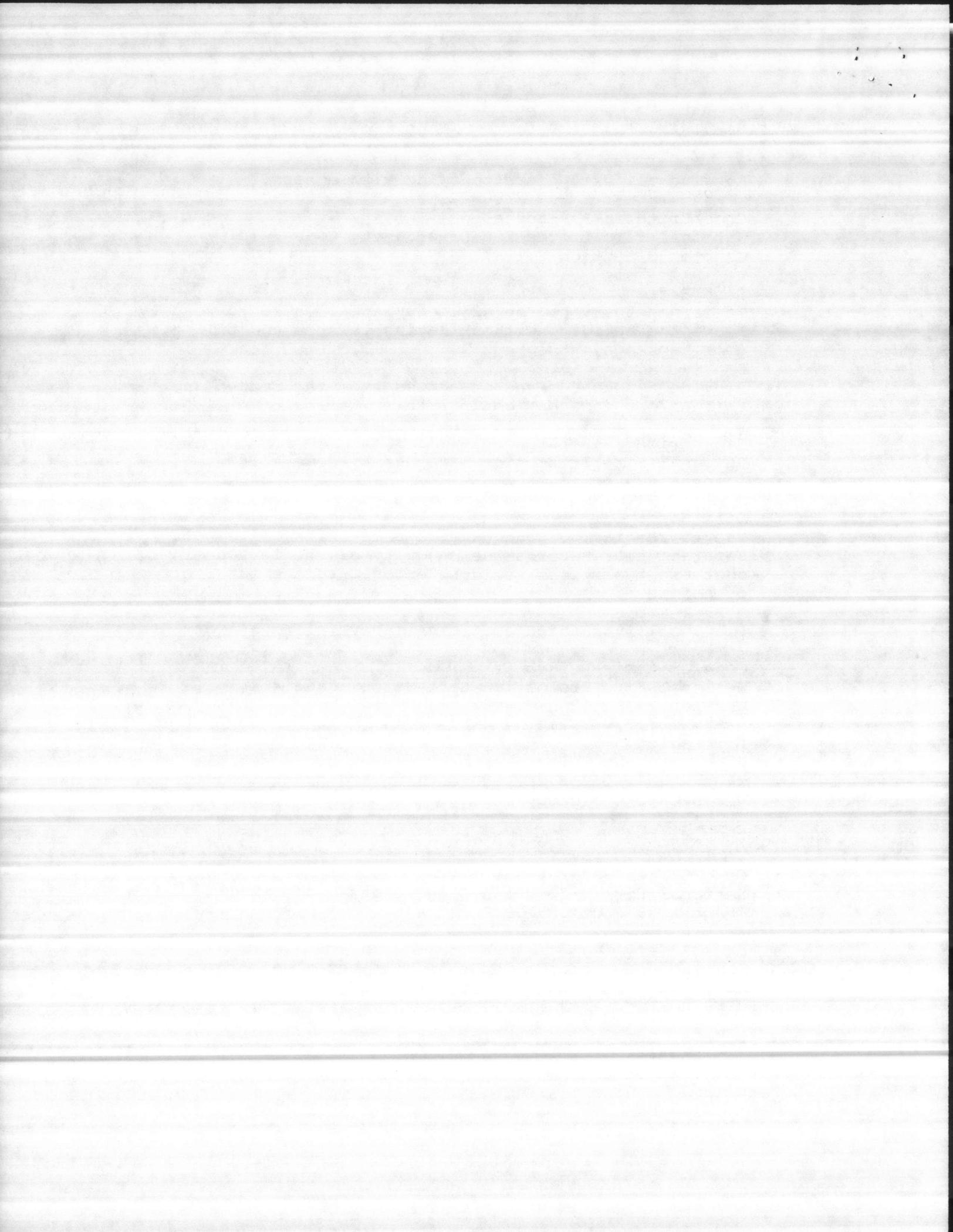
4. Provide Emergency lights throughout the building.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 29 Section 2.9.1

Life Safety

The path of egress must be illuminated at all times during a fire emergency or power failure.



Building 2109

1. Remove or cover the highly combustibile interior finish located in the dining area

Code/Criteria Reference  
.MCO P11000.11 1001

Life Safety

Due to the highly combustibile interior finish located in the dining area of this building. A fire occuring could result in a rapidly spreading fire.

2. Provide an approved fire extinguishing system for the deep fat fyer, and serving lines.

Code Criteria Reference  
National Fire Protection Code # 96 Section 7-1

Life Safety

This building is subject to a very high number of occupants at one time. The combustibile interior finish and lack of any approved fire extinguishing system could result in a fire spreading throughout the building in a very short time.

Building 2108

1. Provide single station smoke detectors in all sleeping area.

Code/Criteria Reference  
National Fire Protection Life Safety Code # 101  
Chapter 17 Section 3.4.4

Life Safety

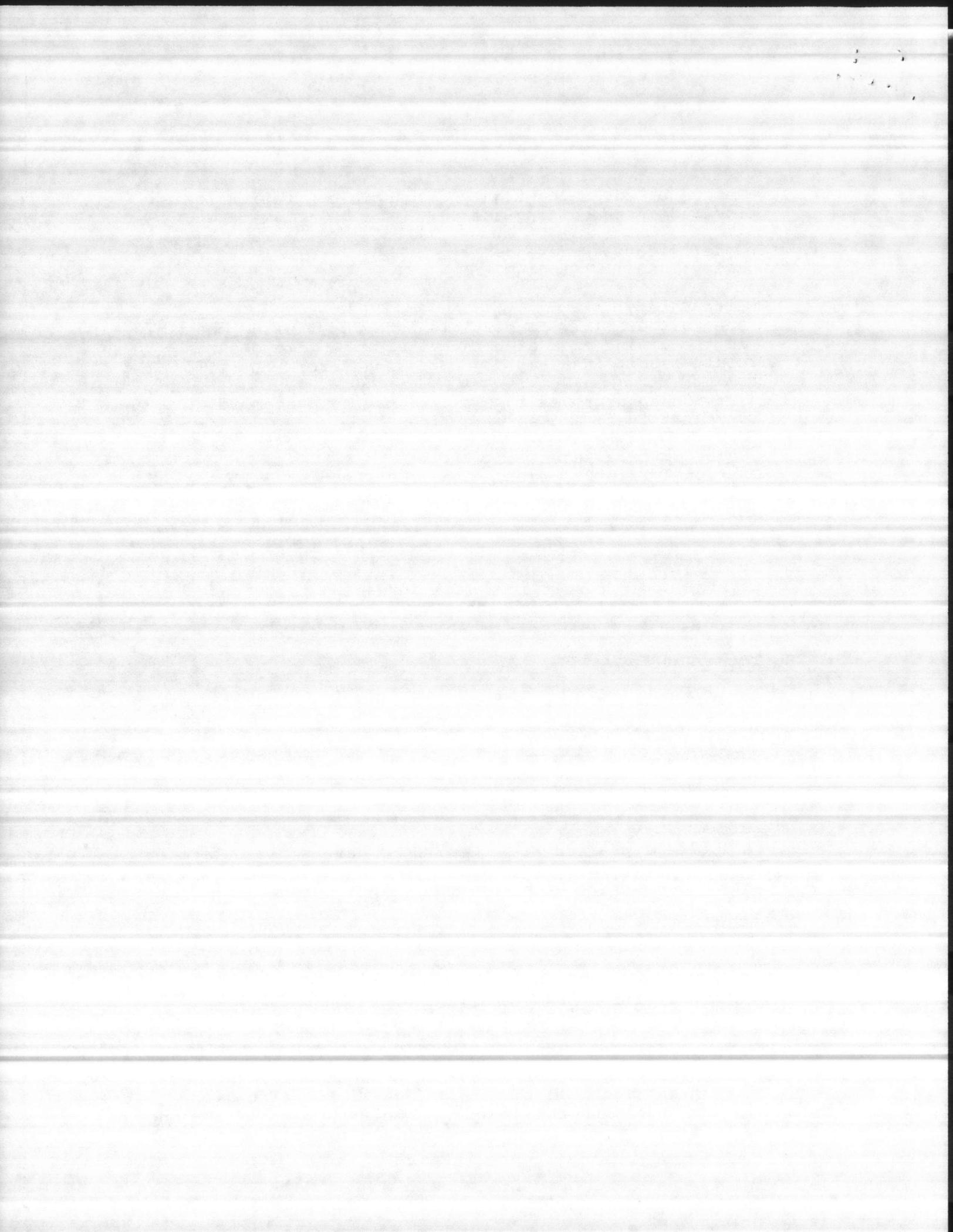
All sleeping areas are required to have smoke detection in the living area to notify the occupants of that living area of a fire that might occur in the room

2. Provide an apporved fire alarm system throughout the building.

Code/Criteria Reference  
National Fire Protection Life Safety Code # 101  
Chapter 17 Section 3.4.1

Life Safety

Occupants of this building must be aware of a fire emergency that might occur in this building. With a fire alarm system in this building the occupants would have early warning of a fire and provide for immediate and orderly evacuation.



5. Provide emergency lights to illuminate all means of egress throughout the building.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 17 Section 2.9.1

Life Safety

Emergency lights are required to light the path of egress during a fire or other emergency where the power might fail.

6. Provide  $\frac{1}{4}$  inch wire glass in metal frames in all windows that are located under the outside fire escape stairs.

Code/Criteria Reference

MCO P11000. 11 Section 1002g

Life Safety

Should a fire occur on the first floor the fire could break through the window making escape from the second floor fire escape impossible.

7. Enclose the storage rooms located throughout the building with a one hour fire rated enclosure.

Code/Criteria Reference

National Fire Protection Life Safety Code # 101  
Chapter 17 Section 3.2.2

Life Safety

A fire in one of these rooms would spread rapidly because of the lack of a fire alarm system, and proper interior fire protection.

8. Remove or cover the highly combustible interior finish located on the second deck with a material having a flame spread rating of 25 or less.

Code/Criteria Reference

MCO P11000.11 Section 1001

Life Safety

A severe life safety hazard exists due to the highly combustible wood paneling. This material aids in the rapid spread of flames and contributes vast quantities of toxic gases and smoke.

11

*Memorandum*

16/144A (Rev. 8-81)  
 F-052-2920

February 10, 1986

Fire Prevention Branch, MCDEC

Public Works Officer, MCDEC

FILE COPY

LIFE SAFETY HAZARDS NOTED FOR BUILDINGS 2112, 2108 AND QUONSET HUTS CAMP BARRETT

Building 2112

Provide automatic sprinkler protection throughout the first and second deck.

Code/Criteria Reference - MCO P11000.11 Section 0601-5

Life Safety - The building contains highly combustible interior finish that poses a serious life threat to occupants of this building. The installation of automatic sprinkler protection would greatly reduce the spread of fire along interior walls and ceilings, thereby improving the conditions of egress.

Provide a automatic fire alarm system throughout the building.

Code/Criteria Reference - MCO P11000.11 Section 0603

Life Safety - A fire occurring in this building could go undetected for a long period of time making egress difficult if not impossible. This could result in a multiple death fire. A fire alarm system would provide early notification to building occupants and initiate evacuation efforts.

Provide a second means of egress from the squash court, and locker room.

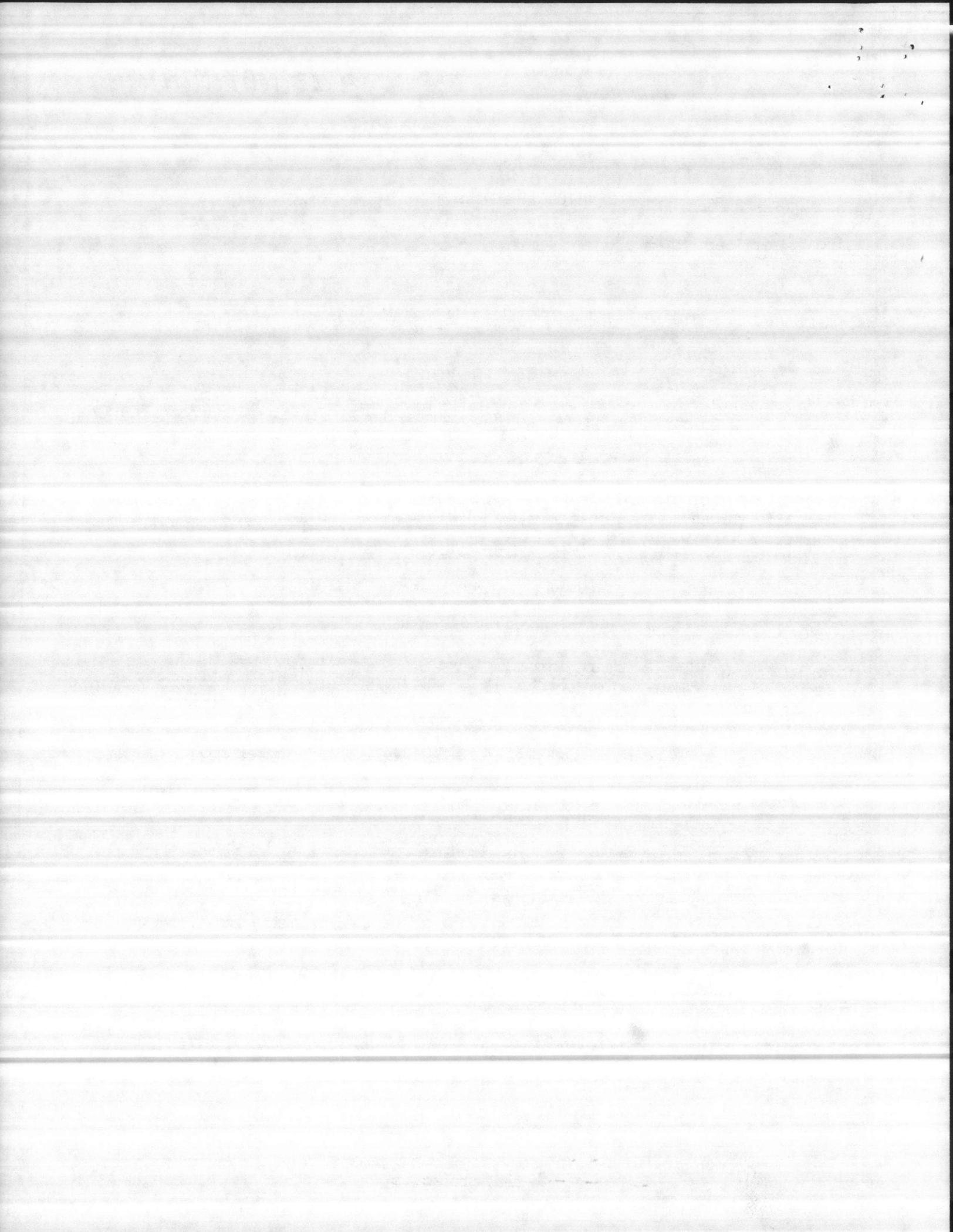
Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 5 Section 5.4.1.2

Life Safety - The Life Safety Code requires exit access to at least two exits by separate way of travel. The addition of exits in the area noted would provide adequate egress facilities, there by limiting the potential for life loss.

Enclose all interior stairs with one hour fire rated construction and protected openings with one hour rated fire doors.

Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 5 Section 2.2.1.3

Life Safety - If an uncontrolled fire occurred on the second floor, occupants would need added protection in escaping from the second floor. Due to the highly combustible interior finish in the stairwell at the present time it would make egress very hard if not impossible.



Provide emergency lights throughout the building.

Code/Criteria Reference MCO P11000.11 Section 1003-B

Life Safety - It is essential to have the path of egress lighted during a fire or other emergency where power would fail.

Provide illuminated signs above all means and ways of egress.

Code/Criteria Reference MCO P11000.11 Section 1063-2

Life Safety - Access to the exit are to be marked by signs in all cases where exits ways to reach and exit are not immediately visible to the occupant. This building serves many personnel who are transient and enter and exit the building using the same means. In the event of a fire emergency where a means of egress were to be blocked personnel would be directed to another means of egress by following the readily visible exit signs.

ding 2108

Provide single station smoke detectors in all sleeping areas.

Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 17 Section 3.4.4

Life Safety - All sleeping areas are required to have smoke detectors in the living areas to notify the occupants of that living area of a fire that might occur in the room.

Provide an approved fire alarm system throughout the building.

Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 17 Section 3.4.1

Life Safety - Occupants of this building must be aware of a fire emergency that might occur in this building. With a approved fire alarm system in this building the occupants should have early warning of a fire and provide for immediate and orderly evacuation.

Provide emergency lights to illuminate all means of egress throughout the building.

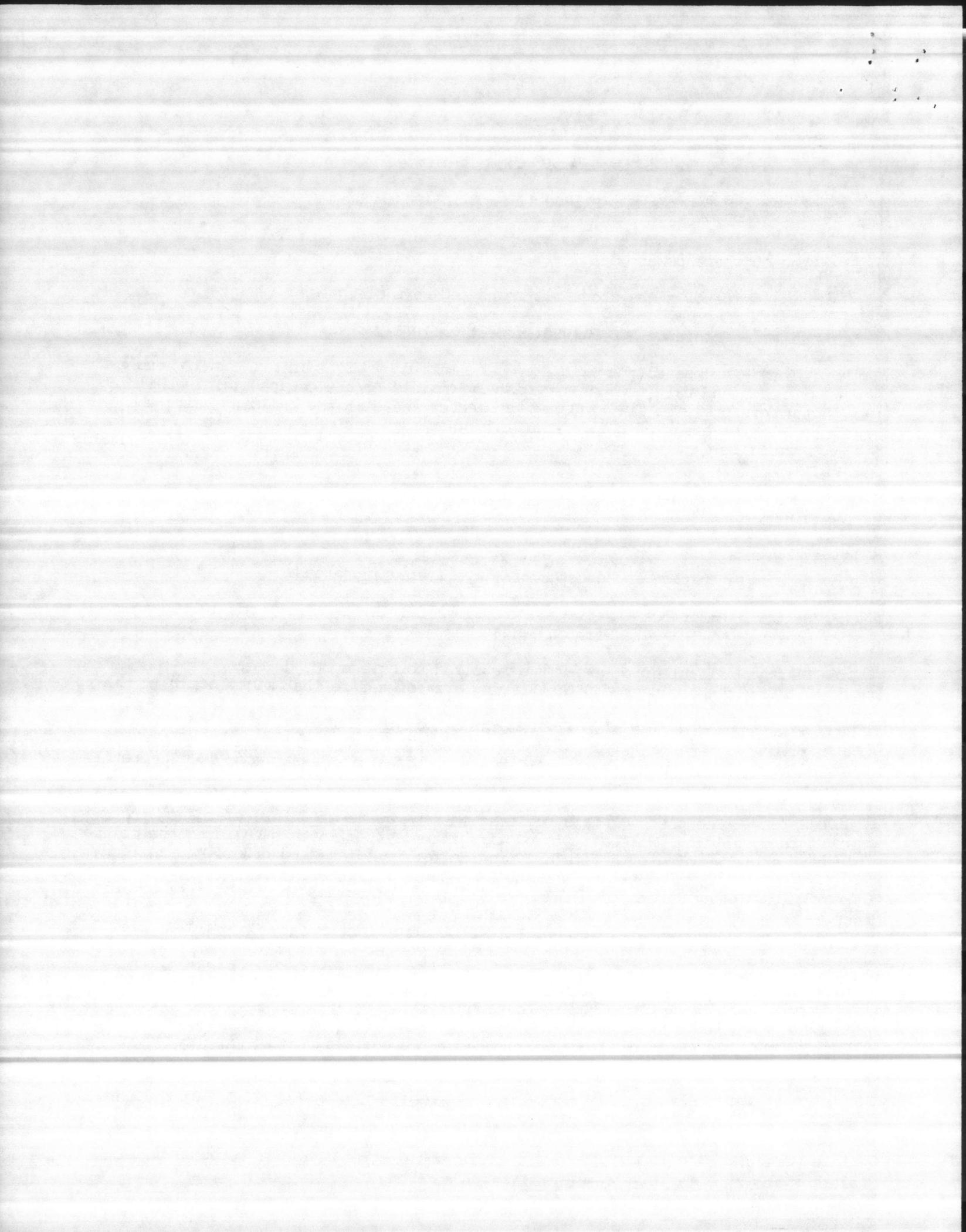
Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 17 Section 2.9.1

Life Safety - Emergency lights are required to light the path of egress during a fire or other emergency where the power might fail.

Enclose the storage rooms located throughout the building with a one hour fire rated enclosure.

Code/Criteria Reference - National Fire Protection Life Safety Code 101 Chapter 17 Section 3.2.2

Life Safety - A fire in one of these rooms would spread rapidly because of lack of alarm system, and proper interior fire protection.



Monset Huts--Camp Barrett

1. Remove the highly combustible interior finish with a material having a flame spread rating of 75 or less.

Code/Criteria Reference - MCO p11000.11 Section 1001

Life Safety - A severe life safety hazard exist due to the highly combustible interior material in these buildings. This material aids in the rapid spread of flames and contributes vast quantites of toxic gases and smoke.

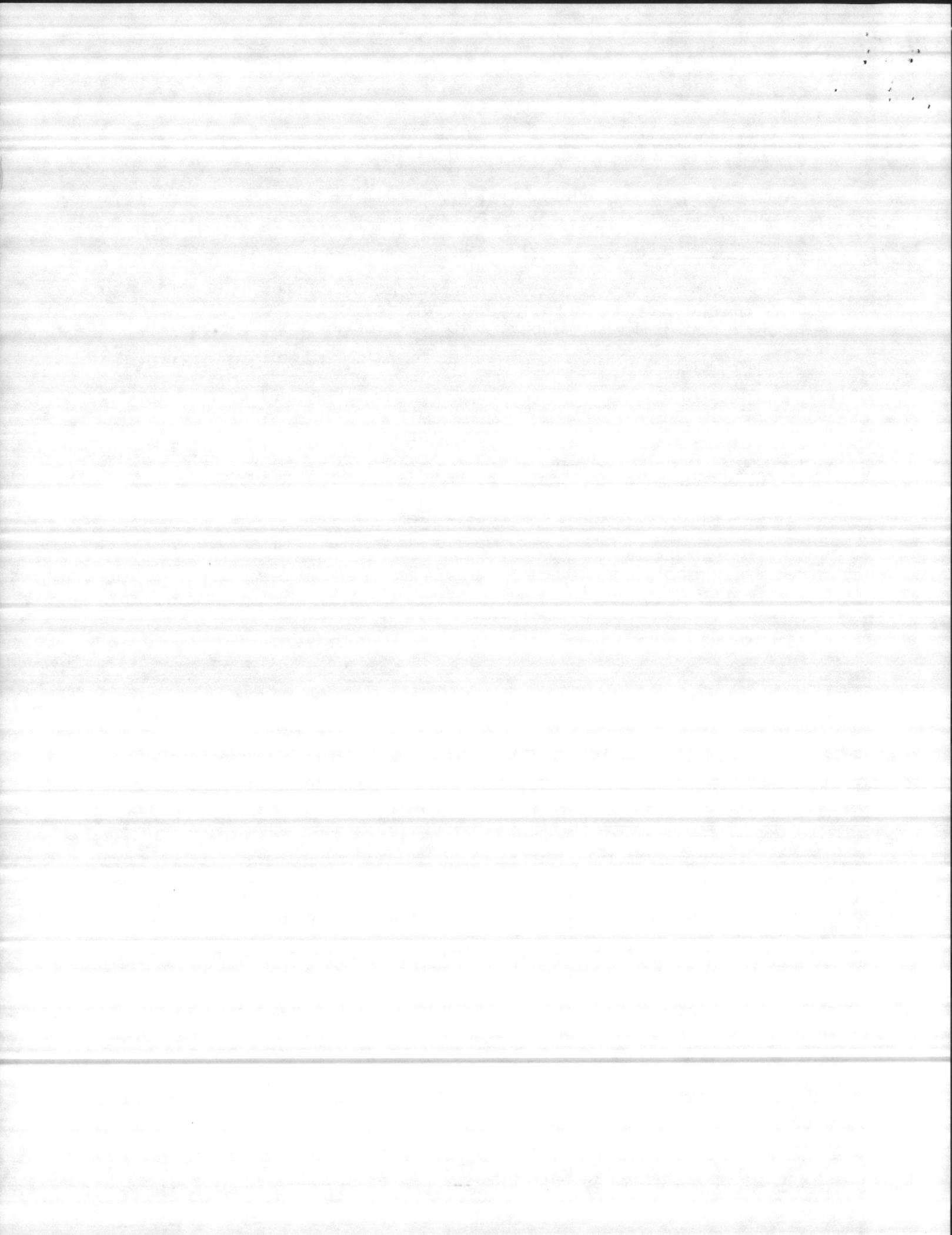
2. Provide complete automatic sprinkler protection throughout these buildings.

Code/Criteria Reference - Navfac DM-8 Chapter 6

Life Safety - A fire in any part of these buildings would spread throughout due to the combustible interior finish. Installation of an automatic sprinkler system would control the spread of flames and limit the volume of toxic gases.

3. Provide a minium of 30 feet clearance between buildings.

Code/Criteria Reference - DM-8 Chapter 2.3



DATE 2 APRIL 86

SET # 5

MCDEC DESIGN REVIEW ROUTING SHEET

TITLE: IMPROVE DINING FACILITIES  
Bldgs 2465 2714 2402

CONTRACT NO.: 84-C-2090

CUSTOMER: Food Services

NAME/PHONE: CAPT TAUMAN

95% REVIEW

WR NO.: 84152

A/E George Mills Btron

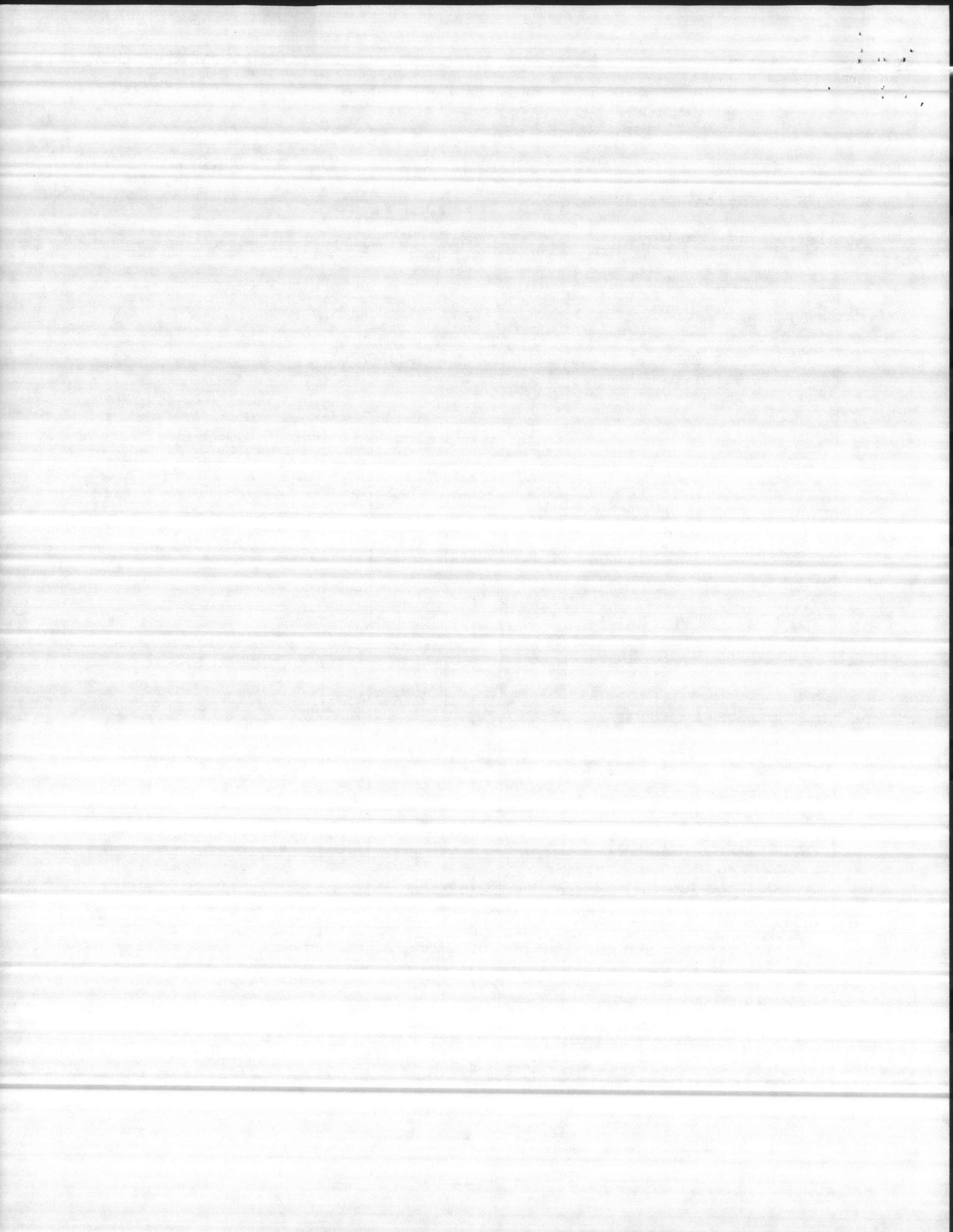
AIC/EC: L.P. DELANEY

PHONE: X2028

	REVIEWER (LINE OUT THOSE WHICH ARE N/A)	ACCEPTABLE OR NO ADDITIONAL COMMENTS	SEE COMMENTS ON			SEPERATE REVIEW COMMENTS ATTACHED		SIGNATURE AND DATE
			DRAWINGS	SPECS.	CALCS.	YES	NO	
1.	EIC/AIC							
	ARCHITECTURAL SECTION (41)							
	ELECTRICAL SECTION (42)							
	MECHANICAL SECTION (43)							
	CIVIL SECTION (44)							
	CUSTOMER							
	MAINTENANCE DIVISION (FMO)							
	CONSTRUCTION BRANCH (20)							
	ENVIRONMENTAL HEALTH							
	CONTRACT SECTION (25)							
2.	FIRE INSPECTION							
	SAFETY OFFICER							
	PHYSICAL SECURITY (PMO)							
	DIR/ENGINEERING BRANCH (40)							
	DPWO (15)							
3	EIC/AIC (COORD. COMMENTS)							

FILE COPY

PLEASE RETURN COMMENTS TO FWD CODE 40 BY C.O.B. 4/14/86



DATE: April 11, 1986

FROM: Fire Prevention Branch, MCDEC

TO: Public Works Officer, MCDEC

SUBJ: IMPROVE DINING FACILITES BLDGS 24165, 27219 and 24002.

1. The following comments are made on the drawings and spec on the above listed job.

Drawings

- a. Sheet E-1 of 12

Existing fire alarm station horn/light is to be relocated. Where? drawings do not show.

- b. Sheet E-5 of 12

The existing fire protection system is not tied into the fire alarm control panel. A new zone module will have to be provided so the new fire protection system can be tied into the fire alarm control panel.

- c. Sheet E-4 of 12

There is no existing fire alarm pedistal at this location.

- d. Sheet E-6 of 12

Fire alarm horns should be used. Drawings show bells.

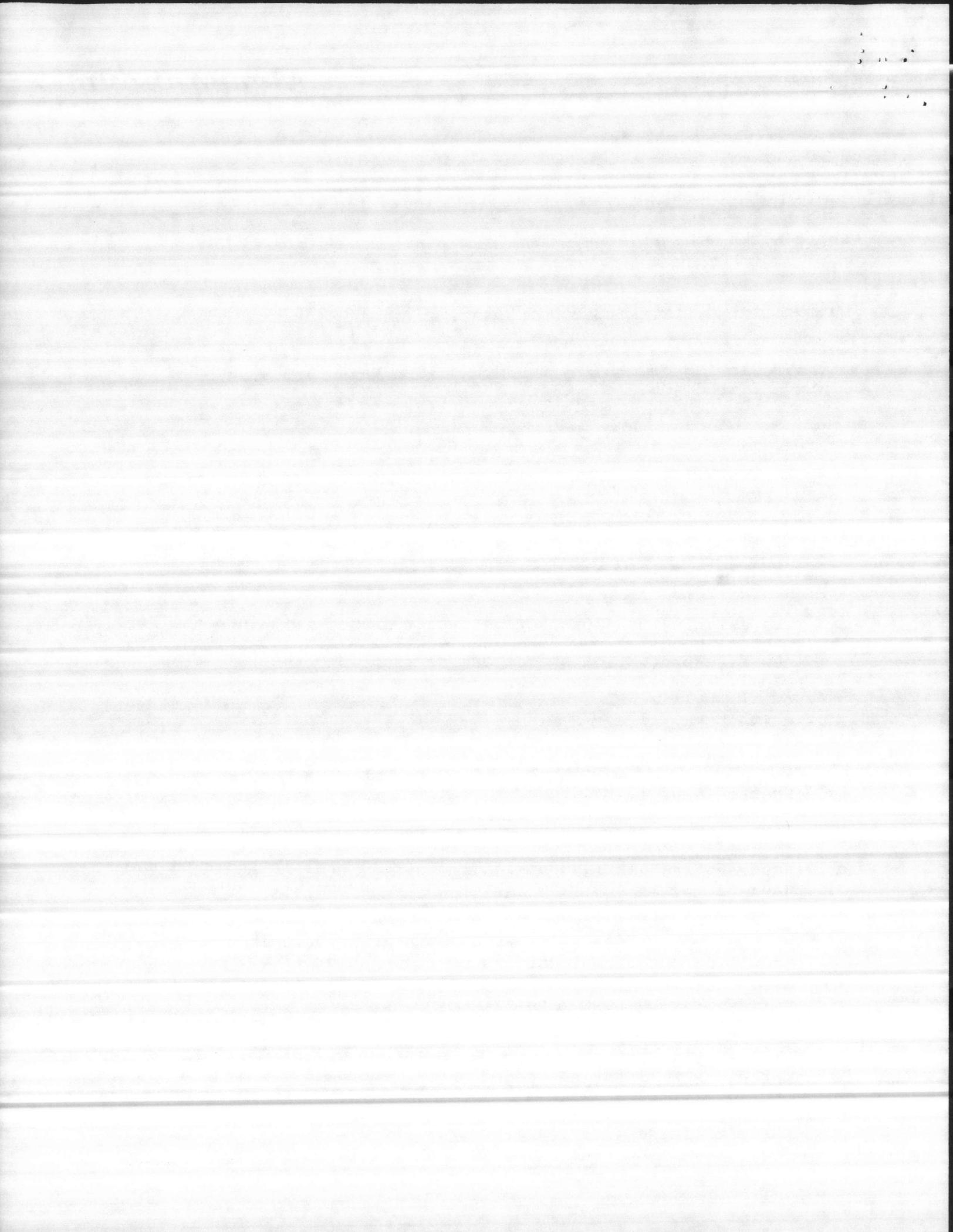
Note# 6 Fire alarm annunciator control panel is shown on the drawings is it the fire alarm control panel or a annunciator panel?

Fire alarm pull stations shown on drawings are in the wrong places. Should be moved to locations as shown on drawings.

Why are 12 zone being used for the fire alarm control panel. This is a overkill on a building of this size.

Will supply ducts hace more that 15,000 CFM or more? If not smoke detectors will not be needed in the ducts. See Mil-Handbook-1008 Section 2.11.2.3

Where will the fire alarm control panel be?



IMPROVE DINING FACILITIES (CONT)

Will dry chemical system be tied into the fire alarm control panel?  
It does not show it being tied in on the drawings.

Number and size of conductors should be per Navy requirements not  
Manufactures.

Fire alarm riser diagram does not give enough detail. Please use one  
that was draw as a guide.

Where will the fire alarm transmitter be?

e. Sheet E-7 of 12

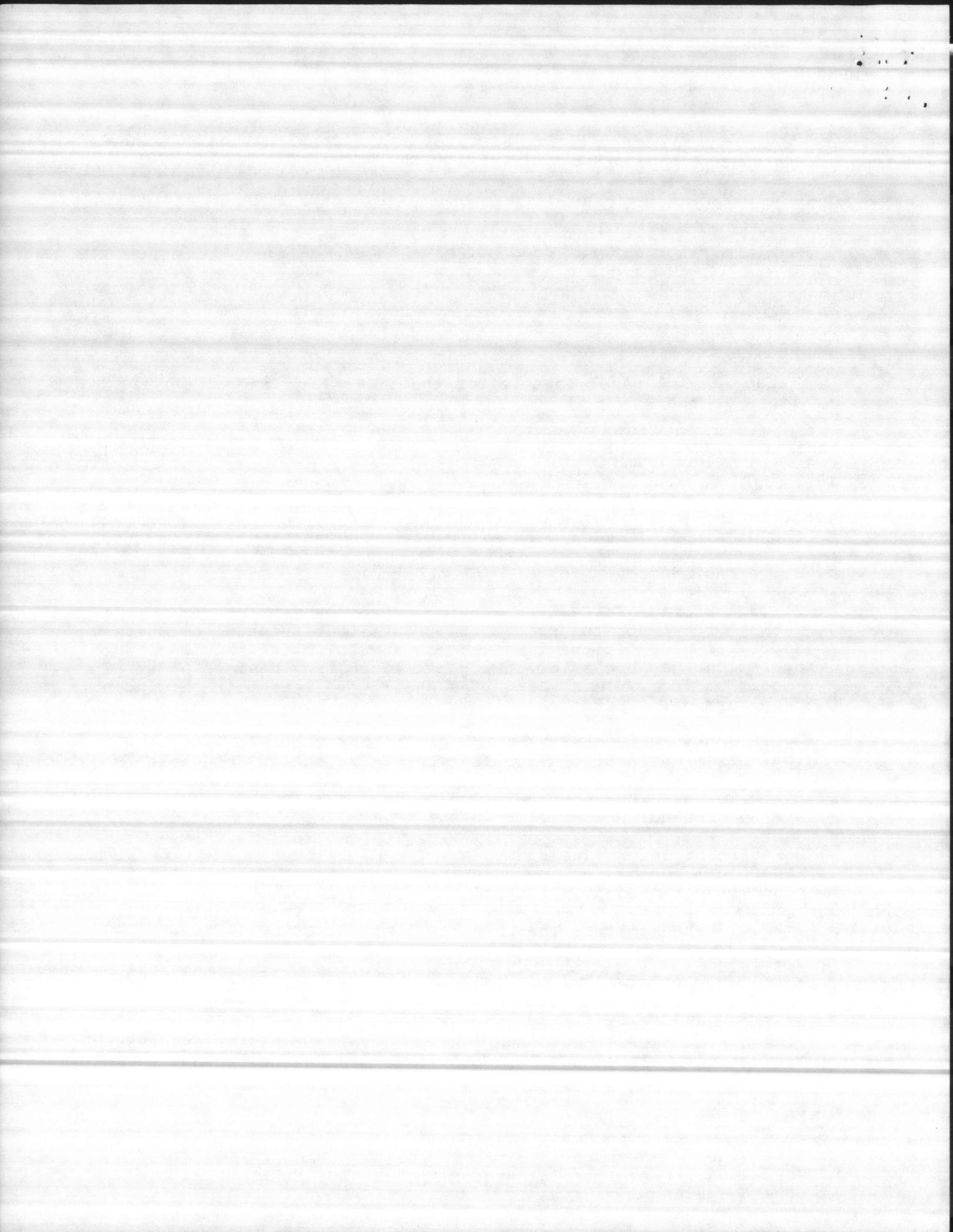
Interface device panel-Is this for the fire alarm control panel? If it  
is it is in the wrong place.

Specification

16722

- a. 2.1.3 The zones should be included into the spec as they are shown on  
the drawings. It does not really tell you what zone covers which area.
- b. 2.1.4 Include operation of smoke control systems to spec.
- c. 2.2.3.1 Storage Batteries: Provide batteries with proper ampere-hour  
rating to operate the system and transmitter tripping circuits under  
supervisory conditions for 48 hours and following this period of  
operations capable of operating all indicating devices under alarm  
conditions for 30 min. Batteries shall have lead bolt-on wing-nut-  
type-terminals. Batteries with fast-tap terminals are unacceptable.
- d. 2.2.6 Smoke Detectors: The station has had many problems with  
ionization detectors. We would like photoelectric detectors to be used.
- f. 2.2.7 The drawings show bells to be used. The spec says horn/lights  
are to be used. What will be used?
- g. 2.2.8 Annunciator Panel: Why does the panel door need to be keyed  
identical to the lock on the fire alarm control panel? A annunciator  
panel is not needed in a building of this size.
- h. 2.2.10.2 Transmitter: The unit shall be factory adjusted to 148.95Mz.
- i. 2.2.10.5 Master Message Designation: Provide no less than six message  
designations, each of the individually identifiable. Each of the  
individually identifiable "Master" message designation shall be  
configured to be automatically actuated from the interface panel, the  
fire alarm control panel and individual alarm initiating devices.  
Activation shall cause the appropriate message to be sent three times.  
Zone the master message in the following manner:

- Zone 1 Dry Chemical System
- Zone 2 Manual Fire Alarm Pull Stations
- Zone 3 Heat Detectors
- Zone 4 Duct Detectors (If needed)
- Zone 5 Spare



IMPROVE DINING FACILITIES BLDG (CONT)

- j. 2.2.10. 11 Radio Master Box Interface Panel: Interface panel shall be the manufacture's commercial product, completely assemble, wired, and tested at the factory, and delivered ready for installation and operation. Interface panel shall comply with applicable portions of NFPA 72B and NFPA 1221 and be UL listed or FM approved for the connection of local fire alarm systems to radio fire alarm transmitters. Panel shall provide zone indication of the alarm and trouble conditions. Interface panel shall provide input and outputs for six alarm circuits. Each panel shall electrically supervise the following: the wire between the local alarm panel and the interface panel; the wiring between the interface panel and its associated radio alarm transmitter; the AC power supply for the interface; and the position of all interface panel control switches. The abnormal position of any switch, standby battery voltage below 85 percent of rated battery voltage, or other disarrangement of this system shall cause the actication of the trouble signal. A trouble silence switch shall be provided that will silence the audible trouble signal but not extinguish the visual trouble light. Upon correction of the system trouble conditions, the audible trouble signal shall sound to indicate the abnormal position switch.
- k. 2.2.10.12 Primary Power: Power shall be 120V AC service obtained by a connection to the fire alarm control panel.



REVISED 05 AUG 85

DATE 24 JAN 86

MCDEC DESIGN REVIEW ROUTING SHEET

SET # 3

TITLE: CONSTRUCT BULK STOR. DOME

CONTRACT NO.: 85-C-2150

CUSTOMER: FACIL MAINT

NAME/PHONE: MIKE BURRELL

35% REVIEW

WR NO.: 85194

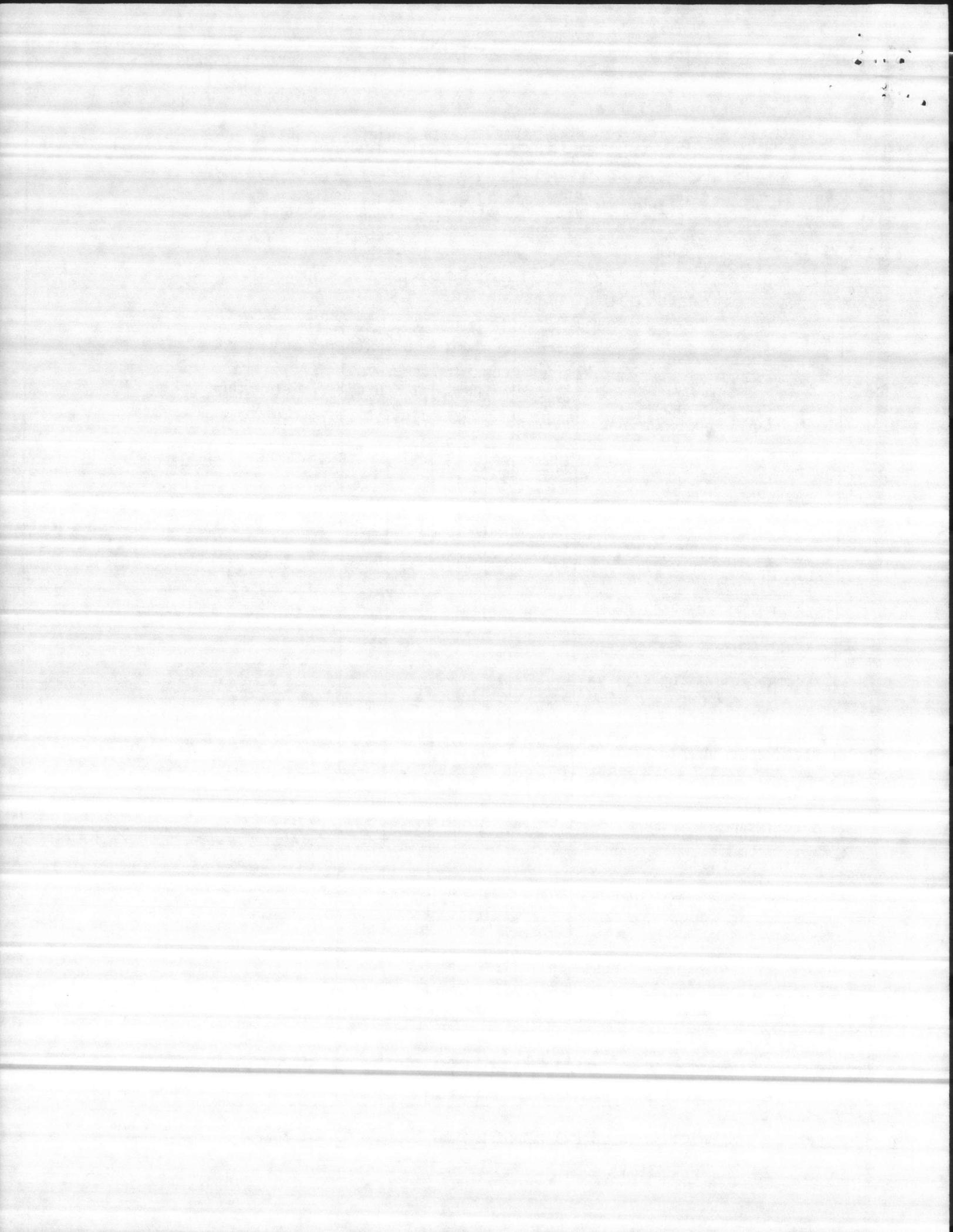
A/E: Hardwicke Johnson, Inc.

AIC/~~EE~~: Belinda Ebert

PHONE: 2028

	REVIEWER (LINE OUT THOSE WHICH ARE N/A)	ACCEPTABLE OR NO ADDITIONAL COMMENTS	SEE COMMENTS ON			SEPARATE REVIEW COMMENTS ATTACHED		SIGNATURE AND DATE
			DRAWINGS	SPECS.	CALCS.	YES	NO	
1	EIC/AIC							
	PLANNING BRANCH (50)							
	ARCHITECTURAL SECTION (41)							
	ELECTRICAL SECTION (42)							
	MECHANICAL SECTION (43)							
	CIVIL SECTION (44)							
	CUSTOMER							
2	FIRE INSPECTOR	/						<i>Gay Carter 2/10/86</i>
	ENVIRONMENTAL HEALTH							
	PHYSICAL SECURITY (PMO)							
	SAFETY OFFICER							
	MAINTENANCE DIVISION (FMO)							
	DIR/ENGINEERING BR. (40)							
	DPWO (15)							
3	EIC (COORD. COMMENTS)							

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CONTRACT # 85-C-2190

Drawings

Sheet 2 of 4

- 2-6 Remove smoke detector from battery room.
- 2-4 Replace smoke detector with an explosive proof heat detector
- 2-3 What is the symbol S for ?
- 2-3 Relocate pull station and horn as shown on drawings
- 3-1 Relocate pull station and horn as shown on drawings
- 3-3 Relocate pull station and horn as shown on drawings
- Provide fixed heat detector in storage room located north of general repair room.

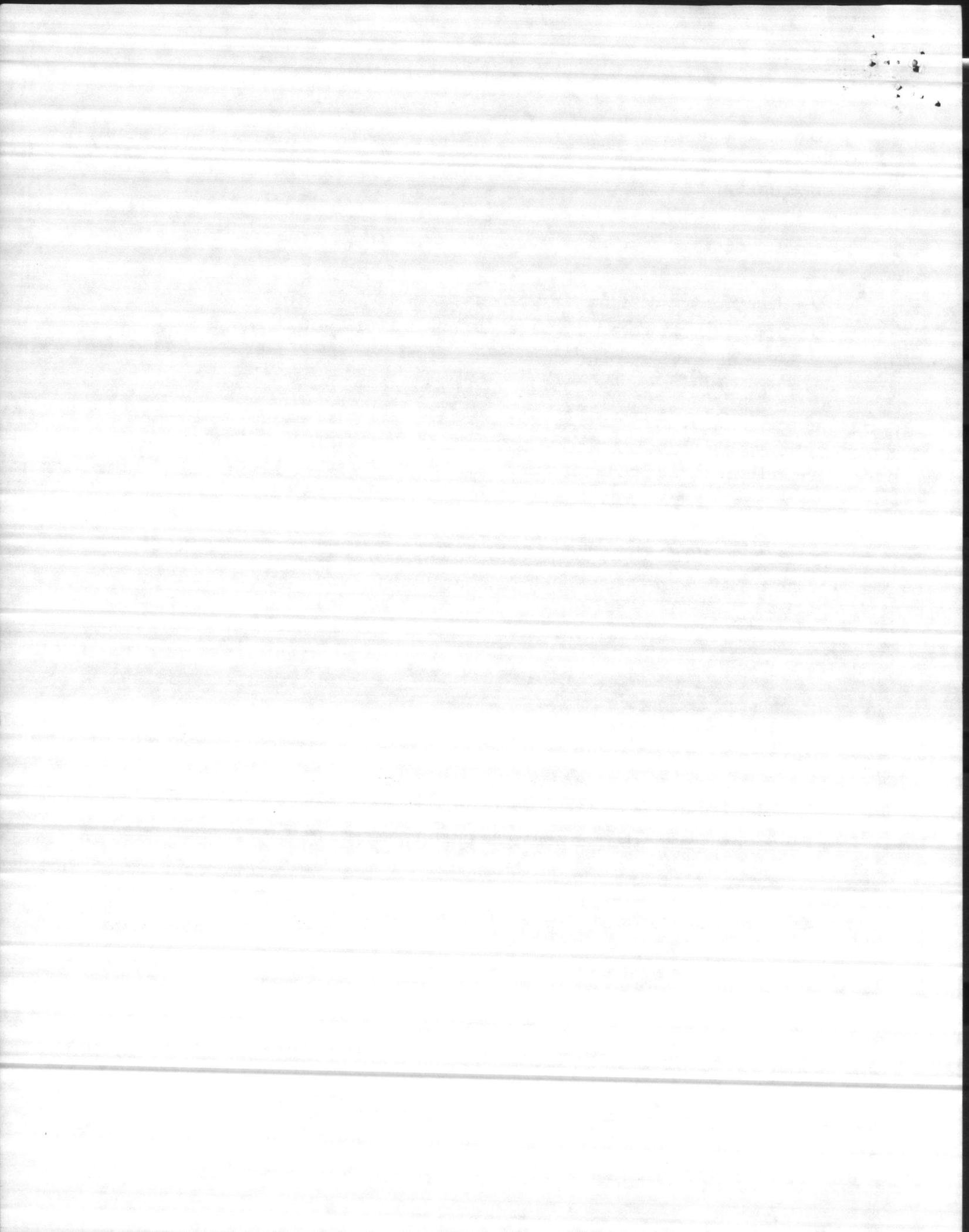
There are several doors and roll up doors on west side interior wall near the Aircraft Restoration and Communications area that are not shown on drawings.

Sheet 3 of 4

Provide fixed temp heat detectors in lieu of smoke detectors for the 2nd floor in system # 1

Provide rate of rise heat detectors in lieu smoke detectors in the Tech shop, room east of the Tech shop and Radio shop on 2nd floor for system #1

The floor, wall and door layout on the drawings is very misleading as there is quite a bit left out. This goes for both system 1 and 2



# Memorandum

January 22, 1986

Fire Prevention Branch, MCDEC

Public Works Officer, MCDEC

NEW FIRE ALARM SYSTEM FOR BUILDING 2112. CONTRACT # 85-C-2190

1. On January 16, 1986 a site inspection was made of building 2112 to review the drawing that were sent to the fire prevention branch from public works. It was noted that the A&E firm needs to return for more field work as noted in the below comments.

a. Specs

1. 2.1.7 Wiring-Should be included (Pigtail or T-tap connections to the alarm initiating and alarm indicating circuits are unacceptable)
2. 2.2.2 Batteries-Should be included (Alarm conditions for 15 minutes. Also batteries shall have lead bolt-on or wing-nut type terminals. Batteries with fast-tap terminals are unacceptable)
3. 2.2.6 Smoke Detectors (Photoelectric detectors are to be used)
4. 2.2.7.4 Why do you need Fire Warning Lights when you have AUDIO - Visual Alarms ?
5. 2.2.8 Annunciator panel. This is not need and is part of the control panel.
6. 2.2.11.2 Radio Fire Alarm Box. Shall be factory adjusted to 140.05 MHz

JAN 23 1986

