



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380-0001

MCO 11320.25
LFF-2-dt
24 Feb 1987

MARINE CORPS ORDER 11320.25

From: Commandant of the Marine Corps
To: Distribution List
Subj: Technical Investigation of Fires by Fire Marshals and Fire Protection Engineers
Ref: (a) MCO P11000.11A
Encl: (1) Format for Fire Investigation Report
Report Required: Fire Investigation Report (Report Symbol (EXEMPT)), par. 6 and encl. (1)

1. Purpose

a. In accordance with the reference, to establish the procedure for technical investigation of selected fires involving Marine Corps property by fire marshals assigned to engineering field divisions (EFD's) of the Naval Facilities Engineering Command and assisted by EFD fire protection engineers.

b. To require activities to conduct local investigations to determine cause and origin for all fires occurring on or involving Marine Corps property under their cognizance in order to:

(1) Properly report this information on DD Form 2324 (Fire Incident Report).

(2) Use the findings in critiques of fire department operations.

(3) Incorporate analysis of cause and origin into the activity fire prevention program.

2. Background

a. Technical investigations are not intended to interfere with or replace any investigations in accordance with the regulations prescribed under the Uniform Code of Military Justice. However, determination of fire cause and origin by a qualified fire investigator is the primary purpose of the investigation. As such the investigator's findings should be carefully coordinated and orchestrated with law enforcement authorities as a basis for further criminal investigation.

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24 Feb 1987

b. Investigations of significant fires provide information which serve as a basis for corrective measures to prevent the recurrence of similar fire losses. Products of the investigations include "lessons learned" which can be disseminated for the general good of the Marine Corps and the Navy.

c. Activity level investigations of fires can reveal "lessons learned" to support local fire protection improvements. Investigations of fires by locally available and knowledgeable personnel complement the limited number of investigations which can be performed by the fire marshals and fire protection engineers.

3. Scope

a. Fires involving Marine Corps property are defined as those occurring at or involving:

- (1) Marine Corps shore installations.
- (2) Marine Corps equipment/inventory on private property.
- (3) Parked aircraft.

b. Fires which meet the threshold for consideration for a technical investigation are those meeting one or more of the following elements:

- (1) Loss of life or multiple serious injuries as a direct result of the fire.
- (2) Initial estimate of property damage in excess of \$100,000.
- (3) Instances where expert cause and origin determination are required as a basis for criminal investigation.
- (4) Failure of fire protection features/equipment, due to unknown cause.
- (5) All fire bombings and acts of sabotage of critical operations.
- (6) Incidents where an investigation would be in the best interest of the Marine Corps, considering: probable significant lessons to be learned, liability potential, political impact, interservice/interagency agreements, community relations, or other unusual circumstances.



4. Conducting Investigations

a. The cognizant fire marshal is designated to direct and manage the technical investigation and shall be responsible for:

(1) Evaluating the request for an investigation and determining if it should be conducted; this evaluation shall include consultation with the Headquarters Marine Corps Fire Protection Program Administrator, the activity Fire Chief, the Fire Protection Engineer, the Fire Marshal Program Administrator, Naval Facilities Engineering Command (Code 10F), and the Assistant for Fire Protection Engineering, Naval Facilities Engineering Command (Code 04F1) as appropriate.

(2) Coordinating the on-scene conduct of the fire investigation with assistance of the EFD fire protection engineer.

(3) Liaison with law enforcement agencies, as required.

(4) Liaison with other commands/agencies/laboratories.

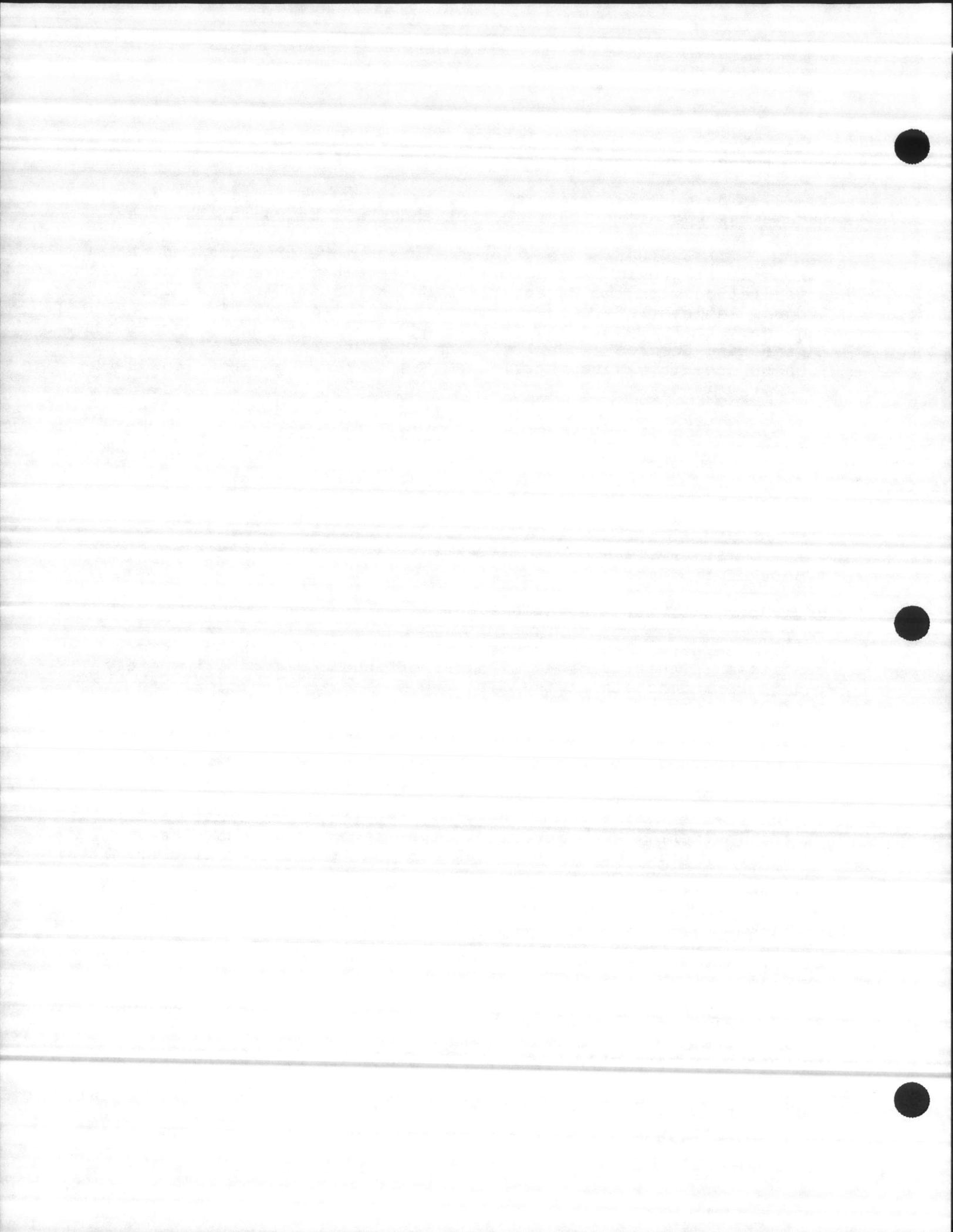
(5) Preparation and distribution of the investigation report of findings.

5. Reports of Fire Investigations

a. Reports shall be prepared in accordance with the format contained in the enclosure. The report shall describe in detail the cause and origin of the fire and emphasize conditions and operations contributing to the fire and its spread which, if corrected or modified, might prevent recurrence of similar fire losses. Particular attention should be given to the technical and economic justification of recommendations for corrective action.

b. Letters of transmittal shall contain a brief description of the incident. When reports include recommendations clearly under the cognizance of the local command, the letter of transmittal shall state, "By copy of this letter the commanding general (or commanding officer) is requested to initiate action on recommendation(s) (specify by number(s)) of the enclosure. A status report stating actions taken or proposed is required by the Commandant of the Marine Corps (CMC) (LFF-2) within 60 days of receipt of this report."

c. Reports shall be forwarded directly to the CMC within 30 days after the investigation has been completed. Copies shall be furnished to the commanding general or commanding officer of the activity involved; superiors in the chain of command; Commander, Naval Facilities Engineering Command and Commander, Naval Safety Center. The original report and copies to Marine Corps activities and superiors shall be retained for a period of 3 years. Because of criminal liability and privacy considerations the contents of



the report shall be "For Official Use Only" and will not be reproduced or distributed beyond the addressees listed above. A nondetailed digest of the incident may be developed by any of the addresses when deemed desirable to communicate "lessons learned" and make respective recommendations to field activities. All digests of fire incidents shall carefully screen out names, locations, and other details not necessary to explain the lessons learned in order to preserve the legal, liability, and privacy aspects of the investigative report.

6. Training

a. Fire marshals assigned to investigate fires will be those who have been provided formal training on basic investigative techniques covering cause, origin, and spread determinations; utilization of photography; collection of samples for laboratories or for display; legal procedure; and evidence gathering techniques.

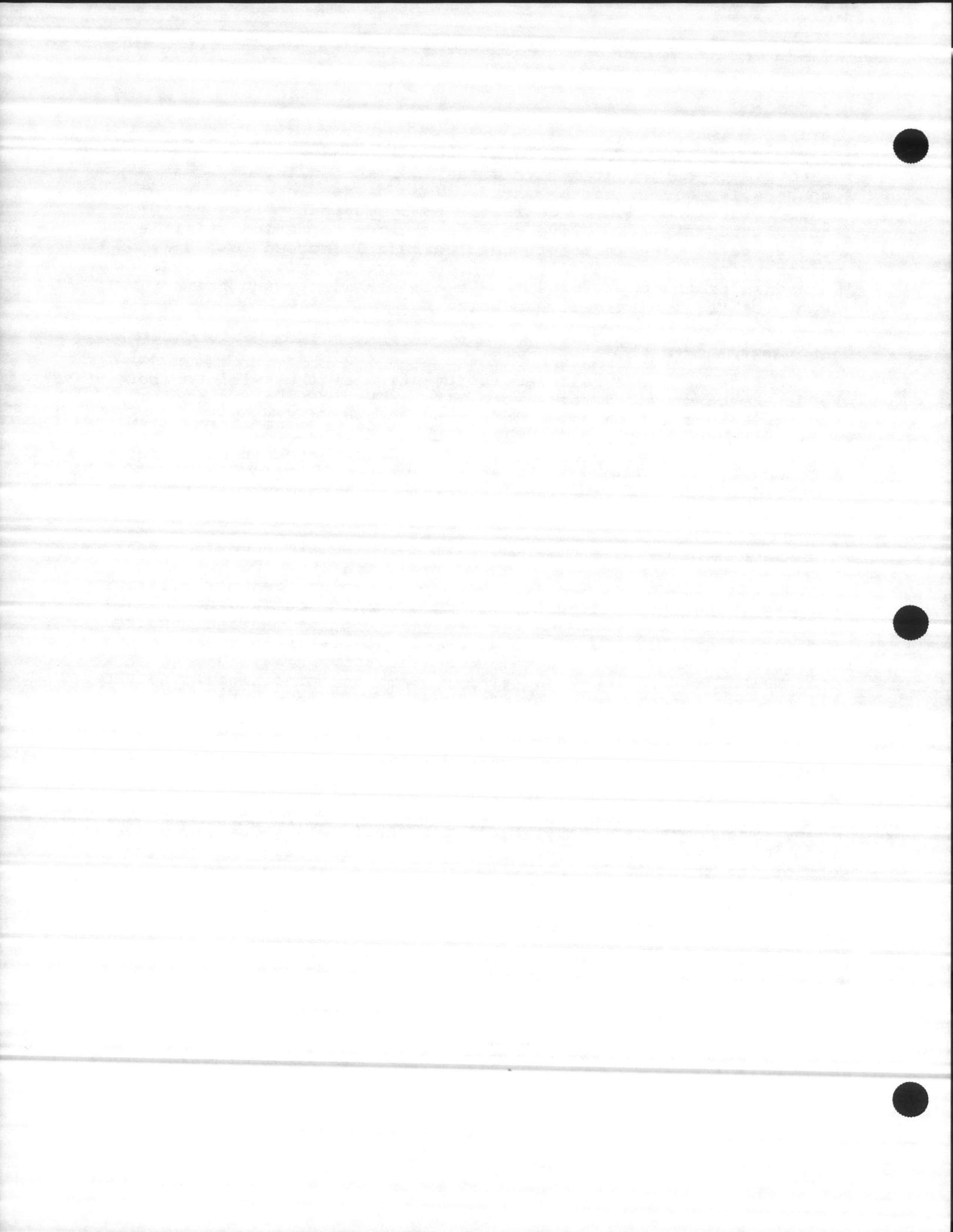
b. Similar fire investigative training is encouraged for selected activity level fire protection personnel.

7. Action

a. In conformance with the policy herein and responsibilities outlined in the reference, commanding generals, commanding officers, and officers-in-charge shall submit the message required by the reference to the cognizant Naval Facilities Engineering Command, EFD, and request a technical fire investigation when fires occur which meet the criteria of paragraph 3b, preceding. The EFD will arrange for the services of a qualified fire marshal and fire protection engineer. Pending arrival of the investigators, physical evidence should remain undisturbed to the maximum extent feasible in order to facilitate determination of cause, origin, and spread. In some instances, it may be necessary to preserve the chain of evidence until the investigator arrives.

b. The Commander, Naval Facilities Engineering Command is requested to provide the services of fire marshals and fire protection engineers to investigate significant fires in response to requests from Marine Corps commands in accordance with policy herein. Commander in Chief, Pacific Fleet is requested to provide services of the Pacific Ocean Fire Marshal when appropriate. Services of fire marshals and fire protection engineers may also be necessary to assist the counsel for courts of inquiry, Naval Investigative Service, or other investigative bodies convened to investigate fires at Marine Corps activities.

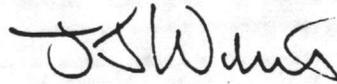
c. Activity commanders requested to implement action via the report transmittal letter of paragraph 5b, preceding, shall provide



MCO 11320.25
24 Feb 1987

a status report to the CMC (LFF-2) stating actions taken or proposed. This report shall be submitted within 60 days of receipt of the investigation report copy.

d. Activity heads are directed to conduct local investigations of all fires under their cognizance and to report significant findings of interest to the CMC (LFF-2). Selected personnel should receive formal fire investigative training to enhance the quality of these investigations.



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9508110, 111, 113, 114, 115, 116, 117 (2)

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FORMAT FOR FIRE INVESTIGATION REPORT

Date of Report: _____

Report Of Fire Investigation

(Name and Location of Activity)

(Name/structure number and occupancy)

1. General

a. Time and date of: fire ignition; fire discovery; fire report; fire department response (and subsequent alarms); fire control, and extinguishment.

b. Location of fire (where on the activity, building number and/or address).

c. Construction and major modifications or rehabilitations (by year).

d. Occupancy (details).

e. Exposures (type of construction, distances, etc.).

f. Building services (description of heating, electricity, gas, etc.).

g. Current and preceding weather conditions (impact on fire cause, spread, and extinguishment).

h. Hazardous materials factors.

2. Fire Protection Features

a. Water supply and hydrants.

b. Detection, alarm, and extinguishing systems (comment on how systems/equipment functioned/impacted on fire).

c. Portable fire fighting equipment.

3. Fire Fighting Force Available

a. Activity fire department (on duty personnel, equipment available, and equipment responding).

ENCLOSURE (1)



24 Feb 1987

b. Outside fire departments (personnel, equipment available, and equipment responding).

c. Other organized forces (auxiliary firefighters, etc.).

4. Narrative of the Fire

a. Circumstances

(1) Activities prior to fire (related to cause, discovery, and reporting of fire).

(2) Detection and reporting of fire.

(3) Attempts to extinguish or rescue pending arrival of fire department.

(4) Fire spread (materials involved and avenue of spread).

(5) Unusual conditions leading to or affecting fire.

b. Firefighting operations (attach sketch of each major stage of the fire).

(1) Response of personnel and equipment.

(2) Person(s) in direct charge of firefighting operations (in successive order).

(3) Evacuation and/or rescue operations.

(4) Protection of exposures.

(5) Extinguishing operations including command, control, and communications.

(6) Salvage operations.

(7) Noteworthy use of equipment and extinguishing agents (jaws of life, AFFF).

(8) Unusual events during fire.

(9) Attach copies of preplan materials from first due Engine Company and Chief Officer.

5. Cause And Origin Of Fire. (Full narrative of basis for determination and elimination of other causes).

ENCLOSURE (1)



6. Loss of Life and Personal Injury. (State cause of deaths and injuries).

7. Estimated Property Loss. (For guidance see DoDI 6055.7M, change 2, chapter 2, section E).

a. Building.

b. Contents.

c. Other than Marine Corps property (if this figure is 10 percent or more of Government loss identify items and owner).

8. Conclusions

a. Violation of regulations.

b. Failure of equipment.

c. Delayed alarm/discovery.

d. Evaluation of firefighting operations.

e. Prevention and/or loss minimization.

9. Recommendations. (The report must contain adequate data to clearly establish justification for each recommendation).

10. Investigators: _____ Fire Marshal

_____ Fire Protection Engineer

Dates of on-site investigation: _____

11. Attachments

a. Photographs. (As obtainable, photograph scenes should include an overall view of the structure, or a similar structure prior to the fire and an overall view of the fire scene (aerial or distant shot). Each photo shall have an identifying label and "TCP" marked on close-up interior shots. Where necessary scales or common known size items shall be included in the photo; color film shall be used when necessary.)

b. Sketches. (Provide a plan view sketch of the area(s) or origin including location and position of evidence, fatalities, and injury occurrences. Also provide a sketch scene showing fire apparatus (denote alarm dispatched on and approximate time of arrival), hydrants with flow capability and main size, master stream devices, and other pertinent data).

c. Miscellaneous.

ENCLOSURE (1)

