AIR OPERATIONS MANUAL

U. S. NAVAL AIR STATION
LOS ALAMITOS
LONG BEACH, CALIFORNIA
NAS INSTRUCTION 3710.4B

DISTRIBUTION LIST (Continued)

FAA SAFETY OFFICE, LONG BEACH MUNICIPAL AIRPORT,
LONG BEACH, CALIF.
FAA LONG BEACH AIRPORT TRAFFIC CONTROL TOWER,
LONG BEACH, CALIF. (2)
FAA FULLERTON AIRPORT TRAFFIC CONTROL TOWER,
FULLERTON, CALIF.
HQ WESTERN AIR DEFENSE FORCE, HAMILTON AFB, CALIF.
    Attn: WDOTN-C
FIRST AERO MEDICAL GROUP (LIGHT) MATS,
    TRAVIS AFB, CALIF. (2)
CG FIRST MAW MCAS EL TORO, CALIF.
RATCC, MCAS EL TORO, CALIF.
CO LOS ALAMITOS (46)
CO, MARDT LOS ALAMITOS (40)
CO VS-23 (2)
CO VS-25 (2)
CO VS-35 (2)
CO VS-37 (2)
CAVG-57
CO, NROTC UNIT, U.C.L.A., LOS ANGELES, CALIF.
CO, NROTC UNIT, U.S.C., LOS ANGELES, CALIF.
NAVAL REGIONAL AIRSPACE OFFICER, LOS ANGELES, CALIF.
NAS INSTRUCTION 3710.4B

From: Commanding Officer
To: Distribution List

Subj: Air Operations Manual, U. S. Naval Air Station Los Alamitos, Long Beach, California; promulgation of

Ref: (a) OPNAV INSTRUCTION 3710.21 of 16 December 1954

1. Purpose. To promulgate, in accordance with reference (a), the Air Operations Manual for the Naval Air Station Los Alamitos, Long Beach, California, which establishes rules and regulations for guidance, information and compliance of all persons concerned with the operation of aircraft and/or related vehicular traffic on the field proper.

2. Cancellation. The Air Operations Manual, NAS Los Alamitos Instruction 3710.4A of 7 February 1958 and the revisions thereto are hereby cancelled and superseded and shall be destroyed.

3. General. This manual has been prepared in accordance with the provisions of U. S. Navy Regulations, pertinent Federal Air Regulations, and directives issued by the Chief of Naval Air Training and Chief of Naval Air Reserve Training. The rules and regulations set forth do not change or modify existing instructions issued by competent higher authority, nor do they relieve pilots of their responsibility for the use of good judgement and the observance of safety precautions.

4. Administration. The Operations Officer, NAS Los Alamitos as direct representative of the Commanding Officer, is responsible for insuring compliance with the provisions of this manual and with all matters relating or pertaining to the control and clearance of aircraft at Naval Air Station, Los Alamitos.

5. Revisions. Changes to Instrument Approach Illustrations will be made by the holders of this manual based on information published by the Hydrographic Office. All other changes will be promulgated by NAS Los Alamitos Change Transmittal.
NAS INSTRUCTION 3710.4B

DISTRIBUTION LIST:

NAS ALAMEDA, CALIF.
NAS CORPUS CHRISTI, TEX.
NAS DALLAS, TEX.
NAS GLENVIEW, ILL.
NAS GYMCO, GA.
NAS GROSSE ILE, MICH.
NAS JACKSONVILLE, FIA.
NAS JOHNSVILLE, PA.
NAS KEY WEST, FIA.
NAS LAKEHURST, N.J.
NAS MEMPHIS, TENN.
NAS MINNEAPOLIS, MINN.
NAS MIRAMAR, CALIF.
NAS MOFFETT, CALIF.
NAS NEW ORLEANS, LA.
NAS NEW YORK, N.Y.
NAS NORFOLK, VA.
NAS NORTH ISLAND, CALIF.
NAS OAKLAND, CALIF.
NAS OCEANA, VA.
NAS CLATHE, KAN.
NAS PATUXENT RIVER, MD.
NAS PENSACOLA, FIA.
NAS POINT MUGU, CALIF.
NAS QUONSET POINT, R.I.
NAS SEATTLE, W.N.
NAS SOUTH WEYMOUTH, MASS.
NAS WHIDBEY ISLAND, W.N.
NAS WILLOW GROVE, PA.
NAAS CABIANISS FIELD, CORPUS CHRISTI, TEX.
NAAS CHASE FIELD, CORPUS CHRISTI, TEX.
NAAS FALLON, NEV.
NAAS KINGSVILLE, TEX.
NAAS MAYPORT, FIA.
NAAS NEW IBERIA, LA.
NAAS REAM FIELD, CALIF.
NAAS SAUFLEY FIELD, PENSACOLA, FIA.
NAAS WHITING FIELD, PENSACOLA, FIA.
NAF LITCHFIELD PARK, ARIZ.
ALF EL CENTRO, CALIF.
MCAS CHERRY POINT, N.C.
MCAS EL TORO, CALIF.
MCAS QUANTICO, VA.
MCAP CAMP PENDLETON, CALIF.
HQ FOURTH AF, HAMILTON AFB, CALIF.
CO MARCH AFB, CALIF.
COMMANDER ELEVENTH COAST GUARD DISTRICT,
LONG BEACH, CALIF.
COMMANDER TWELFTH COAST GUARD DISTRICT,
SAN FRANCISCO, CALIF.
COMMANDER U.S. COAST GUARD AIR STATION,
SAN DIEGO, CALIF.
<table>
<thead>
<tr>
<th>CHANGE NO.</th>
<th>INSERTED BY</th>
<th>RANK/RATE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>GENERAL INFORMATION</td>
</tr>
<tr>
<td>II</td>
<td>CLEARANCE OF AIRCRAFT</td>
</tr>
<tr>
<td>III</td>
<td>COURSE RULES</td>
</tr>
<tr>
<td>IV</td>
<td>AIR TRAFFIC CONTROL</td>
</tr>
<tr>
<td>V</td>
<td>TRANSIENT AIRCRAFT</td>
</tr>
<tr>
<td>VI</td>
<td>ILLUSTRATIONS</td>
</tr>
<tr>
<td>VII</td>
<td>AIRCRAFT CRASH &amp; RESCUE</td>
</tr>
</tbody>
</table>
CHAPTER I

GENERAL

101 GENERAL PRUDENTIAL RULES

102 AIRCRAFT NOISE REDUCTION

103 FIELD, HANGAR AND SERVICE FACILITIES

103.1 LOCATION
103.2 NAS ALAMITOS TOWER CONTROL ZONE
103.3 ADMINISTRATIVE AND OPERATIONAL CONTROL
103.4 RUNWAY DATA
103.5 PARKING AREA AND TAXIWAY DATA
103.6 FIELD ELEVATION
103.7 CONTROL TOWER
103.8 OPERATIONS OFFICERS
103.9 WIND INDICATORS
103.10 EMERGENCY ARRESTING GEAR
103.11 MIRROR LANDING SYSTEM
103.12 COMPASS ROSE
103.13 AIRCRAFT STOWAGE AND PARKING
103.14 AIRCRAFT SERVICE AND MAINTENANCE
103.15 METEORLOGICAL FACILITIES AND SERVICES
103.16 FLIGHT PLANNING AND CLEARANCE
103.17 FLIGHT RATIONS

104 LIGHTING FACILITIES

105 HOURS OF OPERATIONS

106 VEHICULAR AND PEDESTRIAN TRAFFIC
CHAPTER I

GENERAL

101. GENERAL PRUDENTIAL RULES:

The regulations set forth herein are compiled in accordance with current directives from higher authority and issued to promote the safe, orderly and expeditious movement of air traffic at Naval Air Station, Los Alamitos and within its designated control zone. These regulations are not intended to cover every contingency which may arise or every rule of safety or good practice, nor should they be interpreted to supplant or modify existing instructions issued by higher authority. Current OPNAV Instructions, pertinent Navy Department directives, Federal Air Regulations, and applicable joint agreements with the Los Angeles Air Route Traffic Control Center (LA-ARTC) and the Long Beach Tower form the basis for air operations within the close network of airways bordering Los Angeles International Airport; Long Beach Municipal Airport; U.S. Marine Corps Air Station, El Toro; Fullerton Airport; Marine Corps Air Facility, Santa Ana; Orange County Airport; and the Naval Air Station, Los Alamitos. It is therefore incumbent on all pilots to exercise constant vigilance to avoid collisions in this area of high density traffic, to abide scrupulously with the provisions of this manual, and to maintain a full and current knowledge of the fundamental basis for these regulations. It is considered that only emergency conditions preclude strict adherence to these regulations and any deviation from these procedures will be based on sound judgement and good airmanship.

102. AIRCRAFT NOISE REDUCTION:

Popular concern over aircraft noise has become an increasingly serious public relations problem to the U.S. Navy and other Defense Department agencies. The densely populated areas adjacent to NAS, Los Alamitos require that this activity exert a persistent effort to effectively implement the noise abatement program. Accordingly, every pilot is enjoined to exercise utmost caution in the conduct of flight over congested areas. Power changes, maneuvers and/or flight levels which may create a nuisance factor through the resultant noise at ground level, even though not specifically constituting flight violation, are to be avoided whenever possible.

103. FIELD, HANGER AND SERVICE FACILITIES:

103.1 LOCATION. The Naval Air Station, Los Alamitos is located five (5) miles East-Southeast (ESE) of the Long Beach Municipal Airport. The geographical coordinates are as follows:

Latitude 33° 41' 30" North
Longitude 118° 03' 42" West

The landing field bears fifty (50) degrees magnetic, distance one point seven (1.7) nautical miles from the Long Beach Low Frequency Radio Range station. The Long Beach VORTAC a combination VHF Omni Directional Range and UHF pulse type Omni Range with distance measuring equipment is located on the field proper. (refer plates 7 & 8).
103.2 **LOS ALAMITOS TOWER CONTROL ZONE.** In general, the airspace within a radius of five (5) miles of the control tower extending from the surface up to and including 3,000 feet constitutes the Los Alamitos Tower Control Zone.

103.3 **ADMINISTRATIVE AND OPERATIONAL CONTROL.** The Naval Air Station, Los Alamitos, its runways and associated facilities are under the administrative and operational control of the Chief of Naval Air Reserve Training, and are jointly used by the Naval Air Reserve, Marine Air Reserve, and such Fleet squadrons as may be assigned.

103.4 **RUNWAY DATA.** The landing area consists of two (2) parallel runways constructed of concrete and macadam, described as follows:

<table>
<thead>
<tr>
<th>Runway</th>
<th>Length</th>
<th>Width</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4L - 22R</td>
<td>5900 feet</td>
<td>150 feet</td>
<td>Northeast-Southwest</td>
</tr>
<tr>
<td>4R - 22L</td>
<td>8000 feet</td>
<td>200 feet</td>
<td>Northeast-Southwest</td>
</tr>
</tbody>
</table>

The wheel load capacities of the runway are as follows:

<table>
<thead>
<tr>
<th>Runway</th>
<th>Wheel Load Capacities</th>
<th>Tire Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4L - 22R</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>4R - 22L</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
</tbody>
</table>

103.5 **PARKING AREA AND TAXIWAY DATA.** All taxiways are seventy-five (75) feet wide. The load capacities of the parking area and all taxiways are as follows:

<table>
<thead>
<tr>
<th>Surface Designation</th>
<th>Wheel load capacity</th>
<th>Tire Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Area</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #1</td>
<td>15,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #2</td>
<td>15,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #3 NE-SW Section</td>
<td>35,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>E - W Section</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #4</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #5</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #6</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #7</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #8</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #9</td>
<td>35,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>Taxiway #10 N - S Section</td>
<td>35,000 pounds</td>
<td>150 PSI</td>
</tr>
<tr>
<td>NW-SE Section</td>
<td>50,000 pounds</td>
<td>150 PSI</td>
</tr>
</tbody>
</table>

103.6 **FIELD ELEVATION.** The elevation of NAS, Los Alamitos is thirty-five (35) feet above Mean Sea Level (MSL).

103.7 **CONTROL TOWER.** The control tower is located on top of the main hangar (Building #1) on the North side of the field.

103.8 **OPERATIONS OFFICERS.** The Operations Officers, Weather Services, Flight Clearance and associated spaces are located directly below the control tower on the first deck of the main hangar building.
103.9 WIND INDICATORS. A free swinging tetrahedron is located between runway 22L and the approach end of runway 22R. The tetrahedron is lighted between sunset and sunrise. Small non-lighted wind socks for utilization by rotary-wing aircraft are located at the Helicopter Line west of the control tower and at the Southwest end of abandoned runway 16 (closed).

103.10 EMERGENCY ARRESTING GEAR. A combination Pendant (Type E-5) and Runway Overrun Barrier (Type MA-1A) arresting gear is installed on the overrun of runway 22L, ten (10) feet beyond the threshold lights (refer to plate 4). The chain arresting gear is kept in the armed status ready for immediate use during all flight operations on Runway 22L; the barrier can be raised into position within fifteen (15) seconds via remote control from the tower.

103.11 MIRROR LANDING SYSTEM. A permanent type mirror landing system is installed on the port side of runway 22L 750 feet from the approach end and set for a three (3) degree glide angle. The use of this facility is available only as an aid to landing, using the normal approach pattern. Mirror Landing Practice and its attendant type pattern is not authorized at this station. Lights for the mirror will be turned on for landing of all jet aircraft and upon request to the tower for conventional type aircraft.

103.12 COMPASS ROSE. A one (1) turntable compass rose is located near the West boundary of the field on the North/South taxiway (taxiway #3). Use of the compass rose is arranged through the control tower.

103.13 AIRCRAFT STOWAGE AND PARKING. Transient Prop aircraft will normally be parked in the designated parking area located between taxiway #9 and #10 (refer plate #3 or #4). Transient Jet aircraft will normally be parked on the West ramp (refer plate #3 or #4). Temporary parking of transient aircraft on the ramp in front of operations may be arranged by the Operations Duty Officer. Hangar space is limited and is not available to transient aircraft except in unusual circumstances.

103.14 AIRCRAFT SERVICE AND MAINTENANCE. Routine maintenance and repair may be requested through the transient line shack, or the Aircraft Maintenance Officer. Servicing delays are to be expected on week-ends. The following is available:

1. Aircraft repair and maintenance, Class "C".
4. Aviation Lube Oil, 1100.
5. High pressure, low pressure, and liquid oxygen and/or replacement bottles.
103.15 METEORLOGICAL FACILITIES AND SERVICES. The weather office is located adjacent to the operations spaces in the main hangar (Building #1). Class "D" aerological services including teletype circuits "A" and "C", a facsimile receiver, and a qualified forecaster are available twenty-four (24) hours daily. Current allowances for aerological personnel however, are insufficient to support operations significantly above those normally generated by assigned units. Vertical cross sections for cross-country flights are prepared on two (2) hour notice. Current upper air soundings and winds aloft charts are on display for use in jet operations. Surface observations are recorded and transmitted hourly.

103.16 FLIGHT PLANNING AND CLEARANCE. A flight planning room is provided in the operations spaces where current air navigations charts, publications, NOTAMS, and associated materials are available. Flight clearance services are normally available from 0800 to 2000 daily except Thursday and Saturday when service is provided until 2200. Service at other than the foregoing periods will be provided on request.

103.17 FLIGHT RATIONS. Box lunches are available during normal working hours, with two (2) hour prior notice. All requests, other than those from Fleet Units based aboard, will be ordered through the Operations Duty Officer (see 501.2).

104. LIGHTING FACILITIES:

104.1 LIGHTING FACILITIES. Lighting facilities are available as follows:

1. The two (2) parallel runways are lighted in accordance with Navy, Air Force and FAA standards. Runway 22L-4R (Instrument runway) is equipped with variable five (5) position, high intensity lights. Runway 22R-4L is equipped with medium intensity, single position lights.

2. Standard Navy lighted runway distance markers are installed on runway 22L-4R.

3. All taxiways are lighted in accordance with the standard Navy system.

4. The main hangar is equipped with ramp flood lights located on the East, South and West sides.

5. Standard red obstructions lights are installed on all hazards located within the traffic pattern. A detailed list of all local obstructions is provided in Chapter III of this manual.

6. A free swinging tetrahedron, located between runway 22L and the approach end of runway 22R, is lighted between sunset and sunrise.

7. A mobile flood light truck is available on fifteen (15) minutes notice.

8. A flashing amber light, located on top of the control tower, is in operation whenever right hand traffic is in effect.
104.1 LIGHTING FACILITIES (Continued)

9. A rotating airport beacon showing a double-peaked white flash alternating with a single-peaked green flash is located on top of the control tower. The beacon is in operation during daylight hours when the local weather is below VFR minimums and from sunset to sunrise. All runway, taxiway and obstruction lights are controlled by the tower.

10. Standard Navy Parallel Row and Crossbar (High Intensity) Approach Lights, installed in the approach zone for runway 22L (see plate #4) are available during instrument weather conditions and/or upon pilots request. The five (5) position lights are normally set at medium intensity; other brilliancy settings are available upon request to the control tower.

105. HOURS OF OPERATION:

105.1 HOURS OF OPERATION. NAS, Los Alamitos is open for flight operations from 0800 to 2000 daily except on Thursday and Saturday when services are provided until 2200 local time. All support activities including the control tower, Flight Clearance, Meteorological Service, charts and hydrographic materials and necessary line support will be provided at other times upon prior notice or for emergencies by alerting the control tower personnel through airborne contact with Flight Service or Long Beach Approach Control.

106. VEHICULAR AND PEDESTRIAN TRAFFIC:

106.1 VEHICULAR AND PEDESTRIAN TRAFFIC. Vehicular and pedestrian traffic on the landing field area shall be governed by the following:

1. No vehicles shall be driven onto a runway unless permission has been granted by the Operations Officer or his authorized representative.

2. Drivers of vehicles shall obtain clearance from the control tower by radio or light signals prior to crossing any runway.

3. Vehicles authorized to operate regularly on the field shall be appropriately painted and marked. Other vehicles authorized for special operation on the field will carry an international orange and white checkered flag.

4. Personnel not officially connected with the handling or servicing of aircraft are prohibited from walking on any portion of the runways, taxiways or ramps.
CHAPTER II

CLEARANCE OF FLIGHTS

201 DEFINITION OF FLIGHTS
201.1 LOCAL FLIGHT
201.2 EXTENDED FLIGHT
201.3 PROTRACTED FLIGHT
201.4 OVERSEAS FLIGHT

202 AUTHORIZATION FOR FLIGHTS
202.1 FLIGHT SCHEDULES
202.2 LOCAL FLIGHTS
202.3 EXTENDED FLIGHTS
202.4 PROTRACTED FLIGHTS
202.5 OVERSEAS FLIGHTS
202.6 NARESRAIIOM AIRLIFTS, REGULAR AIRLIFTS, ADMINISTRATIVE FLIGHTS AND FERRY FLIGHTS
202.7 FLEET AIRCRAFT
202.8 TRANSIENT AIRCRAFT

203 FLIGHT PLANNING REQUIREMENTS
203.1 NAVAL AND MARINE PILOTS
203.2 NAVAL AIR TRAINING COMMAND PILOTS
203.3 NARESRAIIOM PILOTS FLYING CROSS COUNTRY

204 CLEARANCE OF FLIGHTS
204.1 CLEARING AUTHORITY
204.2 PILOTS EXERCISING OWN CLEARANCE AUTHORITY
204.3 IFR AND POINT-TO-POINT FLIGHTS
204.4 LOCAL FLIGHTS
204.5 HOSPITAL (AIREVAC) FLIGHTS
204.6 OPERATIONAL CLEARANCES

205 CLEARANCE OF PASSENGERS
205.1 CLEARANCE AUTHORITY
205.2 IDENTIFICATION
205.3 MILITARY PASSENGERS
205.4 CIVILIAN PASSENGERS
205.5 SECURITY
205.6 SAFETY AND SURVIVAL EQUIPMENT
205.7 SAFETY AND SURVIVAL BRIEFING
205.8 CREW AND PASSENGER LISTS
205.9 SAFETY OF OPERATION

206 DEFINITION OF LOCAL FLYING AREA
206.1 GEOGRAPHICAL DESCRIPTION
206.2 SECTORS

207 VFR WEATHER MINIMUMS
CHAPTER II
CLEARANCE OF FLIGHTS

201. DEFINITION OF FLIGHTS:

201.1 LOCAL FLIGHT. A local flight is one that is conducted entirely within the local flying area (see plate #1) and in which no landing is made other than at NAS, Los Alamitos.

201.2 EXTENDED FLIGHT. An extended flight is one which proceeds beyond the local area but not more than twelve hundred (1,200) nautical miles from NAS, Los Alamitos or any flight, except a protracted flight, which originates at NAS, Los Alamitos with the intention of landing at another field.

201.3 PROTRACTED FLIGHT. A protracted flight is one which proceeds more than twelve hundred (1,200) nautical miles from NAS, Los Alamitos and terminates within the limits of the continental United States.

201.4 OVERSEAS FLIGHT. An overseas flight is one which terminates outside the limits of the continental United States.

202. AUTHORIZATION FOR FLIGHTS:

202.1 FLIGHT SCHEDULES. Normal flight operations for NAS, Los Alamitos Organized Naval Air Reserve Units, Organized Marine Air Reserve Units, such Fleet Squadrons or detachments as may be based aboard and all other pilots flying station aircraft will be authorized through the promulgation of daily flight schedules over the signature of the appropriate authorizing officer as delineated in paragraph 202.2.

202.2 LOCAL FLIGHTS. All local flights utilizing station aircraft scheduled or unscheduled, must be authorized by the Training Officer, Flight Training Officer, Assistant Flight Training Officer or Operations Duty Officer. Local flights for Marine personnel must be authorized by the Commanding Officer, Executive Officer or Operations Officer of the Marine Air Reserve Training Detachment.

202.3 EXTENDED FLIGHTS. Extended flights, including two (2) ROVnites may be authorized for station, detached duty and Organized Naval Reserve pilots by the Flight Training Officer. In the case of Marine personnel, the Commanding Officer and Executive Officer, MARTD may authorize such flights. Extended flight involving more than two (2) ROVnites must be authorized by the Commanding Officer for Naval personnel of the Commanding Officer, MARTD, for Marine personnel.

202.4 PROTRACTED FLIGHTS. Protracted flights may only be authorized by the Commanding Officer, Naval Air Station, Los Alamitos.
202.5 OVERSEAS FLIGHTS. Requests for overseas flights in NAS, Los Alamos aircraft shall be submitted to CNARESTRA for approval via the Commanding Officer.

202.6 NARESTRACOM AIRLIFTS, REGULAR AIRLIFTS, ADMINISTRATIVE FLIGHTS AND FERRY FLIGHTS. The Operations Officer is empowered to authorize all NARESTRACOM airlifts, regular airlifts, administrative and ferry flights. The Operations Officer has the responsibility and authority for assignment of pilots for these flights.

202.7 FLEET AIRCRAFT. The Commanding Officer, Officer-in-Charge or Senior Naval Aviator present of each detachment of each unit, detachment or squadron based aboard authorizes flights involving the aircraft over which he exercises Operational control.

202.8 TRANSIENT AIRCRAFT. Flight departures, VFR or IFR, involving transient aircraft are considered as duly authorized by the activity to which the pilot is attached.

203 FLIGHT PLANNING REQUIREMENTS:

203.1 NAVAL AND MARINE PILOTS. All Naval and Marine pilots requesting clearance must present evidence that adequate pre-flight planning has been accomplished to insure a safe and properly conducted flight.

203.2 NAVAL AIR TRAINING COMMAND PILOTS. All pilots attached to the Naval Air Reserve Training Command must present for inspection a completed flight plan and log form on flights extending beyond the local flying area as outlined on plate #1 of this manual. Flight logs are as follows:
- Single engine propeller/jet CNAVTRA GEN 3760/1
- Multi-engine propeller CNAVTRA GEN 3760/2

203.3 NARESTRACOM PILOTS FLYING CROSS COUNTRY. All pilots flying NARESTRACOM aircraft attached to NAS, Los Alamos must present a completed CNARESTRA GEN 3710/1 (Authority for Clearance) if the flight is to proceed beyond the local operating area. Pilots filing to airfields in the local operating area must present completed form NAS PA2 3700/1 (rev 6-60) indicating destination.

204 CLEARANCE OF FLIGHTS:

204.1 CLEARING AUTHORITY. The Commanding Officer is the clearing authority for NAS, Los Alamos. The Operations Officer, Assistant Operations Officer and Operations Duty Officer are delegated the authority and responsibility to act as clearance Officer for all flights departing NAS, Los Alamos. Clearance may be withheld if any question exists as to the pilots' ability, condition of the aircraft, weather conditions or any other circumstance considered to be of a hazardous nature.
204.2 PILOTS EXERCISING OWN CLEARANCE AUTHORITY. A pilot possessing his own clearance authority who elects to exercise this authority against the advice of the Clearance Officer of NAS, Los Alamitos will be required to sign a form. This form states that he has been briefed on all enroute, destinations and alternate weather and that he understands he is making the flight contrary to the advice of the Clearance Authority of NAS, Los Alamitos, Long Beach, California. Further, he must state in writing the urgency of the flight.

204.3 IFR AND POINT-TO-POINT FLIGHTS. All instrument and point-to-point flight clearances shall be filed at the clearance desk on a properly completed DD 175 by the pilot of each aircraft or the flight leader of each group flight, along with other completed forms as specified elsewhere in this chapter. Upon prior arrangement with the Operations Officer, Commanding Officers of Fleet Units based aboard may authorize IFR/VFR on top local flights to be cleared from the Unit's daily flight schedule, providing the aircraft call sign is on file with operations prior to departure.

204.4 LOCAL FLIGHTS.

1. Local flights shall be conducted in the local flying area under VFR and VFR on Top conditions only. Local flights when listed on an approved flight schedule may be filed by telephone with NAS Los Alamitos Operations Flight Desk. The Operations Duty Officer will be kept advised by all operating units of any changes in their respective schedules. Local and test flights by transient aircraft shall be cleared, in person, with the Operations Duty Officer.

2. For all local flights appearing on daily flight schedules or filed by the respective duty officer, it shall be the responsibility of the Commanding Officer of the squadron or unit concerned or the officer approving the flight schedule to insure:
   a. That the pilots have been properly briefed on existing and anticipated weather as NAS, Los Alamitos, in the local flying area and along the intended flight route.
   b. That no landing will be made at other than NAS, Los Alamitos, except in an emergency.
   c. That weight and balance requirements have been fulfilled in accordance with existing directives.
   d. That the pilots are currently qualified in type aircraft and for the mission intended.
   e. That the pilots have been briefed on all pertinent features of this manual.
   f. In case of Jet aircraft, that the pilot records on the aircraft assignment release (NAS PAT 3700-1-REV 6-60) the computed take off distance and the computed minimum acceptable airspeed for a 3,000 feet take off roll.
   g. In the case of helicopters that the weight and balance is computed for each flight and recorded on form (NAS PAT 3700-1 REV 6-60) or is on file in operations.
3. Pilots of NAS, Los Alamitos aircraft may file local VFR flight plans with the Operations Clearance Desk by submitting in person, or by telephone, the following item of information:
   a. Aircraft bureau number and/or modex or side number.
   b. Type aircraft.
   c. Pilots' name, rank/rate and unit to which attached.
   d. ETD, ETA and local area sector(s), in sequence, in which operations will be conducted.

4. Pilots on local flights will make position reports to the nearest military or FAA radio facility at each hour interval when flights exceed two (2) hours.

204.5 HOSPITAL (AIREVAC) FLIGHTS. Military Air Transportation Service Hospital Evacuation Flights do not require a flight plan when departing from an intermediate or scheduled base stop which has been entered on the aircraft clearance form DD 175 filed at the base of origin, provided that:
   1. The stop at any intermediate or scheduled base is no longer than one (1) hour.
   2. There is no change in crew or passengers other than the "AIREVAC".
   3. A list of all occupants is left with the Operations Duty Officer when a change is made.

Such flights will be escorted during arrival and departure by a fire truck. A properly manned ambulance will stand by at operations while the aircraft is on the ground.

204.6 OPERATIONAL CLEARANCES. Operational clearances for CNAVSTRA controlled aircraft will be authorized by the Commanding Officer only in the event of special exercises considered essential to defense or emergency missions. Fleet aircraft based at NAS, Los Alamitos may operate under operational clearances providing an official Fleet Air Detachment instruction based on effective CNAVSTRA policy designating clearance authority is on file with the NAS, Los Alamitos Operations Officer. Operational flight clearances shall be filed on the standard aircraft clearance form (DD 175) and delivered to the NAS Operations Duty Officer for coordination with the local FAA agency. Departure and climb out instructions will be issued by radio from Navy Alamitos Tower.

205. CLEARANCE OF PASSENGERS:

205.1 CLEARANCE AUTHORITY. A passenger is an individual in an aircraft who is not a member of the assigned crew. All passengers departing NAS, Los Alamitos in military aircraft will be released for flight by the Commanding Officer or his designated representative in accordance with current OPNAV and other pertinent directives. This clearance authority will be administered at the Operations Clearance Desk.
205.2 IDENTIFICATION. Proper and adequate identification must be furnished by all personnel, both military and civilian.

205.3 MILITARY PASSENGERS. Military passengers will be in the appropriate uniform of the day. Slacks prescribed for the particular uniform are recommended for female passengers.

205.4 CIVILIAN PASSENGERS. Civilian (Civil Service) passengers who are authorized by orders to ride in military aircraft will present a copy of such orders to the clearing authority. Civilian (Non Civil Service) passengers in military aircraft will present such authorization to the clearing authority and shall further execute a "Hold-Harmless" agreement in the presence of the clearance authority prior to departure.

205.5 SECURITY. Proper security measures will be taken by the pilot in command to ensure that access to classified equipment, information or material is denied to unauthorized persons.

205.6 SAFETY AND SURVIVAL EQUIPMENT.
   1. All passengers will be provided with a seat and a seat belt.
   2. A complete parachute and harness is required aboard the aircraft for each individual (crew and passenger) except when the flight is to be conducted in a multi-engine transport type aircraft operating in an air carrier service which is capable of maintaining level flight under normal loading conditions with fifty (50) percent of its engines inoperative (NARESTRACOM aircraft will be operated in accordance with current CNARESTRA directives).
   3. Aircraft operating over water and ocean areas, beyond safe gliding distance from land, must have aboard a properly functioning life vest (Mae West or other approved type) for each crew member and passenger embarked. There must be sufficient life rafts and survival equipment to safely support all personnel aboard.

205.7 SAFETY AND SURVIVAL BRIEFING. Passengers on flights of which survival equipment in the preceding paragraphs is applicable, will be properly and adequately briefed by the pilot prior to take-off on the use of such equipment, including escape procedures.

205.8 CREW AND PASSENGER LISTS. All crew members will be clearly designated on the appropriate flight plan form and/or manifest as to name, initials, rank/rate, file/service number, branch of service and parent organization in the case of military personnel. In the case of civilians, the name, initials and other pertinent identifying information, including home address, must be listed.
205.9 **SAFETY OF OPERATION.** Every effort will be made on the part of all responsible personnel to minimize risk and provide the safest possible operating conditions for passenger-carrying aircraft.

206 **DEFINITION OF LOCAL FLYING AREA:**

206.1 **GEOGRAPHICAL DESCRIPTION.** The established local flying area can be generally defined as an area extending to the Pacific ADIZ on the West, Southern Border ADIZ on the South and approximately 250 nautical miles North and East of the Long Beach Omni Range (located on NAS, Los Alamitos). The area excludes the Greater Los Angeles Metropolitan area and the area generally Northeast of NAS, Los Alamitos (refer plate #2). The specific outer boundary of the local flying area is established by a line connecting the following coordinates:

- 36 degrees 18 minutes North Latitude
  122 degrees 10 minutes West Longitude

- Thence to
  37 degrees 47 minutes North Latitude
  120 degrees 00 minutes West Longitude

- Thence to
  37 degrees 57 minutes North Latitude
  118 degrees 31 minutes West Longitude

- Thence to
  35 degrees 00 minutes North Latitude
  118 degrees 35 minutes West Longitude

- Thence to
  34 degrees 48 minutes North Latitude
  118 degrees 00 minutes West Longitude

- Thence to
  34 degrees 48 minutes North Latitude
  117 degrees 32 minutes West Longitude

- Thence to
  34 degrees 18 minutes North Latitude
  116 degrees 55 minutes West Longitude

- Thence to
  36 degrees 00 minutes North Latitude
  113 degrees 54 minutes West Longitude

- Thence to
  34 degrees 34 minutes North Latitude
  113 degrees 10 minutes West Longitude

- Thence to
  32 degrees 07 minutes North Latitude
  113 degrees 30 minutes West Longitude

- Thence to
  32 degrees 30 minutes North Latitude
  114 degrees 47 minutes West Longitude

- Thence to
  32 degrees 42 minutes North Latitude
  114 degrees 43 minutes West Longitude

- Thence to
  32 degrees 30 minutes North Latitude
  117 degrees 18 minutes West Longitude
206.1 GEOGRAPHICAL DESCRIPTION (CONTINUED)

Thence to
32 degrees 16 minutes North Latitude
117 degrees 08 minutes West Longitude

Thence to
32 degrees 16 minutes North Latitude
118 degrees 25 minutes West Longitude

Thence to
34 degrees 00 minutes North Latitude
120 degrees 30 minutes West Longitude

Thence to
36 degrees 18 minutes North Latitude
122 degrees 10 minutes West Longitude

206.2 SECTORS. The local flying area is divided into
twelve (12) alphabetically designated sectors to facilitate posi­
tive control over local traffic (refer plate #1). All pilots
filing local flight plans shall designate the local areas of opera­
tions and list them in the order of utilization.

NOTE: Local flight within the Greater Los Angeles Met­
ropolitan area shall be restricted to the Los Alamitos traffic
pattern and the approach and departure corridors as depicted in
plate #5.

207. VFR WEATHER MINIMUMS:

207.1 VFR CLEARANCES. VFR clearances will be granted
by the Clearance Officer when weather condition are as good or
better than the following prescribed minimums and forecast to
remain so for the estimated duration of the flight plus one (1)
hour, computed from the proposed take-off time:

1. JET AIRCRAFT.
   Ceiling 3,000 feet
   Visibility 3 miles

2. PROPELLER AIRCRAFT
   Ceiling 2,000 feet
   Visibility 3 miles

3. HELICOPTER AIRCRAFT
   Ceiling 500 feet
   Visibility 1 mile

(a) Because of their special flight char­
acteristics, helicopters may be cleared on controlled VFR flights
when the weather minimums are less than those specified in 2
above, subject to the following restrictions:

(i) Any flight which leaves the field bound­
aries on a local training flight must file a flight clearance form
DD 175 with the Operations Duty Officer and must list an alternate
airport which is VFR and which can be reached in VFR conditions.
(ii) Flights may be cleared in the practice landing pattern (inside the field boundaries) providing the ceiling is no less than 500 feet and visibility no less than one (1) mile. All such flights will be directed to remain on the ground whenever an instrument approach to the field is in progress.

(iii) VFR training flights will not be permitted when the ceiling is less than 500 feet and the visibility less than one (1) mile.
CHAPTER III
COURSE RULES

301 TAXI INSTRUCTIONS
301.1 CONTROL
301.2 TWO WAY COMMUNICATIONS
301.3 IDENTIFICATION
301.4 RIGHT OF WAY
301.5 CLEARANCE TO CROSS
301.6 TAXI INTERVALS
301.7 EXTENSION AND FOLDING OF WINGS
301.8 LISTENING WATCH
301.9 TAXI PATTERN
301.10 LIGHT SIGNALS

302 TAKE OFF INSTRUCTIONS
302.1 PREPARATION
302.2 CLEARANCE
302.3 TAKE OFF
302.4 PRIORITY
302.5 JET DEPARTURE RUNWAY 22L
302.6 JET DEPARTURE RUNWAY 4R
302.7 PROPELLER AIRCRAFT DEPARTURE RUNWAY 22
302.8 PROPELLER AIRCRAFT DEPARTURE RUNWAY 4
302.9 IFR DEPARTURES ALL RUNWAYS

303 LANDING INSTRUCTIONS
303.1 VFR ENTRY
303.2 CARRIER BREAK UP AND FORMATION LANDINGS
303.3 APPROACH RUNWAY 22
303.4 APPROACH RUNWAY 4
303.5 RESTRICTIONS
303.6 LANDINGS

304 MIRROR OR FIELD CARRIER LANDING PRACTICE

305 ACROBATICS

306 HELICOPTER APPROACHES
306.1 HELICOPTER APPROACHES
306.2 HELICOPTER MAT LANDINGS
306.3 HELICOPTER PRACTICE LANDING AREA

307 ORDNANCE ARMING AND DISARMING

308 ROCKETS, BOMBING AND GUNNERY AREAS

309 TARGET TOW PLANE OPERATIONS

310 PROHIBITED, RESTRICTED AND DANGER AREAS

311 LOCAL OBSTRUCTIONS
CHAPTER III

COURSE RULES

301 TAXI INSTRUCTIONS:

301.1 CONTROL. The Naval Air Station, Los Alamitos is under positive control at all times and all taxi instructions shall emanate from the control tower.

301.2 TWO-WAY COMMUNICATIONS. No aircraft shall leave the chocks until two-way communications have been established with the control tower.

301.3 IDENTIFICATION. Aircraft on local flight plans shall use the modex number radio calls as flight identification number. Flight filed on a DD 175 flight clearance form will use "Navy" or "Navy Jet" and the last five (5) numbers of the aircraft bureau number as a radio call to the tower. Only the lead pilot of flights consisting of more than one (1) aircraft need call for taxi instruction.

301.4 RIGHT-OF-WAY. Aircraft taxiing on taxiways shall have the right of way over aircraft entering or crossing taxiways.

301.5 CLEARANCE TO CROSS. All aircraft shall hold clear of the duty runway and will not enter, cross or taxi on any runway unless cleared by the control tower.

301.6 TAXI INTERVALS. No taxiing aircraft shall overtake or pass another except with tower approval. Taxiing aircraft shall maintain a minimum distance of 100 feet between aircraft.

301.7 EXTENSION AND FOLDING OF WINGS. Carrier-type aircraft shall not be taxied on the field or taxiways with wings folded. Outbound aircraft shall extend wings prior to entering taxiways and inbound aircraft shall not fold wings until after leaving the taxiways.

301.8 LISTENING WATCH. Taxiing aircraft shall maintain a listening watch on the ground control frequency at all times.

301.9 TAXI PATTERN. All fixed wing aircraft shall adhere to the established taxi pattern (refer plates #3 and #4) unless specifically authorized to deviate by the control tower.

301.10 LIGHT SIGNALS. Directional light signals shall be used by the tower to render assistance and control traffic only in event two-way communications fail after the aircraft is committed to taxi.

302 TAKE-OFF INSTRUCTION:
302.1 PREPARATION. No take-off clearance shall be requested from the tower until all necessary pre take-off and take-off check-off lists have been completed.

302.2 CLEARANCE. No take-off shall be made without tower clearance. In addition, pilots will visually scan for landing aircraft before entering the take-off runway.

302.3 TAKE-OFFS. All take-offs will be executed in accordance with standard operating procedures. Obstacle or high performance take-offs are not authorized except for jet aircraft as necessary when launching a tow target. Pilots shall be thoroughly briefed prior to each tow flight on safe procedures for take-off with the tow banner. Formation take-offs are not authorized.

302.4 PRIORITY. Jet aircraft shall have priority over propeller driven aircraft for take-off, only if requested and justified. Air Evac Flights will normally have priority over all other aircraft.

302.5 JET DEPARTURE RUNWAY 22L. Jet aircraft on VFR departures shall turn left after take-off and climb out on a heading of 165 degrees magnetic to a minimum altitude of 2,000 feet, cross the coast line over the Southwest portion of the U.S. Navy Jet and Ammunition Depot, then proceed seven (7) miles on a magnetic track of 165 degrees to POINT X-RAY, before proceeding on course. POINT X-RAY is located at 118 degrees 5 minutes West and 33 degrees 36 minutes 30 seconds North, on a bearing of 177 degrees true, ten (10) miles from the Long Beach LF Range station (refer plate #5).

302.6 JET DEPARTURE RUNWAY 4R. Jet aircraft on VFR departures shall turn right and climb out on a heading of 175 degrees magnetic, to a minimum altitude of 2,000 feet, stay east of the Sunset Beach Airport, cross the coast line Northwest of Huntington Beach, then proceed six (6) miles on a magnetic track of 175 degrees to POINT ZULU, before proceeding on course. POINT ZULU is located at 118 degrees 03 minutes West and 33 degrees 35 minutes North on a bearing of 170 degrees true twelve (12) miles from the Long Beach LF Range station (refer plate #5).

302.7 PROPELLER AIRCRAFT DEPARTURE RUNWAY 22. Propeller driven aircraft on VFR departures will turn left after take-off to a heading of 165 degrees magnetic in order to cross the coast line over the Southwest portion of the U.S. Navy Jet and Ammunition Depot, Seal Beach and proceed to POINT X-RAY, as outlined in Article 302.5 above (refer plate #5).

302.8 PROPELLER AIRCRAFT DEPARTURE RUNWAY 4. Propeller aircraft on VFR departures will turn right after take-off to a heading of 175 degrees magnetic, remaining east of the Sunset Beach Airport, cross the coast line Northwest of Huntington Beach and proceed to POINT ZULU, as outlined in Article 302.6 above (refer plate #5).
302.9 IFR DEPARTURES ALL RUNWAYS. Departures for all aircraft under instrument flight rules will be in accordance with the authorized air traffic control clearance.

1. This station has established six (6) Standard Instrument Departures as listed below:
   (a) Los Alamitos-San Pedro VOR Departure-Conventional 1 (plate #9)
   (b) Los Alamitos-San Pedro LF Departure-Conventional 1 (plate #10)
   (c) Los Alamitos-Oceanside VOR Departure-Jet 1 (plate #11)
   (d) Los Alamitos-Oceanside TACAN Departure-Jet 1 (plate #12)
   (e) Los Alamitos-San Pedro TACAN Departure-Conventional 1 (plate #13)
   (f) Los Alamitos-070° Departure-Conventional 1 (plate #14)

2. When pilots are given a specific SID, no amendment will be made by the agency issuing an ATC clearance. When the ATC clearance is issued, the assigned name and number of the SID to be used will be preceded by the enroute portion of the clearance. The pilot shall confirm the SID issued by reading back the name and number.

3. The SID will be used only when filed or requested by a pilot. Pilots requesting a deviation or departure that does not conform to a SID will be given the detailed departure clearance. Transient pilots who may be unfamiliar with a given SID, will be given the detailed departure clearance when they so request it.

303 LANDING INSTRUCTIONS:

303.1 VFR ENTRY. All aircraft on a VFR clearance shall conduct their let down over the ocean and contact Navy Alamitos tower for landing instructions over POINT X-RAY for an approach to runway 4, or over POINT ZULU for an approach to runway 22 (refer plate #5). Except in emergencies such as in-flight radio failures, no aircraft shall enter the traffic pattern until communications is established with the control tower. After crossing the coast line, the maximum speed for Jet aircraft is 250 knots and maximum speed for propeller driven aircraft is 175 knots. If the cloud base is above 2,500 feet, all aircraft shall descend to and cross the coast line at 2,000 feet. If the cloud base is between 2,000 and 2,500 feet, cross the coast line at 1,500 feet. If the cloud base is below 2,000 feet, no VFR approach will be permitted unless an emergency exists.

303.2 CARRIER BREAK-UP AND FORMATION LANDINGS. Formations of two (2) aircraft are the maximum number that will be allowed to conduct carrier break-ups over the field. Formation landings are not permitted.
303.3 **APPROACH RUNWAY 22.** After receiving landing instructions from Navy Alamitos tower, all aircraft shall proceed from over POINT ZULU inbound on a magnetic track of 355 degrees in order to cross the coast line Northwest of Huntington Beach and remain East of the Sunset Beach Airport. They shall maintain a northerly heading and descend to enter a left hand traffic pattern at 1,500 feet, proceed upwind slightly to the right of the landing runway, and break downwind as soon as traffic permits. Descent to 1,000 feet shall be made during the turn to downwind after the break (refer plate #5).

303.4 **APPROACH RUNWAY 4.** After receiving landing instructions from Navy Alamitos tower, all aircraft shall proceed from over POINT X-RAY inbound on a magnetic track of 345 degrees in order to cross the coast line over the Southwest boundary of the U.S. Net and Ammunition Depot, Seal Beach. They shall maintain a northerly heading and descend to enter a right hand traffic pattern at 1,500 feet, proceeding upwind slightly to the left of the landing runway, and break downwind as soon as traffic permits. Descent to 1,000 feet shall be made during the turn to downwind, after the break (refer plate #5).

303.5 **RESTRICTIONS.** Except for the approved approach and departure routes, local flights originating or terminating at NAS, Los Alamitos will NOT fly over the Greater Los Angeles Metropolitan area. All other VFR flights that must proceed over the Greater Los Angeles Metropolitan Area shall depart via the appropriate corridor to POINT X-RAY or ZULU and climb to at least 3,000 feet before proceeding on course. All inbound VFR flights shall approach NAS, Los Alamitos through the VFR approach corridor (refer plates #2 and #5). Flights proceeding to or returning from an inland training area will adhere to the approved departure and approach corridors and circumnavigate the Greater Los Angeles Metropolitan Area (refer plate #2). In so far as practicable, all aircraft will avoid flying over the HIGH EXPLOSIVE area of the northern sector of the Seal Beach Ammunition Depot.

303.6 **LANDINGS.** All pilots shall check and report "wheels down and locked" upon turning base leg. Landings shall be at a safe interval and touch-and-go landings are permitted only when authorized by the control tower.

304 **MIRROR OR FIELD CARRIER LANDING PRACTICE:**

304.1 **MIRROR OR FIELD CARRIER LANDING PRACTICE.** Mirror or field carrier landing practice is not authorized at NAS, Los Alamitos. The mirror will only be used as an aid in the normal landing pattern.

305 **ACROBATICS:**

305.1 **ACROBATIC FLIGHT.** Acrobatic flight will be conducted in accordance with current OPNAV Instructions, CNAVRENGRA Instructions and CAR Part 60.

-17-
306. HELICOPTER APPROACHES:

306.1 HELICOPTER APPROACHES. Helicopters shall remain under positive control of the Navy Alamitos tower for all approaches, landings and departures. Helicopters shall call the tower over POINT CHARLIE (33° 42' 00" North, 118° 04' 30" West) for landing or entry into the helicopter practice landing area. Helicopters shall depart POINT CHARLIE on a heading of 350° magnetic, maintaining an altitude of 500 feet, at a speed of 60 kts., for POINT DELTA (33° 45' 30" North, 118° 03' 30" West) (refer plate #6).

306.2 HELICOPTER MAT LANDINGS. If cleared to the helicopter mat for landing, depart POINT DELTA on a heading of 335° magnetic, descending to 200 feet passing Garden Grove Boulevard, 100 feet passing the field boundary, approaching the helicopter landing mat via taxiway #11 at an altitude of 100 feet and land on the macadam South of the concrete. Clearance to cross the duty runway must be received prior to crossing Garden Grove Blvd. If clearance to cross the duty runway and proceed to landing mat are not received at Garden Grove Boulevard, helicopters will proceed direct to the approach end of abandoned runway 34 and land. (refer plate #6)

306.3 HELICOPTER PRACTICE LANDING AREA. If cleared to the helicopter practice landing area, depart POINT DELTA on a heading of 355° magnetic, descending to 200 feet passing Garden Grove Boulevard, 100 feet passing the field boundary and completing a landing on the approach end of abandoned runway 34 before entering the practice pattern. The practice pattern boundaries are: To the North, practice landing area of abandoned runway 34; To the East, the station transmitter site; To the South, Garden Grove Boulevard; To the West, the Long Beach VOR/TAC station. The practice pattern will be left hand traffic, not to go above 500 feet unless cleared by the tower. Helicopters will avoid flying directly over the GCA unit (refer plate #6).

307. ORDNANCE ARMING AND DISARMING:

307.1 GENERAL. All pilots will be thoroughly briefed on ordnance procedure prior to carrying any ordnance load in aircraft and shall be thoroughly familiar with ordnance safety precautions promulgated by NAS, Los Alamitos Instructions. All aircraft proceeding to or from the Ordnance Arming or Disarming Area shall monitor the Navy Alamitos Ground Control Frequency. A clearance to the area and taxi instruction from the area are mandatory.

307.2 ARMING. Miniature and water filled bombs may be loaded on the aircraft in the line area. Ammunition may be loaded in the aircraft on the line provided the proper gun safety devices are installed. Rockets with explosive heads will be loaded and gun safety devices removed only in the authorized arming area just prior to take-off as follows (refer plate #24):
307.2 ARMING (CONTINUED)

1. At the head of runway 22L on a heading of 195° magnetic.
2. At the head of runway 4R on a heading of 083° magnetic.

307.3 DISARMING. All aircraft carrying live ammunition or rockets will proceed immediately upon landing to the disarming area. All rockets will be unplugged and grounded at this point. Ammunition will be released from the feed mechanism and stowed in the ammunition cans before aircraft proceed to their parking area. The disarming areas are as follows:

1. Off the upwind end of runway 22L on a heading of 083 degrees magnetic.
2. Off the upwind end of runway 4R on a heading of 195 degrees magnetic (refer plate #24).

307.4 HUNG BOMBS OR ROCKETS. When it is necessary for an aircraft to land at NAS, Los Alamitos with hung rockets or bombs the aircraft will orbit over the ocean south of the airport and notify the tower. The tower will contact the station Ordnance Officer and clear the traffic pattern and runways. Aircraft will be cleared to land and proceed to the disarming area. The station Ordnance Officer will take whatever action is necessary to remove the hazard before the aircraft returns to the lines.

308 ROCKETS, BOMBING AND GUNNERY AREAS:

308.1 ASSIGNMENT. Targets and areas for ordnance practice by NAS, Los Alamitos aircraft are assigned by COMNAE-11. Target and area requests for week-ends and week-days for squadrons on Active Duty for training shall be made to the NAS, Los Alamitos Target Assignment Officer. No pilot will use any target or gunnery area unless specifically scheduled to do so. Strict adherence to scheduled times is mandatory.

308.2 USE OF OPERATING AREAS AND TARGETS. No form of training involving the use of machine guns, automatic weapons, rockets, bombs of any type, torpedoes, flares, searchlights or floodlights will be conducted without specific assignment of an area or target and then only in the area or at the target assigned.

308.3 TARGET NO. 13 (R-263). Target number thirteen (13) is a low-level bombing, rocketry and strafing target consisting of a circular area with a 300 yard radius established as a danger area. It is located one-half mile West of the Northwestern tip of San Clemente Island at 33° 02' North; 118° 37' West. Ordnance drops are restricted to rockets, water filled and miniature bombs. All runs must be conducted from the Southwest to the Northeast on a heading of 030° true using a left-hand pattern. Strafing and rocket runs must be conducted so that the impact is
308.3 TARGET NO. 13 (R-363) (CONTINUED)

clear of San Clemente Island. All aircraft must exercise extreme caution due to the ALF San Clemente traffic pattern and clear with the ALF tower prior to commencing runs on the target. Exercises may be conducted on VFR days only from the surface up to 2,000 ft. All pilots assigned to this target will make positive identification of the target before commencing runs in order to obviate the possibility of using the wrong rocks as a target and avoid damage to surface craft (refer plate #23).

308.4 AIR TO AIR GUNNERY, ASW, SMOKE LITE DROPS (AREA KK-N, W-290). Ocean operating area KK-N, established as Warning area W-290 (refer plate #23), is assigned as the air to air gunnery area, ASW and smoke light drop area. This area extends from the surface upwards to unlimited altitude. Exercises may be conducted in VFR conditions from sunrise to sunset. Before commencing firing runs, all pilots will take necessary precautions to avoid the possibility of endangering surface craft.

308.5 AERIAL TRAINING AREA ONE (1). Aerial training area one (1) is located East of the Northern section of San Clemente Island in Warning Area 291 and defined by the coordinates 32° 07' 12" North; 118° 26' 30" West; 33° 07' 12" North; 117° 43' 00" West; 32° 56' 30" North; 117° 43' 00" West; 32° 56' 30" North; 118° 26' 30" West (refer plate #23). This area is restricted to ASW and smoke light drops. Exercises may be conducted in this area in accordance with current COMELEVEN Instructions.

309 TARGET TOW PLANE OPERATIONS:

309.1 GUARD PLANE. Target tow planes shall be accompanied to and from the target by a guard plane.

309.2 TAXI. The target plane shall abide by the taxi instructions as published for other aircraft (refer plates #3 and #4).

309.3 TAKE OFF. The target plane shall receive clearance from the tower prior to taking position for tow hook up.

309.4 DEPARTURE. The tow plane shall follow established VFR departure procedures (refer plate #5).

309.5 ENTRY CLEARANCE. Aircraft towing targets shall contact Navy Alamitos tower prior to reaching the coast line for clearance to enter the traffic pattern to release the tow.

309.6 TOW DROP PATTERN. When properly cleared by the control tower, the tow plane and guard plane shall enter the traffic pattern flying parallel and to the left of runway 22L at 600 feet, until reaching the release point. The target shall be released upon voice signal from the control tower.
309.6 TOW DROP PATTERN (CONTINUED)

Aircraft will fly close aboard the field in the traffic pattern and will remain over government property wherever practicable.

309.7 FOULED TARGET. Aircraft towing targets which do not release on the first attempt will, fuel permitting, proceed over water and attempt to free the target by all means available. If fuel state does not permit or if attempts to drop over water are unsuccessful, the aircraft, when cleared by the tower, will make a high approach landing which will allow the target to make its initial ground contact on the runway avoiding the possibility of becoming tangled with obstructions.

309.8 LIGHT SIGNALS. In event the tow target plane experiences radio failure upon return to the field, the control tower will use a green light to indicate when the tow target plane has reached the release point.

310 PROHIBITED, RESTRICTED AND DANGER AREAS:

310.1 PROHIBITED, RESTRICTED AND DANGER AREAS. The Greater Los Angeles Metropolitan Area is prohibited to all Los Alamitos aircraft operating under VFR clearances except for the traffic pattern, approach and departure routes. Aircraft cleared under Instrument Flight Rules shall proceed in accordance with their air traffic control clearance. Appropriate aeronautical charts and publications should be studied for danger areas and airspace reservations in the local operating area.

311 LOCAL OBSTRUCTIONS:

311.1 LOCAL OBSTRUCTIONS. All obstructions within 750' lateral clearance area from the center line of runways, and above a 7:1 slope transition zone from 750' to 12,000' from the center line have obstruction lights except:

1. RUNWAY 22R-4L
   Five (5) small buildings 8' high, located SW 300' from NE end of runway 22R-4L and 650' northerly of runway center line.
   Plane parking area 200' x 800' located SW 600' to 1,400' from NE end of runway 22R-4L and 275' northerly of runway center line.
   Automobile parking lot located SW 1,100' from NE end of runway 22R-4L and 650' northerly of runway center line.
   20' x 130' building, 12' high located SW 1,100' from NE end of runway 22R-4L and 520' northerly of runway center line.
   Group of twenty (20) small buildings, 10' to 33' high located SW 1,500' to 2,100' from NE end of runway 22R-4L and 450' to 800' northerly of runway center line.
   200' x 800' plane parking area SW 1,700' to 2,400' from NE end of runway 22R-4L and 250' to 750' northerly of runway center line.
LOCAL OBSTRUCTIONS #1 CONTINUED

Two (2) small buildings, 8' high, located 1,250' NE end of runway 22R-4L and 250' southerly of runway center line.

2. RUNWAY 22L-4R

One (1) magazine structure 13' high, located SW end of runway 22L-4R and 650' southerly of runway center line.

Two (2) small buildings 8' high located NE 1,100' from SW end of runway 22L-4R and 500' northerly of runway center line.

Open storm drainage ditch and 7' chain link fence located SW 1,600' from SW end of runway 22L-4R.

3. NORTHEAST APPROACH ZONE

Large dairy hay barn 22' high located 1,000' NE from NE end of runway and 850' northerly of runway center line.

4. SOUTHWEST APPROACH ZONE

Two (2) buildings 10' high, several trees 25' high, and power pole 30' high, located SW 1,400' from SW end of runway 22R-4L and 800' northerly of runway center line.

5. BUILDINGS AND STRUCTURES WITH OBSTRUCTION LIGHTS (REQUIRED)

GCA Mobile Units, two (2) small buildings and 20' high steel water tank located SW 4,500' from NE end of runway 22L-4R and 450' southerly of runway center line.

Radio antenna poles 70' high located SW 3,000' from NE end of runway 22L-4R and 2,400' southerly of runway center line (Required only for helicopter landing practice).

B.O.Q. buildings, 23' high located SW 800' from NE end of runway 22R-4L and 750' northerly of runway center line.

Hanger and control tower building 80' high located SW 2,400' from NE end of runway 22R-4L and 1,000' northerly of runway center line.

6. BUILDINGS AND STRUCTURES WITH OBSTRUCTION LIGHTS (OPTIONAL)

Three (3) radio antenna poles 80' high located SW 1,000' from NE end of runway 22R-4L and 1,800' northerly of runway center line.

Recreation building 35' high located SW 2,400' from NE end of runway 22R-4L and 1,800' northerly of runway center line.

N.R.T.C. Building 25' high located SW 3,600' from NE end of runway 22R-4L and 2,800' northerly of runway center line.
CHAPTER IV
AIR TRAFFIC CONTROL

401 CONTROL TOWER
401.1 AIR AND GROUND CONTROL
401.2 OPERATING FREQUENCIES

402 INSTRUMENT APPROACH CONTROL
402.1 CLEARANCE
402.2 TYPES OF APPROACHES

403 GROUND CONTROL APPROACH
403.1 HOURS OF OPERATION
403.2 IFR APPROACHES
403.3 PRACTICE APPROACHES
403.4 VFR APPROACHES
403.5 GCA MINIMUMS (ACTUAL)
403.6 GCA PATTERN
403.7 GCA LOST COMM/MISSSED APPROACH PROCEDURE

404 INSTRUMENT APPROACHES

405 INSTRUMENT DEPARTURES
405.1 STRATUS CONTROL
405.2 LOS ANGELES ATC CONTROL
405.3 STANDARD INSTRUMENT DEPARTURES
405.4 RADAR DEPARTURE CONTROL

406 PROCEDURE FOR CHECKING "WHEELS DOWN AND LOCKED"
406.1 WHEEL CHECK BY THE PILOT
406.2 "WHEELS DOWN AND LOCKED" REPORT
406.3 RUNWAY WHEEL WATCH AND SAFETY OFFICER
406.4 WHEELS UP WARNINGS

407 EMERGENCY PROCEDURES
407.1 EMERGENCY TRAFFIC CONTROL
407.2 OVERDUE AIRCRAFT
407.3 LOST PLANE PROCEDURE
407.4 BRAKE OR FLAP FAILURE IN CARRIER TYPE AIRCRAFT AND AIRCRAFT HAVING A NOSE WHEEL
407.5 FOUL WEATHER PROCEDURE

408 COMMUNICATIONS FREQUENCIES

409 LAMP SIGNALS
CHAPTER IV
AIR TRAFFIC CONTROL

401. CONTROL TOWER:

401.1 AIR AND GROUND CONTROL. All air traffic in the Los Alamitos Control Zone and all ground traffic on the taxiways and runways at NAS, Los Alamitos shall operate only under positive control of the Navy Alamitos Tower at all times.

401.2 OPERATING FREQUENCIES. Transmitting and receiving frequencies may be found in the current flight information publications.

402 INSTRUMENT APPROACH CONTROL:

402.1 CLEARANCE. An instrument approach clearance to NAS, Los Alamitos can be obtained through Long Beach Approach Control.

402.2 TYPES OF APPROACHES. NAS, Los Alamitos has two (2) conventional instrument approaches and four (4) Jet instrument penetrations as follows:

1. Low Frequency Range Approach (Conventional). Minimums 500-1 Day; 500-2 Night. GCA is available on request.
2. Omni Approach (Conventional). Minimums 800-1 Day; 800-2 Night. GCA is available on request.
3. Jet Low Frequency Range Penetration. Minimums 800-1 Day; 800-2 Night. GCA is available on request.
4. Jet ADF/RADAR Penetration. PAR Minimums 100-½; SUR Minimums 400-1.
5. Jet VOR/RADAR Penetration. PAR Minimums 100-½; SUR Minimums 400-1.
6. Jet IACAN Penetration. Minimums 500-1 Day; 500-2 Night. GCA is available on request.
7. Contact approach. Minimums- when weather conditions are due to haze and smoke and visibility is two (2) miles or better.

403 GROUND CONTROL APPROACH:

403.1 HOURS OF OPERATION. GCA is available twenty-four (24) hours daily on the following basis:
1. During instrument weather, from 0800 to 1630, no notice required.
2. From 1630 to 0800, available on fifteen (15) notice.
3. On Tuesdays, during VFR weather conditions, GCA will be out of service for routine maintenance from 0800 to 1630 local.

403.2 IFR APPROACHES. All IFR approaches must be requested through Long Beach Approach Control.
403.3 PRACTICE APPROACHES. GCA Unit #5 is available for practice approaches as noted in Art. 403.1, provided the ceiling is 2,500 or better, and the visibility is at least five (5) miles. VFR conditions must be maintained at all times while in the practice pattern. Practice approaches will be discontinued when local air operations are secured.

403.4 VFR APPROACHES. When the NAS, Los Alamitos official weather is at or above three (3) miles visibility, the ceiling is at or above 1,000 feet, but below practice minimums as noted in Art. 403.3, VFR approaches will be accepted to a final landing only. VFR conditions must be maintained at all times in the GCA pattern.

403.5 ACTUAL GCA MINIMUMS. Weather minimums for actual Precision approaches are: Ceiling one hundred (100), visibility one half (½) mile. Weather minimums for actual Surveillance approaches are: Ceiling four hundred (400), visibility one (1) mile.

403.6 GCA PATTERN. The NAS, Los Alamitos standard GCA pattern is based on an approach to runway 22L and is limited to within ten (10) mile radius of the airport (refer plate #21).

403.7 MISSED APPROACH/LOST COMMUNICATION PROCEDURE. In the event of missed approach and/or lost communication failure one of the following procedures will be given:

If no transmissions are received for one (1) minute in the traffic pattern—
1. Climb to 2,000, direct to the 12 NM Long Beach VOR/TAC fix, hold South on the 171 radial, 6 mile pattern, left turns, contact Long Beach Approach Control for further instructions or,

2. Climb to 2,000, direct 171 radial of the Long Beach VOR, proceed South to Alhambra intersection, hold Southeast non-standard, one (1) minute left turns on the 124 radial of Los Angeles VOR, contact Long Beach Approach Control for further instructions or,

3. Climb to 2,500, direct to Long Beach Low Frequency Range, proceed Southwest course San Pedro intersection, hold South non-standard one (1) minute right turns, contact Long Beach Approach Control for further instructions or,

4. Climb to 2,500, direct to the 16 NM Long Beach VOR/TAC fix, hold Northeast on the 210 radial, 6 mile pattern, right turns, contact Long Beach Approach Control for further instructions.

404. INSTRUMENT APPROACHES:

404.1 INSTRUMENT APPROACHES. Instrument approaches to NAS, Los Alamitos as listed in Art. 402.2 shall be made on the appropriate facility in accordance with procedures published in the flight information publications (refer plates #15 thru #21).
404.2 CONTACT APPROACH. Contact approaches for certain aircraft are authorized when weather conditions are due to haze and smoke and visibility is two (2) miles or better. The aircraft authorized to request contact approaches are as follows: S2F, P2V, SWE, R4D, and R5D. This will be a one (1) aircraft at a time operation. The aircraft will normally be held at the Long Beach VOR/TAC in VFR condition on top of the haze condition. Aircraft will be under the positive control of Long Beach Approach Control until the field is in sight and the pilot is confident that a contact approach can be accomplished. Normally Long Beach Approach Control will vector the aircraft to an advantageous position that will be compatible to the downwind leg for runway 22L/R. The pilot must request a contact approach if desired after he has the field in sight. If the field is not sighted or the approach is not accomplished the pilot will follow the missed approach instructions as given by Long Beach Approach Control. The phraseology normally used by approach control will be as follows:

1. Contact approach approved within two miles of the Los Alamitos airport. If not possible climb in the traffic pattern within two miles of the airport to VFR conditions on top.
2. Contact Los Alamitos tower on ___ Mc.

Note: It should be emphasized that this procedure will not be used by jet aircraft. There is no change to jet approaches.

405. INSTRUMENT DEPARTURES:

405.1 STRATUS CONTROL. When the top of the of the overcast in the Los Angeles area is below 3,000 feet, Los Angeles Air Traffic Control may delegate unrestricted control of departing NAS, Los Alamitos traffic. This type of control is dependent upon the traffic load and weather conditions in the area and will be delegated to the Navy Alamitos tower or refused by Los Angeles AIC.

405.2 LOS ANGELES AIC CONTROL. When the top of the overcast in the Los Angeles area is above 3,000 feet, all instrument departures will be cleared by Los Angeles AIC.

405.3 STANDARD INSTRUMENT DEPARTURES. NAS, Los Alamitos has four (4) conventional and two (2) jet standard instrument departures as listed:

1. Los Alamitos-San Pedro VOR Departure
   Conventional #1 (plate #9).
2. Los Alamitos-San Pedro LF Departure
   Conventional #1 (plate #10).
3. Los Alamitos-Oceanside VOR Departure
   Jet #1 (plate #11).
4. Los Alamitos-Oceanside TACAN Departure
   Jet #1 (plate #12).
5. Los Alamitos-San Pedro TACAN Departure
   Conventional #1 (plate #13).
6. Los Alamitos-070° Departure
   Conventional #1 (plate #14).

405.4 RADAR DEPARTURE CONTROL. Aircraft departing NAS,
Los Alamitos in IFR weather conditions shall be instructed to switch to Long Beach Departure Control prior to take off. Aircraft will contact Long Beach Departure Control on the assigned frequency and monitor Navy Alamitos tower on guard.

406. PROCEDURE FOR CHECKING "WHEELS DOWN AND LOCKED":

406.1 WHEELS CHECK BY THE PILOT. The pilot of each aircraft shall check by every available means that the landing gear is down and locked. The pilot, upon turning base leg, will call the tower and advise, "Wheels down and locked".

406.2 "WHEELS DOWN AND LOCKED" REPORT. The tower will require the pilot of each aircraft landing at this field to report "Wheels down and locked" prior to each landing.

406.3 RUNWAY WHEELS WATCH AND SAFETY OFFICER. The runway wheels watch will be required for the landing of all single-piloted (including tandem place) fixed wing aircraft, during daylight hours. This watch is also required for all night landings as follows:

1. During periods for training of Organized Reserve Pilots on active duty.
2. During the week-end training of Organized Reserve Pilots on inactive duty.
3. During periods when a flight of four (4) or more single piloted fixed wing transient aircraft are landing.

The Runway Safety Officer will be required during periods of intensive training by Organized Reserve Pilots flying single piloted fixed wing aircraft and during transition or requalification in such aircraft by both Active Duty and Organized Reserve pilots. Periods of intensive training shall be interpreted, as periods of Active Duty Training, Week-end Inactive Duty for Training and during local night flying. A chase pilot when required for Transition, First Flight or Requalification may act as Runway Safety Officer by observing take-offs, approaches and landings from his aircraft positioned at the approach end of the runway.

406.4 WHEELS UP WARNINGS. It is the duty of the wheel watch, upon observing an aircraft approaching for landing with wheels up, to warn the pilot by means of radio and/or hand or remote firing red flares. The tower upon observing an aircraft approaching wheels up, or the warning given by the wheels watch, will transmit on the radio a wave-off warning to the pilot.

407 EMERGENCY PROCEDURES:

407.1 EMERGENCY TRAFFIC CONTROL. A pilot declaring an emergency that necessitates an immediate landing will be cleared to land on any runway at the pilots discretion. When an immediate
407.1 EMERGENCY TRAFFIC CONTROL (Continued)

emergency becomes known, the control tower shall close the field to all other traffic. A pilot declaring an emergency wherein a delayed and/or normal landing may be effected, will be given priority to enter the traffic pattern for landing. When a deferred emergency becomes known the field may or may not be closed, depending upon the nature of the emergency. In such instances the pilot should call the tower with the following information:

1. Bureau number or side number of aircraft.
2. Type of aircraft.
4. Position.
5. Estimated flight time remaining and other pertinent information.

In all cases of emergency, either immediate or deferred, all pilots not involved shall maintain radio silence until advised by the control tower to resume normal communication.

407.2 OVERDUE AIRCRAFT. The following procedures shall be followed in the event an aircraft is overdue:

1. When a propeller aircraft is overdue one (1) hour or a jet aircraft is overdue thirty (30) minutes and/or thirty (30) minutes prior to fuel exhaustion, the control tower shall attempt to establish radio contact with the missing aircraft.
2. Simultaneously with the attempted radio contact, the tower will notify the Operations Duty Officer who will direct the line crew to preform a visual check for the missing aircraft.
3. If the results of #1 and #2 above are negative, Flight Service will be notified and all airports in the local area or proposed flight route, as applicable, will be checked for the missing aircraft.
4. If the aircraft is determined to be missing, search and rescue procedures will be instituted, as required, in accordance with Chapter VI, Section 601.2 of this manual.

407.3 LOST PLANE PROCEDURE. Aircraft operating in the vicinity of Los Alamitos who become lost or in doubt of their position should take the following action:

1. Turn IFF to emergency
2. Call Navy Alamitos tower on a standard tower frequency or, if unable to contact the tower, shift to guard or emergency frequency and call any military or FAA station. Prefix transmissions with "Pan", the urgent call; or with "Mayday", the distress call, as the circumstances or degree of urgency dictates. When communication is established, request a fix or steer to base.
3. Climb immediately to 12,000 feet or above and comply with current Radar Interceptor Procedures as outlined in the flight information publications.
407.4 BRAKE OR FLAP FAILURE IN CARRIER TYPE AIRCRAFT AND AIRCRAFT HAVING NOSE WHEEL. Pilots of aircraft experiencing loss of brakes or flaps may utilize the field arresting gear or barrier located on runway 22L. The gear is armed whenever runway 22 is the duty runway. A fifteen (15) second delay can be anticipated for use of the barrier. The gear is dearmed whenever runway 4 is the duty runway, in which case, there will be a delay of approximately fifteen (15) minutes to arm the gear. All landings, when use of the arresting gear or barrier can be anticipated, will be on runway 22L.

407.5 FOUL WEATHER PROCEDURE. When weather conditions go below VFR minimums while local flights are airborne or when a communication failure occurs for flights on top of an overcast, the weather to the East of the mountains usually remains clear. George AFB, bearing 020 degrees magnetic, is fifty-eight (58) miles from NAS, Los Alamitos. NAAS El Centro, bearing 090 degrees magnetic, is one hundred thirty-six (136) miles from NAS, Los Alamitos. MCAS Yuma, bearing 095 degrees magnetic, is one hundred eighty-five (185) miles from NAS, Los Alamitos. These fields are usually good alternate airports.

408. COMMUNICATIONS FREQUENCIES:

408.1 COMMUNICATION FREQUENCIES. Tower, GCA and emergency frequencies are subject to frequent changes. All holders of this manual are requested to refer to the flight information publications for current communication frequencies.

409 LAMP SIGNALS:

409.1 LAMP SIGNALS. Lamp signals in accordance with current directives are the primary means of signalling for airborne traffic without radio contact and all moving traffic on the ground. All pilots and other personnel required to be on taxiways or runways will be familiar with the light signal procedure described below:

<table>
<thead>
<tr>
<th>COLOR AND TYPE</th>
<th>ON THE GROUND</th>
<th>IN THE AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady Green</td>
<td>Cleared for take-off or proceed.</td>
<td>Cleared to Land.</td>
</tr>
<tr>
<td>Flashing Green</td>
<td>Cleared to taxi.</td>
<td>Return for Landing</td>
</tr>
<tr>
<td>Steady Red</td>
<td>Stop.</td>
<td>Give way to other aircraft and continue circling.</td>
</tr>
<tr>
<td>Flashing Red</td>
<td>Taxi clear of landing area (runway) in use.</td>
<td>Airport unsafe - do not land.</td>
</tr>
<tr>
<td>Flashing White</td>
<td>Return to starting point on field.</td>
<td>None</td>
</tr>
<tr>
<td>Flashing Red and Green</td>
<td>General warning signal, exercise extreme caution.</td>
<td>General warning signal, exercise extreme caution.</td>
</tr>
</tbody>
</table>
CHAPTER V

TRANSIENT AIRCRAFT

501 ACCOMMODATIONS AVAILABLE
501.1 BERTHING AND MESSING
501.2 FLIGHT RATIONS

502 TRANSPORTATION
502.1 ON-STATION
502.2 OFF-STATION

503 PROCEDURES FOR HANDLING VISITING VIP
503.1 COURTESIES AND SERVICES
503.2 NOTIFICATION REQUIRED OF ODO
503.3 OFFICIAL GREETING

504 ENDORSEMENT OF PER DIEM ORDERS
504.1 AVAILABILITY OF GOVERNMENT AIR TRANSPORTATION
504.2 ARRIVAL AND DEPARTURE
504.3 AVAILABILITY OF QUARTERS AND MESSING
CHAPTER V
TRANSIENT AIRCRAFT

501. ACCOMODATIONS AVAILABLE.

501.1BERTHING AND MESSING. Berthing and messing for military personnel are normally available as follows:

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Berthing</th>
<th>Messing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers including female</td>
<td>B.O.Q.</td>
<td>B.O.Q.</td>
</tr>
<tr>
<td>C.P.O.'s</td>
<td>CPO Club</td>
<td>General Mess</td>
</tr>
<tr>
<td>Enlisted Personnel</td>
<td>Barracks 18</td>
<td>General Mess</td>
</tr>
<tr>
<td>Wave Personnel</td>
<td>Wave Barracks</td>
<td>General Mess</td>
</tr>
</tbody>
</table>

Meals are also available at the Navy Exchange Cafeteria on the following schedule:

- Monday and Tuesday: 0700 to 1400
- Wednesday through Sunday: 0700 to 1500

501.2FLIGHT RATIONS. Regular flight rations may be ordered at the Operations Clearance Desk, during normal working hours, on a minimum of two (2) hour notice. Outside of normal working hours, a longer preparation time may be required. Requesting personnel are reminded, that the quality content of flight rations will be materially improved with additional notice. Whenever possible therefore, flight rations should be ordered twenty four (24) hours in advance.

502. TRANSPORTATION AVAILABLE.

502.1ON-STATION. On station transportation within the boundaries of NAS, Los Alamitos is available at Operations for all transient pilots and crews. Phone extension 457 or 313.

502.2OFF-STATION. Off station Official Navy transportation is available for persons on official business only. NAS, Los Alamitos has a liberty bus that departs from in front of the administration building approximately, but not later than, 1800 and 2330 hours. The liberty bus proceeds direct to the corner of Long Beach Blvd. and Ocean Blvd. and departs the southwest corner of the same location not later than 1830 and 2400 hours. For further information contact the J00D.

503. PROCEDURES FOR HANDLING VISITING VIP.

503.1COURTESIES AND SERVICES. Commissioned Officers of the Navy in the rank of Captain and above, or equivalent ranks of the other Armed Services, and important civilian dignitaries shall be accorded the following services and courtesies while visiting the Naval Air Station:

1. Full honors in accordance with Navy Regulations when the visit is formal, unless otherwise directed by the visiting officer or dignitary.
503.1 COURTESIES AND SERVICES (Continued)

2. Appropriate messing and quartering accommodations insofar as available facilities permit.
3. Surface transportation subject to limitations established by higher authority.

503.2 NOTIFICATIONS REQUIRED OF ODO. The Operations Duty Officer will notify the following personnel of the EIA and/or ETD of visiting VIP:

1. NAS OOD and ODO
2. NAS Operations Officer
3. NAS Operations Flight Line
4. NAS Control Tower
5. Marine Air Detachment (On USMC VIP)
6. Commander Fleet Air Detachment (As appropriate)

* The NAS OOD is the only one to be notified by the ODO of the actual arrival and departure times of visiting VIP unless otherwise directed in a specific case.

503.3 OFFICIAL GREETING. The Commanding Officer and/or the Command Duty Officer will greet all visiting VIP.

504. ENDORSEMENT OF PER DIEM ORDERS.

504.1 AVAILABILITY OF GOVERNMENT AIR TRANSPORTATION. Personnel requiring endorsement of orders indicating availability of government air transportation are to deliver such orders to the Operations Duty Officer for proper endorsement.

504.2 ARRIVAL AND DEPARTURE. Personnel requiring an arrival and/or departure endorsement are to deliver such orders to the NAS OOD for endorsement.

504.3 AVAILABILITY OF QUARTERS AND MESSING. Quarters and messing facilities are normally available at NAS, Los Alamitos and per diem orders will be endorsed accordingly by the NAS OOD.
CHAPTER VI: ILLUSTRATIONS

PLATE 1. NAS, LOS ALAMITOS LOCAL FLIGHT AREA
PLATE 2. GREATER LOS ANGELES METROPOLITAN AREA
PLATE 3. FIELD DIAGRAM, TAXI PATTERNS RUNWAY 4R/4L
PLATE 4. FIELD DIAGRAM, TAXI PATTERNS RUNWAY 22R/22L
PLATE 5. VFR APPROACH, DEPARTURE AND TRAFFIC PATTERNS
PLATE 6. TRAFFIC PATTERN CHART HELICOPTERS
PLATE 7. NAS, LOS ALAMITOS AREA RADIO FACILITIES L/MF
PLATE 8. NAS, LOS ALAMITOS AREA RADIO FACILITIES VOR
PLATE 9. CONVENTIONAL OMNI STANDARD INSTRUMENT DEPARTURE #1
PLATE 10. CONVENTIONAL L/MF STANDARD INSTRUMENT DEPARTURE #1
PLATE 11. JET OMNI STANDARD INSTRUMENT DEPARTURE #1
PLATE 12. JET TACAN STANDARD INSTRUMENT DEPARTURE #1
PLATE 13. LOS ALAMITOS SAN PEDRO TACAN CONVENTIONAL #1
PLATE 14. LOS ALAMITOS 070° DEPARTURE CONVENTIONAL #1
PLATE 15. LOW FREQUENCY RANGE APPROACH (CONVENTIONAL)
PLATE 16. OMNI APPROACH (CONVENTIONAL)
PLATE 17. JET LOW FREQUENCY RANGE APPROACH
PLATE 18. JET ADF/RADAR APPROACH
PLATE 19. JET VOR/RADAR APPROACH
PLATE 20. JET TACAN APPROACH
PLATE 21. GCA PATTERN
PLATE 22. GCA BASIC EMERGENCY/HELICOPTER PATTERN
PLATE 23. ROCKET, BOMBING AND GUNNERY AREA CHART
PLATE 24. TARGET TOW, ORDNANCE ARMING AND DISARMING CHART
PLATE 25. AIRCRAFT CRASH, FIRE FIGHTING AND RESCUE CHART
NAS Los Almitos

LOS ALAMITOS-SAN PEDRO VOR DEPARTURE - CONV. 1

FREQUENCIES (Long Beach)
GROUND CONTROL 352.4
DEPARTURE CONTROL 124.2/126.2/338.2
TOWER 339.1/340.2
CENTER (LAX) 125.9/311.8

CLEARANCE AND DEPARTURE ROUTE DESCRIPTION
ATC Clears To

Los Alamitos-San Pedro VOR DEPARTURE - CONV. 1

Climb to and maintain (Plt. level/Alt./VCGT)
Take off Rwy LL, LR, 22L, 22R

Climb on Long Beach VORTAC 210 radial to San Pedro Intersection. Cross San Pedro at (altitude) (minimum 2,500).

Los Alamitos-San Pedro VOR DEPARTURE - CONV. 1
EFFECTIVE DATE 12-17-60
LOS ALAMITOS - SAN PEDRO LF DEPARTURE - CONV. 1

FREQUENCIES

GROUND CONTROL 332.4
DEPARTURE CONTROL 120.2/126.2/338.3
TOWER 339.4/340.2
CENTER (LAX) 125.9/311.8

CLEARANCE AND [: ROUTE DESCRIPTION

ATC Clears To Via

Climb to and maintain (ft. level/ft./CEI)
Los Alamitos-San pedro LF DEPARTURE - CONV. 1
Take off Run 11L, 13, 22L, 22R

Climb southwestbound on Long Beach LFR Southwest course to San Pedro Intersection. Cross San Pedro at (altitude) (minimum 2,500).

LOS ALAMITOS - SAN PEDRO LF DEPARTURE - CONV. 1

IN EFFECT UTL 12-19-68
LOS ALAMITOS-OCEANSIDE VOR DEPARTURE - JET 1

FREQUENCIES
GROUND CONTROL 352.1
TOWER 339.4/340.2
DEPARTURE CONTROL 126.2/338.2
CENTER (LAX) 120.8/269.4/352.0

CROSS AT: 210 radial to Oceanside vortac
Intercept Oceanside 275 radial at (altitude)
(minimum 4,000), cross Oceanside vortac at (altitude/
flight level).

LOS ALAMITOS-OCEANSIDE VOR DEPARTURE - JET 1
EFFECTIVE DATE 10-17-60
Los Alamitos-Oceanside Tacan Departure - JET 1

**FREQUENCIES**

- **Ground Control**: 352.4
- **Departure Control**: 124.2/126.2/338.2
- **Tower**: 339.1/310.2
- **Center (LAX)**: 120.8/269.1/352.0

**CLEANANCE AND DEPARTURE ROUTE DESCRIPTION**

ATC clears ____________ to ____________ VIA ____________.

Climb to and maintain ____________ (fl. level/alt./VSOT)

Los Alamitos-Oceanside Tacan Departure - JET 1

Take off Rwy 4L, HR, 22L, 22R

Climb on Long Beach VORTAC 194 radial to Intercept and proceed inbound via Oceanside VORTAC 265 radial to Oceanside. Cross Long Beach 22 mile DME fix at (altitude) (minimum 4,000), Cross Oceanside 36 mile DME fix at (altitude) (minimum 4,000), Cross Oceanside VORTAC at (altitude/flight level).

**Los Alamitos-Oceanside Tacan Departure - JET 1**

Effective Date: 8-19-60
LOS ALAMITOS SAN PEDRO TACAN CONVENTIONAL #1
PLATE 13 PAGE: 43

NOT YET OPERATIONAL
NOT YET OPERATIONAL
MISSED APPROACH
At 1.7 N.A. after "LB" Rng
turn left climbing to 2500 or
"on top" intercept NE crs of Rng
then proceed to SAN PEDRO INTXN
via SW crs

NOTE: The primary instrument approach
procedure for Los Alamitos NAS
is Radar.
LOS ALAMITOS NAS

INST APCH PRO (USN)

LONG BEACH APCH CON
379.1 328.2 237.8 126.3
NAVY ALAMITOS TOWER
239.4 340.2 142.74
142.74 379.1
RADAR AVAILABLE

NOTE: Information shown beyond 20 NM. circle-not to scale

EMERO SAFE ALT 100 NM 13,500
MISSED APPROACH

Initial penetration 20,000
Right turn climbing to "CON TOP" out 120°
within 10 NM. HIR PAR
control not established

PAR pickup:
Right turn over "LG" to 000°for 1 min

maintaining 2500

NOTE: This procedure prohibited when tops of
ever exceed 4000

MINIMA

<table>
<thead>
<tr>
<th>MIN ALT</th>
<th>CIEL-VIS</th>
<th>MIN ALT</th>
<th>CIEL-VIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR/Par 225</td>
<td>1,35</td>
<td>100-4</td>
<td>1,35</td>
</tr>
<tr>
<td>Circling</td>
<td>NOT AUTHORIZED</td>
<td>NOT AUTHORIZED</td>
<td></td>
</tr>
</tbody>
</table>

Then/Distance Facility to Missed Approach

KNOTS | 120 | 140 | 160 | 180 | 200 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN: SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TERMINAL AREA CHART

JAL-PS3-ADP/RADAR

LONG BEACH, CALIFORNIA
LOS ALAMITOS NAS

PLATE 18 PAGE 48
GCA BASIC EMERGENCY/HELICOPTER PATTERN

PLATE 22 PAGE 32
CHAPTER VII

AIRCRAFT, CRASH AND RESCUE

701.1 NAS, Los Alamitos Instruction 3730.2D
    Subj: Crash and Rescue Bill including Pre-Accident Plan

701.2 NAS, Los Alamitos Instruction 3130.1A
    Subj: Search and Rescue Bill

701.3 NAS, Los Alamitos Instruction 11135.1A
    Subj: Aircraft Crash Salvage Bill
NAS INSTRUCTION 3730.2D

From: Commanding Officer
To: Distribution List

Subj: Crash and Rescue Bill Including Pre-Accident Plan

Ref: (a) OPNAV INSTRUCTION 3750.6D of 11 June 1959
(b) U. S. Navy Public Information Manual, NAVEXOS P-1035
(c) NAS INSTRUCTION 5720.1A

Encl: (1) Field Diagram Depicting Emergency Equipment Positions
(2) Public Information Annex

1. Purpose. To establish basic responsibilities and requirements to assist in the carrying out of an orderly procedure in the event of an aircraft accident or aircraft emergency involving this station.

2. Cancellation. NAS INSTRUCTION 3730.2C is hereby cancelled and superseded.

3. How to report a crash:
   a. By tower. Tower activates crash siren and reports details over the primary crash phone system.
   b. By persons on the station. Dial 222 on any station phone and report details to the tower.
   c. By persons off the station. Call Geneva 1-1331, extension 222 and report the details to the tower duty controlman.

4. Explanation of Primary Crash Phone System:
   a. The primary crash system consists of eight phones hooked together on a common party line. Two (2) of these phones, one in the Operations Officer's office and one in the tower are control phones and are the only stations capable of activating the system. This is done by lifting the receiver and pressing the button located on the control phone.
   b. The two (2) control stations have a visual indication by a light panel that the other station phones have answered; therefore, the person answering the crash phone will make no voice report, but will standby for information.
   c. Location of Primary Crash Phones:
      (1) Control Station #1 - Tower.
      (2) Control Station #2 - Operations Officer.
(3) Station #1 - Aircraft Maintenance Officer.
(4) Station #2 - Structures Office, Hangar #2.
(5) Station #3 - Officer of the Day.
(6) Station #4 - Medical.
(7) Station #5 - Fire Station.
(8) Station #6 - GCA Trailer.

d. The Primary Crash Phone System will be tested daily at 0800. The Tower (Control Station #1) will initiate the test. Each station on the circuit will lift the receiver and wait on the line until told to secure.

5. Secondary Crash Phones. The station administrative phones will be utilized as a Secondary Crash Phone System.

6. Pre-accident Plan: (Action to be taken when the emergency alarm is sounded signifying an aircraft in distress.)

*a. The control tower operator will:

(1) Convey by radio the exact information to the crash-fire fighting and rescue crews, and the crash ambulance personnel as to the nature of the emergency, location of aircraft, and the intentions of the pilot, then keeping them advised of status of emergency.

(2) Simultaneously with alarm, inform the Operations Officer of the nature of the emergency.

(3) Notify all traffic on the field and in the air of the emergency and close the field. The field will remain closed until otherwise directed by the Operations Duty Officer.

(4) Direct aircraft to maintain radio silence unless called or an emergency arises.

b. The Operations Officer will:

(1) Alert and control the movement of all personnel and equipment on the field.

(2) Assume over-all military control over all fire fighting and rescue personnel and equipment.

(3) Insure readiness of additional personnel and/or equipment as may be required.

*c. The Operations Duty Officer will:

(1) Proceed immediately in the radio-equipped operations crash vehicle to a position on taxiway #10 between the dual runways (Position #2 on Enclosure 1) and by authority of the Operations Officer insure that all emergency equipment and personnel are in all respects prepared for
any eventuality. In case runway (4) is in use, the ODO will take position on the East/West taxiway between the dual runways, (Position #3 on Enclosure 1).

(2) Assume military control of the airfield proper, unless or until relieved.

(3) Assume duties assigned in Paragraph 6.b. in the absence of the Operations Officer.

d. The Station Fire Chief will: Assume technical control of all fire fighting and rescue equipment and personnel.

e. The Crash/Fire and Rescue Crew will:

(1) Immediately man their assigned equipment and standby the radio for instructions from the Fire Chief.

(2) Be properly clothed and in all respects prepared for the fire fighting and rescue work.

f. Medical Personnel will:

(1) Proceed immediately to the base of the control tower (Position #1 on Enclosure 1) and standby for information and/or instructions from the Operations Duty Officer.

(2) Be prepared to render medical aid to personnel involved.

g. The Duty Photographer will: Proceed to Operations (Position #1 on Enclosure 1) and report to the Operations Officer and/or Aviation Safety Officer for instructions.

h. The Master at Arms will: Proceed the same as the Duty Photographer above.

i. The Officer of the Day will:

(1) Remain at his post in the Administrative Building.

(2) Dispatch the Master at Arms to Operations.

(3) Notify the Aviation Safety Officer of the emergency.

(4) Notify photographic personnel of the emergency.

(5) Keep the Commanding Officer and the Executive Officer informed as information is received.

j. The Crash Salvage Crew will:

(1) Immediately post a telephone watch who will standby for
in instructions from the Operations Duty Officer. The telephone watch will act as communications coordinator between the Operations Duty Officer and the crash salvage crew.

(2) Except for the telephone watch, the crash salvage crew will muster at their equipment and standby until instructions are received from the Operations Duty Officer or until secured from the emergency.

(3) Be prepared to assist and advise the crash fire fighting crew when directed by the Operations Duty Officer or other competent authority.

k. The Aircraft Maintenance Officer will: Insure that sufficient, qualified personnel are immediately available to man the crash salvage equipment and effectively carry out any crash salvage assignment.

7. Action to be taken in the event of a plane crash on or near the field.

a. The Control Tower Operator will:

(1) Sound Crash Alarm and convey exact information to crash, fire fighting and rescue crews and the crash ambulance personnel as to the location of the accident, keeping them advised of status together with pertinent details.

(2) Simultaneously with alarm, notify the Operations Officer of the crash location.

(3) Announce location of the crash over the loudspeaker in Hangar #1.

(4) Notify all traffic on the field and in the air of the crash or emergency and close the field. Field will remain closed until otherwise directed by the Operations Officer. For crash off station, close field until adequate replacement of emergency equipment takes position on the field.

(5) Direct aircraft to maintain radio silence unless called or if emergency landing is necessary.

b. The Operations Officer will:

(1) Alert and control the movement of all personnel and equipment of the crash.

(2) Take charge (Military Control) over all rescue and fire fighting operations, with primary emphasis on rescuing personnel.

(3) Facilitate the dispatch of additional personnel and/or equipment as needed.
c. The Operations Duty Officer will:

(1) Proceed immediately to the scene of the crash.

(2) Assume military control of all crash fire fighting and rescue operations unless or until relieved by higher authority.

(3) Assume duties as assigned in paragraph 7.b. in the absence of the Operations Officer.

d. The Crash Fire and Rescue Crew will: Proceed immediately to the scene of the crash. The Fire Chief will direct (Technical Control) crash fire fighting operations under the over-all supervision of the Operations Duty Officer.

e. The Medical Personnel will: Depart for the scene of the accident in the ambulance immediately upon notification and render aid to personnel involved.

f. The Duty Photographer will: Proceed to the scene of the crash and report to the Operations Duty Officer and/or the Aviation Safety Officer.

g. The Aircraft Maintenance Officer will:

(1) Dispatch crane and salvage equipment to scene of crash.

(2) Direct all salvage operations when notified by the Operations Officer or the Aviation Safety Officer that rescue operations, photographic coverage, and preliminary investigation by the Aircraft Accident Board have been completed.

h. The Officer of the Day will:

(1) Remain at post in the Administration Building.

(2) Dispatch Master-at-Arms to ramp in front of Operations for further instructions by qualified Operations Department personnel.

(3) Notify the Aviation Safety Officer, the location of the crash or emergency.

(4) Notify Photographic personnel of the crash and its location.

(5) Log all information concerning the crash as it is received.

(6) Keep the Commanding Officer and the Executive Officer informed as information is received.
NAS INST 3730.2D  
16 MAR 1961

i. The Master-at-Arms will: Provide security as directed by the Operations Officer or his representative until salvage has been completed, or until properly relieved.

8. Off Station Crash

a. When a crash is reported away from the field, the following information will be obtained by the person receiving the report if possible:

(1) Location of Crash
   (a) Geographic location (street, town, etc.)
   (b) Bearing and distance from some known fix.
   (c) Grid location (NAS Crash Grid).
   (d) Latitude and Longitude.

b. Vehicles

   (1) Within a 15 mile area all on station crash procedures will be followed, terrain permitting.

   (2) If beyond the 15 mile area, only crash equipment designated by the Operations Duty Officer, will proceed to the scene.

   (3) Medical personnel will proceed to the scene of the crash by helicopter with a follow-up team arriving by ambulance.

c. Security. Will be furnished by military, and/or local state police. If professional security is not available, civilian guards may be used.

d. Aircraft Accident Board: Will proceed to the scene of the crash and carry out the investigation procedures as outlined in the Aircraft Investigators Handbook and OPNAV Instruction 3750.6D.

* 9. Reports

a. Message reports will be made to CNO and Aviation Safety Center within four (4) hours in accordance with Section c. Para 25, of OPNAV Instruction 3750.6D.

b. Casualty report will be initiated by the Legal Officer in accordance with existing instructions in BUPERS Manual or Marine Corps Manual as applicable.

c. Message report on aircraft incident flight hazard and ground accident in accordance with OPNAV Instruction 3750.6D.

d. Medical Officers report in accordance with OPNAV Instruction 3750.6D.
10. Additional Responsibilities of the Operations Officer in case of a Crash at Sea

a. Immediately alert the following activities via interphone or by telephone and request assistance:

(1) Coast Guard Headquarters, Long Beach. HEmlock 7-2941
(2) Hamilton AFb, San Rafael, California 4th Air Force Rescue Coord Center. Tucker 3-7711, Ext 2525.
(3) NAS San Diego, California. HEmlock 5-6611
(4) Coast Guard Air/Sea Rescue Unit, San Diego, California. Cypress 5-3121

b. Accurately determine whether recovery of sunken aircraft is feasible and if so, request flight service line and dispatch follow up assistance from COMELEVEN.

11. Operations Officer

a. Provide training to insure readiness of the crash rescue and fire fighting crews. He shall supervise the Chief of the Fire Department in the training of personnel assigned to both the structural fire and crash rescue and fire fighting crews.

b. Order and maintain adequate quantities of spare parts for vehicles, and supplies such as foam, CO2, etc., for actual fire fighting and training purposes.

c. Provide the following equipment and personnel during all flight operations:

(1) 1 MB-1 on the field, fully manned at the west crash shack. (Position #4 on Enclosure 1)
(2) 1 MB-5 standing by at the station fire house, fully manned.

 d. During all jet aircraft operations, the following equipment will be provided:

(1) 1 MB-1 on the field, fully manned at the west crash shack. (Position #4 on Enclosure 1)

(2) 1 MB-5 on the field, fully manned at the east crash shack. (Position #5 on Enclosure 1)

(3) 1 MB-5 standing by at the fire house manned by personnel not previously engaged.
12. Public Works Officer will be Responsible for: Insuring by frequent inspections, the mechanical readiness of the fire fighting and crash equipment and vehicles.

13. The Medical Officer will be Responsible for: Insuring the readiness of an appropriate ambulance crew during all flight operations.

14. Public Information Annex

a. Enclosure (2) is designed to assure the intelligent and efficient coordination of news of this station's aircraft accidents for release to the civilian news media.

b. Reference (b) provides that release of all unclassified news originating from this activity is mandatory. Attention is invited to reference (c), which directs that all reports to civilian news media be made through the Command Liaison Officer.

Distribution List:
All Station Departments and Divisions
All Pay Units

Copy to:
CHARESTRA (2)
MARTD
VS-23
VS-37
VS-25
VS-35
CVSG 55/CVSG 57

R. B. BUCHAN
PUBLIC INFORMATION ANNEX

TO

NAS LOS ALAMITOS CRASH AND RESCUE BILL

1. Purpose. Since the Command Liaison Officer has the responsibility of making all news releases originating within this command, it is imperative that all information concerning missing, overdue, or crashed aircraft be made available immediately. It is directed that the Operations Department and all other cognizant parties inform the Command Liaison Office immediately in the event of such occurrences and keep it advised of all developments for the duration of the emergency. Please note that reports are required not only for major accidents, but for any such occurrence which might come to the attention of the public.

2. Action. The Command Liaison Officer will need the following information to effectively service interested media:

   a. Location of crash
   b. Time of crash or time of discovery
   c. Model of aircraft
   d. Names of personnel involved, if known
   e. Condition of personnel
   f. Status of search and rescue operations
   g. All possible additional amplifying data, including terrain involved, extent of fire, if any, invasion of the public domain, other aircraft involved, descriptions of eye witnesses, etc.
NAS INSTRUCTION 3130.1A

From: Commanding Officer
To: Distribution List

Subj: Search and Rescue Bill

Ref: (a) Search and Rescue Agreement between Commander, Western Area (U. S. Coast Guard), Commander, Fourth Air Force and Commander, Western Sea Frontier dated 4 FEB 1957 
(b) Search and Rescue Agreement between Commander, Western Area (U. S. Coast Guard) and Commander in Chief, Pacific Fleet dated 8 JAN 1957 
(c) NWP 37, Search and Rescue 

Encl: (1) U. S. Coast Guard Grid System

1. Purpose. This bill is to outline Standard Search, Rescue and Alerting procedures and to attain maximum coordination and utilization of those military and civil agencies who mutually assist or actively participate in Search and Rescue Missions within the 11th Naval and Coast Guard Districts and Maritime Areas, which include the greater portion of the NAS Los Alamitos local operating area.

2. Cancellation. NAS Instruction 3130.1 is hereby cancelled and superseded.

3. Areas of Responsibility

a. In accordance with references (a) and (b), the Commandant, Eleventh Coast Guard District is delegated the primary responsibility as Search and Rescue Coordinator of the 11th Naval and Coast Guard Districts and Maritime Areas.

b. The Naval Air Station Los Alamitos is available as a participating agency under the coordination of the Commander, Eleventh Coast Guard District.

c. The Operations Duty Officer is designated as Search and Rescue Coordinator for local searches.

d. The Operations Office spaces are assigned as the Coordination Center for all local searches.

4. Rescue Operating Procedures

a. Any information received in regard to a distress or possible distress involving an aircraft, surface vessel or sub-surface vessel will immediately be relayed to the Operations Duty Officer, NAS Los Alamitos (Ext. 287), who will notify the Search and Rescue Coordinator, U. S. Coast
Guard, Long Beach (Phone H8mlock 7-2941). Distress in this case includes aircraft in the following categories:

(1) Any aircraft whose position is so doubtful as to give rise to doubt as to its safety.

(2) Any aircraft which has actually made a forced landing or is about to do so.

(3) Any aircraft whose operating efficiency has been impaired to the extent that a forced landing may be necessary.

(4) Any overdue or unreported aircraft as determined by the circumstances and, when possible, subject to confirmation of the operating agency. Aircraft are considered overdue when:

(a) The aircraft on a point-to-point flight plan fails to arrive at its proposed destination within sixty (60) minutes of its estimated time of arrival.

(b) The aircraft on a local flight plan which exceeds its ETA sixty (60) Minutes.

5. Rescue Coordination Center

a. When information of a distress incident is received by the Rescue Coordination Center, any or all of the following steps will be taken depending on the existing circumstances and the nature of the distress:

(1) Alert primary Search and Rescue activities and assign search areas and rescue missions.

(2) In the case of unreported or overdue aircraft, to request the FAA and Flight Service stations to conduct field checks at all fields under their cognizance where the aircraft may have made an unreported landing.

(3) Alert UHF/DF net.

(4) Alert VHF/DF net.

(5) Alert HF/DF net.

(6) Advise the controlling agency of the distress aircraft or vessel as to the nature of the distress, action being taken and other pertinent information available.

(7) Augment primary search and rescue facilities with additional secondary search and rescue facilities as availability permits and as circumstances dictate.
(8) Coordinate the orderly assignment or search areas to aircraft engaged in the Search and Rescue Mission with due regard to existing weather, nature of terrain, and range or endurance capabilities of the aircraft involved.

(9) Request the organization and direct the assignment of land search and rescue parties as circumstances warrant.

(10) Alert and request assistance from U. S. Forestry Service and State Highway Patrol as the nature of distress may warrant.

(11) Advise all participating activities, including the controlling agency of the distressed aircraft, when the Search and Rescue Mission is successfully completed, or recommend the discontinuance of further search when the scope of operation and other information available indicates that further search effort would serve no useful purposes.

6. Action by Search and Rescue Units

a. Aircraft engaged in a Search and Rescue Mission as assigned by the Search and Rescue Coordinator, U. S. Coast Guard, Long Beach, shall be guided by instructions received from the Rescue Coordination Center. Results of all distress incidents investigated by aircraft, or land search parties engaged in the Search and Rescue Mission should be reported promptly to the Rescue Coordination Center by the most expeditious communication facility available. This report should include:

(1) Accurate location of the distress aircraft by latitude and longitude and/or by bearing and distance from the nearest known geographical fix. Additional information such as nearby roads, rivers, lakes and mountain peaks should be included.

(2) Condition of the distress aircraft; whether there are any visible survivors; other aircraft on or near the scene of distress and, if actual rescue is effected, the names and condition of survivors.

(3) In addition, activities engaged in the Search and Rescue Mission shall advise the Rescue Coordination Center at the completion of each day's search, the following:

(a) Result of day's search.

(b) Area thoroughly searched during the day.

(c) Portions of assigned search not covered and the reason.

(d) Availability of aircraft for search mission the following day.

(e) Time on station in aircraft hours.
b. Aircraft engaged in a Search and Rescue Mission as assigned by the Search and Rescue Coordinator, Los Alamitos, shall be guided by the NAS Los Alamitos Local Search Plan.

7. NAS Los Alamitos Local Search Plan

a. The NAS Los Alamitos Local Search Plan will be in accordance with the procedures outlined in reference (c).

b. Due to the wide variety of search problems which can be encountered, definite search assignments will be determined from pattern requirements.

c. The U. S. Coast Guard Grid System, enclosure (1), will be utilized for assignment of search sectors.

d. Responsibilities for the implementation of a local search are as follows:

   (1) The Search and Rescue Coordinator shall:

       (a) Based upon information received, decide upon the type, extent and area of the search.

       (b) Dispatch immediately to the scene, an HSS type helicopter and/or suitable high aircraft equipped with FM radio equipment.

       (c) Assign search areas and search plans.

       (d) Assign communication frequencies.

       (e) Brief the pilots assigned to the mission.

       (f) Assure himself that full control of the search is maintained in the Coordination Center until the search is completed or discontinued.

   (2) The Training Officer or his representative shall assign pilots for the search as the needs dictate.

   (3) The Maintenance Officer or his representative shall assign aircraft in number and type as the needs dictate.

   (4) The Communications Officer shall provide personnel for a listening watch of assigned communications frequencies as needed.

8. Reports

a. At the completion of their assigned mission, the pilots will make their report to the Search and Rescue Coordinator giving information
as listed in paragraph 6.a.

b. The Search and Rescue Coordinator shall report directly to the Commanding Officer, either verbally or in writing as requested, the results of the search.

Distribution List:
All Station Departments and Divisions
All Pay Units

Copy to:
CNARESTRA (2)
CDR, Western Area (USCG) (2)
CDR, 11th AF (2)
COMWESTSEAFRON (2)
VS-37
VS-23
MARDT
VS-25
VS-35
SAN DIEGO SECTIONAL CHART (AIR SEA RESCUE CHART)
NAS INSTRUCTION 11135.1A

From: Commanding Officer
To: Distribution List

Subj: Aircraft Crash Salvage Bill: promulgation of

Ref: (a) NAS INSTRUCTION 3730.2C

Encl: (1) Aircraft Salvage Bill

1. Purpose. To outline the duties and responsibilities of personnel assigned to perform aircraft salvage operations in accordance with reference (a).

2. Cancellation. NAS INSTRUCTION 11135.1 is cancelled and superseded.

3. Objective. To have readily available an experienced aircraft salvage crew capable of conducting salvage operations in a rapid and efficient manner, and to provide this crew with the necessary tools and equipment to effect salvage with a minimum of damage to the aircraft involved and without imposing undue hardship on the crew.

4. Scope. This salvage bill is intended not only to cover actual salvage operations, but to encompass the basic preparatory measures and operating procedures prior to the event of actual salvage. In this connection no man assigned to the salvage crew will absent himself from his assigned station without the express permission of the Line Maintenance Duty Chief. The Line Maintenance Detail, from which the Salvage Crew is formed, shall not normally be used to complete routine work which is the responsibility of the various shops or lines. In the event of scheduled local night flying, the Salvage Crew shall stay within the immediate vicinity of the salvage equipment. No one will be allowed to go to the movie, clubs, hobby shops, etc. Flying during the period of duty is also prohibited.

5. Responsibility

a. It shall be the duty of the Shops Division Chief, under the supervision of the Aircraft Maintenance Officer, to conduct routine inspections of all salvage equipment and to insure that equipment is tested and inspected daily, to be standing by in the event that aircraft salvage operations become necessary. He shall take steps to insure that adequate tools and provisions, including foul weather gear, camping equipment, and rations are readily available for use by salvage personnel who may be ordered to remote locations at other than normal hours.
b. All personnel assigned to the Salvage Crew will be qualified in the
functions of salvage operations and equipment. They will also be qualified
to re-rig the arresting gear used for a barrier. The Aircraft Maintenance
Officer, or his authorized representative, shall maintain a training program
to insure Salvage Crew personnel are so qualified.

c. Under the direction of the Aircraft Maintenance Officer, the Shops
Division Chief, who is in charge of the Salvage Crew, shall assist and advise
the crash firefighting organization about entry into the aircraft, placement
of fuel lines, fuel tanks, batteries, switches, and approximate position of
trapped personnel in the crashed aircraft. If salvage equipment is needed
to facilitate crash rescue and crash firefighting, he should recommend its
movement and use at the scene of the accident. When the station Aviation
Safety Officer, or his authorized representative, gives permission, wreckage
shall be removed in accordance with existing regulations.

d. The positions and basic duties of the salvage crew are outlined in
enclosure (1).

6. Policy in Regard to Aircraft Salvage. Experience in salvage operations
indicates that each salvage operation should be considered individually;
the method and route of approach to the aircraft should be carefully analyzed
in order to minimize damage to public or private property in getting the
salvage equipment to the location of the wrecked or damaged aircraft. The
positioning of the salvage equipment in relation to the aircraft should be
carefully considered when using hoisting or pulling equipment in order not
to apply stresses which will further damage the aircraft. Many hasty
salvage operations have resulted in strike damage to aircraft which incurred
only minor damage as a result of the accident.

7. Off-station Salvage. In the event that off-station salvage is necessary,
the Aircraft Maintenance Officer, or his authorized representative, shall
detail personnel and equipment in accordance with the type equipment to be
salvaged.

R. B. BUCHAN

DISTRIBUTION LIST:
All Station Departments/Divisions
A2d Organized Reserve Units
CVSG-55/CVSG-57
VS-23/VS-25
VS-35/US-37
MARTD

Copy to:
CHARESTRA (R)
# Aircraft Salvage Bill

**Position** | **Duties**
--- | ---
Petty Officer in Charge | 1. Muster Salvage Crew  
2. Direct Salvage Crew’s operations  
3. Provide a phone standby
Equipment Operator | 1. Operate crane
Assistant Equipment Operator | 1. Assists in salvage operations as directed
Sling Man | 1. Procure proper slings and cables from the crash locker, Hangar 2  
2. Installs slings and cables on crashed aircraft
Assistant Sling Man | 1. Assists sling man  
2. Assists in salvage operations as directed
Electrician | 1. Assists in salvage operations as directed  
2. Checks aircraft battery disconnect  
3. Man light truck
Technician | 1. Assist in salvage operation as directed  
2. Insures maximum security of classified radio/radar gear
Ordnanceman | 1. Assists in salvage operations if aircraft is armed and when directed
Safety Equipment Man | 1. De-arms ejection seats and canopies as required

**Note:** During hours of normal operation, aircraft salvage operations will be performed by maintenance personnel from Hangar 2 since some of the members of the Salvage Crew are assigned to remote areas (i.e., Jet Line, S2P Line) and are not always aware of an emergency. In the event that special rates are required, the Shops Division Supervisor will notify personnel concerned by telephone.

Enclosure (1)