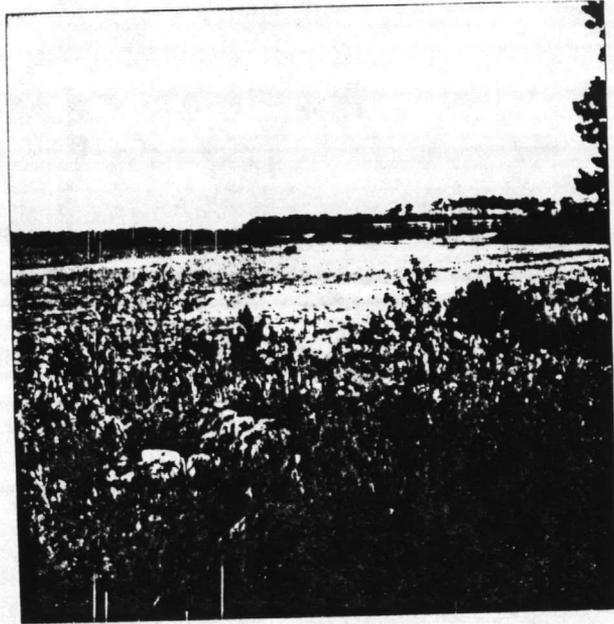


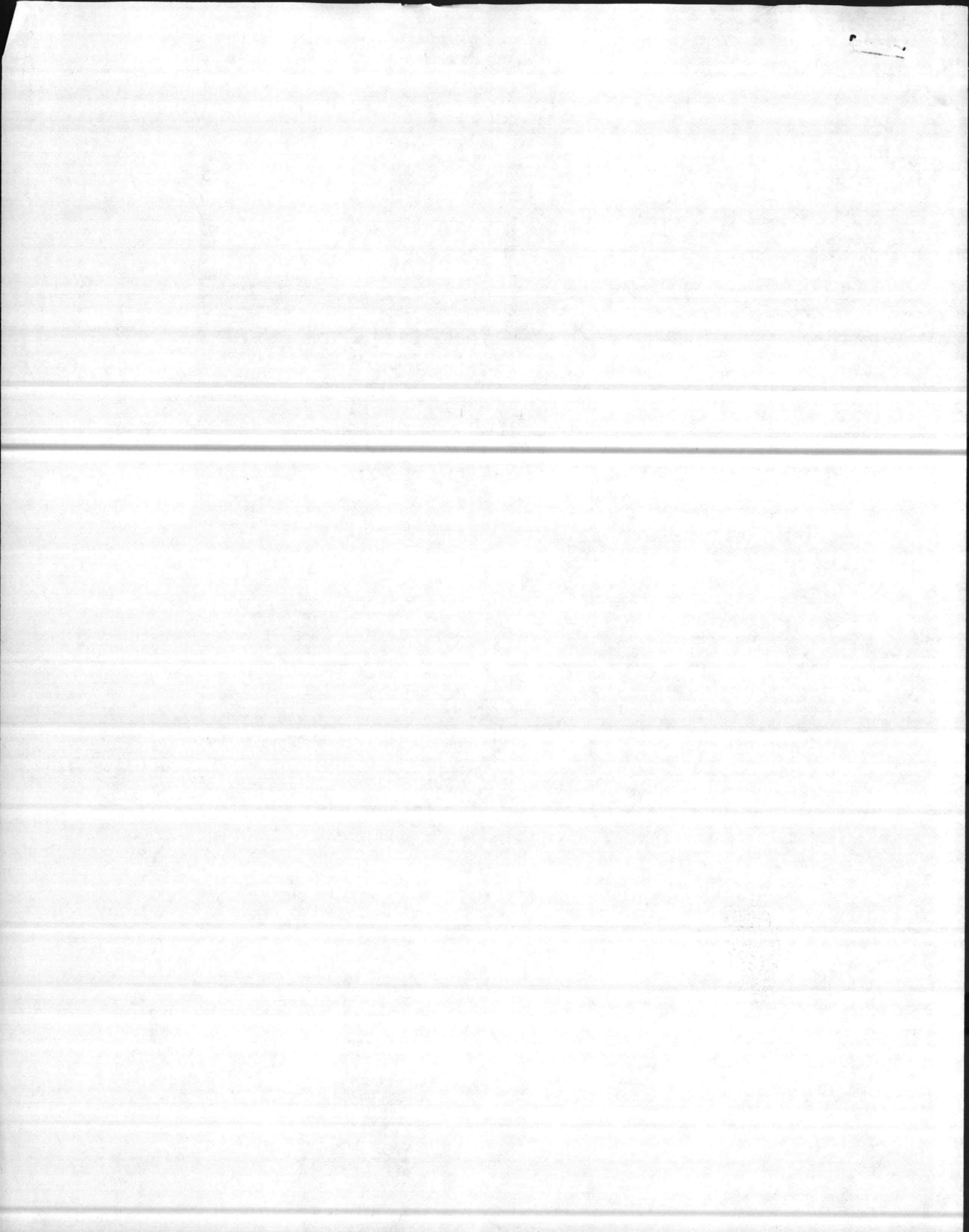
11000/5



TO: BOB ALEXANDER, ENVIRONMENTAL ENGINEER

The above shows two 6X's maneuvering in New River River approximately 400 yards off shore. The third vehicle is too far under water to show up in this photo. I am forwarding this for your information and possible future reference in environmental planning.

*DDS*  
DANNY SHARPE, 11OCT84



## NCEL Designs Offshore Bulk Fuel System

Approximately 1,000,000 gallons of fuel a day is offloaded from a tanker moored two miles at sea and delivered by pipeline to shore.

That is the staggering supply the Marine Corps ground and air forces will demand to conduct a successful amphibious landing upon an undeveloped beach.

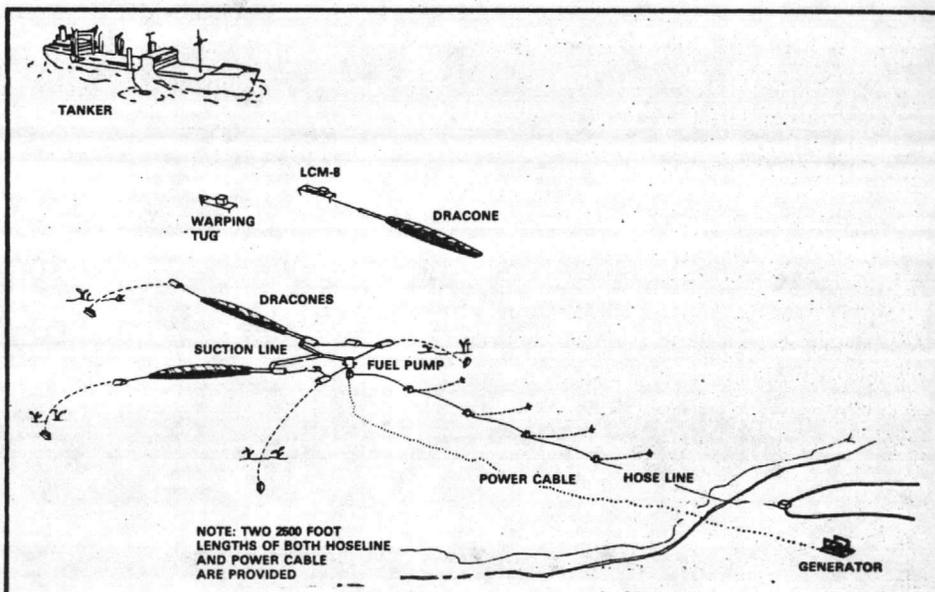
Since no existing fuel systems offer such logistical capabilities, the Navy is adapting commercial components into its development of the new Offshore Bulk Fuel System (OBFS) designed to satisfy specific Navy/Marine Corps requirements through the 1990s.

As lead laboratory, the Naval Civil Engineering Laboratory (NCEL), Port Hueneme, Calif., has designed an OBFS to be installed and fully operational in 17 days to provide the maximum fuel supply needed. But results from tests at sea reveal that complete installation and full-flow rate can be achieved after 14 days.

The Naval Facilities Engineering Command is the developing agency of the project; and the Strategic Sealift Branch, Chief of Naval Operations, is the sponsor.

NCEL Project Leader Daniel True said the OBFS consists of two facilities—the Amphibious Assault Fuel Supply Facility (AAFSF) and the Amphibious Tanker Terminal Facility (ATTF). Once amphibious forces have landed with temporary stores of petroleum, oil, lubricants (POL) and emergency supplies, the installation of both facilities gets under way concurrently.

AAFSF provides the short-term capability. Installed within three days, it provides 440,000 gallons of fuel a day. It is operational in sea state 3 with waves up to five feet. ATTF provides reliable off-loading of tankers up to 70,000 dead weight tons in sea state 5 with waves up to 12 feet. Despite these severe offshore conditions, the system is capable of providing 2,000,000 gallons of POL daily,



**THE AMPHIBIOUS ASSAULT FUEL SUPPLY FACILITY (AAFSF) can be installed within three days to provide 440,000 gallons of fuel a day to military forces ashore. This facility is a component of an Offshore Bulk Fuel System being developed by the Naval Civil Engineering Laboratory, Port Hueneme, Calif.**

satisfying the long-term, all-weather need of a million gallons a day.

Part of AAFSF, a 6-inch buoyant hose, can be installed in 4 hours from the beach to LSTs moored 5,000 feet offshore. This delivery method provides 300,000 gallons a day initially. AAFSF is completed with the addition of four towable rubber bladders, a mooring, and a transfer pump to shuttle fuel from offshore tankers. Each bladder is 220 feet long, 11 feet diameter, and holds 110,000 gallons. It is towed by a powered work barge from the tanker to the AAFSF bladder mooring located 2,500 feet offshore. Two bladders can be accommodated in this mooring at once. An electric pump, with a switching valve, unloads one bladder while the other empty one is replaced with a full bladder. POL is carried by the six-inch buoyant hose to shore.

The long-term ATTF, the heart of the OBFS, consists of a single point mooring (SPM) fuel buoy to which the tanker moors; high-capacity catenary anchor legs incorporating high-strength chain and four large drag embedment anchors;

underbuoy hoses; a pipeline end manifold (PLEM); interconnecting hoses; and two 10,000-foot, 8-inch bottom-laid pipelines. This facility will provide the POL the Marine Amphibious Force will need from the 18th day after landing to a nominal six months.

Especially designed lightweight and portable SPM fuel buoy is an integral component of a functional and acceptable ATTF. The Laboratory has streamlined existing commercial configurations, adapting industry concepts to match logistical support capabilities of Navy Amphibious Construction Battalions responsible for the installation and operation of the ATTF.

True said the SPM affords safe mooring for tankers in mud and sand seafloors. It can be installed in 65-200 feet of water at virtually any landing beach, in polar, tropical, and temperate environments.

The SPM fuel buoy structure weighing less than 130,000 pounds (approximately half the weight of a commercial one) with a diameter of 28 feet and a hull depth

*Continued on page 2*

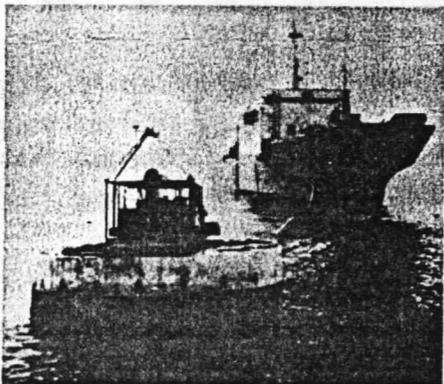


## Offshore Bulk Fuel System (Con't.)

of 10 feet. It contains a two-product distribution unit, a cantilevered two-arm rotation unit, and four hawsepipes. It incorporates the American Bureau of Shipping safety factor of two on anchor capacity, and three on chain and structure strength, to give a mooring capacity of 225,000 pounds in any direction. The hawser is a single mooring line 225 feet long and 18 inches in circumference, and is fitted with small lines resulting in a self-pickup capability.

Briefly, the nominal 17-day installation of ATTF begins with a site survey, beach preparation, and anchor/chain preparation occurring simultaneously. After four days, anchors and chain legs are ready for installation. The pipeline is ready on the beach for preassembly into 100-foot lengths and tow-out. During the next five days, the anchors are installed and the two 10,000-foot pipelines are towed into position. On the 10th day, the PLEM is connected to the pipeline hoses and anchored on the seafloor. From Day 11 through 15, the mooring legs are connected to the SPM, and the adjusting of the buoy position and chain pretensioning is completed. Connection of the underbuoy and offbuoy floating hoses and hawser are completed on the 17th day.

The nominal 17-day ATTF installation requires 10-hour work days, four powered and seven non-powered work barges, a maximum 95 workers on any given day, and an inventory of equipment that includes cranes, bulldozers, rough terrain forklifts, and air compressors.



**THE SINGLE POINT MOORING Fuel Buoy is an integral part of the Amphibious Tanker Terminal Facility (ATTF). The Naval Civil Engineering Laboratory, Port Hueneme, Calif., developer of an Offshore Bulk Fuel System, designed this lightweight and portable buoy which can transfer 2,000,000 gallons of fuel a day from a tanker to onshore storage facilities.**

But faster installation times are being sought. True said a nine-day installation could be achieved when the following pending improvements are incorporated into the operations:

- With more personnel, around-the-clock work could prove a vital time saver.
- Special chain packaging and placement of a portable windlass on the chain-deployment vessel would eliminate the need to transport the chain to the beach.
- The PLEM, underbuoy hoses, and pipeline end hoses might be replaced with 300-foot lengths of flexible pipe.
- A second chain tensioner could be placed on the SPM, allowing chain connection and tensioning on two legs simultaneously.
- The use of three support vessels would permit the tow-out of two pipes at the same time.

A prototype ATTF has been developed, tested, and improved during the last three years. Test results of at-sea installations of the new SPM have revealed no major difficulties during the offloading, hose assembly, pipeline, and PLEM installation, or positioning of the four anchor legs. During final fleet operational evaluation tests this summer, data showed that the nominal 17-day installation with the existing design can be completed in 14 days under favorable environmental conditions.

Although designed to provide the Navy with a capability to respond quickly with logistical support during a major amphibious operation, OBFS technology can be adapted by the offshore oil and transport industries. With the use of the expedient ATTF installation procedures and hardware designs, commercial moorings can be temporarily installed where weather windows for installation are severely limited, where specialized ocean construction platforms are not readily available, or where construction diver assistance is limited.

Diver involvement in the ATTF installation is limited to observation, measurements and inspection at maximum depths of 150 feet. All construction work, such as securing underbuoy hoses to the buoy after PLEM installation, is done at maximum depths of 30 feet.

Circle No. 1 on Reader Reply Card

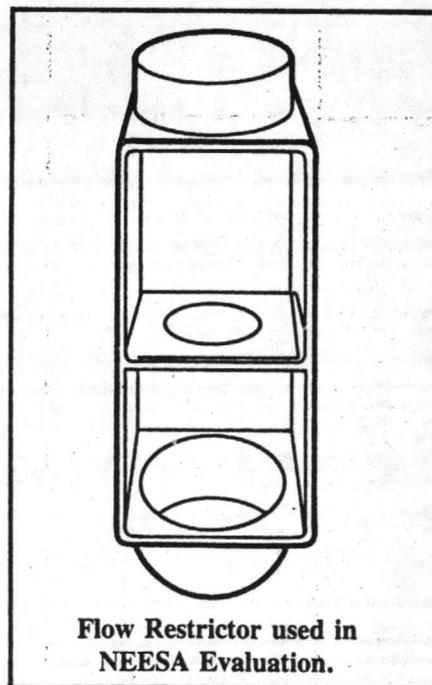
## Retrofit Boiler Draft Control Device (Exhaust Flow Restrictor) Evaluated

Manufacturers claim that retrofit draft control devices save 15 percent to 30 percent or more in fuel consumption. These devices range from an orifice in a flat plate to a fully automatic, solenoid-actuated device that modulates with the firing rate of a boiler, a water heater, or a furnace. The Naval Energy and Environmental Support Activity (NEESA) evaluated one of these devices to provide utilities managers with updated technology.

The flow restrictor tested consists of an orifice that reduces cross-sectional stack area by 40 percent. The reduction in area decreases the flow of combustion gases through the heating unit. The configuration is claimed to increase heat retention.

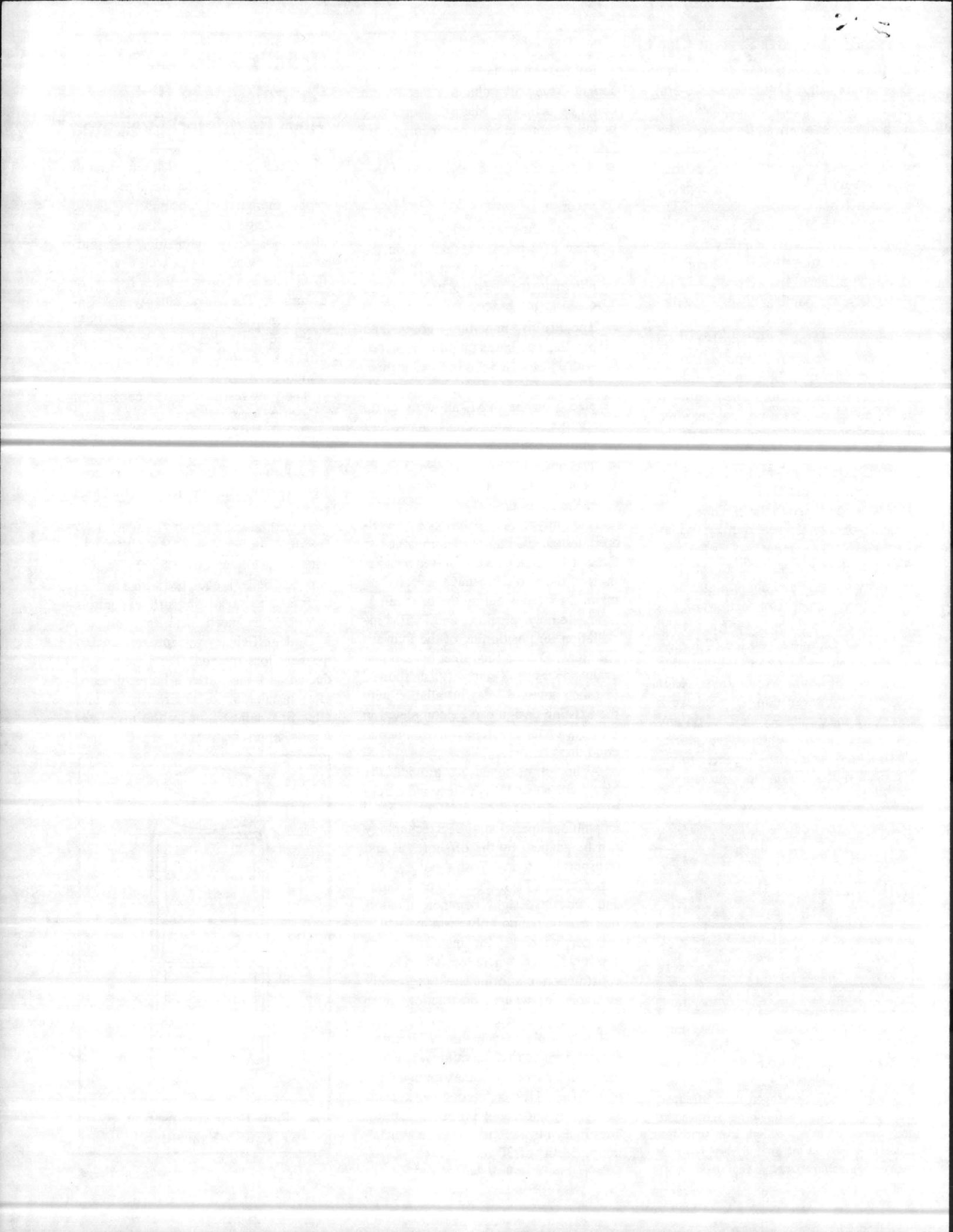
A natural-gas-fueled, firetube, low-pressure steam boiler with 5.6-MBtu/hr output capacity was used for the evaluation. The boiler is equipped with a forced-draft fan and modulating air/fuel controls connected by mechanical linkages.

Boiler efficiency was measured using the heat loss method. Tests were conducted as found, after a boiler tuneup, after installation of the restrictor, and after final adjustment by the manufacturer's representatives.



Flow Restrictor used in NEESA Evaluation.

Continued on next page



# NRL Researchers Play 'Key Role' in New Steel Development

The "key role" in the research characterization and development of a new type of steel for naval structure has recently been credited to a Naval Research Laboratory (NRL) research team.

## Retrofit Boiler (Con't.)

The boiler tuneup increased efficiency by 4.2 percent. Installation of the restrictor increased efficiency by 0.5 percent. This value is within expected measurement error and is therefore considered negligible. Final adjustments by manufacturer's representatives decreased efficiency by 3.2 percent. Test results (from 12 to 26 May 1982) are shown below.

Overall Boiler Performance (Percent Efficiency/Percent Excess Air)				
Percent Load	Existing	After Tuneup	After Installation	Final Adjustment
100%	77.35/ 43.46	80.58/ 9.36	80.99/ 6.38	78.40/ 51.18

The most effective efficiency improvement was achieved by adjusting the air/fuel ratio without adding peripheral devices. (From *Information Bulletin*, August 1982, a publication of the Naval Energy and Environmental Support Activity)

Circle No. 2 on Reader Reply Card

At the request of the Naval Sea Systems Command (NAVSEA), NRL was engaged from 1973 to 1982 in the development and characterization of HY-130 steel base material, weldment (structures joined together by a welding process), and product forms for the environments experienced by submarine pressure hull structures.

NRL's responsibilities in the program included the development of fracture toughness and stress corrosion testing methods and criteria, the resolution of the weld hydrogen embrittlement problem,

and the metallographic examination of fatigue and stress corrosion fractures. Laboratory test specimens were used to provide the baseline data for the examination of cracks in models of large structural test elements.

In addition, the NRL research team provided consultants to the steel and welding electrode industry and advisory technical support to NAVSEA, naval laboratories, and naval and private shipyards.

Circle No. 3 on Reader Reply Card

## Manufacturing Technology End-of-Project Demonstrations

Syscom	Project No.	Project Title	Category
<b>JANUARY</b>			
AIR	A82045	E/F Transducer Fab.	Electronics
AIR	A83249	Precision Robotic Tech.	CAD/CAM
<b>FEBRUARY</b>			
AIR	82100A	Sonobuoy BCB	Electronics
<b>MARCH</b>			
SEA 07	S718	Auto Propeller Optical Measurement	CAD/CAM
AIR	A83259	Metal Matrix Mfg.	Non-Metals
AIR	A81122	Nd:YAG Laser Rods	Electronics

For additional information on end-of-project demonstrations, address written requests on company stationery to the following personnel at the appropriate SYSCOM. AIR: Commander, Naval Air Systems Command, Attn. Mr. R. Retta, Code 5143, NAVAIRSYSCOM Headquarters, Washington, D.C. 20361. ELEX: Commander, Naval Electronic Systems Command, Attn. Mr. R. Hill, Code 81341, NAVELEXSYSCOM Headquarters, Washington, D.C. 20360, SEA: Commander, Naval Sea Systems Command, Attn. Mr. R. Ramsay, Code 90M, NAVSEASYSYSCOM Headquarters, Washington, D.C. 20362.

### Volume 8, No. 11 READER REPLY CARD

Are you presently on the mailing list for the Navy T<sup>2</sup> Fact Sheet?  Yes  No

Would you like to be placed on the Fact Sheet mailing list?  Yes  No

Would you like to be removed from the Fact Sheet mailing list?  Yes  No

Circle numbers of technology items for which you would like more information or a point of contact.

**1 2 3**

Comments \_\_\_\_\_

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Name _____	ID No. _____
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Phone No. \_\_\_\_\_ **11/83**



Danny ~~DDS~~ SLA 200  
Ken  
1. 11000/5d  
FAC/REA/nh  
6280/1  
21 FEB 1984

**From:** Commanding General  
**To:** Commanding Officer, Marine Corps Air Station (Helicopter),  
New River, Jacksonville, North Carolina 28545

**Subj:** Preliminary Environmental Impact Assessment (PEA);  
submission of

**Ref:** (a) CO, MCAS(H)NR ltr 204:PEA:jw over 11000 dtd 10 Feb 84  
(b) BO 11000.1A

1. Per the request at reference (a), the PEA for the fuel bladder test has been reviewed and complies with reference (b). In light of both the need to proceed with the testing and the environmental commitments expressed in the enclosures to reference (a), approval to proceed is granted.
2. Request that a brief presentation of this project and the PEA be made at the next scheduled meeting of the MCB Environmental Impact Review Board. This meeting will tentatively be scheduled for 21 March 1984. The point of contact for this matter is Mr. Alexander, ext. 3034.

J. G. FITZGERALD  
By direction

Copy to:  
BNain [w/ ref (a)]  
NREAD [w/ ref (a)]  
PWO [w/ ref (a)]  
BFire

18

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY

REPORT OF THE COMMITTEE ON THE  
PROGRESS OF CHEMISTRY

FOR THE YEAR 1911

CHICAGO, ILL., 1912

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CHICAGO, ILL., 1912



UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
(HELICOPTER)  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545

IN REPLY REFER TO  
204:FEA:jw  
11000

FEB 10 1984

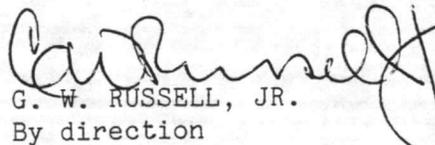
From: Commanding Officer  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina  
28542 (Attn: Assistant Chief of Staff, Facilities)

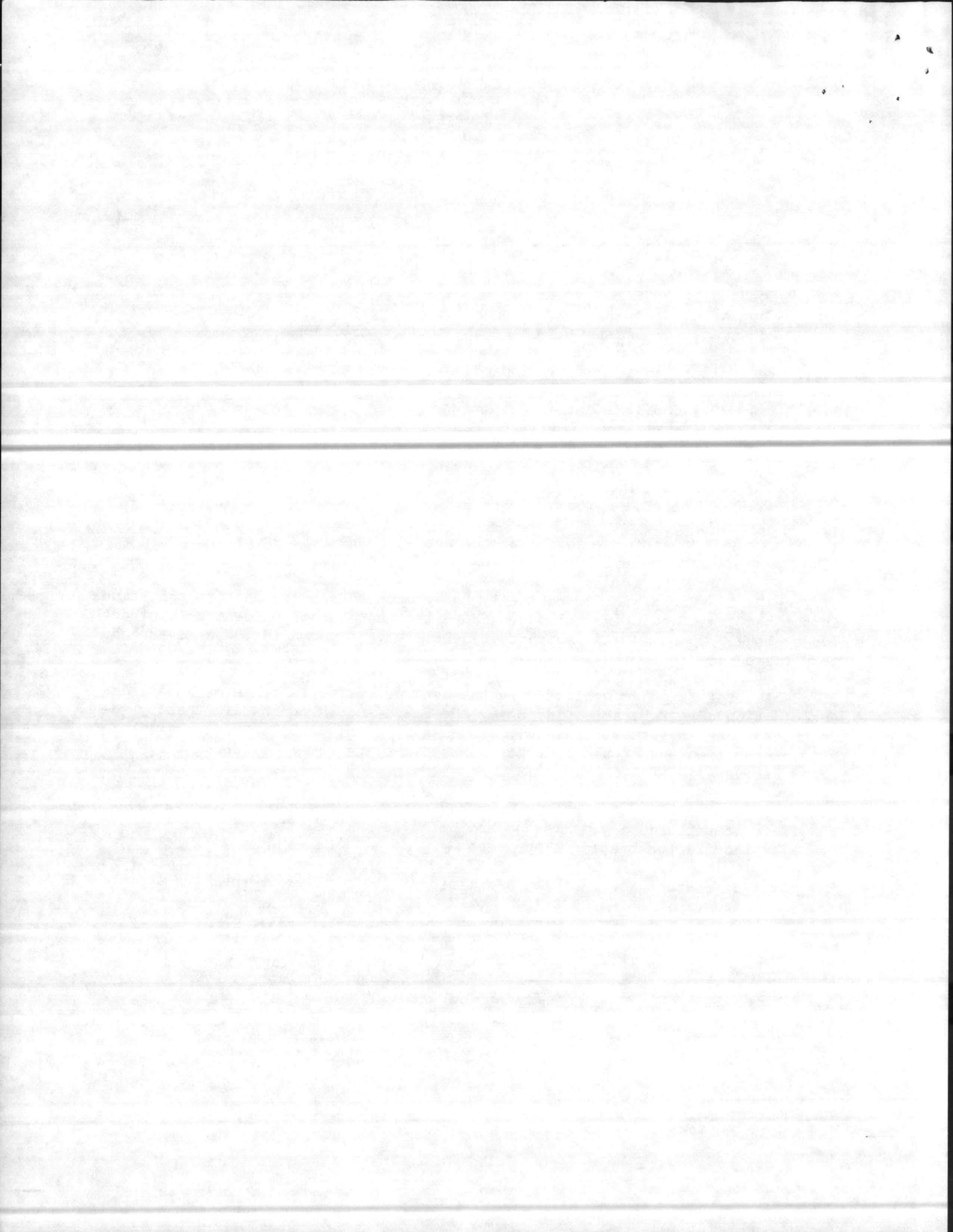
Subj: Preliminary Environmental Impact Assessment; submission of

Ref: (a) BO 11000.1A

Encl: (1) Preliminary Environmental Impact Assessment for First Article  
Test of 20,000 Gallon Collapsible Bulk Fuel Tank  
(2) CG Albany msg 271653Z Jan 84  
(3) COMCABEAST msg 061045Z Feb 84

1. Enclosure (1) is forwarded in accordance with the reference for consideration by the Environmental Impact Review Board.
2. The Marine Corps has contractually undertaken to provide certain assistance in the testing of bulk fuel bladders as part of an overall Government contract for eventual purchase. As indicated by enclosures (2) and (3), New River has been tasked as the action activity.
3. Because of language contained in the contract, time is of an essence. In anticipation of a favorable finding by the Board and in order to not delay the contractor any more than absolutely necessary, New River is proceeding with site preparation and should be ready to have testing commence during the week of 13 February 1984.
4. It is requested that a preliminary review be conducted of enclosure (1) and if found satisfactory, this command be advised immediately in order that we may authorize the testing to proceed.
5. Point of contact for further information is LtCol G. W. Russell, Jr. or Mr. F. E. Acosta at 451-6506/6518.

  
G. W. RUSSELL, JR.  
By direction



UNITED STATES MARINE CORPS  
Marine Corps Air Station  
(Holloman)  
New River, Jacksonville  
North Carolina 28542

204:FEA:jw  
11000  
FEB 10 1984

From: Commanding Officer  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina  
28542 (Attn: Assistant Chief of Staff, Facilities)

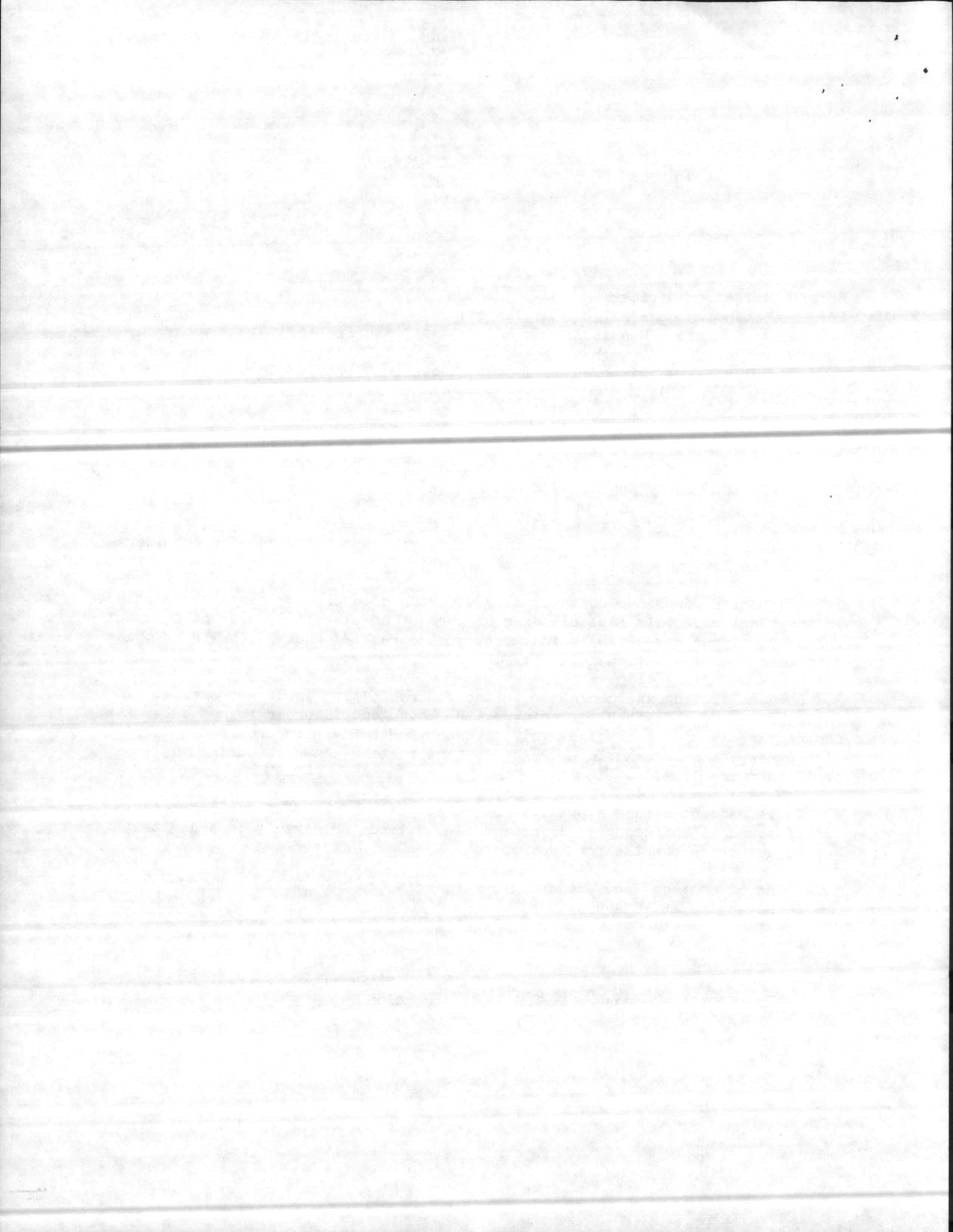
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G. W. RUSSELL, JR.  
By direction



Preliminary Environmental Impact Assessment  
for First Article Test\* of Minowitz,  
20,000 Gallon Collapsible Bulk Fuel Tank  
U.S. Government Contract, M67004-82-C-0229

\*Three Phase Test on a Marine Corps Logistic Base, Albany, GA Contract for 1,620 collapsible bulk fuel tanks

1. Action/Project Description.

a. General. The proposed test is the final requirements for acceptance of first article by the U.S. Marine Corps. The test has three major objectives:

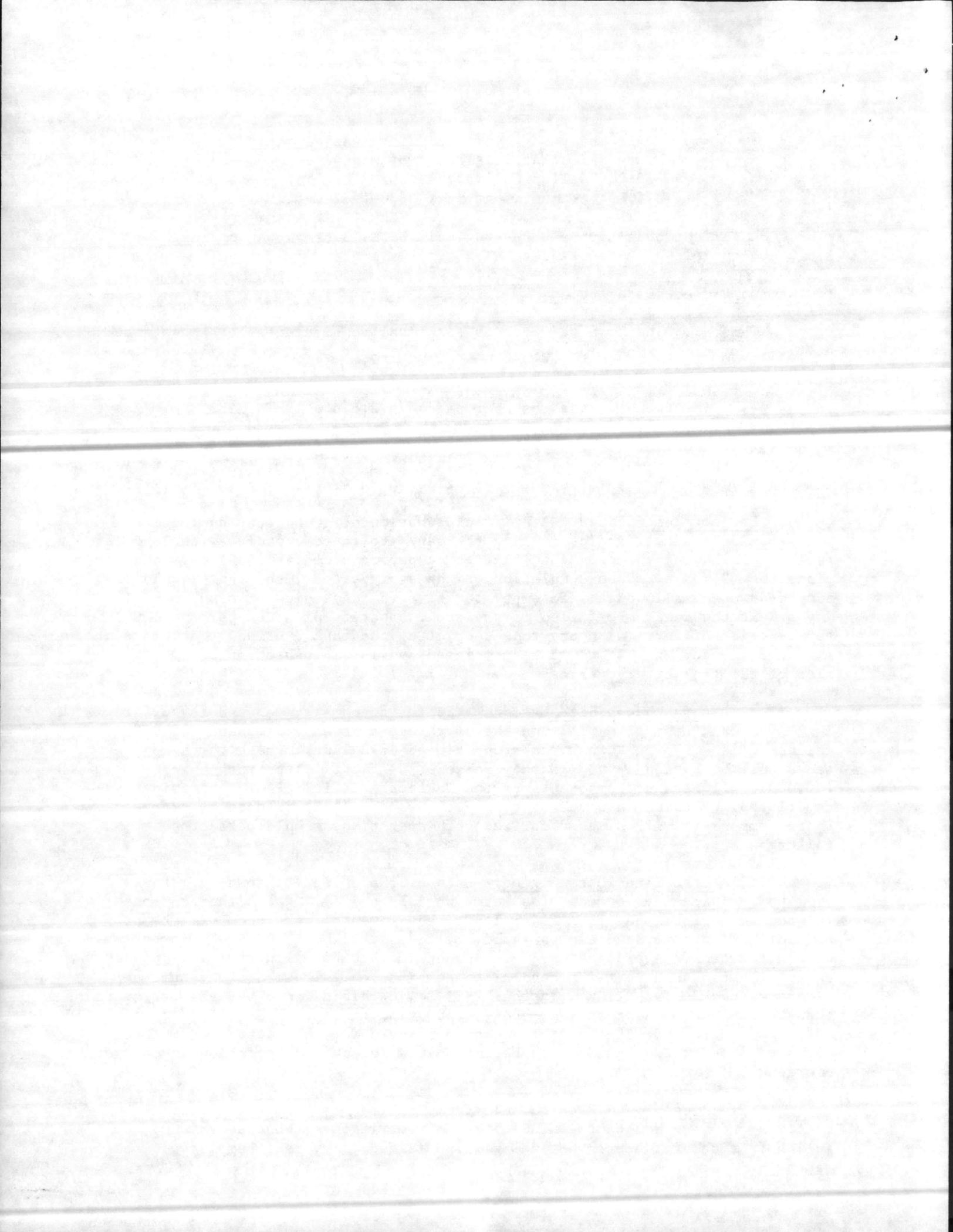
- (1) The fuel storage test per para 4.6.2.6 of MIL-T-52983
- (2) The tank overload test per para 4.6.2.7 of MIL-T-52983
- (3) The internal inspection test per para 4.6.2.7.1 of MIL-T-52983

b. Project Description. A brief explanation of these testing requirements could be summarized as filling the tanks to rated capacity with JP-5 jet fuel, and allowing them to stand free for a period of thirty (30) days plus or minus two (2) days. Upon completion of the storage test, the tanks would be pumped down and allowed to lie empty for five (5) days plus or minus one (1) day. Next the tanks are filled to the rated capacity plus ten percent (10%) for a period of four (4) hours thus completing the tank overload test. The internal inspection test would be completed by visual inspection of the inside of the tank after overload.

(1) Actual Test Site Layout. (See attached site map and layout drawing) The tank test site will consist of three (3) twenty thousand (20,000) gallon collapsible bulk fuel tanks positioned in a line. These three (3) test tanks will be backed up as a safety measure, by two (2) twenty thousand (20,000) gallon tanks components of the Tactical Airfield Fuel Dispensing System (TAFDS) or the Amphibious Assault Fuel System (AAFS) in case of emergency. These components will be used for recovery operations should catastrophic failure occur.

(2) Test Site Installation. Each of the three (3) test fuel tanks will be individually bermed. The berms will be one (1) foot higher and one (1) foot wider than normal AAFS or TAFDS requirements. The berm will be capable of holding over one and one half (1½) times the amount of fuel stored within the tank. A professional grade nonpermeable berm liner will be placed under each tank and normal ground cloth combination. These are the same berm liners successfully utilized in the FY-83 Solid Shield Exercise, ship to shore transfer and subsequent storage and distribution of live class III products. No dispensing of POL from the bladders is planned for this test. Additional earth will be stored behind each berm to allow for quick absorption in case of emergency.

(3) Receipt and Return. All fuel utilized at the test site will be received and returned to the MCAS(H) Fuel Farm via five thousand (5,000) gallon tactical refueler. No fuel will be issued, only test samples will be taken.



2. Consideration of Site Selection. Original MCLB Albany plans for test site selection in December of 1982 was the Second Marine Aircraft Wing TAFDS site at Bogue Field. The operational tempo at the Second Marine Aircraft Wing and shortage of trained personnel at Bogue Field required MCLB Albany to request assistance from the Marine Corps Air Station (Helicopter), New River, NC via COMCABEAST. MCAS(H) has the required fuel on hand, key individuals trained in quality control of POL, and areas within easy access of hard surface roadways free of debris and vegetation. Terrain within the site selected is level and existing earth mounds of the old motorcross track will be utilized for berm construction. The surrounding terrain allows easy access for equipment and personnel to assist in containment should a spill occur. The site selection is known to and has been reviewed by Mr. Robert E. Alexander, Environmental Engineer, Office of the Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune, NC. Review of the site took into consideration the technical operations of the fuel tank test with respect to environmental constraints. The site selected and reviewed meets the testing requirements and satisfies the environmental criteria. The initial site preparations will move the existing earth mounds of the motorcross track in such a manner as to provide a stockpile of soil sufficient for construction of protective berms and for spill containment. This site will not conflict with normal MCAS (H) operations.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

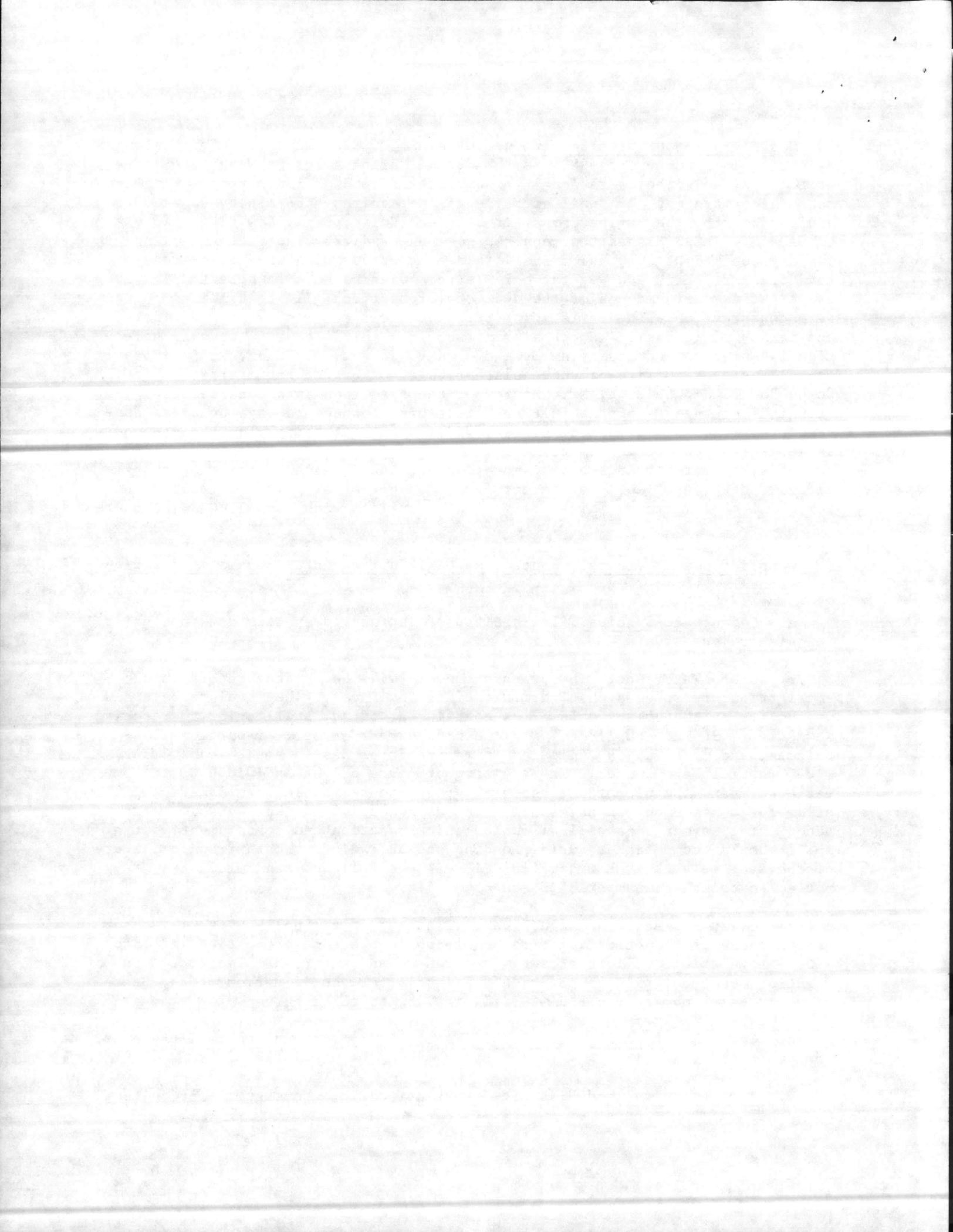
a. Endangered Species. The habitat of endangered species does not exist in this project area.

b. Clean Water Act. The primary concern will be surface runoff into small tributary streams that terminate into New River. The level terrain and protective earth berms should allow containment of any spill prior to reaching New River. Strict compliance with the procedures for spill reporting, containment and clean up as indicated in Marine Corps Base, Camp Lejeune Order 11090.1B will be enforced. The addition of extra height and width to the earth berm and the use of professional grade, nonpermeable berm liners will allow for containment of any spill. The abundance of stockpiled soil as an added safety precaution will allow for quick reaction and containment. If a spill should occur either during loading and unloading or catastrophic failure of the storage tank, MCB Order 11090.1B will be followed and immediately reported to telephone number 3333 and 6506/6518.

c. Clean Air Act. No significant discharge of air pollutants will occur unless there is an accidental fire. All applicable fire prevention and fire safety regulations will be strictly adhered to and enforced. Tactical fire fighting equipment will be positioned at the site. Notification of the State of North Carolina is required if spill residue is to be burned.

d. Coastal Zone Management Act (CZMA). Not applicable due to location of the projected test site.

e. Archaeological and Historic Preservation Act. No significant cultural resources exist at the site.



f. North Carolina Erosion and Sedimentation Regulation. As discussed in paragraph 3.b. above there is no significant potential for sediment leaving the site. Therefore, this regulation is not applicable.

g. Hazardous Materials and Hazardous Waste Disposal. Spill containment and cleanup procedures outlined in paragraph 3.b. above. Major spill prevention will be provided by installation of an impermeable liner large enough to cover the bermed area. Disposal of any contaminated fuels will be in accordance with Marine Corps Base, Camp Lejeune Order 11090.1B.

h. Protection of Wetlands Executive Order 11990. Spill prevention and containment procedures outlined in paragraph 3.b. and 3.g. above would prevent any fuel from entering adjacent wetlands.

i. Sanitary Waste and Refuse Disposal. No sanitary waste or refuse will be generated in association with this test.

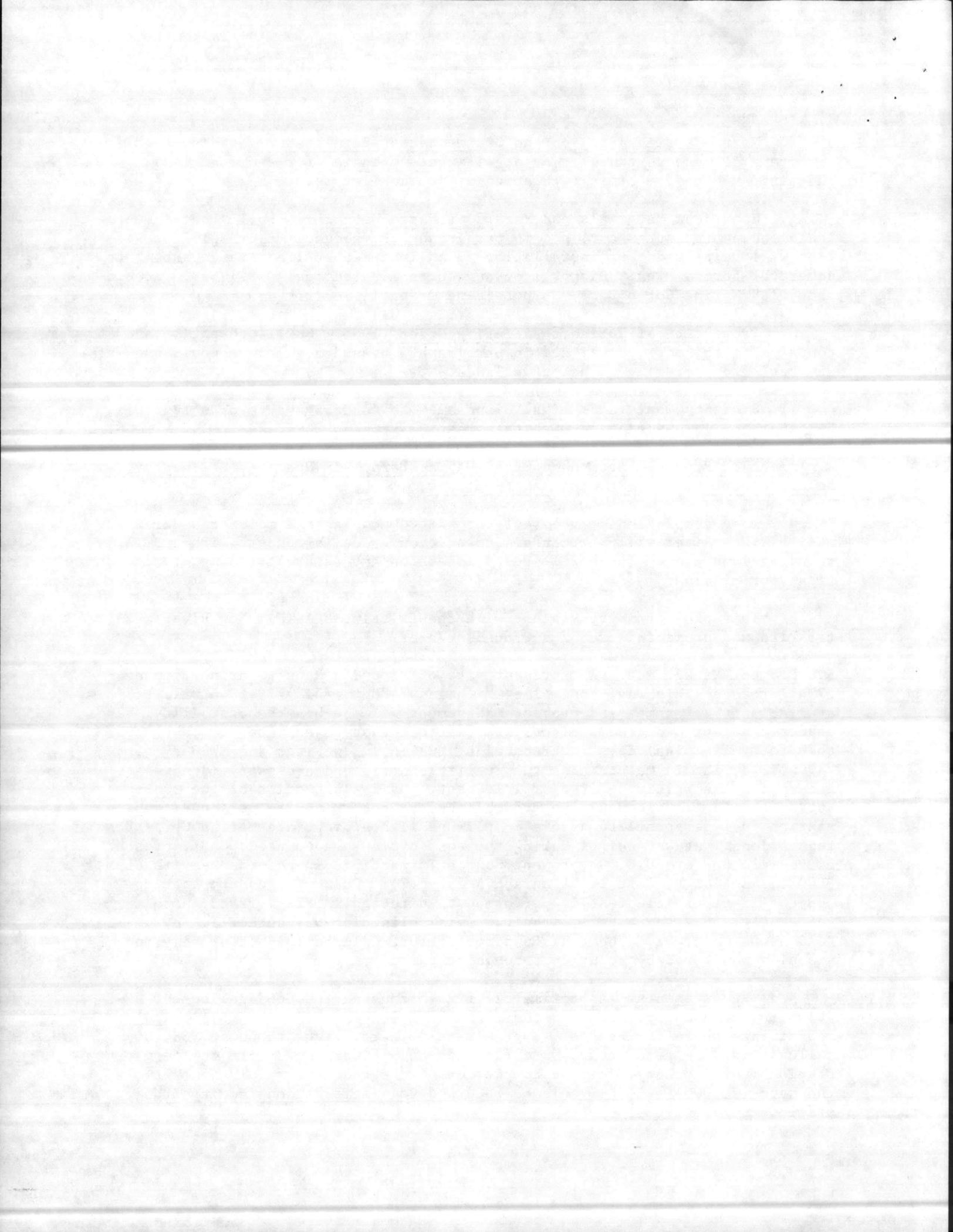
4. Impact of Proposed Action on Other Marine Corps Air Station (Helicopter), New River Operations, Mission and Functions.

a. Upon completion of the test the site, known as the motorcross area at MCAS(H), New River will be returned to an even grade in concert with surrounding landscape. There will be no impact on any future training, functions, or mission.

b. This project is consistent with the existing MCAS(H), New River Master Plan and projected use of surrounding area.

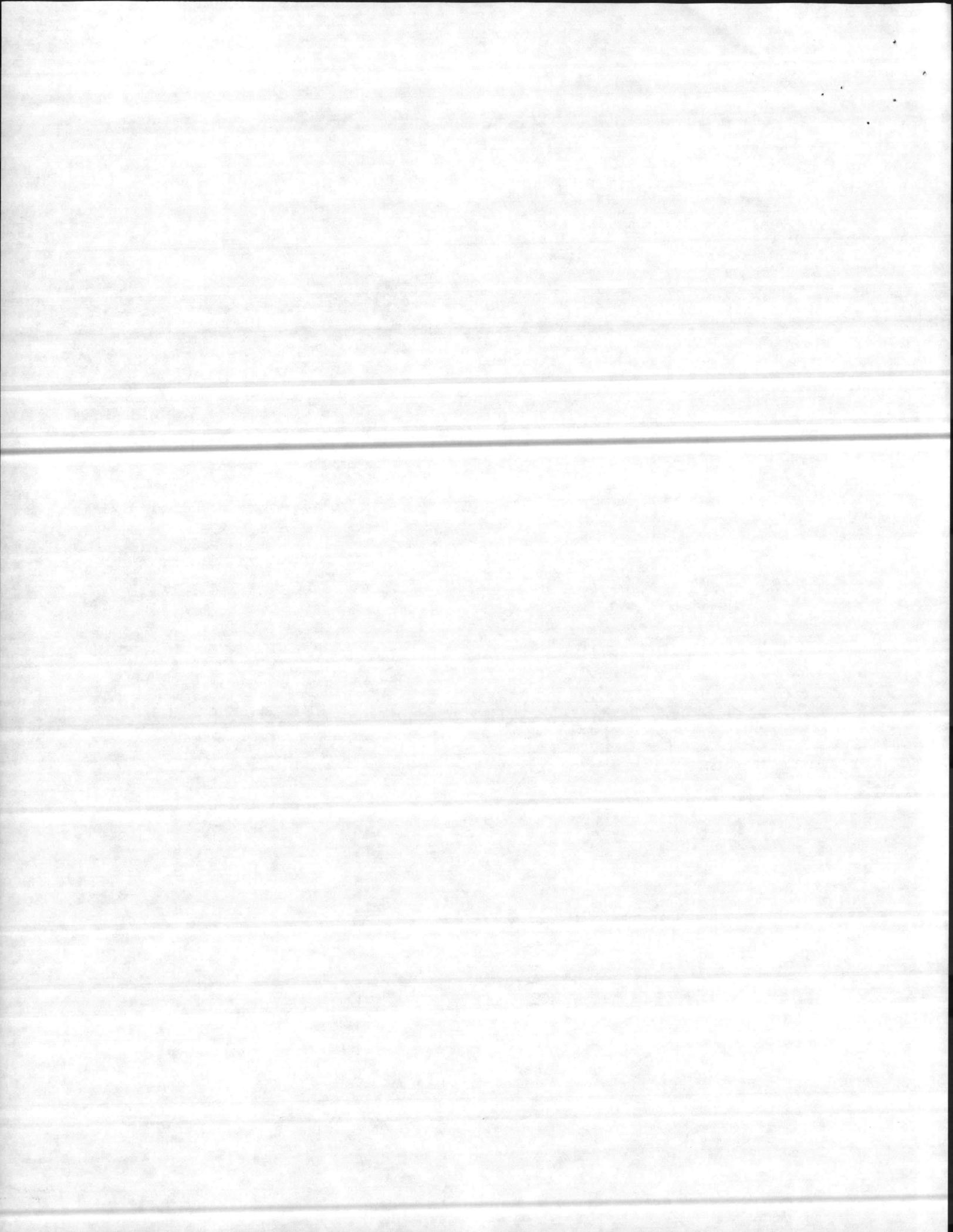
5. Project Management. A representative of Minowitz Manufacturing Company, 27941 Groesbeck Highway, Roseville, Michigan 48066, (313)779-5940 will be available at all times and project management will be his responsibility. The expected duration of the subject first article test is expected to take less than forty-five (45) days. Personnel of MCAS(H), New River and MWSG-27 Det "A" will assist in maintaining the quality control and necessary manpower to accomplish the required first article test. Daily inspection of the tanks during the test cycle would be accomplished by both Minowitz personnel and station fuel personnel to assure compliance with appropriate Marine Corps Base regulations. At key points during the test cycle an appointed DCAS representative will perform U.S. Government Source Inspections in accordance with DLAM 8200.1, Section V, Part I, Paragraph 5-102-b(2). DCAS will assure that the subject first article test is performed as directed in MIL-T-52983, para 4.6.2.6, 4.2.6.7 and 4.6.2.7.1 only. This delegation was authorized by DCASMA, Detroit, MI. The tanks undergoing test will be inspected daily and visually monitored by security throughout the day.

6. Fuel Requirements. Approximately sixty thousand (60,000) gallons of JP-5 aviation fuel will be used for the first article test. At the completion of the storage phase of the test, approximately thirty-eight thousand (38,000) gallons would be returned to specification and reintroduced into the permanent station fuel facility. At the completion of the test the final twenty-two thousand (22,000) gallons would be returned to specification and into the station fuel facility.

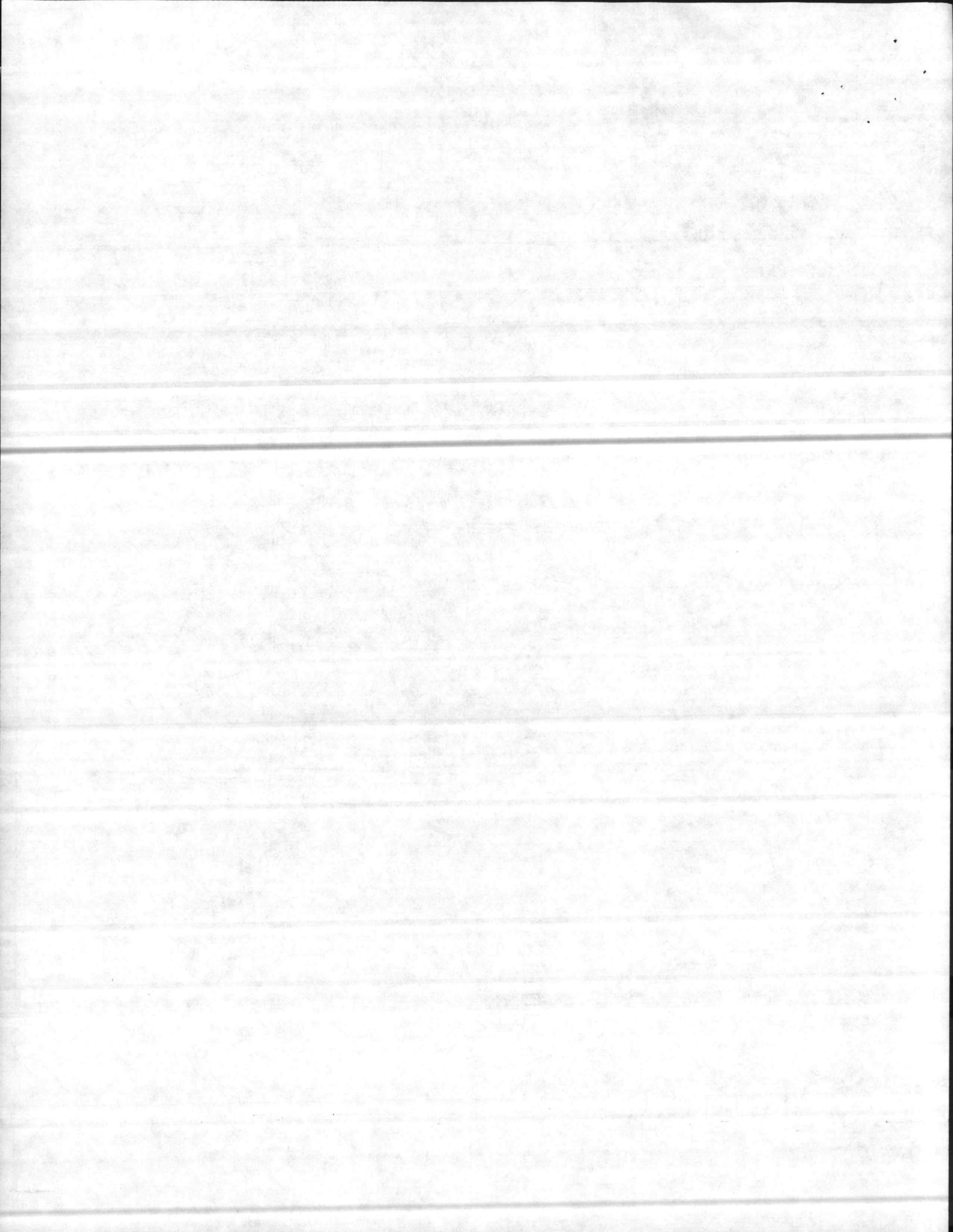


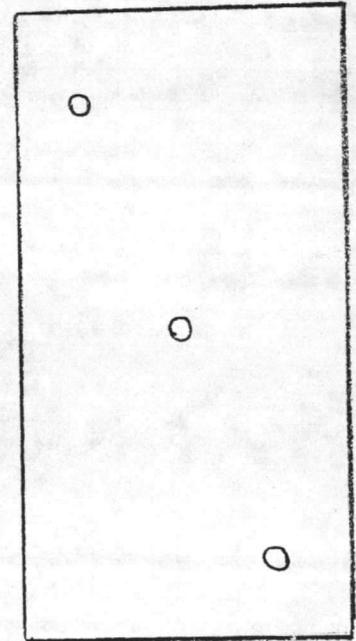
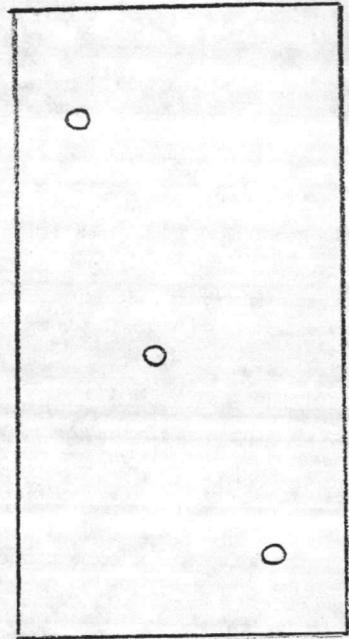
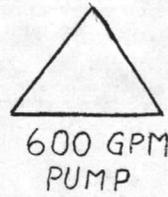
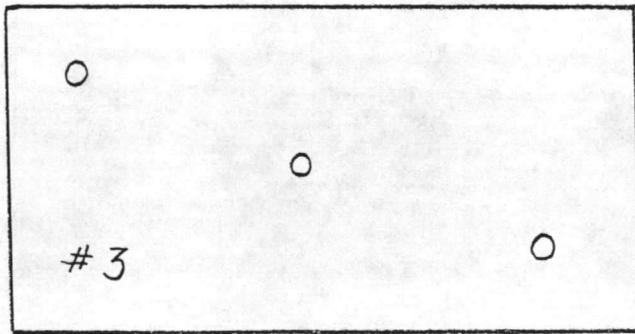
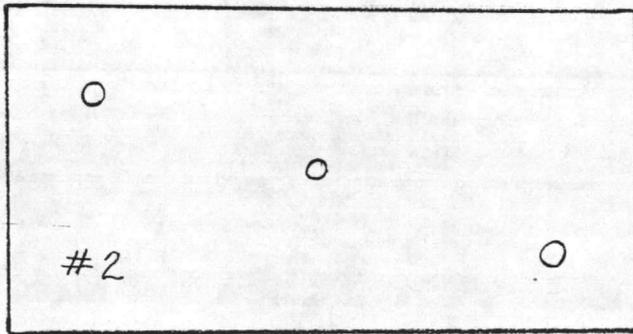
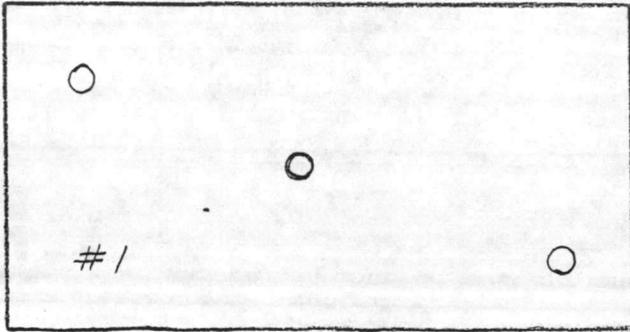
Attachments:

- (1) Site Map (MCAS(H),NR)
- (2) Fuel Tank Test Layout







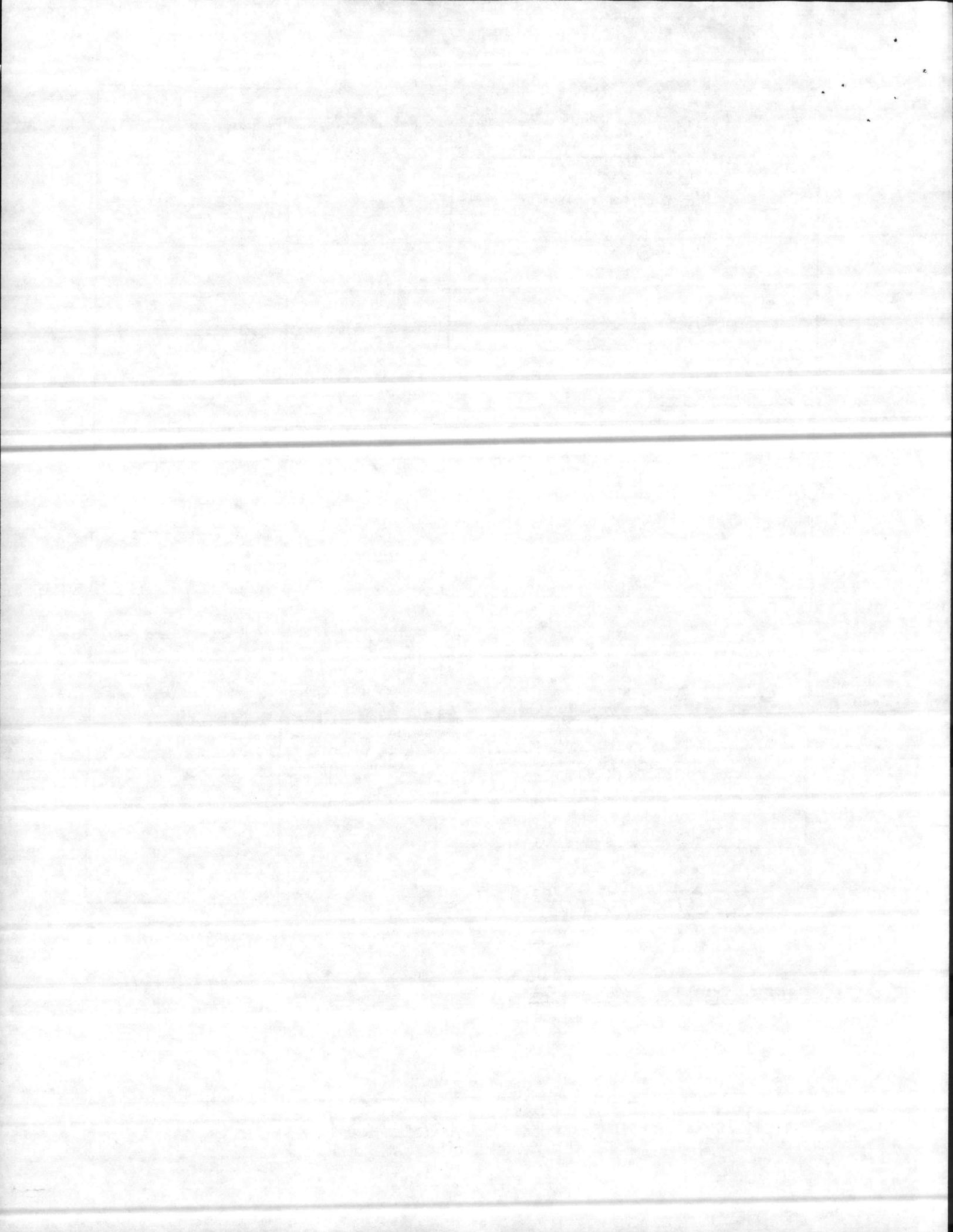


TEST TANKS

AAFS / TAFDS  
SAFETY  
TANKS

APPX SCALE:  $\frac{1}{2}'' = 6'$

FUEL TANK TEST



4613

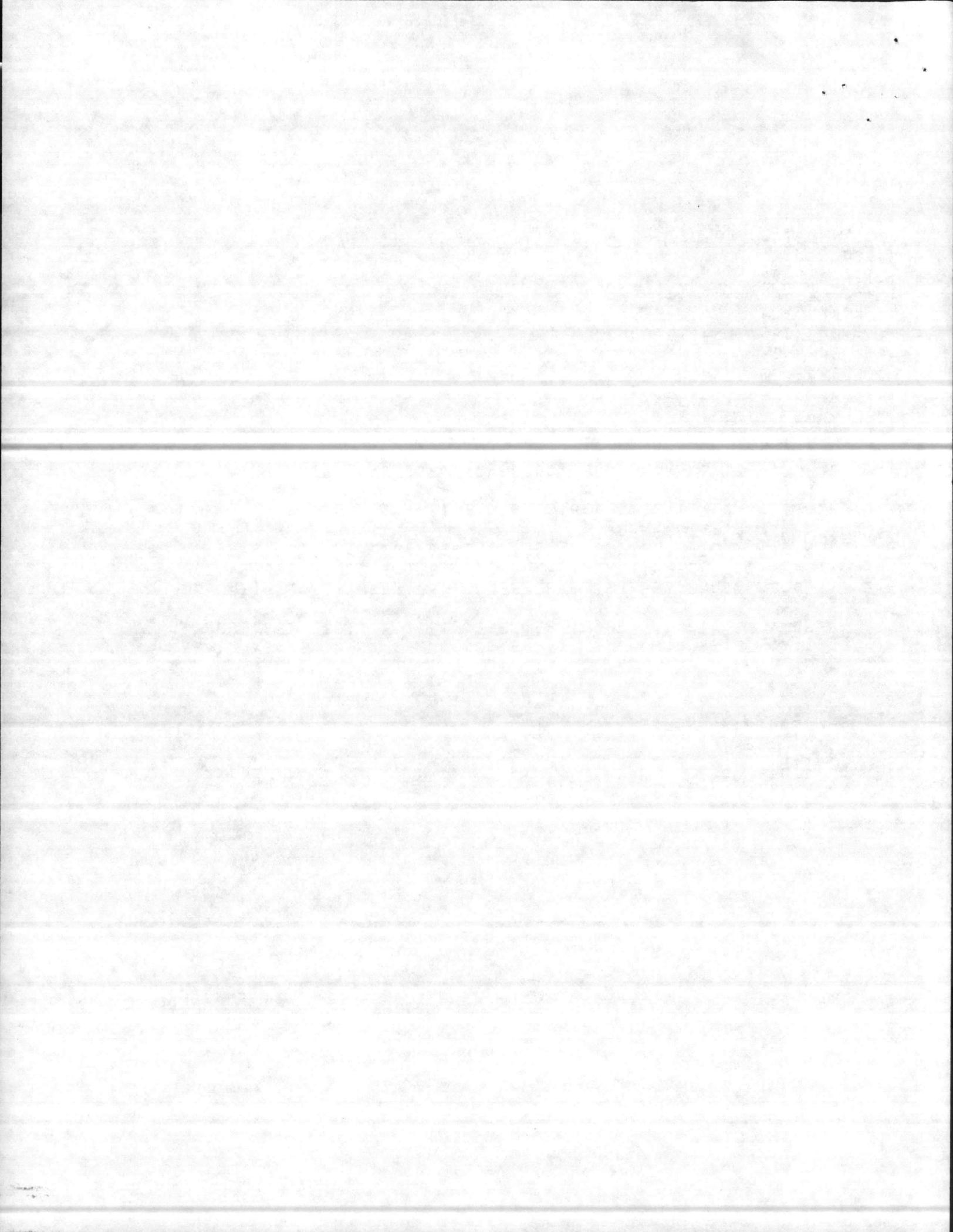
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ZNR UUUUU  
P 271653Z JAN 84  
FM CG MCLB ALBANY GA  
TO RUELFCA/COMCABEAST CHERRY PT NC  
INFO RUEACMC/COMC WASHINGTON DC  
RUEOLFA/CG FMFLANT  
RUCLECU/CG SECOND MAW  
RUCJSA/CG MCB CAMP LEJEUNE NC  
RUEBMA/MCAS H NEW RIVER NC

	ACT	INFO	INT
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REMARKS			

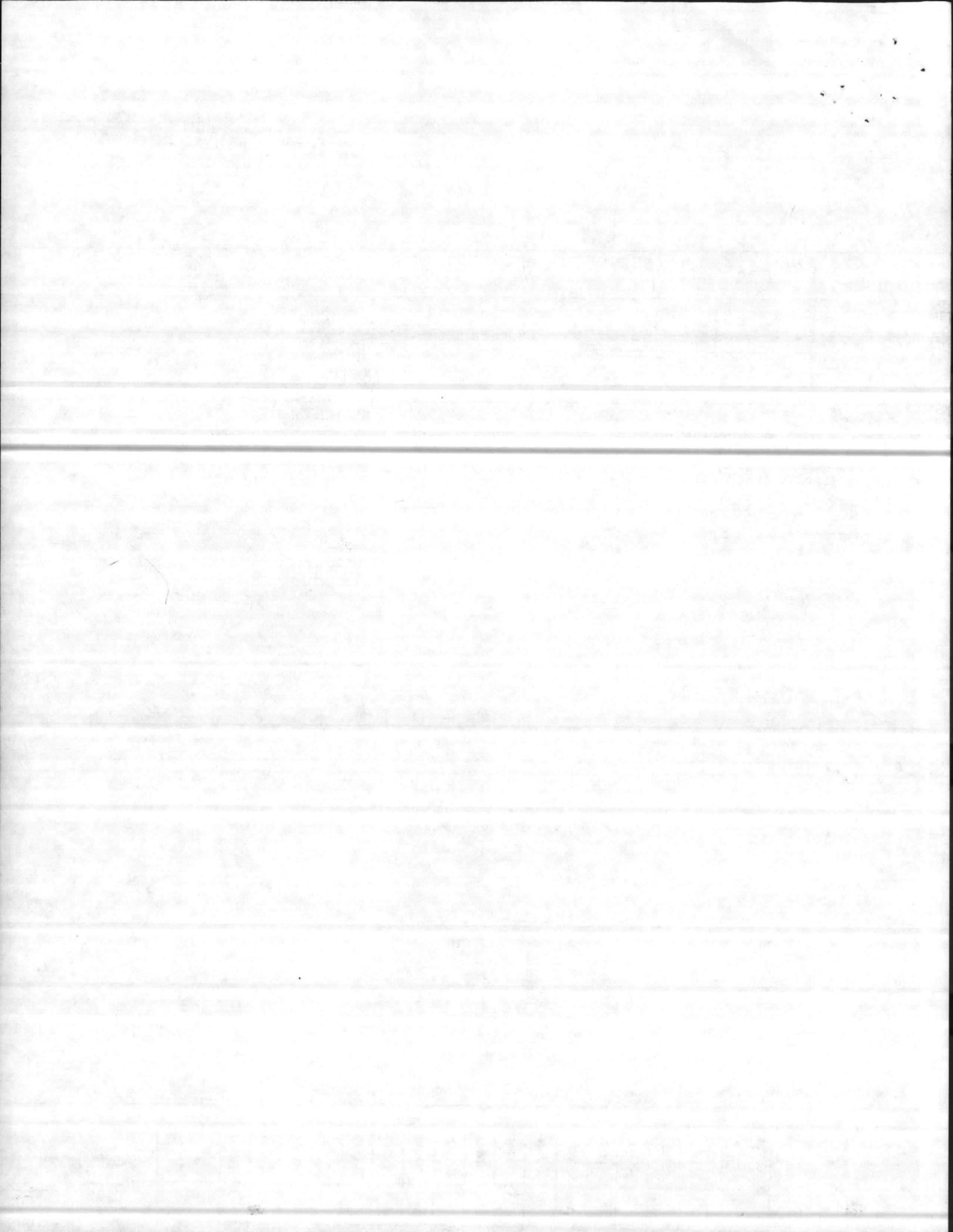
BT  
UNCLAS //NOFORN//  
COM FOR CODE LME-21 FMFLANT FOR FORENGRO: MCB CAMP LEJ FOR ACS  
FACILITIES  
SUBJ: TEST SITE FOR TANKS, FABRIC COLLAPSIBLE, 20,000 GAL  
1. CG FMFLANT 262125Z JAN 84  
2. FORCOMS BTAN MCLB (LT COL WELSH) AND COMBATEAST (COL SALES)  
MCAS NEW RIVER (COL HOGAN); MCB CAMP LEJEUNE (LT COL FITZGERALD)  
3. REF A REQUEST SUBJ TEST SITE BE RELOCATED FROM BOGNE FIELD TO  
MCAS NEW RIVER.  
4. IN INFORMAL LIAISON, REF B, REQUEST FIRST ARTICLE TEST FOR SUBJ  
TANKS MANUFACTURED BY MINOWITZ CO, BE CONDUCTED AT MCAS NEW RIVER

PAGE 02 RHCJSG987 UNCLAS  
FUEL DIVISION AREA,  
3. REQ ADVISE:  
POC LT COL D. T. WELSH, AV 460-6570,  
BT  
#5457

27 16 53 Z Jan 84









UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
(HELICOPTER)  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545

IN REPLY REFER TO

204:FEA:jw  
11000

FEB 10 1984

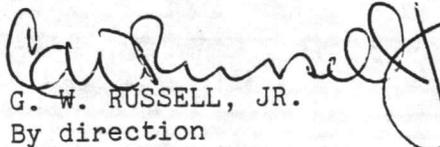
From: Commanding Officer  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina  
28542 (Attn: Assistant Chief of Staff, Facilities)

Subj: Preliminary Environmental Impact Assessment; submission of

Ref: (a) BO 11000.1A

Encl: (1) Preliminary Environmental Impact Assessment for First Article  
Test of 20,000 Gallon Collapsible Bulk Fuel Tank  
(2) CG Albany msg 271653Z Jan 84  
(3) COMCABEAST msg 061045Z Feb 84

1. Enclosure (1) is forwarded in accordance with the reference for consideration by the Environmental Impact Review Board.
2. The Marine Corps has contractually undertaken to provide certain assistance in the testing of bulk fuel bladders as part of an overall Government contract for eventual purchase. As indicated by enclosures (2) and (3), New River has been tasked as the action activity.
3. Because of language contained in the contract, time is of an essence. In anticipation of a favorable finding by the Board and in order to not delay the contractor any more than absolutely necessary, New River is proceeding with site preparation and should be ready to have testing commence during the week of 13 February 1984.
4. It is requested that a preliminary review be conducted of enclosure (1) and if found satisfactory, this command be advised immediately in order that we may authorize the testing to proceed.
5. Point of contact for further information is LtCol G. W. Russell, Jr. or Mr. F. E. Acosta at 451-6506/6518.

  
G. W. RUSSELL, JR.  
By direction

Preliminary Environmental Impact Assessment  
for First Article Test\* of Minowitz,  
20,000 Gallon Collapsible Bulk Fuel Tank  
U.S. Government Contract, M67004-82-C-0229

\*Three Phase Test on a Marine Corps Logistic Base, Albany, GA Contract for 1,620 collapsible bulk fuel tanks

1. Action/Project Description.

a. General. The proposed test is the final requirements for acceptance of first article by the U.S. Marine Corps. The test has three major objectives:

- (1) The fuel storage test per para 4.6.2.6 of MIL-T-52983
- (2) The tank overload test per para 4.6.2.7 of MIL-T-52983
- (3) The internal inspection test per para 4.6.2.7.1 of MIL-T-52983

b. Project Description. A brief explanation of these testing requirements could be summarized as filling the tanks to rated capacity with JP-5 jet fuel, and allowing them to stand free for a period of thirty (30) days plus or minus two (2) days. Upon completion of the storage test, the tanks would be pumped down and allowed to lie empty for five (5) days plus or minus one (1) day. Next the tanks are filled to the rated capacity plus ten percent (10%) for a period of four (4) hours thus completing the tank overload test. The internal inspection test would be completed by visual inspection of the inside of the tank after overload.

(1) Actual Test Site Layout. (See attached site map and layout drawing) The tank test site will consist of three (3) twenty thousand (20,000) gallon collapsible bulk fuel tanks positioned in a line. These three (3) test tanks will be backed up as a safety measure, by two (2) twenty thousand (20,000) gallon tanks components of the Tactical Airfield Fuel Dispensing System (TAFDS) or the Amphibious Assault Fuel System (AAFS) in case of emergency. These components will be used for recovery operations should catastrophic failure occur.

(2) Test Site Installation. Each of the three (3) test fuel tanks will be individually bermed. The berms will be one (1) foot higher and one (1) foot wider than normal AAFS or TAFDS requirements. The berm will be capable of holding over one and one half (1½) times the amount of fuel stored within the tank. A professional grade nonpermeable berm liner will be placed under each tank and normal ground cloth combination. These are the same berm liners successfully utilized in the FY-83 Solid Shield Exercise, ship to shore transfer and subsequent storage and distribution of live class III products. No dispensing of POL from the bladders is planned for this test. Additional earth will be stored behind each berm to allow for quick absorption in case of emergency.

(3) Receipt and Return. All fuel utilized at the test site will be received and returned to the MCAS(H) Fuel Farm via five thousand (5,000) gallon tactical refueler. No fuel will be issued, only test samples will be taken.

2. Consideration of Site Selection. Original MCLB Albany plans for test site selection in December of 1982 was the Second Marine Aircraft Wing TAFDS site at Bogue Field. The operational tempo at the Second Marine Aircraft Wing and shortage of trained personnel at Bogue Field required MCLB Albany to request assistance from the Marine Corps Air Station (Helicopter), New River, NC via COMCABEAST. MCAS(H) has the required fuel on hand, key individuals trained in quality control of POL, and areas within easy access of hard surface roadways free of debris and vegetation. Terrain within the site selected is level and existing earth mounds of the old motorcross track will be utilized for berm construction. The surrounding terrain allows easy access for equipment and personnel to assist in containment should a spill occur. The site selection is known to and has been reviewed by Mr. Robert E. Alexander, Environmental Engineer, Office of the Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune, NC. Review of the site took into consideration the technical operations of the fuel tank test with respect to environmental constraints. The site selected and reviewed meets the testing requirements and satisfies the environmental criteria. The initial site preparations will move the existing earth mounds of the motorcross track in such a manner as to provide a stockpile of soil sufficient for construction of protective berms and for spill containment. This site will not conflict with normal MCAS (H) operations.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. The habitat of endangered species does not exist in this project area.

b. Clean Water Act. The primary concern will be surface runoff into small tributary streams that terminate into New River. The level terrain and protective earth berms should allow containment of any spill prior to reaching New River. Strict compliance with the procedures for spill reporting, containment and clean up as indicated in Marine Corps Base, Camp Lejeune Order 11090.1B will be enforced. The addition of extra height and width to the earth berm and the use of professional grade, nonpermeable berm liners will allow for containment of any spill. The abundance of stockpiled soil as an added safety precaution will allow for quick reaction and containment. If a spill should occur either during loading and unloading or catastrophic failure of the storage tank, MCB Order 11090.1B will be followed and immediately reported to telephone number 3333 and 6506/6518.

c. Clean Air Act. No significant discharge of air pollutants will occur unless there is an accidental fire. All applicable fire prevention and fire safety regulations will be strictly adhered to and enforced. Tactical fire fighting equipment will be positioned at the site. Notification of the State of North Carolina is required if spill residue is to be burned.

d. Coastal Zone Management Act (CZMA). Not applicable due to location of the projected test site.

e. Archaeological and Historic Preservation Act. No significant cultural resources exist at the site.

f. North Carolina Erosion and Sedimentation Regulation. As discussed in paragraph 3.b. above there is no significant potential for sediment leaving the site. Therefore, this regulation is not applicable.

g. Hazardous Materials and Hazardous Waste Disposal. Spill containment and cleanup procedures outlined in paragraph 3.b. above. Major spill prevention will be provided by installation of an impermeable liner large enough to cover the bermed area. Disposal of any contaminated fuels will be in accordance with Marine Corps Base, Camp Lejeune Order 11090.1B.

h. Protection of Wetlands Executive Order 11990. Spill prevention and containment procedures outlined in paragraph 3.b. and 3.g. above would prevent any fuel from entering adjacent wetlands.

i. Sanitary Waste and Refuse Disposal. No sanitary waste or refuse will be generated in association with this test.

4. Impact of Proposed Action on Other Marine Corps Air Station (Helicopter), New River Operations, Mission and Functions.

a. Upon completion of the test the site, known as the motorcross area at MCAS(H), New River will be returned to an even grade in concert with surrounding landscape. There will be no impact on any future training, functions, or mission.

b. This project is consistent with the existing MCAS(H), New River Master Plan and projected use of surrounding area.

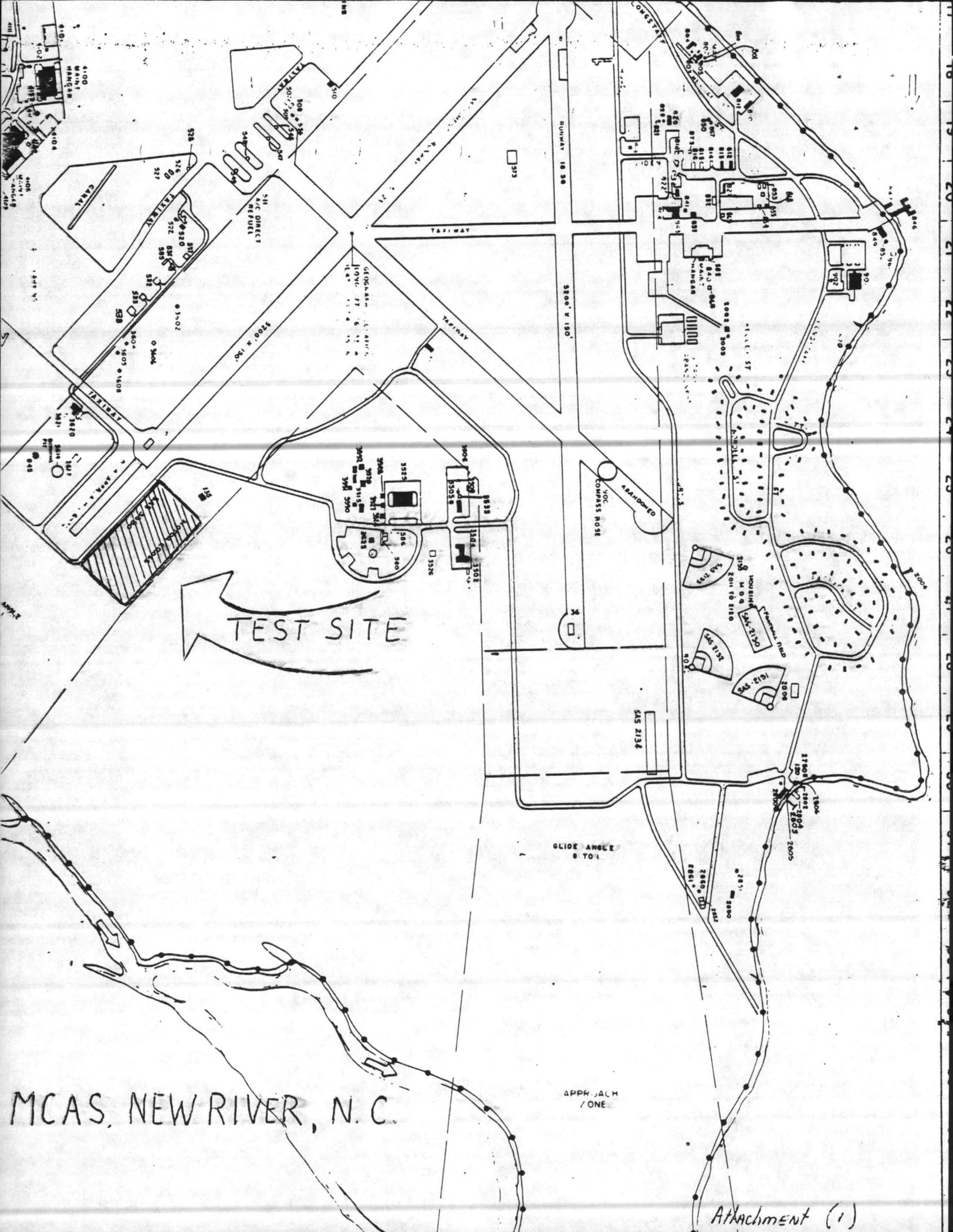
5. Project Management. A representative of Minowitz Manufacturing Company, 27941 Groesbeck Highway, Roseville, Michigan 48066, (313)779-5940 will be available at all times and project management will be his responsibility. The expected duration of the subject first article test is expected to take less than forty-five (45) days. Personnel of MCAS(H), New River and MWSG-27 Det "A" will assist in maintaining the quality control and necessary manpower to accomplish the required first article test. Daily inspection of the tanks during the test cycle would be accomplished by both Minowitz personnel and station fuel personnel to assure compliance with appropriate Marine Corps Base regulations. At key points during the test cycle an appointed DCAS representative will perform U.S. Government Source Inspections in accordance with DLAM 8200.1, Section V, Part I, Paragraph 5-102-b(2). DCAS will assure that the subject first article test is performed as directed in MIL-T-52983, para 4.6.2.6, 4.2.6.7 and 4.6.2.7.1 only. This delegation was authorized by DCASMA, Detroit, MI. The tanks undergoing test will be inspected daily and visually monitored by security throughout the day.

6. Fuel Requirements. Approximately sixty thousand (60,000) gallons of JP-5 aviation fuel will be used for the first article test. At the completion of the storage phase of the test, approximately thirty-eight thousand (38,000) gallons would be returned to specification and reintroduced into the permanent station fuel facility. At the completion of the test the final twenty-two thousand (22,000) gallons would be returned to specification and into the station fuel facility.

**Attachments:**

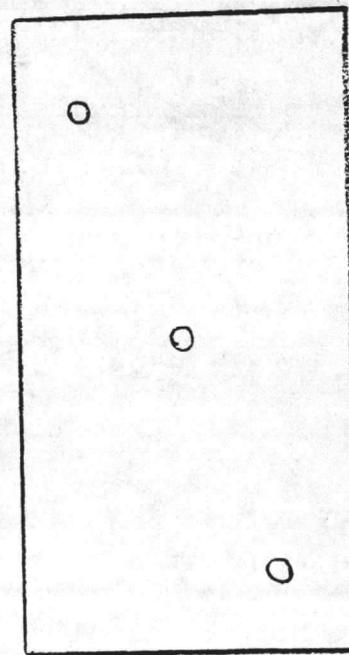
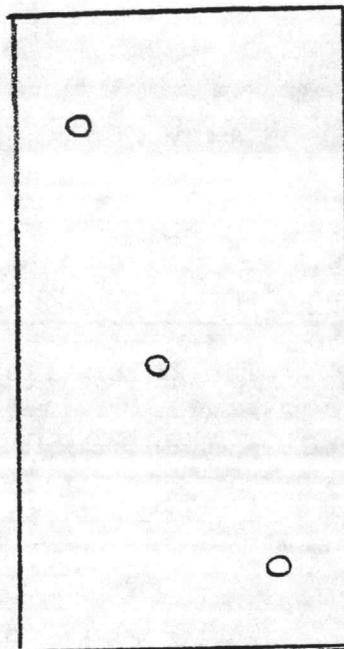
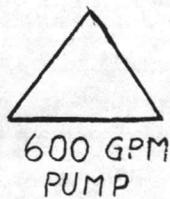
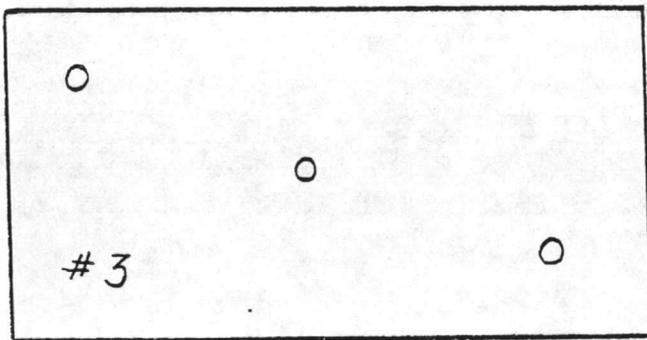
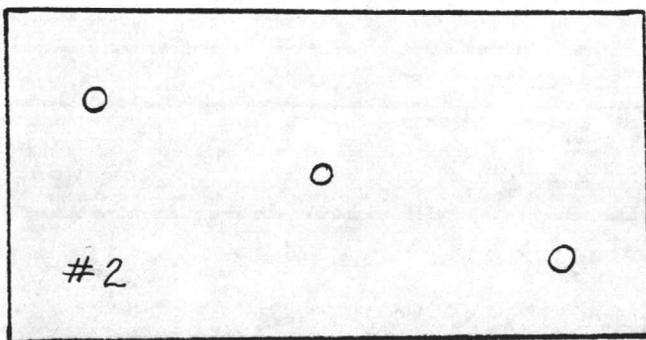
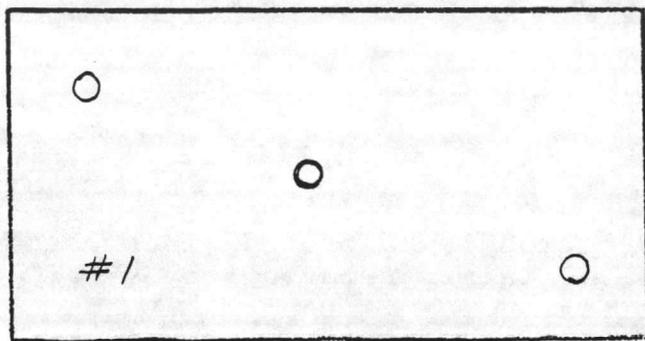
(1) Site Map (MCAS(H),NR)

(2) Fuel Tank Test Layout



MCAS, NEW RIVER, N.C.

Attachment (1)



TEST TANKS

AAFS / TAFDS  
SAFETY  
TANKS

APPX SCALE:  $\frac{1}{2}'' = 6'$

FUEL TANK TEST

PRELIMINARY ENVIRONMENTAL ASSESSMENT  
FOR  
TREE AND UNDERBRUSH REMOVAL FOR AMMUNITION SUPPLY POINT

1. Enclosures. Site map.

2. Purpose and Need

The purpose of the proposed action is to provide increased security to the Ammunition Supply Point by removing trees and underbrush which restrict visibility.

3. Project Description

The project consists of:

- a. Removal of marketable saw timber and pulpwood;
- b. Removal of underbrush; and
- c. Landscaping as needed to establish permanent grasses for erosion control and to facilitate maintenance.

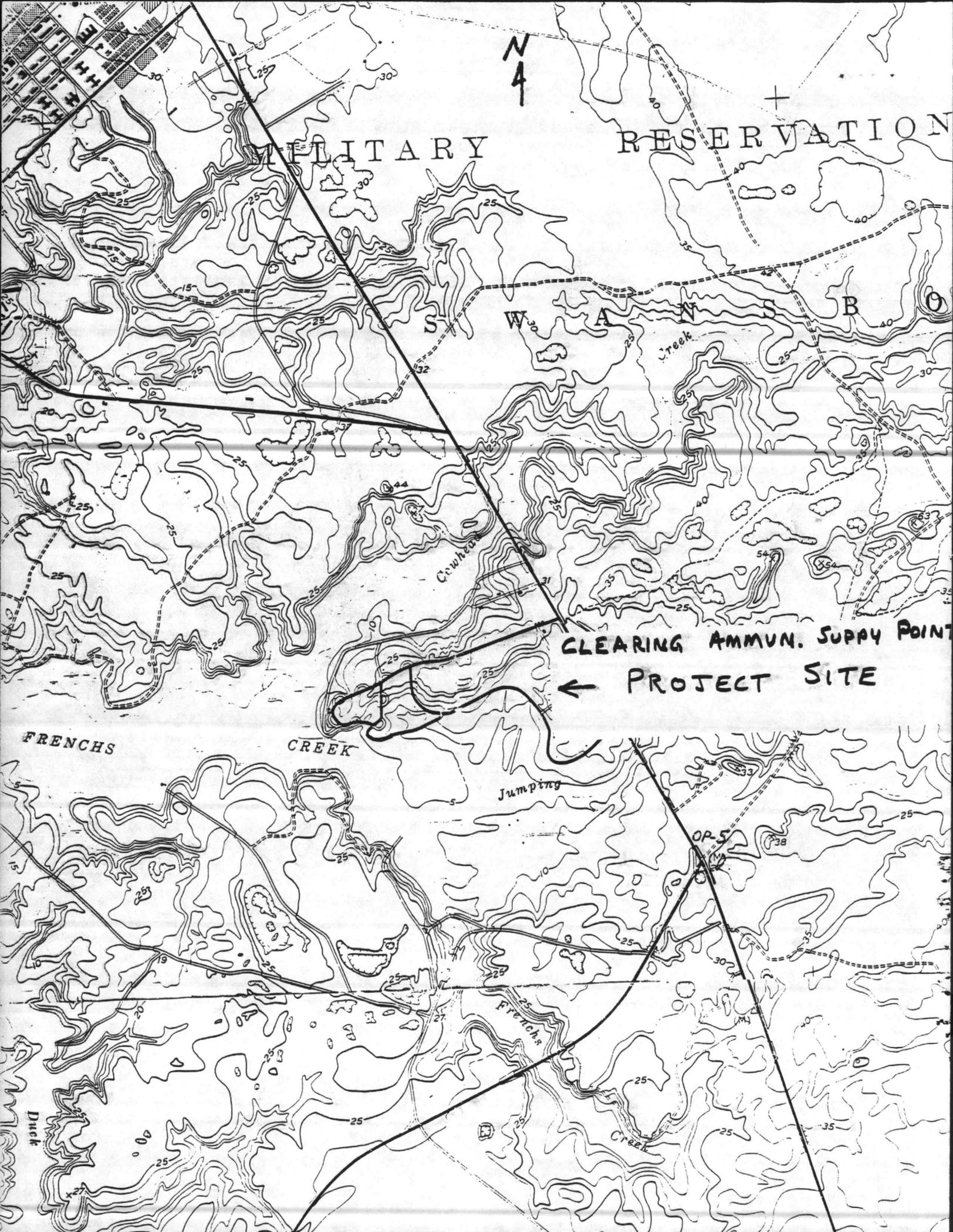
4. Compliance with Environmental Requirements

- a. Clean Air Act: No emissions are anticipated.
- b. Clean Water Act: No discharges of polluting runoff will occur during construction or upon completion of this project.
- c. National Historic Preservation Act: No significant cultural resources are located on the project site.
- d. Executive Order 11990, Protection of Wetlands: No wetlands are located on the site.
- e. Endangered Species Act: No habitat of endangered species is located on the site.
- f. N.C. Sedimentation Pollution Control Act: Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Reseeding of disturbed areas and establishment of vegetative cover on the cleaned area will be accomplished within 30 days of completion of the construction. A sediment control plan will be implemented.

5. Conclusion. The completion of tree and underbrush removal from the Marine Corps Base Ammunition Supply Point will not result

in significant environmental impact provided the measures described herein are followed. Further, the project is not considered controversial, thus, preparation of an Environmental Assessment per MCO 6280.5 is not required.

Prepared by: Robert E. Alexander  
Environmental Engineer  
AC/S Facilities



N  
4

MILITARY

RESERVATION

STEWARTS CREEK

FRENCHS

CREEK

CLEARING AMMUN. SUPPLY POINT

← PROJECT SITE

Jumping

OP-5

FRENCHS

CREEK

Duck

CONTRACTING DIVISION  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

DDS  
3/18  
Fite 11000/5

CD/AFE/ss  
4860  
4 Jan 1984

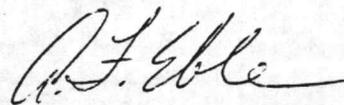
From: Contracting Officer  
To: CA Task Group

Subj: Potential CA Action on Future Environmental Resource Issues

Encl: (1) Southeastern Section: The Wildlife Society ltr dtd 13 Dec 83

1. The enclosure demonstrates a growing public interest in federal management of land, mineral and water resources, and their subsequent impact upon the nation's wildlife. Informal communications with the Justice Department, U.S. Attorney, Michael GORDON, indicates that many of the environmental groups are not accepting administrative decisions of government agencies; but, are vigorously seeking temporary restraining orders/permanent injunctions in a federal district court. If we should be directed to consider any CA actions with an environmental impact, it is highly recommended that an "EPA impact report" be prepared in advance of any public announcement due to the likelihood of federal court suit by several regional societies.

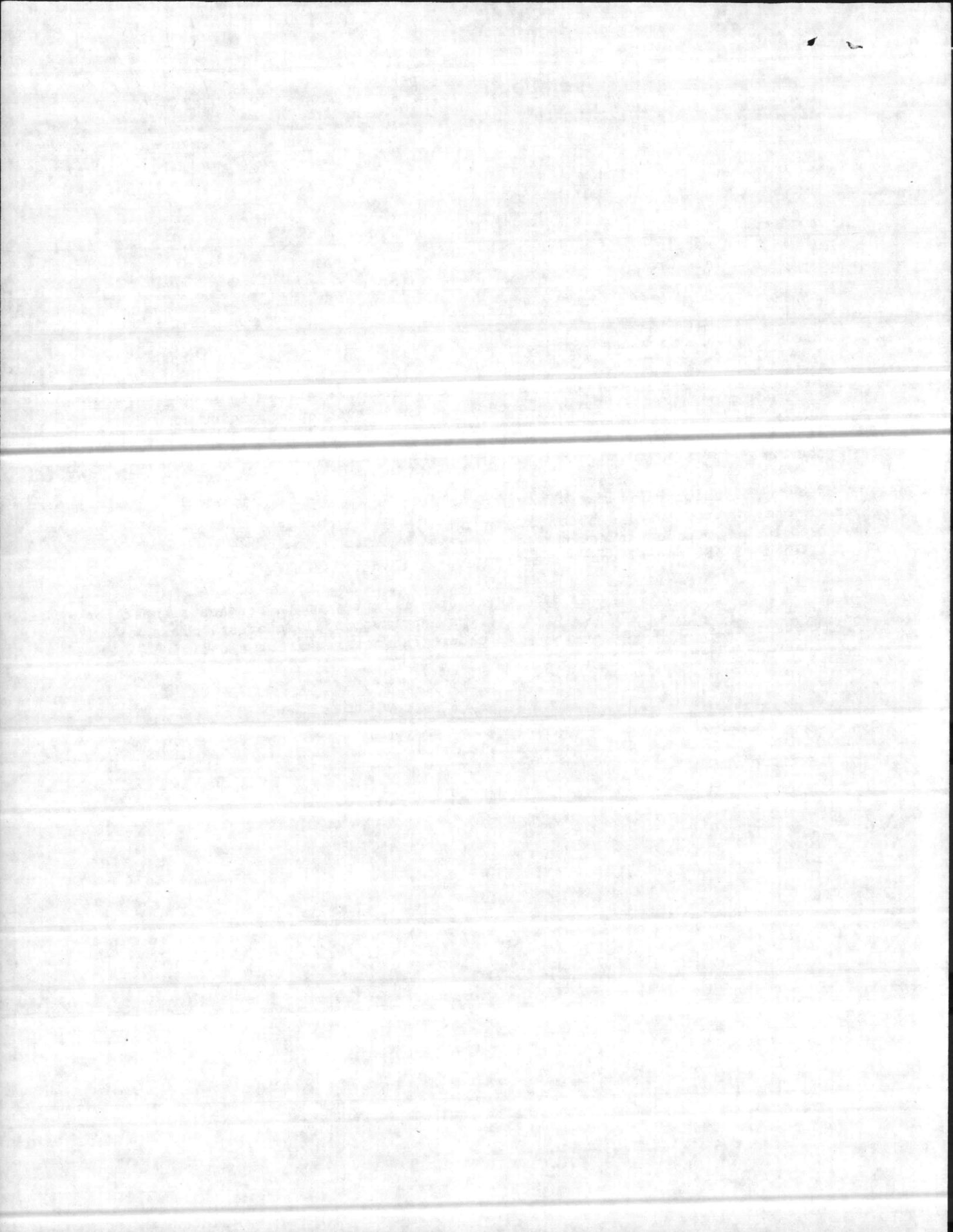
2. It is my understanding, that there are currently no CA studies planned for the next two years that could generate an environmental interest. This memorandum is therefore advisory in nature and not requiring a decision by the CA Review Board.



A. F. EBLE

- Distribution:
- AC/S, Manpower
  - AC/S, Logistics
  - SJA
  - MAO
  - BMaintO
  - PWO
  - CPO

Copy to:  
Mr. Tom BASIL, Esq. (legal counsel)



SOUTHEASTERN SECTION  
THE WILDLIFE SOCIETY



December 13, 1983

Contracting Chief  
Marine Corps Base  
Camp Lejeune, N. C. 28542

Dear Sir:

The Southeastern Section of The Wildlife Society is greatly concerned with the impact that contracting fish and wildlife management functions on military reservations would have on the wildlife resources. The types of decisions resource managers must make require intimate knowledge of the area, long term experience with particular habitats and dedicated law enforcement effort. It is doubtful that this type of knowledge or commitment can be obtained from a low bid contractor.

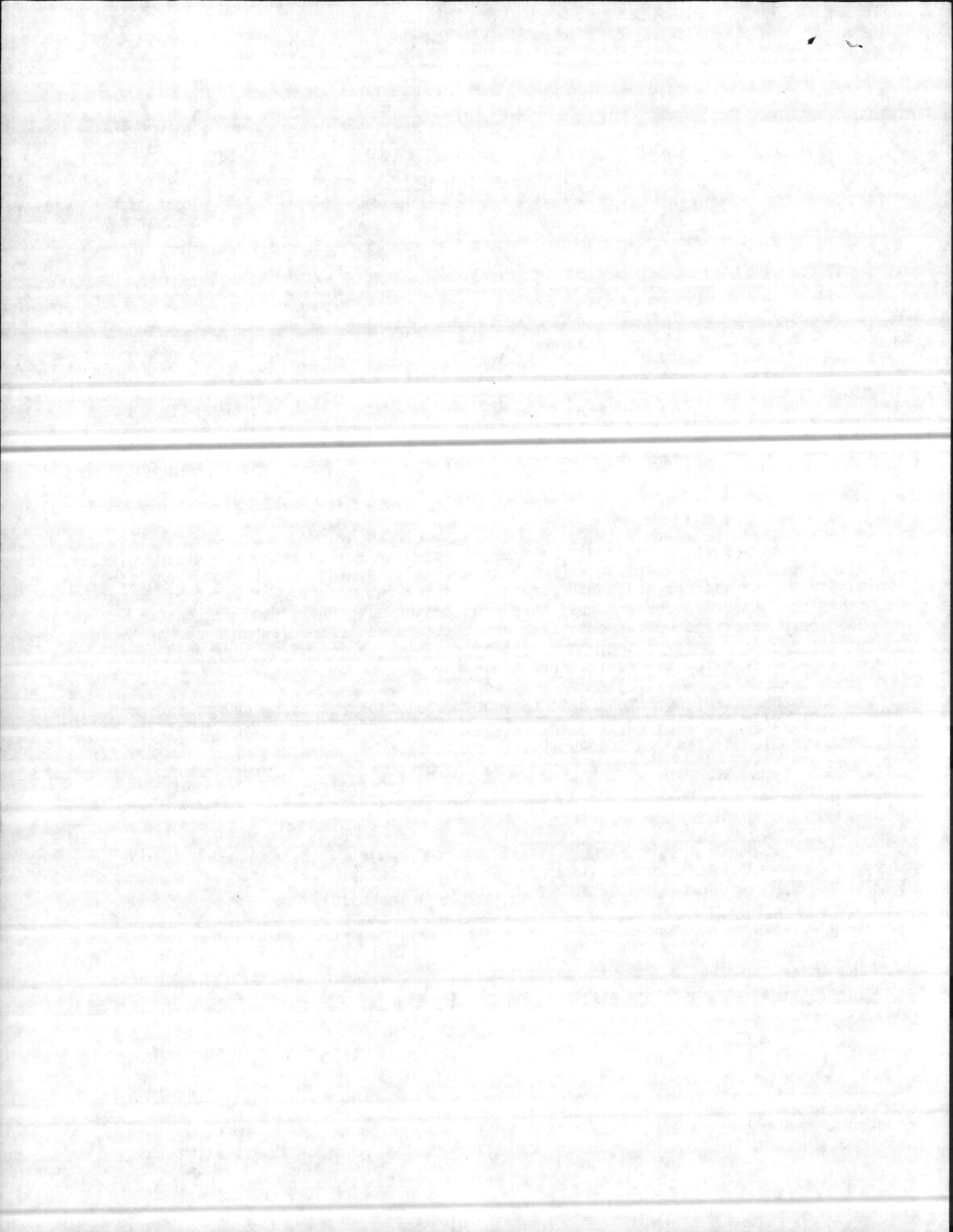
I, therefore, wish to submit to you a resolution passed by our membership on November 9, 1983 at our annual meeting. Please give this matter careful consideration before you act on it.

Sincerely,

Joe Kurz, President  
Southeastern Section  
The Wildlife Society

JK:dw

Enclosure



A RESOLUTION TO RETAIN PROFESSIONAL FISH AND  
WILDLIFE MANAGEMENT AS AN INHERENT GOVERNMENT FUNCTION ON  
MILITARY INSTALLATIONS

WHEREAS the Department of Defense is actively engaged in the contracting of various wildlife management functions to private concerns, and

WHEREAS this contracting often includes professional fish and wildlife management functions including law enforcement, and

WHEREAS the Department of Defense has identified certain functions as inherent government functions not subject to contracting due to the government's need to control planning, security, quality, budget and similar processes, and

WHEREAS professional fish and wildlife management requires judgements, data collection, experience, training, professional expertise, dedicated law enforcement, interagency coordination, and other actions that cannot be clearly defined within a contract and thus falls within those categories that the government should retain with federal employees, and

WHEREAS, military installations within southeastern United States contain some of the best managed fish and wildlife resources within the United States, and contracts to low bid private contractors who seldom have any demonstrated interests in professional natural resource management will result in a decline in the quality of fish and wildlife management and recreation on military installations;

THEREFORE, BE IT RESOLVED that the Southeast Section of The Wildlife Society supports the retention of professional fish and wildlife management, to include related law enforcement, as an inherent Department of Defense function staffed with federal employees, trained in Natural Resources Management, and

BE IT FURTHER RESOLVED that this Section will forward this resolution to the Secretary of Defense, each of the four Branch Secretaries, installation commanders and contracts officers, and directors of appropriate state fish and wildlife agencies as well as support this resolution within the Section's capabilities as such avenues of support are identified.

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