

The original documents are located in Box 11, folder “Defense - Naval Oceanographic Center (1)” of the John Marsh Files at the Gerald R. Ford Presidential Library.

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FACT SHEET
CONSOLIDATION OF THE NAVAL OCEANOGRAPHIC PROGRAM

The Secretary of Defense has reviewed the Secretary of the Navy's proposal to consolidate selected elements of the Naval Oceanographic Program. The Secretary of Defense agrees that the consolidation is in the best long term interests of the Department of Defense and the Nation, and that the National Space Technology Laboratories site in Hancock, County, Bay St. Louis, Mississippi, is the most technically suitable facility available to revitalize and increase the efficiency of this important program. The Secretary of Defense has directed that the Navy proceed as expeditiously as possible to notify all affected employees of the decision so that they can reach a timely determination based upon their own personal desires and also provide those who choose to relocate the maximum time possible to make necessary arrangements prior to the start of the school year in Mississippi in late August. This notification will be implemented in the near future.

BACKGROUND: During the last decade the Naval Oceanographic Program has evolved from a fairly small, compact nucleus of scientists, engineers and operators to today's widely dispersed organizational structure. In the early sixties it was not difficult to perceive that a rapid expansion of the Naval Oceanographic Program was inevitable. Navy planners quickly learned the advantages which accrue to a naval force that is superior in its ability to understand and take advantage of its operating environment. In a parallel development, leaders in the civil sector recognized the economic potential of the oceans in the total sense of national security, and they quite properly turned to the Navy for the technological base upon which to build.

To answer the challenge posed a dilemma: the need was there, the expertise was there, but adequate facilities were not. As a result, organizations brought into being to deal with technical and operational requirements utilized whatever space was available, regardless of location or suitability. In the near term there was no alternative; however, in the long run, the danger of organizational inertia was real, with the attendant potential problems of redundancy and poor communications. As early as 1963, those involved in the leadership of the program realized that in the face of a substantial increase in federal demand for oceanographic technology, a consolidation of activities was essential. Beginning then, a continuous effort has been direct toward



solving the inadequate space and scattered building situation of the Naval Oceanographic Office. In the National Capital Region alone, there are over 1,300 Navy personnel in 20 separate buildings involved in the management or execution of the Naval Oceanographic Program. This situation is not efficient and is inadequate for the more complicated and operationally important work that has to be done for the Navy's fleet. This situation is exacerbated by the recognized importance of the oceans as a source of energy and resources. The proliferation of activities in the ocean requires the most sensitive management possible to maximize utilization of the valuable national assets represented by Navy's considerable capital investment in the ocean and to ensure responsiveness for a clearly defined, easily recognizable center of managerial, technical and operational excellence, which is cleanly structured, physically functional and finely tuned to Navy and National needs.

There is also a government policy (Executive Order 11512) that requires the DOD to give consideration to decentralizing services or activities from the National Capital Region (NCR) which can be carried out elsewhere without excessive cost or significant loss of efficiency. In addition, Congressional Committees have repeatedly expressed the desire that the DOD reduce the activities in the NCR which do not have to be at the seat of Government.

ACTION: The approved action is to consolidate the Naval Oceanographic Program and to establish an Oceanographic Center of Excellence at the NASA National Space Technology Laboratory, Hancock County, Mississippi. Elements to be consolidated into the Center include the Naval Oceanographic Office and the following elements of the Office of Naval Research: the Deputy Assistant Oceanographer of the Navy for Ocean Science; the Ocean Science and Technology Division; the Acoustic Environmental Support Detachment; and the Long Range Acoustic Propagation Project. This action will synthesize Navy's Ocean Science Program by collocating at one site the full spectrum of ocean science activities necessary to properly support the Fleet and other national objectives. Additionally, the Center will house the Navy's only operational oceanographic entity, the Naval Oceanographic Office. While policy direction, interagency coordination, and overall program control will continue to be exercised by existing headquarters in the NCR, the Hancock County site will provide the facilities and the national focus to establish a matrix of managerial, technical and operational excellence, including the vital contributions from the Nation's

academic and industrial communities. The research and development branch of the Center will, as now, be responsive to the Chief of Naval Research and will serve as a regional branch of the Office of Naval Research. The site selected for the Center of Excellence fulfills two basic criteria: First, the technical facilities are outstanding, are currently under-utilized, and are available; Second, the surrounding area has the requisite social and economic base to absorb additional citizens. Supporting documentation addressing these two criteria are contained in the Final Environmental Impact Statement filed with the Council on Environmental Quality on 30 May and announced in the Federal Register on 6 June 1975.

PURPOSE: To provide for improved management and operational efficiencies of Navy's Oceanographic Program; fully utilize existing under-utilized Federally owned facilities designed for such occupancy; increase opportunity for interagency operations through collocation with other Federal agencies with similar programs; i.e., NASA -- Earth Resources Laboratory; NOAA -- National Data Buoy Office; National Oceanographic Instrumentation Center; Fisheries Engineering Lab.; Lower Mississippi River Forecast Center; Interior -- Gulf Coast Hydro-Science Center; EPA -- National Pesticide Monitoring Lab.; Pesticide Chemical Regulation Lab.; Lower Mississippi River Field Facility; Coast Guard -- Gulf Strike Team; decrease Federal employee population in the NCR in accordance with the stated desires of Congressional Committees; increase Federal capability to meet Nation's future ocean oriented needs; and to provide a National focal point for oceanography.

WHERE: National Space Technology Laboratory, Bay St. Louis, Mississippi (Hancock County). Fifty miles east of New Orleans. Formerly the Mississippi Test Facility -- built in mid 1960's by NASA to test booster rockets. The site now has space and facilities available for Navy use. Offices -- warehouses -- laboratories -- instrument test facilities -- computer facilities. Consolidation at NSTL will increase production efficiency and lower overhead costs.

WHEN: Begin Summer 1975. Will take approximately two years to complete consolidation. Personnel moving schedule: 240 personnel in first quarter FY 1976; approximately 400 in summer of 1976 and 600 in summer of 1977.

WHO: Primarily Naval Oceanographic Office -- 1,200 civilian employees scattered in 19 buildings in Capital Region. Fifty civilians from Office of Naval Research.

ASSISTANCE TO CIVILIAN EMPLOYEES: Employees who decline to transfer with their function or who might otherwise be adversely affected by reduction in force as a result of this action will be afforded priority placement assistance under the DOD program for stability of civilian employment.

ENVIRONMENTAL IMPACT: Draft Environmental Impact Statement filed 11 April 1975. Public hearings held in Maryland and Mississippi. After evaluation of all comments and facts received, a determination was made that the overall impact was not considered sufficient to warrant a negative decision. Final Environmental Impact Statement filed with Council on Environmental Quality on 30 May 1975.

ECONOMIC IMPACT: One-time cost to Navy and NASA is estimated at \$19.2 Million including some new construction. Will cause temporary increase in non-government jobs for construction of facilities, new homes for employees, transportation of household goods and government owned equipment, services. Annual reduction in Navy and NASA costs are estimated to be about \$3.0 Million.

	<u>FY 76</u>	<u>FY 77</u>	<u>FY 77</u>
<u>Navy</u>			
<u>Cost</u>			
<u>Schedule</u> Movement/			
Severance	\$2.9M	\$1.7M	\$4.1M
Construction			7.5M
Other	0.4M	0.2M	0.6M
 <u>NASA</u>			
<u>Cost</u>			
<u>Schedule</u> Facilities	1.5M		
 Total Navy and NASA	\$4.8M	\$1.9M	\$12.3M

Amortization: One-time costs will be amortized in about seven years after complete implementation of the consolidation.



HISTORY

1. RECOGNIZED THE NEED TO CONSOLIDATE AND
THE OCEANOGRAPHIC PROGRAM.
2. TEN YEAR ATTEMPT TO CONSOLIDATE IN NATION
— NO CONGRESSIONAL SUPPORT.
3. EXAMINED POSSIBLE SITES FOR AVAILABLE FAC
4. FACILITIES ARE AVAILABLE AT NSTL BAY ST. LO

SUMMARY OF ALTERNATIVES

Location	Net Sq. Ft. Required	Sq. Ft. Avail. of Req. Type	Condition of Existing Facilities
Newport	368,000	102,000	Poor
Quonset	"	0	Fair
Davisville	"	5,800	Good
Philadelphia	"	130,000	Poor
Hyattsville	"	172,000	Good
Otis AFB	"	72,000	Poor
Sand Point	"	0	Poor
Michoud/NSTL	"	348,000	Good
NSTL	"	280,500	Excellent
Suitland	"	0	N/A
Portsmouth	"	4,300	Poor

(1) MILCON Cost not computed because it was apparent it would be more than NSTL.

LEGEND

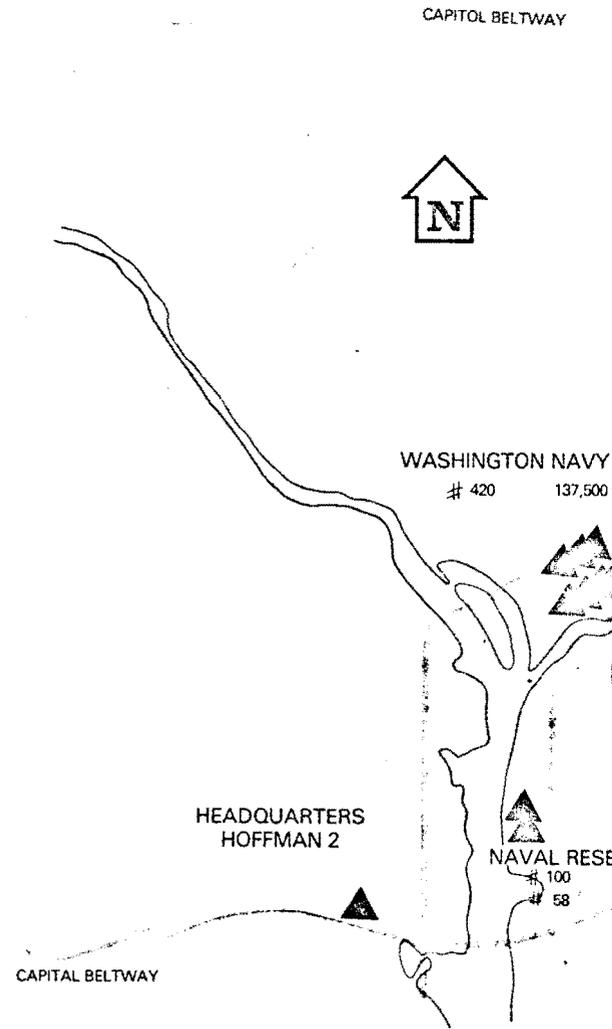
- # NUMBER OF PEOPLE
- ⌘ SQUARE FEET OF SPACE

NAVOCEANO
ONR

TOTALS

	PEOPLE	NET SQ FT	BUILDINGS
NAVOCEANO	1,246	355,880	19
ONR	63	16,789	(1)
TOTAL NCR	1,309	372,669	19

180,000 MILE LOCAL TRAVEL PAID TO EMPLOYEES.
20,000 GALLONS GASOLINE.
ALL BUILDINGS MORE THAN 30 YEARS OLD.



DISTANCE TO — FROM BUILDING 1000 (COMPUTER)

WAREHOUSE/GARAGE 1 MILE
INSTRUMENTATION 1 MILE

LEGEND

NUMBER OF NAVY PEOPLE
⌘ SQUARE FEET AVAILABLE

SUMMARY

BUILDING	NET SQ FT	NEW CONSTRUCTION	AGE(YEARS)
COMMON	48,000		
1000	18,649	87,500	9
1100	33,914		9
1105	18,940		9
1200	7,100		
1201	2,774		9
2101	1,300		9
2105	25,667		9
2204	33,448		10
STORAGE	30,000		
3202	15,000		9
8100	46,057		9
TOTAL NSTL	368,349		

(2204) WAREHOUSE & SUPPLY
14 33,448 ⌘
(UNDERWATER TOW TANK)
37,000 ⌘

(1201) COMMUNICAT
21 2,774 ⌘

(1100) R&D ADMINISTR
240 33,914 ⌘

(1105) LAB
9

(2101) OFFICE
10 1,300 ⌘

(2105) GARAGE
52 25,667 ⌘

PEARL RIVER

National Space Technology Laboratory



(1100) COMPUTER AND DATA ANALYSIS



(1100) R&D ADMINISTRATION



(1105) LABORATORY

National Space Technology Laboratory

New Directions

Written especially for the Mississippi Monitor
By
Janice Jones
NASA Public Affairs Office



Administrative, Engineering, and Laboratory complex at NSTL



Facilities Available NSTL

Initially Available Space FY 76 NET SQ. FT.

<u>BUILDING</u>	<u>OFFICE</u>	<u>FUNCTIONAL</u>
1000	13,034	5,615
1100	33,914	
1105	2,027	5,913
1200	7,100	
1201	1,478	1,296
2101	1,300	
2105	4,664	21,003
2204 (Warehouse)		33,448
2204 (Ocean Inst Fac)		37,000
8100	4,740	41,317

Additio

Laboratory
Storage

1,000 add on

68,257

145,502 — 213,819

COSTS

FOR ANY CONSOLIDATION SITE WHICH REQUIRES
TO COMMUTE AT LEAST 10 ADDITIONAL MILES

1. EMPLOYEE RELOCATION
2. EQUIPMENT RELOCATION AND INSTALLATION
3. FACILITIES CONSTRUCTION

PLAN

NUMBER OF EMPLOYEES RELOCATED

		AUG 75	MAR 76	JU
CIVILIAN	(1239)	230	35	
MILITARY	(42)	10	0	

NAVAL OCEANOGRAPHIC CE
 Bay St. Louis, Mississippi

1281 (42 Military)

Operational

1084 Personnel
 Naval Oceanographic Office
 (Less R&D Components)

Present Organization
 Naval Oceanographic Office
 ONR — Code 102
 ONR — Code 480
 ONR — AESD

	<u>FY 76</u>	<u>FY 77</u>	<u>FY 77</u>
Personnel Moved	288	177	390
Sever	93	74	181
Retire	19	17	42

3



Department of the Navy



ENVIRONMENTAL IMPACT STATEMENT

Volume 1

NAVAL OCEANOGRAPHIC CENTER
BAY ST. LOUIS, MISSISSIPPI

June 1975

FINAL



ERRATA

- Page 11 Alternative (7) -- Michoud (New Orleans) Louisiana vice Michoud (New Orleans) Mississippi.
- Page ix Table 7a -- "Constructed" vice Constitute.
- Page ix Table 8c -- "Accreditations" vice Accreditibilities
- Page 22 Paragraph 2.21.a. First sentence, "runs" vice "running."
- Page 46 Table 10. Hancock General. Enter 56 under "No of Beds" and delete the number 4.
- Page 46 Table 10. Vet Administration. Enter "Yes" under 24 Hour Emergency Room and substitute 1 for 4.
- Page 63 Line two of paragraph 2.34.e. should read "sandy Gulf beaches" vice "Gulf Sandy beaches".
- Page 71 Paragraph 4.04.a. Line 2 should read "spouse" vice "sponsor".
- Page 72 Paragraph 4.04.b. Line 7 should read "30 - 45 days" vice "\$30 - \$45".
- Page 72 Add footnote 27. "Personal Communication with Mr. La Valley, Sales Manager, Routh Robbins Realty, Oxon Hill, Maryland."
- Page 73 Paragraph 4.04.e. Line 9, "\$.86" vice "\$86".
- Page 73 Paragraph 4.04.f. Line 7, change to read "housing, public . . ." vice "having public . . .".
- Page 75 Paragraph 4.04.f.(1). Sentence beginning "Economics . . ." should read as follows: "Economics are a dominant factor in maintaining those patterns since black family income is approximately 60 - 70% . . . average.³⁰"
- Page 76 Paragraph 4.04.i. "TAB A" vice "TAB 4".
- Page 79 Paragraph 4.06.a. Change "Table 15" to read "Table 17".
- Page 79 Paragraph 4.07, line 5. Insert "%" after the number "20".
- Page 89 Paragraph 6.01, line 16. Change (c) to (e).

DEPARTMENT OF THE NAVY
ENVIRONMENTAL IMPACT STATEMENT
VOLUME I

NAVAL OCEANOGRAPHIC CENTER
BAY ST. LOUIS
MISSISSIPPI

JUNE 1975

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NAVAL OCEANOGRAPHIC CENTER
BAY ST. LOUIS, MISSISSIPPI
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SUMMARY

NAVAL OCEANOGRAPHIC CENTER, BAY ST. LOUIS, MISSISSIPPI

() Draft (X) Final Environmental Impact Statement

Responsible Office: Oceanographer of the Navy, Alexandria, Va.

Responsible Officer: RADM J. Edward Snyder, USN

Telephone: 325-9395

1. Name of Action: (X) Administrative () Legislative

2. Description of Action: The proposed action would establish a Naval Oceanographic Center at the National Space Technology Laboratory (NSTL), Bay St. Louis, Mississippi. The Naval Oceanographic Office, Suitland, Maryland, less certain research and development elements would relocate to Bay St. Louis and constitute the major component of the Oceanographic Center. Related Washington based Navy Oceanographic Program (R&D) managers and performers, plus similar elements from the present Oceanographic Office, would collocate and form a Research and Development Activity. Existing administrative, laboratory and automated data processing spaces will be leased from the National Atmospheric and Space Administration to house the activities concerned. An additional 87,500 net square feet of space will be provided by construction adjacent to Building 1000 to provide for a secure area adjacent to the computer facilities. The proposed action will relocate an estimated 800 Navy employees and their families from the National Capital Region to the NSTL region. Navy employment at NSTL as a result of the proposed action will total approximately 1300.

A number of sites were visited and considered for the proposed action and analyses were made for the more competitive ones. Availability of relatively new (10 years old) buildings in excellent condition currently or previously housing underutilized administrative, laboratory and ADP facilities, along with co-occupancy of NSTL with a number of other federal and state agencies similarly engaged in oceanographic and environmental pursuits, made NSTL the most desirable of the several sites considered.

3a. Environmental Impact: (Relocation Site) No significant impact on the natural environment will result directly from the proposed action since existing facilities will fulfill most needs. The action is essentially non-polluting with the major effect limited to a minor increase in vehicular emissions from increased traffic flow. Additional employment opportunities through either direct hire of local residents or

through employment generated by increased demand for housing, goods and services will result for the local communities near NSTL should the proposed action be completed.

3b. Adverse Environmental Effects: (1) (Outflow Location-NCR) Relocation of the affected activities to a site outside of the NCR could result in severance of certain family, cultural and community ties for many of the employees. Blacks, who comprise approximately 14% of the work force, may be reluctant to transfer to the proposed relocation site. Many women employees whose husbands provide the primary source of family income and who are employed elsewhere, are likely to seek other employment in the NCR rather than relocate.

(2) (Relocation Site-NSTL)

Urbanization of the Countryside adjacent to several of the local communities will be speeded with the influx of new families and the attendant increase in demand for housing, municipale services and recreational facilities. Settlement of relocated Navy employees in large numbers in a given locale could temporarily tax a local school system.

4. Alternatives: Alternatives considered include:

(1) Do Nothing.

(2) Construct Facilities for a Naval Oceanographic Center at Suitland, Maryland.

(3) Establish a Naval Oceanographic Center in Prince Georges Center, Hyattsville, Maryland.

(4) Establish a Naval Oceanographic Center in Renovated buildings 59 and 76 at the Navy Yard, Philadelphia, Pennsylvania.

(5) Establish a Naval Oceanographic Center in a reactivated portion of the Construction Battalion Center, Davisville, Rhode Island.

(6) Establish a Naval Oceanographic Center in Renovated facilities at the Naval Base, Newport, Rhode Island.

(7) Establish a Naval Oceanographic Center Collocated with NASA and Dept. of Agriculture Michoud (New Orleans) Mississippi and NSTL.

(8) Alternatives to planned new Construction:

(a) Do Nothing.

(b) Expand one or more buildings in addition to or in lieu of new construction adjacent to building 1000.

5a. Comments Requested on Draft Environmental Impact Statement

Federal:

Administrator
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Regional Administrator
Environmental Protection Agency
(Region IV)
1421 Peachtree Street
N. E. Atlanta, Georgia 30309

National Register of Historical Places
National Park Service
Department of the Interior
Washington, D.C. 20240

Office of the Deputy Assistant Secretary
for Environmental Affairs
Department of Commerce
Washington, D.C. 20230

Director
Office of Community and Environmental Standards
Department of Housing and Urban Development
Room 7206
Washington, D.C. 20410

Office of Environmental Affairs
Office of the Assistant Secretary for
Administration and Management
Department of Health, Education and Welfare
Washington, D.C. 20202

Director
Office of Environmental Quality
Office of the Assistant Secretary for
Environment, Safety and Consumer Affairs
Department of Transportation
Washington, D.C. 20590

Assistant Secretary for Occupational Safety
and Health
Department of Labor
Washington, D.C. 20210

Federal Energy Administration
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20461

National Aeronautics and Space Administration
NASA Headquarters
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Washington, D.C. 20546

National Research Council
Commission on Natural Resources
2101 Constitution Avenue
Washington, D.C. 20418

Oceanography Section
National Science Foundation
1800 G Street, N.W.
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Administrator
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Rockville, Maryland 20852

Fishery Oceanography Coordinator
National Oceanic and Atmospheric
Administration
National Marine Fisheries Service
Washington, D.C. 20235

Rural Electrification Association
U.S. Department of Agriculture
Room 5901
Washington, D.C. 20250

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Bay St. Louis, Mississippi 39520

State and Local Clearinghouses

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Office of the Governor
510 Lamar Life Building
Jackson, Mississippi 39201

Gulf Regional Planning Commission
P.O. Box 1346
Gulfport, Mississippi 39501

Southern Mississippi Planning and
Development Commission
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Hattiesburg, Mississippi 39401

Metropolitan Washington Council of Governments
1225 Connecticut Avenue, N.W.
Washington, D.C. 20036

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Marine Programs Biologist
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P.O. Box 497
Long Beach, Mississippi 39560

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Washington, D.C. 20005

Central Louisiana Electrical Co.
Slidell, Louisiana 70458

Mississippi Power Company
Box 4079
Gulfport, Mississippi 39501

Director
Public Relations
University of Southern Mississippi
Box 16 South Station
Hattiesburg, Mississippi 39401

Eden Isles Homeowner's Association,
Slidell, LA
325 Eden Isles Boulevard
Slidell, Louisiana 70458

5b. Comments Received on Draft Statement

Federal

Veterans Administration Center
Jackson, Mississippi 39216

United States Department of the Interior
Office of the Secretary
Washington, D. C. 20240

Department of Health, Education and Welfare
(Region IV)
50 7th Street, N. E.
Atlanta, Georgia 30323

National Aeronautics and Space Administration
Washington, D. C. 20546

Regional Administrator
Environmental Protection Agency (Region IV)
1421 Peachtree Street, N. E.
Atlanta, Georgia 30309

United States Department of Agriculture
Washington, D. C. 20250

State and Local Clearinghouses

Metropolitan Washington Council of Governments
1225 Connecticut Avenue, N. W.
Washington, D. C. 20036

The Maryland National Capitol Park and
Planning Commission
6600 Kenilworth Avenue
Riverdale, Maryland 20840

Office of the Mayor
City of Bay St. Louis
Bay St. Louis, Mississippi

Unsolicited Comments

Mr. Edwin L. Stephenson
3620 Wedgway Drive
Ft. Worth, Texas 76133

Private citizen

Mr. Sargent F. Jones, II
5410 Ferndale Street
N. Springfield, Virginia 22151

Private citizen

Mr. Leonard Johnson
12207 Kenlock Court
Upper Marlboro, Maryland

Private citizen

Mr. Alvin Fisher, Jr.
10906 Exeter Court
Upper Marlboro, Maryland 20870

Private citizen

Mr. Stephen W. Dorey
6301 Hil-Mar Drive
Forestville, Maryland 20028

Private citizen

Mr. Peter Bockman
3607 Glenbrook Road
Fairfax, Virginia 22030

Private citizen

Mr. Gerald E. Williams
4247 South 32nd Road
Arlington, Virginia 22206

Private citizen

6. Draft Statement to CEQ
Final Statement to CEQ

April 2, 1975

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1. Proposed Action

A. Nature of the Proposal

1.01 This statement details a proposal by the United States Navy to establish a Naval Oceanographic Center at the National Space Technology Laboratory in Bay St. Louis, Mississippi. It is proposed to consolidate and relocate the Washington based Navy Oceanographic Program (R&D) managers and performers and operationally funded performers in order to provide for effective administration of Navy's Oceanographic Program. This action would result in establishment of a Naval Oceanographic Center, comprised of the Naval Oceanographic Office less certain research and development elements and a Naval Oceanographic Research and Development Activity. To accommodate these activities, the National Aeronautic and Space Administration (NASA) has agreed to make approximately 280,000 square feet of building space available for Navy use on a long term use permit (25 years or longer if desired) subject to approval of the proposed relocation by the Secretary of Defense ¹. (The rental charged by NASA would provide: heat, air conditioning, power, water, ground maintenance, building maintenance, fire protection, mail service, road maintenance, custodial services and security.) New construction adjacent to building 1000 will provide approximately 87,500 net square feet of space for classified operations and general office usage. The buildings being offered for Navy use are located in the section of the fee area shown in figure 1 as "Area for Navy Consideration". Among factors considered by Navy in preparation of Environmental Impact Statements are conservation, economics, aesthetics, historic values, fish and wildlife resources, flood damage prevention, navigation, recreation, water supply and water quality, and, in general, the needs and welfare of the people. This Statement addresses those considerations.

B. Project Description.

1.02 The project, for ease and clarity of assessment, can be broken down into three categories: (1) movement from the National Capital Region, (2) relocation, and (3) enlargement of facilities to meet expected needs.

1. NASA ltr of 23 April 1975

ARMY - NORTH AREA

ASSUME NASA DESIRES TO
HOLD STAGE TEST AREA -
BALANCE FOR NAVY
CONSIDERATION

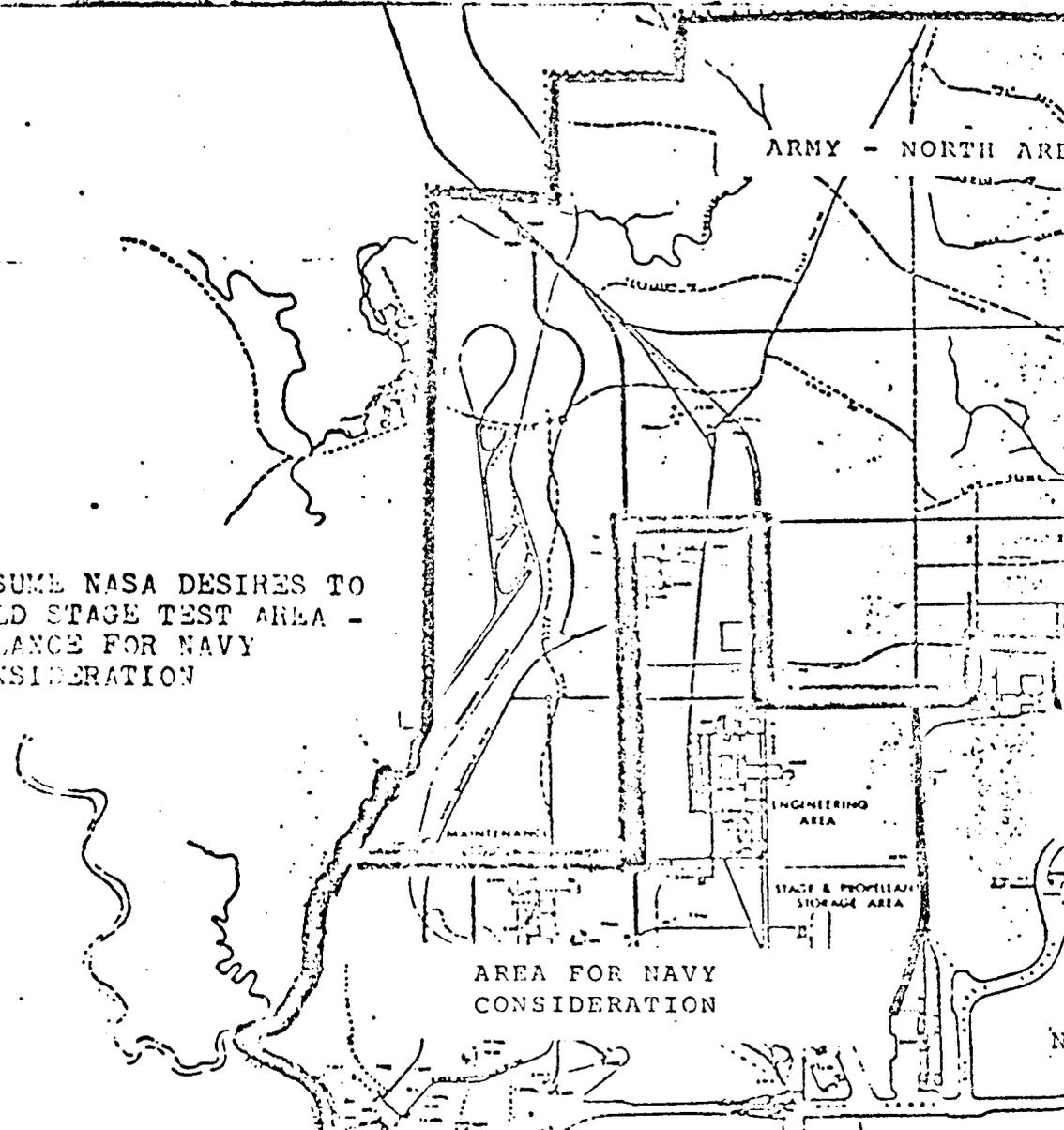
2

MAINTENANCE

ENGINEERING
AREA

STAGE & PROPELLANT
STORAGE AREA

AREA FOR NAVY
CONSIDERATION



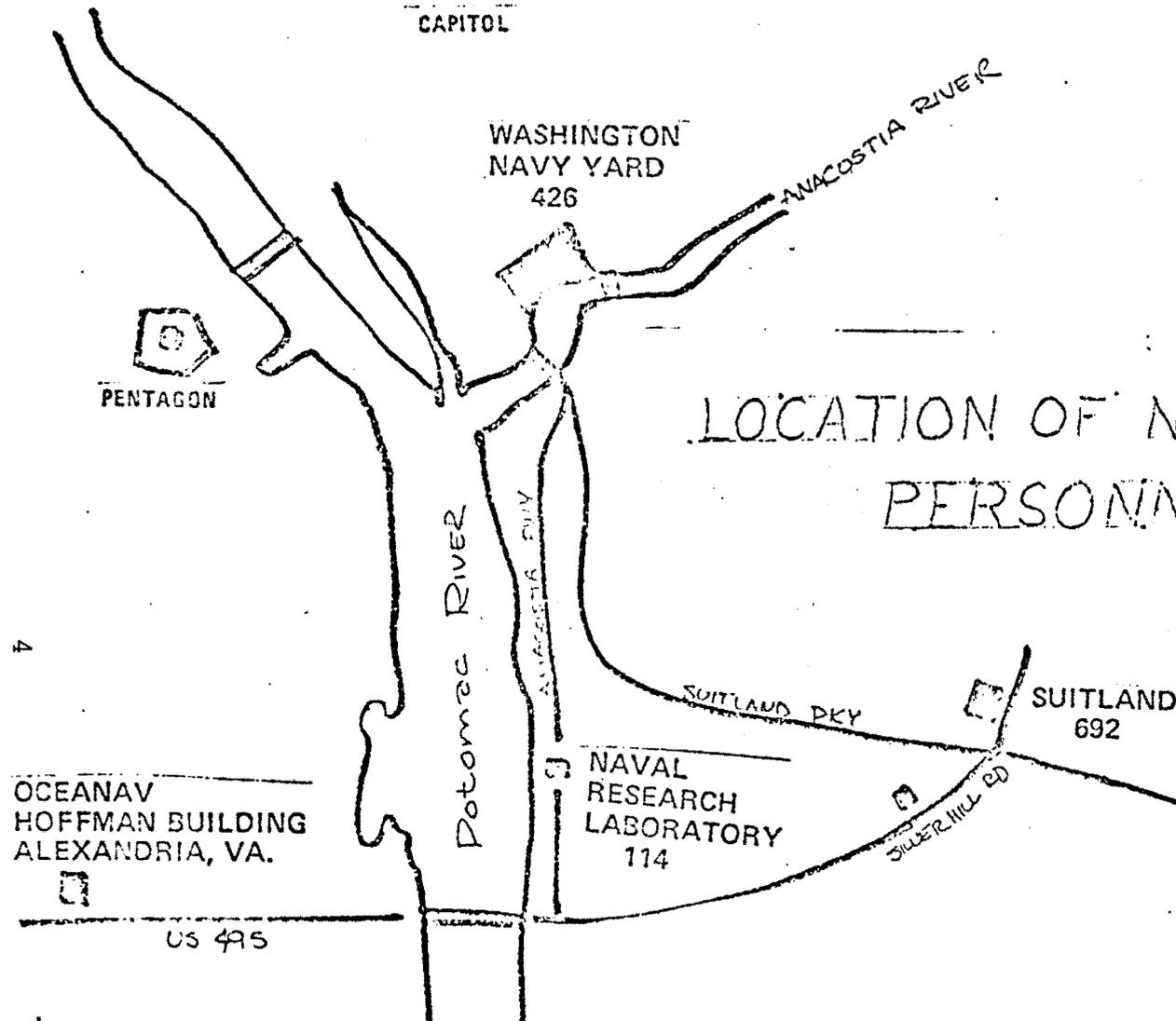
1.03 Executive Orders, Secretary of Defense memoranda, Department of Defense Instructions and Congressional interest have continually expressed concern over the size of the Federal presence in the National Capital Region (NCR). The need to reduce Defense activities in the NCR is continually stressed and measures taken by Congress and defense officials have exerted and continue to exert considerable pressure on activities to relocate. To implement Defense plans for facilities reduction, ceiling limitations have been placed on administrative space in the NCR. Congressional interest in reducing Defense activities in the NCR was again forcefully stressed during FY 75 budget hearings (see Appendix A). Proposals for relocation of Navy activities and components to areas outside the NCR in response to the aforementioned directives are reviewed and approved by the Secretary of the Navy to assure compatibility with the Navy's overall mission requirements.

1.04 The Naval Oceanographic Center would be composed of the Naval Oceanographic Office (NAVOCEANO) and selected Research and Development (R&D) program managers and performers from the Office of Naval Research where fields of management are comprised principally of efforts identified as being components of the Navy Oceanographic Program.

1.05 At the present time, the Naval Oceanographic Office is housed in 19 different buildings in four primary locations in the NCR (figure 2). The locations are Suitland, Maryland, the Washington Navy Yard, the Chesapeake Beach facility in Calvert County, Maryland, and the Naval Research Laboratory in Washington, D. C. NAVOCEANO currently employs approximately 1,200 civilian personnel with an annual payroll exceeding \$20M. All permanent employees would be asked to relocate with the program; however, it is estimated that approximately 800 civilian personnel will actually move. Of those personnel choosing to make the move, most will likely be either managerial or professional. All personnel will be provided a minimum of sixty days to exercise the option to relocate.

a. In addition to civilian employees at the Naval Oceanographic Office, there are 20 Naval officers and 15 enlisted personnel assigned. These personnel would also be relocated to NSTL.

b. Other personnel, not employed at the Naval Oceanographic Office but who are oceanographic program



LOCATION OF
PERSONA

4

managers and performers and would be relocated to NSTL, include 50 civilians and 7 naval officers from the Office of Naval Research.

1.06 The Naval Oceanographic Office's requirements for additional space and the operational problems attendant with both overcrowding and physical separation of facilities have long been recognized through numerous inspections and visits by representatives from the Department of Defense, Office of the Chief of Naval Operations, Commandant Naval District Washington, and the General Services Administration (see Appendix B). Certain hydrographic operations were split out from NAVOCEANO in 1972 and combined with elements from the Army Topographic Command and the Air Force Aeronautical Chart and Information Center to form the Defense Mapping Agency. Former NAVOCEANO components did not physically relocate from the premises with the formation of the new activity; therefore, the need for additional space still exists.

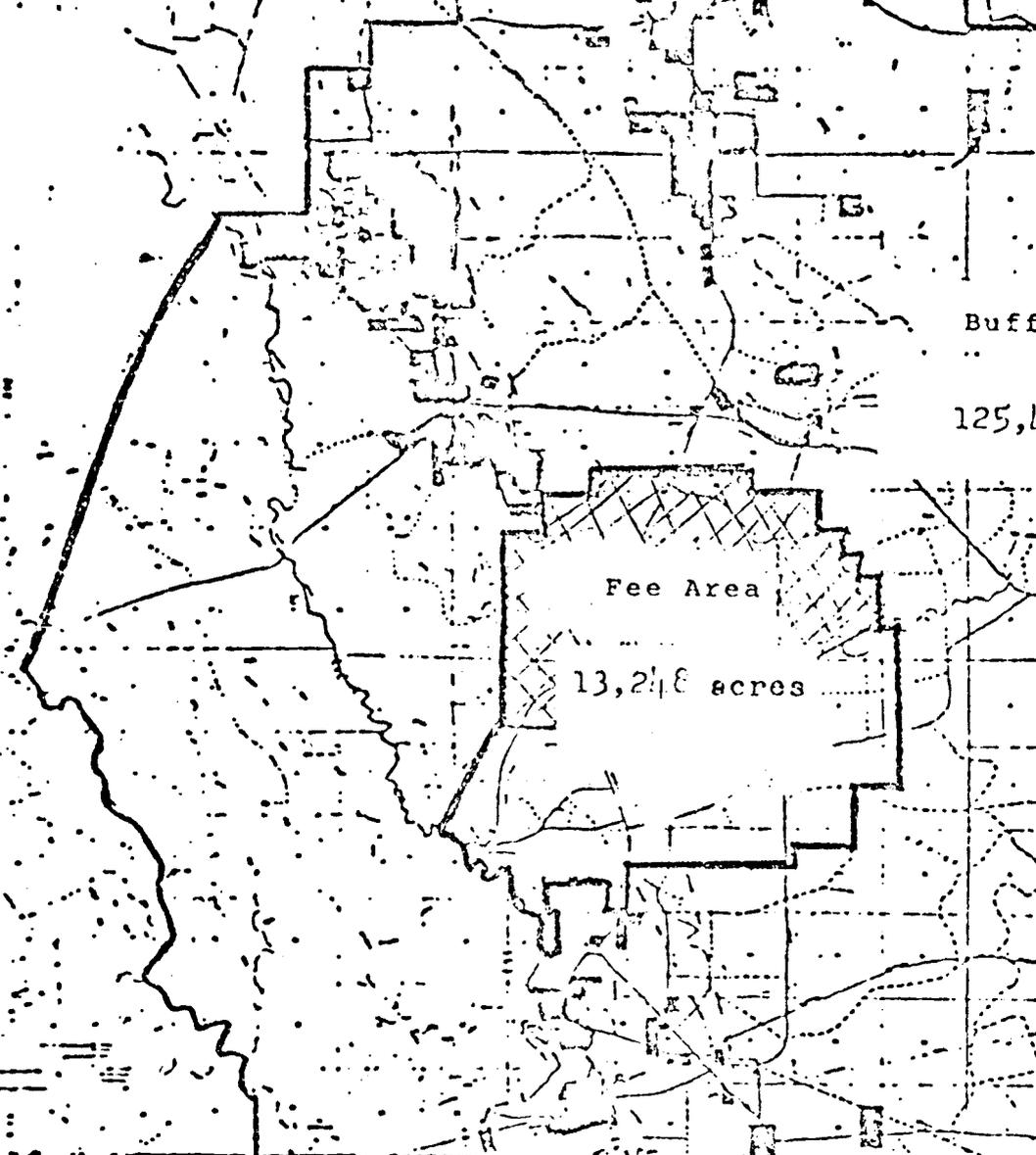
1.07 Consolidation of program elements will decrease local travel expenditures, decrease present loss of personnel time spent traveling inter-office, permit a reduction in number of personnel by about 50, would assist the Department of Defense in meeting NCR space occupancy reduction goals, and would result in decreasing annual expenditures for space rental. (See APPENDIX C, TAB A and B)

1.08 Results of a study concluded in September 1973 for the Chief of Naval Development on Research and Development management positions concluded "[W]e have found the budgetary and management arrangements so complex that program coherence is nearly totally obscured." 2.

Consolidation of the Major portion of the Navy's R&D program managers at one location would lead to increased coordination, be more effective, and provide economy in the case of existing manpower resources. Collocation of the R&D program managers with the Naval Oceanographic Office will also increase the potential of the operationally funded program to enhance the transition of R&D to the operational program thereby providing for a more effective link between R&D program managers, Fleet support producers and the Fleet.

1.09 The site under consideration is the NASA owned National Space Technology Laboratory (NSTL) at Bay St. Louis, Mississippi (Figures 3 and 4). This site

2. MONK, ANDREWS AND NORRIS REPORT ON NAVY OCEANOGRAPHIC RESEARCH AND DEVELOPMENT PROGRAM. SEPT 73. Para I



Fee Area

13,248 acres

Buffer

125,400

Buildings of interest to Navy

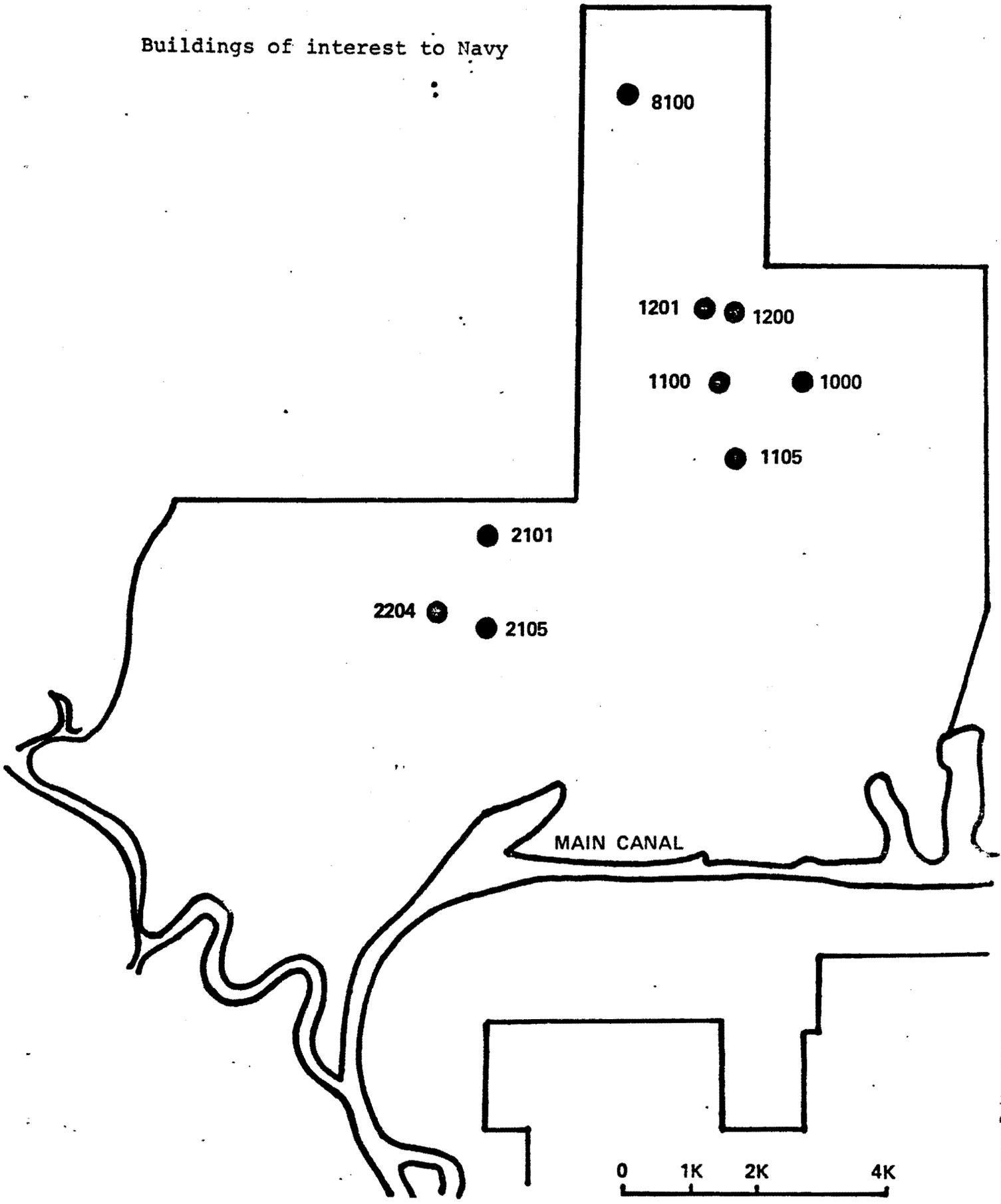


FIGURE 4

is given primary consideration after considering and rejecting various alternate sites for technical or economic unsuitability as reported in APPENDIX D.

1.10 The physical facilities at NSTL offer a unique potential for accomplishing the consolidation of the Naval Oceanographic Program. NSTL has readily available relatively new buildings (10 years old) originally designed to meet the requirements of an oceanographic/environmental support activity (i.e., a modern oceanographic instrumentation calibration facility, a tow tank, a water jet tank, well equipped laboratory facilities and a computer facility).

1.11 Several other federal agencies having complementary programs in oceanography, meteorology and ecology have components in residence at NSTL. (See APPENDIX E) These include Dept of Commerce (National Oceanic and Atmospheric Administration) Department of Interior (U.S. Geological Survey), Department of Transportation (U.S. Coast Guard), Corps of Engineers, and the Environmental Protection Agency. The Navy will cooperate with other organizations, consistent with its own mission requirements, to provide a national focus to describe, understand, and predict environmental phenomena. Close physical proximity to components of other Federal agencies engaged in similar pursuits will encourage the continued exchange of oceanographic data and knowledge with and between these organizations. With the expertise and experience in other Federal agencies in residence, facilities capabilities in data processing, acoustics, meteorology, oceanography, pollution control, photography and instrumentation calibration, NSTL is an ideal site for an integrated oceanographic center,

1.12 The buildings which NASA has designated as fully or partially available for Navy occupancy and use in 1975 are:

<u>Building Number</u>	<u>Net Sq Ft Available to Navy</u>		<u>General Description</u>
	<u>Office</u>	<u>Functional</u>	
1000	13,034	5,615	Computer/Admin
1100	33,914		Administrative
1105	2,027	5,913	Laboratory/Office
1200	7,100		Administrative/Office
1201	1,478	1,296	Communications/Office
2101	1,300		Laboratory/Office
2105	4,664	21,003	Office/Garage/Warehouse
2204		33,448	Warehouse
2204		37,000	Instrumentation
8100	4,740	41,317	Instrumentation/Office
Totals	<u>68,257</u>	<u>145,592</u>	

In addition, NASA can, through consolidation, make available the following space within one year:

11,000 sq. ft. of laboratory and collocated office,
15,000 sq. ft. of 60 ft. high bay storage and 30,000 sq.
ft. of dead storage area.

1.13 Building 8100 is a well equipped oceanographic instrument repair, maintenance and calibration facility which is well suited to handle existing and future oceanographic program needs. Building 1000 was constructed to house ADP equipment and is well suited to accept installation of an 1108 computer to meet NSTL tenants' needs without major renovation.

1.14 Proposed Relocation Phasing: It is proposed that the relocation/consolidation occur in three major phases. This would permit early initial occupancy of presently underutilized space, allow ample time for the program and local communities to adjust to and prepare for the changes, allow time for program adjustment and consolidation at NSTL, and permit necessary building additions to be completed. (See APPENDIX F)

a. Phase 1 (summer of 1975) would include relocation of the R&D managers from the Office of Naval Research, and certain Research and Development personnel from the Naval Oceanographic Office. A total of approximately 240 positions would be relocated during phase 1. These personnel will occupy space in buildings 1100 and 1105.

b. The second phase (summer 1976) personnel would occupy all of building 1000 (18,649 sq. ft.) to which must be added approximately 6,500 sq. ft. of temporary space in FY 76 in order to provide secure work area adjacent to the computer. They would also occupy portions of Bldgs 8100 (13,000 sq. ft.), 1200 (2,000 sq. ft.) and 1201 (1,478 sq. ft.) and all of Bldg 2105 as supply office (4,664 sq.ft.) and warehouse (21,003 sq. ft.). A total of 428 positions are involved in the second phase of relocation.

c. After the MLCON funded addition to building 1000 is completed, some Navy personnel would be relocated (locally) into the new addition with the balance of those transferring in the final phase (613 positions) going either into the new addition or into appropriate functional and office space in the buildings and space designated as available by NASA.

1.15 Enlargement of Facilities. In addition to the use of existing facilities, some additional Military Construction (MCON) is required to meet secure space requirements.

Urgent minor construction of 6,500 net square feet of space is proposed to temporarily house elements of the Ocean Survey Program until construction of the larger building. This building will be connected to building 1000 and is a windowless, pre-engineered metal building on a concrete slab meeting security specifications for classified material. It will have air conditioning, heating, toilet facilities, and all utilities. The major construction project to provide long term secure working and administrative space adjacent to the computer facility consists of a new two story, rigid steel frame building with hinge masonry curtain walls on pile foundations and concrete slab with air conditioning, heating, toilet facilities, and all utilities. Security fencing will be installed around the computer-secure working area complex. New parking facilities will also be provided adjacent to the secure area. The new facility will, in general, be compatible with existing structures (see figure 5-11).

1.16 Total space available for Navy use at NSTL after enlargement of building 1000 is approximately 368,349 square feet. Space available is equal to that authorized by the Basic Facility Requirement List prepared by the Naval Facilities Engineering Command³.

2.0 Environmental Setting Without the Project

A. The Natural Environment

2.01 NSTL is located amid pine woods and marsh land approximately 55 miles northeast of New Orleans. The area is comprised of 13,248 acres of government owned or controlled land. This buffer zone is inhabited only by livestock and wildlife with farming and lumbering permitted. No one is allowed to reside in the area.

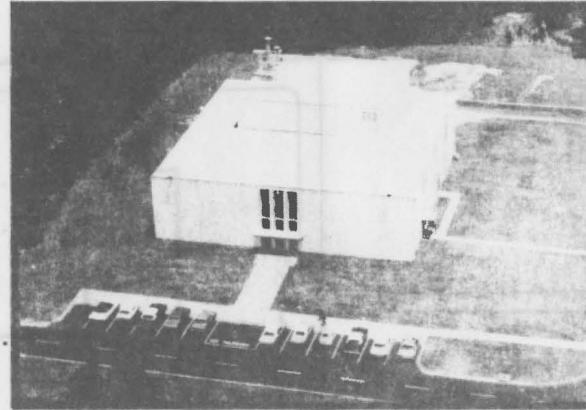
2.02 The Fee Area, approximately 5 miles square, is located east of the Pearl River in the western sector of Hancock County, Miss. The buffer zone, extending approximately 6 miles on all sides of the Fee area also encompasses part of Pearl River County, Miss., to the northwest and St. Tammany Parish, La. to the west in addition to part of Hancock County.

2.03 Underlying the area of NSTL is a thick sequence of sediments. These sediments are representative of

3. NAVFACINST 11010.44B of 9 NOV 73

National Space Technology Lab

Figure 5



(1000) COMPUTER AND DATA ANALYSIS

11

Figure 10

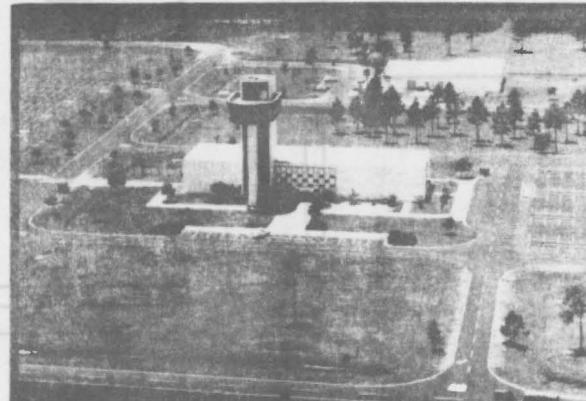
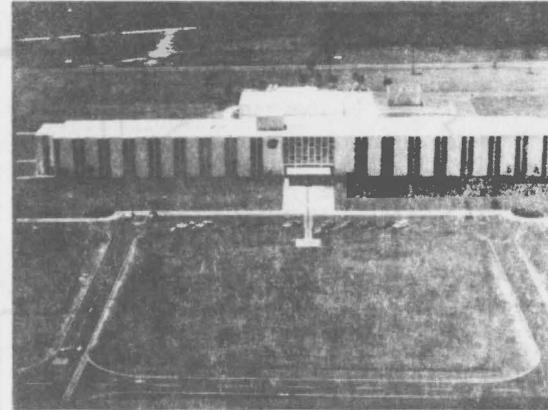


Figure 6



(1100) R&D ADMINISTRATION

Figure 9



13
FIGURE 11

(39

(4

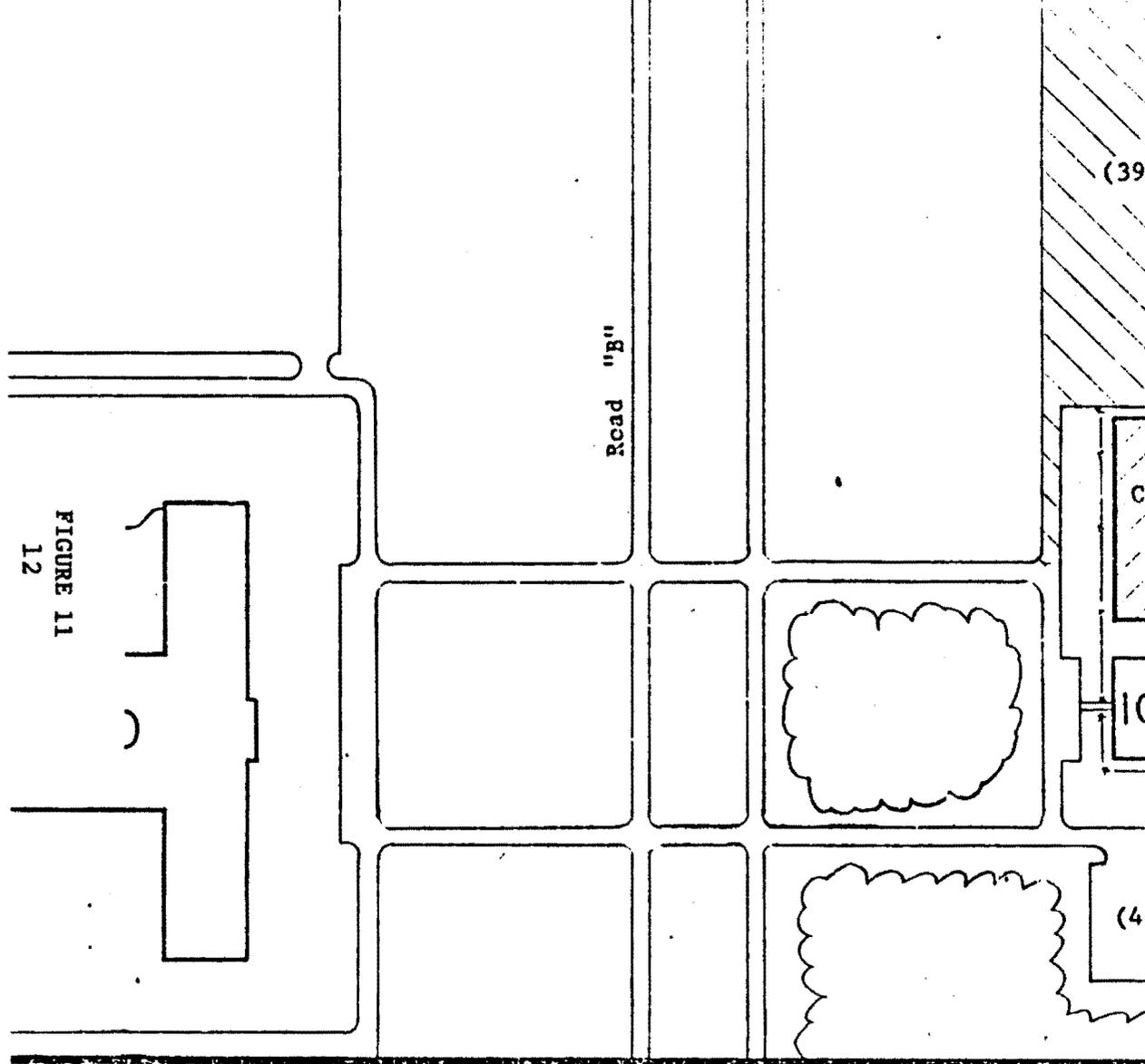


FIGURE 11
12

shallow-water delta deposits separated by thinner, widespread marine deposits. This type of deposit can be expected to yield sands, gravels, and clays.

2.04 The mild climate and acid soil dictate the plant pattern of the area. The long leaf pine is the principle tree of the higher land area and the pond cyprus is the dominant species of the low level. Other trees include slack pine, swamp tupels, wax myrtle, and gallberry. Approximately 3/5 of Pearl River County is wooded with similar figures for Hancock County.

2.05 The region comprised of Pearl River and Hancock Counties contains a relative abundance and diversity of wildlife. Species represented include deer, turkey, dove, squirrel, and quail. Lakes and streams in the area also support plentiful numbers of fresh water fish, amphibians and reptiles, and water fowl. The greatest immediate threat to the wildlife in the region is loss of habitat through logging operations, canalization, clearing operations for increased pasture and crop lands, and urban expansion.

2.06 An abundance of wildlife and other natural resources exists within the Fee Area/buffer zone. Early recognition by NASA for the need to conserve the wildlife of the area, wisely manage the forestry resources, protect certain natural resource areas, and develop potential recreational areas prompted the development of an extensive Land Management Plan. This Plan was prepared by the U.S. Army District Engineer, Mobile, Alabama and includes several supplementary plans and recommendations for economic development and management of resources at the site including forestry products, wildlife, recreation and transportation.

a. The Wildlife Management Plan provides guidelines, techniques and practices to be followed by NASA to conserve and assure propagation of the numerous species of animal, fowl and fish resident within the Fee Area/buffer zone consistent with the assigned mission of the area.

b. The Recreation Plan recognizes the rich historical significance and unique folklore of the region while also providing for the orderly development and conservation of this important recreational resource.

c. The forestry Plan provides for management, conservation and timely harvesting of the forests consistent with mission, wildlife, and recreational needs.

2.07 The area affected by the proposed construction associated with the move is a partially wooded lot with a significant coverage of grass and a variety of shrubs. No significant wildlife population resides in the area. The area affected by the proposed construction totals approximately 300,000 square feet with about 50% of the area partially covered with pines (see figure 5).

B. The Human Environment Washington D. C. Area

2.08 Of the approximately 1200 people employed by the Naval Oceanographic Office, about 650 are located in the buildings of the Suitland Federal Reservation, Suitland, Md. This complex is situated in the southern region of the Metropolitan D. C. area characterized by a high density, transient population composed primarily of hourly wage earners and senior citizens. Almost the entire work force commutes to residential areas in the Maryland and Virginia suburbs. (See tables 1 and 2) The Capital Beltway (I-495), part of the interstate highway system, has access interchanges only minutes from the complex and gives easy access to both rural and urban areas. The federally provided vehicle parking and proximity of the Beltway, combined with the general suburban atmosphere has contributed to retention of employees assigned to the complex.

2.09 The buildings in the Suitland complex are shared by more than one agency and the host/tenant relationship has created space problems. While the main NAVOCEANO building is shared with the Defense Mapping Agency Hydrographic Center (DMAHC) and space is assigned according to occupancy at the time of the Navy/DMAHC split, the other spaces are not as secure for the Office. The Department of Commerce is the host agency for FOB 3 and 4 and has priority in space allocation. Commerce has required NAVOCEANO to vacate one wing of Federal Office Building Number 3 and half a wing in Federal Office Building Number 4 in the past two years. The people displaced by these moves have had to be accommodated in already crowded quarters in these buildings or move to the Washington Navy Yard where more space was available. The expansion of the missions of the Bureau of the Census in FOB #3 and the National Weather Service in FOB #4 creates a continuing demand for space by the host agency.

2.10 Engineers, scientists, and technicians assigned to the various buildings in the Washington Navy Yard account for

TABLE 1

SUMMARY OF RESULTS FOR RELOCATION SURVEY
 (NAVOCEANO and ONR)
 (9 APR 1975)

<u>Place of Residence</u>	<u>%</u>
Anne Arundel County	(5%)
Montgomery County	(5%)
Pr. Georges County	(57%)
St. Mary's County	---
Calvert County	(4%)
Charles County	(5%)
Fairfax County	(10%)
Loudon County	---
Arlington County	(1%)
Alexandria	(3%)
Washington, D. C.	(8%)
Not Specified - Other	(3%)
TOTAL	(100%)

TABLE 2

EMPLOYEE TRANSPORTATION

<u>Employees using public transportation to come to work</u>	(5%)
<u>Employees driving own car to work</u>	(87%)
<u>Employees participating in car pool</u>	(35%)

about 30 percent of the total NAVOCEANO population and generally find themselves in an undesirable working environment. WNY is a historic location dating back to 1799 and has had many identities with consequent building construction and modification. Much of the assigned space is inadequate for the organizational components located in the buildings, but through ingenuity and substantial investment of resources a workable situation has evolved. Since the Office is a management entity, assignment of individuals to components in the WNY is frequently a necessity without regard to employee preference. Extremely difficult commuting and parking creates morale problems. Attrition among employees at WNY is greater than those assigned to Suitland.

2.11 The center city residential areas are not considered desirable by many employees because of the high crime rate and poor schools, and the majority at WNY commute on heavily congested thoroughfares in order to reach the suburbs.

2.12 NAVOCEANO employees at the Naval Research Laboratory (NRL) in southeast Washington, D. C. are primarily engaged in research and development and the general atmosphere is quite attractive to most people. Again, the host/tenant relationship is not desirable since the Maury Center Building, now occupied by oceanographic program segments, is being considered for other NRL use. NAVOCEANO has been asked to vacate spaces in one building this year and the scientists and engineers are being relocated to WNY. The trade-off of spaces in a generally congested area with commuting problems for those at NRL is a morale consideration which might be a factor in attracting and keeping people with unique talents

2.13 The relatively few people at the Naval Research Laboratory Chesapeake Beach Annex, located about 40 miles from Suitland on the shores of the Chesapeake Bay comprise only 3 percent of the Office total. The buildings which are loaned to NAVOCEANO by NRL are adaptable to the intended use to which they have been (or will be) put and the rural environment is most pleasant. About half the people at the Beach Annex live in the surrounding Calvert County area and enjoy the many advantages of the relatively secluded area while also having the benefits of a metropolitan area less than an hour's drive away.

2.14 The availability of housing in the Metropolitan Washington area has generally been good in the past resulting in much of the work force becoming home owners as opposed to renters (see table 3). This pattern would be predictably repeated in a new area.

C. The Human Environment NSTL

2.15 NSTL (previously known as the Mississippi Test Facility) was established in 1961 when the National Aeronautics and Space Administration (NASA) purchased 13,248 acres (Fee Area), and leased an additional 125,442 acres as an acoustic buffer zone, in Hancock and Pearl River Counties, Miss., and St. Tammany Parish, La. Primary mission of the facility was to test fire the first and second stages of the Saturn V Space Vehicle. Additionally, later MTF was assigned the mission of supporting other governmental agencies in research and development programs.

2.16 Facilities construction was essentially completed in 1966 and testing commenced. During its development, MTF ranked with the major construction projects in the country totalling approximately \$350M. In all, approximately 173 structures were built to accomplish and support the assigned mission (a listing of structures, name, type, size, usage, etc. is contained in the "Master Plan, George C. Marshall Space Flight Center, Mississippi Test Facility," Vol. 3, 1971 edition). In addition to the static test stands used for the missile firings, structures include but are not limited to facilities for administrative personnel, security (including police and fire) laboratories (meteorological, oceanographic, acoustics, photo, material analysis, electronic test and calibration, metallurgy, and others), machine and workshop areas, canals and locks, railway facilities, warehouse complexes, power plant facilities, fuel storage areas, data acquisition facilities, sewage collection and treatment facilities and others.

Those facilities having a direct bearing on the environmental effects of the proposed relocation are discussed in the following paragraphs ⁴.

4. Master Plan, George C. Marshall Space Flight Center Mississippi Test Facility (vol. 3, 1971), P. 47-53,73.

TABLE 3

EMPLOYEE RESIDENCES

<u>Type of Residence</u>	<u>%</u>
Live in own house	(65%)
Live in own condominium	(2%)
Live in rented apartment	(23%)
Live in rented house	(7%)
Not specified - Other	<u>(2%)</u>
TOTAL	(100%)

2.17 Electrical Power

a. The NSTL electrical power is normally supplied by dual 110-kv overhead transmission lines owned and operated by the Mississippi Power Company. Alternate power service from either the Mississippi Power Company or the Louisiana Power and Light Company is available. One source is connected through the Kiln Switching Station, east to the 110-kv transmission line from the Bay Saint Louis Substation, and the other is connected to the Log-town Substation through a 2.5 mile 110-kv line.

b. The Site Main Power Station is located south of the Main canal, east of the Bascule Bridge. It consists of the primary switch yard and the main substation, fenced in separate adjacent areas. The Mississippi Power Company operates and controls the former while the NSTL Support Contractor has responsibility for the latter. The power has proved to be adequate for all demands. (See figure 12)

c. The power backup system is a complete, self-contained generating plant, capable of providing a three-phase, 60 Hz electrical power up to a maximum of 7500 kV-A. The system consists of four 2120 hp, 12 cylinder diesel engines, driving direct-coupled 1875 kV-A revolving-field generators. These engine-generator sets, with their auxiliary apparatus, form a precise power unit, capable of continuous power production with frequency regulation of $\pm 0.02\text{Hz}$.

2.18 Potable Water

a. The Potable Water System supplies the support and test areas with water for drinking, sanitation, and fire protection. The system consists of deep wells, pumps, chlorinators, elevated storage tanks, automatic controls, and a distribution system. The 1600 foot deep artesian wells provide water at 30 to 40 psig.

b. The distribution systems are designed to provide a minimum residual pressure of 30 psi and to serve a population of 1.5 times the estimated ultimate building manpower requirements. Average domestic water demand is considered as 40 gallons per person per shift, based on design population figures, with the peak demand at 2.5 times the average demand.

2.19 Sewage Treatment

a. There are three separate sewage systems which collect, treat, and dispose of sewage from the buildings and facilities. Each system serves a specific section of the Site and drains into a sewage lagoon. The design of each system was based on an average flow of 30 gallons per capita per 8-hour shift, and a maximum flow of 2.5 times the average flow.

b. The sewage lagoons are designed to produce an effluent that meets the requirements of state and local health departments, being equivalent to that of a secondary sewage treatment plant. The design is based on a surface loading of 30 pounds of 5-day biochemical oxygen demand (BOD) per acre per day. The effluent is tested to assure that the necessary decomposition, through bacterial action, has been attained so that, coupled with the dilution factor, it will maintain adequate dissolved oxygen content for fishlife after discharge into the river.

c. The present permit for effluent discharge requires updating of facilities by mid-1977 to meet the more stringent requirement of the Federal Water Pollution Control Act of 1972 in effect at that time. NASA currently has a contract with an engineering firm to study the requirements and make recommendations to meet the long-term needs of the facility. A report is due in late CY 1975 and it is expected that facilities modification may begin as early as mid-CY 1976. Long term requirements include those generated by both the proposed Navy and Army presence at the site. NASA, as host at NSTL, will obtain any permit modification generated by the proposed actions ⁵.

d. Outlying buildings such as the Central Compressor and the Meteorological Buildings are served by individual septic tanks. The north and south Reception Centers are served by package treatment plants. These units are adequate and meet sanitary requirements, thus eliminating long sewage lines.

2.20 Chemical Wastes

a. Liquid chemical wastes are disposed of by neutralization and subsequent discharge through the chemical disposal area consisting of leach pits lined with oyster and clam shells. Acids are neutralized by chemical action on the shell. Caustic materials are neutralized by mixing with an

5. Personal communication with Mr. Wolverton, NSTL.

acid solution and dilution in water. The leach pits are inspected periodically, and a proper chemical balance is maintained.

b. Additional chemicals are added as needed to achieve a pH factor of 6 to 8 before discharging into the East Pearl River. Chemicals that are toxic or voluminous in nature are disposed of by shipment to an offsite processor.

2.21 Roadways

a. State Highway 607, running in a generally northerly direction from U. S. 90 to Interstate 59 at Nicholson to the north. Interstate 10, running in an east-west direction, intersects 607 approximately 2 miles south of the Fee Area providing easy access to 607 from either the Slidell, La., or the Bay St. Louis, Miss., regions. Interstate 59 likewise provides easy access from Picayune, Miss., to 607 at Nicholson to the north.

b. Within the Fee Area, a portion of Highway 607 has been replaced by a four lane north-south arterial facility known as road A. It is designed to handle peak traffic loads (peake employment at NSTL was approximately 6,000 with current occupancy established at about 1,100) and function as a by-pass for through-site traffic. Highway 607 is closed to travel by the general public within the NASA complex. Five other major roads serve traffic needs within NSTL. Roads within the Fee Area are categorized for design purposes as either primary or secondary. Primary roads are designed to carry wheel loads up to 12,000 lbs and secondary roads, adequate for lighter traffic can carry wheel loads up to 10,000 lbs. Most of the roads serving functional areas are primary roads with hard surfaces. Additional, unimproved roads also exist throughout the area.

2.22

In 1970 NASA announced plans to mothball the facility as the space program became de-emphasized and appropriations were reduced accordingly. However, a later decision was made for NASA to retain custody of the facilities and other federal and state agencies were brought in to fill the void left by the curtailment of NASA's space program. At its peak operation, NASA employed, directly or indirectly, nearly 6,000 personnel. Employment for all agencies and contractors presently in residence at NSTL now numbers about 1,100 with a significant portion of these being scientists as opposed to a majority of engineers and construction personnel previously employed at the facility.

2.23

In 1974 MTF was designated a permanent installation reporting directly to NASA headquarters in Washington, D. C. and renamed the National Space Technology Laboratories (NSTL). NSTL serves two primary functions:

- (1) To serve as an installation jointly used by public activities engaged in environmental affairs -- land and marine.
- (2) To remain as a facility in being for static testing of rocket systems.

2.24

With this mission change and subsequent influx of non-space related agencies, NASA retained custody of NSTL and now serves a major function as host to other agencies. As such, NASA supplies major support to the tenant activities; these include various utilities, facilities maintenance, security, fire protection, waste management, and land management. Other of NASA's major activities include development testing of the main engine for the space shuttle program and operation of the Earth Resources Laboratory.

2.25

Federal and state agencies with components in residence at NSTL (as of Oct 1974) include NASA, National Oceanic and Atmospheric Administration (NOAA), Department of Interior (DOI), Environmental Protection Agency (EPA), U.S. Coast Guard, U.S. Army, Office of the Governor of Mississippi (Office of Science and Technology), Louisiana Office of Technology, and Louisiana/Mississippi State Universities. Specific agency components and mission statements are contained in APPENDIX F, TABS A-G.

D. The Human Environment Surrounding Communities

2.26 General ⁶.

a. Within a radius of approximately 125 miles of NSTL are numerous cities of importance such as New Orleans and Baton Rouge, La.; Mobile, Ala.; Hattiesburg, Miss.;

6. Master Plan, George C. Marshall Space Flight Center, Mississippi Test Facility, (vol. 3, 1971) page 7.

and the Mississippi Gulf Coast cities including Gulfport, Biloxi, and Pascagoula. The largest of these is New Orleans, an international port for air and sea, located approximately 55 miles southwest of NSTL. Its seaport facilities are the largest in the South. In addition to being noted for its tourist and cultural attractions, it is the major economic and trade center of the Gulf Coast. Its medical facilities, educational programs and cultural attractions are well-known.

b. Baton Rouge (capital of Louisiana, located approximately 125 miles from NSTL) is another principal city within the region. It is located on the east bank of the Mississippi River and has a municipal airport and a well equipped river port, which accommodates many ocean going vessels. It is the site for some of the finest medical and educational facilities in the region. In addition to being a large industrial area, it is surrounded by a fertile agricultural section adapted to stock raising and dairy farming.

c. Mobile, Ala., being the second largest city in the region, is one of the principal U.S. seaports on the Gulf of Mexico. It is located approximately 105 miles east of NSTL and handles over 17,000,000 tons of incoming and outgoing cargo (chemicals, textiles, foods and metal products) annually. Its educational facilities are among the finest available. Paper, pulpwood (largest single industry), petroleum, and seafood account for the bulk of Mobile's trade.

d. The Gulf Coast area is one of the fastest growing metropolitan areas in the country. The state port located in Gulfport serves as an active outlet for numerous Mississippi products. One of the country's six largest shipbuilding firms is located at Pascagoula along with a multi-million dollar oil refinery. The beaches extending along the Gulf of Mexico also serve as a major tourist attraction.

e. There are major medical and hospital facilities in the cities within the region. Some institutions of major distinction are located in New Orleans, including Ochsner Foundation Hospital, Locuo Infirmary, Charity Hospital and others. There is also a Veterans Administration Medical Hospital within the New Orleans area.

f. The mild climate and vast areas of fresh and salt water afford excellent opportunities for year-round fishing and other water sports. Wild game and fowl in the large areas of timber and marshland are of particular interest to the hunter. The DeSoto National Forest lies within the region, providing many facilities for camping and outdoor recreational activities. The New Orleans area offers the attraction of major sports events in addition to its unique and colorful environment. New recreational facilities at Jackson Ridge are under construction in Hancock County. Facilities will include a camping area, boat marina, and picnic areas.

2.27 Local General

The region surrounding NSTL is characterized by the small relatively conservative, rurally oriented towns of Picayune and Poplarville to the north, the growing "bed-room" community of Slidel to the west, and the metropolitan Gulfport - Biloxi area to the east. The immediate coastal area is mostly cosmopolitan in nature with a special appeal to the tourist and to the individual for whom the sea holds an attraction. Inland a short distance, extensive areas are sparsely populated with small farms, workers in forest related industries, and commuters to urban or industrial employment. The life style in the countryside is "very different than the life and work in the urban megalopolis that sprawls across the coastal boarder following the sand beaches of the Gulf of Mexico" ⁷.

2.27.a Area Population

Table 4 provides the population figures for 1970 and the percent increase since 1960 for both urban and rural areas of the Mississippi Gulf Coast. Table 5 gives population forecast figures at five year intervals from 1975 to 1990.

2.27.b Non-Subsidized Housing

Housing for approximately 347,500 personnel exist in the four Mississippi coastal areas ⁸. This figure includes dwellings of all kinds: single family units, multi-family units, and mobile homes. At the present time, an estimated 1100 homes are listed for sale on the Mississippi

7. J. D. Burrous, Composition of the Population of the Coastal Counties. U. of S. Miss., Sea Grant Publication.
8. Gulf Regional Planning Co. 1974 Housing Program, An Analysis of Housing Growth Since 1973. P.VI.

TABLE 4

URBAN AND RURAL POPULATION
Mississippi Gulf Region
1970

POPULATION					PERCENT INCREASE SINCE 1960
COUNTY	URBAN		RURAL	COUNTY TOTAL	
Hancock	Bay St. Louis*	6,752			
	Waveland*	3,108			
		<u>9,860</u>	7,527	17,387	23.8
Harrison	Biloxi*	48,486			
	D'Iberville	3,292			
	Gulfport*	40,791			
	Long Beach*	6,170			
	Pass Christian	2,979			
	West Gulfport	6,996			
	Other Urban	2,970			
	<u>111,684</u>	22,898	134,582	12.6	
Pearl River	Picayune*	10,467			
	Poplarville	2,312			
	<u>12,779</u>	15,023	27,802	24.1	
Regional Total		47,857			

* Incorporated Municipalities

SOURCE: Gulf Regional Planning Commission. Urban Systems
Engineering Demonstration Program Information Summary.

TABLE 5
 POPULATION FORECASTS
 Mississippi Gulf Region
 1975-1990

AREA	1975	POPULATION FORECAST		
		1980	1985	1990
<u>MISSISSIPPI GULF REGION</u>				
Total Population	342,000	421,100	508,100	616,300
Urban Population	252,300	317,800	388,100	466,000
Rural Population	89,700	103,300	120,000	150,300
<u>HANCOCK COUNTY</u>				
Total Population	20,000	28,100	36,100	45,300
Urban Population	13,300	21,200	29,000	37,800
Rural Population	6,700	6,900	7,100	7,500
<u>BAY ST. LOUIS URBAN AREA</u>	8,500	10,000	11,600	13,000
<u>WAVELAND URBAN AREA</u>	3,800	5,200	7,400	9,400
<u>DIAMOND HEAD</u>	1,000	6,000	10,000	15,400
<u>HARRISON COUNTY</u>				
Total Population	177,000	216,000	254,000	300,000
Urban Population	135,200	166,100	200,900	238,600
Rural Population	41,800	49,900	53,100	61,400
<u>PASS CHRISTIAN URBAN AREA</u>	4,400	5,600	6,500	7,300
<u>LONG BEACH URBAN AREA</u>	8,900	11,100	14,30	17,500
<u>GULFPORT URBAN AREA</u>	59,100	76,700	97,400	118,900
<u>BILOXI URBAN AREA</u>	55,000	64,000	73,000	84,000

SOURCE: Gulf Regional Planning Commission. Urban Systems Engineering Demonstration Program Information Summary.

Gulf Coast (including Picayune) east to Biloxi. There are 75-100 homes in the \$20,000 - \$70,000 price range presently available in Picayune. In the remainder of the area, there are approximately 200 homes in the \$10,000 to \$30,000 price range; 600 in the \$30,000 to \$70,000 price range; and about 200 in the \$70,000 to \$150,000 price range ⁹. In excess of 200 available homes exist in Slidell, La., with 100-150 listing for less than \$36,000; 60-75 between \$35,000 and \$55,000, and approximately 25 in excess of \$55,000 ¹⁰. (See table 6 for a breakdown by localities.)

More than 5000 finished lots, i.e., lots with utilities and ready to build upon are also available for immediate construction. The real estate associations in the region are committed the principles of equal opportunity in housing ¹¹. (See APPENDIX G, and H)

9. Southern Miss. Planning & Development District. Area Resource Inventory Report. May 75.
10. Personal Communication Mr. Wm. Folse, Mgr Corruth Mortgage Co. Slidell, La.
11. The Navy Housing Office, Naval Construction Center Gulfport has received five complaints of racial discrimination since 1970. Upon investigation, three of the complaints proved groundless. The area served by the Office generally includes the coastal region from Pass Christian east to and including Gulfport. Few Navy personnel currently reside outside of this area. (Personal communication with Assistant Housing Officer, Naval Construction Center, Gulfport.)

2.27.b.1 Subsidy Housing

Approximately 1600 units of state and local subsidized housing currently exist in the Mississippi coastal regions of interest. Table 6a provides a breakdown by locality and Table 6b provides current income limits required to determine eligibility for admission and continued occupancy. Vacancy rates for most areas are low and waiting lists may be in effect in some regions. An additional 350 units are available under section 235 of the Federal Housing Act from the Department of Housing and Urban Development with most of these located in the Gulfport - Long Beach - Pass Christian area. (See Tables 6a,b,c,d, & e.)

2.27.b.2 Rentals - Apartments

As of August 1973, a total 11,873 apartment units either existed or were under construction in the Mississippi area of interest. Of these, approximately 68% (existing units only) were judged in good condition, i.e., the building is structurally sound with very little if any deterioration. An additional 1,000 permits had been issued for construction of new units. Vacancy rates in the existing units vary somewhat by region with an average of about 14% (August 73) ¹². Table 7a, b, c, d, and e provide average rental fees for both furnished and unfurnished apartments for the locales.

2.27.b.3 Rentals - Houses

Availability of rental housing varies by area and season. Indicative of this availability however is the number of rental houses in Gulfport and the Bay St. Louis - Waveland area. There are approximately 1500 rental houses in the Gulfport area ranging in rent from \$80.00 to \$300.00 per month. In Waveland - Bay St. Louis, an estimated 100-200 rentals in the range from \$75.00 to \$300.00 per month exist ¹³.

12. Gulf Regional Planning Commission. 1973 Regional Apartment Directory, P.3.

13. Provided by the Women's Department, Hancock Bank, Gulfport.

TABLE 6

HOUSING

<u>LOCATION</u>	<u>VACANCIES</u>	<u>FINISHED LOTS</u>
Picayune ¹	200	60
Long Beach ²	94	600 [2,566 in Harrison Cty ³]
Diamond Head ⁸	120 Condominiums	1,000 [450 additional in Hancock Cty ³]
Pass Christian ⁹	91	
Bay St. Louis ⁹	236	*See finished lots Hancock Cty.
Gulf Port ⁵	195	1,000 lots
Slidell, LA ⁶	200	1,500 ⁷
Biloxi ⁴	300	1,000

Source

1. Mr. W. Ryan, Ryan Realty Co.
2. Hon. Sam Maxwell, Mayor, Long Beach
3. Mr. Dwight Johnson, Home Builder Associates
4. Mr. Francis Collins, President Ocean Springs - Biloxi Realty Board
5. Mr. George Schagle, Hancock Cty Bank, Gulfport
6. Mr. Wm False, Carruth Mortgage Co., Slidell, LA
7. Mr. Wm. Miller, Slidell Realty
8. South Miss. Planning & Development Dist., Area Resource Inventory Report May 75. P. 14
9. HUD Area Postal Vacancy Survey, Aug 1974

Table 6a

Low Income Public Housing

<u>LOCATION</u>	<u>REGION VIII HOUSING</u>	<u>LOCAL HOUSING AUTHORITY</u>
Hancock County		
Waveland	--	75%
Bay St. Louis	--	100%
Harrison County		
Pass Christian	28#	90#
Long Beach	156#	50#
Gulfport	204# (200 additional under home ownership plan#)	100#
Biloxi		728#
Pearl River County		
Picayune	--	
Poplarville	70%	

NOTE: Turnover rates in most areas are fairly high; however availability lists may exist at any time.

Personal communication with Mr. Albert Rushing,
Executive Director, Housing Authority, Region VIII,
Gulfport, Miss.

% Gulf Regional Planning Commission. 1974 Housing Program, An Analysis of Housing Growth Since 1973, P. 15.

Table 6b

Eligibility for Region VIII Low Income Housing #

<u>No. in Family</u>	<u>Maximum Admission Family Income</u>	<u>Continued Occupancy Limits</u>
1	4500	5625
2	5100	6375
3	5300	6625
4	5500	6875
5	5800	7250
6	6100	7625
7	6300	7875
8	6500	8125
9	6700	8375
10	6900	8625

Personal communication with Mr. Albert Rushing,
Executive Director, Housing Authority, Region VIII,
Gulfport, MS.

TABLE 6c
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Family Income Limits for FHA Sections 235 and 236 Housing
Approved or Permissible Public Housing Administration

Limits in Dollars by Number of Persons in Family--County Limits

County or Locality	1	2	3	4	5	6	7	8
Adams	5265	6075	6615	7155	7695	8235	8775	9315
Alcorn	5535	6345	6885	7425	7965	8505	9045	9585
Amite	4455	5265	5805	6075	6345	6480	6615	6750
Attala	5535	6345	6885	7425	7965	8505	9045	9585
Benton	4320	5400	5670	5940	6210	6480	6750	7020
Bolivar	5670	6480	7020	7560	8100	8640	9180	9720
Calhoun	4320	5400	5670	5940	6210	6480	6750	7020
Carroll	4455	5535	5805	6075	6345	6615	6885	7155
Chickasaw	5535	6345	6885	7425	7965	8505	9045	9585
Choctaw	4320	5400	5670	5940	6210	6480	6750	7020
Claiborne	4455	5535	5805	6075	6345	6615	6885	7155
Clarke	4320	5400	5670	5940	6210	6480	6750	7020
Clay	5535	6345	6885	7425	7965	8505	9045	9585
Coahoma	4725	5400	5670	5940	6210	6480	6750	7020
Copiah	4455	5535	5805	6075	6345	6615	6885	7155
Covington	4995	5535	5940	6345	6885	7425	7965	8505
DeSoto	5400	6210	6750	7290	7695	8100	8505	8910
Forrest	4995	6210	6480	6750	7020	7290	7560	7830
Franklin	4455	5265	5805	6075	6345	6480	6615	6750
George	4320	5400	5670	5940	6210	6480	6750	7020

TABLE 61
**ANALYSIS OF SUBSIDIZED APARTMENTS SUPPLY AND VACANCY
 MISSISSIPPI GULF COAST
 MARCH, 1975**

	<u>Efficiency Units</u>			<u>One Bedroom Units</u>			<u>Two Bedroom Units</u>		
	<u>Number</u>	<u>Vacant</u>	<u>Vacancy Rate</u>	<u>Number</u>	<u>Vacant</u>	<u>Vacancy Rate</u>	<u>Number</u>	<u>Vacant</u>	<u>Vacancy Rate</u>
Hancock County:									
Bay St. Louis	18	0	0.0%	20	1	5.0%	24	3	12.5%
Waveland	0	0	0.0	27	5	18.5	21	1	4.8
Unincorporated Area	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	18	0	0.0%	47	6	12.8%	45	4	8.9%
Harrison County:									
Biloxi	186	34	18.3%	337	21	6.2%	509	56	11.0%
Gulfport	0	0	0.0	190	1	0.5	467	14	3.0
Long Beach	0	0	0.0	8	0	0.0	18	0	0.0
Pass Christian	12	6	50.0	29	6	20.7	136	81	59.6
Unincorporated Area	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>12</u>	<u>0</u>	<u>0.0</u>	<u>18</u>	<u>1</u>	<u>5.6</u>
Total	198	40	20.2%	576	28	4.9%	1,148	152	13.2%
Jackson County:									
Escatawpa	0	0	0.0%	0	0	0.0%	0	0	0.0%
Gautier	0	0	0.0	47	10	21.3	85	17	20.0
Moss Point	0	0	0.0	24	0	0.0	62	0	0.0
Ocean Springs	99	46	46.5	99	1	1.0	0	0	0.0
Pascagoula	0	0	0.0	86	4	5.0	294	11	3.7
Unincorporated Area	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0</u>	<u>0.0</u>
Total	99	46	46.5%	256	15	5.9%	441	28	6.3%

Table 6e

235 Housing

Housing available under Section 235 of the Federal Housing Act#

Picayune	22
Bay St. Louis	33
Waveland	--
Pass Christian	[
Long Beach	[297
Gulfport	[

352 units

Personal communication with Mr. Tony Alba, U.S. Department of Housing and Urban Development, Jackson, Mississippi

Maximum qualifying income for a family of 4: \$7,425.

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TABLE 7
 NUMBER OF NON-ASSISTED APARTMENTS CONSTRUCTED
 MISSISSIPPI GULF COAST

Year Built	Efficiency Units		One-Bedroom Unit		Two-Bedroom Unit	
	Number	Percent	Number	Percent	Number	Percent
Before 1960	69	20.0%	317	10.2%	322	6.3
1961	26	7.6	95	3.0	161	3.2
1962	0	0.0	31	1.0	32	0.6
1963	0	0.0	30	1.0	38	0.7
1964	14	4.1	156	5.0	142	2.8
1965	0	0.0	88	2.8	101	2.0
1966	0	0.0	11	0.4	91	1.8
1967	0	0.0	118	3.8	103	2.0
1968	12	3.5	103	3.3	135	2.7
1969	23	6.7	81	2.6	140	2.8
1970	29	8.4	193	6.2	264	5.2
1971	113	32.8	675	21.7	824	16.3
1972	12	3.5	327	10.5	621	12.2
1973	46	13.4	577	18.5	1,175	23.2
1974	0	0.0	313	10.0	922	17.6
1975 ¹	0	0.0	0	0.0	0	0.0

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TABLE 7b
 ANALYSIS OF NON-ASSISTED APARTMENT SUPPLY AND VACANCY
 MISSISSIPPI GULF COAST
 MARCH, 1975

	Efficiency Units			One-Bedroom Units			Two-Bedroom Units		
	Number	Vacant	Vacancy Rate	Number	Vacant	Vacancy Rate	Number	Vacant	Vacancy Rate
Hancock County:									
Bay St. Louis	0	0	0.0	23	0	0.0	91	5	5.5
Unincorporate Area	<u>0</u>	<u>0</u>	0.0	<u>0</u>	<u>0</u>	0.0	<u>0</u>	<u>0</u>	0.0
Total	0	0	0.0	23	0	0.0	91	5	5.5
Harrison County:									
Biloxi	144	32	22.2	839	91	10.8	908	254	28.0
	54	3	5.6	798	147	18.4	1,122	300	26.9
Long Beach	0	0	0.0	158	50	31.6	411	190	46.2
Pass Christian	0	0	0.0	48	21	43.8	87	34	36.2
Unincorporated Area	<u>8</u>	<u>0</u>	0.0	<u>93</u>	<u>33</u>	35.5	<u>189</u>	<u>68</u>	36.0
Total	206	35	17.0	1,936	342	17.8	2,717	846	30.7
Jackson County:									
Escatawpa	0	0	0.0	4	0	0.0	12	1	8.3
Gautier	0	0	0.0	90	31	34.4	243	175	72.0
Moss Point	0	0	0.0	25	6	24.0	131	13	9.9
Ocean Springs	6	2	33.3	279	64	22.9	417	124	29.7

TABLE 7
NON-ASSISTED APARTMENT SUPPLY ANALYSIS
MISSISSIPPI GULF COAST
MARCH, 1975

	\$50 to \$75	\$75 to \$100	\$101 to \$125	\$126 to \$150	\$151 to \$175	\$176 to \$200	\$201 to \$225	\$226 to \$250	\$251 to \$275	\$276 to \$300	More Than \$300	Rental Rate Not Disclosed	Total
Efficiency Units													
Occupied	17	51	123	83	25								299
Vacant	7	11	10	17	0								45
Total	24	62	133	100	25								344
Vacancy Rate	29.2%	17.7%	7.5%	17.0%	0.0%								13.1%
Under Construction	0	0	24	0	0								24
One Bedroom Units													
Occupied	105	142	731	1,326	219	19						0	2,542
Vacant	30	27	147	321	48	0						0	573
Total	135	169	878	1,647	267	19						0	3,115
Vacancy Rate	22.2%	16.0%	16.7%	19.5%	18.0%	0.0%						0	18.4%
Under Construction	0	0	0	88	0	0						57	145
Two Bedroom Units													
Occupied	66	32	236	1,367	866	717	89	49	13			0	3,433
Vacant	13	14	77	613	465	373	12	66	5			0	1,638
Total	77	46	313	1,980	1,331	1,090	101	115	18			0	5,071
Vacancy Rate	16.9%	30.4%	24.6%	30.9%	34.9%	34.2%	11.9%	57.4%	27.8%			0	32.3%
Under Construction	0	0	52	42	92	94	0	0	0			184	464
Three Bedroom Units													
Occupied			29	25	44	91	88	51	24	24	3	0	379
Vacant			27	1	83	72	23	12	16	23	3	0	260
Total			56	26	127	163	111	63	40	47	6	0	639
Vacancy Rate			48.2%	3.8%	65.4%	44.2%	20.7%	19.0%	40.0%	48.9%	50.0%	0	40.7%
Under Construction			0	0	0	16	12	0	0	0	0	88	116
Total All Units													
Occupied	186	225	1,119	2,801	1,154	827	177	100	37	24	3	0	6,653
Vacant	50	52	261	952	596	445	35	78	21	23	3	0	2,516
Total	236	277	1,380	3,753	1,750	1,272	212	178	58	47	6	0	9,169
Vacancy Rate	21.2%	18.8%	18.9%	25.4%	34.1%	35.0%	16.5%	43.8%	36.2%	48.9%	50.0%	0	27.4%
Under Construction	0	0	76	130	92	110	12	0	0	0	0	329	749

SOURCE: Wortman & Mann, Inc., Department of Research, Planning, and Management, 1975.

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TABLE 7d
ANALYSIS OF APARTMENT SIZE BY MONTHLY RENTAL
MISSISSIPPI GULF COAST
APRIL, 1975

Size of Apartment	Monthly Rental Rates						
	\$50 to \$75	\$75 to \$100	\$101 to \$125	\$126 to \$150	\$151 to \$175	\$176 to \$200	\$201 to \$225
Existing:							
Less than 500 Sq.Ft.	11	69	57	41			
500 to 600 Sq.Ft.	138	142	658	510	90	1	
601 to 800 Sq.Ft.	87	66	609	1,912	716	57	37
801 to 1,000 Sq.Ft.			56	1,102	634	585	64
1,001 to 1,200 Sq.Ft.				188	306	584	69
1,201 to 1,400 Sq.Ft.					0	35	36
1,401 to 1,600 Sq.Ft.					4	10	6
Subtotal	236	277	1,380	3,753	1,750	1,272	212
Under Construction:							
Less than 500 Sq.Ft.			24				
500 to 600 Sq.Ft.					24		
601 to 800 Sq.Ft.			52		64		
801 to 1,000 Sq.Ft.					42	92	
1,001 to 1,200 Sq.Ft.							94
1,201 to 1,400 Sq.Ft.							16
1,401 to 1,600 Sq.Ft.							12

Table 7e

Approximate rental cost for an average apartment in the area include:

I. Gulfport/Biloxi/Long Beach/Pass Christian

1 bedroom - unfurnished - \$140 per month

2 bedroom - unfurnished - \$165 per month

1 bedroom - furnished - \$165 per month

2 bedroom - furnished - \$200 per month

II. Bay St. Louis

1 bedroom - unfurnished - \$90 per month

2 bedroom - unfurnished - \$150 per month

1 bedroom - furnished - \$150 per month

2 bedroom - furnished - \$180 per month

III. Poplarville

1 bedroom - unfurnished - \$95 per month

2 bedroom - unfurnished - \$115 per month

1 bedroom - furnished - \$125 per month

2 bedroom - furnished - \$150 per month

IV. Picayune

1 bedroom - unfurnished - \$100 per month

2 bedroom - unfurnished - \$125 per month

1 bedroom - furnished - \$150 per month

2 bedroom - furnished - \$175 per month

Source: Southern Mississippi Planning & Development District.
Area Resources Inventory Report. May 75. P. 11

2.27.c Schools

The public school system in the coastal region can accept in excess of 2500 new students without over crowding. (See Tables 8a, b, and c) This figure approaches nearly 6000 when the Biloxi system is also considered. In addition, there are eighteen (twenty-two including Slidell, La.) non-public schools of which fourteen (seventeen) are church related. The average pupil to teacher ratio is 21.4. The average number of courses available in the schools is 76 with a low of 33 and a high of 101 (120 in Biloxi). Mean American College Test (ACT) score was 17.4 with a low average of 14.0 in Hancock County and a high 20.2 in Gulfport. The composite national average for school year 74-75 was 18.9 ¹⁴. Bay St. Louis, Gulfport, Long Beach, Pass Christian, and Picayune each had one or more students scoring 29 or better on the test. Table 9a provides a summary of the racial mixtures of the school systems facility, and the status with regards to court ordered integration.

2.27.d Medical Facilities

There are nine hospitals with over 600 beds to serve the civilian and military population from Slidell to Biloxi (see Table 10). Average occupancy rates range from 65% to 90% with average costs of semi-private rooms less than \$60 per day ¹⁵. Most of the hospitals have 24 hour staffing of emergency rooms. Three separate ambulances serve the coastal area, including air ambulance service where needed ¹⁶. Slidell is served by its own local ambulance service. There are approximately 135 civilian physicians (see Table 11) and surgeons on the Gulf Coast including specialists as follow: allergy, cardiovascular, dermatology, EENT, family practices, general practice, gynecology, obstetrics, internal medicine, neurosurgery, orthopedics, pediatrics, plastic surgery, psychiatry, radiology, surgery, and urology. In addition, dentists rendering services in general dentistry, oral surgery, and orthodontist work are generally available (see Table 12). Additional facilities are available in private nursing homes to meet specific individual needs.

14. Personal communication with Dr. M. Miller, Superintendent of Schools, Gulfport.
15. Southern Mississippi Planning & Development District. Area Resource Inventory Report. May 1975. P.9
16. Mr. Tim Crawley, Administrator, Crosby Memorial Hospital Picayune.

TABLE 8a

	CHURCH RELATED	GRADES	NON CATHOLIC SCHOOLS	MEMBERS OF PARISH
Christ Episcopal Day School, Bay St. Louis	Episcopal	1-12	1-9 750.00 10-12 900.00	
Annunciation, Kiln	Catholic	1-8		251
Our Lady of the Gulf, Bay St. Louis	Catholic	1-6		270
St. Clare's, Waveland	Catholic	1-8		350
St. Stanishlans, Bay St. Louis	Catholic	7-12		450
St. Rose De Lima, Bay St. Louis	Catholic	1-8		219
Nativity BVM Elm-Biloxi	Catholic	1-6		215
Notre Dame- Biloxi	Catholic	7-12		440
Sacred Heart Girls High - Biloxi	Catholic	7-12		390
Westminister Academy- Gulfport	No	1-8	885.00	
St. James - Mississippi City	Catholic	1-6		260
St. Pauls - Pass Christina	Catholic	1-6		285
Harrison County Private #1, Biloxi	No	1-6	480.00	
St. Thomas - Long Beach	Catholic	1-6		221
St. John - Gulfport	Catholic	1-6		230

TABLE 8b
 AREA SCHOOLS
 General Information

SCHOOLS	ENROLLMENT	CAPACITY	TOTAL COURSES	PUPILS PER TEACHER	ACT MEAN SCORES	PERCENT OF TEACHERS WITH A, AA, OR CERTIFICATE
Gulfport	8,035	9,500	101	20.9	20.2	99.4
Long Beach	3,364	3,700	87	19.6	19.0	100.0
Pass Christian	1,566	2,100	74	20.6	15.0	98.6
Biloxi	8,382	10,400	120	20.0	19.8	99.0
Harrison Co.	9,560	9,700	93	24.6	17.0	98.3
Hancock Co.	1,681	1,900	100	21.6	14.0	90.3
Bay St. Louis	1,936	2,400	50	20.3	16.7	100.0
Pearl River Co.	1,227	1,600	33	24.1	17.0	100.0
Picayune	3,691	4,200	65	22.1	18.0	99.4
Poplarville	1,777	2,100	40	20.3	16.9	98.8
Totals or Average	<u>41,219</u>	<u>47,600</u>	<u>76</u>	<u>21.4</u>	<u>17.4</u>	<u>98.4</u>

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* Provided by Dr. M. Miller, Supt. Gulfport School System

TABLE 8c
PUBLIC SCHOOL ENROLLMENTS AND ACCRE

MISSISSIPPI

	1971-72	72-73	73-74	74-75	Could a moderate tional dents-- facilit
Bay St. Louis ¹	1995	2005	1936	1937	z 389
Gulfport ²	8549	8334	8025	7645	# 1,000 -
Hancock County ³	1491	1593	1681	1723	200 max
Long Beach ⁴	3306	3399	3364	3395	Limited
Pass Christian ⁵	1570	1531	1566	1500	500 max
Pearl River Central ⁶	1179	1185	1227	1200	100+
Picayune ⁷	3873	3700	3691	3638	* Approxim availabl
43 Poplarville ⁸	1813	1810	1777	1838	100+

LOUISIANA

St. Tammany Parish ⁹					
Abita Springs	358	431	433	469	Limited
Covington	3083	2964	3089	3103	1,000 m
Mandeville	1611	1799	1898	1979	Limited
Pearl River, La.	1908	2111	2206	2216	Limited
Slidell	6421	6564	6746	7269	Limited

Summary Table 9a

Integration and Gulf Coast Schools

1. St. Tammeny's Parish - School system placed under court order to achieve satisfactory integration of schools.

1972 racial mixture: Pupils: 76% White
23% Black
1% Other

Teachers: 20.5% Black
79.5% White

Maximum Black enrollment in any school in the system is 52.4%

2. Long Beach - The U.S. Dept of Justice is not a party to any action against the school system to date.

1972 racial mixture: Pupils: 5.4% Black
1.1% Other
93.6% White

Teachers: 3.2% Black
96.8% White

3. Picayune - The U.S. Dept of Justice is not a party to any action against this school system to date.

1972 racial mixture: Pupils: 27.4% Black
.2% Other
72.4% White

Teachers: 76.7% White
23.3% Black

4. Gulfport - The U.S. Dept of Justice is not a party to any action against this school system to date.

1972 racial mixture: Pupils: 27.1% Black
.3% Other
76.7% White

Teachers: 23.3% Black
76.7% White

5. Hancock County - The U. S. Dept of Justice is not a party to any action against this school system to date.

1972 racial mixture: Pupils: 10.3% Black
1.1% other
88.6% White

Teachers: 6.7% Black
93.3% White

6. Harrison County - Placed under a Court Order in August 1970 to achieve satisfactory integration of schools.

1972 racial mixture: Pupils: 27.3% Black
72.7% White

Teachers: 24.3% Black
75.4% White
(1 Oriental teacher employed)

7. Bay St. Louis - Waveland - The U. S. Dept of Justice is not a party to any action against this school system to date.

No figures for racial mixtures

8. Pass Christian - The U. S. Dept of Justice is not a party to any action against the school system to date.

No figures for racial mixtures

Summary obtained from Mr. L. Newton, Office of Civil Rights, U.S. Dept of Justice (racial data was derived from Directory of Public Elementary and Secondary Schools in Selected Districts, Fall 1972. Office of Civil Rights HEW)

TABLE 10

HOSPITALS

<u>NAME</u>	<u>LOCATION</u>	<u>NO OF BEDS</u>	<u>24 HR EMERG ROOM</u>
Slidell Memorial ¹	Slidell	132	(Emergency room is staffed with an MD on call)
Gulfport Memorial ²	Gulfport	282	YES ³
Garden Park ³	Gulfport	120	NO ⁴
Howard Memorial ²	Biloxi	206	YES ⁴
Hancock General ²	Bay St. Louis	4	YES
Vet Administration ²	Biloxi ⁴	209	4
Keesler Air Force Base ⁴	Biloxi	400	YES
Crosby Memorial ⁵	Picayune	100	(to be initiated in the near future)
Popularville ²	Popularville	40	YES

Burn facilities are available at both Mobile, Alabama and Jackson, Miss.

1. Personal Communication
2. Southern Miss. Planning & Development District. Area Resource Inventory Report, May 75, P.8
3. Mr. Kent Strom, Administrator, Memorial Hospital Gulfport
4. Mr. Les Newcomb, Southern Miss. Planning & Development District.
5. Mr. Tim Crowley, Administrator, Crosby Memorial Hospital

TABLE 11

DOCTORSSLIDELL, LOUISIANA

Dermatologist	2
Eye	2
General Practice	7
Gynecology & Obstetrics	2
Orthopedics	2
Pediatrics	2
Surgeon	2

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BAY ST. LOUIS, MISSISSIPPI

General Practice	2
------------------	---

PASS CHRISTIAN, MISSISSIPPI

General Practice	3
------------------	---

WAVELAND, MISSISSIPPI

TABLE 11 (Continued)

DOCTORS

BILOXI, MISSISSIPPI

48

Asthma/Allergy	2
Dermatologist	1
Ear/Nose/Throat	3
Eye	3
General Practice	6
Gynecology & Obstetrics	5
Internal Medicine	7
Neuro-Surgeon	2
Orthopedics	5
Pediatrics	3
Plastic Surgeon	1

GUI

TABLE 12

DENTISTS

	GENERAL	ORAL SURGEON	ORTHODONTIST	PEDIATRIC
<u>Mississippi</u>				
Bay St. Louis	3			
Biloxi	12	1	2	
Gulfport	22	1	3	
Long Beach	3			
Pass Christian	0			
Picayune	5			
Poplarville	1			
Waveland	1			
<u>Louisiana</u>				
Slidell	12		3	

2.27.e Water. The primary source of drinking water for both domestic and agricultural use in the region surrounding NSTL is underground aquifers. These aquifers range from 500 to 3000 feet thick with wells commonly yielding 1500 gpm. Large reserves of soft artesian water remain to be developed ¹⁷. Several deficiencies exist in the present supply systems. In four of the twelve municipal systems on the Miss. coast, capacity is inadequate to handle both peak consumption and fire demands for extended periods of time. Emergency power sources for the water supply are generally non-existent and many of the areas have a single well as a source. A comprehensive plan addressing both existing problems and providing recommendations for facilities improvement necessary to meet long range requirements have been developed ¹⁸. Implementation of these recommendations require the coordinated effort of the various municipalities.

2.27f Electrical Facilities. The Mississippi Power Company serves the major portion of the area that would be impacted if the proposed action is approved. It is one of four companies: Georgia, Alabama, Gulf, and Mississippi Power operated in an inter-connected and integrated power pool. Present area capacity is 1,465,000 KW with a summer peak usage of 1,200,000 KW projected. This leaves a 22% reserve. More normal (i.e., non-summer) loads range around 50% of capacity. Two additional generating units are under construction in Jackson County with scheduled completion dates in 1977 and 1979 ¹⁹.

17. Gulf Regional Planning Commission ltr of 8 April 1975.

18. Gulf Regional Planning Commission. Urban Systems Engineering Demonstration Program Information Summary. P. 11 et seq.

19. Office of Science and Technology (State of Miss.) ltr of 10 April 1975.

2.27.g Public Transportation. Hourly bus service presently provides transportation to the coastal communities from Pass Christian to Biloxi. Commuter train service is planned for 1977 to augment bus service and provide additional service to those working in the shipyards at Pascagoula. Buses exist and service will be instituted upon request for transportation from the several communities, including Picayune and Slidell, to NSTL ²⁰.

2.27.h Because of the impact of MTF (now NSTL) upon the immediate vicinity, the MTF Master Planning Group worked in close liaison with local city and county planning agencies and the Gulf Regional Planning Commission to coordinate planning activities. Some of the major communities have increased facilities by as much as 200 percent since the establishment of MTF. Improvements in public utilities, new school construction, and new housing have provided for population increases.

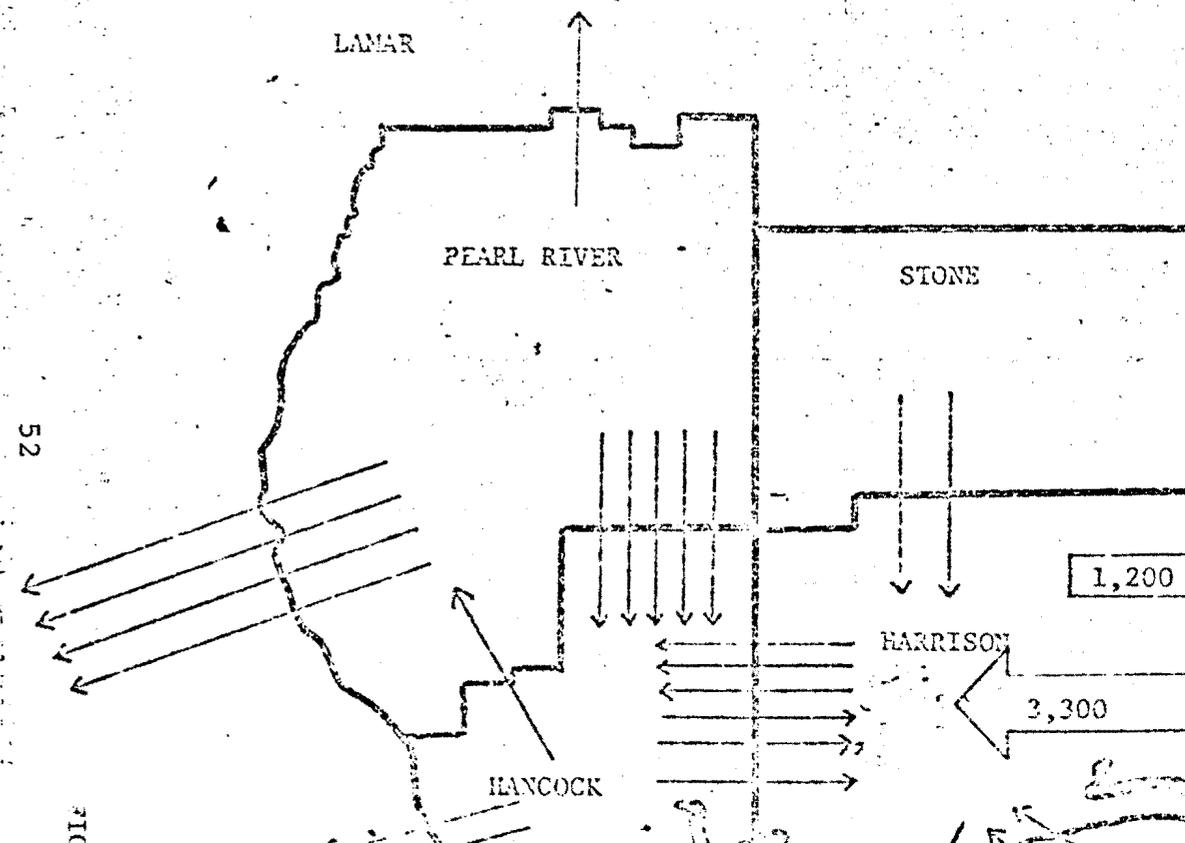
2.27.i The highway network serving NSTL is extensive. East west and North-south traffic is presently served by Interstate highway 10 passing through the buffer zone to the south, and Interstate 59 respectively. East-west traffic may also use U.S. highway 90. Traffic from Picayune to the Gulf Coast area is via state highway 43 along the north and northeast boundaries of the buffer zone and highway 603 on the eastern boundaries. State highway 607 provides a traffic artery direct to NSTL from I-59 in the north and from I-10 and U.S. 90 in the south (see figures 13 and 14). As noted from figure 14, traffic is not particularly heavy on the roadways. Completion of I-10 has resulted in some distribution of the U.S. 90 traffic between the two roadways with U.S. 90 still carrying the bulk of local traffic.

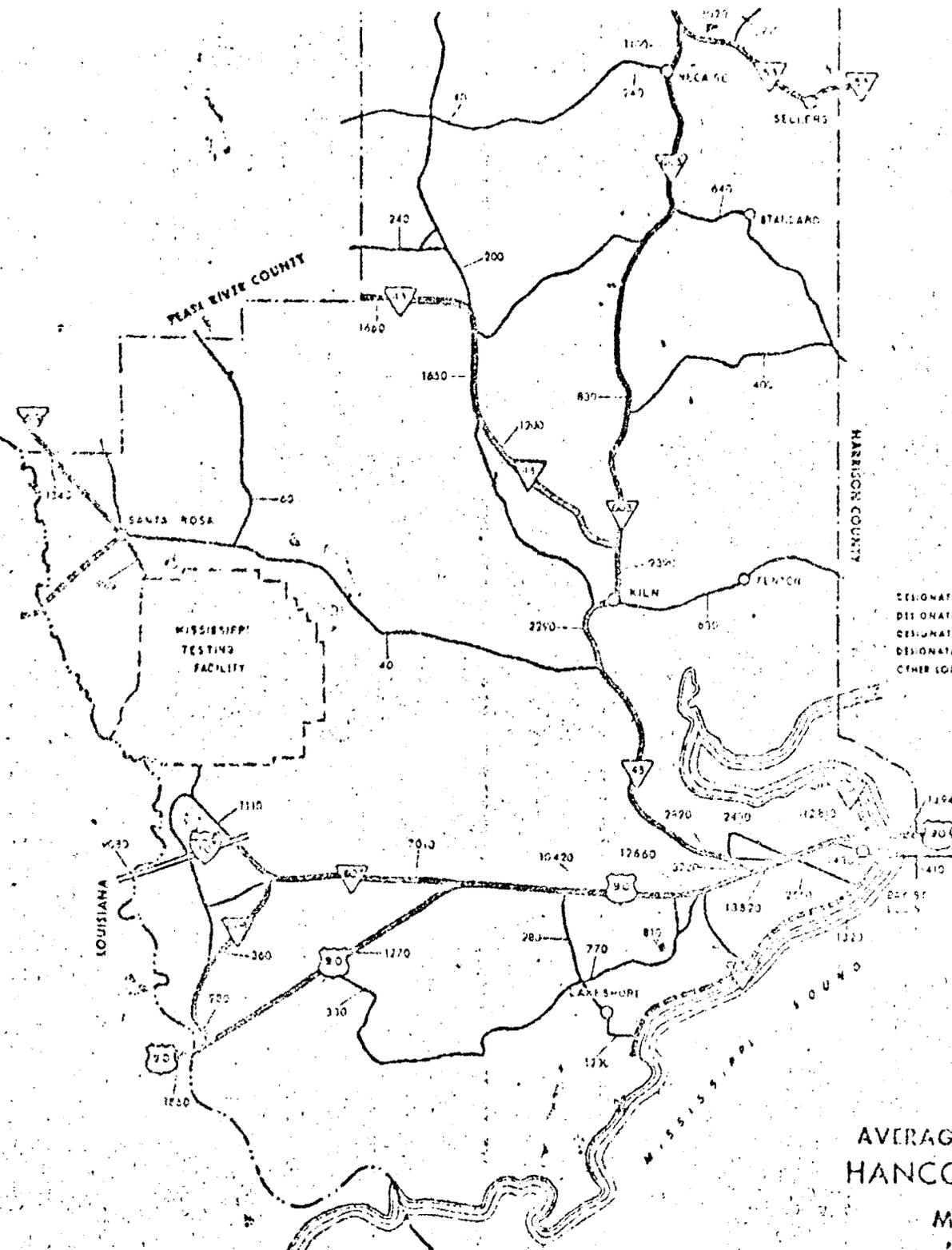
2.27.j Civil airports are located in Picayune, Slidell and in Hancock County. The largest intermediate commercial fields are located in New Orleans and Gulfport.

2.27.k NSTL is located in the western portion of Hancock County, with portions of the vast buffer zone surrounding the Fee Area extending to the north into Pearl River County and into St. Tammany Parish, La., to the west. Total employment for 1970 in the two counties most notably impacted by NSTL operations was 9,015 for Pearl River and 5,525 for Hancock (see figure 15). Per capita income for

20. Personal communication with Mr. T.E. Morris, Executive Director, Mississippi Coast Transportation Authority.

MAJOR CONTRIBUTING STREAMS FOR MISSISSIPPI





LEGEND

- DESIGNATED STATE MAINTAINED PAV
- DESIGNATED STATE MAINTAINED IMPROV
- DESIGNATED LOCAL MAINTAINED PAVED
- DESIGNATED LOCAL MAINTAINED UNPAVED
- OTHER LOCAL ROADS SURFACE UNPAVED

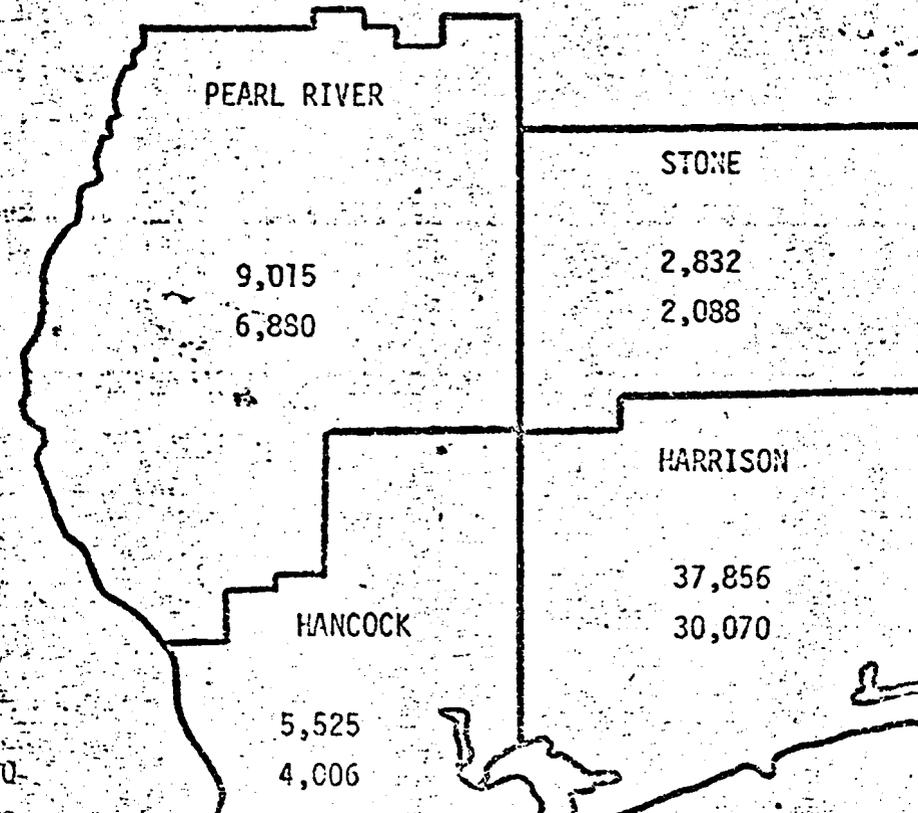
**1972
AVERAGE DAILY TRAFFIC
HANCOCK COUNTY**

MISSISSIPPI

PREPARED BY TMS

MISSISSIPPI STATE HIGHWAY DEPARTMENT
TRAFFIC AND PLANNING DIVISION
IN COOPERATION WITH THE
U.S. BUREAU OF PUBLIC ROADS
AND THE U.S. DEPARTMENT OF COMMERCE
BUREAU OF ECONOMIC ANALYSIS

FIGURE 14



1971 was \$2,384 in Pearl River County and \$3,296 in Hancock (figure 16). The lower incomes for the area are reflected in the cost of living averaging about 15% less than that for the NCR 21.

2.27.1 Officials in all counties are actively seeking means of increasing the industrial base of their respective areas thereby enlarging its economic base, widening employment opportunities and elevating the real per capita income of its citizens. Pearl River County, in particular, has a need for additional employment opportunities since about one-third of the work force must commute to other areas for employment. The Mississippi Research and Development Center suggested economic goal for the period 1970 - 1980 is an increase of 1,000 new manufacturing jobs in Pearl River County (see APPENDIX H). Du Pont currently has a titanium dioxide plant under construction near Pass Christian which is expected to employ 450-500 local personnel when in production in 1976.

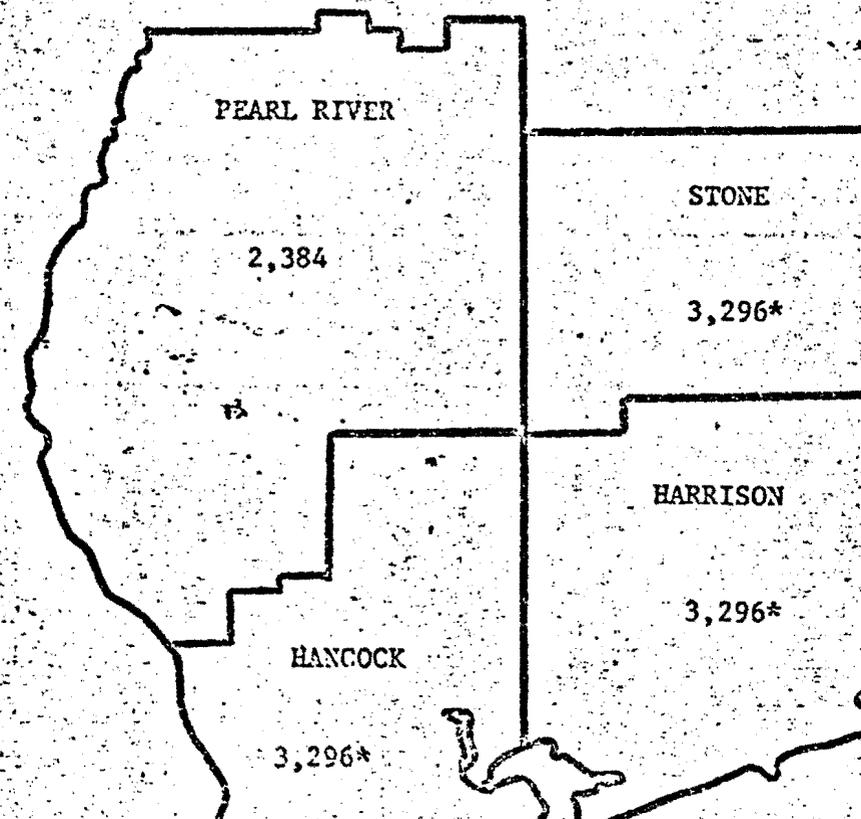
2.27.m Hancock County established the Hancock County Port and Harbor Commission in 1963 to act as an instrument in providing for and actively seeking new industries for the county. With the Stennis International Airport Project recently completed, the Commission has now focused its attention on development of the Port Bienville Industrial Park. The 2,200 acre site, with access to the intercoastal waterway via the Pearl River, railway facilities and easy access to U.S. 90, is ready for industrial development. The Master Industrial Plan for the area calls for ultimate development of 11,000 acres. The Port and Harbor Commission is actively seeking industry and is prepared to help new industries in negotiations for financial assistance (See APPENDIX J for additional details).

2.28 Hancock County

a. General. Hancock County is the westernmost of Mississippi's three coastal counties. It is bordered by the Pearl River on the west, Harrison County on the east, Pearl River County on the north, and the Gulf of Mexico to the south. Total area of the county is 485 square miles. The county is governed by a five member board of Supervisors. Total population for 1970 was established as 17,387 with a projected figure for 1975 of 20,000.

21. U.S. Dept of Labor, Bureau of Labor Statistics.
NEWS (USDL 75-190) April 9, 1975.

PER CAPITA INCOME, 1971
(DOLLARS)



b. Schools. Exclusive of the Bay St. Louis Separate School District, there are three public schools to serve the educational needs of the county:

<u>Name</u>	<u>Location</u>	<u>Grades</u>
Gulfview	Lakeshore	1-8
Charles B. Murphy	Pearlington	1-8
Hancock North Central	Kilm	1-12

In addition, one parochial school, Annunciation, located at Kilm with grades 1-8, also serves the county. Vocational training needs are met by the new Vocational Technical Center, located at the Stennis International Airport. Courses in mechanics, building trades, metal trades, industrial electricity, practical nursing, welding, and general clerical are taught to high school juniors and seniors by day and to interested adults by night.

c. Utilities. Urban and industrial electricity is provided by the Mississippi Power Company. Electrical needs of the rural communities are provided by the Coast Electric Association. Natural gas, where available, is provided by the United Gas Company. The county water supply, in common with the other local regions, is drawn from underground sources and is estimated by the Gulf Regional Planning Commission to be adequate for planned and desired expansion (TAB B, Appendix J). Recommendations have also been made for the establishment of multi-jurisdictional waste collection, treatment, and disposal facilities to serve the urban and adjacent urbanized areas of Hancock County.

d. Housing. One of the largest land developments, Diamond Head, is located in the eastern part of Hancock County on the Bay of St. Louis. This 4,600 acre site is designed to provide numerous recreational and utility facilities and ultimately accommodate 15,000 home sites. (See section 2.27.b for additional information.)

e. Recreation. The location and mild climate of Hancock County provide a variety of outdoor activities, such as fishing, boating, swimming, and water skiing. Local parks and playgrounds are available throughout the County. Buccaneer State Park, in the southwestern portion of the county, will contain camping areas, picnic areas, swimming facilities and hiking areas when completed.

2.29 Bay St. Louis.

a. General. Bay St. Louis is located in southeast Hancock County on the Bay of St. Louis, approximately 50 miles from New Orleans. The 1970 population figure was 6,752 and is projected to increase by 1975 to approximately 8,500. The town is one of two incorporated towns in Hancock County and is governed by a mayor and two Commissioners (See TAB D. APPENDIX J for additional descriptive material).

b. Schools. There are four public schools with an approximate enrollment of 2,000 students located in the Bay St. Louis area. The senior high school is newly completed and offers both college preparatory and business - vocational training. In addition, two parochial schools, enrollment of approximately 500, and three private schools with a total enrollment of about 1,000 contribute to the educational needs of the town. Both the parochial and private schools have also recently completed building programs. Pupil/teacher ratios in all schools range from about 20 in the senior high school to about 28 in the elementary grades.

c. Utilities. City owned water, sewer, and natural gas systems furnish these needed utilities to the area residences. Electrical service is provided by the Mississippi Power Company. Sewage is collected in a municipal collection system and treated in sewage lagoons. City water is provided by underground sources and is considered adequate for the foreseeable future.

d. Housing. Housing and apartment availability are generally considered satisfactory within anticipated requirements. Typical private residences are brick veneer on lots averaging 125 x 200 feet with building costs about \$15-\$20 per square feet.

e. Recreation. There are three baseball parks, seven parks and playgrounds, tennis courts, and beach areas to help meet the needs of local citizenry.

f. Medical Facilities. Medical facilities include the county hospital and health center, with all the facilities of a short-term general hospital, and three private clinics. (See section 2.27.d and Tables 10, 11, and 12.)

2.30 Waveland.

a. General. The city of Waveland is located on the south central coast of Hancock County on the Gulf of Mexico. Its 1970 population was 3,108 with a projected increase to about 3,800 by 1975. It is an incorporated municipality governed by a mayor and a board of four aldermen (TAB E of Appendix J and TABS A, and C of Appendix K for additional data).

b. Schools. The public schools in Waveland are an integral part of the Bay St. Louis separate school district (see paragraph 2.27.c). In addition, there is a new parochial school with excellent facilities including science and reading labs for kindergarten through eighth grade. Approximate enrollment in the latter is 300 students.

c. Utilities. A city owned water system supplies the water needs of the populace from underground sources. Electrical service is provided by Mississippi Power Company; gas is supplied by United Gas Company through a municipal distribution system. City sewage collection and treatment facilities are not yet available; however, a multi-million dollar sewage system is planned with treatment facilities scheduled for completion in 1975.

d. Housing. Available housing and apartments in Waveland are generally limited. Typical new construction is of brick veneer with construction costs in the neighborhood of 15 to 20 dollars per square foot in a 125 x 200 lot.

e. Recreation. Recreational facilities include a municipal park, public beach, skating rink, and riding stables. Additional facilities will be readily available as construction on nearby Buccaneer State Park proceeds.

f. Medical Facilities. Residents of Waveland utilize Hancock General Hospital to satisfy their needs.

2.31 Picayune.

a. General. Picayune is located in southwest Pearl River County on the northern edge of the NSTL buffer zone with a population of approximately 11,000. City government is conducted by a mayor, councilmen (4), and a city manager. This combination has proven very effective, allowing the city to annex a substantial amount of the immediate surrounding areas. Agriculture, lumber, and light industry provide the primary economic base for the town (see TAB F, Appendix J, and TAB D, Appendix K for additional data on Picayune).

b. Schools. Seven public schools (5 elementary, 1 junior high, and 1 senior high), enrollment of about 4,000 students, and one private school with an enrollment of 200-300 students provide the educational needs of the town. In addition to the normal college preparatory courses, a new vocational - technical school (also part of the public high school) provides training in the building trades, metal trades, and sales and marketing. Pupil to teacher ratio is about 30 to 1 in the elementary grades (1-6) and drops to about 22 to 1 in the upper grades (7-12).

c. Utilities. Water, sewer, and natural gas systems are city owned and operated. The sewer system has recently been expanded in scope and updated with the construction of a new sewage treatment plant. Water is supplied from underground sources and is considered adequate for present needs and planned expansion for the foreseeable future. Electricity is supplied by Mississippi Power Company facilities.

d. Housing. Availability of houses and apartments within the vicinity of Picayune is generally considered satisfactory for current demands. Typical house construction is brick veneer situated on an 85 x 150 foot lot. Construction costs average between \$15 and \$20 per square foot.

e. Recreation. The Picayune Athletic Association (formerly the YMCA) is the center of activity with a park playground, and pool. A fully supervised schedule of year-round activities is planned for members. A total of 8 municipal parks and one private park are available to meet the needs of the residents. A private country club, with swimming pool, as well as hunting and fishing in the local forests, lakes and streams provide excellent recreational opportunities.

f. Medical. The Lucius Olen Crosby Memorial Hospital (with 100 beds), a health center, and three private clinics combine to supply the health needs of Picayune. (See section 2.27d and Tables 10, 11, and 12.)

2.32 Poplarville

a. General. Poplarville, home of Pearl River Junior College, is located near the center of Pearl River County on Interstate 59. It is the county seat of Pearl County and agriculturally oriented. Incorporated in 1886, it is governed by a mayor and board of aldermen. The 1970 population figure was set at 2,312. Available housing and support facilities are considered generally limited. Since the town could not accept more than a token influx of personnel associated with the proposed move, a description of existing facilities will not be given. (TAB G of Appendix J and TAB F of Appendix K does however provide additional data.)

2.33 Slidell

a. General. Slidell is located approximately 15 miles southwest of NSTL in St. Tammany Parish, Louisiana. 1970 census figures show a population of 16,016 residents. Including the surrounding area, population figures exceed 30,000. Slidell is primarily a residential community with its residents commuting elsewhere for employment. The city of Slidell is governed by a mayor and five members of the Council. Council meetings are held monthly and are open to the public (Appendix L).

b. Schools. Within the city limits of Slidell are four elementary, two junior high, and two senior high schools. Vocational training is provided at the relatively new Sullivan Vo-Tech School in Slidell. Transportation is also provided to Sullivan Memorial Trade School in Bogalusa. The Slidell public school is part of the St. Tammany Parish school system and is administered accordingly. Two parochial schools, kindergarten through eighth grade, are sponsored by Roman Catholic churches in the area. A number of private nursery schools exist in the area. Pupil teacher ratio in the public schools (enrollment of approximately 8,000) is about 25 to 1. Numerous institutions of higher learning are within easy commuting distance.

c. Utilities. Water and sewage are municipally owned utilities with treatment of the sewage provided in a modern treatment plant. Water is supplied from artesian wells. The Sanitation Department provides residential pick-up

twice weekly. Central Louisiana Electric Company provides electric service to the residents of Slidell. Washington -- St. Tammany Electric Co-op provides service to those outside the city. Louisiana Gas Service Company provides natural gas to Slidell residents.

d. Housing. Slidell offers many residential areas with homes available in various price ranges. Vacancies are available in both established areas and new subdivisions.

e. Recreation. Organized leagues provide excellent opportunity for local boys to participate in football and baseball. Close proximity to Lake Pontchartrain, and the Gulf Coast provide easy access to beaches, encourage fishing, boating, and other aquatic activities. Numerous swimming pools exist in the various subdivisions. Nearby timberlands bayous, fields and marshes provide excellent hunting opportunities. There are two golf courses to meet the needs of the area's golfers.

f. Medical. Medical needs of the community are met by the Slidell Memorial Hospital (132 beds), together with the services of two nursing homes (67 and 80 beds). Close proximity to the greater New Orleans area makes those facilities a valuable adjunct to Slidell.

2.34 Pass Christian

a. General. Pass Christian is a residential city with a growing industrial base located on the eastern side of the bay of St. Louis about 60 miles from New Orleans in Harrison County. Situated on the coast and having received the full force of hurrican Camille, much new construction is in evidence throughout the city. Present population estimates exceed 4,000. Governing of the city is accomplished by a mayor and five aldermen. (See TAB H, APPENDIX J and TAB I, APPENDIX K.)

b. Schools. Pass Christian has four public schools with an enrollment for 1974-75 school year approaching 1,600. In addition, a new Episcopal High School (grades 7-12) was completed in time for the 1972-73 fall term. A parochial school with an enrollment exceeding 200 completes the major educational facilities for the city.

c. Utilities. Water, sewer, and gas systems are municipally owned. Electrical power is supplied by Mississippi Power Company.

d. Housing. Available housing in Pass Christian is spread throughout the community in considerable numbers with an average price in the range of \$25,000 to \$35,000 dollars. Large subdivisions as generally known in the Washington, D.C. area do not exist.

e. Recreation. Recreation centers to a large degree on the nearby Bay of St. Louis and Gulf Sandy beaches, a public pier and, for those with boats, a yacht club are easily accessible from all parts of town. A golf course is readily available as are tennis courts for those so inclined. An active scouting program is available for the youth of the area.

f. Medical. Medical needs of the citizens of Pass Christian are served by Pass Christian clinic and two local nursing homes. Additional facilities are readily available in nearby Bay St. Louis and Gulfport. In addition, New Orleans is just 60 miles away, with its many excellent facilities.

2.35 Long Beach

a. General. Long Beach is a small city of just under 8,000 population located on Mississippi Sound between Pass Christian and Gulfport. The city was incorporated in 1905 and has a mayor and five aldermen to govern. (See TAB I, APPENDIX J and TAB H, APPENDIX K.)

b. Schools. The Long Beach school district has an area population of about 18,000. Current enrollment in public school is approximately 3400. There are three elementary schools and two secondary schools to meet public educational needs. One parochial school, St. Thomas, serving grades 1-6, is also located in the city. The University of Southern Mississippi, Gulfport (at Long Beach) offers undergraduate degrees in secondary education, elementary education, and business administration. Graduate level degrees in the same disciplines may also be pursued.

c. Utilities. The water and sewer systems are municipally owned with sewage treatment presently accomplished by the trickling filter method. Water is supplied by five deep wells and has a system capacity of over 4 million gallons per day. Garbage is collected by the city twice weekly and disposed of in a sanitary landfill. The Mississippi Power Company owns and operates the electrical system and gas is supplied by the United Gas Company.

d. Housing. Available housing supply is considered adequate to satisfy the demand likely generated should the proposed relocation be approved. (See paragraph 2.27.b and accompanying tables.) Total vacancy rates for Long Beach apartments in March 1975 when the latest HUD survey was taken indicated a rate of 43.4%. This rate will drop considerably during the summer months with the influx of tourists. The housing industry is proposing to build upwards of 600 new homes in the \$35,00 to \$75,000 price range when market conditions warrent. Approximate building costs per square foot range from \$15 - \$22.

e. Recreation. Recreational facilities in Long Beach, as elsewhere on the Gulf coast, reflect the year-round mild climate and are centered out doors. The city owns 14 acres of parkland; places strong emphasis on pee-wee football, baseball, and basketball. In addition, there are four tennis courts. The recreational program has a year round swimming program, arts and crafts, and a Senior Citizens Program. Other facilities include public pier, fishing, jetty, and small craft harbor.

f. Medical. The citizens of Long Beach must rely on the medical facilities available in nearby Gulfport and Biloxi. (See Table 11 for practicing physicians.)

2.36 Gulfport

a. General. Gulfport is located on Mississippi Sound near the center of the Harrison County coast line. It provides the western boundary of the population center stretching from Gulfport eastward to Biloxi Bay. The 1970 population figures for the incorporated limits of Gulfport were 40,791 with a projected growth to over 50,000 by 1975. Gulfport was incorporated in 1898 and has a city government directed by a mayor and two commissioners. (See TAB J, APPENDIX J and TAB H, APPENDIX K.)

b. Schools. There are 17 public schools, including two high schools, serving the Gulfport school district with a current enrollment of about 8,000 students. Collocated in Gulfport are St. John's Catholic School, grades 1-6, Gulf Coast Academy, grades 2-8, and Westminister Academy. The latter two are non-public, non-church related. Jefferson Davis Junior College with an enrollment of over 2,000 is also located in Gulfport.

c. Utilities. The city owned water system draws its water from deep wells and has a system capacity of 12.3 MMGPD. Peak demand is 10MMGPD. City sewage is treated by means of a sewage treatment plant. Garbage pick up is provided by the city. The electrical and natural gas needs are furnished by the Mississippi Power Company and United Gas respectively.

d. Housing. Availability of both housing and apartments is considered good for purposes of the proposed relocation (see paragraph 2.27.b and associated tables). Typical home construction is brick veneer on a 100 x 150 ft lot with building costs ranging from \$15 to \$20 per square foot.

e. Recreation. Recreation to a large degree is centered out doors. There are 15 playgrounds, 2 parks, 9 baseball fields, sand beaches, public piers, boat ramps, and golf courses. In addition, there is a Senior Citizens Club and bowling. (Additional information on recreational facilities and cultural activities for all the communities mentioned heretofore may be found throughout TAB B, Appendix H.)

f. Medical. One of the better, larger non-military hospitals in the area is located at Gulfport, Memorial Hospital, with cobalt and radiation therapy units, coronary, intensive care unit, nuclear medical unit, and other modern facilities. Other available facilities include Garden Park Hospital and several private clinics. (See paragraph 2.27.d and associated Tables.)

3.0 Relationship of proposed action to Land Use Plans, Policies and Controls for the Affected Areas

3.01 The proposed action is to relocate the Naval Oceanographic Office and certain other of the Navy's marine related research and development program managers from the NCR to NSTL, an existing facility located in Hancock County, Mississippi. In 1974, NSTL was designated a permanent facility with one of its mission functions to serve as an installation jointly used by public activities engaged in land and marine environmental affairs (para. 2.23). Components of several Federal and state agencies engaged in environmental research are already in residence at NSTL (see Appendix E).

3.02 Under the current proposal, Navy will obtain custody of space in those buildings listed in paragraph 1.12 under a long term lease with NASA. New construction adjacent to building 1000 will supply an additional 87,500 net square feet of secure working and administrative space. Use will be made of existing laboratory, ADP, and administrative facilities where such facilities currently exist. Internal modifications will be made to existing buildings where necessary to meet mission requirements.

3.03 The proposed relocation and consolidation of elements of the Naval Oceanographic Program at NSTL is consistent with NASA plans for the installation and, in general, conforms to the policies on planning, acquisition, and management of Federal space set forth in section 2 (a) of Executive Order Number 11512.

3.04 Relocation and consolidation of elements of the Naval Oceanographic Program is also considered consistent with long range plans by the local governments and planning agencies to bring increased industrial growth to the Hancock and Pearl River Counties region (see para. 2.27) (a) and (b), Appendix I and Appendix J). The planned action will provide additional employment both directly and indirectly, to the local area without causing major impact on the natural environment.

3.05 The Gulf Regional Planning Commission and the Southern Mississippi Planning and Development District, in conjunction with federal, state, and local agencies and officials, are planning for future development in Hancock, Harrison, Jackson, and Pearl River Counties, Mississippi. In 1970, the Urban Engineering Demonstration Program for the Gulf region was initiated to develop simultaneously long-range plans for area-wide water, sanitary sewage, storm drainage, flood plans management, and solid waste management systems for the four coastal counties. Completed in 1972, the program describes existing conditions, defines areas of needed improvement, and makes recommendations to meet projected long-range needs ²². Primary parameters used in the development of the plans are the economic base, population, and land use. Projected population figures for the region are set forth in table 5 while Regional Land Use Plan for Hancock, Harrison, Jackson, and Pearl River Counties, Miss., sponsored by the Gulf Regional Planning Commission in 1971, delineates area best suited for residential, commercial, industrial, and agricultural use.

22 Urban Systems Engineering Demonstration Program Information Summary, Gulf Regional Planning Commission, P. 1.

Areas requiring special protection are also identified. In January 1975, planning studies for the four Mississippi coastal counties were initiated by the Environmental Protection Agency under Section 201 of the Federal Water Pollution Control Act Amendments of 1972 to determine existing and projected (1995) needs of the area under the more stringent requirements of the act ²³.

3.06 During the buildup and subsequent period of high level of operations by NASA at NSTL (then MTF), NASA MTF Master Planning Group worked in close liaison with the local city and county planning agencies and the Gulf Regional Planning Commission. Planning for the NASA regional impact is reflected to a degree in the number of new school facilities, housing development (such as Diamond Head), and improved sewage collection and treatment facilities in the area. In general, Land Use Planning is consistent with future growth. How consistent land use resulting from housing requirements incidental to the proposed move is with planned use, will be determined only after personnel commence relocating in the NSTL area. For the most part, personnel can be expected to relocate in either established residential areas or in planned subdivisions.

3.07 The relocation of an estimated 2,600 new personnel (only a portion of which will likely choose to relocate in any given community) may have some short term effect on existing housing supplies and facilities. The population increase is, however, considered to be consistent with that planned for in anticipation of an increased industrial base for four coastal counties. (See table 5)

3.08 A substantial number of the personnel involved in the proposed move may choose to relocate in Slidell, La., and its environs. The large number of subdivisions, the existence of a land use study to plan for the orderly growth of the region, a practice of encouraging industrial growth and attendant population increases associated therewith, indicates that both the relocation of facilities and its accompanying population influx is consistent with long range planning for the area.

23 Gulf Regional Planning Commission letter of 8 April 1975

4.0 The Environmental Impact of the Proposed Action

A. Natural Environment NCR.

4.01 Relocation of the Naval Oceanographic Office and other elements of the Naval Oceanographic Program from the NCR will have little effect on the natural environment. These organizations are housed in existing facilities, located for the most part in highly developed office and laboratory complexes in urban areas. With the demand for additional space by private business and governmental agencies in the NCR, it is extremely unlikely that any facilities vacated by the proposed action will remain vacant long and even less likely that any of the areas will revert to park land or other natural uses. Relocation of the affected activities will likely remove about 600 vehicles from the highways and streets, temporarily, with an attendant reduction in generation of air pollutants. However, as previously mentioned, the areas vacated are not likely to remain so for long. The Department of Commerce has previously expressed interest in space presently occupied by the Naval Oceanographic Office at Suitland. Any reduction in vehicle emissions attributed to the proposal will likely be short-lived and of little significance when the total number of vehicles used in the NCR is considered.

4.01.b. An estimated 800 employees will relocate from NCR if the proposed action is accomplished. A similar number of residences will become available in the NCR for reoccupancy, thereby reducing the pressure on housing construction by a like amount. There will also be either a reduction or a less rapid rise in demand for sewage treatment services, solid waste disposal, potable water, and utilities. When considered in light of the total population of the NCR and surrounding environs, the overall effect will be insignificant if noticeable.

B. Natural Environment NSTL.

4.02 The area to be occupied by Navy at NSTL, should the proposed action be accomplished, is a developed area of about 3,000 acres with numerous buildings of various sizes, many of which were used for administrative, ADP, and laboratory purposes. Interspersed within the area are wooded

lots and grassy areas. The proposed action will require occupation of some existing buildings and also proposes construction of a building adjacent to building 1000 comprising about 87,500 net square feet. This would necessitate disruption of approximately 300,000 square feet of lawn, driveway, parking area, and wooded area adjacent to building 1000 (See figures 5 and 11 for building construction and parking areas. The area affected is not a significant wildlife habitat, nor will the proposed construction significantly affect the natural characteristics of the surrounding area. The immediate construction site is not known to be of historic significance and, as noted, has been the site of previous construction. NSTL and the buffer zone comprise about 138,700 acres of mostly wooded area and marshlands. Intended use of the occupied area is similar to that for which the area was constructed (i.e., administration labs, ADP, etc). Therefore, the proposed action will not result in activities creating excessive noise levels, producing atmospheric emissions, (other than that created by the power companies in supplying the necessary electricity) use large amounts of water, electrical power, or natural gas, nor will local water bodies be significantly affected. As a result, there will be little additional effect on the natural environment.

4.02.a The Army Material Command is presently contemplating the use of the northern 7000 acres of the Fee Area as an ammunition assemble area. Surveys of the region are in progress and preparation of a Draft Environmental Impact statement is underway. If approval is given for the Army project, clearing and site preparation of approximately 600 acres of land to be used for siting of facilities will commence in early 1976. Facilities construction is projected to start in mid 1977 and end in 1982. When completed, the facility will be a government-owned, contractor-operated facility for the production of 155 mm artillery ammunition 24.

4.02.B. Utility lines, sewage collection and treatment facilities, and water supply systems exist and were constructed when peak employment at NSTL was about 6,000. As a result of the proposed relocation, employment at NSTL will

24. Personal communication Mr. Gagnon, Army Material Command
Dover, N. J.

increase from about 1,100 to approximately 2,500, well below the designed capacity of the aforementioned system. The Army project referred to above includes plans for independent utilities and sewage system. Therefore, required Navy services are expected to be met by existing facilities resulting in little or no additional effects on the natural environment.

C. Effects on the Natural Environment in the Surrounding Communities

4.03 The proposed Navy action will result in the relocation of approximately 800 employees in the NSTL region. While most would probably elect to settle in either established residential areas or new subdivisions, some pressure will likely be exerted on the housing industry for new housing starts outside of presently planned areas and for some second "recreational" homes at the beach or near other prime recreational areas. Such pressure will inevitably result in the conversion of some lands from agriculture, wildlife habitat or other natural uses to residential use. The extent of such loss is beyond estimation until personnel commence to settle and patterns are established. Area land use planning is widespread, numerous housing subdivisions exist and/or are planned -- some quite extensive. Long range planning for solid waste collection and disposal, water supplies, sewage collection and treatment and industrial growth has been instituted to accommodate future population growth. The overall effect is expected to be one of speeded urban expansion previously anticipated and planned for rather than unguided, unplanned, and unbridled growth.

4.03.a. Increased generation of air pollutants incident to vehicular travel to and from NSTL as employment levels increase can be expected. Car pooling will be encouraged should the proposed relocation become reality. How effective such efforts will be depends to a large degree on the number of personnel settling in enclaves, thereby making car pooling both practical and economical. Should sufficient interest exist, requirements can be generated for bus service between central locations within the various communities and NSTL (see paragraph 2.27.g). Air quality is good in the region ²⁵ and the increased traffic is not expected to cause significant deterioration.

25. Personal communication with Mr. Allen Neal, Southern Mississippi Planning & Development District, Gulfport, Miss.

4.03.b. The proposed Navy relocation may be environmentally beneficial in that it will potentially provide employment to local residents thereby increasing the employment base. Increased employment will reduce somewhat the need for immediate industrial relocation in the area with its greater potential for increased atmospheric pollution, water usage, power usage, pollutant generation, and subsequent disposal.

D. Effects on the Human Environment (Employees)

4.04 General. The principal impact of the proposed relocation is socio-economic in nature. The majority of the personnel involved are Naval Oceanographic Office employees, many of long standing with emotional, cultural, community, family, and economic ties to the NCR. Many of the affected individuals own homes (see Table 3), are active in various organizations, have children involved in school activities, and participate in the many cultural and educational opportunities that exist in the NCR.

4.04.a. Employment. Relocation from the NCR to any region greater than daily commuting distance for working sponsor will affect, at least temporarily, total family income of a substantial number of employees. Approximately 43% of the employees have spouses working in the NCR. Spouses of 37% of the employees are employed by other than one of the relocating Navy activities²⁶. As a result, any relocation from the NCR would cause either the employee or his/her spouse to terminate his/her present employment to maintain family integrity. Statements by several individuals at the public hearings held 5 May 1975 at Suitland, Md., suggest that several families will split rather than either spouse giving up his/her employment. Employment opportunities for spouses are considerably less in the NSTL region than in the NCR and wages are lower. Historically, employees have enjoyed considerable mobility between Federal agencies within the NCR as well as between components within these agencies. Relocation to NSTL would, to a large degree, isolate employees from the federal job market existing in the NCR thereby decreasing the ease with which he can seek employment elsewhere. Those with business and investments that require their presence in the NCR will be forced to choose between relocating and seeking employment elsewhere. With current high unemployment, job opportunities are not as

26. Employee questionnaire administered on 11 April 1975.

plentiful as in former years. A number of the employees have rather specialized skills not in great demand on the open market and will therefore be forced by circumstances to make a move against personal desires.

4.04.b. Housing. Housing sales in the NCR have slowed somewhat in the last 1 to 2 years over the demand existing before the current downswing in the economy and higher interest rates on loans. In addition, older homes for sale must compete with the new tax break given to stimulate new home sales. Good homes, reasonably priced currently average about \$30 - \$45 on the market in Prince Georges County ²⁷. Market conditions are influenced strongly by interest rates and the asking price for an individual home. Downward movements in either generally results in quicker sales. Factors affecting the housing market are subject to change over short periods of time making an assessment over the duration of the proposed relocation difficult. Home owners in the vicinity of the Chesapeake Bay facility face additional problems in the sale of homes. Small resident population, distance from NCR, and limited employment opportunities impose additional limitations on the opportunities to sell a home.

4.04.c. Education. Approximately 28% ²⁶ of the employees are involved in after-hours educational programs. A few employees have also indicated that their spouse were pursuing some educational goal. Relocation, to any area, would interrupt the present pursuit, may cause loss of some previously earned credits if a school near the new location does not accept all previous work, and might well cause abandonment of present plans if the discipline now being pursued is not offered at the new location. Seventy-one percent of the employees polled cite family schooling as a negative factor in the proposed relocation to NSTL. The composite national average ACT (American College Test) score for 74-75 was 18.9 ²⁸. From Table 8b, it can be determined that the Mississippi school districts near NSTL range from considerably below the national mean to above the mean. Several attempts were made to obtain data from the Prince Georges County schools with which to compare systems. Each attempt was without success. An article in the Washington Star-News of 29 January 1975 ²⁹ states

28. Personal communications. Dr. M. Miller, Supt of Schools Gulfport, Ms.

29. John Mathews, Washington Star-News. Wed, January 29, 1975

"[a]nd by the ninth grade, the Maryland averages are seriously off the national pace." The article also notes "[C]omparison between schools and school systems are hazardous, Dr. Sensenbaugh added, . . ."]

4.04.d. Family and Community Ties. Seventy-two percent of the employees polled on 11 April cited family consolidation as a negative consideration associated with the proposed relocation to NSTL. As noted earlier, several employees voiced the opinion that the family would separate before either husband or wife would give up his or her position. Personnel with relatives (and friends) living in the NCR, middle Atlantic states, or New England will be separated (or separated by even greater distances) should the Oceanographic Center be established in Mississippi. The same would be true for any other site outside of the immediate NCR. Sixty four percent considered severing of community ties as a negative consideration in the proposed relocation to NSTL. This impact would result in any relocation sufficiently far from the NCR that personnel could no longer commute to work.

4.04.e Wage Employees. There are currently 35 ungraded employees (wage board) of whom 32 are permanent. These permanent employees will be asked to relocate should the proposed move be approved. Those permanent wage employees who have sufficient time in position will be eligible for salary retention for two years at which time they will revert to the top step of their wage grade and be paid the appropriate hourly rate in effect for the Biloxi area. At the present time, there is an \$86 differential between the NCR and the Biloxi area for a WG 10 step 5 (i.e. \$6.72 vs \$5.86 per hour).

4.04.f. Black Employees. Relocation to the Gulf Coast could have a negative impact on minority employees, especially blacks who comprise approximately 14% of the total affected personnel (see Table 13 for minority breakdown). Of concern to all affected employees are the nature and availability of such basics at the proposed location as schools, having public accommodations, public and private medical/hospital care, law enforcement, etc. These concerns are amplified for minority employees who additionally must consider the general attitude of the majority populace towards minorities and the degree to which minority groups have been able to enter fully into the mainstream of general life activities.

Table 13

MINORITY EMPLOYEES

<u>Grade Distribution</u>	<u>Percent</u>	<u>Primary Source of Family Income</u>
GS 1 - 4	4%	40%
GS 5 - 9	40%	71%
GS 10 - 13	52%	82%
GS 14 ---	1%	100%
*WG 5 - 8	3%	
<u>Minority Women Percent of Minority Personnel</u>		<u>Primary Souce of Family Income</u>
21%		52%
<u>General Work Area</u>	<u>Percent</u>	<u>Primary Source of Family Income</u>
Scientific, Engineering Professionals	37%	81%
Other Professional	14%	68%
Administrative	9%	67%
Technical	31%	81%
Clerical	6%	38%
Trade	3%	100%

Source: 11 April 1975 Employee Survey

*Blacks comprise 89% of the ungraded employees.

(1) Housing. Identifiable housing patterns exist in the communities surrounding NSTL. Many of the predominantly black housing areas originated during the period of institutionalized segregation. Economics are a dominant factor in approximately 60 - 70% that of the regional average ³⁰. The real estate agents are committed to sale of housing on an equitable basis (see APPENDIX G). DHUD sponsored housing is available to all races and, in the case of 235 housing, is located in all housing areas ³¹. The Navy Housing Office, Naval Construction Center, Gulfport reports receiving five complaints of discrimination in housing since 1970. Upon investigation, only two proved valid ³².

(2) Schools. All public schools are integrated (see Table 9a) with the minority/white teachers ratio approaching that of the student body in most schools.

(3) Recreation and Public Accommodations. Public officials from several of the communities have provided statements regarding equal access to all public facilities in their areas (see APPENDIX G). The city of Slidell is currently under court order to integrate its youth football league. A suit is pending against the Picayune Athletic Association for alleged discrimination (A telegram received from the Picayune City Manager in response to a query on the availability of public facilities states that public recreational facilities are available to anyone (see APPENDIX G)). In addition, the U.S. Department of Justice, Civil Rights Division has received about 36 complaints

30. U.S. Dept of Commerce, Social & Economic Statistics Administration, Bureau of Census "A Computer Profile: Biloxi, Miss."

31. Personal communications. Mr. T. Alba. DHUD, Jackson, Miss.

32. Personal communications. Mr. Roberts, Assistant Housing Officer

since January 1970 for the area of St. Tammany's Parish, La., Pearl River, Hancock, Harrison, and Jackson counties, Miss., over alleged discrimination. No suits have been filed in these instances ³³.

4.04.h. Relocation may cause a number of individuals to exercise their retirement option earlier than previously planned rather than relocate. Of the personnel presently assigned to the Oceanographic Office, approximately 43 employees are considered eligible for full retirement benefits with another 225 eligible for discontinued service early retirement.

4.04.i. Of the approximately 800 employees expected to relocate with the proposed action, about 750 are Naval Oceanographic Office employees. A breakdown of personnel and projected relocation percentages for each category are contained in TAB 4, APPENDIX F.

4.04.g. Women Employees. Women employees comprise about 21% of the total affected work force. Grade and general work area distribution are shown in Table 14. Approximately 49% of the women employees are the primary (but not necessarily the sole) source of family income. This figure increases to 54% for minority women. Fifty four percent of the women report that their husbands are employed somewhere other than at one of the activities proposed for relocation. This is compared to only 27% of the men who report having wives employed somewhere other than with one of the activities proposed for relocation. Women therefore face additional problems where a spouse is unwilling or unable to relocate because of the unavailability of a position comparable to the one he currently holds. There are fewer job opportunities for spouses, male or female, in the NSTL region and pay is generally lower where employment is found. Consequently, a higher percentage of women employees than men may choose not to relocate. Seventy-two percent of the women with working husbands are employed in the clerical and technical fields. Employees within these fields are generally mobile between agencies and components thereof. Most of these employees (clerical and technician) should be able to obtain employment with another federal agency relatively easy. They will, however, be competing for jobs with others currently unemployed.

33. Personal communication, Mr. L. Berry, USDJ Civil Rights Division

Table 14
Women Employees

<u>Grade Distribution</u>	<u>Percent</u>	<u>Primary Source of Income</u>
GS 1 - 4	23%	38%
GS 5 - 9	68%	50%
GS 10 - 13	8%	77%
 <u>Work Area</u>		
Scientific, Engineering	6%	79%
Other Professionals	10%	52%
Administrative	17%	43%
Technical	25%	55%
Clerical	42%	41%

Source: 11 April 1975 Survey

E. Effects on the Human Environment: NCR

4.05 The personnel involved (military and civilians) in the proposed action represent approximately 2% of the total Navy (military and civilian) work force³⁴ in the NCR and only .3% of the total federal civilian work force³⁵. The payroll for the activities effected by the proposed relocation exceeds \$20 Million annually. Relocation will result in revenue reduction in personnel, sales and property taxes to the effected states of Virginia, Maryland and the District of Columbia. Some of these losses, particularly property tax loss, will be short lived as suggested by the average market time of houses for sale. In the past the Navy employees have made sizable contributions to various federal, state and local charities. Many of these would benefit the new area in the future rather than the NCR.

4.05.a. About 450 employees of the effected activities may choose not to relocate should the proposed action be carried out. Approximately 270 employees are eligible for retirement in one form or another and as many as 100 to 150 may elect retirement rather than relocate. The effect then is to increase the number of personnel competing for jobs in the NCR by about 300 at a time of relatively high unemployment. As noted in paragraph 4.04.g., a number of these will be women who are not the primary source of income. In these instances, family income will be reduced and, in most cases, the unemployed individual will seek employment elsewhere in the NCR. Those employees electing to remain will be comprised primarily of professionals (administrative and logistics), technicians (administrative and logistics) and clerical support. These skills are, in general, highly transferable and a high demand exists for these skills in the NCR. (See TAB C, APPENDIX F.)

4.05.b. Personnel potentially affected by the proposed relocation do not reside in a close knit community but rather reside in a random fashion throughout the southern and central NCR³⁶. As a result, movement of these families

34 Distribution of Manpower in the United States by States as of June 1974. NAVSO P-1385. P. 27

35 Dec 74 Monthly Release Federal Civilian Manpower Statistics of the Civil Service Commission

36 Provided by Office of Civilian Manpower Management

should not greatly affect school population, commercial sales, utility demands nor service requirements in any locale. In addition, the relatively high demand for housing in the NCR strongly suggests that residences vacated by relocating employees will be reoccupied in a short period of time with little overall effect on the aforementioned areas (see paragraph 4.04.b.).

4.05.c. A large number of personnel who would be relocated are actively engaged in community affairs, such as scouting, neighborhood civil associations, Boys League, churches, etc., and their time and energies will be a loss to their respective communities. This loss will be particularly noticeable in smaller communities, such as Chesapeake Beach.

F. Effects on the Human Environment: NSTL

4.06 Relocation of the Naval Oceanographic Office and other elements of the Naval Oceanographic Program at NSTL will have little overall effect on the human environment at the site. Facilities, i.e., utilities, roadways, etc., were designed and constructed for an employment level over twice what it will be should the proposed relocation be accomplished.

4.06.a. The proposed action will approximately double the work force at NSTL. Attendant with this increased employment will be increased traffic flow. If the Army project is also approved the total work force commuting to and from NSTL will approach that of NASA during full operation (see table 15).

G. Effects on the Human Environment: Surrounding Communities

4.07 The proposed action will relocate Navy employees with above average education, above average income and who are potentially more liberal and urban oriented in outlook than many of the local citizens. Approximately 1300 personnel, of which about 20 are unmarried, are presently employed by affected Navy activities. Two levels of impact are projected for the proposed action: maximum and probable. Certain assumptions are made and must be used until personnel make the decision to relocate and choose a community to settle in. Maximum impact on local communities will occur if all current employees choose to relocate. In this case approximately 3900 new residents will move into the area (see table 15). All present permanent employees will be given the opportunity to move with the affected activities should the Secretary of Defense approve

Table 15

<u>Number in Family* (Including Employee)</u>	<u>Percent</u>	<u>Number of Employee (100% relocate)</u>	<u>Maximum (employees plus famil</u>
1	18%	223	223
2	19.5%	241	482
3	19%	235	705
4	23.5%	291	1164
Over 4 (Assumes 5 per family)	21%	260	1300
			<u>3874</u>

08

*Based on employee survey of 11 April 1975

the proposed action, however, it is estimated that 60 to 65 per cent will actually choose to relocate. The more probable number of new residents moving into the region from the NCR is about 2500. In as far as possible the vacancies created by personnel choosing not to relocate will be filled locally in the Mississippi Gulf Coast Region. Otherwise, new employees will be hired from outside the immediate area.

Average per capita income for those employees relocating is estimated to be about \$4500 as opposed to a per capita income of \$3500 or less (1971) for Pearl River and Hancock Counties. By virtue of its being primarily in a residential area, close to New Orleans and the site of NASA's Slidell Computer Complex, a per capita income of \$3000 to \$3500 for Slidell is considered to be a reasonable estimate. One potential effect of the proposed move is to relocate a sizable "urbanized upper middle class" into a more relaxed atmosphere. Some adjustment in attitude may be necessary for both local residents and Navy employees and their families. The degree to which this will occur depends to some extent on the settlement pattern of the new personnel (i.e., the number actually settling in a given locale) the number of NASA employees originally from areas outside the deep south currently or previously living in a given area, and the early background of the Navy employees and their families). Black employees, aware of the racial history of the south, will be sensitive to and quick to criticize situations, gestures and conditions which suggest he is not accepted equally with all other residents of the area.

4.07.a. The Army ammunition facility proposed for the northern half of the fee area (see paragraph 4.02.a.) will employ a maximum of 968 construction personnel during the construction phase. This peak figure is projected for FY 79 with the number decreasing thereafter. Initial operations are scheduled to commence in FY 80 with 300 contractor personnel. During normal operations an estimated 1800 contractor personnel and about 60 Army personnel (Army and civilian) will be employed at the facility. Source of contractor employees is the prerogative of the contractor. During full mobilization a maximum of 5500 contractor personnel would be required³⁷.

³⁷ Personal communication with Mr. Gagnon, Army Material Command Project Manager, Dover, NJ and confirmed by OCEANAV msg 131927Z MAY 75.

4.07.b. Many of the personnel relocating from the NCR currently own homes in the region and will likely sell them. As a result, these personnel may have funds for substantial down payments on new homes in the NSTL area. With above average incomes, relatively high standards of living, and lower prices for equivalent homes when compared to the NCR (this advantage will somewhat offset the additional housing cost due to financing homes at the new higher interest rates). Considerable demand will be generated for the better available homes and/or new construction to meet individual needs and desires. The inevitable result will be an increase in the cost of housing. Personnel relocating immediately will likely purchase existing homes while those relocating during the later phases of the proposed move will be more likely to contract for new construction. An accurate estimate of new construction and its attendant effect on utilities requirements is most difficult to make until personnel have had a chance to reflect upon the merits of the various communities and have evaluated existing housing as to its ability to meet their needs.

4.07.c. New construction starts will generate demands for new sewer, water, electrical and natural gas hookups. Increased municipal services may be required. Water supply throughout the area is considered adequate. Modernization and new construction of sewage collection and treatment facilities in the larger communities should assure adequate capacity to meet the new demands. Existing long range planning for development of the area around NSTL (see chapter 3) should reduce deficiencies caused by the proposed action to short term perturbations.

4.07.d. Until personnel commence to move and settle into communities, the community impact will be most difficult to assess. Few, if any, of the communities surrounding NSTL can singularly absorb the full impact of relocation. Availability of desirable housing and the quality of the school system will play major roles in determining individual relocation sites. Table 16, supplied by the Commander, Naval Oceanographic Office, provides a good approximation as to the numbers and grade school age children. A comparison of numbers of children with the number of vacancies shown in tables 8b and 8c indicate that area wide there are more than enough facilities to school the anticipated Navy increase without overcrowding. Both public and private schools exist and a number of new students are likely to attend. As noted in paragraph 1.14, relocation, if approved, would occur in essentially three phases with 240 personnel relocating in the summer of 1975. The school systems would have approximately two years to adjust to the increased loading.

Table 16
Distribution of School Age Children

<u>Grade</u>	<u>Number of Students</u>
Pre-School	243
1	70
2	62
3	68
4	64
5	77
6	81
7	82
8	77
9	80
10	85
11	69
12	83
Total	<u>1141</u>

Source: COMNAVOCEANO Survey, April 1975

4.07.e. The influx of new students will exert pressure for increased emphasis on college preparatory courses in the local high schools. The new students come from culturally privileged families where at least one parent has usually obtained a college education, the parent(s) is a professional, usually scientifically oriented, and the children have had a wide range of exposure available in the nation's capital. Many, if not all, of the new students will be college bound because of family and cultural background. In contrast, many of the students from the rural areas are more agriculturally and trades oriented and this is reflected in certain school curriculum. Some adjustment may be required in the school curriculum, especially in the smaller schools, to meet the educational needs of the new students.

4.07.f. Relocation of the proposed activities should provide some employment opportunities for the local citizenry, generally at better than average (by local standards) pay scales. The vacancies requiring professionally trained personnel may or may not be filled from local sources depending upon the availability of qualified personnel.

4.07.g. Since blacks comprise approximately one-third of the population of the area immediately adjacent to NSTL, it can be anticipated that a number of the total projected vacancies can be filled by minority employees. It is also expected that employment opportunities will be available for women from the local area.

4.07.h. Secondary jobs (i.e. employment not directly related to the proposed relocation plan) can be expected to increase in response to increased housing construction and increased demands for goods and services.

4.07.i. Establishment of an Oceanographic Center of this magnitude may well provide the incentive for additional related activities to consider relocating at NSTL. Demands for higher education by the employees can also be expected to prompt one or more universities to offer courses or extension service to the locale.

4.07.j. Table 17 provides an estimate of base loading at NSTL for selected years to 1981. Base population, including contractors, is projected to increase to about 1400 by the end of 1975, increase to over 3400 by the end of 1977 and reach a steady loading of almost 4500 personnel when the Army facilities commence normal operations. Certain maximum community impacts can be projected from this table. First, approximately 1000 short term employees will need

TABLE 17

NSTL Base Loading

	<u>1975</u>	<u>1977</u>	<u>1979</u>	<u>1981</u>
# NASA & Current Tenants	1040	1040	1040	1040
# NASA SSME	65	169	169	169
# NASA Shuttle	30	330	0	--
% Army Construction	0	600 (est)	968%	#0 (est)
% Army Contractor	--	--	--	1860
Navy	<u>240</u>	<u>1281</u>	<u>1281</u>	<u>1281</u>
	<u>1375</u>	<u>3420</u>	<u>3458</u>	<u>4350</u>

Mr. Jack Rogers, NASA

% Mr. Gagnon, Army Material Command, Project Manager, Dover, N.J.

accommodations. These personnel include both construction and NASA employees. Since government contracts are normally bid items, the origin of the construction workers cannot be determined until after bidding. Almost certainly a number will not be local and will rent homes, apartments or trailers to live in. Some of those with longer contracts may bring families and school-age children. Secondly, by 1981 almost 3500 new residents (including approximately 150 DuPont employees moving into the area) may relocate to the area and need homes. Should the contractor for the Army munitions facility hire mostly local personnel (the prerogative is the contractors) then a lesser number will be required. Schools will be impacted similarly. Potentially close to 5600 new students could relocate to the area by 1981 (i.e., $3500 \times 80\%$ (families) $\times 2$ children each). This figure assumes that all new employees associated with the build up at NSTL would be new to the area rather than commuters. Table 8b projects approximately 6400 school vacancies in the Mississippi area (including Biloxie) at the present time. Some additional vacancies exist in nearby Louisiana. The Army and Navy projects are totally independent of one another and approval of one is not dependent upon the approval of the other.

5.0 Adverse Environmental Effects which cannot be avoided should the Project be implemented

5.01 Direct impact on the natural environment as a result of the proposed action will be insignificant. Some secondary impact resulting from increased housing demands and associated increased demands for utilities, municipal services and solid waste disposal can be expected. Likewise, increased construction for facilities extension and/or expansion will affect the environment.

5.02 The primary effect for the proposed action is socio-economic in nature. For many employees who relocate, certain family, community and cultural ties will be broken. Some may relocate at greater personal expense through higher house payments reflecting current interest rates or through investments terminated because of the move. Apprehension on the part of minorities over whether or not they can fully and equally participate in the general life activities of the proposed relocation area, and uncertainty as to the attitudes of the majority populace towards minorities, could cause a large percentage of minority employees to choose not to relocate. Those who do relocate may experience some acts of discrimination, particularly in the smaller, more isolated areas. Women employees whose husbands provide the primary source of family income and who are employed elsewhere in the NCR, will, in general, choose to seek employment elsewhere in the NCR. Highly educated employees and their families, with above average incomes, generally liberal outlook, urban orientation and relatively high standard of living may with time undergo some place-of-living adjustment if they settle in one of the smaller, rurally oriented communities. Offered relocation may lead to earlier than planned retirement for some employees, possibly resulting in a disruption of personal plans and causing a reduction in both immediate and long term income.

5.03 Involved in the relocation will be a loss to the NCR of a payroll exceeding \$20 million dollars annually. Lost also will be the state and local revenue derived from this payroll.

5.04 A rapid influx of new families into any single given locale could exceed the immediate supply of adequate housing or the ability of contractors to supply needed housing, inflate prices with the increased demand, exceed the capacity of existing facilities and municipal services, and tax the local school system. Settlement of large numbers of Navy

employees together could cause a division within the community between the "locals" and the "outsiders". In a phased relocation as planned, however, the natural constraints imposed by individual differences and availability of housing within a reasonable time frame will likely preclude the above described situation from occurring. Rather, the influx of new families is more likely to result in accelerated expansion in accordance with existing plans.

5.05 Assuming that personnel settle randomly throughout the NSTL area, an overall increase in school enrollment of about 3.6% [i.e. 1,200 new students with current enrollment at approximately 33,000 (see Tables 16 and 8B less Biloxi)] can be anticipated. The Slidell school system is likely to be one of the most affected because of the number of homes available and its proximity to New Orleans. Phased relocation and Federal aid to areas impacted by federal employment will help offset the effects of increased enrollment to some extent. Impact Aid, however, is restricted to the state in which the Federal Activity is located. Therefore, Louisiana schools will not be eligible for aid. School curriculums can also be expected to undergo subtle changes with an influx of college oriented students.

5.06 The components comprising the proposed Oceanographic Center will lose considerable amounts of production time during the move and consolidation following thereafter. A certain amount of unproductive and duplicative work will be required during the 1976 - 1977 time frame when major elements are physically separated. New personnel replacing those who choose not to relocate may require a period of training and adjustment before they can effectively assist in the accomplishment of the Center's mission.

5.07 Greater travel distances for some employees could increase gasoline consumption; however, the suburban development pattern of the Mississippi Gulf Coast region could tend to encourage car-pooling to a greater extent than it is practiced in the NCR.

5.08 Effects of the proposed action on the communities surrounding NSTL are difficult to assess. The effects on any one locale are greatly dependent upon settlement patterns to be established by the new arrivals.

ALTERNATIVES TO THE PROPOSED ACTION

6.0 General

There are three basic one-time cost considerations associated with any relocation that requires personnel moves. The first is related to the costs associated with the transfer of personnel; the second with building construction and modification; and the last pertains to expenses related to closing one facility and activating the second. The latter includes equipment removal, preparation and reinstallation, simultaneous operations at two locations and loss of productivity. The first and last cost categories vary little for any site that requires personnel to relocate. (A summary of the economic costs related to the proposed relocation to NSTL appears in Tab B, Appendix C. A detailed breakdown of costs is contained in the economic analysis prepared for the Secretary of the Navy and the Secretary of Defense for use in their decision regarding the proposed relocation.) The considerations used in site selection were: (a) Are the facilities federal government controlled and now available; (b) Can Naval Oceanographic Program consolidation be accomplished; (c) Are the available facilities technically suitable; (d) Cost of renovation and necessary new construction; (e) Are the facilities outside the NCR; and (f) Certainty of future occupancy.

A. Do nothing

6.01 This alternative to the proposed action would impose no additional impact on employees beyond that now existing. Family and community ties would be maintained, employed spouses would retain their positions, and other personal plans and goals would not be interrupted. The affected element would still be in the NCR in the conflict with the expressed desire of Congress to reduce the Defense presence in the region and in conflict with the directive of the Secretary of Defense for decentralization. Presence of the affected activities in the NCR is not necessary for the successful prosecution of theirs or the Navy's mission. Several components of the affected activities occupy present quarters in a tenant status with future access uncertain. Space limitations, both physical and Congressionally imposed, limit options for managerial improvement. Therefore, this alternative fails criteria (b) and (c) shown in Section 6.0.

B. Alternative Sites

6.02 A number of alternative sites have been considered with emphasis on sites where currently underutilized facilities might exist. Technical suitability inspections were made of those sites considered most "competitive" from environmental, economical and managerial aspects to reduce the number of alternatives for more detailed analysis. Sites visited by Navy oceanographic and facilities engineers specifically to assess their suitability to meet the technical needs of relocation and consolidation of the Naval Oceanographic Program include: Newport Naval Station, Davisville Construction Battalion Center, Quonset Point Naval Air Station, Naval Air Engineering Center, Philadelphia; Prince Georges Center, Hyattsville, Maryland; Michoud Assembly Facility, Michoud (New Orleans), Louisiana; NSTL, Bay St. Louis, Miss. Off-site facilities review was conducted for Otis Air Force Base, Massachusetts; the Naval Prison, Portsmouth, New Hampshire; Navy property, Sand Point, Washington. With the exception of Prince Georges Center and Sand Point, Navy Oceanographic Program relocation to any of the other sites would constitute partial replacement of a larger prior population. In several instances it was immediately obvious that the number, age, condition and type of structures available made the site non-competitive in terms of cost and quality. Only one, the NSTL site, has existing oceanographic instrumentation test and calibration facilities.

6.03 The sites considered most competitive were: The Federal Center at Suitland, Maryland; Prince Georges Center, Hyattsville, Maryland; Naval Base, Newport, Rhode Island; NASA Facility, Michoud, Louisiana; and NSTL, Bay St. Louis. Early preliminary assessment determined that each of the sites is developed and that one or more facilities located thereon is occupied. Therefore, little or no impact on the natural environment would occur as a direct result of the proposed action. Some impact on personnel involved, such as severance of certain family and community ties, possible loss of employment where the spouse is employed at other than one of the relocating activities, etc., can be expected regardless of site chosen if outside the NCR. The decision then becomes one mostly concerned with projected increases in managerial efficiency, economics, and certainty of continuous occupancy. (APPENDIX D provides additional discussion relative to alternative sites.)

6.03.a Construction of additional quarters at Suitland, Maryland would alleviate most, if not all, of the projected impacts on employees and communities associated with relocation from the NCR. Certain employees who would relocate to the new facilities at Suitland would incur increased commuting expenses. Construction of additional public buildings at Suitland would still leave Navy in conflict with Secretary of Defense and Congressional wishes to decentralize Defense activities currently located in the NCR. In view of the stated Congressional opposition to a continued high level of DOD presence in the NCR, the probability of obtaining the needed funds for construction is considered very low. The alternative fails by application of criteria (c), (d) and (e) of Section 6.0.

6.03.b Use of Prince Georges Center would eliminate any impact projected for the communities surrounding NSTL, would permit most, if not all, employees to remain in their present homes, continue present activities, pursuit of goals, etc., with little extra commuting time and distance beyond that now encountered. Some employees would become eligible for relocation, and if the option were exercised, the expense would be added to the move. Prince Georges Center was rejected after evaluation for the following reasons: (1) total space is insufficient to consolidate all activities of the Naval Oceanographic Office even without considering the collocation of other oceanographic research and development segments; (2) present occupants of the Center would have to be moved [(1) would still apply], thereby increasing the cost of the move; (3) costs could never be amortized since the building is rented and rents will continue to rise; and (4) full consolidation and collocation, both major aims of the proposed action, could not be achieved. Therefore, the alternative fails by application of criteria (a), (b), (c), (d) and (e) shown in Section 6.0.

6.03.c Philadelphia Navy Yard. Relocation to this site would entail most of the personnel impacts associated with the proposed relocation to NSTL. Many family and community ties would be broken; employed spouses would have to terminate employment to move; homes, possibly with low mortgage rates, would have to be sold and new ones purchased. Personnel pursuing degree programs locally would also have to make adjustments. On the positive side, the Navy Yard has existing facilities and adequate utility capacity. In addition, relocation to Philadelphia would likely reduce minority employee apprehension about potential discrimination. The number of employees relocating to

Philadelphia would be small in relation to the existing population; therefore, existing facilities (i.e., public transportation, medical services, schools, etc.) could be expected to absorb the new arrivals without problems. The oceanographic personnel would also be replacing a Navy component vacating the spaces. Buildings 59 and 76 at the Navy Yard were nominated for consideration. The buildings are about 50 years old with some of the space previously used for heavy industry. Building characteristics include high bays and overhead cranes. Accumulated dirt consistent with previous usage is present. Considerable renovation would be necessary before the spaces were usable. The age and type of buildings were important considerations in evaluation of this site. This alternative therefore fails by application of criteria (c) and (d) shown in Section 6.0.

6.03.d Relocation to the Navy Construction Battalion Center at Davisville, Rhode Island was considered reasonable in terms of location and age of facilities. The Navy has recently relocated a sizeable presence from the Rhode Island area with the result that adequate housing, school facilities, etc., exist to meet the needs of incoming personnel. The area, both at the Center and in surrounding communities is developed, thereby causing little or no impact on the natural environment. Relocation to Davisville, Rhode Island would impact on employees personally in the same way as relocation to any other area outside the NCR (see previous discussions). Positive minority considerations are similar to those noted for Philadelphia. A primary reason for rejecting Davisville was the fact that the buildings are required for Construction Battalion Mobilization in the event of hostilities. Therefore, this site fails by application of criteria (c), (d) and (f) of Section 6.0.

6.03.e Location of the Naval Oceanographic Center at the Naval Station, Newport, Rhode Island would impact personnel in the same ways previously discussed. A sizeable Navy presence was recently relocated from the base, thereby vacating considerable housing, school facilities, etc. Newport is an established area, relatively close to large metropolitan centers and quite capable of meeting the needs of the employees of the Oceanographic Center. Spouses wishing employment to supplement family income would likely have a difficult time finding employment unless willing to commute to one of the larger population centers. Positive minority considerations are similar to those noted for Philadelphia. Facilities available for relocation at Newport, Rhode Island are old (about 30 years) and in a bad state of repair. It was determined that new

construction would be required in order to effectively use the site. Construction costs were estimated at a figure comparable to that developed for new construction requirements at the Federal Center, Suitland, Maryland. Therefore, this site fails by application of criteria (c) and (d) shown in Section 6.0.

6.03.f Relocation to Michoud (New Orleans) is attractive in many respects. It is a large population center, offering many cultural attractions, employment opportunities for appropriate skills, recreational sites, educational centers and excellent medical facilities. The impacts on employees for relocation outside the NCR remain the same as previously discussed. NASA facilities at Michoud (New Orleans) are new (about 10 years old), and the period of time required to amortize cost associated with relocation is attractive when compared to other areas. Use of these facilities would mean sharing quarters with the Department of Agriculture in one area and with NASA contractors in another. In the former case, Agriculture is seeking additional space and in the latter, the space utilized by Navy would have to be made available to the contractors if NASA's workload increased sufficiently to require the space. In addition, relocation at Michoud would also call for approximately 100 personnel to be located at NSTL, Bay St. Louis for instrument calibration and maintenance. The primary reason for rejecting this site is the uncertainty of long term availability of occupied space. Therefore, this site selection fails by application of criteria (b) and (f) shown in Section 6.0.

6.03.g During discussions with NASA officials over relocation at Michoud, it was determined that a portion of NSTL could be made available for Navy use. One time cost and annual savings estimates indicate that the NSTL site is the most economically feasible. Direct impact on the natural environment is small, and many of the impacts on personnel involved are the same for any relocation. NSTL is attractive from the standpoint of age, condition and types of unique, underutilized facilities available. Collocation with other federal, state and other agencies involved in related endeavors is an added plus. This site then satisfies all of the criteria stated in Section 6.0. NSTL was thus chosen for more in depth assessment.

6.03.h In addition to the reasons outlined above, in order to make all potential sites comparable from an operational standpoint, it would be necessary to duplicate the underutilized oceanographic instrumentation facilities which exist at NSTL. The estimated cost for duplicating these facilities is included in the economic analysis for all potential sites for which construction estimates were prepared except NSTL. (See Appendices C and D for additional discussion of alternatives).

C. Alternatives to Planned Construction at NSTL

6.04 Essentially two alternatives exist to the planned construction adjacent to Building 1000. No action and expansion of one or more other buildings.

6.04.a. With no additional construction, several components of agencies currently in residence at NSTL would have to move to other buildings at NSTL to provide needed room for Navy's proposed action. In addition, more use would have to be made of buildings originally constructed for other purposes. Inherent in "Do Nothing" is the necessity to utilize a larger number of buildings with the resultant loss of interaction and increased security problems.

6.04.b. Expansion of one or more other buildings would result in similar impact on the natural environment (generally insignificant, except that multiple construction would likely affect a greater area) plus retain the problems noted in 6.04.a. relative to increased number of construction sites if multiple expansion were undertaken.

7.0 Relationship between local short--term use of man's environment and the maintenance and enhancement of long-term productivity

7.01 Primary short and long term environmental gains should the proposed action be carried out are the increase in direct and indirect employment opportunities. An estimated 450 employment vacancies will require filling by the relocating activities. Secondary employment, both short and long term will rise because of increased demand for housing, goods and services. Short term losses include loss of jobs by current employees choosing not to relocate. Many of these employees will have skills in high demand in the NCR and therefore likely face only short term unemployment. Utilization of the facilities available at NSTL will help ensure its continued existence. Continued underutilization could possibly result in a reversal in the decision to retain the complex as an active entity resulting in its closure with an attendant loss of jobs. At the very least, underutilization is a waste of expensive resources.

7.02 Utilization of NSTL complex by Navy (and Army should that project become a reality) generally precludes acquisition of the lands and facilities by state, local or private interests in the near to mid-term for industrial development, thereby causing a loss of a potentially taxable resource. Industrial development is being actively courted by local interests. Use of NSTL as an industrial park would at least delay development of sites elsewhere. This is, however, not a likely alternative in that some portion of NSTL (Static Test Area) must be available to NASA for ongoing programs.

7.03 Some long term loss of habitat/agricultural forest lands will result from the proposed action. Increased requirements for housing, goods and services will likely speed the conversion of some natural areas to urban uses. The number of new families projected for the area is not so great as to require development of areas above and beyond that currently planned.

7.04 Location of the Oceanographic Office and an Oceanographic Research and Development Facility in close proximity to the other agencies' elements in residence and currently engaged in environmental research will foster greater information exchange with a likely result of more rapidly increasing our knowledge about the natural environment. A long term environmental benefit.

8.0 Irreversible and Irretrievable commitments of resources that would be involved in the proposed action should it be implemented.

8.01 A commitment of approximately \$17 million would be required to move personnel and equipment, renovate certain existing spaces and provide for construction of a new building adjacent to Building 1000 should the proposed action be implemented. Much of this original commitment will be "returned" in anticipated savings in out years by increased management efficiency and projected reductions in certain operating costs. Initial cost outlay should be recovered by savings in about ten years. Also committed, should the project be implemented as planned, are labor and materials utilized in renovation and construction.

8.02 Natural habitat loss will result from both expansion of Building 1000 (approximately 300,000 square feet) and from increased urbanization of the region surrounding NSTL to accommodate growth resulting from the proposed action.

8.03 Certain human resources may be lost to the Navy if productive, long term employees choose not to relocate and seek employment outside Navy.

8.04 Productivity will be reduced during the relocation phase and subsequent consolidation.

9.0 Considerations that Offset Adverse Environmental Effects

9.01 All of the adverse effects described in Chapter 5 could be avoided by exercising the "Do Nothing" option or constructing needed facilities at Suitland, Maryland. Neither of these two alternatives, however, satisfy Congressional or DOD requirements for decentralization of Defense Activities in the NCR. Relocation of the Naval Oceanographic Office to the Prince Georges Center, Hyattsville, Maryland would also prevent all projected adverse effects on NSTL and the surrounding communities. In addition, few, if any, current employees would need to move from their present homes. Lack of sufficient space to meet all of the Oceanographic Office's needs, much less accommodate the proposed Research and Development activity, precludes accomplishment of stated objectives, i.e. consolidation and collocation for increased managerial efficiency and reduced operating cost. Most of the impacts associated with the proposed action, such as interruption of family and community ties, increased housing demands, etc., simply shift to any new target area designated.

9.02 Essentially nothing can be done to reduce the impact on the natural environment at NSTL and surrounding environs. Impact from the proposed action at NSTL is insignificant in terms of habitat lost. Impact on the natural environment as a result of increased urbanization is unavoidable except as noted in paragraph 9.01. Car pooling and the use of promised bus service will be urged to both conserve gasoline and reduce the total quantity of vehicle emission.

9.03 Impact on current Navy employees cannot be totally avoided except as noted in paragraph 9.01. Once a decision is made regarding implementation of the proposed action, certain steps will be taken to ease the transition:

(1) Employees will be given sixty days after any affirmative decision by the Secretary of Defense regarding the proposed action before a decision on relocation is required.

(2) A house-hunting trip to the target area, or 30 days temporary quarters and subsistence will be afforded employees who accept transfer as soon as a final decision favoring relocation is reached, and a date for the transfer is established.

(3) Personnel with children will not be required to move during the school year, in so far as possible.

(4) A placement assistance unit comprised of Navy and Office of Civilian Manpower Management (OCMM) personnel will be established to advise all personnel of their legal and regulatory rights and benefits relative to relocation, transfer of function, retirement, separation and priority placement within the federal system.

9.04 Navy has a very strong affirmative action program regarding housing, general discrimination and employment opportunities for minorities. Directives require that the local Commander take an active role in relating with the community leaders to ensure that all Navy personnel are treated fairly.

9.05 Housing demand will be high as personnel commence looking for quarters. The possibility exists that supply will be inadequate in some locales. Phased relocation will reduce this impact to some extent by allowing time for additional residential construction, if needed or desired, once plans for relocation are firm.

9.06 Impact on school systems will also be lessened by a phased relocation thereby allowing greater time to obtain additional teachers and equipment if need be. This preparation cannot begin in earnest until personnel have begun selecting homes in communities in the target area. Impact aid funds for school districts with federal employees will also help ease the impact of increased school enrollment.

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