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16. Abstract This report is a non-technical summary of the update to the Louisiana Airport System Plan. The system plan identifies the location, service level, and role of the 71 airports included in the plan and the costs to develop individual airports and the airport system as a whole during the 0-5 year and 6-10 year planning periods. Major chapters discuss the plan structure, forecasts of aviation activity, system performance measures, implementation costs, financial implications, and programming and system implementation. The appendix provides information for each of the 71 airports included in the plan.			
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Louisiana Airport System Plan

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and the
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Disclaimer

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented. This report does not necessarily reflect the official views or policies of the Louisiana Department of Transportation, Division of Aviation, nor does it constitute a standard, specification, or regulation. This report is not intended for construction, bidding, or permit purposes.

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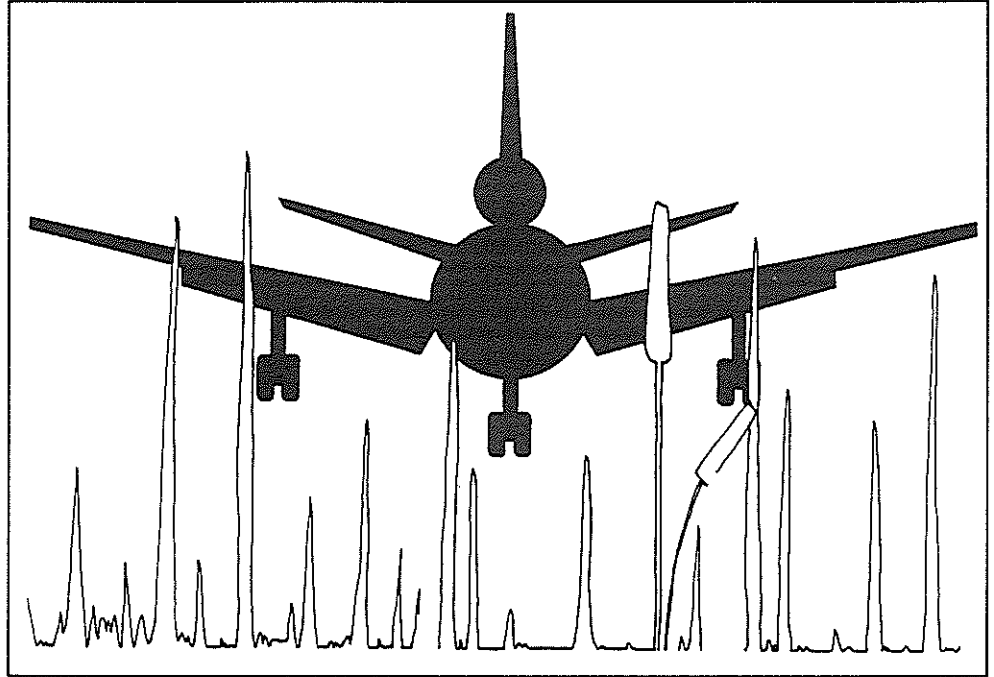
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I

Executive Summary



Today, aviation means business. Available, accessible air transportation is recognized by government and business leaders as important in stimulating the state's economy. This report documents a 20-year plan to improve Louisiana's airport system that will support the state's economic development objectives.

In Louisiana, 71 airports are part of the National Plan of Integrated Airport Systems (NPIAS) and/or the Louisiana Airport System Plan (LASP). The airports in the NPIAS and the LASP have been identified as essential to the nation's and state's air transportation system. The objective of both the NPIAS and the LASP plans is to direct federal and state resources to the airports that can best support the plan's goals of increasing system capacity; providing air access to population, agricultural, and natural resource centers; and encouraging economic development.

The Plan Structure

Of the 71 airports in the Louisiana Airport System Plan, seven are commercial service airports, six are reliever, and 58 are general aviation. (The LASP airports are listed alphabetically by associated city in the Appendix.) At the present time, two airports, Vicksburg-Tallulah and

Ruston, are under construction. These airports will replace older airports in the same vicinity. A new reliever airport in Ascension-St. James Parish was completed in March 1992. A new airport is being planned for the Port Sulphur-Plaquemines Parish area; the cost to construct this proposed airport is not included in the system plan implementation costs as discussed in this report. When this airport is completed, the LASP will consist of 72 airports.

Airports are classified according to the service they perform. Commercial service airports provide scheduled air passenger service. Reliever airports are located in large urban areas and provide additional capacity by attracting general aviation use from the urban area's commercial service airports. General aviation airports provide service to population centers and areas with agricultural value and mineral resources.

Aviation Activity Forecasts

Forecasting aviation demand is an essential part of the LASP. Anticipating where growth will occur and the demand for air service will keep Louisiana's airport system strong and poised to take advantage of a strengthening economy.

At the end of the 20-year planning period, 95 percent of Louisiana's population will be within a 60-minute drive of a commercial service airport. In 1991, more than 4.3 million passengers boarded air carriers in Louisiana. By 2010, that number will more than double to 9.6 million. Over the 20-year period, enplanements on commuter and small certificated aircraft are estimated to jump from more than 270,000 to almost 600,000.

Although general aviation represents more facilities and more aircraft than commercial service, it has not enjoyed the same striking growth. Deregulation of the airline industry, high interest rates, decline in the oil and gas industry, loss of tax incentives to aircraft ownership, and a proliferation of civil suits stemming from laws and rulings have slowed the general aviation industry dramatically.

The number of general aviation aircraft is expected to rise moderately, however, from 3,573 aircraft in 1991 to 4,270 in 2010. The number of licensed pilots is forecast to increase from 8,458 to 10,114. Total aviation hours flown per year should increase from 675,000 to more than 1 million. The number of annual general aviation operations will also increase from 2.7 million to 3.6 million.

System Performance Measures

Ascertaining how well Louisiana's system of airports is meeting, and will meet, the needs of the state can be determined by applying performance measures. Performance measures are expressed as

percentages of the population centers and economic centers (agricultural and mineral) which are served by different classes of airports in the system.

To determine the percentage of population living within a reasonable drive time of a commercial service airport, a radius of 50 miles, representing a 60-minute drive time, is drawn around the airport. During the 20-year planning period the percentage of Louisiana's population living within a reasonable drive of a commercial service airport will remain constant at about 95 percent.

For general aviation airports, a 25-mile radius indicating a 30-minute drive time is considered reasonable. General aviation transport airports serving populous areas and areas of moderate to high business jet activity should enjoy considerable growth during the 20-year planning period. Percentage of population served shows an increase from near 90 percent in 1990 to 97 percent in 2010. Agricultural activities served by transport airports will increase from 70 to 85 percent and mineral value from 74 to 83 percent.

General aviation utility airports serving smaller communities provide capacity in urban areas and provide access to the state's agricultural production. Population and agricultural and mineral value served by general utility airports should remain constant at 99 percent, 99 percent, and 87 percent, respectively, during the 20-year planning period.

System Costs and Financial Implications

The system role, associated development, and costs for each airport were developed and confirmed through a series of 15 public meetings conducted in 1991. The capital improvements included in the implementation costs are those for developing each airport to its specified role in the LASP. Development is divided into short-term (0-5 years), intermediate-term (6-10 years), and long-term (11-20 years).

The planning process attempts to identify an improvement program for each airport. Full implementation may not be possible due to financial constraints or due to changing conditions which make planned improvements undesirable at some future date.

NPIAS airports with eligible projects may receive funding from the FAA's Airport Improvement Program funds as well as state funds. The 20-year cost for developing the 71 airports is \$1 billion. For commercial airports, improvement costs are \$785 million; for reliever airports, \$36 million; and for general aviation airports, \$180 million.

The FAA's Airport and Airway Development Act of 1970 established the Aviation and Airways Trust Fund into which aviation user fees are paid. The Airport Improvement Program (AIP) uses Trust Fund monies to assist local sponsors with airport improvements. The limit on AIP appropriations and FAA program priorities determines where the available funding is allocated.

The largest percentage of AIP funds goes to commercial service airports. In 1992 these airports received about \$9 million from FAA entitlements. AIP funding is authorized through 1993. A re-authorization of the AIP funding at the current level will provide total annual funding of about \$30 million (entitlement plus discretionary funds).

Reliever airports are eligible for FAA Trust Fund set-aside allocations. Based on the 1992 allocation and previous AIP funding, and assuming re-authorization at the 1992 level, annual funding for these reliever airports should be about \$3.5 million annually.

Federal funding for general aviation airports is limited. AIP grants are made from the state's apportionment of the Trust Fund allocation set-aside. Louisiana expects to receive about \$3.4 million annually from the state apportionment.

State funding is provided by the aviation portion of the Louisiana Transportation Trust Fund which generates funds through sales tax on jet fuel and aviation gas. This aviation portion of the fund is administered by the Division of Aviation.

Because local governments, cities, and parishes are the owners and sponsors of community airports, LASP implementation is their responsibility. Communities willing to support the role of their NPIAS airport should receive assistance from the federal program; for airports ineligible for federal funding, state funding may be available.

System Implementation

The LASP Five-Year Capital Improvement Program is a detailed listing of potential projects based on funding from the FAA's Airport Improvement Program and the Transportation Trust Fund. The CIP is compiled from projects listed on airport development worksheets.

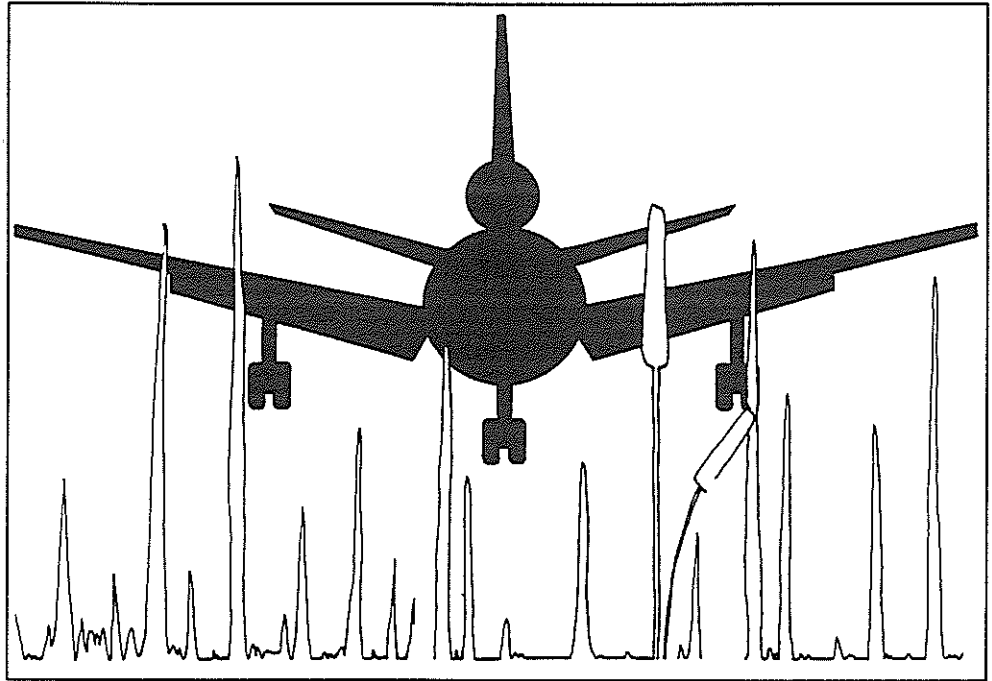
The CIP sets the schedule for when airport improvements should take place; it represents projects that are of the highest statewide priority. Inclusion in the CIP is an indication to the sponsor that the project is under consideration for future funding.

Whether a project is implemented depends on airport sponsor action, FAA and DOTD decisions, funding availability, priorities, and actual project costs. Implementation begins by submitting an application or resolution to the Division of Aviation by November 1 of the current year to be considered for inclusion in the next fiscal year's capital outlay program.

The state's contribution can be 100 percent for state projects. Financial assistance for federal projects is 90 percent from FAA and 10 percent from the state.

II

Plan Structure



The Louisiana Airport System Plan identifies a system of airports that will meet the goals and objectives identified for the state airport system. The purpose of state airport system planning, in its broadest sense, is to determine the location, service level, role criteria, and timing of airport development needed in the state to establish a viable, balanced, integrated system of airports. The LASP is designed to identify those airports that will perform an essential role in the economic and social development of Louisiana. From among the more than 425 landing sites, 71 established airports have been identified as those that best meet this requirement.

Airport system planning is a continuous process which identifies the cost and the level of federal, state, and local capital investment required to maintain and develop system airports. It provides guidance for the expenditure of funds under the Federal Aviation Administration (FAA) Airport Improvement Program (AIP) and the Louisiana Department of Transportation and Development (DOTD) Facilities Development Program. The planning process also supports the development of a state aviation policy.

The first LASP was prepared in July 1976. In 1981 and 1991 the LASP was revised. A Louisiana State Heliport System Plan was prepared and published in 1984. Additionally, a Southeast Louisiana Airport System Plan was prepared by the Regional Planning Commission and published

in 1990. Information from the latter plan was used to prepare this revision to the LASP. From 1984 to 1990, due to state funding limitations, the airport system planning process was largely discontinued.

A duplication of airport facilities in the LASP is minimized in order to concentrate public financial resources for the 71 identified airports. The capital improvement needs of the LASP airports have been identified as part of the planning process in order to provide a guide for programming federal and state financial assistance for airport development.

This summary report documents the update process that took place in 1991 when 15 regional meetings were held across Louisiana. Local airport sponsors and community leaders met with representatives from the Louisiana Department of Transportation and Development and the Louisiana Transportation Research Center to discuss the needs of each LASP airport. As a result of those meetings, development worksheets for each LASP airport were compiled indicating the improvements needed to realize its system role and the scheduling of those improvements over the next 20 years.

General aviation airports with the roles of seaplane base, heliport, or STOLport (Short TakeOff and Landing) were not evaluated as part of this update of the LASP.



System Goals, Objectives, Performance Measures

Airport system "goals" state the system's desired accomplishments, but whether actual achievement of the goals is met is difficult to measure. An "objective" can be measured and monitored by applying "performance measures" to gauge the extent to which the objectives have been achieved in a specified airport system. The following goals and objectives can be met by building new or by developing existing airports.

Goals of the LASP are to:

- Provide a system that is safe for all aviation users;
- Provide adequate access by air to the population and economic activity centers of the state;
- Provide adequate access by air to the state's growing tourism, aviation, and aeronautical industries;
- Maximize the opportunity for growth in international trade and travel, particularly with Central and South America;
- Maximize the economic benefits and return on investment to the state from development of the airport system;
- Minimize adverse impacts on the environment; and
- Integrate the airport system effectively with other transportation systems and, thereby, provide an efficient multimodal transportation system.

Objectives of the LASP are to:

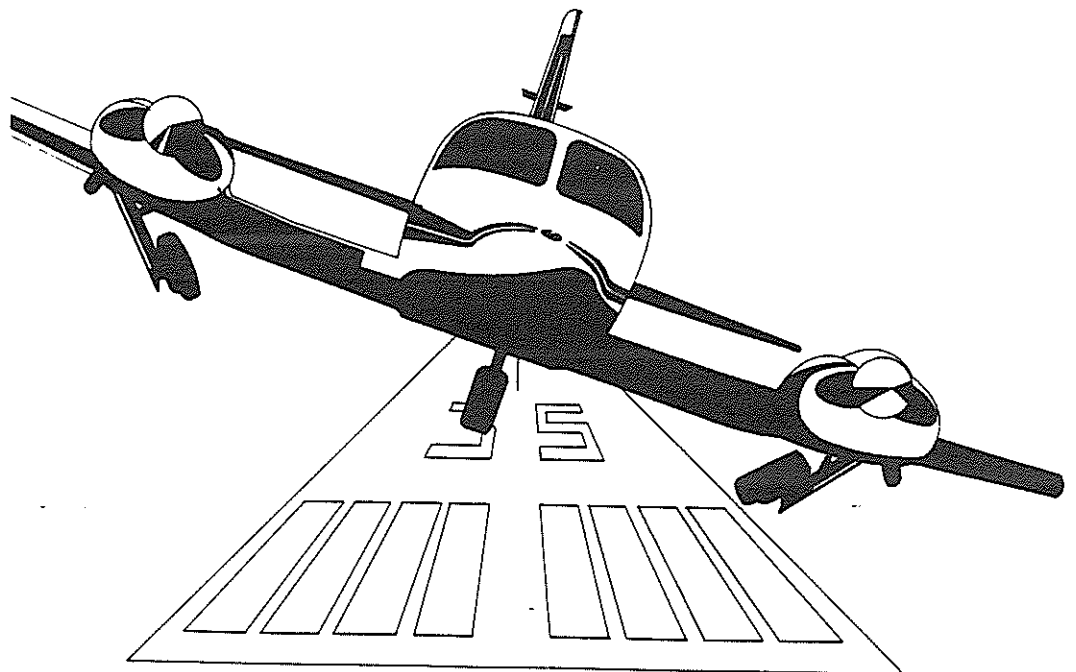
- Provide airports capable of supporting commercial service within a 60-minute drive of significant population centers;
- Provide airports capable of supporting business jet aircraft and single- and twin-engine piston-powered aircraft within a 30-minute drive of significant population and mineral resource centers and the economic activity generated by urban development;
- Provide airports capable of supporting single- and twin-engine piston-powered aircraft within a 30-minute drive of significant agricultural resource centers;
- Provide adequate airport capacity to meet forecast aviation demand;
- Meet federal and state safety standards; and
- Provide an airport system developed to applicable federal and state design standards.

Performance measures indicate how well the LASP meets its goals and objectives. For example, one goal is to provide adequate air access to population and economic activity centers. Performance measures can be developed to gauge access improvements by comparing access provided by the existing aviation system to access provided in 2010 by implementing the LASP.

Performance measures are expressed as percentages of the given demographic or economic centers that are being served by a particular class of airports. They include the percentage of the state's population served by commercial service airports, the percentage served by transport airports that are capable of accommodating business jet aircraft, and the percentage served by all airports. Other access measures indicate the percentage of the state's employment, agricultural and mineral production, and total personal income served by these classes of airports.

Relationship of LASP to NPIAS

The LASP serves as an important component of the National Plan of Integrated Airport Systems (NPIAS). As such, it includes airport locations that are considered to be important to state air transportation objectives as well as those that are of sufficient national interest to be incorporated in the NPIAS. The state planning process also assists in identifying airports that meet national interest criteria but which might not be identified by the FAA alone. In addition, the airport development included in the LASP is not limited to those items of development eligible only for federal financial aid but for state aid as well. To be included in the NPIAS and, therefore, eligible for federal funding, an airport must first be included in the LASP.



Service Levels

The service level identified for an airport is based on its contribution to the goals and objectives identified for the airport system. The service levels and role definitions used for the LASP are identical to those used by the FAA for the NPIAS (See Table 1).

Primary Commercial Service

A primary commercial service airport is either an existing or planned public-use airport which is forecast to receive scheduled passenger service and to enplane annually 10,000 or more passengers within 5 years.

Non-Primary Commercial Service

A non-primary commercial service airport is either an existing or planned public-use airport forecast to receive scheduled passenger service and to enplane annually at least 2,500 but less than 10,000 passengers within 5 years.

Table 1
Airport Service Levels

Service Level	11-20 Year Role	Number of Airports in LASP	Function	Airport Design Standards
Primary Commercial	Transport	7	Supports scheduled passenger service by large and medium transport aircraft; enplanes at least 10,000 passengers annually.	Transport; precision runway.
Non-Primary Commercial	Transport	-0-	Supports scheduled service by small transport aircraft; enplanes fewer than 10,000, but more than 2,500 passengers annually.	Transport; precision runway.
Reliever	Transport	6	Relieves congestion at metropolitan commercial service airports by providing alternative facilities for general aviation use.	Transport or general utility; non-precision runway.
General Aviation	Transport	27	Provides community access by business jets.	Transport; non-precision runway.
General Aviation	General Utility	14	Provides community access by single and light twin-engine aircraft and a limited number of business jets.	General utility; non-precision runway.
General Aviation	Basic Utility	17	Provides air access for communities less than 30 minutes from a higher level system airport (commercial, reliever) and/or supports essential but low level activity.	Basic utility; visual runway.

Reliever

A reliever airport relieves congestion in a Metropolitan Statistical Area (MSA) as defined by the U.S. Office of Management and Budget by providing general aviation users with alternative airport facilities. A reliever airport may have a role of transport or general utility. A reliever airport must meet both criteria 1 and 2 below unless specifically designated by the FAA as a reliever airport based on special justification.

1. The reliever airport must provide substantial capacity or instrument training relief as evidenced by:
 - A current or forecast activity level of at least 50 based aircraft or 25,000 annual itinerant or 35,000 annual local operations, or
 - The installation or proposed installation of a precision instrument landing system (ILS or MLS) for instrument training activity, and

2. The relieved airport:
 - Must be a commercial service airport serving an MSA with a population of 250,000 or having at least 250,000 enplaned passengers annually, and
 - Must operate at 60 percent of its capacity or at such a level before being relieved by one or more reliever airports or is subject to restrictions that limit activity that would otherwise reach 60 percent of capacity.

General Aviation

General aviation airports are classified according to the function they perform in providing access to the state's population and economic activity centers. An objective of the LASP is to provide air access within a reasonable surface access time to significant population and/or mineral resource centers for business jet and piston-powered aircraft and to agricultural resource centers by piston-powered aircraft. For system planning purposes, reasonable surface access time is determined by a 25-mile radius indicating an average ground travel time of about 30 minutes.

The seven classes of general aviation aircraft include piston single-engine, piston multi-engine, turboprop, turbojet, piston rotocraft, turbine rotocraft, and other.

Role Criteria

The airport's role influences its design and the type of aircraft it can accommodate. In the case of commercial service airports, the role influences the routes and markets the airport serves nonstop. There are three airport roles associated with commercial service airports: long haul (over 1,500 miles stage length), medium haul (500 to 1,500 miles stage length), and short haul (less than 500 miles stage length). There are three airport roles associated with reliever and/or general aviation airports: transport, general utility, and basic utility.

General aviation airports with the roles of seaplane base, heliport, or STOL port (Short Take Off and Landing) were not evaluated as part of this update of the LASP. The LASP identifies the role for each airport included in the system for the short-, medium-, and long-range planning periods.

Transport -- Reliever or general aviation airports

Transport airports provide access to turboprop and turbojet business aircraft and most single- and twin-engine piston-powered aircraft. These airports are located where there is sufficient population or economic activity to support a moderate to high level of business jet activity and/or to provide capacity in metropolitan areas. Different role criteria are applied depending on whether the airport is or is not located within an MSA.

- MSA Transport Airport: An existing or planned airport must meet criteria (1), (2), and (3) to be classified as an MSA transport airport:
 - (1) Be located in an MSA; and
 - (2) Have, or be forecast to have within 5 years, 500 or more annual itinerant operations by business jet aircraft; and
 - (3) Have one or more of the commercial service airports serving the MSA operating at 60 percent of its capacity or operating at such a level before construction of the transport airport.

Note: Designation of multiple transport airports in the New Orleans MSA is based on the 1990 Southeast Louisiana Airport System Plan prepared by the Regional Planning Commission.

- Non-MSA Transport Airport: An existing or planned airport must meet criteria (1) and (2) and one of the criteria (3) through (5) to be classified as a non-MSA transport airport:

-
- (1) Serve a community located beyond a 25-mile radius from the nearest commercial service or reliever airport having or planned to have business jet capability; and
 - (2) Be located beyond a 25-mile radius of the nearest previously designated transport airport; and
 - (3) Serve an area of significant population or a mineral resource center; or
 - (4) Have, or be forecast to have within 5 years, 500 or more annual itinerant operations by business jet aircraft; or
 - (5) Have two jet aircraft that are expected to be permanently based at the airport for the next 5 years.

General Utility -- General aviation airports

General utility airports provide primary access to smaller communities, capacity in metropolitan areas, and access to the state's agricultural production generally by single- and twin-engine piston-powered aircraft.

An existing or planned airport must:

- Provide capacity within the service area of an existing commercial, reliever, or general aviation transport airport that is forecast to be at 60 percent of its annual capacity; or
- Serve a community located beyond a 25-mile radius from the nearest commercial service, reliever, or general aviation transport airport.
- Serve an area of significant agricultural production value; or
- Have, or be forecast to have within 5 years, at least 10 based aircraft; or
- Have, or be forecast to have within 5 years, 6,000 annual itinerant operations.

Note: Designation of multiple general utility airports in the New Orleans MSA is based on the 1990 Southeast Louisiana Airport System Plan prepared by the Regional Planning Commission.

Basic Utility -- General aviation airports

Existing publicly-owned airports that have not been classified as commercial service, reliever, general aviation transport, or general aviation general utility airports are included in the LASP as general aviation basic utility airports if they are (1) publicly owned and (2) capable of being economically developed to basic utility design standards. These airports are included in this update of the LASP

the future. Many basic utility airports have received state and/or federal grants and, therefore, are subject to grant conditions providing that they be maintained for at least 20 years from the date of the grant.

Entry Criteria

The entry criteria used for the LASP are strongly influenced by NPIAS principles, service level, and role criteria. The LASP entry criteria extend these principles to recognize airport locations that are of state but not federal interest. Airports were brought into the LASP based on the criteria described below:

Primary Commercial Service Airports: All primary commercial service airports are included in the LASP.

Non-Primary Commercial Service Airports: All non-primary commercial service airports are included in the LASP.

Reliever Airports: All reliever airports are included in the LASP.

General Aviation Airports:

- Existing Publicly-Owned Airports - As a matter of policy, all publicly-owned airports that have a paved runway or are located on a site that meets or could be economically developed to meet the minimum airport development standards (See Table 2) are included in the LASP.
- Existing Privately-Owned Airports - To be included in the plan, privately-owned general aviation airports must meet the following three criteria:
 - The airport serves a community located more than a 25-mile radius from the nearest existing or planned publicly-owned airport, or the airport provides needed capacity within an MSA; and
 - The airport could be economically developed to the standards applicable to the role identified for the airport; and
 - The airport site is suitable for public acquisition, and acquisition would be preferable to replacing the existing public-use airport with a new airport on a different site.
- Proposed New Airports - Proposed new airports are brought into the LASP based on the system goals and objectives and on service levels and role criteria.

LASP Airport Development Standards

An airport's role or design standard in the LASP is based on the type of service it is expected to provide and, consequently, the types of aircraft to be accommodated (See Table 2). Within each role or design standard, the LASP identifies the types of aircraft that are expected to use the facility. In general, commercial service transport airports are designed to serve the larger jet transport aircraft used for scheduled passenger service while general aviation transport airports are designed to handle business jets and turboprop aircraft. General and basic utility airports are designed to accommodate light turboprop aircraft and light twin-engine piston aircraft, respectively.

Development needed at a particular airport is identified by comparing the current design of the airport with fundamental airport development and the role or design standard desired for that airport for each time period. The LASP airport development standards provide guidance for making this comparison. The standards provide guidance for fundamental airport development (Table 3), activity levels for capacity development (Table 4), the timing of upgrade projects, the relationship between the airport design standard and the operational and physical characteristics of the aircraft intended to operate at the airport, and the minimum airport dimensional standards associated with each design standard (Table 2).

The standards and recommendations contained in FAA advisory circulars are recommended by FAA for designing civil airports. For airport projects receiving federal grant-in-aid assistance, the use of these standards is mandatory. At certificated airports, the standards may be used to satisfy specific requirements of FAR Part 139, "Certification and Operations: Land Airports Serving Certain Air Carriers," Subpart D. The DOTD generally will follow these standards and recommendations for all projects in which it participates.

**Table 2
LASP Minimum Design Standards**

Service Level					
Primary		Non-Primary	General Aviation		
Airport Design					
Transport		Transport	Transport	General Utility	Basic Utility
Design Aircraft					
Heavy transport		Light transport, business jet	Business jet	Light twin-turboprop	Light twin-piston
Minimum Land Requirements					
Landing area	As required by hub size	136 acres	136 acres	51 or 36 acres	36 acres
Approach area		125 acres	125 acres	30 or 21 acres	21 acres
Building area		24 acres	24 acres	24 or 12 acres	12 acres
Runways					
Length 1/	As required by critical aircraft	5,000 ft.	5,000 ft.	3,800 or 3,200 ft.	3,200 ft.
Width		100 ft.	75 ft.	60 ft.	60 ft.
Strength 2/		30,000 lb.	30,000 lb.	12,500 lb.	12,500 lb.
Lighting 3/	HIRL	MIRL	MIRL	MIRL	LIRL
Taxiway Type					
Full parallel		Full parallel	Full parallel	Full or partial parallel	Stub with turnarounds
Approach					
Type	Precision	Precision	Nonprecision	Nonprecision	Visual
Visibility minimums	200 ft.- .5 mile	200 ft.- .5 mile	600 ft.-1 mi. straight-in	No minimum standard	Not applicable
Services					
Full range		Full range	Terminal, restrooms, telephone, avgas, Jet A, attended 12 hours	Terminal, restrooms, telephone, avgas	Telephone

Note: These are approximate standards; see appropriate Advisory Circular (AC) for specifics. There are no design standards, as such, for reliever airports. Reliever airports can be designed as either transport or general utility airports depending on the LASP role.

1. Runway length is for sea level and would increase at higher altitudes.
2. Single-wheel landing gear.
3. High (H), Medium (M) and Low (L) Intensity Runway Lighting.

Table 3
Fundamental Airport Development

Development Items	Commercial Service	Other
Land - Airfield Development, Building Area, Runway Protection Zones	Y	Y
Single Runway - Lighted	Y1/	Y1/
Crosswind Runway - Lighted	Y1/,2/	Y1/,2/
Full Parallel Taxiway - Lighted	Y1/	Y1/,3/
Stub/Connecting Taxiways - Lighted/Reflectors	Y1/	Y1/
PAPI/PLASI	Y4/	Y4/
REILS	Y5/	Y6/
Runway Marking	Y	Y
Apron - Lighted	Y	Y
Runway Grooving	Y	N
ILS or MLS with Approach Lighting System	Y7/	Y7/
Rotating Beacon	Y	Y
Lighted Wind Cone; Segmented Circle	Y8/	Y8/
Obstruction Lighting and Marking	Y	Y
Access Roads and Service Roads	Y	Y
Auto Parking	Y	Y9/
Fencing	Y	Y10/

1. Low Intensity Runway Lights (LIRL) - For use on runways at visual flight rule (VFR) airports having no planned instrument approach procedures.
 Medium Intensity Runway Lights (MIRL) - For use on runways having an existing or planned nonprecision instrument flight rule (IFR) procedure for either circling or straight-in approaches.
 High Intensity Runway Lights (HIRL) - For use on runways having an existing or planned precision IFR approach procedure, for runways utilizing runway visual range (RVR), and for runways with straight-in approaches that are regularly used by scheduled airlines.
 Low Intensity Taxiway Lights (LITL) - For use on taxiways and aprons where LIRL are used on the runways.
 Medium Intensity Taxiway Lights (MITL) - For use on taxiways and aprons on airports using either MIRL or HIRL on the runways.
 Taxiway centerline or edge reflector lighting may be used at transport

-
- and utility airports with less than 100 based aircraft.
 2. Provide if the wind coverage on the main runway is less than 95 percent. The allowable crosswind component is 10.5 knots for runways less than 75 feet in width, 13 knots for runways of 75 feet up to but not including 100 feet in width, and 20 knots for runways of 150 feet or more in width. If one crosswind runway exists and is being utilized, it is eligible for programming regardless of wind coverage. For airports with a primary runway and more than one non-parallel runway, only one non-parallel runway will be eligible for programming. One crosswind runway is eligible for lighting if it is determined that wind coverage between sunset and sunrise is less than 95 percent.
 3. Construction of a partial parallel taxiway can be deferred until activity reaches 10,000 annual operations or 14 based aircraft for utility airports. Construction of a full parallel taxiway can be deferred until activity reaches 20,000 annual operations or 28 based aircraft for utility airports.
 4. Precision Approach Path Indicator (PAPI)/Pulsed Light Approach Slope Indicator (PLASI) - For Basic Utility--Stage II and General Utility--Stage II should be installed on both ends of the primary runway:
Type L-881 for utility runways used by small, non-jet general aviation aircraft.
Type L-880 for runways used by jet aircraft.
 5. Runway End Identifier Lights (REIL) for each runway that does not have an existing or planned approach lighting system.
 6. REIL where there is a visual deficiency and the runway does not have an existing or planned approach lighting system.
 7. An Instrument Landing System (ILS) or Microwave Landing System (MLS) if the runway meets or is forecast to meet the criteria in FAA Order 7031.2B, "Airway Planning Standard Number One - Terminal Air Navigation Facilities and Air Traffic Control Services" (APS#1) within 5 years, and a request for aid is expected for the installation of an ILS or MLS under the AIP.
 8. Segmented circles are optional for all airports with standard patterns or with 24-hour control towers. A lighted primary wind cone is required at all lighted airports except those with 24-hour control towers.
 9. Minimum auto parking - five spaces, with an additional five spaces for every 20 based aircraft.
 10. Fencing - when necessary to separate possible incompatible land uses from the airport such as roadways, livestock use, and urban development.

**Table 4
Activity Levels for Capacity Development**

Capacity Development Item	Activity Level	Remarks
Runway (Additional)	60% annual capacity *	1. Parallel preferred 2. Same length and strength as primary if serving same aircraft.
Short Runway	75,000 total operations including 30,000 or more transport type aircraft	1. Small aircraft only 2. Not necessarily parallel
Extension of Short Runway	60% annual capacity	
Additional Exit Taxiways	60% x hourly capacity	
Holding Aprons/By-Pass Taxiway	75,000 total operations, 20,000 itinerant operation or 30 peak hour operations	1. Need dependent upon mix 2. Consider effect on NAVAIDS 3. Limit holding apron to four positions
Terminal Aprons, Aircraft Loading Aprons, Parking Aprons	60% x hourly capacity	
Replacement/Supplemental Airports	Not later than 60% x annual capacity	Degree of timing depends upon forecasts, type of airport, location (metropolitan area), etc.
Additional Instrumentation	Installation recommended five years before airport is forecast to reach activity levels specified in FAA Order 7031.2B (APS #1)	

*See FAA AC 150/5060-5, "Airport Capacity and Delay"

Recommended Runway Lengths

The airport role is determined by the type of aircraft using or forecast to use the facility. In accordance with FAA AC 150/5300-13 "Airport Design" and AC 150/5325-4A "Runway Length Requirements," runway lengths recommended for design depend on a number of factors including the approach speed, wingspan, and maximum certificated takeoff weight of the aircraft forecast to use the facility; airport elevation; mean daily maximum temperature of the hottest month; maximum difference in runway elevation; whether the airport is for small or large aircraft; if for small aircraft, whether the airport is designed for aircraft with 10 or more passenger seats; if for large aircraft, the percentage of the fleet and the percentage useful load.

The following definitions adapted from FAA AC 150/5300-13 are used in this section.

Airport Reference Code (ARC) - Coding system used to relate airport design criteria to the operational and physical characteristics of the aircraft intended to operate at the airport. The code has two components relating to the airport design aircraft. The first component, depicted by a letter, is the Aircraft Approach Category

and relates to aircraft approach speed (operational characteristic). The second component, depicted by a Roman numeral, is the Airplane Design Group and relates to aircraft wingspan (physical characteristic). Generally, aircraft approach speed applies to runways and related facilities. Aircraft wingspan primarily relates to separation criteria for taxiways and taxilanes.

Aircraft Approach Category - A grouping of aircraft based on 1.3 times their stall speed in their landing configuration at their maximum certificated landing weight. The categories are as follows:

- Category A: Speed less than 91 knots.
- Category B: Speed 91 knots or more but less than 121 knots.
- Category C: Speed 121 knots or more but less than 141 knots.
- Category D: Speed 141 knots or more but less than 166 knots.
- Category E: Speed 166 knots or more.

Airplane Design Group (ADG) - A grouping of aircraft based on wingspan. The groups are as follows:

- Group I: Up to but not including 49 feet.
- Group II: 49 feet up to but not including 79 feet.
- Group III: 79 feet up to but not including 118 feet.
- Group IV: 118 feet up to but not including 171 feet.
- Group V: 171 feet up to but not including 214 feet.
- Group VI: 214 feet up to but not including 262 feet.

Large Aircraft - An aircraft of more than 12,500 pounds maximum certificated takeoff weight.

Small Aircraft - An aircraft of 12,500 or less maximum certificated takeoff weight.

Transport Airport - An airport designed, constructed, and maintained to serve aircraft in Aircraft Approach Categories C and D.

Utility Airport - An airport designed, constructed, and maintained to serve aircraft in Aircraft Approach Categories A and B. A utility airport can have the following kinds of activity:

- General Utility - Stage I (less than 10 passenger seats): This type of airport serves 100 percent of the small single-engine and twin-engine aircraft fleet in Aircraft Approach Categories

A and B. Precision approach operations are not usually anticipated. This airport is designed for aircraft in Airport Reference Code B-II.

- General Utility - Stage I (10 or more passenger seats): This type of airport serves 100 percent of the small single-engine and twin-engine aircraft fleet in Aircraft Approach Categories A and B. Precision approach operations are not usually anticipated. This airport is designed for aircraft in Airport Reference Code B-II.

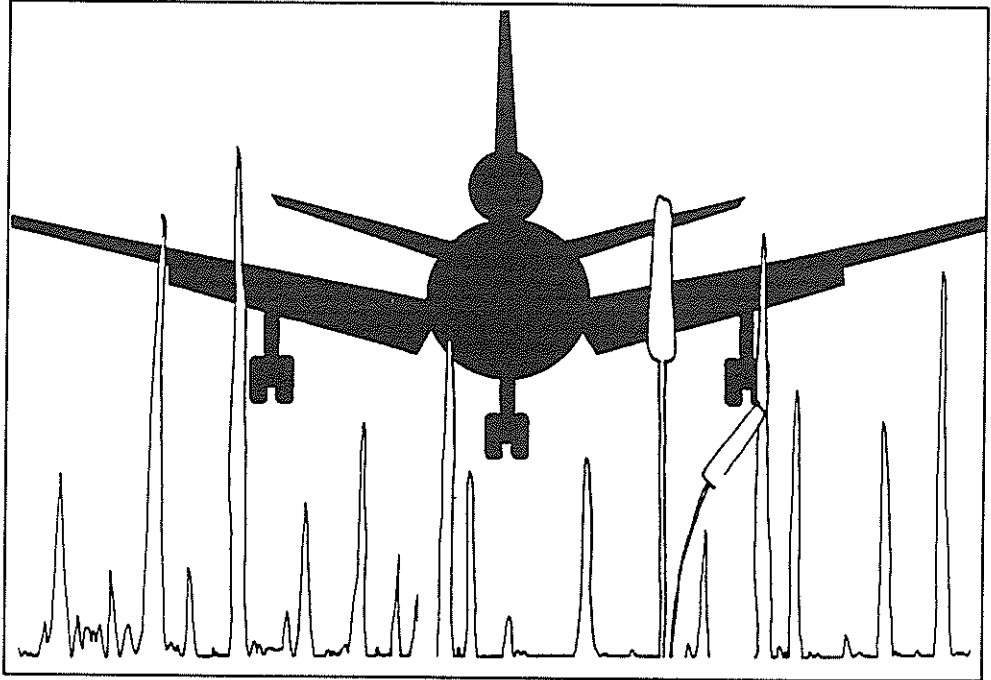
- General Utility - Stage II: This type of airport serves large aircraft in Aircraft Approach Categories A and B and may have the capability for precision approach operations. This airport is normally designed for aircraft in Airport Reference Code B-III.

- Basic Utility - Stage I: This type of airport serves 75 percent of the small single-engine and twin-engine aircraft fleet in Aircraft Approach Categories A and B used for personal and business purposes. Precision approach operations are not usually anticipated. This airport is designed for small aircraft in Airport Reference Code B-I.

- Basic Utility - Stage II: This type of airport serves 95 percent of the small single-engine and twin-engine aircraft fleet in Aircraft Approach Categories A and B. This includes all the aircraft served by a Basic Utility—Stage I airport, plus some small business and air-taxi twin-engine aircraft. Precision approach operations are not usually anticipated. This airport is also designed for small aircraft in Airport Reference Code B-I.

III

Forecasts of Aviation Activity



Forecasts of aviation activity are an essential part of the Louisiana Airport System Plan (LASP). Planning for changes in aviation demand is a primary objective of the LASP, because the amount of activity generated by future aviation users will determine the demand for the airport facilities that make up the state system.

Commercial Service Activity

There are seven commercial service airports in the LASP: Alexandria-Esler Regional, Baton Rouge Metropolitan, Lafayette Regional, Lake Charles Regional, Monroe Regional, New Orleans International, and Shreveport Regional. These airports are classified as primary commercial service airports because they enplane at least 10,000 passengers annually by scheduled carriers.

Deregulation of the airline industry and growth in the national economy, which helped keep fares unusually low and stimulated demand, contributed to growth in commercial activity. Commercial service activity is represented by passenger enplanements. Nationwide the number of domestic enplanements by large, scheduled airlines increased at an annual average rate of 6.2 percent from 1979 to 1989 (the most recent year for which data are available). During the same period, enplanements by commuter/regional airlines increased steadily at an

annual rate of 3.7 percent. The FAA forecasts a continued 4 percent annual growth in commercial service enplanements for large airlines and 6.5 percent for commuter/regional carriers through 2002.

Commercial service enplanements result in air carrier operations. Between 1991 and 2002 the FAA forecasts operations to increase 2.4 percent annually for large carriers and 3.2 percent annually for commuters and air taxi. The majority of these operations will take place at the large, medium, and small commercial service hub airports, with the medium and small hubs having larger growth rates than the large hubs.

During the decade of the 1980s, questions of airport capacity were raised; and the current system of airports nationwide was carefully examined. The ability of the system to accommodate the growth in commercial aviation will depend on additional system capacity in terms of runways, new airports, and improved management of the airways.

The FAA forecasts enplanements for large and commuter/small certificated carriers. The last year for which the FAA made a forecast was 2002. Thus, the LASP forecast linearly extrapolated enplanement figures from the FAA's latest estimates to develop estimates for the years 2005 and 2010. Table 5 shows the forecast enplanements by carrier type from 1991 through 2010. As can be seen from Table 5, total passenger enplanements at Louisiana's seven commercial service airports are forecast to more than double by 2010.

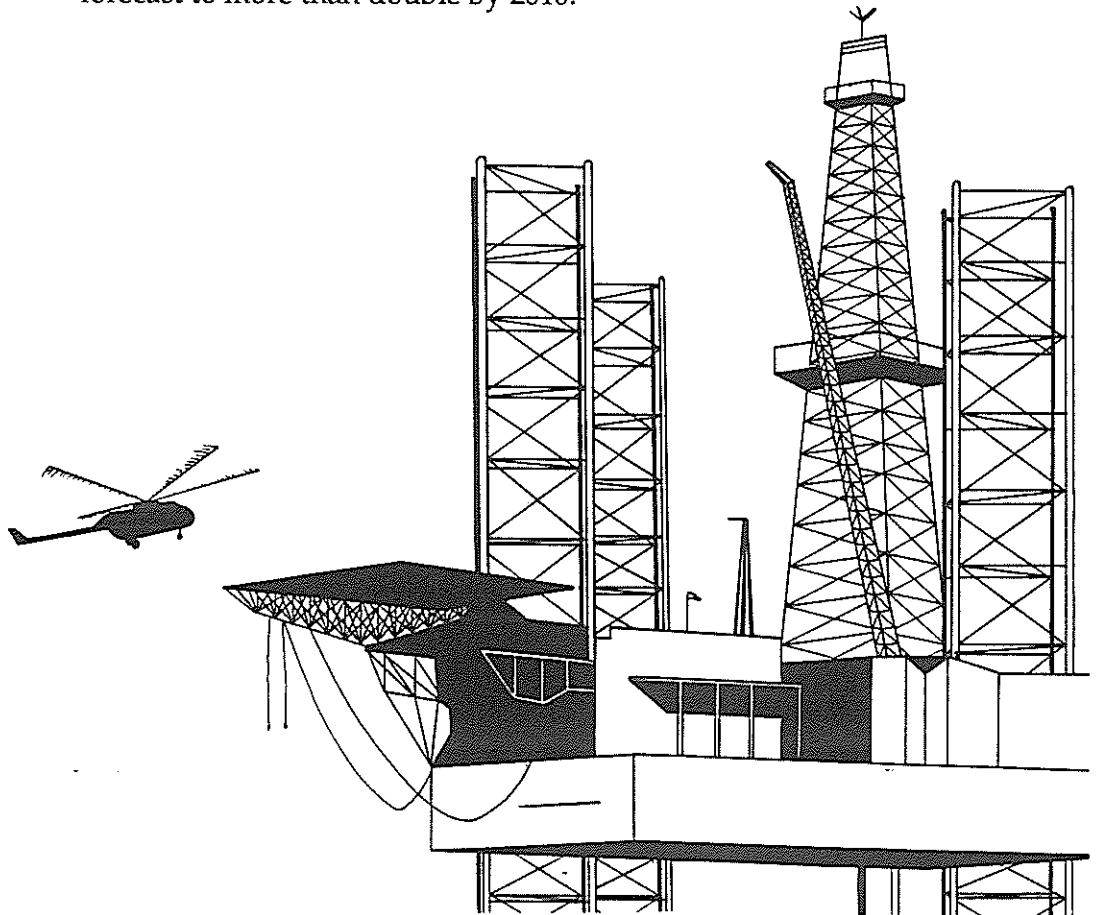


Table 5
Louisiana Enplanements, 1991-2010

Year	Certificated Route Air Carrier	Commuter and Small Certificated Air Carrier	Air Taxi/ Commercial Operator	Foreign Flag Carrier	Total
1991	4,361,281	271,909	46,702	27,022	4,706,914
1992	4,553,360	283,884	48,759	28,213	4,914,216
1993	4,784,281	298,281	51,232	29,643	5,163,437
1994	5,000,680	311,773	53,549	30,984	5,396,986
1995	5,274,322	328,834	56,479	32,680	5,692,314
1996	5,556,015	346,396	59,496	34,425	5,996,331
1997	5,824,097	363,110	62,366	36,086	6,285,659
1998	6,083,603	379,289	65,145	37,694	6,565,731
1999	6,343,737	395,508	67,931	39,306	6,846,481
2000	6,592,020	410,987	70,589	40,844	7,144,441
2005	8,078,968	503,692	86,512	50,057	8,719,230
2010	9,587,324	597,733	102,664	59,403	10,347,124

Notes:

1. Source: LASP Aviation Activity Forecasts
2. In some instances the sum may not equal the total due to rounding.

General Aviation Activity

General aviation airports represent the majority of the facilities included in the LASP. But, the unprecedented growth in commercial aviation has not been reflected in general aviation activity. Many facets of general aviation in the U.S. have declined steadily throughout the 1980s. Contributing factors to this decline were deregulation of the airline industry, high interest rates, loss of tax incentives for aircraft ownership, lack of new technology, national economic stagnation, and the decline in the oil and gas industry. Additionally, laws and rulings which have increased the civil liability awards for domestic aircraft suits virtually brought general aviation aircraft construction to a halt and, to some extent, moved the manufacturing industry overseas. These, along with increased aviation fuel prices, have served to further adversely affect an already depressed industry.

The LASP forecast of general aviation activity has been made using the topdown methodology. That is, a share of the activity forecast by the FAA has been allocated to Louisiana based on Louisiana's historical share of the activity and an estimate of what the state's share will be in the future.

The forecast of U.S. active general aviation aircraft is for seven classes of aircraft: piston single-engine, piston multi-engine, turboprop, turbojet, piston rotocraft, turbine rotocraft, and other. For each aircraft class, Louisiana's share is expected to remain constant. The share of turbine rotocraft has historically been high due to the use of helicopters in the oil and gas industry. The single engine piston-powered aircraft will continue as the dominant aircraft class during the forecast period. Notice that the number of single-engine piston-powered aircraft is forecast to decline while the number of turboprop and turbojet aircraft is forecast to increase. Table 6 shows the forecast general aviation activity for Louisiana by aircraft class from 1991 to 2010.

The annual hours flown by general aviation aircraft in Louisiana have been estimated based on the average number of hours flown by all U.S. aircraft of the same type and the number of each type of aircraft forecast

Table 6
Louisiana Active Aircraft, 1991-2010

Year	Single-Engine	Multi-Engine	Turbo-prop	Turbo-jet	Rotor (Piston)	Rotor (Turbine)	Other	Total
1991	2,582	362	107	34	43	409	37	3,573
1992	2,612	360	108	35	43	462	39	3,659
1993	2,612	358	110	37	42	479	40	3,678
1994	2,601	358	114	39	40	514	42	3,708
1995	2,594	360	120	41	40	540	43	3,737
1996	2,586	362	125	43	40	575	45	3,775
1997	2,579	363	129	45	40	618	45	3,819
1998	2,574	365	133	46	38	636	46	3,838
1999	2,571	366	137	47	37	671	47	3,875
2000	2,567	368	140	49	37	706	48	3,913
2005	2,544	389	155	57	37	854	56	4,091
2010	2,522	397	165	64	33	1,028	62	4,270

Source: LASP Aviation Activity Forecasts

to be active in Louisiana. In other words, it is assumed that Louisiana aircraft will fly the same number of hours as flown on average by all active aircraft of the same type. Table 7 forecasts the number of general aviation hours per aircraft class.

Table 7
Louisiana General Aviation Hours Flown

Year	Single-Engine	Multi-Engine	Turbo-prop	Turbo-jet	Rotor (Piston)	Rotor (Turbine)	Other	Total
1991	336,003	70,262	56,742	13,021	10,118	186,717	2,313	675,176
1992	326,603	70,468	57,176	13,571	10,424	216,857	2,349	697,450
1993	328,048	70,376	58,986	14,510	10,500	239,500	2,326	724,245
1994	329,377	70,678	60,257	15,167	11,613	238,643	2,360	728,094
1995	329,407	72,618	64,225	15,825	12,000	256,721	2,804	753,600
1996	330,748	72,709	67,708	16,483	12,000	282,937	3,789	786,375
1997	330,778	74,145	70,520	17,419	12,000	309,000	3,673	817,535
1998	332,133	74,237	73,500	17,969	9,172	318,000	4,646	829,658
1999	333,562	74,127	76,506	18,515	9,250	309,692	4,653	826,306
2000	335,051	75,765	78,974	19,456	9,250	318,561	4,706	841,763
2005	342,085	76,337	90,036	22,974	10,500	379,388	5,679	926,999
2010	349,252	78,839	99,114	26,909	9,600	414,051	7,545	985,309

Source: LASP Aviation Activity Forecasts

General aviation operations forecasts are based on the forecast of general aviation hours flown (Table 8) and an estimate of operations per hour.

Table 8
Louisiana General Aviation Operations by Aircraft Type

Year	3 Place and less	4 Place and over	Multi-Engine	Turbo-prop	Turbo-jet	Rotor (Piston)	Rotor (Turbine)	Other	Total
1991	1,086,897	782,655	172,407	162,985	37,599	67,149	484,801		2,794,493
1992	1,056,490	760,759	172,913	164,232	39,188	69,180	563,058		2,825,819
1993	1,061,164	764,125	172,687	169,431	41,899	69,684	621,850		2,900,840
1994	1,065,463	767,221	173,428	173,081	43,796	77,070	619,625	See	2,919,685
1995	1,065,560	767,291	178,189	184,479	45,696	79,639	666,563	Note	2,987,417
1996	1,069,898	770,414	178,412	194,483	47,596	79,639	734,632		3,075,074
1997	1,069,995	770,484	181,935	202,561	50,299	79,639	802,303		3,157,216
1998	1,074,378	773,640	182,161	211,120	51,887	60,871	825,671		3,179,729
1999	1,079,001	776,969	181,891	219,755	53,464	61,388	804,100		3,176,568
2000	1,083,817	780,437	185,911	226,844	56,181	61,388	827,128		3,221,706
2005	1,106,571	796,822	187,314	258,618	66,340	69,684	985,062		3,470,410
2010	1,129,754	813,516	192,453	284,694	77,702	63,711	1,075,063		3,637,893

Note:

No data available for "Other" category.

Source: LASP Aviation Activity Forecasts

The number of Louisiana pilots by type of certificate is shown in Table 9.

General aviation activity as shown by Tables 6 through 9 is forecast to experience only modest growth during the next 20 years. Consequently, from an airport system perspective, capacity at general aviation airports is not expected to be a problem. However, the general aviation airport system will be affected by the increased usage of multi-engine, turboprop, and turbojet aircraft used to support commercial and business activities. Airports serving these aircraft types, particularly the turbo-powered aircraft, require longer, wider, and stronger runways, and larger runway protection zones than do airports serving primarily single-engine aircraft.

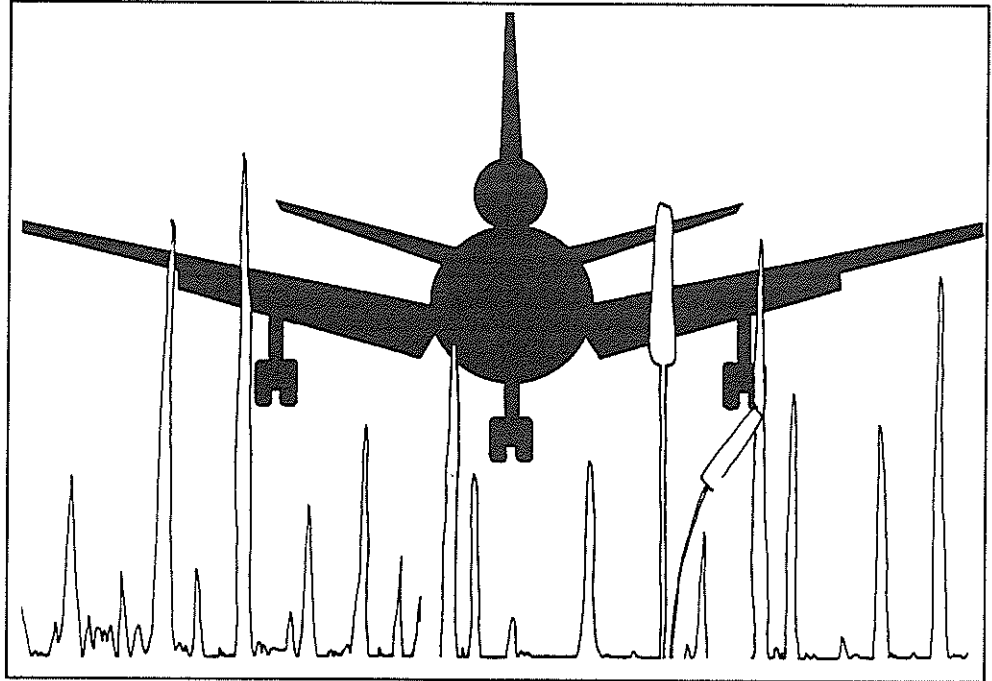
Table 9
Louisiana Pilots by Certificate Type

Year	Student	Private	Commercial	Airline Transport	Misc.	Flight Instructor	Total
1991	1,585	3,294	2,272	994	313	692	8,458
1992	1,612	3,317	2,300	1,026	323	704	8,579
1993	1,636	3,328	2,323	1,058	327	714	8,672
1994	1,657	3,328	2,347	1,092	330	723	8,753
1995	1,673	3,341	2,370	1,132	337	730	8,853
1996	1,685	3,352	2,395	1,174	337	736	8,943
1997	1,693	3,362	2,418	1,216	347	739	9,037
1998	1,699	3,372	2,443	1,249	352	742	9,116
1999	1,705	3,382	2,466	1,282	357	744	9,193
2000	1,705	3,394	2,491	1,317	363	744	9,269
2005	1,737	3,448	2,615	1,454	388	758	9,643
2010	1,874	3,494	2,739	1,593	414	818	10,114

Source: LASP Aviation Activity Forecasts

IV

System Performance Measures



The development of the Louisiana airport system is guided by its goals and objectives. The extent to which the aviation system achieves these goals and objectives by implementing the aviation system plan can be gauged by applying performance measures. Performance measures compare access provided by the existing aviation system to access provided in the year 2010 through implementation of the LASP.

Performance measures are expressed as percentages of the given demographic or economic centers that are being served by a particular class of airports in the state system. They include the percentage of the state's population served by commercial service airports, the percentage served by general aviation transport airports that are capable of accommodating business jet aircraft, and the percentage served by all airports. Other access measures indicate the state's employment, agricultural and mineral production, and total personal income served by these classes of airports.

The area of the state served by an airport is indicated by a circle which defines its service area. The radius of this circle represents the "reasonable" driving time to the airport. For commercial service, the radius is 50 miles or about a 60-minute drive as shown in Figure 1. For general aviation the radius is 25 miles, or about a 30-minute drive as shown in Figure 2.

Examples of performance measures include:

Population Served by Commercial Service Airports

The service area population of each commercial service airport is estimated by drawing a circle of 50-mile radius (approximating a 60-minute ground travel time) around each airport on a Louisiana map. The population contained in each service area is calculated using 1990 census data for cities and parishes (Figure 1).

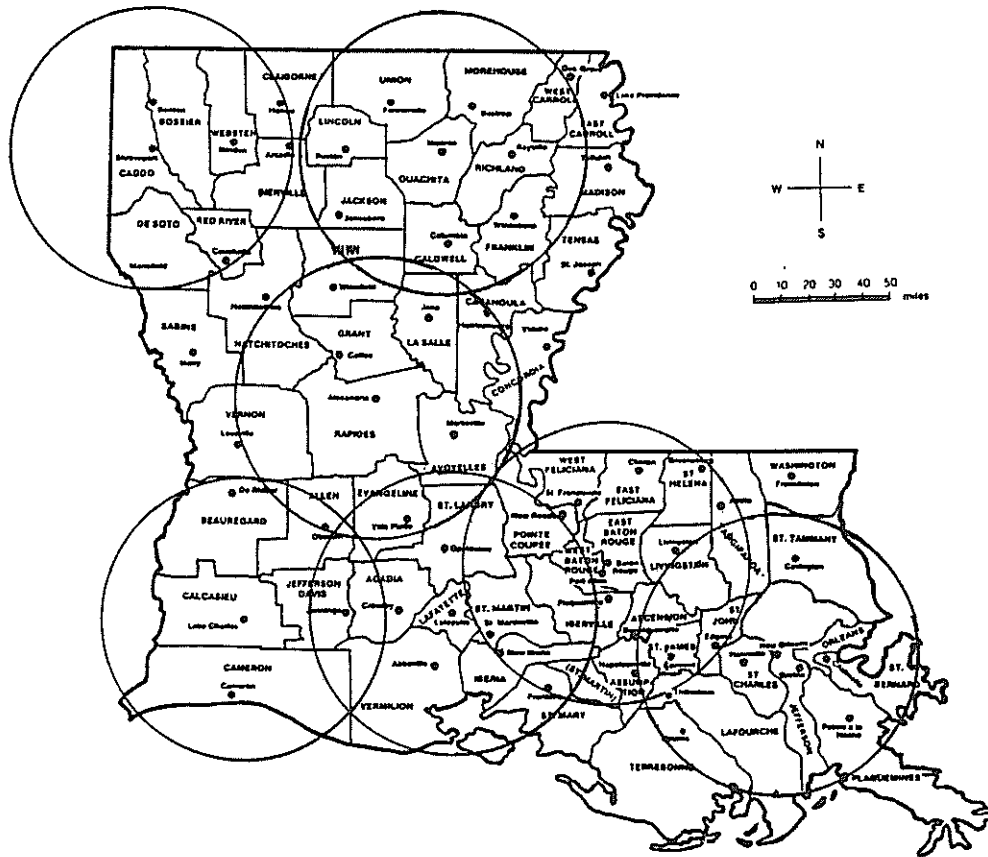


Figure 1. Louisiana Commercial Service Airports, 1990

Population Served by Transport Airports

Airports in this category must meet transport design standards (i.e., have runways long and wide enough to accommodate business jets) as shown in Table 2. The airport service area is defined by drawing a 25-mile radius (approximating a 30-minute ground travel time) around the airport. The population contained within the service areas for these airports is calculated using 1990 census data for cities and parishes.

Employment Served by All Airports

The employment measure indicates the labor force included in airport service areas. Service areas are defined using a 25-mile radius and may include portions of one or more parishes. To determine the employment measure, the percentage of parish population contained in the airport's service area is multiplied by the parish's total employment.

Personal Income Served by All Airports

The personal income measure is used to express the economic activity generated by parish households in the 25-mile service areas. Personal income is estimated by multiplying the parish population included in the service area by the parish income per capita in current dollars.

Resource Values Served by All Airports

The measures for agricultural and mineral value are based on the parish land area covered by the airport service areas. Service areas are defined using a 25-mile radius. All LASP airports are considered in calculating these performance measures. The resource value served is estimated by multiplying the percentage of a parish's land area included in a service area by the parish's agricultural value or mineral value. Figure 2 shows the area of state covered by general aviation airports.

Over the 20-year planning period, almost no change in service to population or agricultural or mineral value is noted in the commercial airports (see Tables 10 and 11). However, for general aviation transport airports, agricultural and mineral value served increases by 18 percent and 8 percent, respectively, due to increases in the runway length and strength.

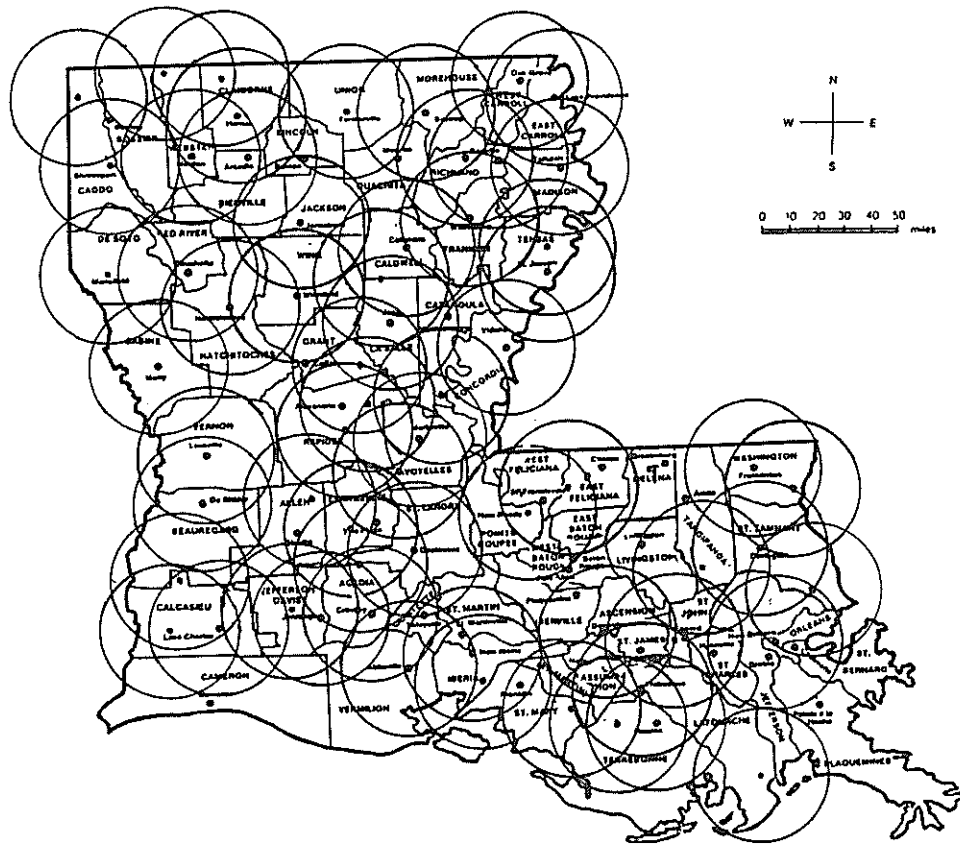


Figure 2. Louisiana General Aviation Airports, 1990

Table 10
Access to State Activity Centers, 1990

	Population (x 1000)	Employment (x 1000)	Personal Income (in \$) (x 1000)	Agricultural Value (in \$) (x 1000)	Mineral Value (in \$) (x 1000)
Total Amount for Louisiana in 1990	4,220	1,981	45,970,340	1,947,185	4,791,045
Scheduled Amount Served	4,000	1,887	44,076,636	1,741,444	4,255,207
Service Percent	94.8	95.2	95.9	89.4	88.8
GA- Transport Amount Served	3,781	1,805	41,710,010	1,301,921	3,554,067
Percent	89.6	91.1	90.7	66.9	74.2
GA-Utility Amount Served	4,184	1,961	45,601,003	1,922,256	4,161,440
Aviation Percent	99.1	99.0	99.2	98.7	86.9

Source: LASP Aviation System Measures of Performance

Table 11
Access to State Activity Centers, 2010

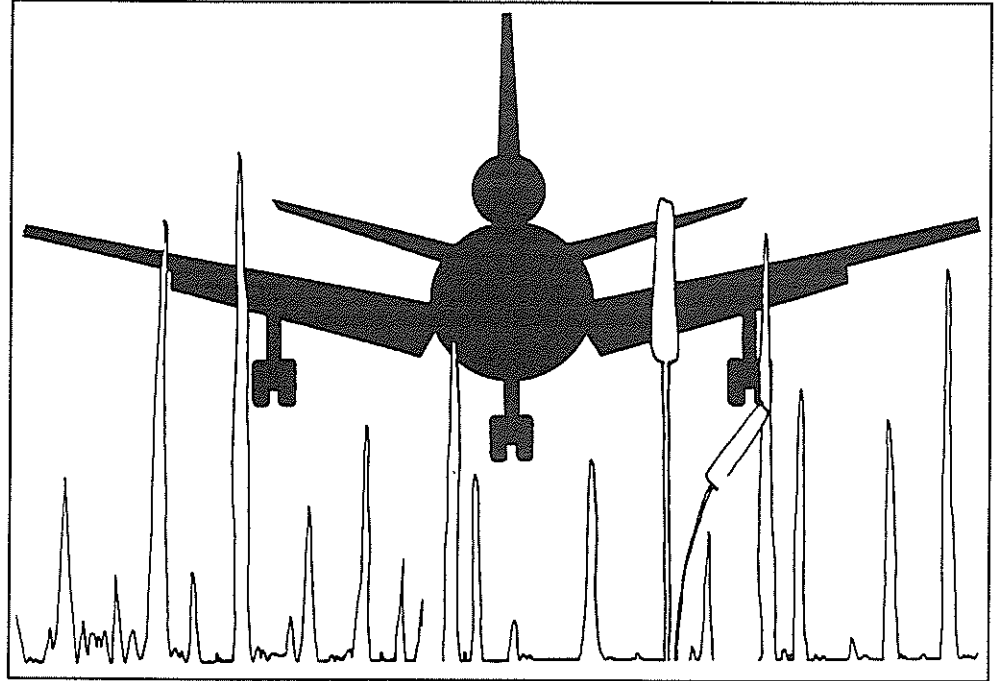
	Population (x 1000)	Employment (x 1000)	Personal Income (in \$) (x 1000)	Agricultural Value (in \$) (x 1000)	Mineral Value (in \$) (x 1000)
Total Amount for Louisiana in 2010	5,118	2,211	67,973,230	3,711,000	4,791,045
Scheduled Amount Served	4,871	2,121	65,338,071	3,411,800	4,255,207
Service Percent	95.2	95.9	96.1	90.5	88.8
GA- Transport Amount Served	4,948	2,150	66,073	3,208,950	3,960,685
Percent	96.7	97.2	97.2	85.1	82.7
GA-Utility Amount Served	5,084	2,192	67,447,253	3,718,300	4,167,571
Aviation Percent	99	99	99.2	98.6	87.0

Source: LASP Aviation System Measures of Performance



V

Implementation Costs



The planning process described in Sections II, III, and IV resulted in the selection of the airport sites required to meet the LASP goals and objectives and the identification of the improvements needed at those sites to implement the plan. In this section information is provided on the estimated costs required to develop the state's airport system over the 20-year planning period.

The costs for each of the 71 airport sites are included in the appendix of this report. The appendix is a summary of the development worksheets that were prepared for each airport site. The worksheet for any airport, which itemizes the needed improvements and their costs, may be obtained from DOTD.

A new airport to serve Port Sulphur/Plaquemines Parish is currently being planned. Because this airport is in the preliminary planning stages, the airport role and development costs are not known at this time. This location is included in the LASP but in this document is not included as one of the 71 airport sites.

Development Categories

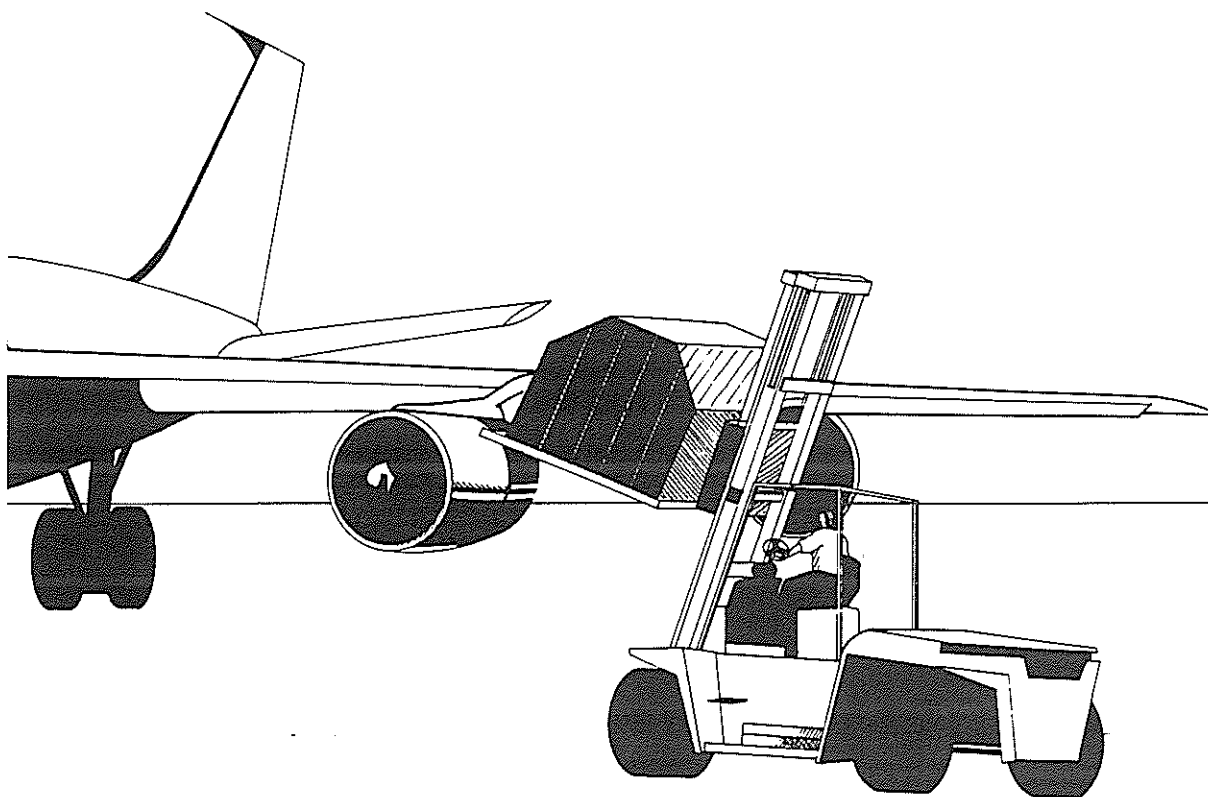
Airport development worksheet items are divided into eight categories. These development categories, also called objective codes, are used in the programming process to establish broad priorities for the allocation of state and federal airport development funds. The eight development categories are:

1. Special Programs

Development required by rule (such as fire/rescue vehicles and their buildings and security equipment); congressionally mandated runway grooving, friction treatment, and distance-to-go signs on all primary and secondary runways at commercial service airports; airport hazard removal or marking; and vertical guidance systems on all primary runways and runway lights, taxiway lighting and sign systems, and marking for all commercial service airports.

2. Reconstruction

Development required to preserve, repair, or restore the functional integrity of runways, taxiways, aprons, lighting, or terminals.



3. Standards

Development to bring existing airports up to recommended standards based on their current design category as listed in the LASP.

Development includes, for example, lengthening, widening, and strengthening the runway at an existing basic utility airport to meet the minimum LASP standard.

4. Upgrade

Development which provides for accommodating larger (more critical) aircraft types and/or longer nonstop routes. Typical development includes runway lengthening, widening, and strengthening to accommodate business jet aircraft, for example, or development to upgrade a basic utility airport to a general utility airport to accommodate a larger portion of the piston-engine aircraft fleet.

5. Capacity

Development required to increase system capacity by increasing airport capacity beyond its present designed use (standards). Typical development includes new runways and aprons and terminal expansion.

6. New Airports - Capacity

Development of all new reliever and new commercial service airports which are constructed to increase metropolitan system capacity. For example, a reliever airport to Baton Rouge Metropolitan constructed near Gonzales in Ascension-St. James Parish was opened in 1992.

7. New Airports - Community

Development of a new general aviation airport which will be the sole airport serving a community. An example is the new airport proposed to serve Port Sulphur and Plaquemines Parish.

8. Planning

Preparation of a new or updated airport master plan or preparation of an FAR Part 150 (Airport Noise Compatibility Planning) study.

The development categories, with the exception of planning, are listed in the general order of priority for development. Special programs such as the current FAA program to improve runway and taxiway guidance signs at all commercial service airports (to minimize the incidence of runway incursions) generally will be a priority 1 category and will take priority over other needed development. Reconstruction and preservation of existing airport pavement is considered more critical than bringing airports up to standards, and bringing an existing airport up to the standards required for current users is considered more critical than is upgrade development needed to accommodate a larger type of aircraft.

Programming of federal and state airport development funds, discussed in Section VI, requires consideration of several factors in addition to the development category of the development items. System costs by development category, however, do provide useful insight into the overall condition of the state's airport system.

If substantial money is needed for special programs, reconstruction, and standards development, less money is available for upgrade, capacity, and new airport projects. The latter three categories are the projects that significantly extend the effectiveness of the state's airport system.

Development Costs

The development items needed for each system airport were identified through a process of comparing the existing conditions at the airport with the fundamental development required for that airport, identifying development needed to bring the airport up to the minimum design standards for current airport users, identifying development needed to upgrade the airport to meet the needs of future users, and identifying development needed to provide increased capacity for current or future users. Where available, airport master plans and project applications prepared by the airport sponsor's consultant were also used.

The development items for each system airport were incorporated into a planning tool or form called an airport development worksheet. In addition to the development items, the development worksheet provides basic planning information such as temperature, elevation, instrument approach, service level, airport roles by time period, airport reference code, etc.

The cost for each development item is estimated based on standard unit costs developed from previous construction projects or engineering estimates prepared by the airport sponsor's consultant. In addition to the cost and the development category/objective code for each item, the construction type (land, paving, lighting, approach aid, terminal, other) and the airport component (primary runway, secondary runway, primary taxiway, etc.) are coded. The various codes are used to summarize development costs to better understand the condition of a single airport, a group of airports with the same design standard or service level, or the condition of the airport system as a whole. The codes also assist in developing priorities for making programming decisions.

The airport development worksheet was provided to the airport's sponsor prior to the regional planning meetings held June through October 1991 as a part of this LASP update project. The worksheets were revised following the regional meeting based on an airport site visit and comments made by the airport sponsors during the regional meeting.

System plan development costs are generally low. This is partially a result of using unit rather than project specific costs and partially a result of the nature of planning versus engineering studies. If a particular airport project has atypical soil conditions, unusual drainage requirements, inadequate pavement base or subgrade materials, etc., the planning costs will be underestimated. As part of the preparatory work for a project, engineering studies are performed; and a revised cost estimate is prepared. Also, it is difficult to estimate during which future time period airport pavements that are currently in good to excellent condition will need to be reconstructed. On a system level, therefore, the aggregate costs will be low. It can be assumed that the system cost estimates shown in this section are a minimum.

System Development Costs

System development costs using October 1991 cost estimates for commercial service, reliever, and general aviation airports are summarized below.

Commercial Service Airports

Table 12 shows the 0-5 year and 6-10 year costs and the 1991 enplanements for the seven commercial service airports. Table 13 shows these costs by development category for the 0-5 year and 6-10 year periods. Development costs beyond the 0-5 year period are not well developed and, consequently, are significantly understated. Development identified for the 6-10 year period is primarily for upgrade and capacity projects. Commercial service airports account for almost 80 percent of the

**Table 12
Commercial Service Airports
0-5 Year and 6-10 Year Costs and 1991 Enplanements**

	<u>Time Period</u>		Enplanements
	0-5 Year (in \$)	6-10 Year (in \$)	
Alexandria-Esler Regional	4,647,000	2,353,900	68,873
Baton Rouge Metropolitan	56,518,100	90,917,500	448,534
Lafayette Regional	6,470,800	-0-	130,163
Lake Charles Regional	5,089,600	1,491,900	61,862
Monroe Regional	12,661,300	11,387,900	112,441
New Orleans International	432,523,600	49,903,500	3,274,089
Shreveport Regional	27,970,000	-0-	310,938
TOTAL	545,880,400	156,054,700	4,406,900

Source: LASP Airport Development Worksheets

Table 13
Commercial Service Airports
Development Costs by Program Objective

	Time Period	
	0-5 Years (in \$)	6-10 Years (in \$)
Special Programs	12,741,200	130,000
Reconstruction	24,128,000	2,372,500
Standards	13,010,500	401,000
Upgrade	459,163,200	90,440,400
Planning	1,555,000	-0-
Capacity	35,282,500	62,710,800
TOTAL	545,880,400	156,054,700

Source: LASP Airport Development Worksheets

20-year system development costs, and New Orleans International Airport accounts for almost 80 percent of the costs to develop the commercial service portion of the airport system.

Major projects planned for New Orleans International include:

- Acquiring land and constructing a new parallel north-south precision runway with supporting taxiways to support commercial service operations;
- Constructing an east/west taxiway north of RW 10-28 and a new north apron to support general aviation operations;
- Acquiring land and constructing additional cargo aprons and associated access roadways to support air cargo operations and anticipated increased trade with Central and South America; and
- Expanding Concourse C and constructing a west passenger terminal complex and associated access roadways to support growth in enplaned passengers.

Major projects planned for Baton Rouge Metropolitan include:

- Acquiring land in the short-term for the eventual construction of a new precision runway parallel to RW 13-31 to support commercial service operations;
- Improving in the short-term the existing terminal complex; and
- Constructing in the intermediate-term a new mid-field passenger terminal complex with associated access roadways and automobile parking that will replace the existing terminal complex.

Shreveport Regional has a major project planned to expand and renovate the passenger terminal.

Reliever Airports

Table 14 shows the 0-5 year and 6-10 year development costs for the six reliever airports. Table 15 shows these costs by development category for the 0-5 and 6-10 year periods. All of the reliever airports with the exception of St. John the Baptist Parish airport are already transport design or are planned to be transport design airports by end of the 0-5 year period. St. John the Baptist Parish airport is planned to be transport design during the 11-20 year period. Reliever airports account for about 5 percent of the 20-year system development costs.

Table 14
Reliever Airports
0-5 Year and 6-10 Year Costs

	Time Period	
	0-5 Year (in \$)	6-10 Year (in \$)
Gonzales, Ascension-St. James Parish	2,168,900	3,024,300
Hammond Municipal	2,955,500	634,400
New Orleans, Lakefront	7,290,900	2,354,900
Reserve, St. John the Baptist Parish	3,882,800	6,402,200
Shreveport Downtown	3,053,500	332,000
Slidell	3,806,700	871,400
TOTAL	23,158,300	13,619,200

Source: LASP Airport Development Worksheets

Table 15
Reliever Airports
Development Costs by Program Objective

	Time Period	
	0-5 Years (in \$)	6-10 Years (in \$)
Special Programs	-0-	-0-
Reconstruction	9,416,800	332,000
Standards	3,836,800	202,200
Upgrade	5,092,100	9,205,600
Planning	224,300	-0-
Capacity	4,588,300	3,879,400
TOTAL	23,158,300	13,619,200

Source: LASP Airport Development Worksheets

New Orleans Lakefront accounts for almost one-third of the 0-5 year reliever costs. A large portion of this cost is for repair of the seawall that protects the airport from Lake Pontchartrain. Repair of the seawall will open up additional land for developing aeronautical services to support general aviation operations, create opportunities for aviation-related employment, and protect the airport from erosion.

General Aviation Airports

Development costs for general aviation airports are separated between those airports that are already transport design or are planned to be upgraded to transport design by the end of the 20-year planning period and those airports that are utility design and are planned to remain utility design through the 20-year period.

Transport Airports. Table 16 shows the 0-5 and 6-10 year development costs for the 27 designated transport airports. By definition, a General Utility II is a utility airport; however, in this section and succeeding sections, General Utility II airports are considered as part of transport airport category since these airports are able to accommodate some business jet aircraft. Table 17 shows these costs by development category for the 0-5 and 6-10 year periods. Transport airports account for about 15 percent of the 20-year system development costs.

The existing transport airports and those proposed to be upgraded in this group provide a critical link to the nation's commerce and business activities. Because of their ability to accommodate the turboprop and turbojet aircraft used by business, the airports serve not just their associated cities but a much larger regional service area. These airports are the backbone of the state general aviation airport system in much the same way that the hub airports are the backbone of the national commercial airport system.

The costs shown for the Vicksburg-Tallulah and Ruston Municipal airports reflect the fact that these are new airports still under construction, and considerable additional construction remains to be accomplished to fully develop the airports in accordance with their master plans.

Chennault Industrial Airpark, although identified in the system plan as a general aviation transport airport is, in reality, in a class by itself. Chennault Industrial Airpark is a former U.S. Air Force SAC base constructed to handle large heavy bomber airplanes. It is capable of handling any of today's commercial service or air cargo aircraft. Although it does provide services to general aviation aircraft, its primary purpose is as a repair, modification, and overhaul facility for all types of commercial and military aircraft. Consequently, the costs to maintain and develop this airport are more similar to the costs associated with a commercial service airport than a general aviation airport.

Major projects planned for Chennault include constructing a new general aviation runway and reactivating the general aviation area, acquiring land and parcel assembly, repairing and improving the storm water drainage system, constructing additional hangars for large aircraft modification, constructing a hangar for aircraft stripping and painting, and constructing facilities for a new air cargo center.

Table 16
General Aviation Transport Airports
0-5 Year and 6-10 Year Costs

	Time Period	
	0-5 Year (in \$)	6-10 Year (in \$)
Abbeville Municipal	1,815,700	648,800
Bastrop, Morehouse Memorial	2,128,000	18,000
Bogalusa, George R. Carr Memorial Air Field	2,083,300	-0-
Coushatta, Red River	993,900	-0-
De Quincy Industrial Airpark	705,900	1,178,000
De Ridder, Beauregard Parish	3,071,100	-0-
Eunice	443,300	-0-
Galliano, South Lafourche	520,500	217,500
Houma-Terrebonne	3,791,000	3,664,000
Jennings	1,512,600	684,000
Jonesboro	1,358,300	427,100
Lake Charles, Chennault Industrial Airpark	58,250,000	900,000
Mansfield, DeSoto Parish	1,337,800	284,000
Many, Hart	810,900	201,500
Marksville Municipal	1,246,800	-0-
Minden, Minden-Webster	1,294,300	818,200
Natchitoches Regional	3,506,900	950,000
New Iberia, Acadiana Regional	2,290,500	-0-
New Roads, False River Airpark	1,137,100	174,300
Oakdale, Allen Parish	420,700	98,100
Opelousas, St. Landry Parish – Ahart Field	2,500,700	-0-
Patterson, Harry P. Williams Memorial	2,100,400	3,566,000
Ruston Municipal	10,863,200	3,097,000
Springhill	2,118,400	882,900
Sulphur, Southland Field	2,486,600	400,000
Tallulah, Vicksburg-Tallulah	8,054,400	2,889,000
Winnfield, David G. Joyce	1,922,300	411,400
TOTAL	118,764,600	21,509,800

Source: LASP Airport Development Worksheets

Table 17
General Aviation Transport Airports
Development Costs by Program Objective

	Time Period	
	0-5 Years (in \$)	6-10 Years (in \$)
Special Programs	2,764,500	-0-
Reconstruction	18,534,500	2,017,400
Standards	23,405,500	3,089,800
Upgrade	11,391,400	11,338,700
Planning	683,700	40,000
Capacity	43,067,400	5,023,900
New Airport	18,917,600	-0-
TOTAL	118,764,600	21,509,800

Source: LASP Airport Development Worksheets

General Aviation Utility Airports. Table 18 shows the 0-5 and 6-10 year development costs for the remaining 31 utility airports. Table 19 shows these costs by development category for the 0-5 and 6-10 year periods. Utility airports account for less than 3 percent of the 20-year system development costs.

Of the 31 utility airports, 14 are included in the NPIAS. The development costs associated with these 14 airports are for reconstruction of deteriorating pavements (15 percent), improvements to bring the airport up to standards for current users (50 percent), and/or to upgrade the airport to a higher utility standard (25 percent). The airports in this group support a variety of commercial activities including manufacturing, timber and timber products, agriculture, and tourism.

The development costs for the NPIAS airport at Oak Grove, Kelly and at Vivian account for one-third of the 0-5 year costs. At both locations, it is proposed that essentially a new airport be built to replace the existing airport on the same site. At Oak Grove, Kelly, additional land is to be acquired and a new runway, taxiway, apron, and access road constructed. At Vivian additional land is to be acquired and a new runway, taxiway, and apron constructed. Both sites have terrain features that result in increased construction costs. The continued development of these two airports in the 6-10 year period account for 70 percent of the 6-10 year costs identified for the 31 utility airports.

Of the 31 utility airports, 17 are not in the NPIAS. The 0-5 year and 6-10 year development costs for these 17 non-NPIAS airports are about \$7.5 million and \$0.5 million, respectively. Most of the development costs

Table 18
General Aviation Utility Airports
0-5 Year and 6-10 Year Costs

	Time Period	
	0-5 Year (in \$)	6-10 Year (in \$)
Arcadia-Bienville Parish	674,700	-0-
Bunkie Municipal	476,100	349,500
Columbia	719,000	-0-
Covington, Greater St. Tammany	928,800	-0-
Crowley, Le Gros Memorial	314,700	-0-
Delhi Municipal	753,500	-0-
Farmerville	654,300	-0-
Franklinton	185,500	50,000
Haynesville	314,700	61,700
Homer Municipal	479,900	-0-
Jackson	90,000	-0-
Jeanerette, Le Maire Memorial	443,400	-0-
Jena	646,400	-0-
Jonesville	582,300	-0-
Lake Providence, Byerley	1,015,500	-0-
Leesville	825,400	-0-
Mamou Municipal	288,000	-0-
Newellton	278,000	-0-
Oak Grove, Kelly	3,086,500	1,020,000
Olla	402,400	-0-
Pineville Municipal	675,400	-0-
Pollock Municipal	327,600	-0-
Rayville Municipal	488,200	350,900
St. Joseph, Tensas Parish	256,300	-0-
Tallulah, Scott	409,700	-0-
Thibodaux Municipal	97,000	-0-
Vidalia, Concordia Parish	999,000	18,700
Vivian	4,474,000	914,000
Welsh	835,200	-0-
Winnsboro Municipal	446,200	-0-
Woodworth	261,100	-0-
TOTAL	22,428,800	2,764,800

Source: LASP Airport Development Worksheets

Table 19
General Aviation Utility Airports
Development Costs by Program Objective

	Time Period	
	0-5 Year (in \$)	6-10 Year (in \$)
Special Programs	1,648,100	20,000
Reconstruction	4,248,400	50,000
Standards	10,347,100	387,100
Upgrade	4,919,400	955,700
Planning	120,000	-0-
Capacity	1,145,800	1,352,000
TOTAL	22,428,800	2,764,800

Source: LASP Airport Development Worksheets

for these airports are for the purposes of reconstructing deteriorating pavements and/or to bring the airports up to standards for current users. Many of the airports in this group support agricultural aviation which provides for the aerial application of many vegetable and grain crops including rice and sugar cane.

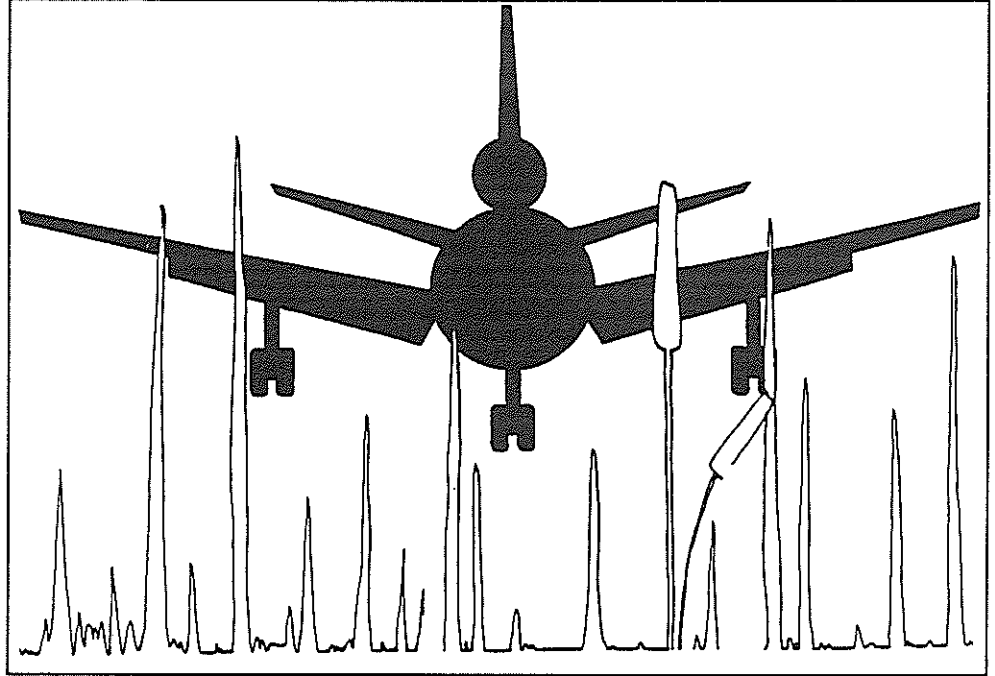
Summary

The 20-year development costs for all 71 airports is approximately \$1 billion: \$785 million for commercial service airports, \$36 million for reliever airports, and \$180 million for general aviation airports.

Probably none of the airports in the LASP will be able to finance the improvements that have been identified for them without some form of government financial assistance. As with the other components of the infrastructure, the public role in the development of the airport system includes providing the necessary facilities. The roles of federal, state, and local government in funding the development of the state's airport system and the sources of funding are discussed in the next section.

VI

Financial Implications



The ability of the LASP airports to finance the improvement costs that have been identified in Section V varies. In general, the more active the airport, the greater its ability to generate revenues from airport activity for capital costs. As the activity level declines, the ability for self-funding declines. As a practical matter, probably none of the LASP airports has the ability to self-fund all their capital costs.

While the commercial service airports have the largest capital costs, they also have the greatest revenue-producing potential. However, for major capital costs of the type identified in the LASP, they will require financial assistance. At the other end of the system, many of the general aviation utility airports may be incapable of funding even operating or capital needs.

The federal government financial assistance programs will play a major role in funding the LASP implementation for the 54 NPIAS airports. State government will also play a major role through providing the non-federal matching funds and providing state funding for those airports that are either not eligible (non-NPIAS) or not competitive for federal funds. The state is also able to assist with funding critical development items that are not eligible for federal funds.

This section of the summary report discusses these funding roles and how they contribute to financing the LASP improvements.

The Federal Role

The federal government, through the FAA, plays a major role in airport improvement. The Airport and Airway Development Act of 1970 established the Aviation and Airways Trust Fund into which aviation user fees are paid. Improvements to the airport and airway system are financed from the fund through grants to eligible public airport sponsors. The 1970 Act was substantially revised by the 1982 Airport and Airway Improvement Act. That act established the present Airport Improvement Program (AIP) which has provided assistance to many of the 54 NPIAS airports in the state. The AIP also provides funding through FY 1993 from the Trust Fund for airport development, airport planning, noise compatibility planning, noise compatibility programs, as well as for state system planning projects.

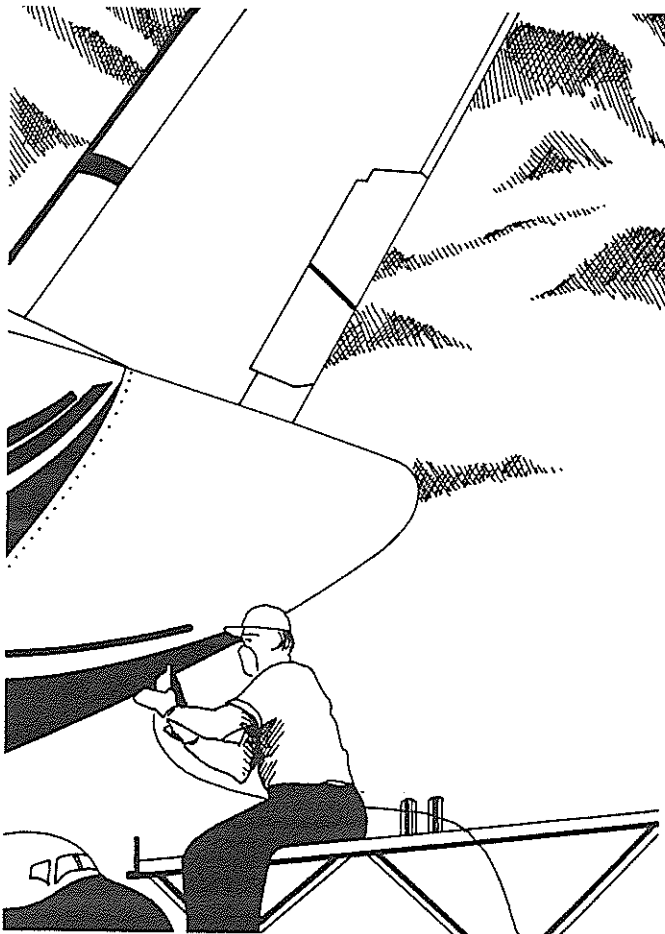
Airport Improvement Program

The AIP uses Trust Fund monies to assist local sponsors with airport improvements. Trust Fund revenues come from an assortment of aviation user fees including an 8 percent tax on airline tickets, a \$3 per person tax on international enplanements, and taxes on general aviation fuel. Annual allocations from the Trust Fund are made by the Congress.

The national annual allocation for the 1992 fiscal year was \$1.9 billion.

Grants are made to eligible recipients by the FAA. Only airports included in the NPIAS are eligible for federal AIP grants. The NPIAS airports are those that the FAA believes are the most essential to the national air transportation system. All Louisiana airports in the NPIAS are also in the LASP; however, not all of the LASP airports are included in the NPIAS.

The fact that a general aviation airport is included in the NPIAS does not ensure that it will receive federal grants. The limit on AIP appropriations and FAA program priorities determine where the available funding is allocated. The FAA allocation is divided into three types of funding: entitlement, state apportionment, and discretionary. Entitlement and state apportionment funds are distributed based on a formula to a particular airport or state. Discretionary funds are distributed nationally on a competitive basis.



Commercial Service Airports

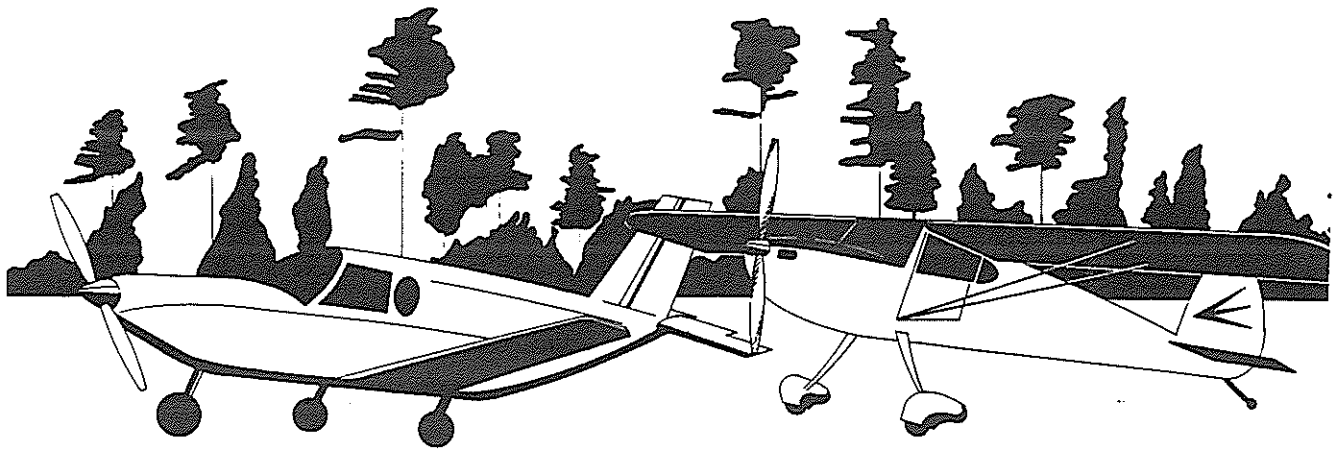
The largest percentage of AIP funds goes to airports that have commercial service. Under the 1987 Act, commercial service airports enplaning at least 10,000 passengers annually will be entitled to grants based on the number of passengers enplaned. The maximum grant is \$16 million annually with a minimum entitlement of \$300,000 per airport. Airports enplaning fewer than 38,000 passengers will now receive the minimum allocation. Airports are also entitled to funds based on their share of the total U.S. freight if they land at least 100 million pounds annually.

Reliever Airports

Reliever airports are eligible for funding from a Trust Fund allocation set-aside for reliever airports. As part of the national emphasis on increasing capacity at major airports, additional grant money has become available for urban reliever airports. Reliever airports compete nationally for this allocation. There is no state entitlement for reliever monies.

General Aviation Airports

Federal funding for general aviation airports is more limited than for commercial service airports. AIP grants for general aviation airports are made from the state's apportionment of the Trust Fund allocation set-aside for general aviation airports. Limited additional funding is available from national discretionary accounts. General aviation airports compete for these funds on a national basis.



The State Role

During the last two decades, Louisiana has gone from a state with one of the most progressive state aviation agencies to a state with one of the least progressive state agencies and back to a state that now has the potential to be one of the most effective state agencies in the nation.

The State's Role in Previous Years

The Louisiana Office of Aviation and Public Transportation was one of the most active and innovative state aviation agencies in the country during the 1970s and early 1980s. Its leadership in the areas of airport planning, development, construction, and program implementation was recognized nationally.

This office, due to its statutory mandate and the resources at its disposal, played the lead role in state airport development. The expertise for planning and developing the airports was provided by the Office of Aviation. The state, through the Office of Aviation, also provided the local share of funding needed to match federal grants for capital improvements. Because of the strong leadership role played by the Office of Aviation, airport sponsors did not have to become knowledgeable about the system role for their airport, with airport planning, or with the procedures for applying for federal funds. The role of airport sponsors was to attend to the proper management and operation of their airport.

Due to economic problems beginning in the 1980s, the Legislature enacted a policy which minimized the state government's involvement in the affairs of cities and municipalities. Thus, airport sponsors found themselves with the responsibility for airport development without the technical and financial assistance previously provided by the state. The result was a significant decline, for almost a decade, in the amount of federal and state funding for capital improvement at system airports.

The Current Role of the State

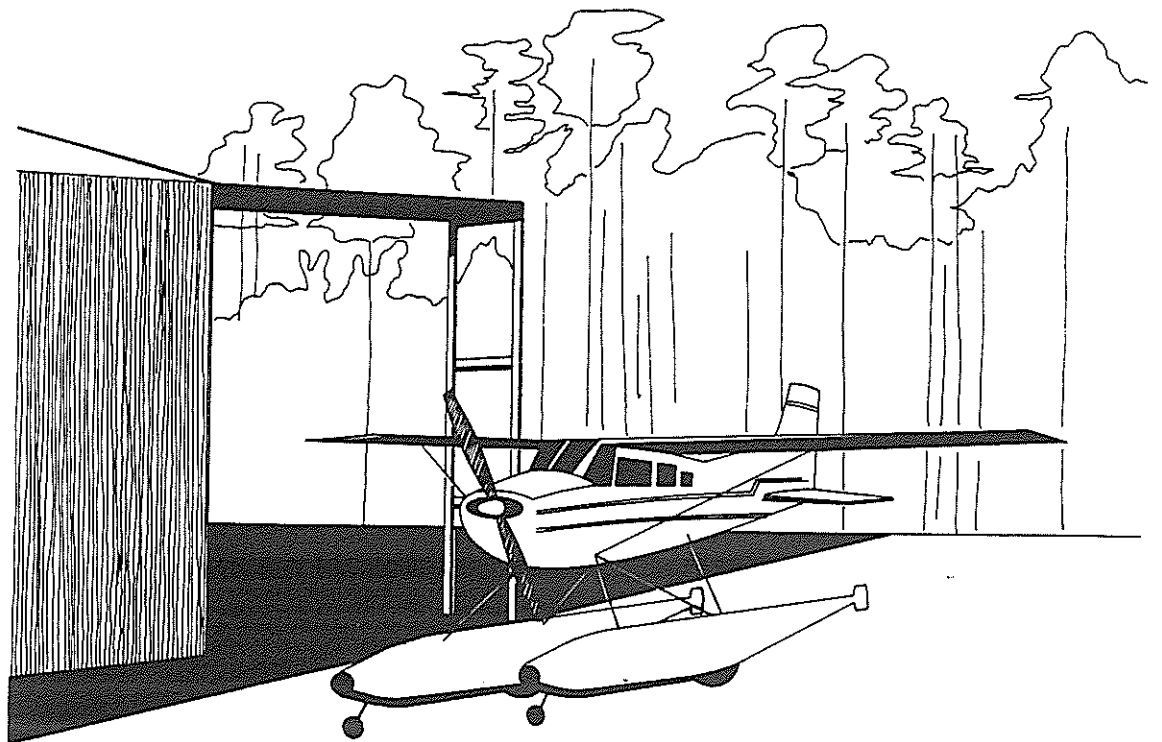
With the establishment of the Louisiana Transportation Trust Fund (herein referred to as the Trust Fund) and the authorization to provide adequate staffing to the state's newly created Division of Aviation, Louisiana is expected to again rank among the leaders in state aviation programs. A portion of the Trust Fund is dedicated to aviation to provide a continuing funding source to enable the Division of Aviation to carry out its responsibilities. The revenues generated by the Trust Fund are expected to provide a significant portion of the financial resources needed to develop the system. A portion of the Trust Fund revenues are generated by sales taxes on jet fuel and aviation gasoline and are administered by the Division of Aviation.

The Division of Aviation is again providing planning, programming, and engineering services to the state's airport sponsors. However, this is not a return to the old way of doing business. Airport sponsors must take an active role in initiating and completing required planning and programming activities in order for a community to be competitive for federal funding. Programming procedures are discussed briefly in Section VII. Development of airport projects is more complex today than it was 15 years ago. Programming decisions are being made two and three years prior to construction of the project. Environmental regulations as well as numerous other federal and state requirements have required a higher level of staff expertise and longer lead times to develop a project, acquire the necessary environmental clearances, obtain funding, and initiate construction. A cooperative, coordinated process between the airport sponsor, the Division of Aviation, and FAA is required.

The Role of Local Governments

Local governments, cities, and parishes are the owners and sponsors of the airports that serve their communities. The responsibility for implementing facility improvements identified in the LASP, therefore, falls on the shoulders of local government. Its leaders must initiate the process of making airport improvements by requesting federal and state financial assistance.

The role of local government will remain pivotal in the LASP's implementation. Given the current resources available, it is anticipated that most communities will choose to participate in the federal and/or



state programs. Communities choosing to pursue capital improvement projects at their airports can expect to receive some assistance from the federal and/or state government, if eligible. Communities that choose not to develop their airports will be at an increasing economic disadvantage.

The LASP is primarily concerned with capital improvements at system airports. However, the role of local governments includes much more than capital improvements. Local governments have the responsibility for airport maintenance (crack sealing, pavement marking, repairing lighting systems and beacons, mowing and controlling weeds, maintaining drainage systems, etc.) and for those airport services (fuel, security, manager/attendant, hangars, terminal facilities, issuing NOTAMS, etc.) necessary for the airport to fill its system role. The minimum service standards for each airport role are identified in Section II.

Commercial service and most reliever airports generate sufficient aviation activity to warrant a full-time professional airport manager and generate sufficient funds to cover the costs of at least some, if not all, of the maintenance and operating costs. However, most general aviation airports will not generate sufficient revenues from on-airport activities to cover the cost of maintaining and operating the airport. These costs are, therefore, the responsibility of the airport's sponsor. These costs may, on an annual basis, far exceed the sponsor's share of capital costs. Without adequate services and maintenance, an airport simply will not function as the community's gateway to business, commerce, and the nation's air transportation system.

Funding Eligibility

Federal Funding Eligibility

Fifty-four of the 71 LASP airports are included in the NPIAS and, therefore, are eligible for federal funding. However, some of the eligible airports may not be competitive for federal funding. Although meeting the NPIAS criteria to qualify as an airport of national significance, the airport may not meet the programming criteria for the type of work that is needed. Meeting programming criteria is not a problem for commercial service or reliever airports but may be a problem for general aviation airports with less than 25 based airplanes. The federal programming criteria varies somewhat from year to year depending on the amount of funds appropriated by Congress. In general, federal funding goes to the most active airports. It is also critical for the airport sponsor to successfully complete the planning and programming activities required for a federal grant in a timely manner.

Not all items identified on the development worksheet are eligible for federal funding. At many system airports, needs such as terminal buildings, fueling systems, hangars, and automobile parking facilities are not eligible for federal funding.

State Funding Eligibility

All the airports identified in the LASP are eligible for state funding. A number of factors, described in the Division of Aviation's Needs and Priorities Process, are considered prior to including a project among those recommended to the Joint Legislative Committee on Transportation and Public Works for programming. Some of these factors relate to how well the airport sponsor is meeting conditions of previous federal and state grants, airport activity levels, and the services provided at the airport.

Funding by Airport Service Level

Commercial Service Airports

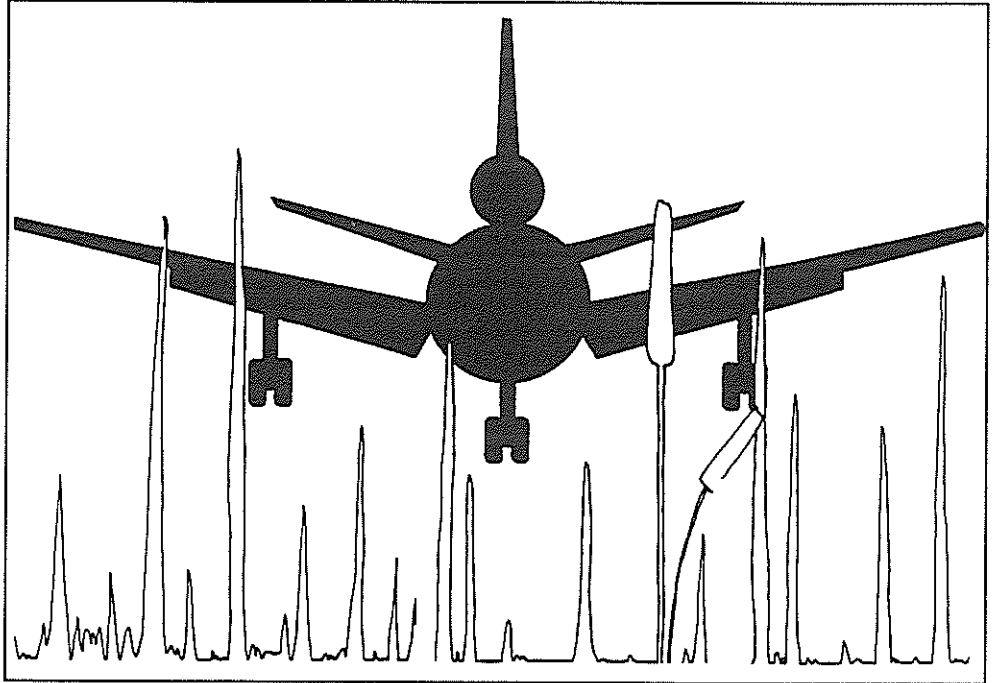
Louisiana's seven commercial service airports received about \$9 million from entitlements based on enplaned passengers in 1992. Commercial service airports are also eligible and compete on a national level for discretionary funds for airport development; for noise compatibility programs; and for capacity, safety, and security projects. Based on previous AIP funding, and assuming that AIP funding is continued at about its 1992 level, it is estimated that annual funding for the seven commercial service airports will average \$30 million per year.

AIP grants to commercial service airports are on a 90 percent federal/10 percent non-federal basis with the exception of New Orleans International which is on a 75 percent federal and 25 percent non-federal basis. The Division of Aviation provides the non-federal share for all commercial service airports, again with the exception of AIP grants to New Orleans International. The Legislature, through the Transportation Infrastructure Model for Economic Development (TIME), will provide \$75 million for New Orleans International for the five-year period 1990 to 1994. Beginning in 1995 the Division of Aviation will provide the non-federal share for AIP projects at New Orleans International.

A comparison of the development costs for commercial service airports as shown in Section V with anticipated federal AIP and state trust fund monies indicates that only about 50 percent or less (due to inflation, etc.) of the needed funding will be met from these sources. However, commercial service airports generally have the ability to generate revenue to meet the cost of projects in which the federal government is not eligible to participate.

VII

Programming and System Implementation



Airport programming is the process through which decisions are made on the allocation of funds for airport improvements. There are several conditions that must be met before a decision to program funds can be made: There must be an identified need. There must be a committed airport sponsor. The sources of funds must be identified and the funding agencies must commit to funding the project. And, there must be an agreement among all parties as to the fiscal year when the project will be implemented. If these conditions are met the project can be programmed. An important element of this process is the capital improvement program. The capital improvement program (CIP) document identifies the projects that the funding agencies have agreed to program during the next five years. There is a fundamental difference between planning, which is a needs identification process, and programming, which is the process through which decisions are made as to which needs will be funded during which time period. In the planning process, the identification of needs is not constrained by available financial resources. In the programming process, needs/projects are constrained by the amount of dollars that are estimated to be available during each programming year. In this section the details of the programming process and the purposes of the CIP document are further explained.

Planning

As was discussed in Section II, the LASP identifies a system of airports that will meet the goals and objectives established for the state airport system. System airports are identified by their location, service level, and role/design standard; and their development needs are identified by time period.

Planning, determining what needs to be done and when, provides a framework within which prudent programming decisions can be made. The development worksheets, prepared for each LASP airport, are an essential input to the programming process. The worksheets contain the following important information about each facility:

- Airport service level
- Airport role/design standard by time period
- Development needs by time frame
- Cost estimates for each development item
- Development category and other codes for each development item

The airport development worksheets are updated through a continuous airport system planning process.

Programming

The programming process includes those activities that must be accomplished subsequent to the identification of needs but prior to letting a contract for the actual construction of a project.

Project Initiation

Potential airport projects can be initiated in one of two ways. The preferred way is for the airport sponsor to send a letter of interest to the Division of Aviation briefly describing the scope of the project, the estimated cost, and the fiscal year in which the sponsor would like to undertake the project. The letter of interest is signed by the chief elected official of the city or parish that is the airport sponsor. The staff of the Division of Aviation will evaluate the request considering the system role for the facility and the needs identified for the airport through the planning process. A meeting is held with the airport sponsor to clarify the scope of the proposed project.

The second way for a potential project to be initiated is for the staff of the Division of Aviation to identify a potential project and contact the airport sponsor. A project may be needed to correct an identified safety

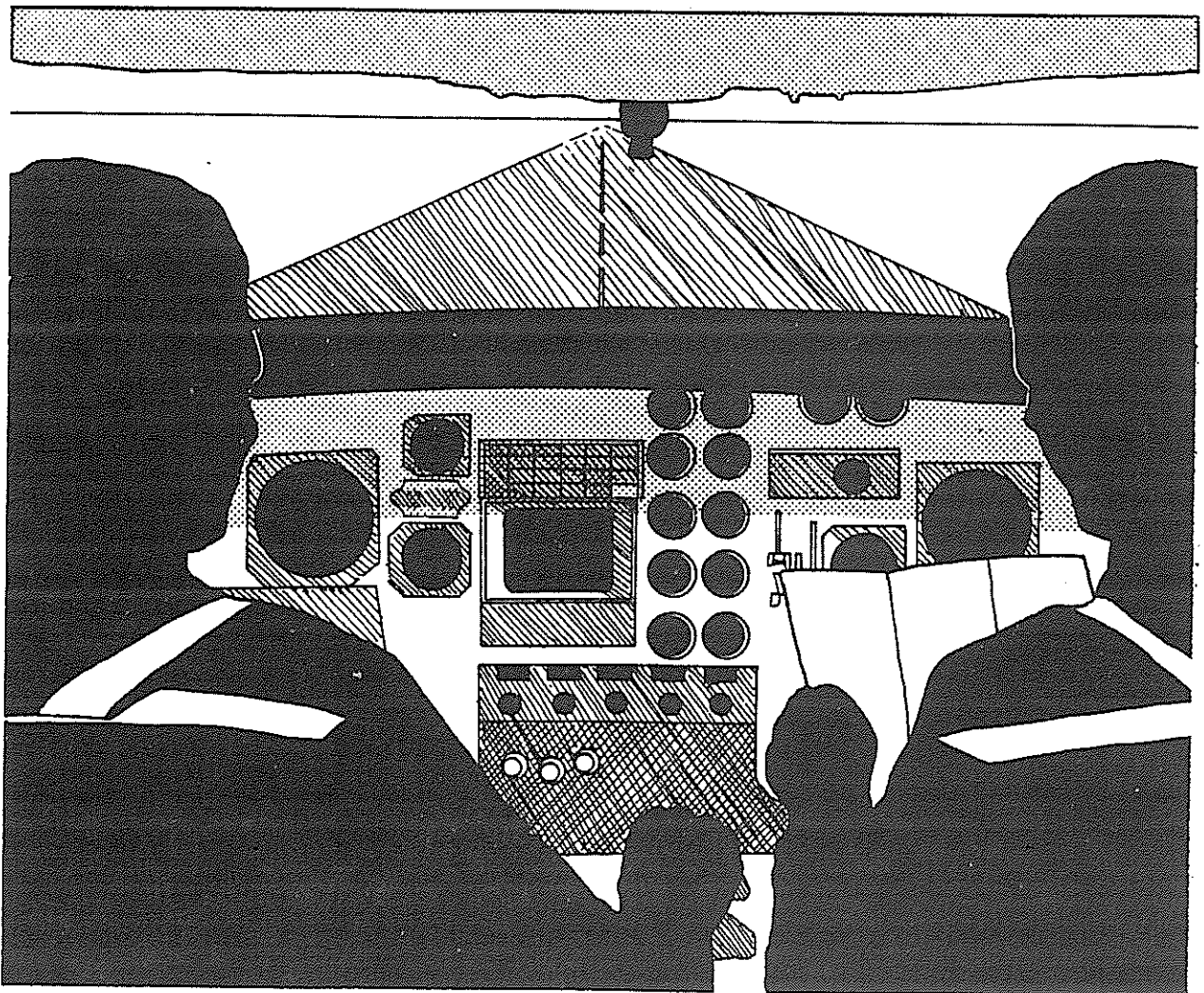
deficiency at an airport, to correct a deficiency in the airport system as a whole, or any number of other needs. If the airport sponsor is interested in pursuing the project, the programming process continues.

Once a project is programmed the Division of Aviation requests a Letter of Intent and Resolution. The Letter of Intent is the sponsor's formal commitment to proceed with the project. The Resolution indicates the sponsor's willingness to participate in the local cost share. Then, the Division of Aviation may approve the project.

Regardless of the method used, the airport development worksheet is modified, if necessary, to accurately reflect the development items needed at the airport and their estimated costs.

Programming Criteria

Before projects can be selected for funding, criteria for determining development priorities are needed. These criteria have been established and are described in the Division of Aviation's Needs and Priority Process document. Airports are separated between commercial service airports as one group and reliever and general aviation airports together



as a second group. Potential projects compete for funding within their own group. Development items for each airport are scored according to the following rating system:

- Category I: Project Type (safety, preservation of existing system, standards, and capacity) (50 percent of score)
- Category II: Facility Usage (30 percent of score)
- Category III: Sponsor Responsibility (20 percent of score)
- Category IV: Bonus Points

Category I development items are further ranked according to the primary purpose of the development item. For example, a development item to lengthen a primary runway will have a higher score than a development item to extend a parallel taxiway. Category II scores are awarded according to the number of based aircraft and the number of enplaned passengers. Category III scores are awarded according to how well airport sponsors are carrying out their responsibility with respect to operating procedures, height and land use zoning, and routine airport maintenance. Category IV scores are awarded based on economic development potential and local funding in excess of minimum requirements. The category scores for each development item on the development worksheet are totaled, and the development items are arrayed in decreasing order of their total score.

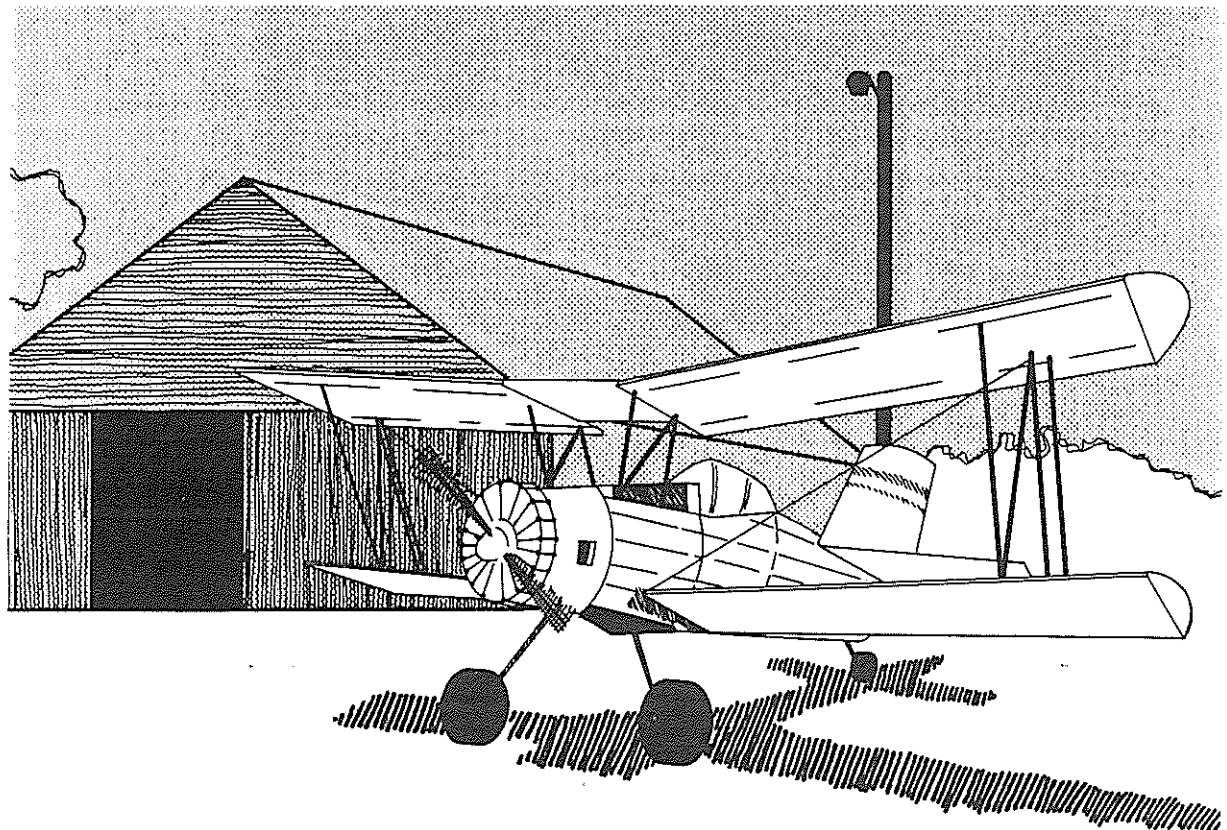
Project Definition

Beginning with the development item with the highest score, other development items for that same airport are grouped together to form a logical project. Considerable professional judgment is used at this point in the process as a number of factors need to be considered. To mention just a few, small projects are not an efficient use of staff resources and result in higher contractor costs. Consequently, if there are several development items that need to be done, they will be done as parts of one larger project rather than several small projects. Each project needs to result in a usable unit. For example, a runway extension project will include the earth work associated with site preparation, pavement construction, pavement marking, extension of the lighting system, and relocation and/or installation of visual approach aids. Land acquisition may be included as a part of the project or it may be programmed as a separate project. On the development worksheet, site preparation, runway extension, lighting, approach aids, land, etc., are all shown as separate development items. Large projects, a new runway for example, may be separated into several projects with the environmental assessment in the first year, land acquisition and engineering work in the second

year, and the actual runway construction in the third year. The priority score of the individual development item triggers the identification of a particular airport for a potential project; professional judgment is used to decide which development items to group together to form the project. The product of the project definition phase is a list of proposed projects and associated costs by location arrayed in order of decreasing priority.

Project Coordination

With the identification of proposed projects and their relative priority, the next step is coordination with the FAA to determine which projects can be supported at the federal level. In reality, this coordination is taking place throughout the year on almost a weekly basis. The Division of Aviation and FAA are working to develop fiscal year programs two and three years in advance of the fiscal year in which the funding will be available. Some modification of a proposed project may be required to refine the proposed scope or the phasing of a project at a particular location. Through the coordination process, the Division of Aviation and the FAA reach an agreement on the projects to be funded, their scope, and the fiscal year in which they will be funded.



Funding Constraints

As a part of the coordination process between the Division of Aviation and the FAA, the dollar amount of FAA funding expected to be available during each fiscal year is estimated. This fiscal year dollar estimate constrains the number of projects that will be scheduled for programming in that fiscal year. In practice, a fiscal year is over-programmed by one or two projects so that in the event that one project is delayed for whatever reason another project will be ready to take its place.

Once the amount of state money needed to match federal funding is estimated, the balance of the funds expected to be available from the state's Trust Fund for state-local projects can be programmed.

The 5-Year CIP

At this point in the programming process the CIP is now a reality. The CIP is an organized statement of the scope and timing of planned improvements at commercial service, reliever, and general aviation airports.

There are several characteristics of the CIP that are worthy of emphasis. The projects in the CIP are projects for which there is a committed airport sponsor. The federal and state funding agencies have agreed to fund their share of the project. This funding agreement is, of course, subject to legislative approval in the case of state funds and congressional appropriations in the case of federal funds. The scope of the project has been agreed to by the airport sponsor and the funding agencies. The sources of federal, state, and local funding have been identified. The year in which the project will be funded has been identified.

This programming process is a near-term goal that is not, as yet, totally in place. It is expected to be fully implemented for the FY 94 program. The first two years of the CIP are substantially in place and the third year is being developed at this time.

There are several important benefits achieved through this programming process and the resultant CIP. Airport sponsors are able to budget for their share of projects costs. Numerous tasks that need to be accomplished before a grant is made can be accomplished on an agreed to schedule. Long lead-time activities such as airport master plan preparation, environmental assessments, land acquisition, preparation of plans and specifications, and advertising and taking bids can all be accomplished prior to the actual grant being made. The federal share of land acquisition costs can be paid on a cost reimbursable basis rather than on an estimated cost basis, an advantage to the airport sponsor. Federal grants are made on the basis of construction bids rather than on engineering cost estimates, again to the airport sponsor's advantage. And finally, the amount of time between issuance of a grant and the start of construction can be as short as 60-90 days. The result is an effective use of federal and state and local government airport development funds.

Supporting Reports and Data

The following documents may be requested from:

Division of Aviation
Louisiana Department of Transportation and Development
P.O. Box 94245
Baton Rouge, LA 70804-9245

Aviation Activity Forecasts, 1990-2010

This report contains forecasts of commercial service and general aviation activity for Louisiana. It also discusses trends affecting the forecasts.

LASP Goals, Objectives, Criteria, Standards

The goals, objectives, entry criteria, and standards used in the LASP are explained in this report. In addition, the report explains the relationship of the LASP to the NPIAS; airport service level, role, and entry criteria; airport development and design standards; and FAA Airport Improvement Program funding categories and priorities.

LASP Aviation System Measures of Performance

This report explains how performance measures are derived and contains tables showing LASP airports listed by parish and city; access to state activity centers provided by LASP airports; current and future access provided by LASP airports and the intensity of coverage.

LASP Financial Implications

This report is divided into two sections: implementation costs and funding implications. Program objectives, an implementation schedule, and a summary of development costs are found in the implementation costs section. The funding implications section contains information on federal and state roles in funding.

LASP Five-Year Capital Improvement Program, 1992-1996

This report contains a five-year plan for improvements to a select list of airports, with financial funding provided by the federal and state government and by local airport sponsors. Included in the document are sections on planning, programming, project implementation, and projects.

LASP Supporting Data

LASP project histories, regional meeting summaries, and airport development worksheets for each system airport are available.



Appendix

LASP Airports

Of the more than 425 landing sites in Louisiana, 71 have been identified as vital to the nation's and state's system of airports. Each of these airports is listed in this appendix by associated city, followed by the airport name and the parish in which the airport is located. Development costs are summarized by planning period, and airport layouts are provided.

Listed below is an explanation of terms used in this appendix.

Airport Reference Code (ARC) - Coding system used to relate airport design criteria to the operation and physical characteristics of the aircraft intended to operate at the airport. The first component of the ARC is a letter which relates to aircraft approach speed; the second component is a Roman numeral which relates to wingspan. For a complete description refer to Section II - Plan Structure.

Airport Role - Determined by the planning process. See Section II - Plan Structure, for complete description.

Instrument Approaches - Locational aids for navigation using instruments. For airports with published instrument approach procedures, the approach with the lowest straight-in landing minimums is listed. If the airport does not have a straight-in approach, the approach with the lowest circling landing minimums is listed.

CAT I	A straight-in ILS approach to a runway of an airport with a Category I instrument approach procedure.
CAT II	A straight-in ILS approach to a runway of an airport with a Category II instrument approach procedure.
DME	Distance measuring equipment.
ILS	Instrument landing system; consists of localizer, glide slope, outer marker, middle marker, and inner marker.
LOC	Localizer; a transmitter giving aircraft position left or right of desired course.
NDB	Non-directional beacon; gives directional guidance to and from the transmitting antenna.
VOR	Very high frequency omnidirectional range; fixed beacon emits circular horizontal radiation pattern on which output is superimposed the rotating directional pattern whose output is unique for each bearing from the beacon.

VOR-DME	VOR guidance information with the assistance of distance measuring equipment.
VOR-A	A VOR approach that is not aligned with the runway.

Service Level - Classification reflecting the type of service provided to the community (see Section II - Plan Structure for complete description). In this appendix the following service levels are used:

PR	Commercial Service - Primary
RL	Reliever Airport
GA	General Aviation Airport

Design Standard - Type of service an airport is expected to provide:

BU-I	Basic Utility, Stage I - At minimum, airports serving 75 percent of the small airplanes in Approach Category A, Design Group I, with less than 10 passenger seats.
BU-II	Basic Utility, Stage II - At minimum, airports serving 90 percent of the small airplanes in Approach Categories A and B, Design Group I, with less than 10 passenger seats.
GU-I	General Utility, Stage I - At minimum, airports serving 100 percent of the small airplanes in Approach Category B, Design Groups I and II, with less than 10 passenger seats.
GU-IA	General Utility, Stage IA - At minimum airports serving 100 percent of small airplanes in Approach Categories A and B, Design Groups I and II with more than 10 passenger seats.
GU-II	General Utility, Stage II - At minimum, airports serving 75 percent of the large airplanes at 60 percent useful load in Approach Categories A and B, Design Groups I and II.
T	Transport - At minimum, 75 percent of the large airplanes at 60 percent useful load in Approach Categories C and D, Design Groups I and II.

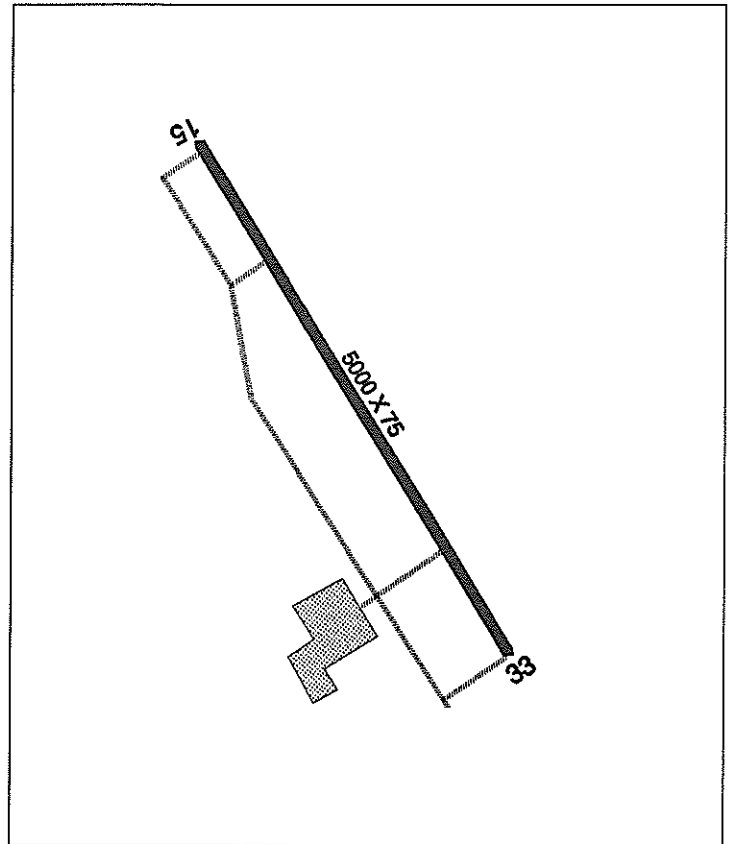
**ABBEVILLE, Abbeville Municipal
Vermilion Parish**

NPIAS Yes
 Instrument Approach VOR-DME
 Based Aircraft 53
 Service Level GA

Airport	Role	ARC
<i>Current</i>	GU-II	B-II
<i>0-5 years</i>	GU-II	B-II
<i>6-10 years</i>	GU-II	B-II
<i>11-20 years</i>	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	-0-	-0-	-0-
<i>Reconstruction</i>	10.9	-0-	881.2
<i>Standards</i>	553.0	182.2	-0-
<i>Upgrade</i>	753.5	-0-	250.0
<i>Capacity</i>	498.3	466.6	244.5
<i>Planning</i>	-0-	-0-	-0-



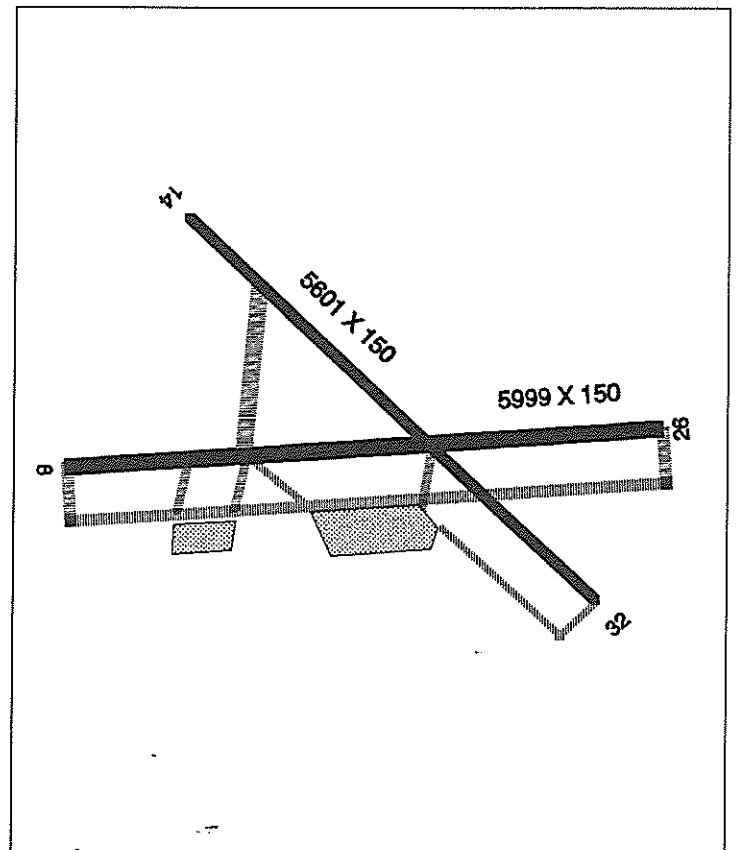
**ALEXANDRIA, Alexandria -- Esler Regional
Rapides Parish**

NPIAS Yes
 Instrument Approach ILS
 Based Aircraft 31
 Service Level PR

Airport	Role	ARC
<i>Current</i>	T	D-IV
<i>0-5 years</i>	T	D-IV
<i>6-10 years</i>	T	D-IV
<i>11-20 years</i>	T	D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	-0-	130.0	-0-
<i>Reconstruction</i>	1,269.9	1,747.5	-0-
<i>Standards</i>	30.0	17.0	12.0
<i>Upgrade</i>	-0-	-0-	-0-
<i>Capacity</i>	3,287.1	459.4	813.0
<i>Planning</i>	60.0	-0-	-0-



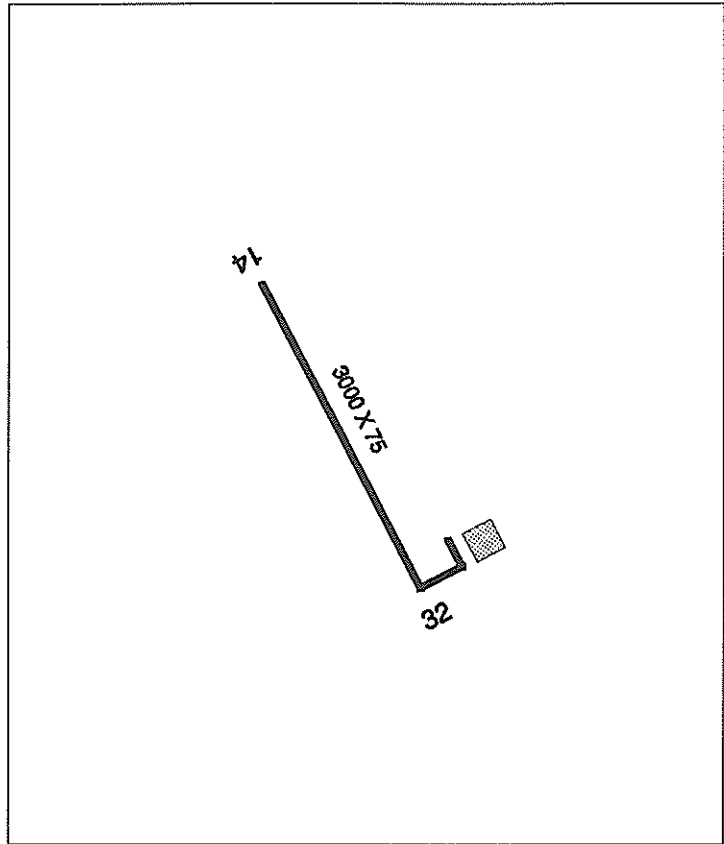
**ARCADIA, Arcadia - Bienville Parish
Bienville Parish**

NPIAS No
Instrument Approach None
Based Aircraft 1
Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	50.0	-0-	-0-
Reconstruction	250.1	-0-	-0-
Standards	15.0	-0-	-0-
Upgrade	324.6	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	35.0	-0-	-0-



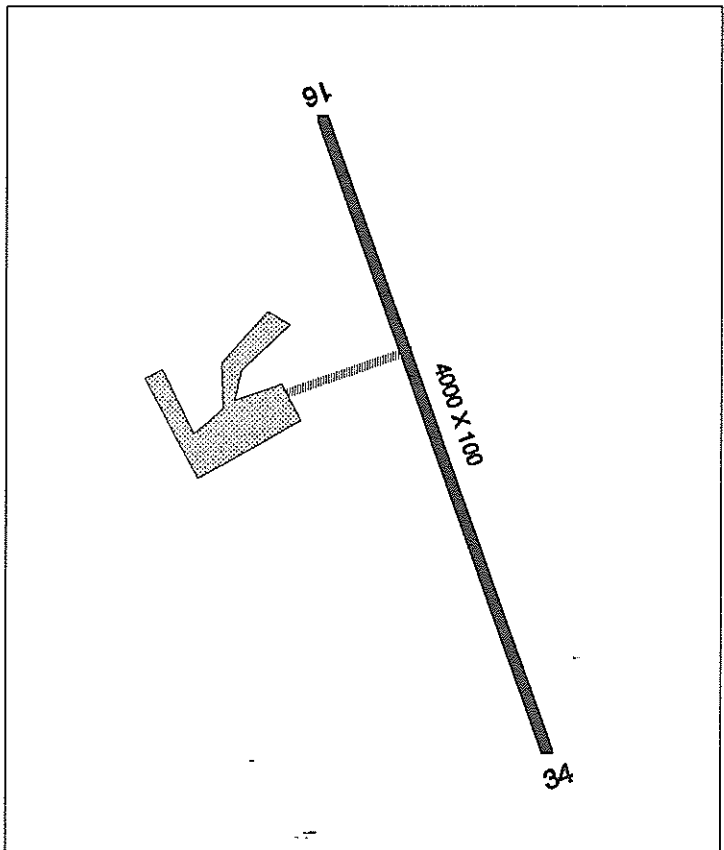
**BASTROP, Morehouse Memorial
Morehouse Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 31
Service Level GA

Airport	Role	ARC
Current	GU-I	B-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	371.5	-0-	-0-
Standards	44.5	-0-	-0-
Upgrade	1,051.7	-0-	-0-
Capacity	660.3	18.0	-0-
Planning	-0-	-0-	-0-



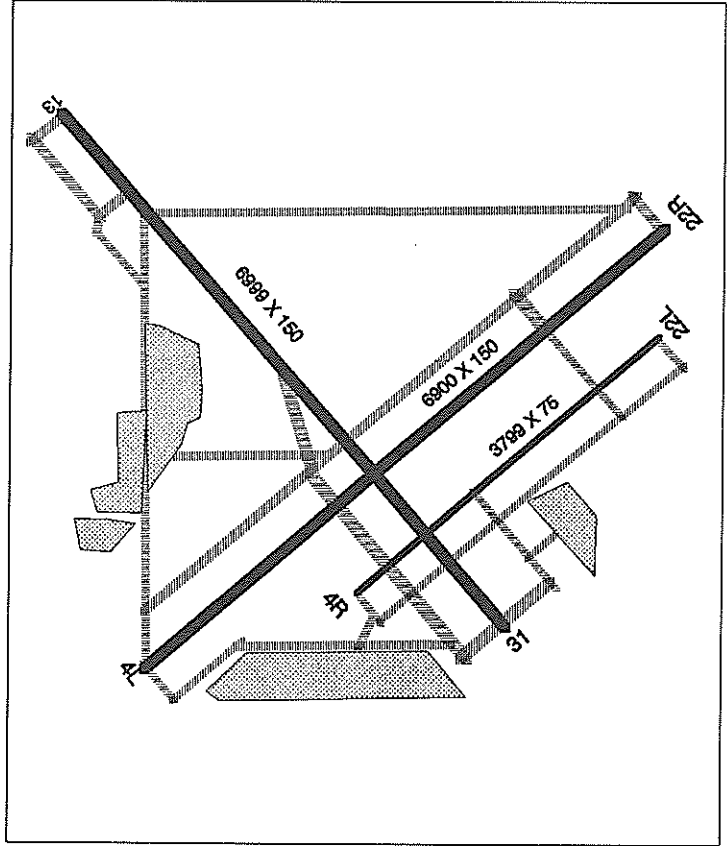
**BATON ROUGE, Baton Rouge Metropolitan
East Baton Rouge Parish**

NPIAS Yes
 Instrument Approach ILS
 Based Aircraft 160
 Service Level PR

Airport	Role	ARC
Current	T	D-IV
0-5 years	T	D-IV
6-10 years	T	D-IV
11-20 years	T	D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	1,423.2	-0-	-0-
Reconstruction	2,545.0	-0-	-0-
Standards	9,663.5	-0-	-0-
Upgrade	32,395.0	39,045.0	44,000.0
Capacity	10,491.4	51,872.5	35,059.7
Planning	-0-	-0-	-0-



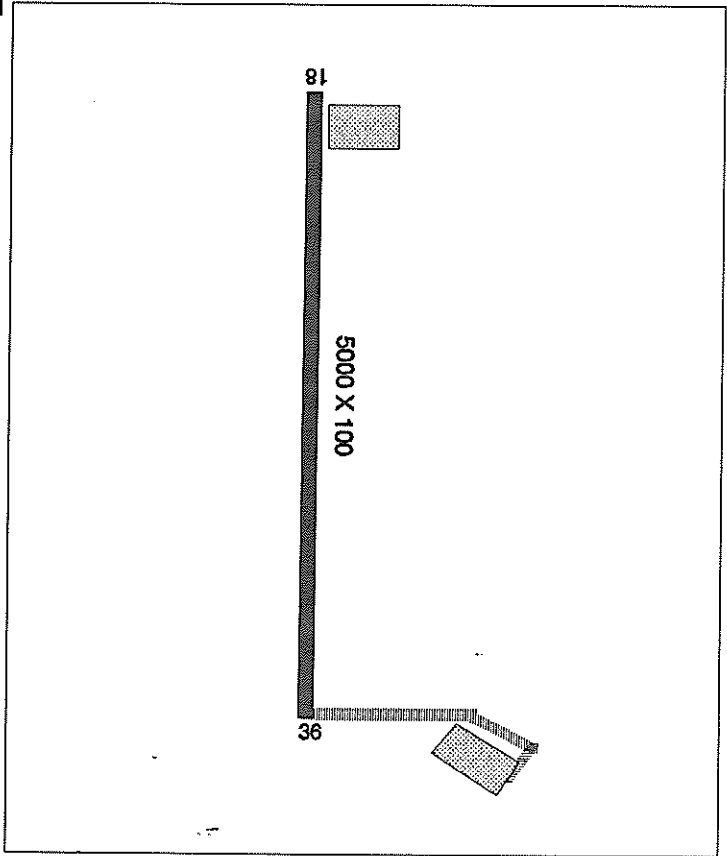
**BOGALUSA, George R. Carr Memorial Air Field
Washington Parish**

NPIAS Yes
 Instrument Approach LOC
 Based Aircraft 18
 Service Level GA

Airport	Role	ARC
Current	T	C-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	10.5	-0-	-0-
Reconstruction	741.9	-0-	-0-
Standards	1,013.7	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	242.2	-0-	-0-
Planning	75.0	-0-	-0-



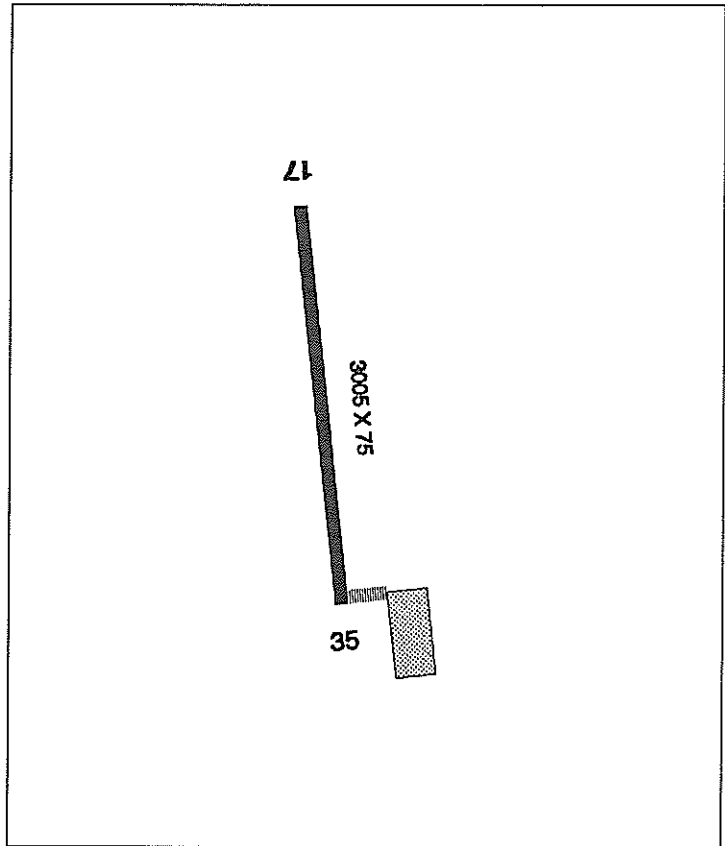
**BUNKIE, Bunkie Municipal
Avoyelles Parish**

NPIAS No
Instrument Approach VOR-DME
Based Aircraft 8
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	57.5	-0-	-0-
Standards	263.5	349.5	-0-
Upgrade	105.1	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	50.0	-0-	-0-



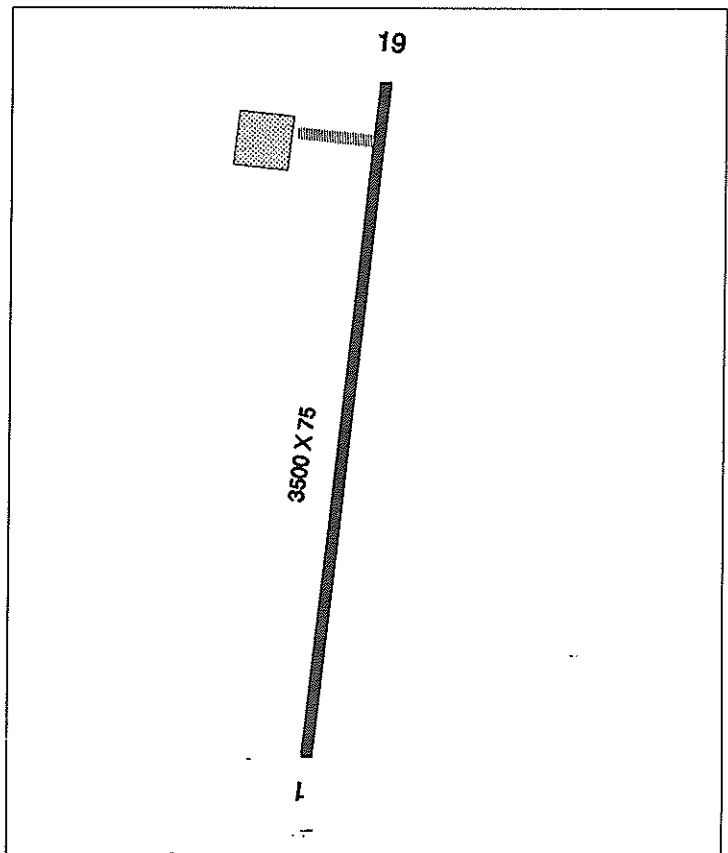
**COLUMBIA, Columbia
Caldwell Parish**

NPIAS No
Instrument Approach None
Based Aircraft 5
Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	161.0	-0-	-0-
Reconstruction	210.4	-0-	-0-
Standards	300.7	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	46.9	-0-	-0-
Planning	-0-	-0-	-0-



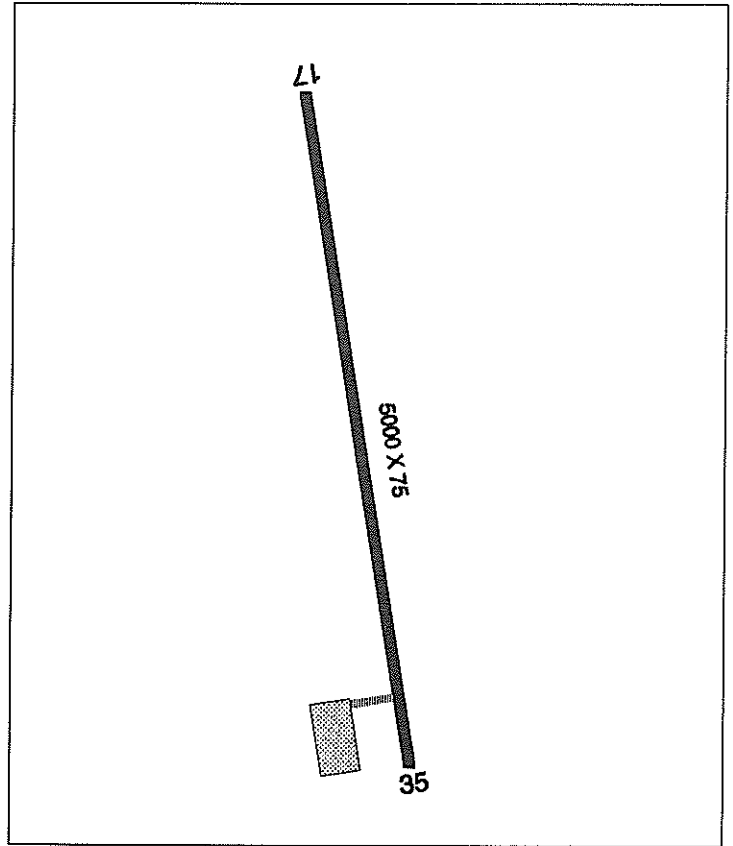
**COUSHATTA, Red River
Red River Parish**

NPIAS Yes
Instrument Approach None
Based Aircraft 4
Service Level GA

Airport	Role	ARC
<i>Current</i>	GU-II	B-II
<i>0-5 years</i>	GU-II	B-II
<i>6-10 years</i>	GU-II	B-II
<i>11-20 years</i>	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	226.0	-0-	-0-
<i>Reconstruction</i>	95.4	-0-	-0-
<i>Standards</i>	672.5	-0-	-0-
<i>Upgrade</i>	-0-	-0-	-0-
<i>Capacity</i>	-0-	-0-	-0-
<i>Planning</i>	-0-	-0-	-0-



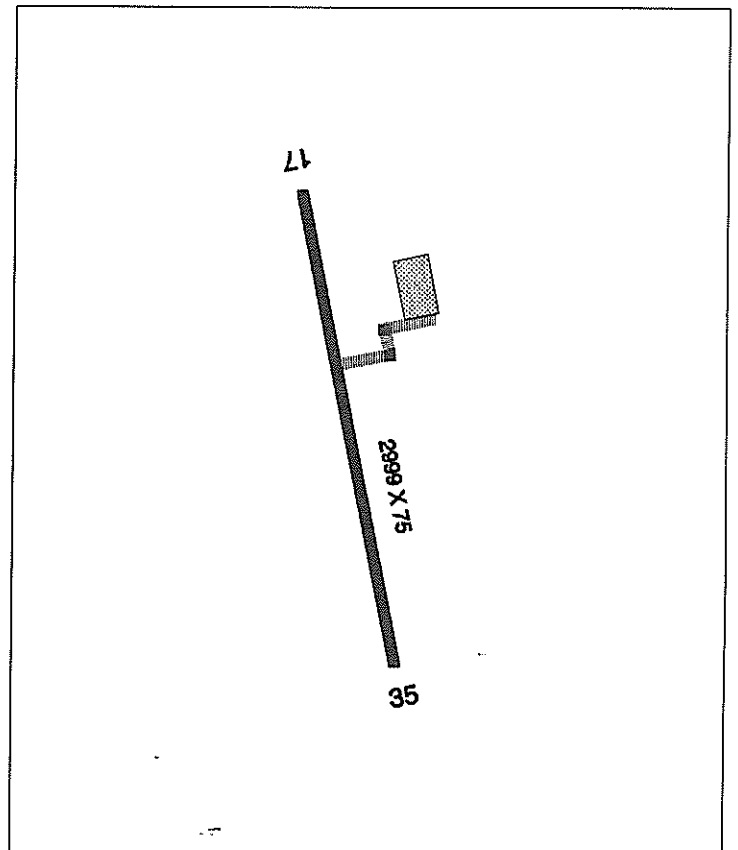
**COVINGTON, Greater St. Tammany
St. Tammany Parish**

NPIAS Yes
Instrument Approach VOR-DME
Based Aircraft 13
Service Level GA

Airport	Role	ARC
<i>Current</i>	BU-I	A-II
<i>0-5 years</i>	GU-I	B-II
<i>6-10 years</i>	GU-I	B-II
<i>11-20 years</i>	GU-IA	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	10.0	-0-	-0-
<i>Reconstruction</i>	180.6	-0-	-0-
<i>Standards</i>	411.2	-0-	-0-
<i>Upgrade</i>	218.8	-0-	392.7
<i>Capacity</i>	108.2	-0-	113.1
<i>Planning</i>	-0-	-0-	-0-



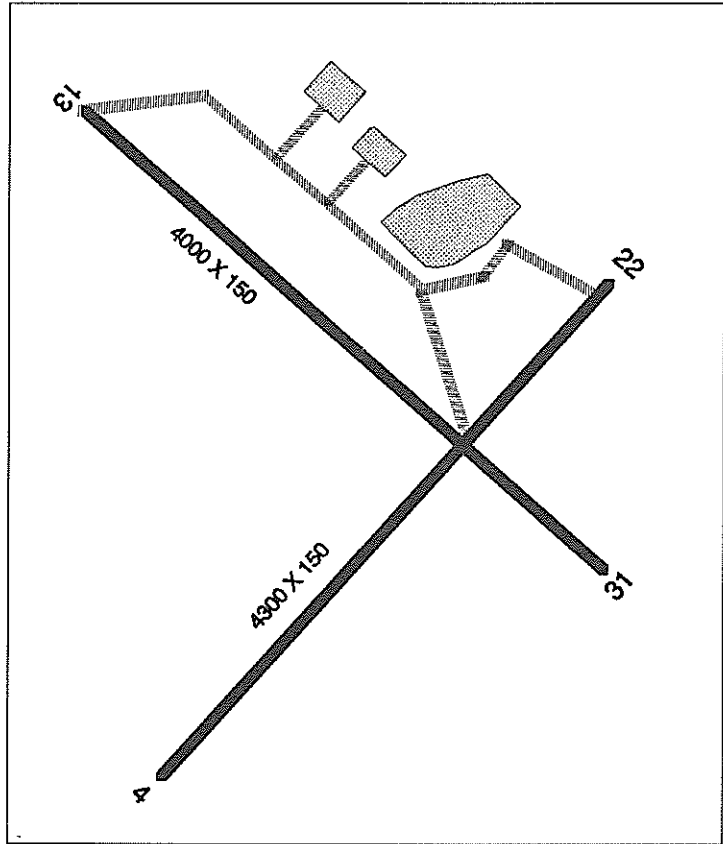
**CROWLEY, Le Gros Memorial
Acadia Parish**

NPIAS Yes
 Instrument Approach None
 Based Aircraft 3
 Service Level GA

Airport	Role	ARC
Current	GU-I	B-III
0-5 years	GU-I	B-III
6-10 years	GU-I	B-III
11-20 years	GU-I	B-III

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	160.3	-0-	-0-
Standards	129.4	-0-	-0-
Upgrade	25.0	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



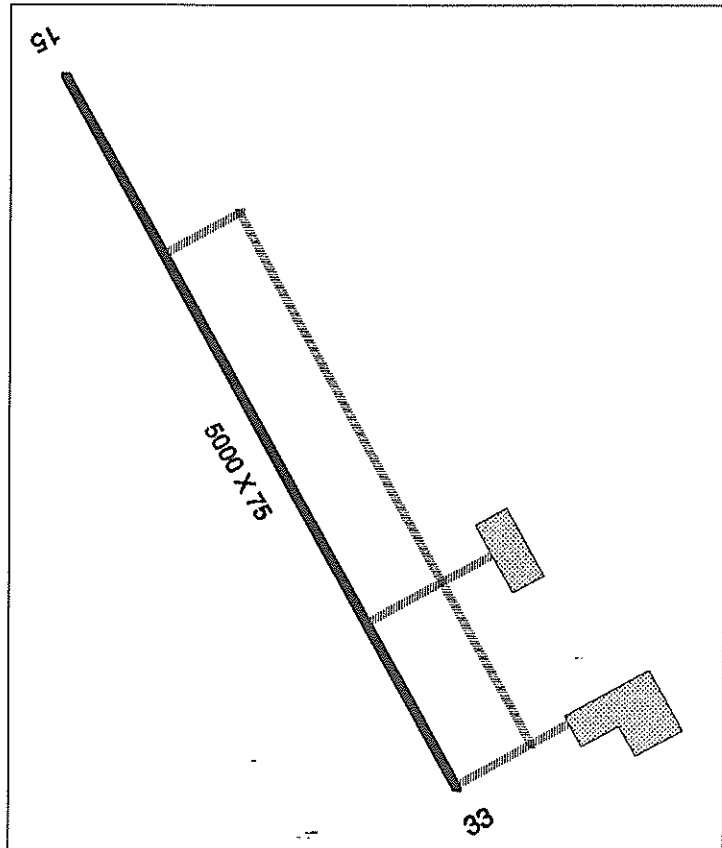
**DE QUINCY, De Quincy Industrial Airpark
Calcasieu Parish**

NPIAS Yes
 Instrument Approach VOR-DME
 Based Aircraft 13
 Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	440.9	85.0	-0-
Standards	-0-	263.8	-0-
Upgrade	-0-	-0-	-0-
Capacity	265.0	829.2	485.0
Planning	-0-	-0-	-0-



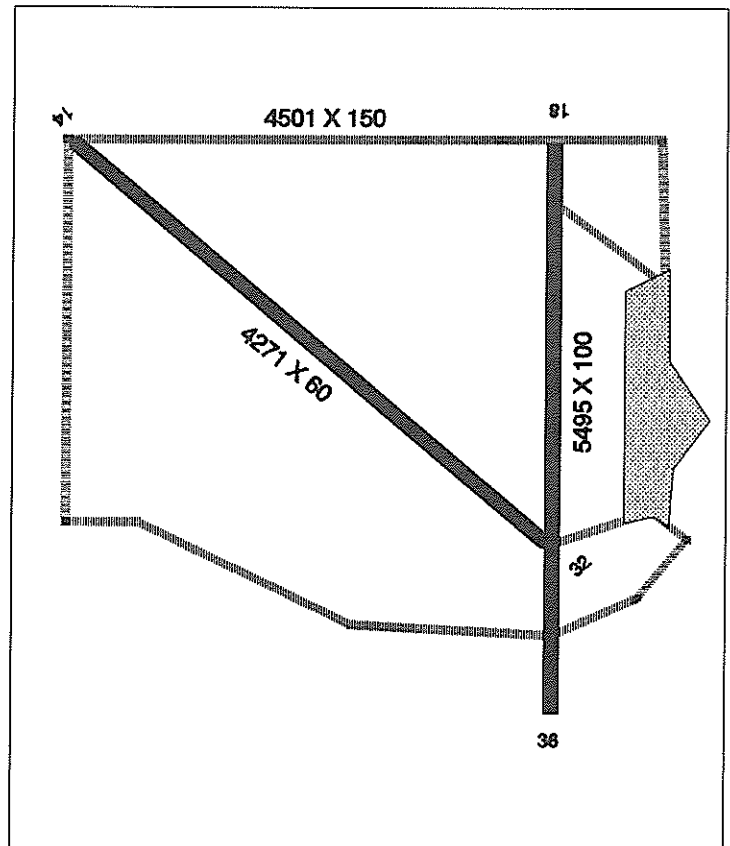
**DE RIDDER, Beauregard Parish
Beauregard Parish**

NPIAS Yes
Instrument Approach LOC
Based Aircraft 28
Service Level GA

Airport	Role	ARC
Current	T	C-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	5.0	-0-	-0-
Reconstruction	483.7	-0-	-0-
Standards	1,975.5	-0-	-0-
Upgrade	293.9	-0-	-0-
Capacity	138.0	-0-	-0-
Planning	175.0	-0-	-0-



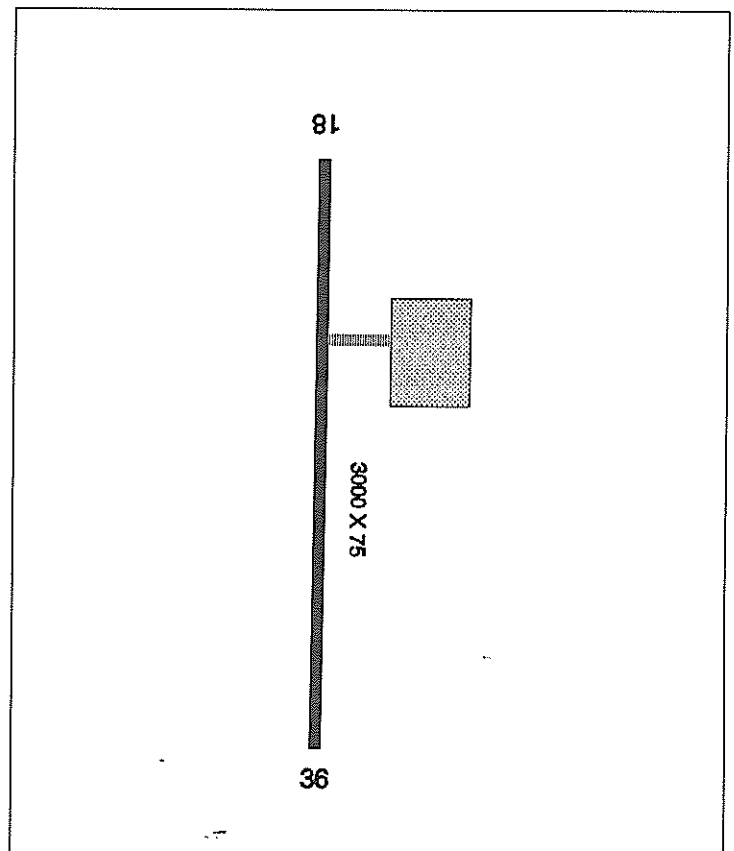
**DELHI, Delhi Municipal
Richland Parish**

NPIAS No
Instrument Approach None
Based Aircraft 8
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-132.0	-0-	-0-
Reconstruction	36.4	-0-	-0-
Standards	262.8	-0-	-0-
Upgrade	312.3	-0-	-0-
Capacity	10.0	-0-	-0-
Planning	-0-	-0-	-0-



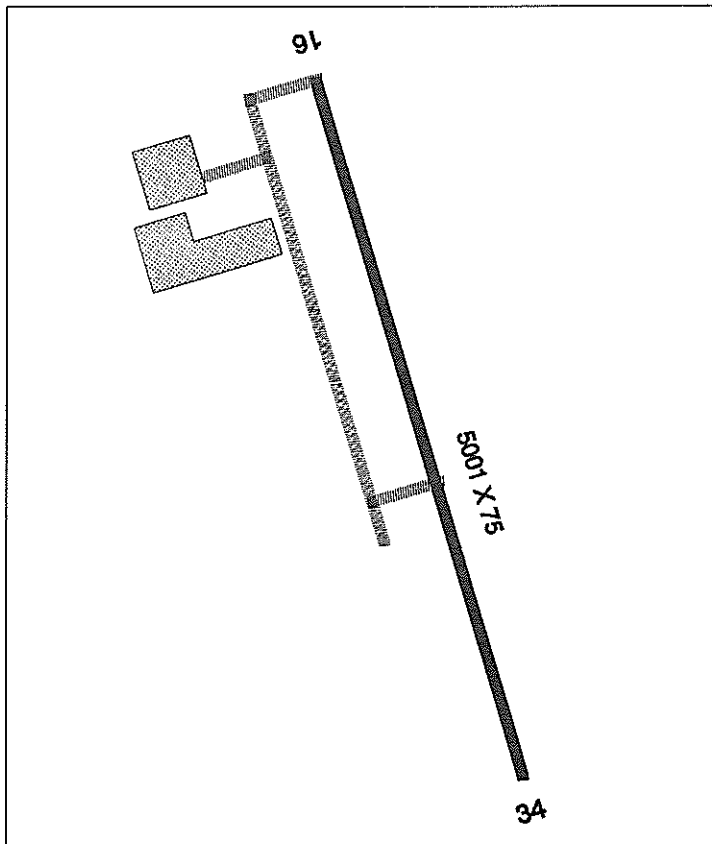
**EUNICE, Eunice
Acadia Parish**

NPIAS Yes
 Instrument Approach VOR-DME
 Based Aircraft 15
 Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	47.8	-0-	-0-
Standards	365.5	-0-	-0-
Upgrade	30.0	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



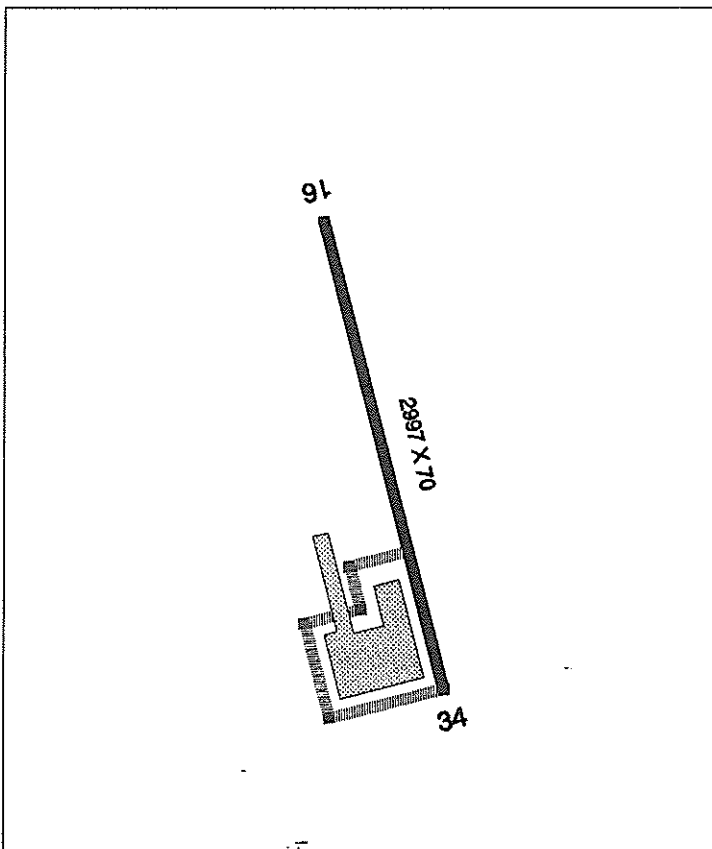
**FARMERVILLE, Farmerville
Union Parish**

NPIAS Yes
 Instrument Approach None
 Based Aircraft 15
 Service Level GA

Airport	Role	ARC
Current	BU-I	A-I
0-5 years	BU-I	A-I
6-10 years	BU-I	A-I
11-20 years	BU-I	A-I

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	227.1	-0-	-0-
Reconstruction	199.2	-0-	-0-
Standards	228.0	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



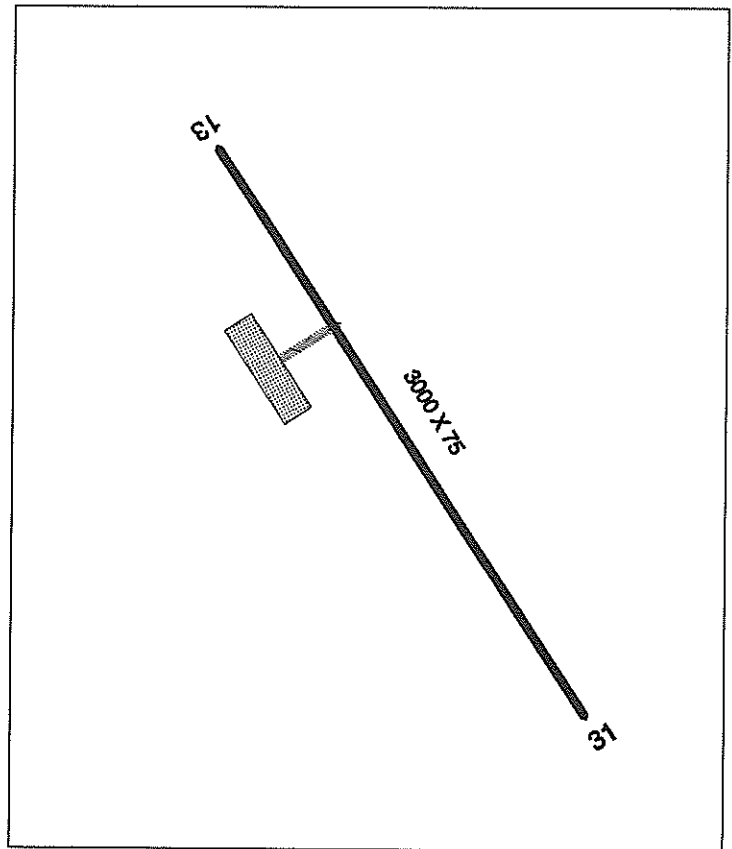
**FRANKLINTON, Franklinton
Washington Parish**

NPIAS No
Instrument Approach None
Based Aircraft 9
Service Level GA

Airport	Role	ARC
Current	BU-I	B-II
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	5.0	-0-	-0-
Reconstruction	64.7	50.0	50.0
Standards	115.8	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



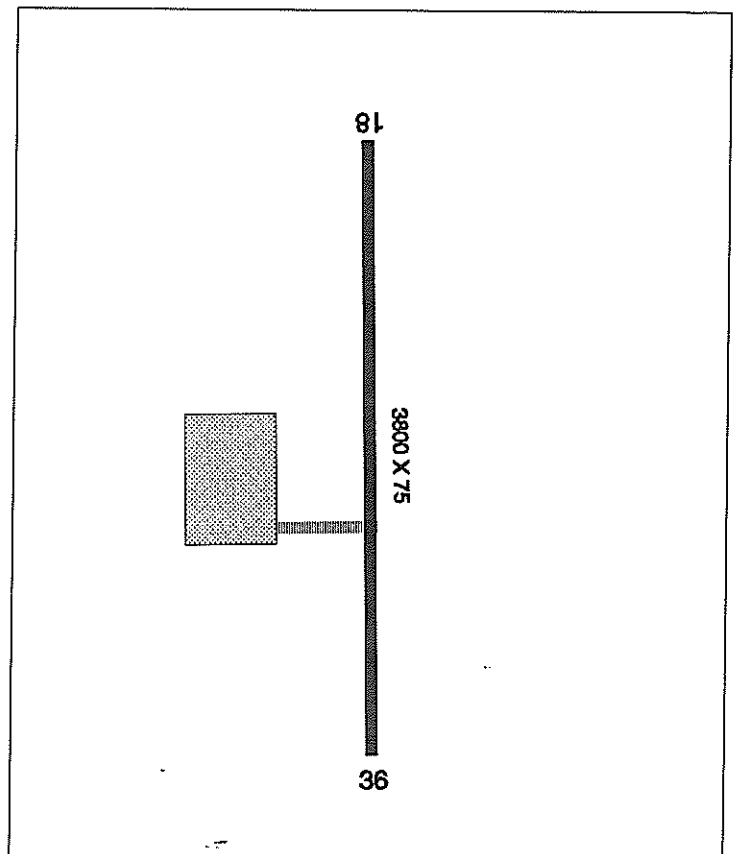
**GALLIANO, South Lafourche
Lafourche Parish**

NPIAS Yes
Instrument Approach None
Based Aircraft 3
Service Level GA

Airport	Role	ARC
Current	GU-I	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	65.5	217.5	-0-
Upgrade	380.0	-0-	-0-
Capacity	75.0	-0-	-0-
Planning	-0-	-0-	-0-



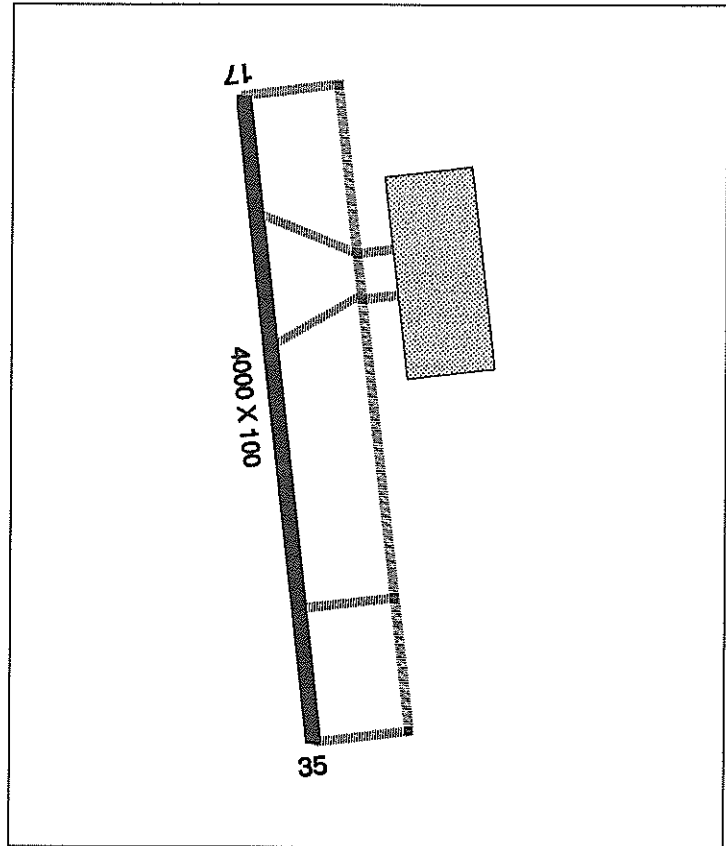
**GONZALES, Ascension - St. James Parish
Ascension Parish**

NPIAS Yes
 Instrument Approach VOR-DME
 Based Aircraft 8
 Service Level RL

Airport Role ARC
 Current GU-I B-II
 0-5 years T C-II
 6-10 years T C-II
 11-20 years T C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	594.7	170.9	-0-
Upgrade	352.2	2,169.0	-0-
Capacity	1,222.0	684.4	999.7
Planning	-0-	-0-	-0-



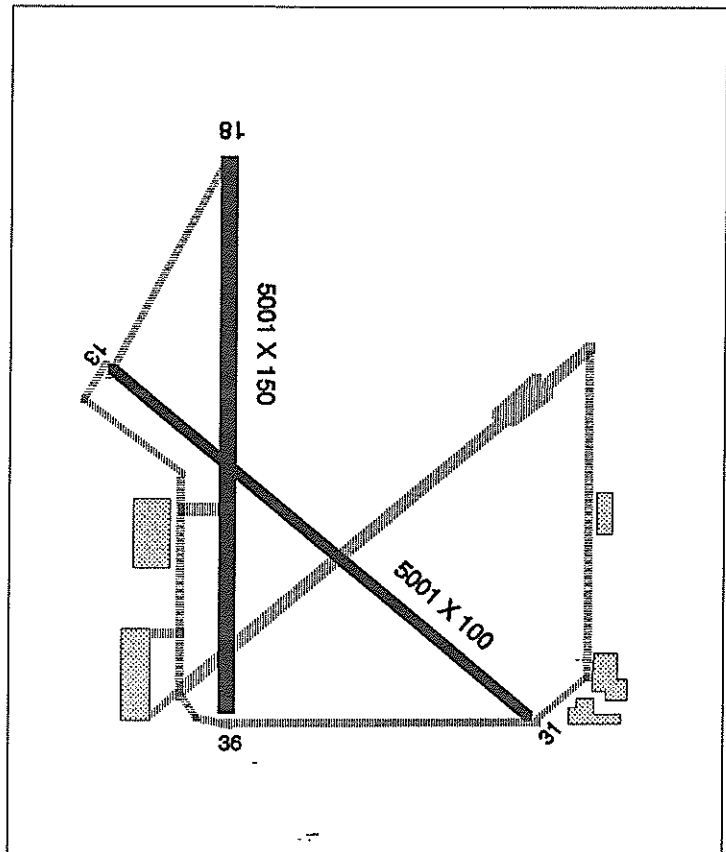
**HAMMOND, Hammond Municipal
Tangipahoa Parish**

NPIAS Yes
 Instrument Approach ILS
 Based Aircraft 53
 Service Level RL

Airport Role ARC
 Current T C-IV
 0-5 years T C-IV
 6-10 years T C-IV
 11-20 years T C-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	1,436.0	-0-	-0-
Standards	191.8	-0-	-0-
Upgrade	1,049.5	634.4	-0-
Capacity	213.9	-0-	-0-
Planning	64.3	-0-	-0-



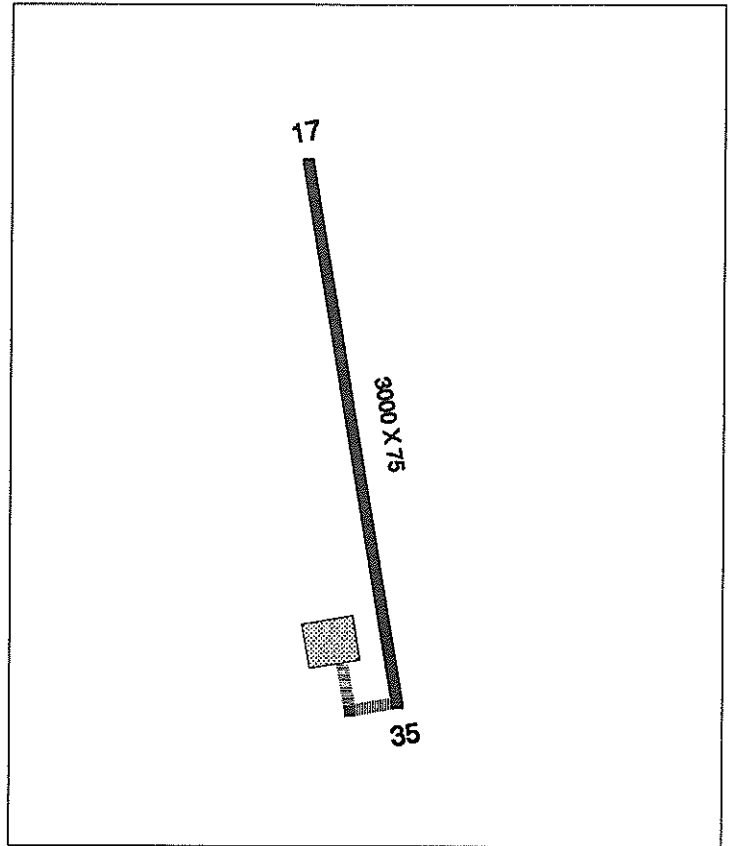
**HAYNESVILLE, Haynesville
Claiborne Parish**

NPIAS No
Instrument Approach None
Based Aircraft 0
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	180.0	-0-	-0-
Reconstruction	21.4	-0-	-0-
Standards	99.3	-0-	-0-
Upgrade	14.0	61.7	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



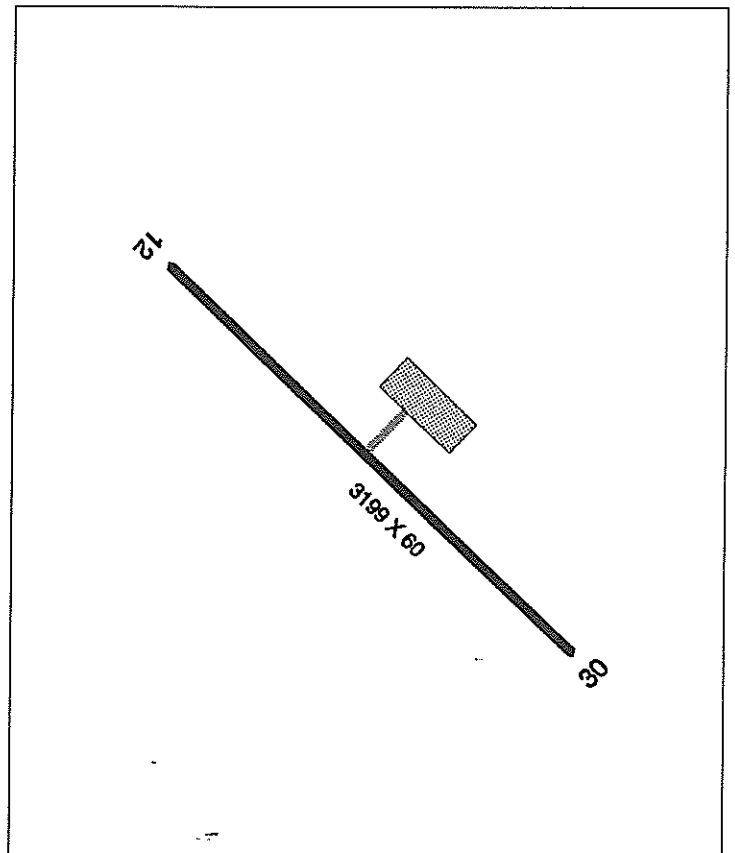
**HOMER, Homer Municipal
Claiborne Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 4
Service Level GA

Airport	Role	ARC
Current	BU-II	B-I
0-5 years	GU-I	B-I
6-10 years	GU-I	B-I
11-20 years	GU-I	B-I

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	138.2	-0-	-0-
Reconstruction	133.4	-0-	-0-
Standards	16.3	-0-	-0-
Upgrade	140.4	-0-	-0-
Capacity	50.6	-0-	-0-
Planning	-0-	-0-	-0-



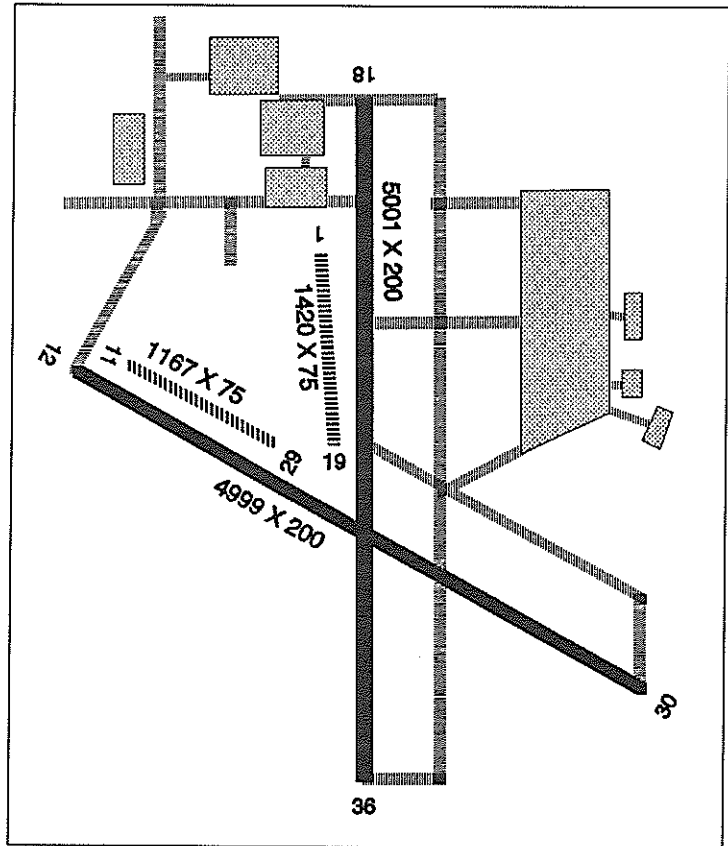
**HOUMA, Houma - Terrebonne
Terrebonne Parish**

NPIAS Yes
Instrument Approach ILS
Based Aircraft 43
Service Level GA

Airport Role ARC
Current T D-IV
0-5 years T D-IV
6-10 years T D-IV
11-20 years T D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	-0-	-0-	-0-
<i>Reconstruction</i>	666.0	-0-	-0-
<i>Standards</i>	-0-	-0-	1,750.0
<i>Upgrade</i>	3,000.0	3,664.0	10,891.0
<i>Capacity</i>	125.0	-0-	-0-
<i>Planning</i>	-0-	-0-	-0-



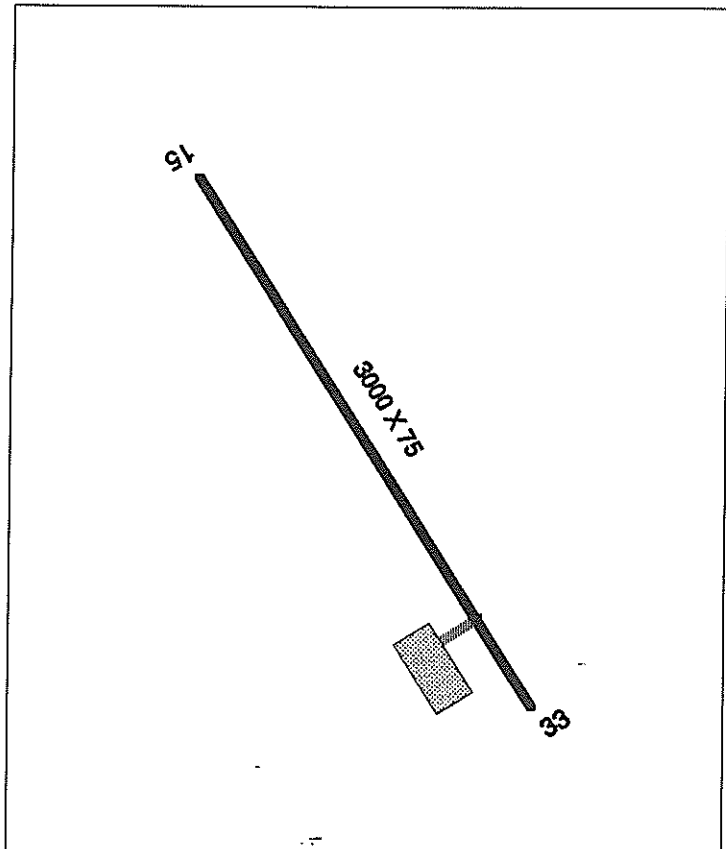
**JACKSON, Jackson
East Feliciana Parish**

NPIAS No
Instrument Approach None
Based Aircraft 3
Service Level GA

Airport Role ARC
Current BU-I A-II
0-5 years BU-I A-II
6-10 years BU-I A-II
11-20 years BU-I A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	5.0	-0-	-0-
<i>Reconstruction</i>	35.5	-0-	-0-
<i>Standards</i>	49.5	-0-	-0-
<i>Upgrade</i>	-0-	-0-	-0-
<i>Capacity</i>	-0-	-0-	-0-
<i>Planning</i>	-0-	-0-	-0-



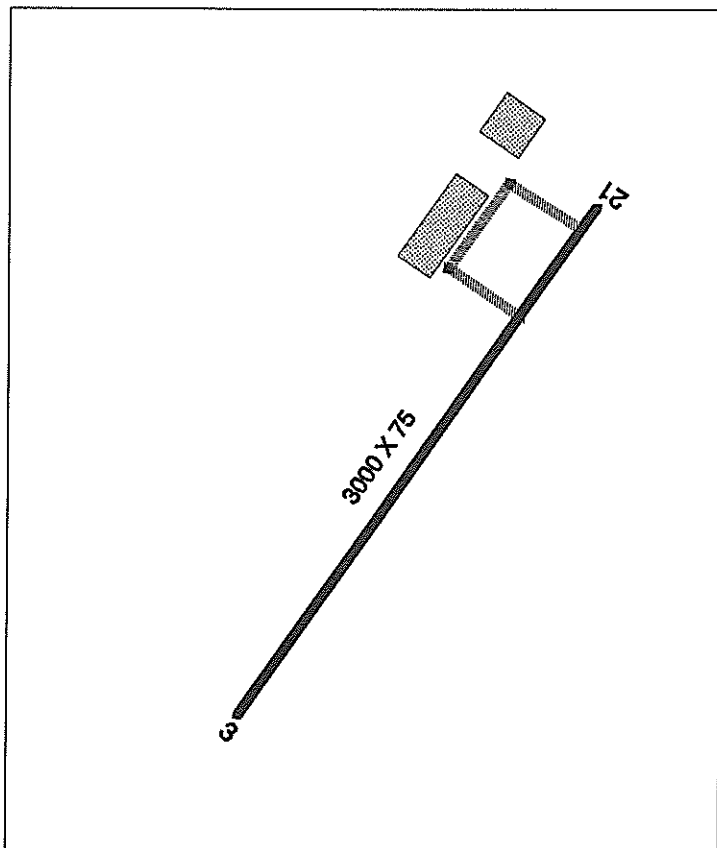
JEANERETTE, Le Maire Memorial Iberia Parish

NPIAS No
 Instrument Approach None
 Based Aircraft 13
 Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	BU-I	A-II
11-20 years	BU-I	A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	212.0	-0-	-0-
Standards	111.4	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	120.0	-0-	-0-
Planning	-0-	-0-	-0-



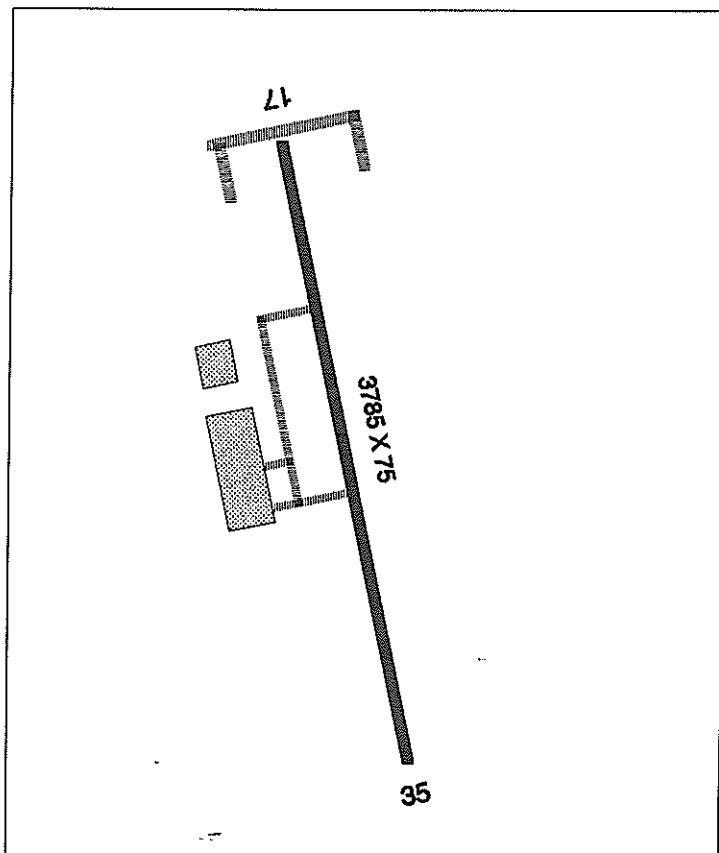
JENA, Jena La Salle Parish

NPIAS Yes
 Instrument Approach None
 Based Aircraft 3
 Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	GU-IA	B-II
6-10 years	GU-IA	B-II
11-20 years	GU-IA	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	30.0	-0-	-0-
Reconstruction	292.6	-0-	-0-
Standards	143.0	-0-	-0-
Upgrade	180.8	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



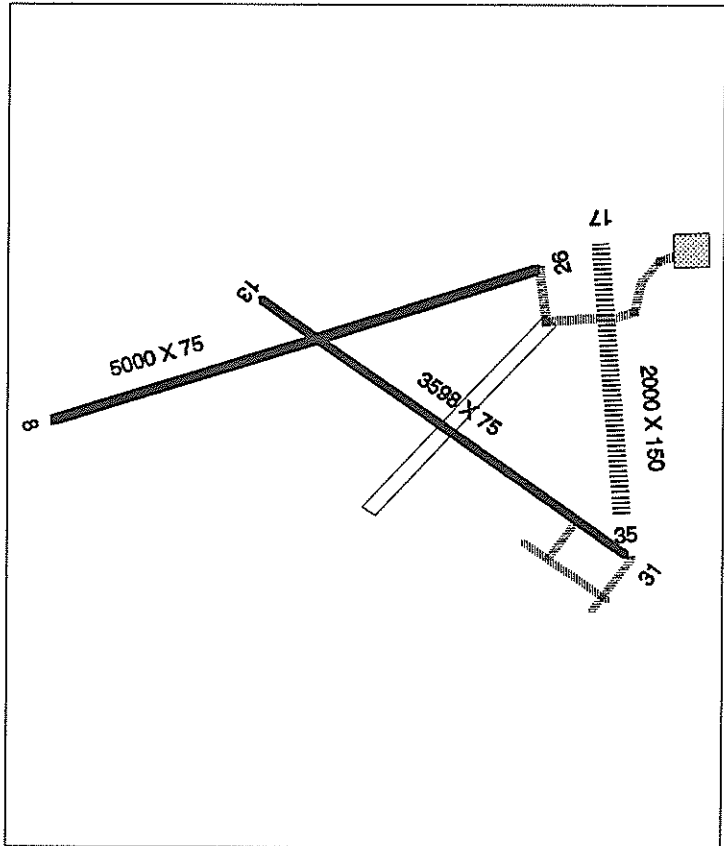
JENNINGS, Jennings
Jefferson Davis Parish

NPIAS Yes
 Instrument Approach VOR-DME
 Based Aircraft 24
 Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	1,011.5	355.8	-0-
Standards	501.1	-0-	-0-
Upgrade	-0-	-0-	130.0
Capacity	-0-	328.2	434.0
Planning	-0-	-0-	-0-



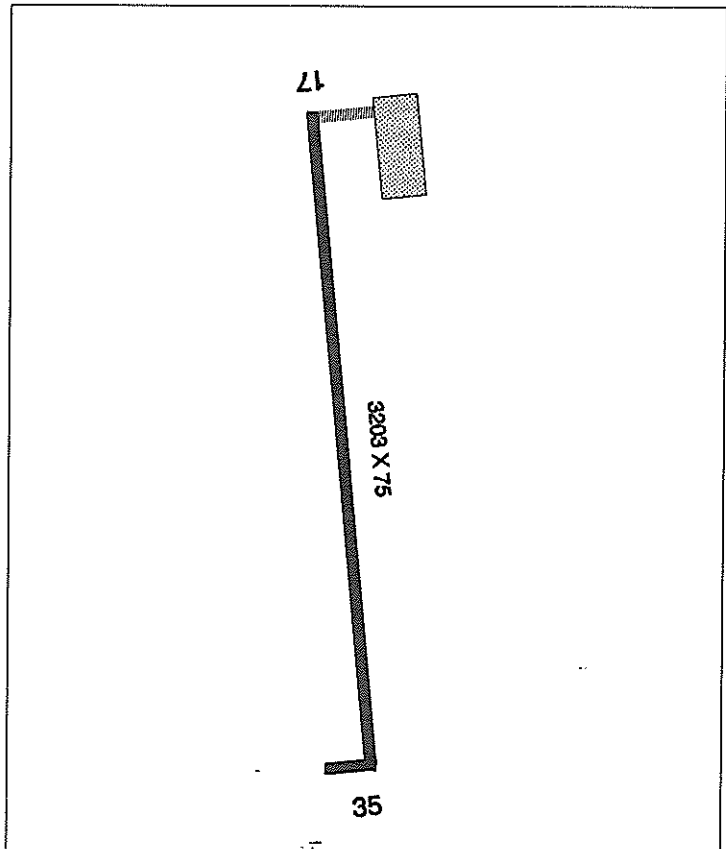
JONESBORO, Jonesboro
Jackson Parish

NPIAS Yes
 Instrument Approach VOR
 Based Aircraft 5
 Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	40.0	-0-	-0-
Reconstruction	233.7	302.1	-0-
Standards	645.8	-0-	-0-
Upgrade	403.8	-0-	-0-
Capacity	-0-	125.0	-0-
Planning	35.0	-0-	-0-



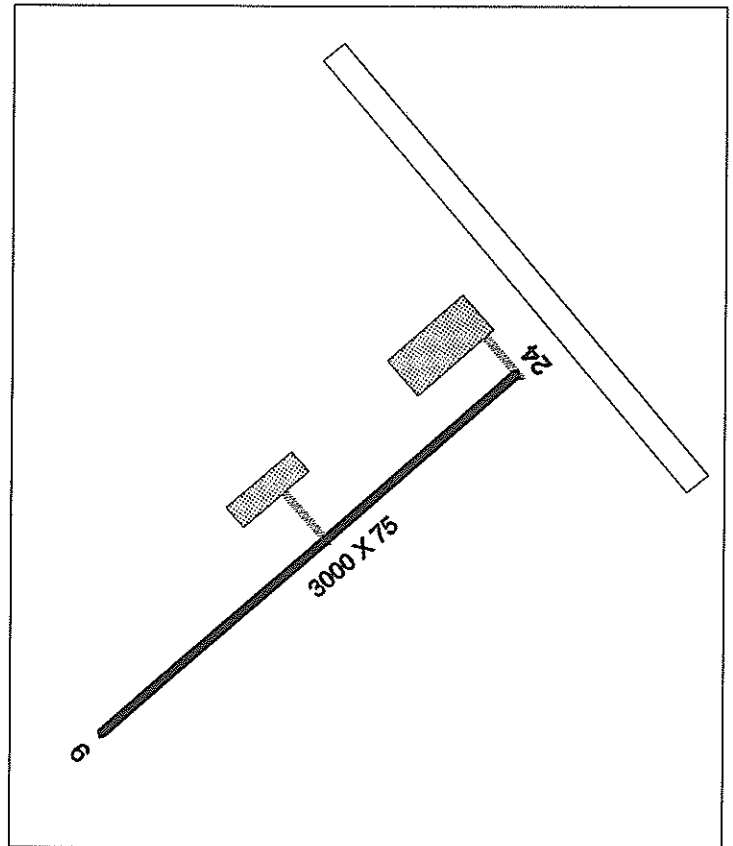
**JONESVILLE, Jonesville
Catahoula Parish**

NPIAS No
Instrument Approach None
Based Aircraft 14
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	82.0	-0-	-0-
Reconstruction	187.5	-0-	-0-
Standards	216.8	-0-	-0-
Upgrade	96.0	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



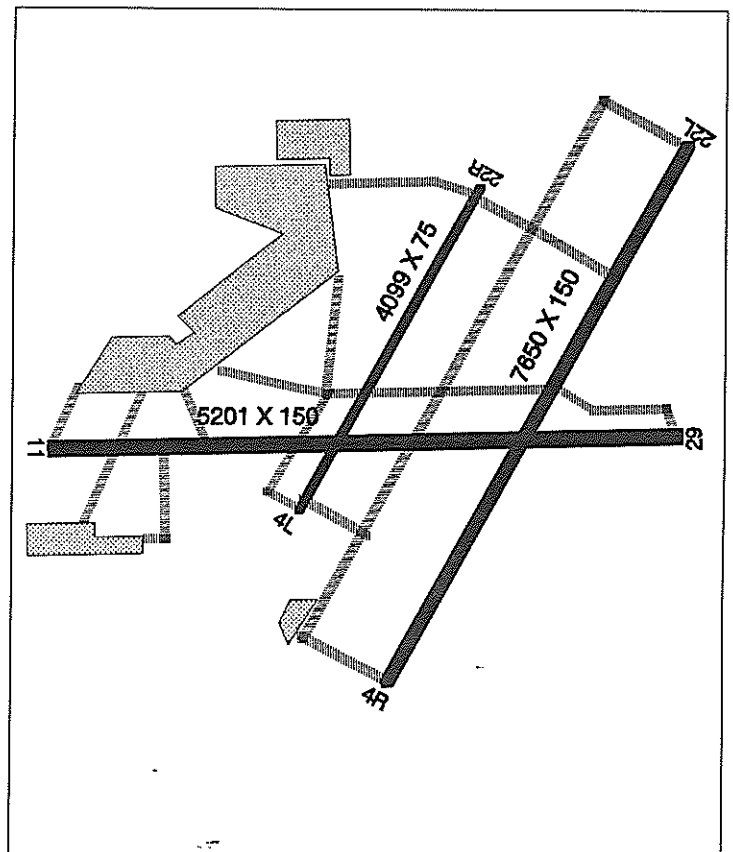
**LAFAYETTE, Lafayette Regional
Lafayette Parish**

NPIAS Yes
Instrument Approach ILS
Based Aircraft 135
Service Level PR

Airport	Role	ARC
Current	T	D-IV
0-5 years	T	D-IV
6-10 years	T	D-IV
11-20 years	T	D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	4,468.8	-0-	-0-
Standards	2,002.0	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



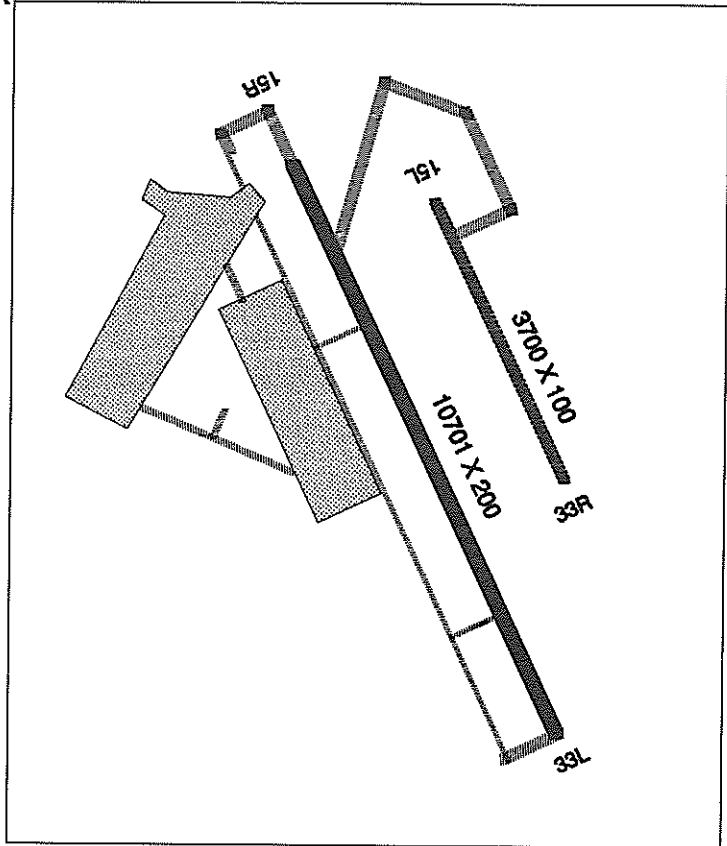
**LAKE CHARLES, Chennault Industrial Airpark
Calcasieu Parish**

NPIAS Yes
 Instrument Approach ILS
 Based Aircraft 37
 Service Level GA

Airport	Role	ARC
Current	T	D-VI
0-5 years	T	D-VI
6-10 years	T	D-VI
11-20 years	T	D-VI

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	1,908.0	-0-	-0-
Reconstruction	7,180.0	500.0	-0-
Standards	9,826.0	400.0	-0-
Upgrade	-0-	-0-	-0-
Capacity	39,170.0	-0-	-0-
Planning	166.0	-0-	-0-



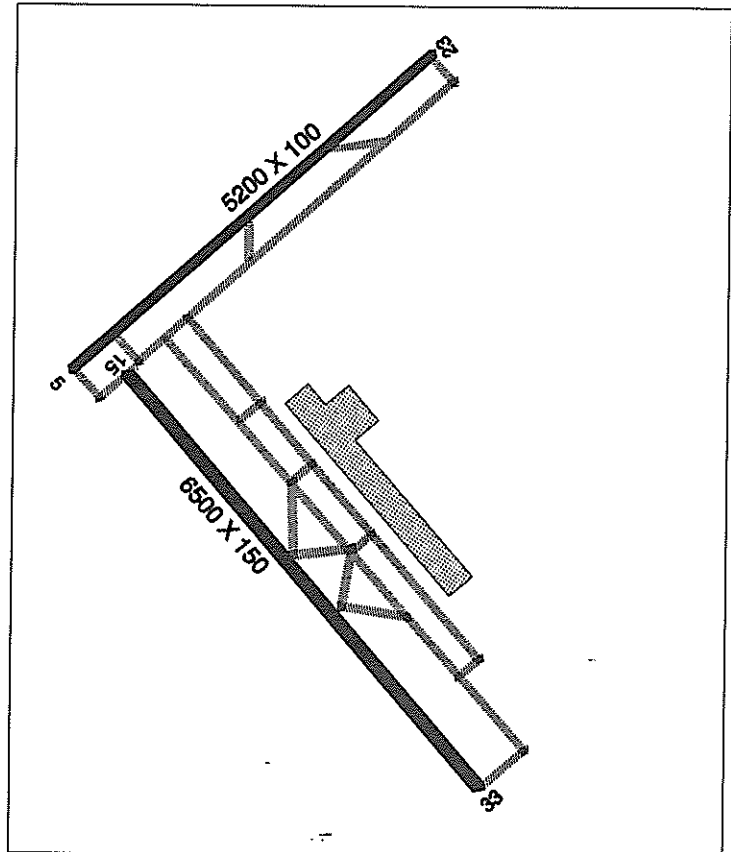
**LAKE CHARLES, Lake Charles Regional
Calcasieu Parish**

NPIAS Yes
 Instrument Approach ILS
 Based Aircraft 56
 Service Level PR

Airport	Role	ARC
Current	T	D-IV
0-5 years	T	D-IV
6-10 years	T	D-IV
11-20 years	T	D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	882.0	-0-	-0-
Reconstruction	2,708.3	-0-	-0-
Standards	545.0	-0-	-0-
Upgrade	416.6	1,491.9	-0-
Capacity	537.7	-0-	-0-
Planning	-0-	-0-	-0-



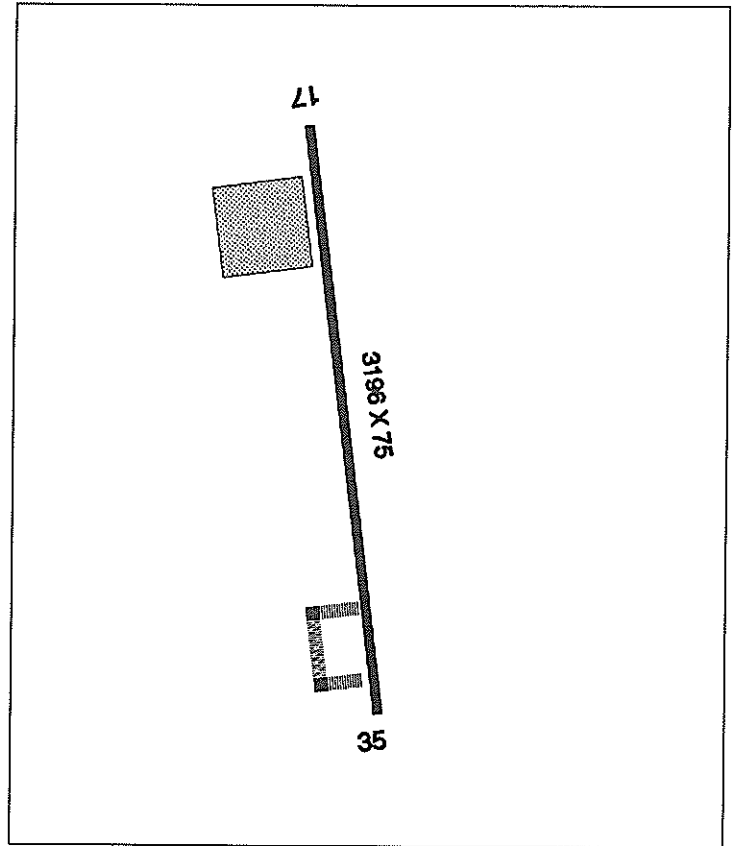
**LAKE PROVIDENCE, Byerley
East Carroll Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 14
Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	38.8	-0-	-0-
Reconstruction	316.1	-0-	-0-
Standards	179.8	-0-	-0-
Upgrade	480.8	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



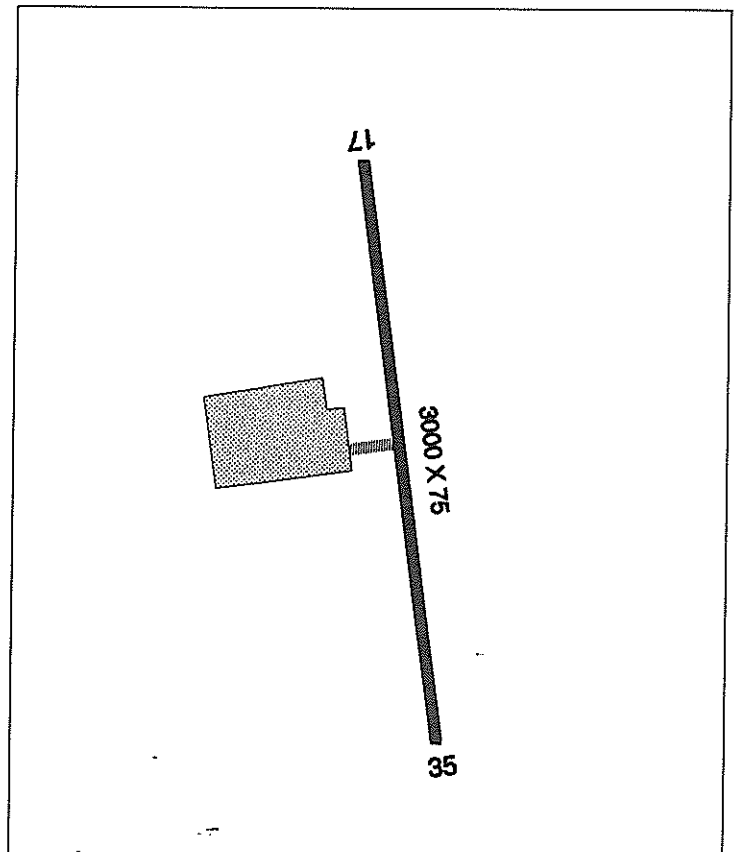
**LEESVILLE, Leesville
Vernon Parish**

NPIAS Yes
Instrument Approach None
Based Aircraft 10
Service Level GA

Airport	Role	ARC
Current	BU-I	B-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	115.0	-0-	-0-
Reconstruction	191.6	-0-	-0-
Standards	179.6	-0-	-0-
Upgrade	336.4	-0-	-0-
Capacity	2.8	-0-	-0-
Planning	-0-	-0-	-0-



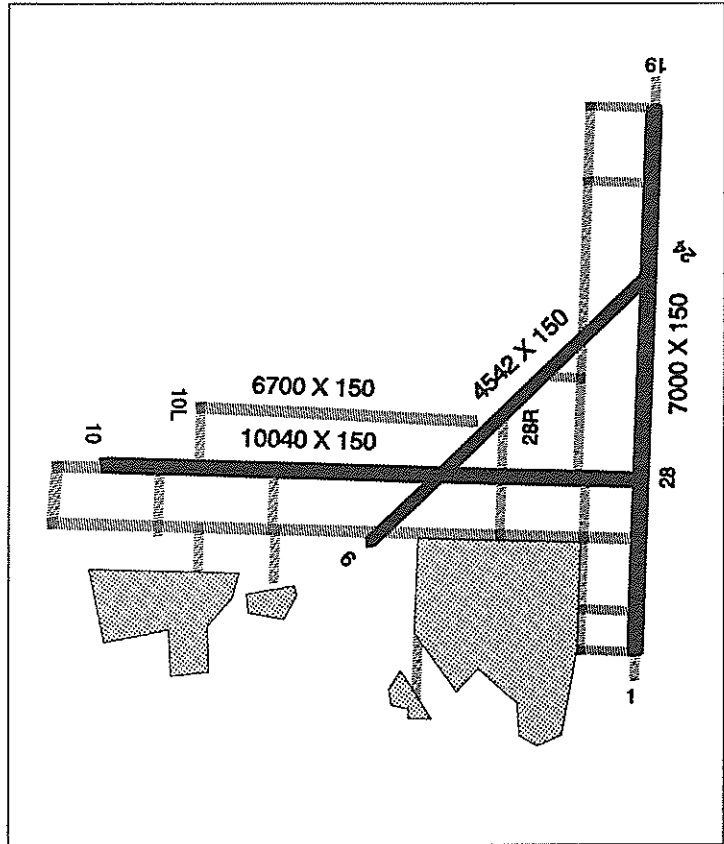
**NEW ORLEANS, New Orleans International
Jefferson Parish**

NPIAS Yes
Instrument Approach ILS
Based Aircraft 45
Service Level PR

Airport	Role	ARC
Current	T	D-V
0-5 years	T	D-V
6-10 years	T	D-V
11-20 years	T	D-V

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	3,885.0	-0-	-0-
Reconstruction	2,266.0	-0-	-0-
Standards	1,655.0	-0-	-0-
Upgrade	423,222.6	49,903.5	-0-
Capacity	-0-	-0-	-0-
Planning	1,495.0	-0-	-0-



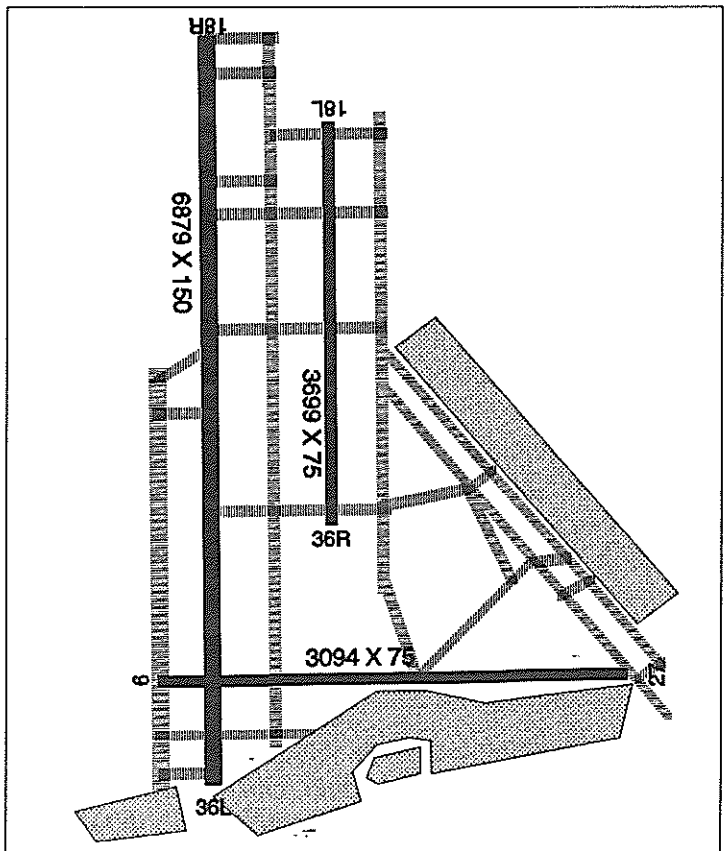
**NEW ORLEANS, Lakefront
Orleans Parish**

NPIAS Yes
Instrument Approach ILS
Based Aircraft 217
Service Level RL

Airport	Role	ARC
Current	T	D-IV
0-5 years	T	D-IV
6-10 years	T	D-IV
11-20 years	T	D-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	5,795.8	-0-	-0-
Standards	605.5	31.3	-0-
Upgrade	406.3	-0-	-0-
Capacity	433.3	2,323.6	830.8
Planning	50.0	-0-	-0-



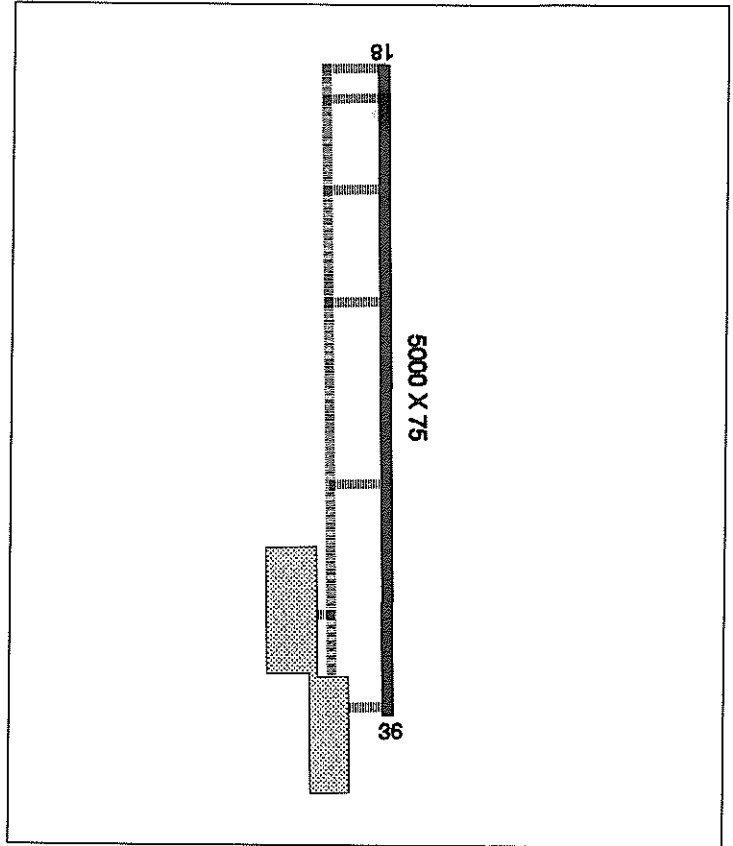
**NEW ROADS, False River Airpark
Pointe Coupee Parish**

NPIAS Yes
Instrument Approach LOC
Based Aircraft 11
Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	40.0	-0-	-0-
Reconstruction	275.5	-0-	-0-
Standards	666.0	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	155.6	174.3	-0-
Planning	-0-	-0-	-0-



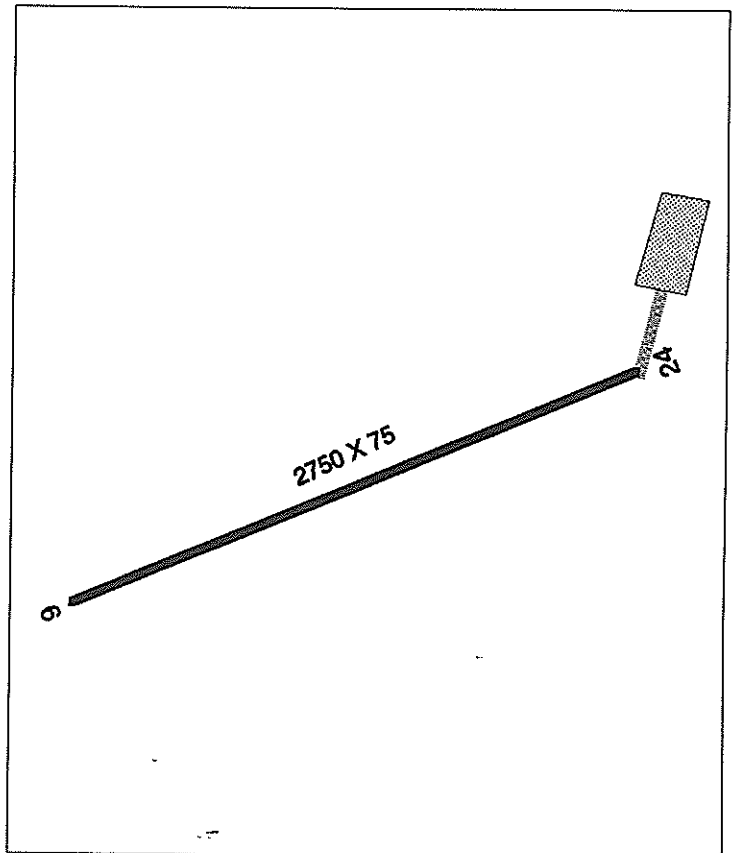
**NEWELLTON, Newellton
Tensas Parish**

NPIAS No
Instrument Approach None
Based Aircraft 7
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	BU-I	A-II
11-20 years	BU-I	A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	176.6	-0-	-0-
Standards	101.4	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	0-	-0-



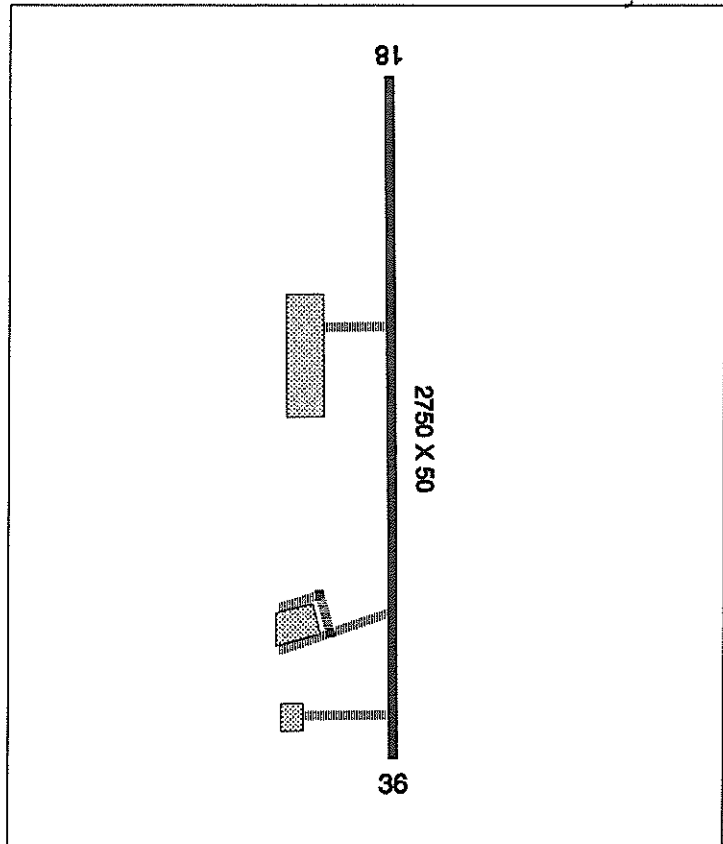
**OAK GROVE, Kelly
West Carroll Parish**

NPIAS Yes
 Instrument Approach None
 Based Aircraft 5
 Service Level GA

Airport	Role	ARC
Current	BU-I	A-I
0-5 years	GU-I	B-I
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	100.0	-0-	-0-
Standards	2,926.5	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	60.0	1,020.0	-0-
Planning	-0-	-0-	-0-



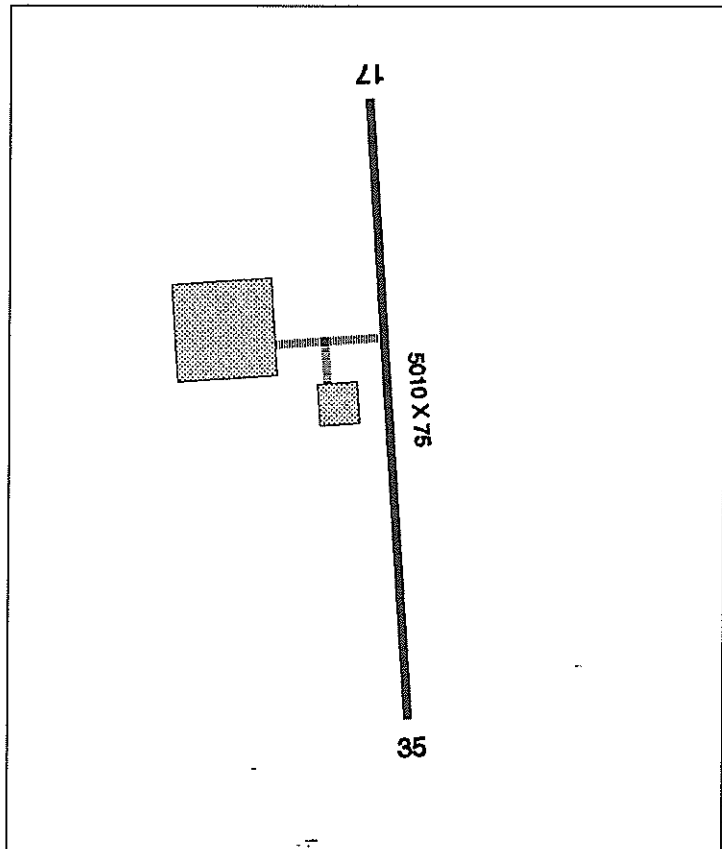
**OAKDALE, Allen Parish
Allen Parish**

NPIAS No
 Instrument Approach None
 Based Aircraft 4
 Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	11.0	-0-	-0-
Standards	334.7	-0-	354.0
Upgrade	-0-	-0-	2,415.1
Capacity	75.0	98.1	91.9
Planning	-0-	-0-	-0-



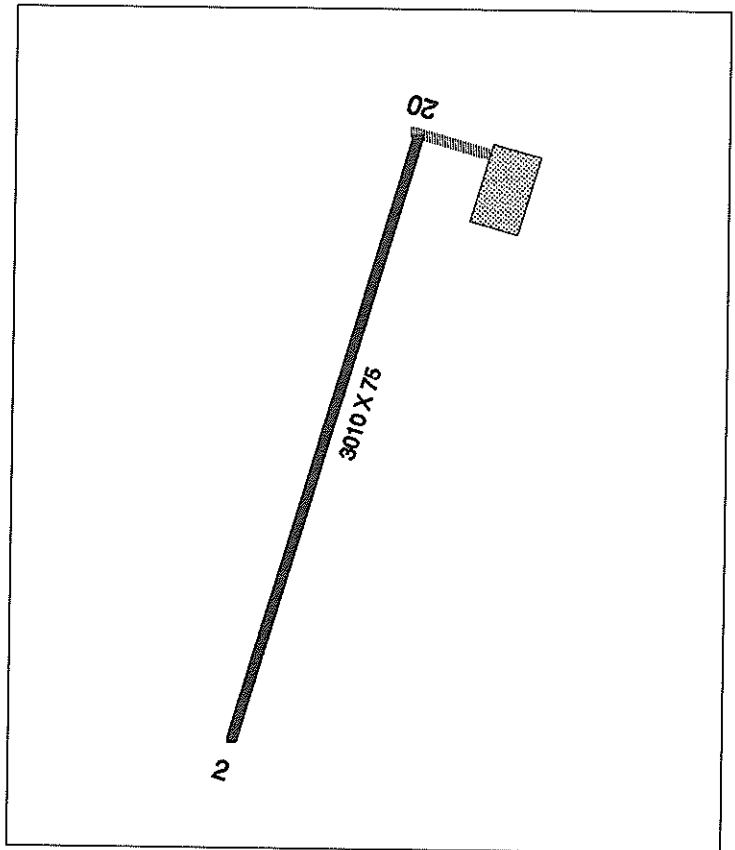
**OLLA, Olla
La Salle Parish**

NPIAS No
Instrument Approach None
Based Aircraft 2
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	47.5	-0-	-0-
Reconstruction	143.5	-0-	-0-
Standards	151.4	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	60.0	-0-	-0-
Planning	-0-	-0-	-0-



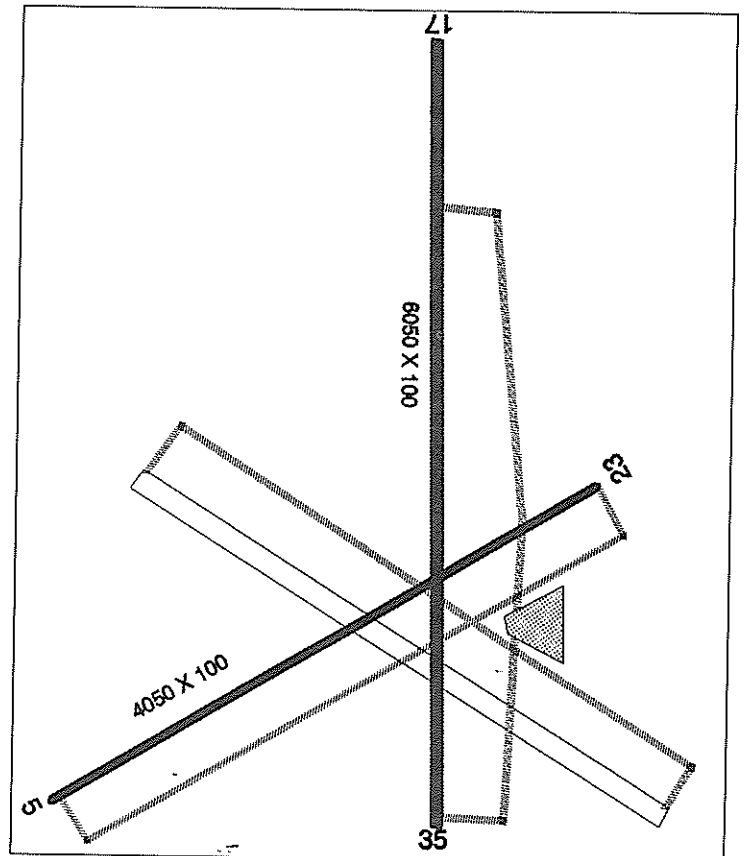
**OPELOUSAS, St. Landry Parish -- Ahart Field
St. Landry Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 15
Service Level GA

Airport	Role	ARC
Current	T	C-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	6.0	-0-	-0-
Reconstruction	1,826.3	-0-	-0-
Standards	668.4	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



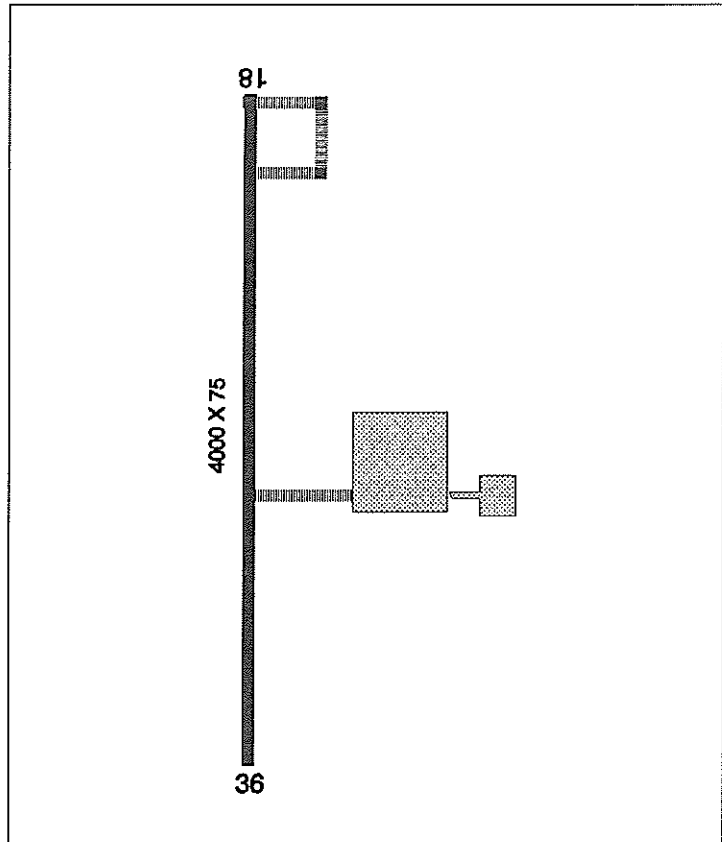
**RESERVE, St. John the Baptist Parish
St. John the Baptist Parish**

NPIAS Yes
Instrument Approach None
Based Aircraft 30
Service Level RL

Airport	Role	ARC
Current	GU-I	B-II
0-5 years	GU-I	B-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	554.6	-0-	-0-
Upgrade	1,700.0	6,402.2	-0-
Capacity	1,568.2	-0-	-0-
Planning	60.0	-0-	-0-



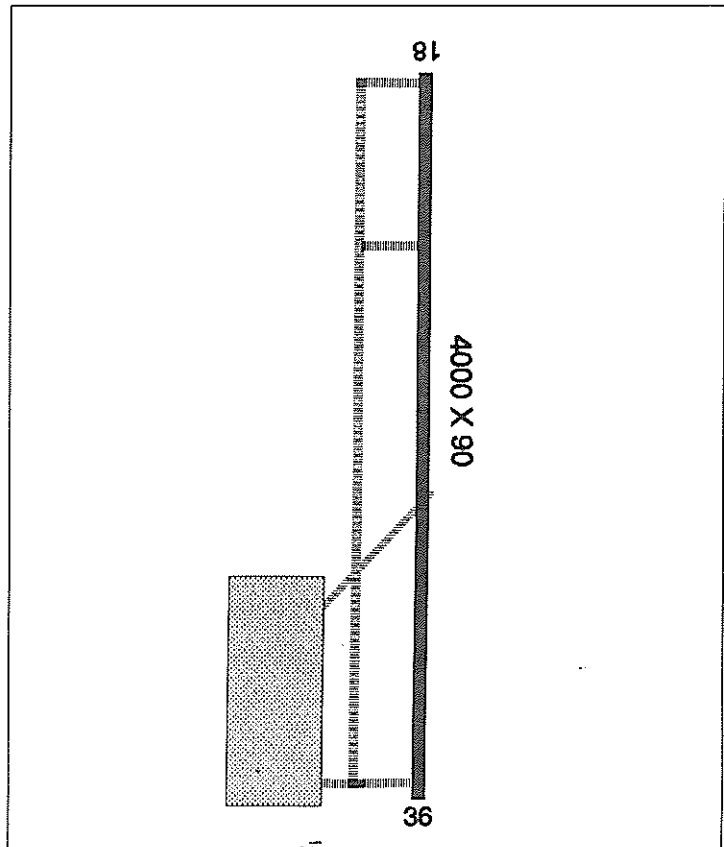
**RUSTON, Ruston Municipal (New)
Lincoln Parish**

NPIAS Yes
Instrument Approach NDB approach pending
Based Aircraft -0-
Service Level GA

Airport	Role	ARC
Current	T	C-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	-0-	-0-	-0-
Upgrade	-0-	1,168.0	-0-
Capacity	-0-	1,929.0	-0-
Planning	-0-	-0-	-0-
New Airport	10,863.2	-0-	-0-



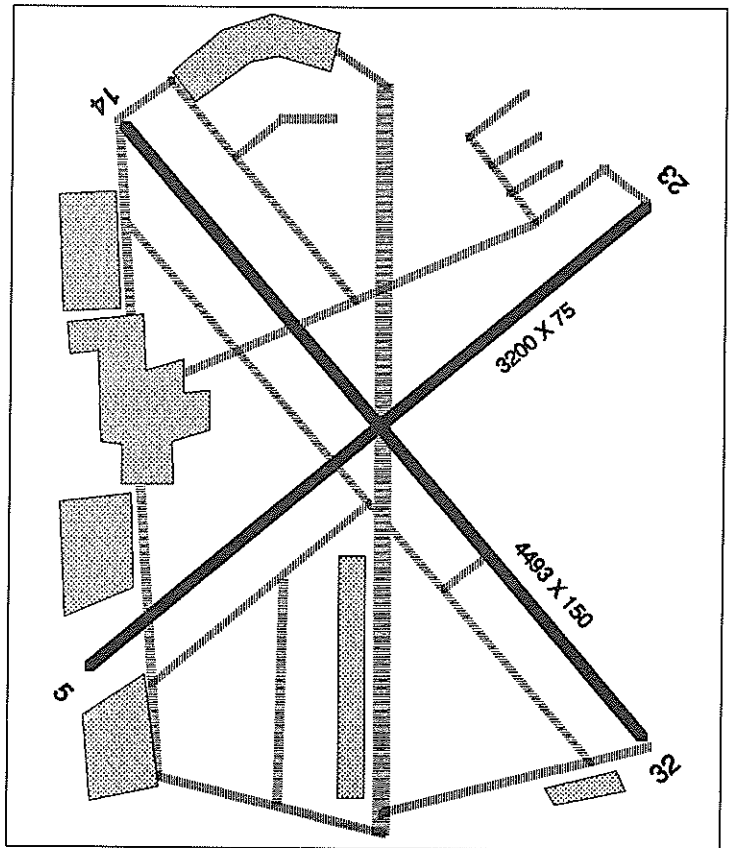
SHREVEPORT, Shreveport Downtown Bossier Parish

NPIAS Yes
 Instrument Approach LOC
 Based Aircraft 186
 Service Level RL

Airport	Role	ARC
<i>Current</i>	GU-II	C-IV
<i>0-5 years</i>	T	C-IV
<i>6-10 years</i>	T	C-IV
<i>11-20 years</i>	T	C-IV

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	-0-	-0-	-0-
<i>Reconstruction</i>	963.4	332.0	-0-
<i>Standards</i>	1,263.3	-0-	-0-
<i>Upgrade</i>	826.8	-0-	-0-
<i>Capacity</i>	-0-	-0-	-0-
<i>Planning</i>	-0-	0-	-0-



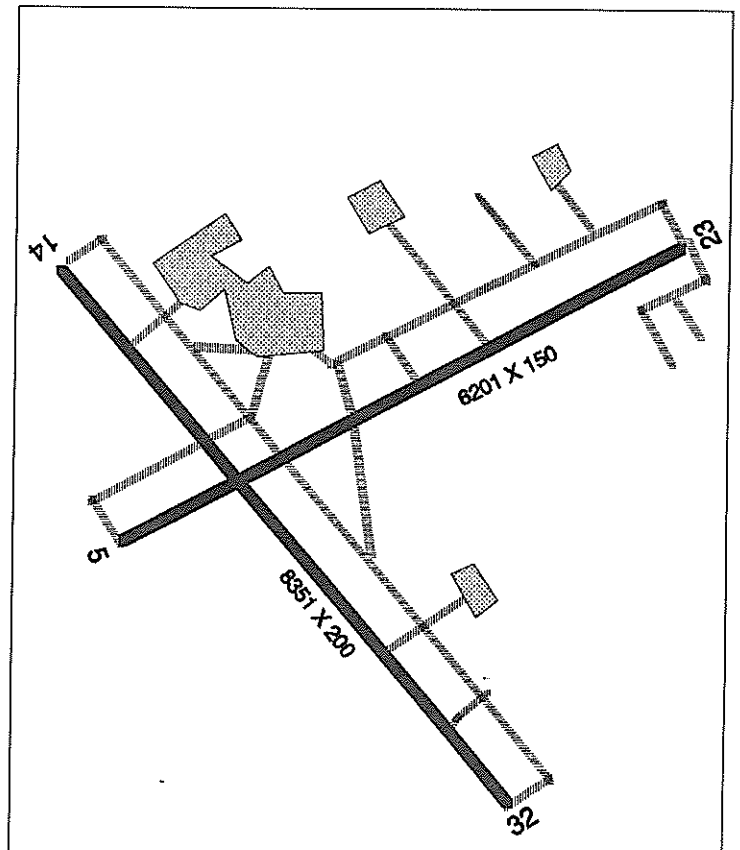
SHREVEPORT, Shreveport Regional Caddo Parish

NPIAS Yes
 Instrument Approach CAT II
 Based Aircraft 53
 Service Level PR

Airport	Role	ARC
<i>Current</i>	T	D-VI
<i>0-5 years</i>	T	D-VI
<i>6-10 years</i>	T	D-VI
<i>11-20 years</i>	T	D-VI

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	3,070.0	-0-	-0-
<i>Reconstruction</i>	4,250.0	-0-	-0-
<i>Standards</i>	1,700.0	-0-	-0-
<i>Upgrade</i>	1,250.0	-0-	-0-
<i>Capacity</i>	17,700.0	-0-	-0-
<i>Planning</i>	-0-	-0-	-0-



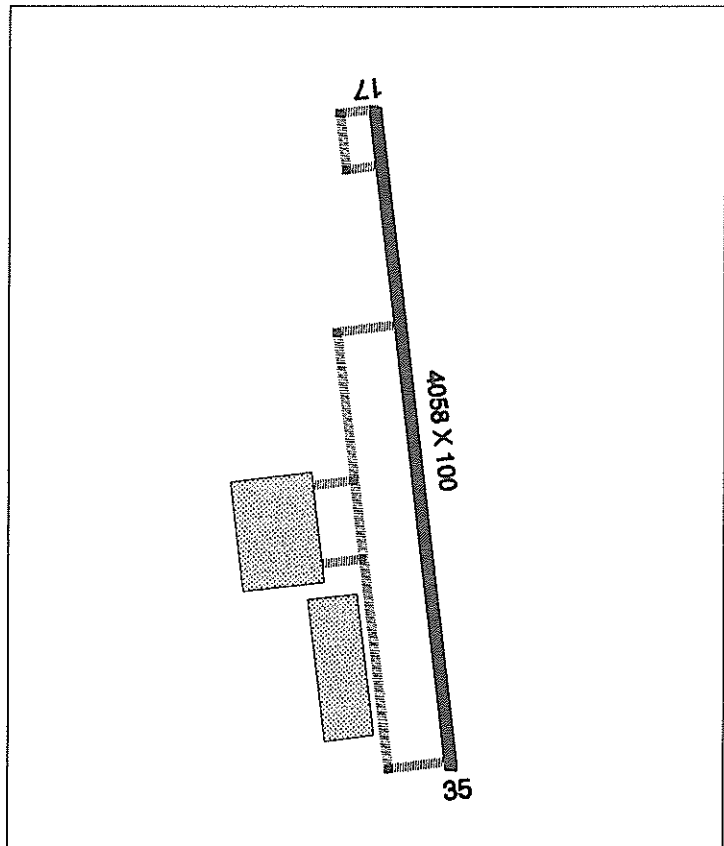
**SLIDELL, Slidell
St. Tammany Parish**

NPIAS Yes
Instrument Approach VOR-DME
Based Aircraft 78
Service Level RL

Airport	Role	ARC
Current	GU-I	B-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	1,221.6	-0-	-0-
Standards	626.9	-0-	-0-
Upgrade	757.3	-0-	354.4
Capacity	1,150.9	871.4	91.8
Planning	50.0	-0-	-0-



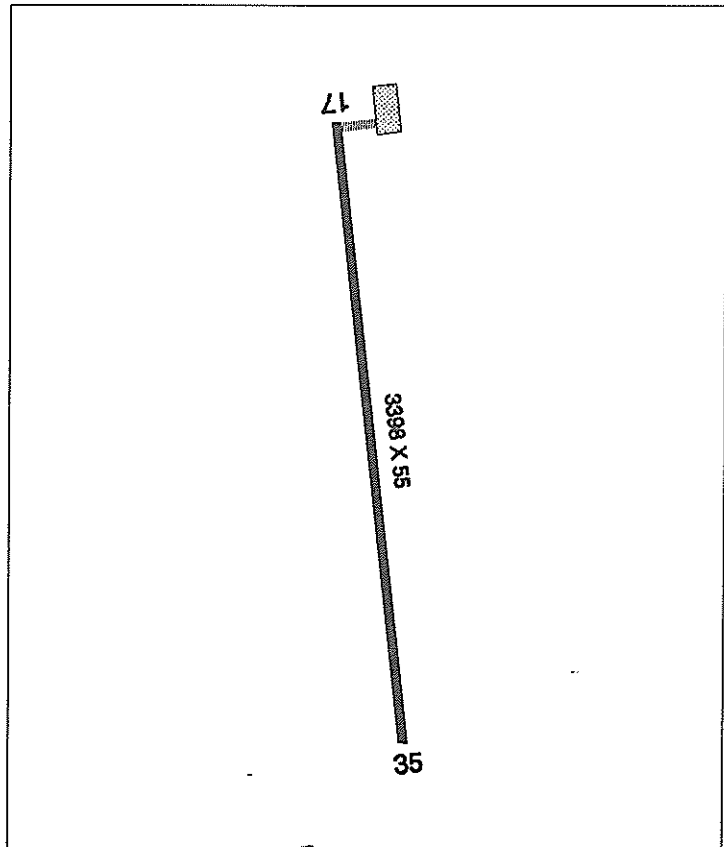
**SPRINGHILL, Springhill
Webster Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 10
Service Level GA

Airport	Role	ARC
Current	BU-II	B-I
0-5 years	GU-I	B-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	291.1	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	1,702.3	556.1	-0-
Upgrade	-0-	326.8	-0-
Capacity	125.0	-0-	-0-
Planning	-0-	-0-	-0-



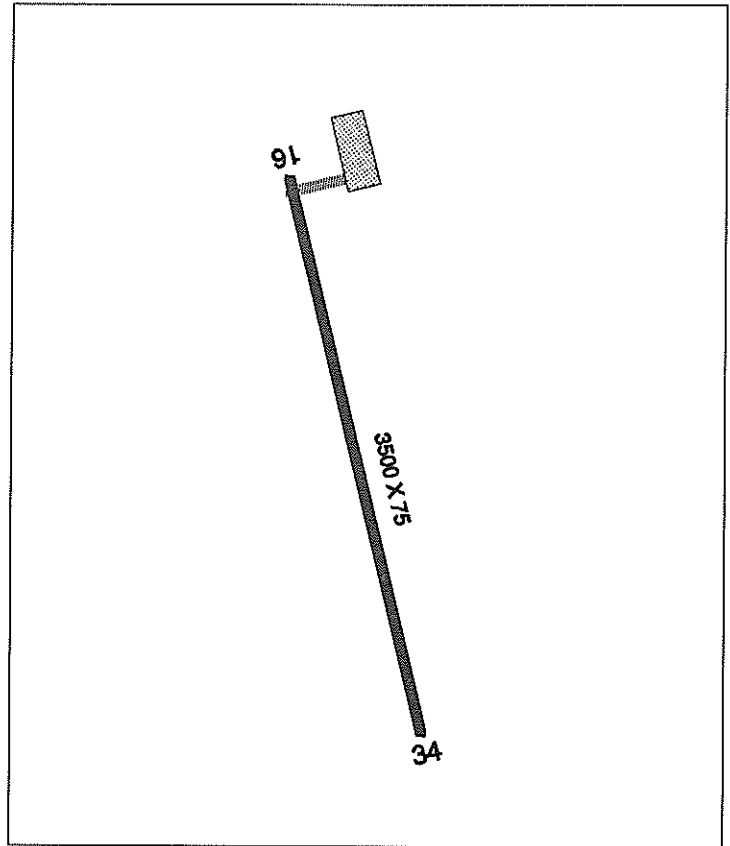
**ST. JOSEPH, Tensas Parish
Tensas Parish**

NPIAS No
Instrument Approach None
Based Aircraft 13
Service Level GA

Airport	Role	ARC
Current	BU-II	B-II
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	32.0	-0-	-0-
Reconstruction	38.5	-0-	-0-
Standards	95.8	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	90.0	-0-	-0-
Planning	-0-	0-	-0-



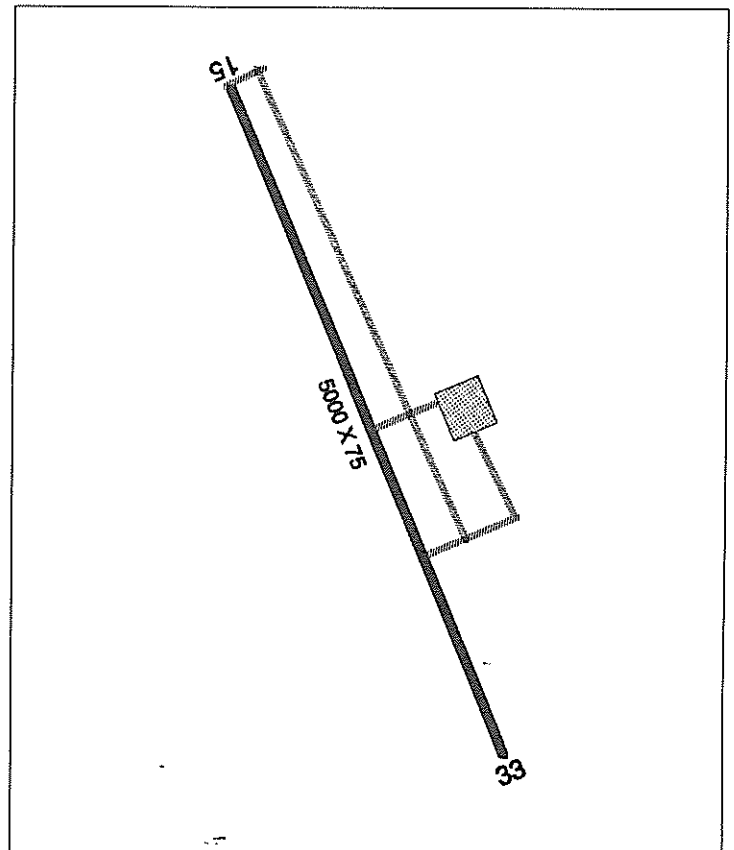
**SULPHUR, Southland Field
Calcasieu Parish**

NPIAS Yes
Instrument Approach VOR-DME
Based Aircraft 11
Service Level GA

Airport	Role	ARC
Current	GU-II	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	312.5	-0-	-0-
Standards	573.5	400.0	-0-
Upgrade	1,045.0	-0-	-0-
Capacity	555.6	-0-	-0-
Planning	-0-	-0-	-0-



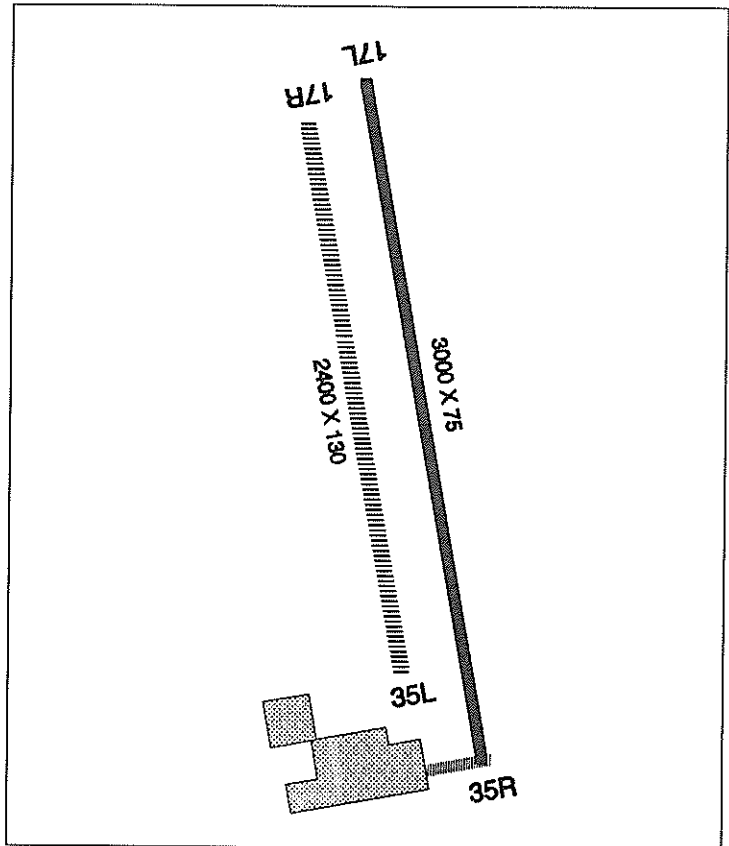
**TALLULAH, Scott
Madison Parish**

NPIAS No
Instrument Approach None
Based Aircraft 7
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	BU-I	A-II
11-20 years	BU-I	A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	7.0	-0-	-0-
Reconstruction	242.4	-0-	-0-
Standards	160.3	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	0-	-0-



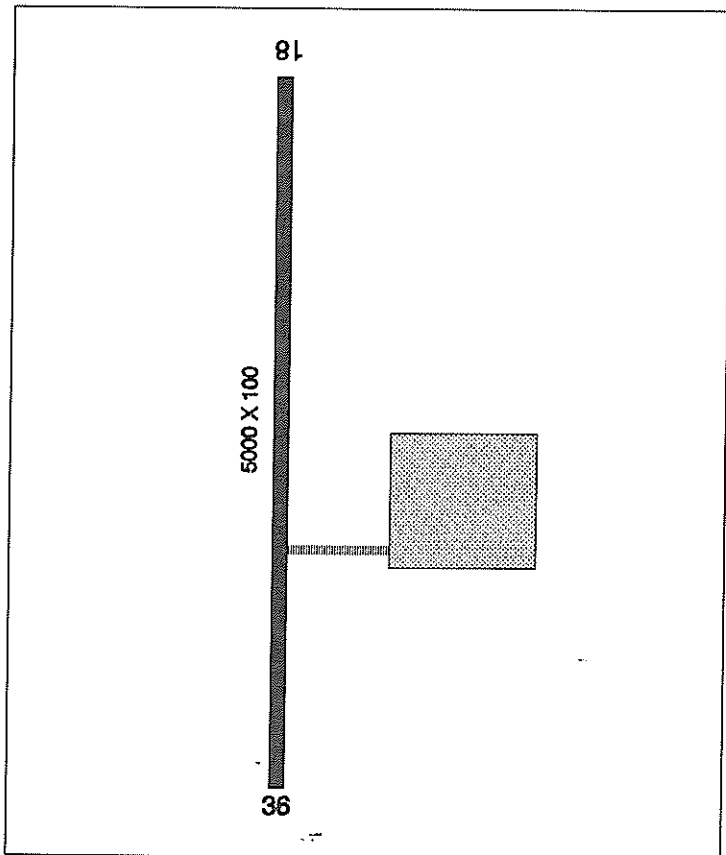
**TALLULAH, Vicksburg - Tallulah (New)
Madison Parish**

NPIAS Yes
Instrument Approach NDB approach pending
Based Aircraft -0-
Service Level GA

Airport	Role	ARC
Current	T	C-II
0-5 years	T	C-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	-0-	-0-	-0-
Standards	-0-	-0-	-0-
Upgrade	-0-	2,889.0	2,141.7
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-
New Airport	8,054.4	-0-	-0-



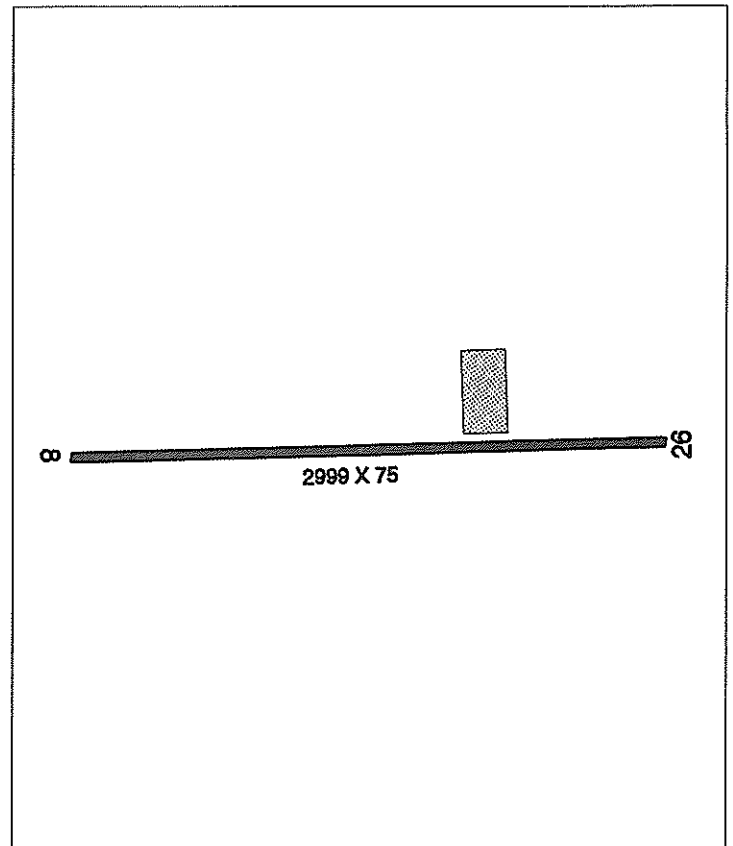
THIBODAUX, Thibodaux Municipal Terrebonne Parish

NPIAS Yes
 Instrument Approach VOR-A
 Based Aircraft 10
 Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	BU-I	A-II
11-20 years	BU-I	A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	20.0	-0-	-0-
<i>Reconstruction</i>	31.3	-0-	-0-
<i>Standards</i>	45.7	-0-	-0-
<i>Upgrade</i>	-0-	-0-	-0-
<i>Capacity</i>	-0-	-0-	-0-
<i>Planning</i>	-0-	0-	-0-



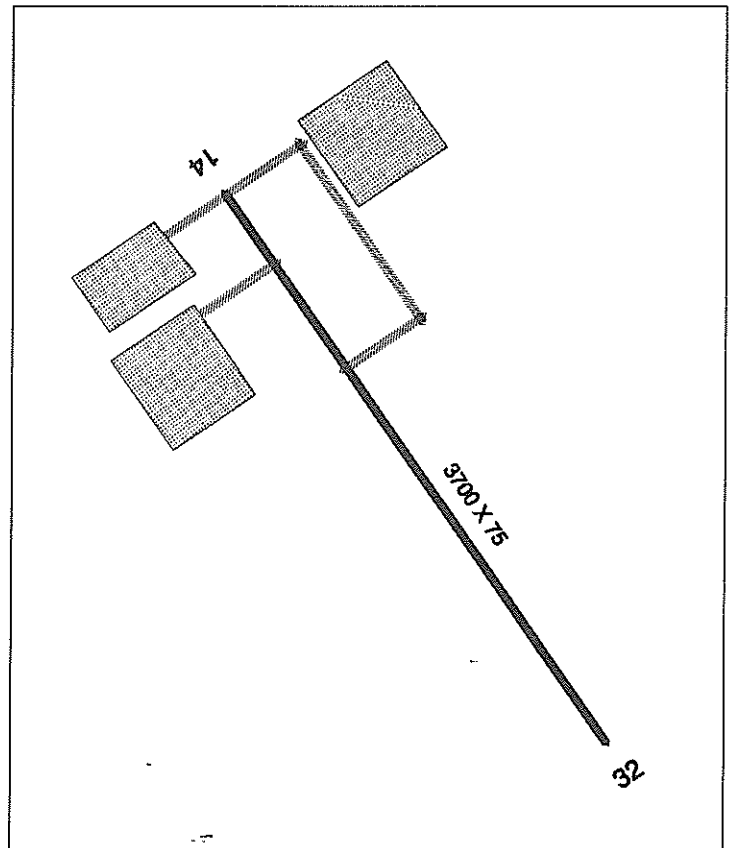
VIDALIA, Concordia Parish Concordia Parish

NPIAS Yes
 Instrument Approach None
 Based Aircraft 14
 Service Level GA

Airport	Role	ARC
Current	GU-I	B-II
0-5 years	GU-II	B-II
6-10 years	GU-II	B-II
11-20 years	GU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
<i>Special Programs</i>	70.0	-0-	-0-
<i>Reconstruction</i>	64.5	-0-	-0-
<i>Standards</i>	130.9	-0-	-0-
<i>Upgrade</i>	713.6	-0-	-0-
<i>Capacity</i>	20.0	18.7	-0-
<i>Planning</i>	-0-	-0-	-0-



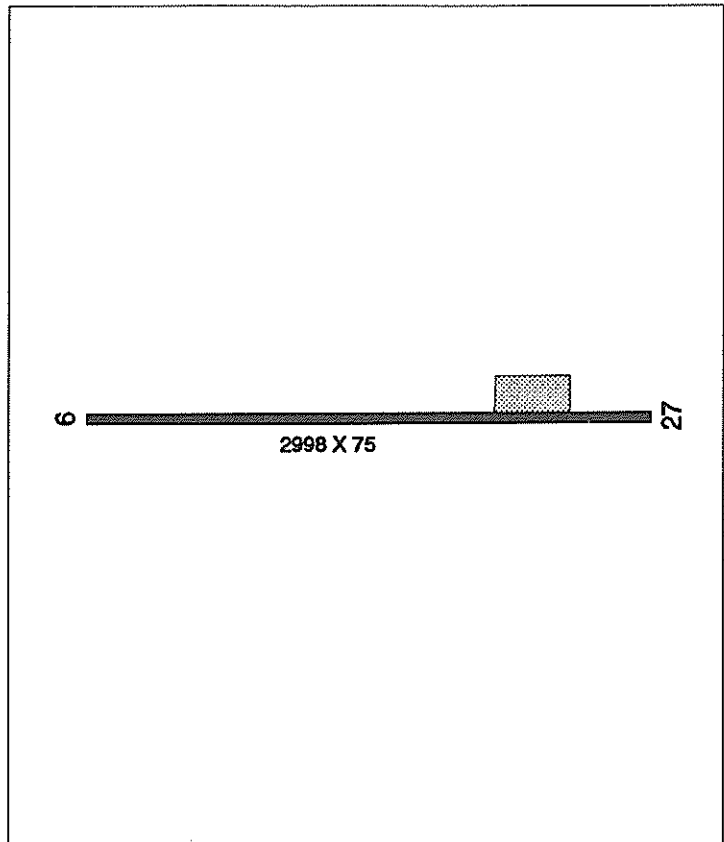
**VIVIAN, Vivian
Caddo Parish**

NPIAS Yes
Instrument Approach NDB
Based Aircraft 6
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	GU-I	B-II
6-10 years	GU-I	B-II
11-20 years	GU-I	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	115.0	20.0	-0-
Reconstruction	85.5	-0-	-0-
Standards	2,336.5	-0-	-0-
Upgrade	1,406.0	894.0	-0-
Capacity	496.0	-0-	-0-
Planning	35.0	-0-	-0-



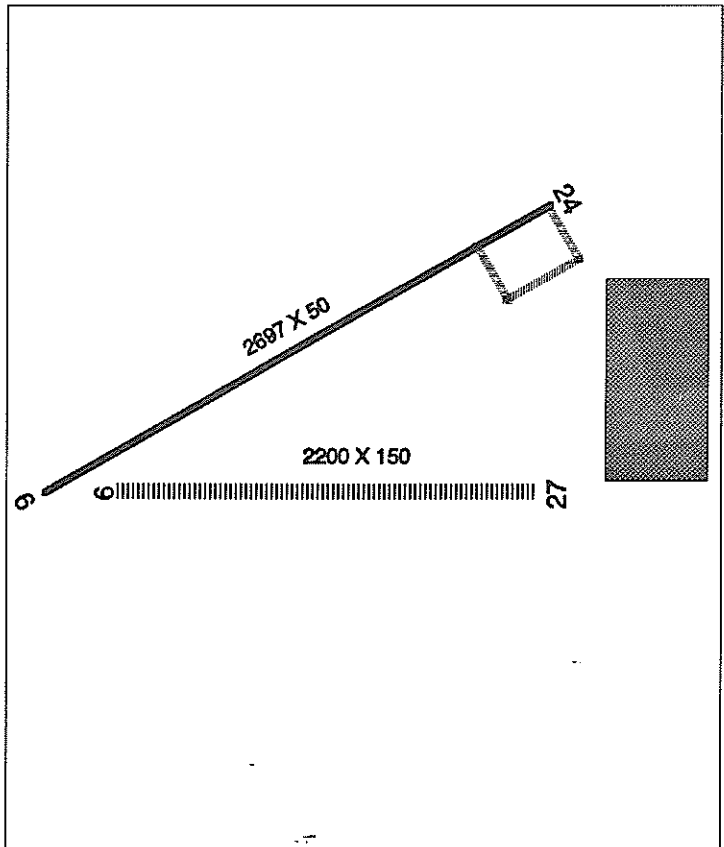
**WELSH, Welsh
Jefferson Davis Parish**

NPIAS No
Instrument Approach VOR-DME
Based Aircraft 10
Service Level GA

Airport	Role	ARC
Current	BU-I	A-I
0-5 years	BU-II	B-I
6-10 years	BU-II	B-I
11-20 years	BU-II	B-I

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	114.1	-0-	-0-
Standards	664.8	-0-	-0-
Upgrade	56.3	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



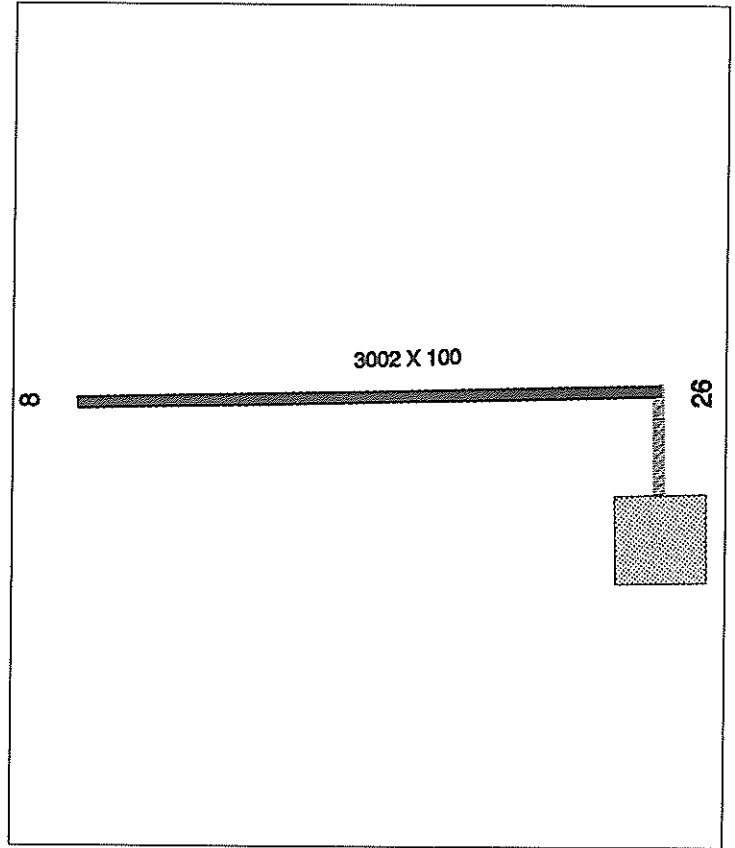
WINNFIELD, David G. Joyce
Winn Parish

NPIAS Yes
 Instrument Approach NDB
 Based Aircraft 7
 Service Level GA

Airport	Role	ARC
Current	BU-I	B-II
0-5 years	GU-I	B-II
6-10 years	T	C-II
11-20 years	T	C-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	30.0	-0-	-0-
Reconstruction	342.0	36.5	-0-
Standards	15.0	-0-	-0-
Upgrade	1,497.3	374.9	-0-
Capacity	38.0	-0-	-0-
Planning	-0-	-0-	-0-



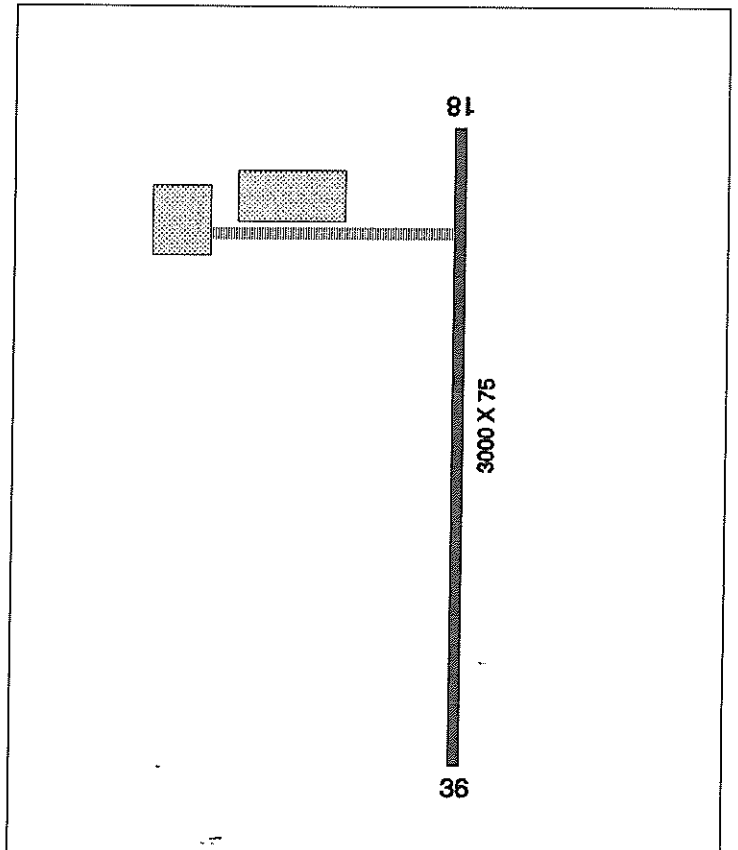
WINNSBORO, Winnsboro Municipal
Franklin Parish

NPIAS Yes
 Instrument Approach None
 Based Aircraft 10
 Service Level GA

Airport	Role	ARC
Current	BU-I	A-I
0-5 years	BU-II	B-II
6-10 years	BU-II	B-II
11-20 years	BU-II	B-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	-0-	-0-	-0-
Reconstruction	208.1	-0-	-0-
Standards	238.1	-0-	-0-
Upgrade	-0-	-0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-



**WOODWORTH, Woodworth
Rapides Parish**

NPIAS No
Instrument Approach None
Based Aircraft 7
Service Level GA

Airport	Role	ARC
Current	BU-I	A-II
0-5 years	BU-I	A-II
6-10 years	BU-I	A-II
11-20 years	BU-I	A-II

Development by Time Period and Object Code

	0-5	6-10	11-20
Special Programs	25.0	-0-	-0-
Reconstruction	44.7	-0-	-0-
Standards	191.4	-0-	-0-
Upgrade	-0-	0-	-0-
Capacity	-0-	-0-	-0-
Planning	-0-	-0-	-0-

