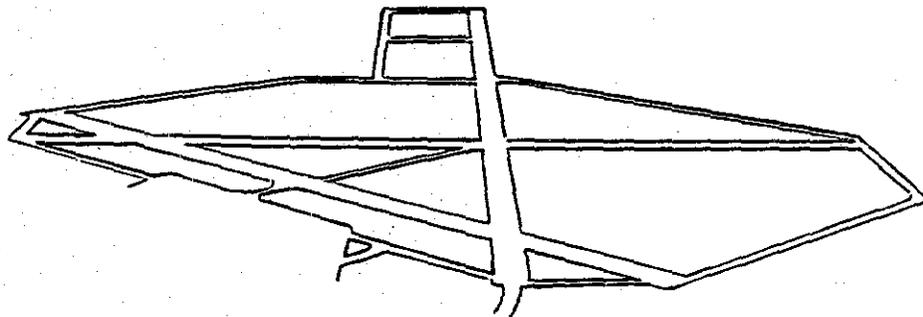
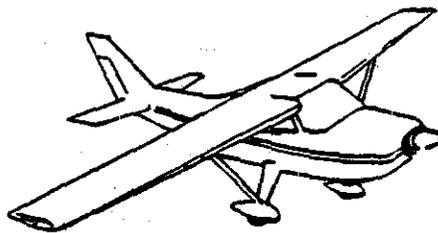


SUFFOLK COUNTY AIRPORT STUDY



September 1990

Prepared By:
SUFFOLK COUNTY PLANNING DEPARTMENT

1990

Suffolk County Airport Study
1990
Suffolk County Planning Department

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September 1990



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PREFACE

At the request of the Suffolk County Legislature (Resolution 1309) the Planning Department was asked to participate in an examination of the practices of leasing space at the County's Airport at Westhampton. The assignment was to prepare a written report which would include an evaluation of the current uses of land, buildings, and facilities at the Airport and make recommendations as to how the Airport should be utilized to best promote and accommodate the County's fiscal and economic needs within environmental constraints. A preliminary report was given to the Health Committee in May 1989 which looked only at the health and safety issues at the facility as well as the primary "lease" issues. This document continues beyond that report to include an assessment of the options available to the County which meet their fiscal, economic and environmental needs into the future.

Background

Suffolk County Airport is located in the eastern portion of Suffolk County within the Town of Southampton, just outside the municipal boundaries of the Villages of Westhampton Beach and Quogue. It is physically situated between Sunrise Highway (State Route 27) to the north, the Long Island Railroad at its southern boundary, bounded on the west by Old Riverhead Road (County Route 31) and on the east by the Quogue Wildlife Refuge.

The Airport facility was built as an Air Base in 1943 on County owned land, and most recently returned by the federal government to the County in 1970. Suffolk County Airport, comprised of 1,250 acres, is the last remaining significant acreage zoned for commercial and industrial purposes on eastern Long Island which is not currently under consideration for an upzoning or acquisition for open space. It has the recognized economic potential as a commercial and industrial center.

The Town of Southampton, within whose municipal boundaries the Airport is sited, continues its 1970 Master Plan position with regard to the Airport, considering their policy statement still relevant today.

"Particular attention should be given to the Suffolk County Air Base as the site for light industrial development with airport access." (p.33)

While the County has kept its obligation, in accord with the 1970 agreement, to maintain the Airport for general aviation purposes, the budget restraints have made the adequate maintenance of this aging facility difficult. However, over the past several years some improvements have been made in the area of aviation safety and services, including the Control Tower, the Terminal Building, Airport Offices of Administration, new roofs on one of the DPW Maintenance buildings and the Power Vault building, as well as navigational aids.

Previous Studies

There have been two previous studies completed for the Airport facility. The first one in 1971 followed closely on the County's acceptance of the Airport from the U.S. Department of Defense. When completed by the consultant the recommendations of that study focused on the establishment of a major air cargo hub at the Airport, and was not implemented. The second study, completed in 1980, was a more comprehensive approach. While not accepted in its entirety (it also included an air cargo element) the Plan resulted in the implementation of several of its aviation safety recommendations, i.e. improved navigational aids, runway rehabilitation, taxiway lighting and signage. This was accomplished using the joint-funding from the FAA, NYSDOT available in their Airport Improvement Program (AIP) in concert with County capital program funds. Currently this funding combination would leave the County with only a 2.5% responsibility for the costs of qualified improvements and equipment.

Report Preparation

Presented herein is an update of the key elements of the 1980 Airport Master Plan prepared under contract to Suffolk County by Trans Plan Inc., an aviation consultant. This in-house approach was considered viable inasmuch as the majority of the findings and recommendations in the 1980 study are still valid.

It was prepared by the staff of the Suffolk County Planning Department with no supplemental funding or staffing provided for its completion. However, the involvement of parties interested and impacted by the Airport was sought out. Special thanks are directed to the volunteers comprising the Airport Advisory Committee formed by County Executive Halpin, whose collective aviation knowledge assisted in the preparation of this report.

Report Organization

There are five (5) chapters to this Suffolk County Airport Study. They are titled as follows: Chapter 1 - Airport Inventory; Chapter 2 - Forecasts & Capacities; Chapter 3 - Development; Chapter 4 - Financing; and Chapter 5 - Airport Benefits. Under separate cover is an Executive Summary of this study document.

The Report is designed to generate guidance toward policy changes and capital investment to improve the usefulness of the Suffolk County Airport for general aviation activity, to meet its economic potential to the region, to become a self-sustaining asset of Suffolk County, and be a "good neighbor" within its sensitive environmental location.

SUFFOLK COUNTY AIRPORT STUDY

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SUFFOLK COUNTY AIRPORT STUDY

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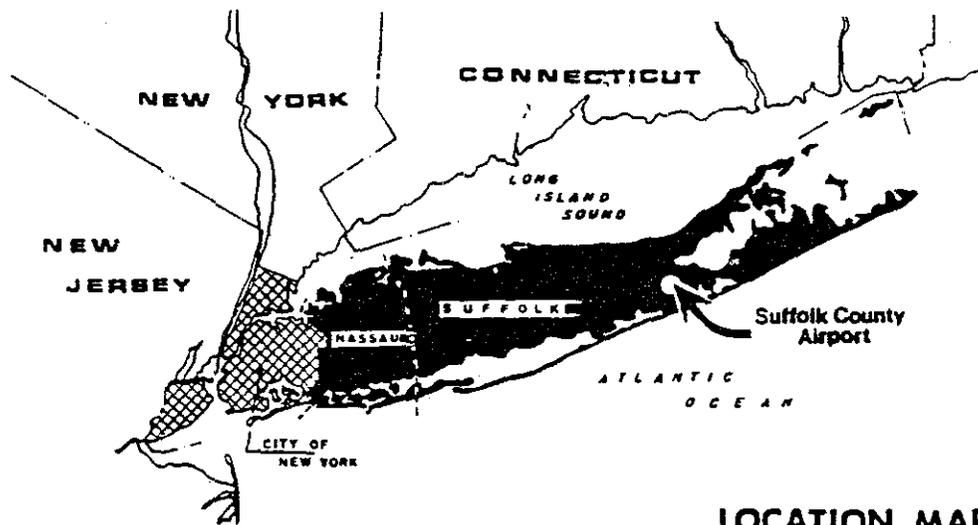
CHAPTER 1 - AIRPORT INVENTORY

CHAPTER 1 - AIRPORT INVENTORY

There has been a steady increase in general aviation activity during the last decade, as well as a renewed interest by the County in improving its revenues at the Suffolk County Airport from the aviation activities as well as the non-aviation "incubator-type" business users of the existing buildings

Section I - LAND USES

A. Adjacent to Airport Existing land uses around the Airport largely consist of open land to the north and east of the facility boundaries. This use continues to the west, to the Brookhaven line, beginning behind a narrow strip of industrial and commercial uses having frontage on Old Riverhead Road (C.R. 31). Adjacent to the southern boundary of the Airport, within the Village of Westhampton Beach, the uses are of an industrial nature including an asphalt plant, a sand and gravel operation as well as an automobile junkyard. The intense development of the land to the south of the Airport also includes residential as well as commercial highway uses, extending past Montauk Highway to the shoreline. This area experiences an influx of population during the summer months when tourists and summer home activities increase.



LOCATION MAP

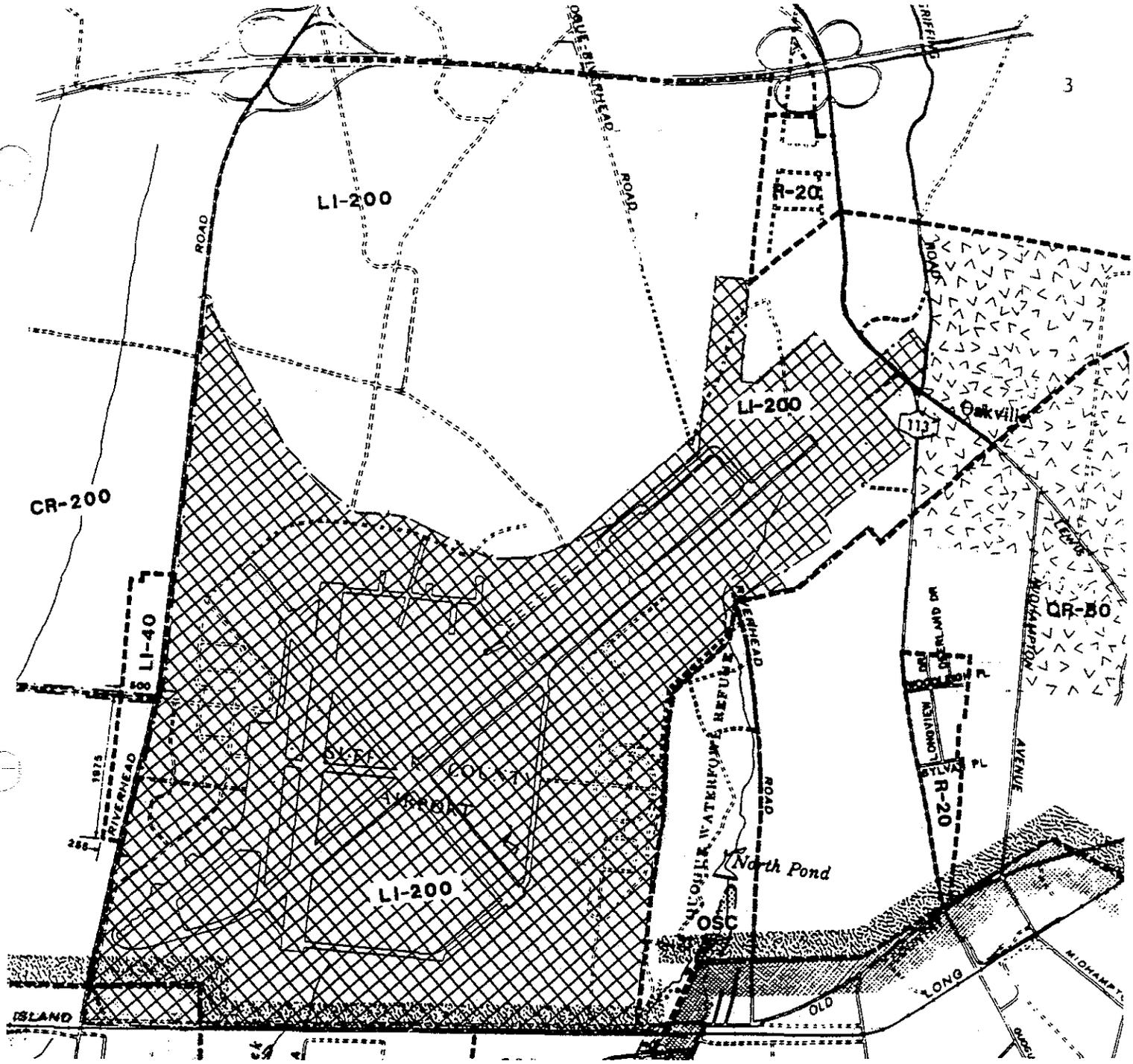
Airport Study - Inventory

The character of this section of Southampton is not expected to change drastically in the future. By Town action major acreages of previously zoned industrial lands were upzoned for large lot residential uses as reflected in **FIGURE 1 SOUTHAMPTON ZONING MAP**. This substantially reduced the land zoned for industrial purposes to the confines of the Airport itself as well as a strip along the adjacent highway frontage, and lands to the north between the Airport boundary and Sunrise Highway. The land to the north of the Airport is comprised of approximately 900 acres of industrial zoned land. Efforts are underway to acquire some of these lands for dwarf pine preservation.

B. On the Airport The majority of the 1,250 acres of this property is used for the primary purpose of aviation traffic, including runways and their clear zones. As a result of the 1980 Study several important safety and navigational improvements were funded and completed. A listing of federally (FAA) assisted projects for the Airport are shown in **FIGURE 2 FINANCIALLY COMPLETED PROJECTS (FAA)**.

Of the approximately 125 acres which are actively utilized on the west boundary of the Airport, the major tenant is the New York Air National Guard which has 75 acres, with the remaining 50 acres currently in use located just north of the Air Guard's compound. A few buildings are located on the eastern side of the Airport adjacent to the Quogue Wildlife Refuge. There is a pie-shaped area of open space (61.0 acres) at the northwest corner of the property which is under consideration as an addition to the Pine Barrens Preserve. The existing activities on the Airport are in three general categories (Leased Buildings, Civil Aviation, and Air National Guard) as depicted in **FIGURE 3 EXISTING USE AREAS**.

C. Building Area The Air National Guard have their facilities located within a 75 acre complex, which includes administration and support buildings and shops, several major hangers, large ramp areas and over 600 feet of alert-type hangers. The alert hangers are currently used for helicopter storage and maintenance.



LEGEND

CR-200	COUNTRY RESIDENCE (200,000 sq ft)	OSC	OPEN SPACE CONSERVATION
CR-120	COUNTRY RESIDENCE (120,000 sq ft)	R-120	RESIDENCE (120,000sq ft)
CR-80	COUNTRY RESIDENCE (80,000sq ft)	R-80	RESIDENCE (80,000sq ft)
CR-60	COUNTRY RESIDENCE (60,000sq ft)	R-60	RESIDENCE (60,000sq ft)
CR-40	COUNTRY RESIDENCE (40,000sq ft)	R-40	RESIDENCE (40,000sq ft)
HB	HIGHWAY BUSINESS (40,000sq ft)	R-20	RESIDENCE (20,000sq ft)
LI-200	LIGHT INDUSTRY (200,000sq ft)	R-15	RESIDENCE (15,000sq ft)
LI-40	LIGHT INDUSTRY (40,000sq ft)	R-10	RESIDENCE (10,000sq ft)
MF-44	MULTI-FAMILY RESIDENCE (44,000sq ft)	RWB	RESORT & WATERFRONT BUSINESS (40,000sq ft)
MHS-40	MOBILE HOME SUBDIVISION (40,000sq ft)	SC-44	SENIOR CITIZENS (44,000sq ft)
MTL	MOTEL BUSINESS (40,000sq ft)	SCB	SHOPPING CENTER BUSINESS (220,000sq ft)
OD	OFFICE BUSINESS (12,000sq ft)	TDR	TRANSFER OF PERMITTED DEVELOPMENT RIGHTS
		VB	VILLAGE BUSINESS

-  AGRICULTURAL OVERLAY DISTRICT
-  AQUIFER PROTECTION OVERLAY DISTRICT
-  TIDAL FLOOD PLAIN OVERLAY DISTRICT
-  TIDAL WETLAND & OCEAN BEACH OVERLAY DISTRICT

FIGURE 1
SOUTHAMPTON ZONING MAP

EASTERN REGION (FAA)

UNOBLIGATED, ACTIVE AND FINANCIALLY COMPLETED PROJECTS

STATE NEW YORK

Location Airport Project No.	Unobligated Tentative Allocation	Grant * Agreement	Final Federal Funds	Description of Work
WESTHAMPTON BEACH (SUFFOLK COUNTY)				
5-36-0122-01-77	139,680	46,920 9/28/77	46,920 11/7/78	Replace/modify the electrical cable system to the ILS localizer and glide scope and fuel farm facilities (approx. 36,000 L.F.).
A-36-0122-01-78	66,936 10/5/77	66,936 12/8/77	66,936 5/28/81	Airport Master Plan Study for Suffolk County Airport.
3-36-0122-01-84		513,050	435,460 7/11/88	Overlay Center Section (approx. 4000' x 150') Runway 6-24 with asphalt concrete.
3-36-0122-02-87		453,423	430,022 6/88	Replace power cable to north taxiway edge lighting system and R/W 24 SSALR. Install runway/taxiway intersection with signs (14 ea.). Replace R/W 24 SSALR threshold bar.
3-36-0122-03-90	-	87,300	-	Install REIL systems on Runways 6, 15, 33 Prepare Airport Property Map

* Required Suffolk County Commitment
of Capital Program Funds

EA Form 2461 (11/63)

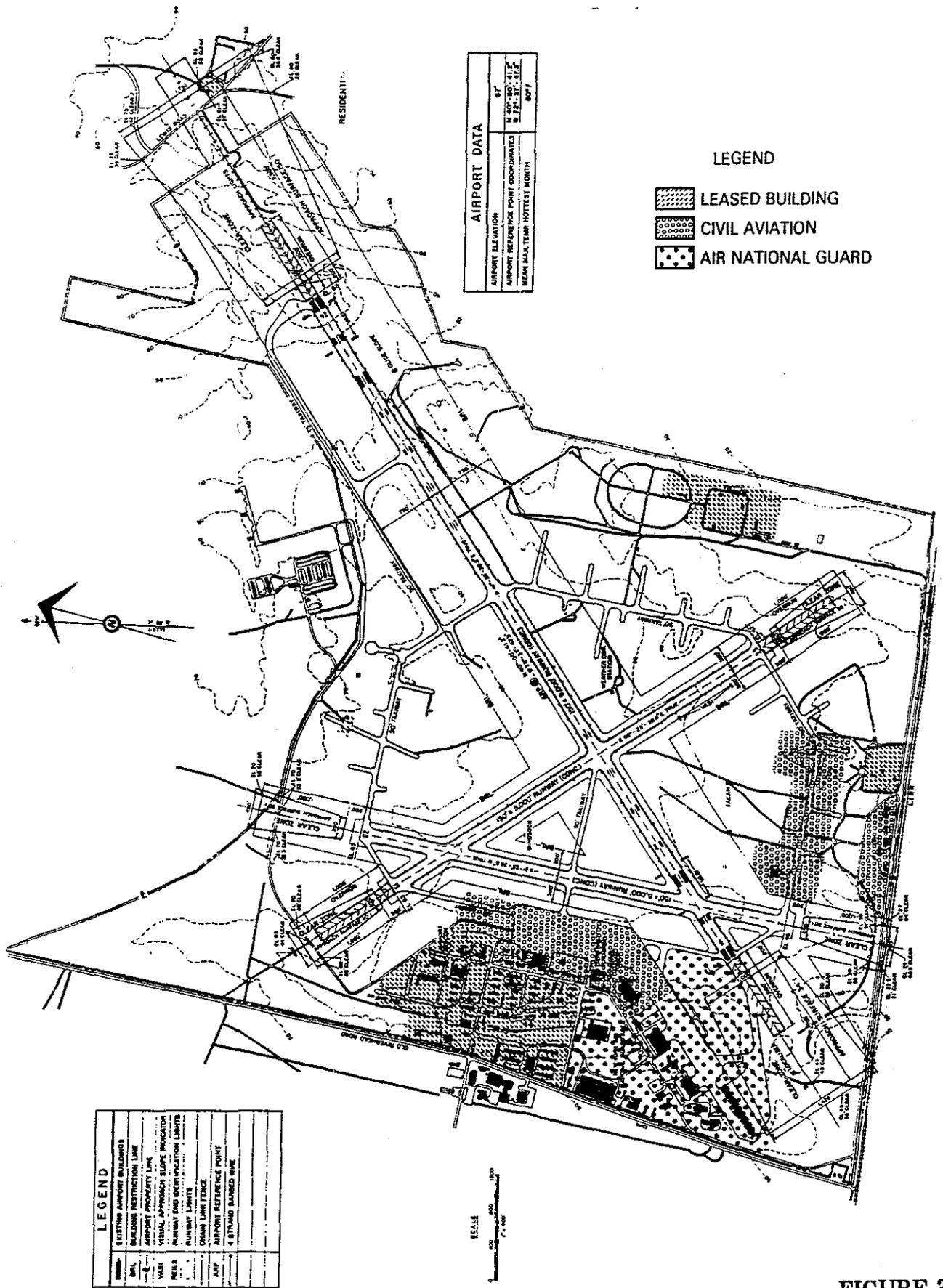
FIGURE 2
FINANCIALLY COMPLETED
PROJECTS (FAA)

The main building area is immediately north of the Air National Guard complex. Adjacent to the runway there are four (4) hangers utilized for aircraft storage with a capacity for 46 aircraft. On the landside it should be recognized that the buildings in use for commercial purposes were originally erected for military purposes including offices, machine shops, storage and other specialized uses. The majority of the buildings are in excess of 40 years old, of concrete block as well as wood frame construction and currently range between fair and poor condition. Seventeen (17) buildings were torn down in 1988 alone. Two (2) have been submitted for demolition approval (Building 190 - dining hall; Building 68 - officers barracks). Five other buildings have been identified in "poor" structural condition, while another fifteen (15) are in a condition referred to as "marginal".

D. Runways & Taxiways The Airport has three major runways: 1/19, 6/24, and 15/33. They are all of concrete construction, 150 wide, and were built in stages from 1943-1958. The runways, prior to the return of the Airport to the County in 1970, were used by the Air Defense Command (ADC) of the United States Air Force and were subject to frequent use by KC-97 aircraft. The Air National Guard activity now uses Lockheed C-130 aircraft for search and rescue missions. Runways 1/19 and 15/33 are in fair to poor condition, with 15/33 having a priority in scheduling for improvements. Runway 6/24 had some necessary improvements made to the center section as reported in **Figure 2**. Runway features are as follows:

<u>Runway</u>	<u>Length</u>	<u>Lighting</u>	<u>Marking</u>
1/19	5,000 ft	none	basic
6/24	9,000 ft	HIRL	instrument
15/33	5,000 ft	MIRL	non-precision instmt.

The existing taxiway system was designed for military operations wherein this layout provides the landing aircraft with limited exit locations from the runways. The "center" taxiway (intersection of Runways 6/14 and 15/33 to the G.A./Terminal apron) and the "south" taxiway are in poor condition and need improvement (i.e. surface overlay).



AIRPORT DATA	
AIRPORT ELEVATION	47'
AIRPORT REFERENCE POINT COORDINATES	N 20° 45' 11" E W 72° 15' 11" E
BEAR MAX TEMP HOTTEST MONTH	80°F

LEGEND

-  LEASED BUILDING
-  CIVIL AVIATION
-  AIR NATIONAL GUARD

LEGEND	
	EXISTING AIRPORT BUILDINGS
	BUILDING RESTRICTION LINE
	AIRPORT PROPERTY LINE
	VISUAL APPROACH SLOPE INDICATOR
	PROPERTY LINE (SEE PROPERTY LIMITS)
	OBSTACLE LIMITS
	CHAIN LINK FENCE
	AIRPORT REFERENCE POINT & STRONG BARBED WIRE

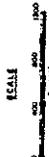


FIGURE 3
EXISTING USE AREAS

E. Clear Zones The dimensions of a clear zone, as depicted on the Airport maps, define an area that should be kept clear of all obstructions so as to allow the proper landing approach slope to the runway in question. Below is a summary of the present clear zones and their dimensions (in feet) at Suffolk County Airport.

<u>Runway</u>	<u>Approach Type</u>	<u>Inner Width</u>	<u>Outer Width</u>	<u>Length</u>	<u>Approach Slope</u>
15,33,1,19	Visual	250	450	1,000	20:1
6	"NP" Instrmt	1,000	1,425	1,700	34:1
24	"P" Instrmt	1,000	1,750	2,500	50:1

F. Ground Access Travelling west to east Sunrise Highway (S.R. 27) located to the north of the Airport serves as a major access to the facility as does Montauk Highway (S.R. 27A) on the south, with Old Riverhead Road (C.R. 31) at its western boundary, and on-site service roads connecting to the Airport terminal and general aviation area.

All vehicle traffic to and from the Airport must use Old Riverhead Road, thereby placing the greatest demand on this road as a feeder for the arterial roads to the north and the south. The maximum design capacity of this road, in both directions, is approximately 1,700 vehicles per hour. The amount of traffic the Airport currently generates is too low to affect the public roads adversely, therefore, no improvements other than normal maintenance are required in response to normal Airport demands. Should greater use of the southern and eastern sections of the Airport occur road improvements would become necessary.

In the way of public transportation, the Long Island Railroad (LIRR) provides limited rail service along this Montauk Branch. There is a station a short distance from the Airport. Rail service consists of five (5)

daily trains in each direction between Montauk and New York City (Penn Station). Additional trains are usually added in the summer months to handle the increased demand during that period.

Bus service for the Airport area is limited and infrequent. The Suffolk County Bus Route S-90 "Center Moriches to Riverhead", due to its alternate routing system, stops at the Suffolk County Airport two times a day. Those times are in the morning at 9:10 AM (from Riverhead) and 4:35 PM (to Riverhead). Again, this lack of service is a function of demand in an area which is sparsely populated and automobile oriented.

Section II - INFRASTRUCTURE

Any planning of infrastructure needs for the present and the future needs of the Airport must first identify the location of utility services, and make an assessment the condition of the current system. The sixteen (16) maps depicting this information were prepared in 1962 by the U.S. Air Force still remain as the single graphic source for this vital information. The fact that the infrastructure for the Airport was begun in 1943 would indicate that if no significant structural renovations of buildings and their environmental systems, including heat, air conditioning, water supply, electric service and sanitary disposal, were conducted over the years, then a physical review of the basic infrastructure can be expected to reveal serious problems.

A. On Site Needs The ability to sustain the operations that currently are sited at the Airport as well as the ability to attract commercial and industrial tenants to this property will depend in large part on the extent of the infrastructure support and services. Listed below are the obvious concerns, which, as stated above, need to be incorporated into an evaluation of the physical conditions.

Water Supply

Suffolk County Water Authority (SCWA) has an 8" line on Riverhead Road adjacent to a water main on the Air National Guard (ANG) property. Discussions are currently underway with the Airport Manager toward SCWA assuming responsibility for the water lines within the Airport property. It is observed that a 12 inch public water line runs parallel to the Airport from the S.C. Water Authority connection, just south of Cook Street, northward to Wallen Street (Main Gate) turning west along Stewart Avenue.

Electric

The site is serviced with power, both underground cable and overhead lines. Inquiries as to improvements to service have been initiated with LILCO. This will become necessary should greater utilization of lands occur at the southern side of the Airport as well as more intense use of the developed western area.

Roads

Most roads within the Airport property have a 30 feet wide pavement. Improved traffic circulation and intersection safety designs must be part of future development expansion.

Parking

There are numerous parking lots through the building area are located adjacent to the aviation activity. Due to the limited width of the airport roads their use for on-street parking creates a safety hazard.

Sewage

Currently cesspools are utilized. The sewer lines used cast iron for 4 inch pipe or smaller, and vitrious clay for 6 inch lines. A 1962 utilities map shows several cesspools abandoned.

Fuel Storage

Compliance with Article 12 for storage and handling of jet fuels and other volatile and toxic products used at the Airport is enforced by SCDHS.

B. Update Information Due to the dated (1962-1965) utilities maps on file at the Airport it makes sense that the various utility companies are currently examining the condition of the on-site water lines, cables and service boxes for adequacy and safety. This activity is a first step toward negotiating with LILCO and S.C.W.A. to assume responsibility for the equipment. The inspection will also provide a more accurate identification of the real needs of these vital infrastructure elements. The septic systems also require examination as many are shown to be closed on the early utility maps. These inspections should be undertaken by the S.C. Health Department.

Section III - LEASES

A. Building Uses All uses and leases are subject to the review and approval of the Federal Aviation Administration (FAA) whose oversight is to insure that the general aviation purposes are continued in keeping with the 1970 Airport agreement. During its ownership, over the past twenty years, the County has leased the existing buildings and adjunct facilities to both aviation related and non-aviation tenants. The location of the majority of the buildings is on the western side of the Airport as shown in **FIGURE 4 BUILDING LOCATION**.

Currently (8/90) there are 90 buildings (not including ANG's 37 buildings) of which 38 are leased, and 4 slated for demolition. The Aviation Division of DPW uses 13 buildings including services in buildings #142-gas station; #144 & 163-garages; #152-maintenance, and part of #1 for the Airport Manager. Three other buildings are used for County records storage are #42 (2,104sf) by the Sheriff, #119 (1,548sf) by Real Estate, and #1899 (1,295sf) by Purchasing.

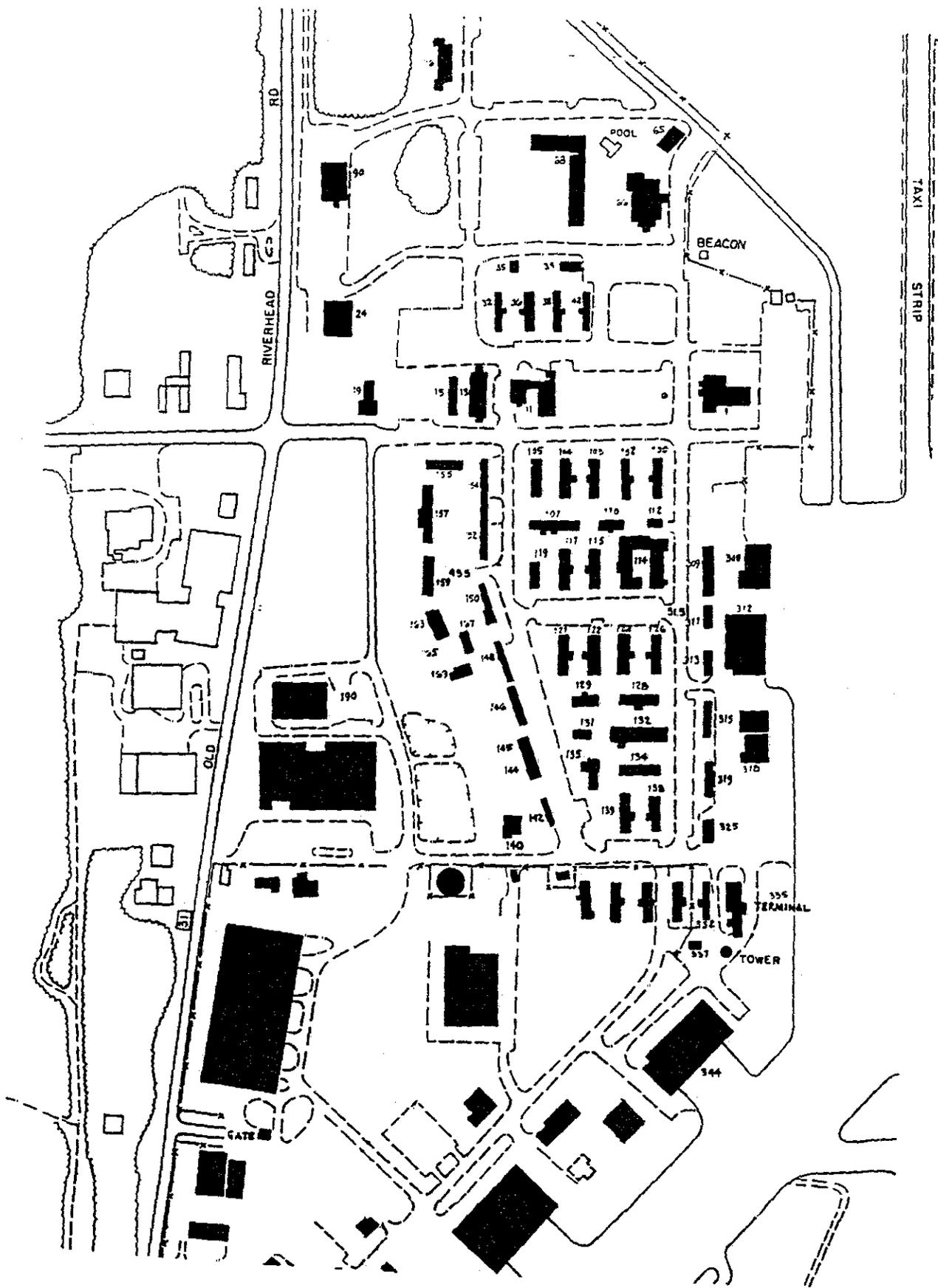


FIGURE 4
BUILDING LOCATION - WEST SIDE

It was reported early in 1989 that eleven (11) tenants had moved off the Airport sites placing 14 buildings and 37,018 s.f. back into the "available" inventory. Since May 1989 another eleven (11) tenants moved off the Airport site vacating 12 buildings and 20,224 s.f. Currently there are seven (7) new leases pending, with 25 buildings available.

B. Terms - Tenants assume occupancy of a building in its "as is" condition. The County maintains the grounds, plows the snow, and provides 24 hour security. The tenant pays for all utilities, including the installation of new meters, and for improvements made to the interior of the building for the tenant's business. There are two forms of lease documents (a) Aviation, and (b) Non-Aviation, with additional insurance requirements and FAA language being added to the Aviation version. A "draft" lease document is enclosed at the end of this report.

In addition to the lease payments, the non-aviation tenants also are required to reimburse the County for property taxes paid to the Town of Southhampton, school and other special districts. This tax payment is common practice applied to nonaviation uses located within municipally owned airport property.

C. Current Occupants - In addition to the New York Air National Guard's use of 37 buildings (totalling 298,029 s.f.), there are thirty-three (33) tenants and one (1) sub-tenant utilizing 38 buildings (149,182 s.f.) plus 22.05 acres of land for related purposes.

D. Lease Renewal - It should be noted that several tenants have multiple spaces which have staggered lease expiration dates affecting their operations. In practice a lease renewal or expiration date simply identifies the timing when new ratables are applied to the succeeding lease period.

During 1990, there were thirteen (13) tenants in 11 buildings (37,020 s.f. + 2.75 ac) whose leases expire, twelve (12) of which are seeking to renew. Of the twelve (12) tenants whose leases are due for renewal

between 1991 and 1992 only one (Sky Electric) has left the Airport, due to a conflict with the Town of Southampton over zoning regulations. These tenancies represent 71,872 s.f. in 11 buildings, plus 4.4 acres. The 1991 total does not include the renewal of the Air National Guard's fee for the "use" of the Airport includes 37 buildings (298,029 s.f) on 75 acres, which 50 year term expires in the year 2021.

E. Re-Appraisal for Lease Terms The Department of Real Estate has an appraisal prepared for each new lease or lease renewal. Based on the appraisal, as to the land/building value and the cost of services to the tenant, a new lease rate is determined. It is normal in this type of real estate report that some judgements on the application of values (vis-a-vis comparable sites) are exercised by the appraiser in preparing the recommendations.

An example of the lease approach was found in an appraisal issued August 1988 for Oldham Construction Corporation (a current tenant) who was seeking a 30 year lease for the expansion of his business on a vacant 2.2 acre parcel adjacent to the Airport Manager's offices. The proposed use was to include the construction of T-Hangers for storage of aircraft, aviation sales and maintenance as well as aviation parts sales. In this appraisal it was determined that the land values on the Airport's public ownership acreages are being considered as equal in value to those off the Airport in private ownership.

According to the pre-existing leases which are scheduled for review and renewal, now that the moratorium has ended, the rates reportedly ranged between \$1.50 and \$3.50 per square foot. The approach to establishing rental rates by individual appraisals is based on a premise that municipally held land and privately held land are equal in value for lease purposes. The typical real estate practices of discounting the value due to location and building condition are applied. However, this "equal to" approach will result in significantly higher per square foot rental costs over the current Airport leasing rates. The resulting higher costs is a disincentive to the past policy of encouraging new

start-up (incubator) tenancies. Combining this marketplace approach of appraisals, and having no "caps" on increases applied over a multiple year tenancy, could dissuade most tenants.

There is no indication of any existing lease policy which encourages aviation tenants, with terms differing from those of non-aviation tenants. These policies and practices now exist at other municipally operated airports, such as Republic Airport, where the differential in values for lease purposes between aviation and non-aviation tenants is at a ratio of approximately 5-1 to encourage aviation uses.

F. Moving Out The anticipated appraisal increase made the decision for one company. A letter, dated April 5, 1989, was received by Mr. LaTrenta the Airport Manager, from an Airport tenant of 11 years, Comsaco Marine Corporation (Building 132). The contention of Mr. Westhoff, the President of the firm, was that the new appraisal-based rental rate of \$4.50 per square foot represented a 62% increase over the \$2.77 rate of the previous year. The additional PILOT payment requirement of non-aviation type tenants has boosted his rent an additional 40 cents per square foot, to a total of \$4.90 per square foot. The condition of the buildings and the heating systems also come under criticism, as did the lack of area services and employee potential. Mr. Westhoff found a location in Bohemia for Comsaco in a facility that provides industrial amenities, including a modern HV/AC system, air conditioned offices, a loading dock and high-capacity electric power. The move of Comsaco (May 31, 1989) placed 17 people, many of them lifted out of the hard-core unemployed from the Riverhead area, back into the ranks of the unemployed.

G. Location, Location... The leasing practice which places the Airport lands on an equal basis with the open market should take note of the comments of the appraiser in the previously cited Oldham Construction appraisal in describing the location of the property:

"The Town of Southampton, in an effort to protect the groundwater storage under these pine barrens, has changed the zoning of the majority of the residentially and industrially zoned land in this area to zones that require 5 acre minimum plot sizes. This restrictive zoning, coupled with the apparent low demand for both residential and industrial use in the northerly part of Westhampton, are factors that I feel will have a tendency to further limit the already slow growth of this area. The subject's area has good access to the Sunrise Highway and the presence of the Airport are positive factors, however, other than tourist or recreation related growth and the uses within and near the airport, I feel that this area will not experience any major development in the foreseeable future."

The question still remains as to whether Suffolk County intended that their square foot lease terms are to be comparative with the marketplace? The Comsaco example is yet another reason to examine a new development approach and marketing niche for the Airport's potential as a commercial and industrial center in concert with its primary function as a general aviation airport.

Section IV - ENVIRONMENT

A. Soils The site of the Airport is located in a typically flat sandy region adjacent to the Pine Barrens Zone and over the proposed Central Suffolk special groundwater protection area (SGPA). The soil is made up of course Carvers sand and Plymouth sandy loam with some gravel in it. This forms an extremely porous substrate which accomodates very rapid percolation of surface water into the acquifer. As the name implies, the 100,000 acres within Pine Barren Zone, (encompassing much of central Suffolk County within the Towns of Brookhaven, Riverhead, and Southampton) is visually dominated by pine trees, characteristically of a single species - the pitch pine (*Pinus Rigida*). On closer observation, a

low, often dense understory appears, consisting in the main, of two very similar species of shrubby or "scrub" oak (*Quercus Illicifolia* and *Quercus Prinoides*). Taller species of oak are occasionally found and become common where the sandy soil of the Pine Barrens merges into more productive neighboring types. Most of the Pine Barrens, however, is dominated by the rather scattered low (in some places only 6-12 feet) pines as well as the unique species of dwarf pines (3-6 feet) as well as an understory of oak.

The significance of this pine forest and the underlying water resources was recognized by Suffolk County in 1984 when it was designated for special protection, and development review powers were given to a new Pine Barrens Review Commission. Following this action was the determination by the County's citizens to earmark substantial funds for the purchase of the dwarf pine acreages.

B. Plants & Wildlife The Quogue Wildlife Refuge at the eastern boundary of the Airport is the most diverse source of vegetation in the area. Pine and oak trees dominate the landscape although red maples, fern, huckleberry and blueberry species are quite common.

The animals which inhabit the Pine Barrens are types requiring little moisture and shade. Numerous types of birds, amphibians and mammals inhabit the Airport's environs, with the greatest cross-section of wildlife found at the Quogue Refuge. Two species of threatened bird that thrive at the Airport because of its low ground cover are the Upland Sandpiper (*Bartramia longicanda*) and the Grasshopper Sparrow (*Ammodrammus savannarum*). It is suggested that this is the only nesting area known on Long Island for the Upland Sandpiper. While the species are rare they are not endangered, but rather appear on NYS-special concern species list. They pose no danger to aviation since they are few and tend to be low flying. Another species which receives attention is the Northern Harrier (*Circus cyaneus*) who's hunting habitat is characteristic of the low vegetative coverage and openness provided by the Airport runways has been confirmed within the dwarf pines immediately north of the Airport.

Based on the 1990 avian survey at the Airport, conducted in June by the County's Ecology division, it is their considered opinion that the Airport provides utilized habitat for the three NYS-listed species previously mentioned, and, that it also provides a breeding habitat for at least two of these species who's grassland habitat is diminishing elsewhere on Long Island.

The Airport, as a use, has the least negative impact upon the natural environment of any other contemplated commercial or industrial use requiring this amount of acreage. Currently, of its 1,250 acres only 125 acres (10%) are in active use. In addition the runways represent another 65 acres and the taxiways adds 31 acres for a total of 221 acres, which is still only 17% of the site, leaving about 1,000 acres open. However there are areas within the Airport which detract from its role as a good neighbor. Adjacent to the boundary of the Quogue Refuge exists a man-made buffer devoid of any vegetation. While it may have served the former military use of the Airport as both a security perimeter and fire break these needs are past. Consideration of planting a tough native ground cover, such as bearberry, to naturally erase these scars on the landscape would also make a positive contribution to the wildlife community.

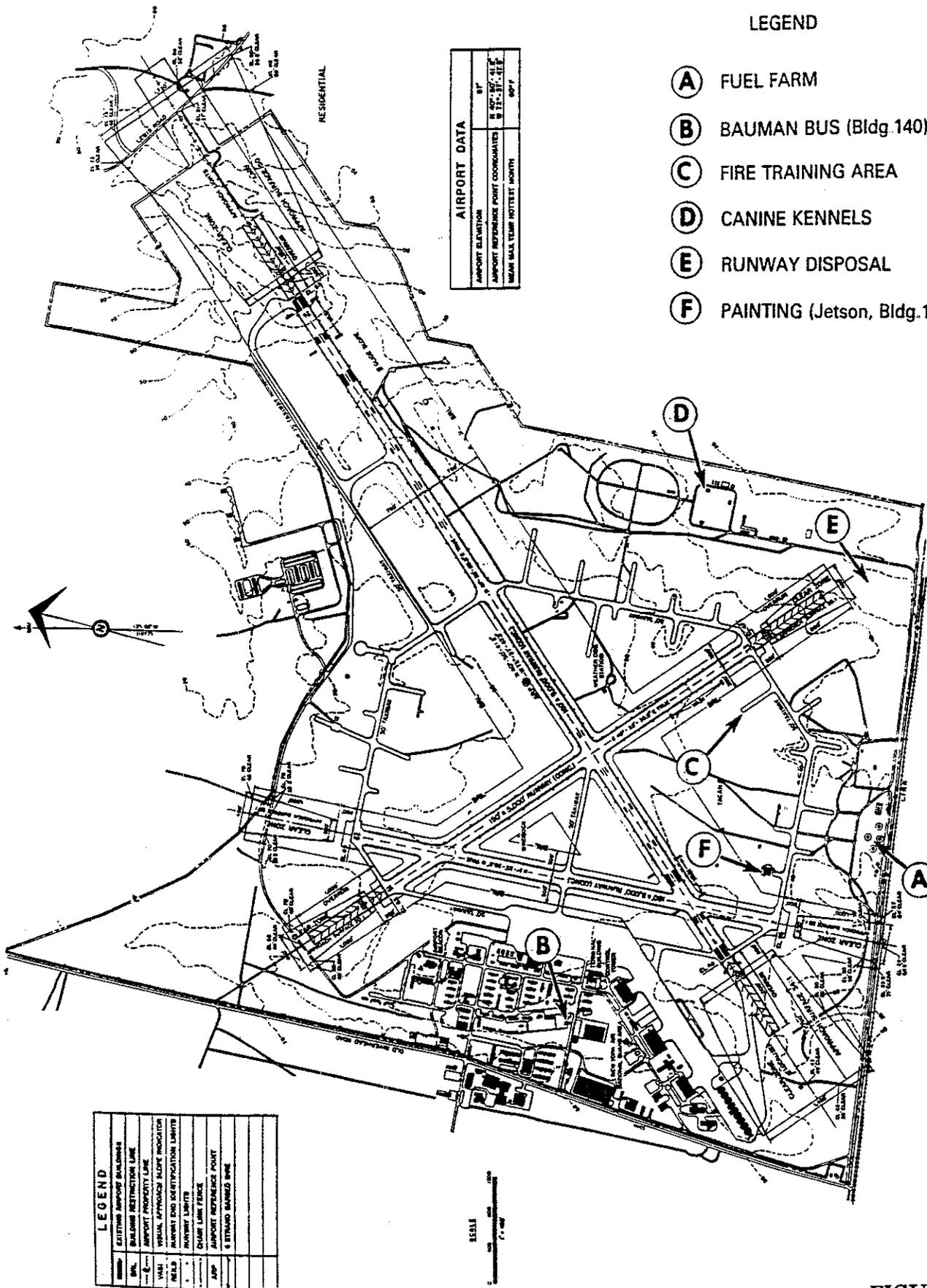
C. Hazardous Materials A survey of the individual tenants and their operations was conducted in May 1988 by the Bureau of Hazardous Materials Management of the Suffolk County Department of Health Services (SCDHS). This survey was in conjunction with another report prepared at the same time by the Groundwater Resources and Reclamation Section (SCDHS) which outlined the past fuel spill problems experienced at the Airport facility at Westhampton. The concern about the environmental impacts of the individual tenants was also addressed at that time.

The pursuit of cleanup alternatives of the major spills (80,000 gallons in 1967 and 10,000 gallons in 1974) at the fuel tank farm (A) at the south end of the Airport property was reviewed by the Suffolk County Department of Health Services (SCDHS) and the New York State Department

of Environmental Conservation (DEC), in conjunction with the U.S. Air Force, to accurately identify the petroleum products spilled, its current chemistry (floating or dissolved), and its movement (if any). This information is needed in order to determine the apportionment of the substantial cleanup costs. From 1988 samples taken at on and off-site monitoring wells it was determined that the plume was a mixture of both JP-4 fuel (military aviation) and Jet A fuel (civil aviation). The prior attempts to simply apportion the responsible parties for the cleanup was halted when an investigation being conducted by the Air Force discovered some civil aviation fuel in the targeted military fuel spill area.

In July 1989 a meeting was held at the County Attorney's office between representatives of the involved parties to report the findings of the monitoring and determine the next steps to the resolution of this issue. It was recognized that further testing of the wells for more sophisticated examination should proceed immediately. In June 1990 an agreement was jointly drafted as to the remediation accountability of this site and the financial obligations of the parties involved. This agreement is is expected to be signed and is a precursor to the preparation of the "work plan" for submission for federal funding under the FUDS (Formerly Used Defense Sites) program of U.S. Army Corps of Engineers. The location of the fuel tank farm (A) and other environmental hazards are depicted on **FIGURE 5 ENVIRONMENTAL CONCERNS.**

Another hazardous condition is represented by the plume of petroleum discovered behind Building 140 (B) commonly referred to as the Bauman Bus site, estimated at 20,000 gallons of JP-4 fuel which is currently being recovered and monitored. Of the three above-ground tanks that were also located at this site, two were removed in 1987 and the remaining 275 gallon waste oil tank is "in compliance" according to the SCDHS tank inventory conducted during May 1988. This same inventory identified the tanks in both the civil aviation use and in the Air National Guard compound, noting compliance, periodic inspection schedules, modifications, and actions to be taken including upgrading the tanks by 1990 in compliance with Article 12 of the Suffolk County Health Code.



LEGEND

- (A) FUEL FARM
- (B) BAUMAN BUS (Bldg. 140)
- (C) FIRE TRAINING AREA
- (D) CANINE KENNELS
- (E) RUNWAY DISPOSAL
- (F) PAINTING (Jetson, Bldg. 1220)

AIRPORT DATA	
AIRPORT ELEVATION	817'
AIRPORT REFERENCE POINT COORDINATES	N 42° 10' 41" E W 11° 31' 41" E
MEAN MAX YEAR HOTTEST MONTH	89°F

LEGEND	
---	EXISTING AIRPORT BUILDINGS
---	BAUMAN RESTRICTION LINE
---	AIRPORT PROPERTY LINE
---	VISUAL APPROACH SLOPE INDICATOR
---	RUNWAY END IDENTIFICATION LIGHTS
---	CHAINS LINK FENCE
---	AIRPORT REFERENCE POINT
---	5 STRIPES SHARDED BONE

FIGURE 5
ENVIRONMENTAL CONCERNS

The remediation of this site is included in the 1990 draft agreement previously mentioned.

Other sites of known environmental problems are identified in FIGURE 5 are the fire training area (C) ; the canine kennel site (D) ; the runway disposal area (E) ; have, since the initial field investigation several years ago, ceased to be used. The past investigations of these sites involved examiners from the Air Force Installation Restoration Program, which program addresses environmental problems at previous active air bases that are now in non-military service.

A former airport sub-tenant, Jetson Air (#1220), was cited for repeated violations of Article 12 of the Suffolk County Health Code for the contamination of the groundwater with methylene chloride traced to their airplane painting service. However, when the criminal case was dismissed against Jetson in 1985, the firm simply left the Airport thus abandoning thirty 55 gallon drums of various hazardous wastes. The liability for these wastes was placed upon Malloy Air (the primary tenant) who has paid out approximately \$25,000 in fees to various hazardous waste haulers to remove the wastes from the site (F) . Currently there remains a 550 gallon above-ground tank for industrial wastes, which tank, according to SCDHS, is "in compliance".

Again, the continuation of existing uses do not pose a threat to the current quality to groundwater providing the installation and use of the materials is in strict compliance with current regulations. This protection should be supported with periodic inspections by SCDHS and the careful placement of monitoring wells, as well as necessary legal changes to insure swift enforcement and remediation when violations, whether accidental or by design, occur.

D. Noise While the normal vehicular traffic noise in and around the Airport property is expected to continue, in the vicinity of an airport the noise concern is usually focused on aircraft movements and activities. Without the technical knowledge available to re-examine this

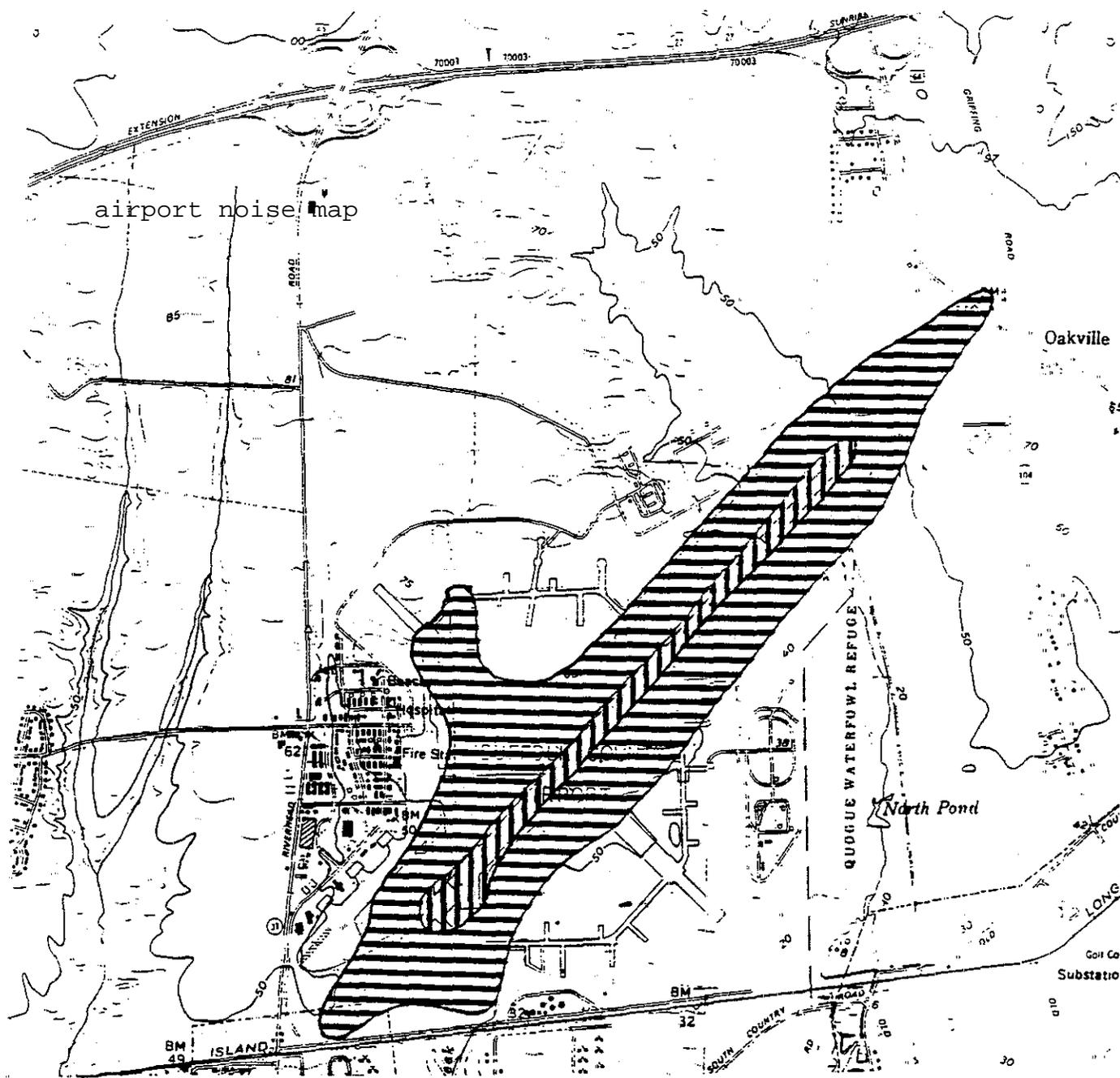
subject, what follows is information first published in the comprehensive planning document of the Airport prepared in 1980 by Trans Plan Inc. The information gathered was based on the FAA's Integrated Noise Model and still holds generally true in today's circumstances.

In 1977 there were 28 civil aviation aircraft based at Westhampton. A based aircraft is one that utilizes one primary airport, usually one convenient to the owner. By 1988 the number had expanded to 80 civil aviation based aircraft which includes 62 single engine, 18 twin engine, 1 jet engine, 2 helicopters and 5 gliders. The military (ANG) aircraft based at the Airport include 4 four-engine C-130's and 5 helicopters.

During the last four years the total reported operations (a takeoff or a landing) at the Suffolk County Airport have declined from 161,978 (1986) to 104,731 (1989) of which approximately 12% annually were attributable to Air National Guard and other military operations. In June 1989 a new aircraft service was added to the aviation services when the Trump commuter helicopters began their limited season (June - September) operations between the Hamptons and New York City. This helicopter service has since been discontinued.

A measure of the noise impacts of aviation operations, depicted in the form of a noise contour line is outlined on **FIGURE 6 AIRCRAFT NOISE IMPACTS**. This graphic follows planning criteria established by the FAA which includes noise sensitivity ratings applied to their compatibility with general land use categories. The terminology of noise sensitivity around airports utilizes the term "Ldn" which is an abbreviation for the day-night average sound level, with the number preceding "Ldn" depicting the decibel level.

There should be no significant effect on land uses located in areas having noise sensitivity levels below 65 Ldn. A chart of general land uses and their compatibility with aircraft noise levels is included on **FIGURE 6** Adding to this information is a further explanation of land planning guidelines shown in **FIGURE 7 LAND USE GUIDELINES (FAA)**.



LAND USE CATEGORY

- Residential
- Schools, Libraries, Churches
- Hospitals, Nursing Homes
- Playgrounds, Neighborhood Parks
- Office Buildings
- Commercial-Retail
- Commercial-Wholesale, Some Retail, Ind., Mfg., Util.
- Manufacturing, Communication (Noise Sensitive)
- Extensive Natural Recreation Areas

LAND USE CATEGORY	LAND USE INTERPRETATION FOR Ldn VALUE			
	55	65	75	85
Residential		Diagonal lines	Horizontal lines	Vertical lines
Schools, Libraries, Churches		Diagonal lines	Horizontal lines	Vertical lines
Hospitals, Nursing Homes		Diagonal lines	Horizontal lines	Vertical lines
Playgrounds, Neighborhood Parks		Diagonal lines	Horizontal lines	Vertical lines
Office Buildings		Diagonal lines	Horizontal lines	Vertical lines
Commercial-Retail		Diagonal lines	Horizontal lines	Vertical lines
Commercial-Wholesale, Some Retail, Ind., Mfg., Util.		Diagonal lines	Horizontal lines	Vertical lines
Manufacturing, Communication (Noise Sensitive)		Diagonal lines	Horizontal lines	Vertical lines
Extensive Natural Recreation Areas		Diagonal lines	Horizontal lines	Vertical lines

LEGEND

- Diagonal lines 65 LDN
- Horizontal lines 75 LDN



FIGURE 6
AIRCRAFT NOISE IMPACTS

LAND USE PLANNING GUIDELINES (FAA)

"Ldn" Values Description of Noise Zones in Terms of Land Use

- < 65 Essentially no complaints are anticipated. Few activities will be affected by aircraft sounds, although building designs for especially sound sensitive activities such as auditoriums, churches, schools, hospitals, and theatres should consider sound control in areas close to the airport. Detailed studies by qualified personnel are recommended for outdoor places of public assembly in the general vicinity of the airport.
- 65-75 Activities where uninterrupted communication is essential should consider sound exposure in design. Generally, residential development is not considered a suitable use although multi-family developments where sound control features have been incorporated in building design might be considered. Open-air activities and outdoor living will be affected by aircraft sound. The construction of auditoriums, schools, churches, hospitals and theatres and like activities should be avoided within this zone where possible.
- 75 > Land should be reserved for activities that can tolerate a high level of sound exposure such as some agricultural, industrial, and commercial uses. No residential developments of any type are recommended. Sound sensitive activities such as schools, offices, hospitals, churches, and like activities should not be constructed in this area unless no alternative location is possible. All regularly occupied structures should consider sound control in design.

Source: AC 5070-6 Airport Master Plans

FIGURE 7
LAND USE GUIDELINES (FAA)

The anticipated lack of development upon the vacant acreages to the north and west of the Airport property, and the contemplated acquisition in the near future of some of these lands as open space will minimize issues involving noise impacts on uses adjacent to those boundaries of the Airport. Established development areas under the southern clear zone of the primary runway (Runway 6), and new development occurring under its northern clear zone terminus (Runway 24) may at some future time require field monitoring to determine the exact noise levels.

E. Air Quality The level of operations and characteristics of the based aircraft and the Air National Guard's equipment is in line with the forecasts made in the 1980 Plan. The projections indicate that the pollution concentrations (peak hour) of solid particulates, sulfur oxides, carbon monoxide, hydro-carbons and nitrogen oxides, (even with the inclusion of the then-proposed air cargo operations) would be 50% less than the minimum standards set by both the EPA and NYS DEC.

Water Quality The quality of the groundwater in the area of the Suffolk County Airport is a matter of critical concern in the future utilization of the Airport and the community at large. The recent acquisitions of large open space parcels for groundwater protection in conjunction with the planned acquisitions north of the Airport, should assure the availability of a high quality of potable water on the Airport itself. Combined with this activity are ongoing studies on the special groundwater protection areas (SGPA) from which policies will be established to enforce protection of these critical watersheds. While the Suffolk County Airport facility lies within the "Central Suffolk" SGPA Study Area, being located at the southernmost downgradient boundary means that the direction of flow is away from the main part of the SGPA.

Section V - FUTURE DEVELOPMENT

The May 1989 Airport report to the Health Committee did not attempt to address the ultimate development of the Airport property, but rather took a short-range narrow look at the health and safety impacts of current tenancy's and aircraft activity.

A. Requests Since this study began communications have been received from persons, organizations, and municipalities seeking to site new activities on the Airport property. The inquiries include such uses as a materials recycling facility (MRF) for the eastern Towns; a fish processing/shipping plant; sports playing fields for a local school district; the relocation of the DPW highway yard (out of Riverhead); the relocation of the fuel depots of both the Fixed Base Operator (Malloy) and the Air National Guard; a complex of discount outlet stores; and consideration of a transportation center adjacent to the LIRR tracks.

B. Benefits The Suffolk County Airport at Westhampton is a valuable asset, both to the County and the communities adjacent to its potential benefits. It is a common misconception to view the Airport as existing only for the benefit of those who fly, when in fact airports benefit everyone because they can attract new industry and new jobs. They can also provide the opportunity to accomodate essential municipal services which have proven most difficult to establish in built-up areas, such as the recycling facility and the DPW highway yard.

Depicted on **FIGURE 8 AVAILABLE LANDS** are areas within the Airport property which do not interfere with the aviation navigation and runway uses and may be viewed as lands which, in a general sense only, could accomodate selected development in the future.

The following presentation on the potential future use of the Suffolk County Airport is based on many of the recommendations of the 1980 Plan which are still valid. It should be remembered that the primary function of this 1,250 acre facility is that of an airport for general aviation activity.

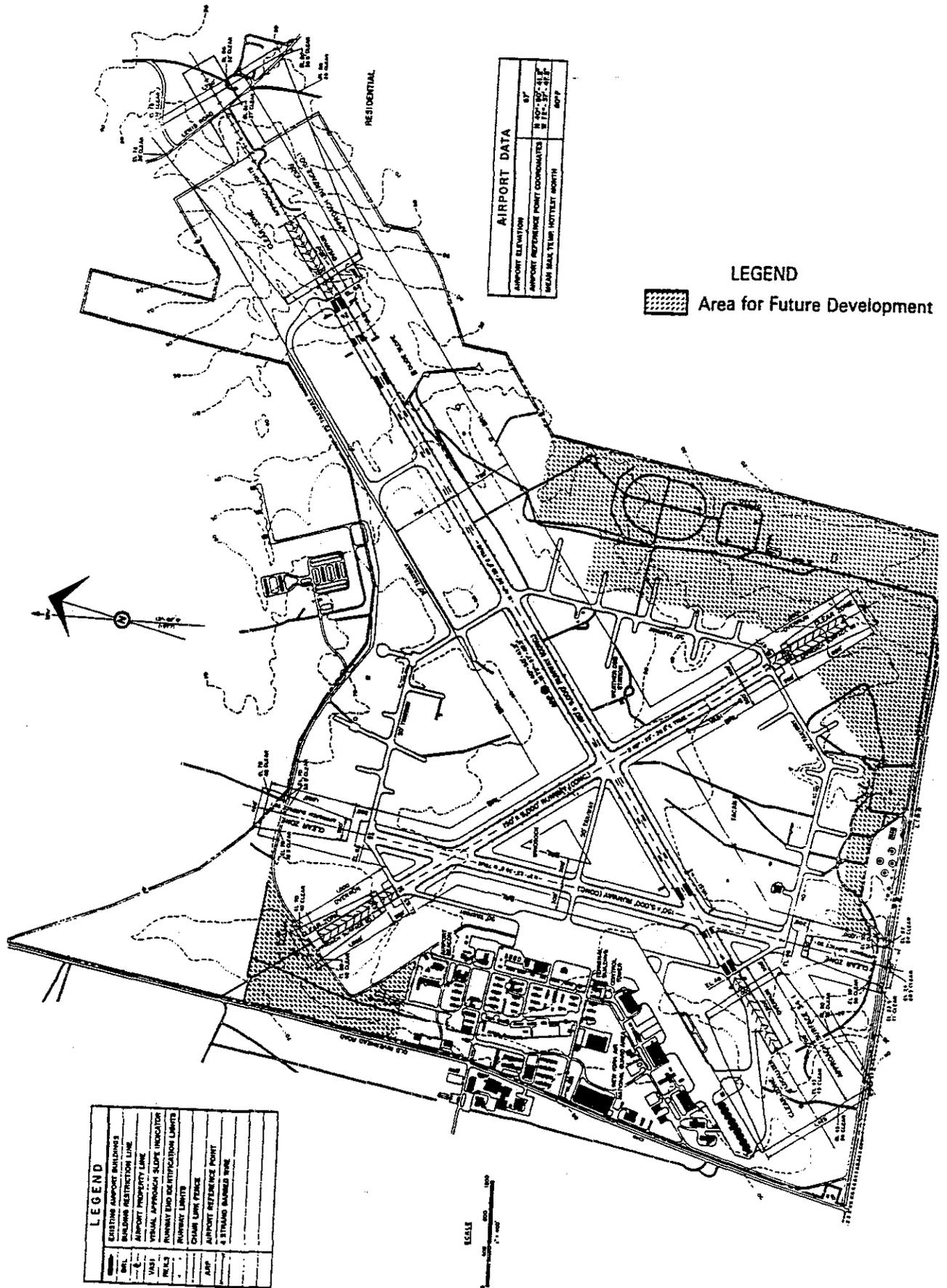


FIGURE 8
AVAILABLE LANDS

CHAPTER 2 - FORECASTS & CAPACITIES

CHAPTER 2 - FORECASTS & CAPACITIES

Upon completing a review of this segment on forecasts and the seven key elements discussed in **CHAPTER 3 - DEVELOPMENT** as well as the financing methods available (**CHAPTER 4**), the next step is a critical decision as to what comes first, the investment to encourage the revenue, or the revenue to support the investment? To assist in that decision the following examination of aircraft and their operations as well as facility capacities to meet future demands is presented.

I. Based Aircraft

It is estimated that less than 16 percent of the active aircraft owners in Suffolk County Airport's service area base their aircraft at the Airport. The lack of high-quality fixed base operator facilities has contributed to the Airport's inability to attract aircraft owners.

One of the primary purposes of this study is to indicate the improvements required to upgrade the Airport to the point where it will be more attractive to general aviation aircraft. This will assist the Airport in meeting the aviation needs of the County and general public while increasing the facility's revenue potential.

Under the most pessimistic circumstances, Suffolk County Airport will maintain its current share of based aircraft out of all the active aircraft in its service area.

A more practical outlook depicts Suffolk County Airport capturing the bulk of general aviation growth in the area due to the combination of improved services and its high quality airfield facilities (relative to competitive airports). The smaller private facilities in the eastern Suffolk area will probably experience only minor increases in based aircraft growth, partly as a result of their inability to raise the private capital needed to maintain and upgrade their airports to meet the needs of the general aviation public.

Under the most optimistic scenario for Suffolk County Airport, its facilities will be improved and thereby become a major attractor of general aviation tenants. Again, this will depend on the quality of the fixed base operator and the Airport services and attraction. However, this scenario also assumes that the larger airports will cut back, or at least hold their accommodation of general aviation at present levels, thereby pushing new aircraft tenants to other available airports. Should some of the smaller private airports close, Suffolk County Airport will become one of the alternatives for those aircraft previously using the private facilities. The following forecast reflects the anticipated growth of based aircraft at Suffolk County Airport assuming facility and service improvements are made. It does not assume any aircraft from the closure or the reduction of general aviation space of other airports.

<u>Year</u>	<u>Single Engine</u>	<u>Multi Engine</u>	<u>Total</u>
1990	70	18	88
2000	90	30	120

II. General Aviation Operations

There are two classes of operational activity at the Suffolk County Airport, Civil (general aviation) operations and Military operations which are further identified between "Local" operations of aircraft based at the Westhampton facility and "Itinerant" operations which originate from other airports. Of the itinerant Civil operations the majority are training flights which use the benefits of the Airport reflected in its relatively unrestricted air space, the length of its runways, the instrument landing system, and the air traffic control service to practice touch-n-go and other training procedures.

A review of the total operations reported at the Suffolk County Airport during the past four years (1986-1989) patterns emerged regarding the

operations by the different classes of activity. Using the 1989 totals (104,371) as an example, Civil general aviation operations (93,477) accounted for 89% of the total, with the "Local" operations being 58,004 (56%) and the "Itinerant" operations being 35,473 (34%). The Military operations represented +10% with 10,894, with "Local" being 6,973 operations and the "Itinerant" being 3,921 operations by military aircraft.

The pattern of operations that is used for forecasting purposes is by the percentages of aircraft activity. Share of total annual operations are assumed to be: Civil Local - 54% ; Civil Itinerant - 34% ; All Military - 12% . These percentages are applied to the forecasted total operations of 125,000 (1990) and 160,000 (2000). The total operational forecast for the year 2000 is conservative because it does not include any forecast of aircraft and operations which will be attracted here by the improved aviation facility as recommended in this Update.

The preceding assignment of operational shares were necessary to forecast the capacity needs for hangers and tie-down aprons relative to based and itinerant Civil aircraft using the Airport. The defining of the annual Itinerant aircraft beyond the required design "peak" to the number of these aircraft which may actually utilize the on-ground aviation services was felt to be important to the revenue generation and expansion of services. Therefore, it is assumed in the forecasts (shown on the following page) for the years 1990 and 2000 that 70% of the Itinerant operations which enter the Airport controlled air space are on training flights, with the majority of them performing touch-n-go training. Of the other 30% which enter the controlled air space only half of them are assumed to seek on-ground aviation services. The forecasted "peak" of Itinerant Civil aircraft for 1990 is 50, increasing to 83 aircraft per year by the year 2000. Accommodating Itinerant aircraft apron capacity based on the FAA required "peak" is considered 'overdesign' at this stage in the Airport's development, nevertheless it will be factored into the design and cost components.

FORECAST OF ANNUAL OPERATIONS

Year	Based Acft		Itinerant Acft		G.A.	Military	Opns.
	G.A.	Local	G.A.	Itint.	Total	Total	Total
1988	80	69,661	-	37,973	107,634	15,735	123,369 <u>1</u>
1989	84	58,004	-	35,473	93,477	10,894	104,371 <u>1</u>
1990	88	68,700	50	41,300	110,000	15,000	125,000 <u>2</u>
2000	120	89,600	83	54,400	144,000	19,200	160,000 <u>2</u>

1 Actual 2 Estimated (Local @ 54%-Itin @ 34%-Mil. @ 12%)

III. Commuter Operations

Any consideration to offer regular commuter activity will occur only when an aircraft operator feels he can consistently obtain aircraft loads that will produce a profit. Commuter service is profitable at Long Island-MacArthur Airport in Islip because its geographical location within a densely populated market area. Airports such as Suffolk County and East Hampton are at competitive disadvantage to Islip for this aviation traffic. However, commuter service potentials in eastern Suffolk improve in the warm weather months when its transient population increases considerably. Last year's introduction of a helicopter commuter service between New York City and the Hamptons indicates there is a seasonal market niche for this type of commuter service.

Finally, the quality of the air service offered will strongly affect passenger growth. It is anticipated that Long Island-MacArthur Airport will continue to offer Long Island's best commuter and scheduled passenger service, handling the excess demand for those travelers finding it inconvenient to travel to the New York City airports. Republic Airport is also capable of handling additional service because profit potentials are greater there (high population densities) even though its distance to the New York City airports is considerably shorter. Suffolk County Airport's future commuter potential lies in the summer tourist market and its intra-regional connection to the New York City Airports. The limited demand for cargo services with a Long Island destination is

being handled by Republic and Long Island-MacArthur airports. Should additional cargo services be anticipated the only facility to handle them (in the future) may be the Grumman facility at Calverton, if it becomes available for such activity.

IV. Airfield Capacities

Unlike many other considerations of airports which can be quantified in absolute terms, the capacity of an airfield cannot be strictly applied. Instead, the purpose of establishing an airfield capacity is to create a guideline for the scheduling of plan implementation.

The runway capacity of an airport is customarily measured in terms of Practical Hourly Capacity (PHOCAP) and Practical Annual Capacity (PANCAP). While the word "practical" is used in both terms, capacities determined are somewhat theoretical and can be exceeded in practice. Using a procedure outlined in the FAA capacity handbook, a practical hourly capacity (PHOCAP) of 127 operations per hour was determined which combined with an existing peaking level of 15%, yields a practical annual capacity (PANCAP) of about 230,000 operations. The revised forecast demand at the Suffolk County Airport should see about 160,000 annual operations by the year 2000.

The PANCAP cited was based on the 1980 aircraft mix and peaking characteristics as well as levels of touch-and-go operations. An investigation of general aviation airports handling approximately the same level of traffic as forecast for the Suffolk County Airport shows them operating a peaking factor of about 13 percent as opposed to the 15 percent that was used in 1980. Applying this factor to the weighted PHOCAP of 127 operations per hour yields a PANCAP of about 280,000 operations, which is safely within the forecasted demand.

V. Hangars and Tie-Downs

There are five available open bay hangars at Suffolk County Airport providing a total area of 63,682 square feet. Based on a FAA standard of 1,225 square feet per hangared aircraft, this translates to a

calculated capacity of about 51 aircraft, however the "practical" hanger space is adjusted to 47 aircraft. A sixth hanger, a 10 unit "T" type, can accommodate only single-engine aircraft, but brings the hanger capacity to 57 aircraft. Assuming that approximately 50 percent of the single-engine (based) aircraft will demand hanger space, with the remaining 50 percent using tie-downs, the forecasted hanger space demand will increase to 80 aircraft, 35 single-engine plus 30 multi-engine, by the year 2000.

The privacy offered by T-Hangars is usually more important to the aircraft owner than is the convenience to be had by a location on the west side of the Airport in the open hangars. The term "hangar rash" is often used by owners to describe the minor damage to aircraft stored in open hangars. Hangar rash is an almost unavoidable result of the routine activity which occurs in an open hangar as aircraft are moved in and out and people circulate through the area (often handling tools or other items). This is to say that most aircraft owners, if they choose to hangar their aircraft, will pay extra for private space, as well as electric service and/or heat. Such private aircraft storage equipment is available in the marketplace in the form of either T-Hangars or Executive hangars. The T-Hangars are not manufactured solely for single-engine aircraft but are also available for light multi-engine aircraft.

For an estimate of the types of hangar space required, it is assumed that all multi-engine aircraft would be hangared along with 50% of the single-engine based aircraft. The projected hangar facility needs are:

<u>FORECAST OF HANGER REQUIREMENTS</u>			
<u>Year</u>	<u>Single Engine Spaces</u>	<u>Multi-Engine Spaces</u>	<u>Total Hanger Spaces</u>
1990	35	18	53
2000	50	30	80

It was previously cited that all multi-engine aircraft will be hangared in open bay hangers, while single-engine aircraft could be accommodated in both open-bay and the one 10-unit "T" hanger, which can only accommodate single-engine aircraft. Using this approach, with 47 open bay hanger spaces estimated to be available, the 1990 demand for all 18 of the multi-engine aircraft could be met along with 29 of the single-engine aircraft in these hangers. Another 10 single-engine aircraft could be placed in the 10-unit "T" hanger. While current hanger space (57) would meet the forecasted hanger accommodation needs for 1990 (53), it falls far short of the year 2000 demand to hanger 80 aircraft, requiring an additional 30 hanger spaces.

The current hangar space inventory includes building #1220 (6,000 s.f.) which was previously utilized as an aircraft painting facility by Jetson Air, and has sufficient area to accommodate 5 aircraft, but was identified as an environmental concern in **CHAPTER 1, Section IV - ENVIRONMENT**. If this hanger should be determined to be unuseable for aircraft storage, due to its environmental risk, the reduction of hanger capacity by 5 aircraft, to space for 52 aircraft. Also included is building #312 (16,654 s.f.) known as Hangar "D". In the 1980 Plan it was reported that this building was in need of extensive repairs, and if these repairs were undertaken and proper maintenance was performed throughout, additional hangar spaces could be provided. Malloy Air, a fixed base operator (F.B.O.) obtained an amendment to their lease in 1980, adding this hangar to their facilities inventory at no cost, for the purpose of improving the building to accommodate aircraft. The last Airport audit by the County Comptroller (1986) levelled severe criticism at the F.B.O. for the poor condition of the building. Since that audit Malloy Air has taken steps to improve the building and it is assumed that the prescribed number of aircraft (13) can be adequately accommodated.

The tie-down area must meet peak demands over and above those of the normal based aircraft. The main concern is to reserve an area sufficient for future forecasted demands. As determined from the projected based aircraft and assuming that the previously determined number of hangar

spaces will be available, an area large enough to tie-down aircraft should be designated on the airfield representing the year 2000 service demand for 120 based aircraft and 83 itinerant aircraft. The number of itinerant aircraft cited reflects the "peak" demand by discounting the touch-n-go training flights in the itinerant aircraft operations

VI. Apron Area

The requirements for apron area are dependent upon the number of based aircraft, operations (by type) and the layout of the airfield. The aprons will be expected to serve four separate and distinct functions. Normally the Itinerant/Fuel Apron are combined. However, since there are only two specific fueling areas along the entire flight line, the requirements are broken out separately.

- * Hangered aircraft (pavement around the hangers)
- * Aircraft tie-downs
- * Aircraft fueling and transient aircraft parking

The guidelines used for determining these requirements are from the FAA Advisory Circular 150/5300-4B, as follows:

Hangar Apron - 4,000 square feet per aircraft served.

("Served" is approximately 50% of based aircraft -
44 in 1990, 60 in 2000)

Tie-Down Area - 2,800 square feet per aircraft served.

("Served" is approximately 50% of based aircraft -
44 in 1990, 60 in 2000)

Fueling and Itinerant Aircraft Apron - 3,240 square

feet per peak number of parked itinerant aircraft.

For this study the required area is further split

Itinerant Apron (2,800 s.f.) and Fuel Apron (440 s.f.)

("Peak" itinerant aircraft projected on the apron -
50 in 1990, 83 in 2000.)

Based on the preceding FAA standards, the apron areas required at the Suffolk County Airport are as follows:

<u>FORECASTED APRON AREA REQUIREMENTS</u>							
(Square Feet)							
	Based	Hanger	Tie-Down	Itin	Fuel	Itinerant	Total
<u>Year</u>	<u>Acft</u>	<u>Apron</u>	<u>Apron</u>	<u>Acft</u>	<u>Apron</u>	<u>Apron</u>	<u>Apron</u>
1990	88	176,000	123,200	50	22,000	140,000	461,200
2000	120	240,000	168,000	83	36,520	232,400	676,920

In addition to that area of the apron that is to be reserved for tie-downs, some apron area will be needed for maneuvering into and out of the hangars. A comparison between the Table identifying actual Flightline Needs (p.47) and the preceding Table will reflect that a major portion of the required apron areas already exist on the Airport.

VII. Terminal Area

The existing terminal building located just north of the control tower provides an area of 4,300 square feet. Since the 1980 Plan, improvements have been made to this facility to accommodate general aviation activity. Future improvements may be needed to accommodate commuter service, or other aviation demands. However, there are some near-term changes that should be made to improve the value of this Airport to general aviation users. These changes would include an improved pilot's lounge, equipped with weather and chart data to assist in flight planning

VIII. Vehicle Parking

The general aviation demand for vehicle parking at the Airport (using the FAA standards) is expected to be approximately 1.2 automobiles per peak hour aircraft operation (excluding those itinerant aircraft operations associated with touch-and-go's). This includes consideration for cars left at the Airport for more than an hour at a time as well as

the fact that many cars do not remain at the Airport but merely "drop off" or "pick up" passengers. It is expected that Suffolk County Airport will experience no problem in meeting the parking needs of its users.

IX. Air National Guard

The New York Air National Guard (NYANG) maintains extensive facilities at Suffolk County Airport. Located on 75 acres the ANG facilities include administration and support buildings and shops, a new Crash/Fire/Rescue building, several major hangars, large ramp areas, and over 600 feet of Air Defense Command type alert hangars currently used for helicopter storage and maintenance. The six new Blackhawk helicopters due in 1990 will be able to be accommodated within the Air Guard's existing facilities.

It is expected that total military aircraft operations will, over this implementation period, remain within the scale of 15-18,000 operations a year. Therefore, since the mission of the unit is not expected to change the existing facilities are sufficient for the present demand.

X. Fueling Facilities

The Airport had the following total storage tank capacities (gallons) of the various types of fuel and lubricants:

<u>EXISTING FUEL STORAGE CAPACITIES</u>			
	<u>General Aviation</u>	<u>Air Guard</u>	<u>Total</u>
Jet Fuel	231,500	546,500	778,000
Gasoline	24,550	12,000	36,550
Diesel Fuel	1,000	10,100	11,100
Kerosene	25,000	-0-	25,000
Heating Oil	48,875	65,100	113,975
Waste Oil	132,275	10,500	142,775
Undesignated	-0-	25,000	25,000
Totals	462,700	669,200	1,131,900

The majority of the tanks are in compliance with the requirements of Article 12 of the Suffolk County Health Code. There are only two (2) tanks not in compliance, which will be removed when the new F.B.O. (Malloy) fuel tank farm (behind building #344) is completed in 1990.

Seeking to comply with Article 12 of the Suffolk County Health Code, and the 1990 deadline for tank modification or replacement, two key users of the existing aviation fuel tanks have submitted their plans to erect new fuel storage capacity at another location. Malloy Air, the F.B.O., is seeking to place his new fuel storage tanks behind Hanger "C" (Bldg 344) which it leases and is located adjacent to the western area flight-line and the ANG complex. Also, the Air National Guard has inquired of the County about the availability of an additional 5 acres in the vicinity of the existing fuel farm, on which they would relocate their fuel storage supply. These new fuel depots would utilize above-ground tank installations in compliance with the Health Code and specific fire safety construction codes governing aviation fuel depots (NFPA Standard 30).

XI. Access Roads

The review of the access roads within the Airport generally indicates that some upgrading of the pavement quality and some intersection improvements would contribute to the safety and use of the facilities. In addition to this upgrading there are two site-access deficiencies.

The first is the access to the southern section of the Airport. Anticipating the implementation of the municipal uses (Highway Yard, Fuel Depot, and a possible Recycling Facility) along the access road which runs parallel to the Airports southern boundary, some pavement improvements are needed to accommodate these heavy vehicle use functions. More importantly, there is a need for the County to acquire private land opposite the southern gate to accommodate the safe highway design (i.e., N.J. Left Turn) to move the flow of traffic safely into the Airport at that point. Immediate County action is also needed to acquire a small out-parcel (70x100), in this same area, which intrudes into the Airport

property. Known as "The Mexican Hut" the site contains two dilapidated buildings. The owner is contemplating the placement of an automobile service shop on the site after removal of the buildings.

The second is to provide a new entrance road to link the area at the north boundary of the Airport to Old Riverhead Road (C.R.31). Assuming that development of the industrial technology park area occurs, as well as some uses on part of the 20 acres north of that site, there should be some alternative traffic reliever to Old Riverhead Road. The existing Airport access road which terminates on the east at the private Mini-Storage facility should be appended to extend west from the access road 400 feet to Old Riverhead Road, at a point approximately 1,200 feet south of the proposed Preserve, and immediately north of the proposed industrial park. This would permit the activities at the north end of the Airport to have access that will not interfere with traffic in the more intensely developed area of the Airport. The cost of improvements to other existing access roads should be borne by the beneficiaries of this improvement. Another example of cost being borne by the beneficiaries would be on the southern access road which may require improvements due to the vehicular traffic that will be using it, and particularly by those needing to get to a specific activity east of the existing fuel farm.

XII. Crash, Fire and Rescue

All of the Airport's fire vehicles and snow removal equipment are owned and operated by the NYANG and are stored at their new CFR facilities adjacent to Building 344. As part of their Airport use lease agreement the ANG responds to on-site aircraft accidents. In addition, an annually renewed agreement between the County and the Village of Westhampton Beach for emergency (fire/rescue) services is provided. This agreement covers the landside buildings, not involving aviation accidents. According to the lease agreements the F.B.O.'s are responsible for the maintenance of the tie down and fueling areas, including the removal of snow. For the anticipated growth of general aviation activity as well as the landside

commercial and industrial building activity, the management and services of the Airport should, with its own equipment, be able to provide its tenants certain basic needs, including fire protection and snow removal.

XII. Air Traffic Control

The air traffic in the vicinity of Suffolk County Airport is under the control and jurisdiction of the New York Air Route Traffic Control Center (NYARTC) at Long Island-MacArthur Airport. In addition, the Suffolk Air Traffic Control Tower during its operating hours controls the air traffic in the immediate area of the Airport and assures a smooth and safe transition of aircraft from en route to a landing, or vice-versa. The Control Tower also handles the airside ground traffic at the Airport.

CHAPTER 3 - DEVELOPMENT

CHAPTER 3 - DEVELOPMENT

Suffolk County Airport is an important segment of the air transportation system on Long Island. It should be maintained and improved to meet future aviation needs. It is also a unique and important asset to the economy of eastern Long Island in the diminishing commercial and industrial sites available to attract new businesses and job opportunities.

Section I - MISSION STATEMENT

Purposes

Airport Mission Statement

These rules and regulations are promulgated to provide for the orderly administration of Suffolk County Airport, to insure as much compatibility as possible between aircraft operations and the surrounding residential development, to enhance public safety, and to promote growth:

Intentions

- 1) Suffolk County Airport is an important regional asset. It provides significant transportation and economic benefits to both Suffolk County and the adjacent communities. The policy of the County of Suffolk shall be that Suffolk County Airport continue to better serve this region by retaining its existing role as a general aviation airport.

- 2) Since it was acquired by Suffolk County in 1970, Suffolk County Airport has accommodated the region's need for an airport devoted to private, business and charter aircraft, as well as the air/sea rescue operations performed by the Air National Guard. Because Suffolk County Airport is situated in the eastern part of Long Island, surrounded by substantial acres of environmentally sensitive pine barrens open space, with a residential and seasonal community development at the southern boundaries of the facility, its role is for use as a general aviation airport is proper. The Long Island-MacArthur Airport satisfies the

demand for scheduled air carrier services and light cargo operations. Suffolk County Airport will be improved to enhance the economic development of the eastern Long Island region through better services to its users of general aviation, transportation through business and charter aircraft, and the activities of the commercial and industrial firms. To this end, the following on-airport improvements are considered appropriate: new and improved access roads, upgraded infrastructure services, aircraft ground handling facilities (including hangars), navigational aids, fueling facilities and maintenance services.

3) It is recognized that as Suffolk County Airport makes these improvements and provides greater regional benefits, it imposes greater local costs and environmental impacts on its neighbors and host communities of Southampton and Westhampton Beach. A balance between these sometimes conflicting interests will be achieved.

4) In cooperation with the aviation users steps will be taken to minimize intrusive aircraft sound, including several airport improvements to facilitate proper runway use. Should the current Ldn 65 contour consistently encroach into the existing residentially developed areas, steps will be taken to improve noise performance standards.

5) To provide support for local governments and schools, a "Payment in Lieu of Taxes" (PILOT) program shall be continued. Each non-aviation economic endeavor shall contribute to common needs without preference or inequity. Airport users will contribute in proportion to their consumption of services.

6) To become a better neighbor Suffolk County Airport will work with public officials, town governments, and the surrounding residential community to substitute apprehension with trust and good will. This can best be achieved through coordinated land use planning, public information and understanding, and constructive public administration to safeguard the community tranquility and foster regional economic growth.

Section II - DEVELOPMENT ELEMENTS

There are seven major development elements of the Airport's growth listed below, but they are not listed in any order of priority. The major development elements are outlined in "**bold**". Following their brief listing, all the elements are discussed in more detail.

<u>Element</u>	<u>Concept</u>
A. Maintain Present Facilities.	Make no major improvements in airport facilities. Continued maintenance.
B. Enhance general aviation (provide new hangars and tie-down areas as needed).	Linear development along taxiway with minimal utilities relocation.
C. Develop commercial/ industrial park.	Block of development behind general aviation and south of perimeter road.
D. Operating airfield improvements (including taxiways to improve efficiency).	Complete the parallel taxiway along Rwy 6/24. Overlay Runway 15/33.
E. Attract commuter airline service.	Requires no change in airfield. Impact on existing passenger terminal would be examined at time of service.
F. Restructure leases of tenancies and the approval process	Requires a differentiation between aviation and non-aviation rates tables to encourage aviation and aviation-related services.

- G. **Management approach** County contracts for professional Airport Management Service firm while retaining County oversight.
- change, to improve
the fiscal health of
the Airport operation.

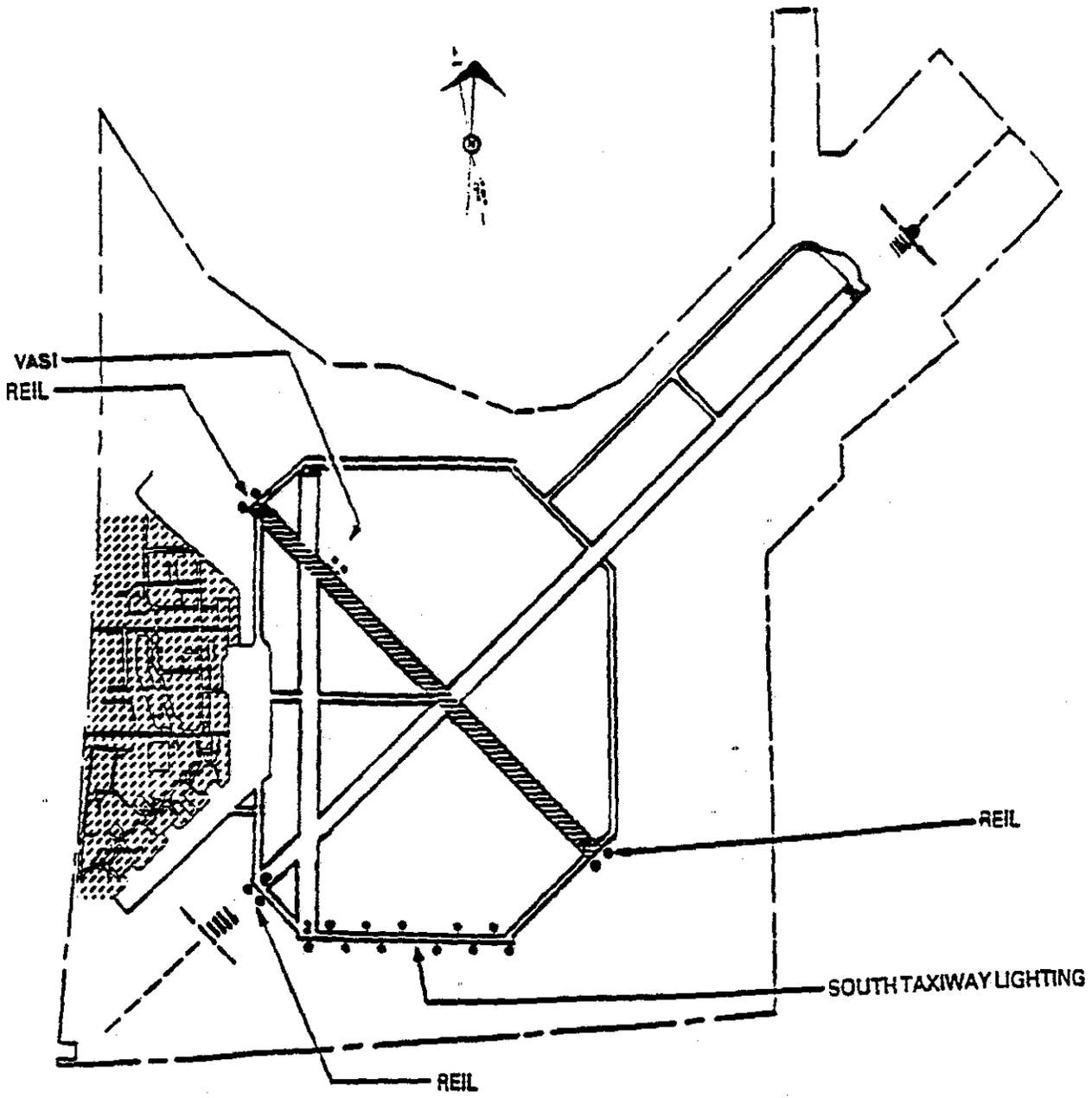
Element A: MAINTAIN PRESENT FACILITIES - This alternative assumes that no major improvements would be made at the Airport. A minimum amount of improvement in the character of the facilities would occur. The Airport would be financially underwritten by the County in much the same way as it has in the past. Only necessary maintenance projects would be performed.

The following list suggests some of the major maintenance-related projects that would be required to continue the current use of the Airport, and are illustrated in **FIGURE 9 MAINTENANCE PROJECTS**.

1. Overlay Runway 15/33 (5,000 ft.).
2. Repairs to existing buildings and removal of deteriorated buildings.
3. South taxiway lighting.
4. REILS* on Runways 15, 33 and 6.
* (Runway End Identifier Lighting System)
5. VASI* on Runway 15.
* (Visual Approach Slope Indicator)

Service to Communities: This alternative would result in no increase in the ability of the airport to meet the present or future aviation needs of the potential service area. In effect, the level of service would decline in a relative manner as the extent of unserved needs increased over the 10 year period. It would be presumed by this approach that the County has determined to forego any actions to attract business into a new planned commercial/industrial technology park at the Airport.

Development Costs: Element A would require no additional investment in new facilities at the Airport. It would, however, still



LEGEND

-  OVERLAY RUNWAY 15/33 (5000FT.)
-  REPAIR / REMOVE BUILDINGS

FIGURE 9
MAINTENANCE PROJECTS

require the commitment of Capital Funding to accomplish the four aviation items previously listed.

Environmental Impact: It is expected that there will be approximately the same noise and air pollution resulting from the "maintain present facilities" alternative as there would be from a full development alternative.

If improvements are instituted, the main use of the airfield will be by based aircraft operators. However, if no changes are instituted, the main use will be by visiting aircraft with the same number of average daily operations and, therefore, the same amount of noise and pollution.

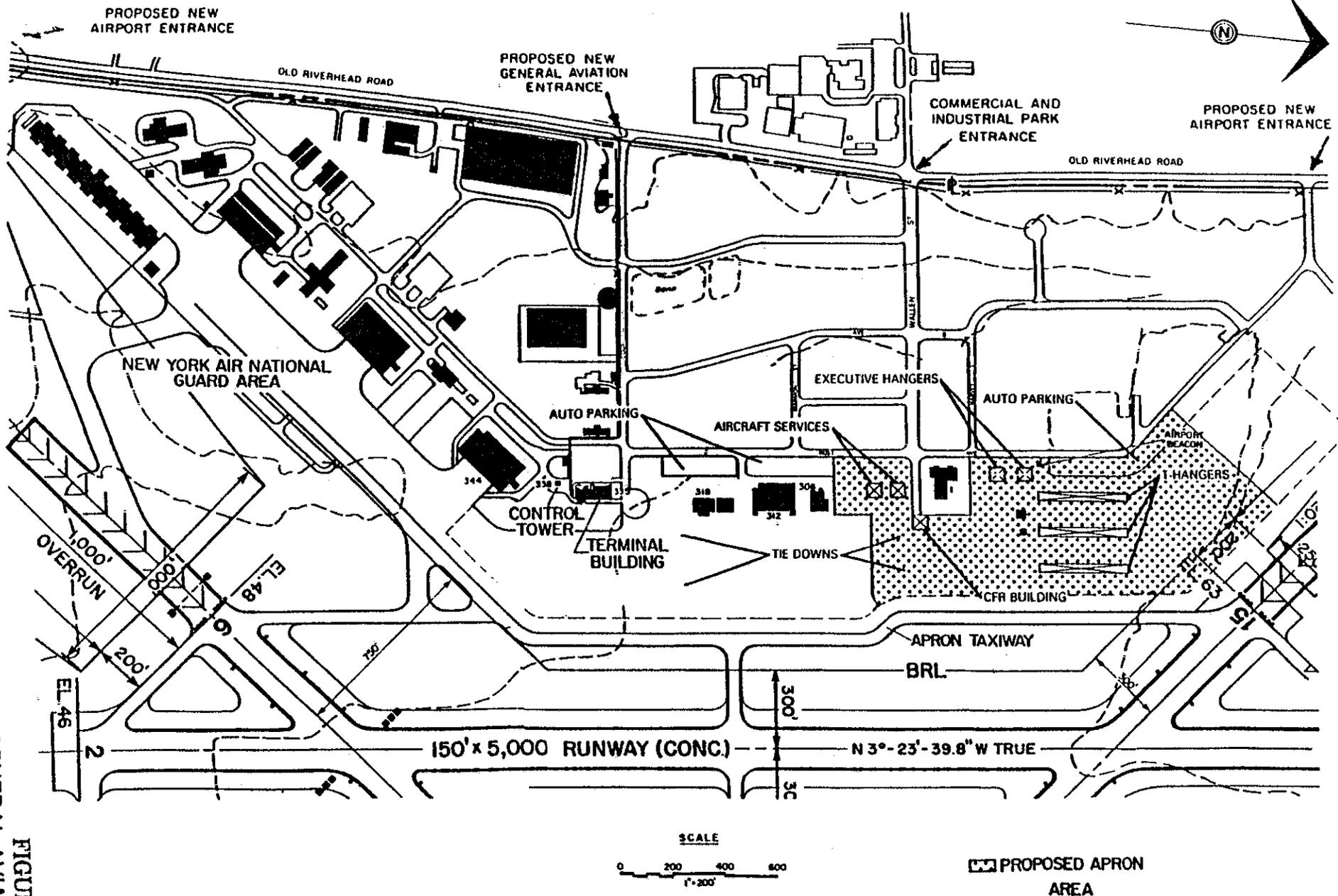
Cost/Benefit Evaluation: There are no additional costs or benefits associated with this alternative.

Financial Viability: The financial viability of making no improvements to the existing facilities is poor. The Airport would continue to lose money and would not gain any additional revenues resulting from the diminution of activities, requiring the County to increase its underwriting of the facility with taxpayer dollars.

Element B: ENHANCE GENERAL AVIATION - Enhancement of general aviation involves the provision of new hangars, tie-down areas as per projected demands by the year 2000; involves linear development along taxiway, preservation of utilities. Shown on **FIGURE 10 ENHANCED GENERAL AVIATION** are the specific items of development.

Service to the Communities: Enhancement of general aviation facilities would involve an increase in available storage space for private aircraft in the area. It would therefore result in increased service and convenience, and revenues.

FIGURE 10
ENHANCED GENERAL AVIATION



Development Costs: The cost of improvements shown below are for additional elements needed to meet the requirements of the year 2000 forecast. The figures shown are the sum of the differences between what is currently available and what will be needed. The cost for apron is based on the federal pavement standards and the median of the FAA quoted price range per square yard installed. The only significant item is the need for Itinerant apron to meet the federal airport planning standards that provide for the "peak" forecast for this aviation class of activity. The T-Hanger costs are for units which can accomodate light multi-engine aircraft. Again it should be noted that the County's portion of the shared-funding of costs is only 2.5% of the eligible projects total. The items listed below are all eligible costs for shared-funding.

<u>COSTS OF G.A. FLIGHT-LINE NEEDS</u>				
<u>Improvement</u>	<u>Quantity</u>	<u>Unit Cost/Per</u>	<u>1990 Cost</u>	<u>2000 ^{1\} Cost</u>
T-Hangars	3 units (30 spcs)	@ \$130,000 ea	390,000	635,200
Hanger Apron	1,333 s.y.	@ 70/s.y. ^{2\}	93,300	151,900
Tie-Down Apron	420 s.y.	@ 70/s.y.	29,400	47,900
<u>Itinerant Apron</u>	<u>25,822 s.y.</u>	<u>@ 70/s.y.</u>	<u>1,807,500</u>	<u>2,944,200</u>
<u>Totals</u>			<u>1,930,200</u>	<u>3,144,000</u>

^{1\} CPI of 5% yr ^{2\} FAA (7/90)

In addition to the flight-line area on the western side of the airport there are two other sections shown on **FIGURE 12 AIRPORT LAND USE PLAN** which are set aside for general aviation expansion. They are sited on the taxiways of the Airport, one on the south side, where some activity already exists, and the other on the east side. The timing of the aviation development of these two areas, beyond that which now exists, will depend on future "demand".

Environmental Impact: The proposed enhancement of general aviation facilities is not expected to significantly affect the number of flights arriving and departing from Suffolk County Airport. It is expected that Suffolk County Airport will still be used for training and practice, but without providing the additional hangar/tie-down space the facility could not adequately handle the parking of the forecasted aircraft on the site. The air and noise pollution resulting from the arrival and departure of aircraft is expected to be approximately the same, with or without the provision of additional hangar and tie-down space.

The impact associated with storm water runoff from the additional apron areas is a concern which will be addressed in the development approval process. The area to be used for general aviation facilities is presently partially covered with buildings and pavement. Under this program, the final general aviation development would add approximately 248,000 square feet of additional impervious surface. This addition is approximately 2.75 percent of the present impervious surfaces on the airfield (existing surfaces of pavements and buildings are estimated at 9.05 million square feet). However, all storm runoff water from the general aviation area can be controlled to protect the ground water quality and assure a regulatory standard of recharge.

Cost/Benefit Evaluation: Since all general aviation facilities under this alternative will be directly or indirectly related to other revenue-producing items, the total financial viability should be tested. The additional general aviation activity would be expected to create approximately seven (7) new jobs at the Airport for the average year. At an annual salary of \$22,000 (1987 average for Suffolk County) would generate \$154,000 per year, and with an economic multiplier of 2.5, this would amount to \$385,000 per year.

Financial Viability: Providing additional facilities to enhance general aviation would increase the financial viability of operating the Airport. It is anticipated that, depending on the progress made in

implementing the recommendations of this Update, the revenues returned from the improvements will equal (and possibly exceed) their costs by the year 2000. A cost saving could be realized by deferring a portion of the apron addition needed to meet the forecasted "peak" Itinerant aircraft demand for apron. Its installation could be tied to a demand factor which would be documented by the Control Tower as to the "peak" itinerant aircraft activity.

Element C: DEVELOP COMMERCIAL/INDUSTRIAL TECHNOLOGY PARK - This alternative consists of utilizing a portion or portions of the Airport that are not needed for aviation or aviation-related functions for new commercial and light industrial uses. Non-aviation "uses" would be in conformance with uses permitted by the Town of Southampton Zoning Code. Due to the unique layout of an airport, it is not feasible to conform the land uses to the strictures of the bulk and height regulations of a 5 acre Industrial zoning district. The eventual uses at the Airport will include aviation-related industry, business office park, a "technology park" of industrial buildings as well as the continuance of incubator-type businesses in several existing buildings on the Airport.

A caveat to the type of uses to be encouraged, is that they do not now exist within the Town and that their activity is environmentally safe due to their sensitive groundwater location. The area of the Airport that is most suitable for new development is the already disturbed western portion. There are many advantages to this side of the Airport for the development of a commercial/industrial technology park. In addition to being adjacent to the aviation activity center this area already has easy and convenient access, as well as existing utilities, streets and visibility.

The potential of an industrial park should not preclude the continuation of existing the long-term tenancy's. For short-term tenancies which are currently located in areas designated for uses for which their activity does not qualify, some movements have to be made. For incubator-type

tenants, at the expiration of their existing leases, the re-use of available existing buildings within the area designated for Incubator activities should be pursued. Aviation and aviation-related tenants will be encouraged to locate close to the flight-line in areas so designated for these uses.

Service to the Communities: Establishment of a commercial/industrial technology park at the Airport would provide an increase in many available services to the communities. Not only would this "park" offer opportunities for new business in the area, but it would also provide a new employment resource as well as new service opportunities to existing local businesses. Incubator-type facilities for "start-up" businesses will also be encouraged, using existing buildings.

Development Costs: The County's costs incurred in the development of a commercial/industrial technology park should involve only the expenses related to removal of some existing facilities, likely upgrading of the infrastructure and some re-construction of access roads. However, even these costs can be mitigated through the use of NY State programs of financial assistance which can include the providing of infrastructure funding in siting companies under the Industrial Access Program, with the main entrance road (Wallen Street) eligible for AIP joint-funding.

Environmental Impact: Establishment of the commercial/industrial technology park would initially have a temporary disturbance during the construction phase which can be mitigated by advance planning. The facility will attract more people to the airport and consequently more automobile traffic. However, the environmental impact of this traffic increase is expected to be negligible.

Development of the park would also involve improvement of the visual quality of the site, new plantings, buffer strips, and an improvement of the overall appearance of the area. The new development could be limited so as not to generate any substantial increased demand on utilities than their current capacity to provide, unless upgraded.

Cost/Benefit Evaluation: Assuming the application of 30% building coverage to the six 60,000 s.f. Commercial lots, and a similar coverage to the eight 80,000 s.f. Industrial lots, the following salary revenues and economic benefits are expected:

<u>Commercial</u> 6 x 60,000 s.f.	=	360,000 s.f. of land
@ 30% building coverage	=	108,000 s.f. of buildings
@ 1 job per 500 s.f.	=	216 jobs @ \$22,000
Annual benefit	=	\$ 4,752,000
Economic benefit (x2.5)	=	\$11,880,000
<u>Industrial</u> 8 x 80,000 s.f.	=	640,000 s.f. of land
@ 30% building coverage	=	180,000 s.f. of buildings
@ 1 job per 1,000 s.f.	=	180 jobs @ \$22,000
Annual benefit	=	\$3,360,000
Economic benefit (x2.5)	=	\$9,900,000
<u>Total Annual Benefits of 396 jobs</u>		= <u>\$8,712,000</u>

Financial Viability: Establishment of an airport commercial/industrial technology park would increase the financial viability of the Airport's operation. A base revenue stream would be generated from the land leased over a twenty-year period at 10% of fair market value, with the buildings being constructed by the private entrepreneur.

The "fair market value" determined in the appraisal of Homan Boatyard (2/90) was \$18,000 per acre. Assuming that 25 acres of land is leased for the Commercial & Industrial Technology Park elements at \$1,800 per acre (10% of the fair market value) it would return a minimum "land" lease revenue of \$45,000 in its first year. Using a 5% CPI this annual revenue figure would increase to \$73,300 by the year 2000. Add to this the economic value of the new buildings and improvements as well as the job revenues generated by the Office Park and the Industrial Technology Park development.

As the County will not be building the structures in the commercial/industrial technology park the lease negotiations with the developer/tenant will require consideration of the cost differential between the land valuation and the value of the fully developed parcel. Therefore, the County should seek the cooperation of the municipalities in providing structured tax-abatements to these non-aviation related tenants. The County's need to place the Airport on a self-sustaining path means that we should encourage the efforts of potential investors in the Airport's development by utilizing all the available economic tools, including industrial revenue bonds and infrastructure funding assistance.

Element D: COMPLETE AIRFIELD IMPROVEMENTS - Two new taxiways were considered in the 1980 Plan, which if built, would have contributed to increasing the overall airfield capacity. However, in this Update, the taxiway needed is the extension to the existing taxiway parallel to Runway 6/24. Also previously considered was the installation of a VASI-4 system, but since cargo aircraft and their volumes are not proposed a regular VASI (Visual Approach Slope Indicator) system is recommended. This system provides a navigational aid to general aviation aircraft operators who are not equipped or licensed for instrument operation.

Service to the Communities: The taxiway would provide no additional level of service to the communities. It would make the airport more convenient and safer to its users.

Development Costs: The costs for the project to overlay Runway 15/33 - \$ 833,300 (1990); \$1,357,400 (2000). The Federal (FAA) portion (90%) of this overlay would be reduced by up to 40% with the use of Air National Guard funding sources designed to cost-share the expense of joint facility improvements (i.e. runways). The parallel taxiway extension cost for Runway 6/24 - \$2,333,310 (1990); \$3,800,700 (2000), and Runway 15's navigational VASI - \$ 60,000 (1990); \$ 97,700 (2000) respectively.

Environmental Impact: The resurfacing of Runway 15/33 is an existing impervious surface. However, development of the taxiway parallel to Runway 6/24 could affect the environment in the following ways:

1. Air Quality - The taxiway addition is projected to have the following beneficial effects on the air quality by reducing the air pollution emissions of taxiing aircraft by 329 hrs./yr.
2. Ground Water - The additional impervious surface (300,000 s.f) created by the would contribute to storm water runoff. However, all runoff water would be held on the Airport and allowed to percolate into the aquifer as a recharge source.
3. Vegetation - The institution of taxiway would require clearing of approximately six acres of groundcover from the center of the area of the Airport for construction of the 6000 x 50 pavement.

Cost/Benefit Evaluation: The development of the taxiway is a favorable cost/benefit as it adds both a convenience and safety feature to the aviation facility. The resurfacing of Runway 15/33 is a cost effective matter of maintenance and improved aircraft safety and has a higher need priority than the 6/24 taxiway.

Financial Viability: Improvements in the taxiways and runways would have no significant effect on the airport's financial viability.

Element E: ATTRACT COMMUTER AIRLINE SERVICE - This element would require no change in the existing airfield facilities. However, it was anticipated in 1980 that should a regular commuter service be established the passenger/public area of the terminal now being used for an itinerant pilots lounge and coffee shop may require replacement with approximately 7,000 square feet of area.

Service to the Communities: An increase in commuter service would provide an increase in available service to the communities. Although the demand for increased commuter service is projected to be minimal, having the service could provide an important convenience to the communities of eastern Long Island.

Development Costs: Development costs associated with attracting an increase in commuter airline service would be the terminal building only, which could be a shared cost with the commuter airline.

Environmental Impact: The environmental impact associated with enhancement of commuter service is expected to be negligible.

Cost/Benefit Evaluation: In order to determine the revenues receivable from the increase of commuter service, it would be necessary to conduct an in-depth cost/benefit analysis. However, the commuter service would be expected to generate approximately 5 new jobs at the airport at an average annual pay of \$22,000, which, when multiplied by 2.5 for indirect jobs and services, would result in a total benefit of \$ 2,750,000 over the next 10 years.

Airspace and Clearances: There is no effect on airspaces and clearances resulting from enhanced commuter services.

Financial Viability: The enhancement of commuter airline service is expected to have little impact on the financial viability of the maintenance of the airport. The new passenger handling facilities would produce direct revenue as leased space to the commuter airline operations.

Element F: LEASES - The current system has problems typical of a process which requires multiple reviews and sign-offs. Added to the circulation delays is the current requirement that a new (outside) appraisal be conducted each time a lease is anticipated.

One of the expressed concerns which initiated this Airport Plan Update was the low rental rates being enjoyed by some tenants. A review of 1988 tenancies, square footage rented and annual rents reflected an absence of any pattern or uniformity in lease rates. Another issue is the time involved between an inquiry by a prospective tenant and the execution of a lease document. The average time (1986 Airport Audit) to process a lease is 154 days (5 + months) after the paperwork begins. Due to this extended review/approval process it is reported that several prospective tenants have opted to seek accommodation elsewhere.

There are several recommendations made for this key economic element of Airport revenues. These involve the implementation of four new elements to speed the process. First, FAA pre-approval of certain uses. Second, establishing annual rental rates with a CPI adjustment. Third, clarification as to the specific application of abatements of rent and extensions of lease terms where tenant initiated improvements are involved. Fourth, setting up "classes" of tenancies. This also involves the further defining of such tenancies to the application of PILOT's (Payment in Lieu of Taxes, to the Town of Southampton) for exempt and non-exempt type activities within generic use identifications of Aviation and Aviation-related, Manufacturing, Storage, Incubator-type operations, Commercial, Service and Public, etc. Establishing an annually adjusted lease rate-table tied to a CPI should reduce some delay in the lease review by eliminating the need for individual appraisals.

These changes would also require that a review of the draft leases by the legal department be conducted during the initial stages, and prior to the legislative resolution. Streamlining the lease approval system to provide a "reasonable" time frame to the potential tenant will not compromise the County's proper review of legitimate concerns.

Services to the Communities: This management item would provide no additional level of services to the communities. What it should do is remove the expressed concerns about the low rents at the Airport in

direct competition with adjacent industrial lands. Too, the establishment of leasing standards and rate-tables will stabilize the location of firms and their employment of community people.

Development Costs: None. The costs associated with policy changes and the establishment of lease review processes and rate-tables are County management functions not specifically charged to the Aviation Division Budget.

Environmental Impact: There is no perceived environmental impact to these management changes.

Cost/Benefit Evaluation: Establishing a standard approach to per square foot building lease costs for aviation and for non-aviation uses should result in an initial increase in revenues from existing tenants. The benefits of the Airport Manager (Director) to respond quickly and with accuracy to queries from interested potential tenants on permitted uses, lease conditions and rates and the speedier lease approval timetable is invaluable to the Airport. Too, the encouragement of aviation and its related businesses through lease arrangements will make the Airport more attractive to general aviation. These lease arrangements could utilize practices currently exercised at other municipal (NY State) airports which encourage aviation users to locate there by providing leasing costs significantly below those charged to non-aviation tenants.

Financial Viability: Improvements to the current leasing system will have a positive impact on the Airport's revenue system.

Element G: CHANGE MANAGEMENT APPROACH - Placing the daily management of an airport under the guidance of a professional management firm has been successful at other municipally owned airports. The success of the management firm is measured in its performance and completion of certain goals regarding new airport activity and revenues. Therefore, in concert with facilities improvements recommended in this Update, the

utilization of professional management, the interest of a dynamic fixed based operator (F.O.B.) who will provide quality services to aviation is the combination that will improve the attraction and economic health of the Airport.

Services to the Communities: There will be no direct services to the adjacent communities, but an active center of general aviation will seek services from the communities, as well as provide employment opportunities.

Development Costs: The retention of a firm to manage the aviation element of the Airport is not a development cost item, but rather a negotiated contract for services, with either a fee being charged by the contract vendee, or payment made to the County by a concessionaire. Performance is tied to this remuneration as well as specific revenue returns to the County by certain target dates.

Environmental Impact: There is none.

Cost/Benefit Evaluation: The professional management firm approach is beneficial inasmuch as their success is dependent upon their ability to attract clientel, and thereby revenues, to the Airport. The improvements to the Airport, the marketing of the facility (with sufficient time being allowed for response) should see the goals attained for the aviation activity and revenues as forecasted. In addition the County's "oversight" should preclude any loss of momentum in meeting the goals. The contract, outlining the responsibilities and operating authority of the professional management firm will greatly influence the cost/benefit results.

Financial Viability: It is recognized that the retention of an airport management firm will not result in instant accomplishment of forecasted revenues. A three to five year period is common before the positive results begin to show in actual revenue returns to the Airport. To initiate this progression requires the County concurrently move forward with its improvement program in partnership with FAA and NYSDOT.

Section III - ENVIRONMENTAL IMPACTS

After a review of the 1980 development plans for Suffolk County Airport, the Long Island Regional Planning Board concluded that the Airport would not generate a significant amount of growth on the eastern end of Long Island. At most, the proposed Airport Plan would provide a steady source of jobs in the area as the population of the east end grows and industry begins to develop around the facility.

A. Population - Suffolk County, and in particular the eastern towns, are expected to grow steadily as the population of Long Island spreads further east. The projections of population for the Town of Brookhaven and the five eastern towns show the amount of impact this population shift will have on the area around the Airport. The total population growth of eastern Suffolk County according to the following Chart will slow down from its 40% growth pattern in the decade between 1970 and 1980, to a moderate pace of 17%, as forecasted.

POPULATION FORECASTS

<u>Town</u>	<u>1970*</u>	<u>1980*</u>	<u>1990</u>	<u>2000 .</u>
Brookhaven	245,260	365,015	425,000	505,800
East Hampton	10,980	14,029	17,000	21,300
Riverhead	18,909	20,243	23,650	33,200
Shelter Island	1,644	2,071	2,500	3,000
Southampton	36,154	43,146	52,000	54,750
Southold	16,804	19,172	22,450	24,100
Totals:	329,051	463,676	542,600	642,150

Source: Long Island Regional Planning Board, May 1987.

* Published Census Data

The population growth for only the five eastern towns between 1970 and 1980 still reflected a 17% increase. However, assuming that the growth

in Brookhaven to 1980 was in its western section, and the future growth will be located in its central and eastern sections, some adjustments are made to the growth impacts. The resulting population growth forecasted under this assumption between 1980 and 1990 would be 95%, with another 20% growth between the years 1990 and 2000.

B. Industrial Growth - With the upzoning of substantial industrial acreages in Southampton to residential zoning, the Suffolk County Airport will have a major role in meeting the future industrial growth and employment needs of eastern Suffolk.

While the Airport may influence the location of new industrial buildings, its impact would otherwise be minimal. The major advantages to development near the Airport are the access to major roads, with Sunrise Highway to the north, and the Montauk Highway to the south, as well as the availability of vacant property suitable for accommodating growth yet sufficiently buffered from residential neighborhoods.

C. Airport Improvements - The proposed development plan for the Airport would not generate any significant growth in the area, because most of the recommended improvements will only serve to increase airport efficiency and safety. The overlay of part of Runway 15/33 is a maintenance and safety item; the new hangars would increase aircraft storage capacity; the new taxiway parallel to Runway 6/24 would increase airfield capacity and safety; the removal of buildings (for other than their condition) would be to facilitate the development program outlined in this Airport Study. Furthermore, the Industrial Technology Park area would be only about 15 acres in size, which is a fraction of the available industrial land in the County. While this employment center would have a positive impact on the area, it would not become a nuisance factor to the community. The preferred combination of providing both the living and working environments in close proximity should be viewed positively by the adjacent Town and Villages in their development planning deliberations.

D. Community Impact - The future development mentioned would not change the Airport's role in the community, but would generate a need for additional local business and personal services to support the Airport facilities. Because of this, the Airport's development should not create traffic congestion within the adjacent communities or an excessive demand for community services such as power, water, sewerage, roads, schools, etc. The majority of vacant lands around the airport (not currently being considered for acquisition) are zoned 5-acre residential, therefore their development would be controlled through municipal zoning and planning. This should insure an orderly and efficient pattern of growth. Lands to the north of the Airport under consideration for acquisition are already in a 5 acre zoning category.

E. Degradation During Construction - While it is possible that water pollution may occur during construction, it must also be considered that construction impacts to the quality of the water in the area would be of a temporary nature. In promoting construction procedures that will protect and enhance a favorable environment, consultation with the contracting firms should take place prior to any construction. This consultation will serve to inform and instruct the builder in the construction controls to prevent air and water pollution during the Airport's development as outlined in FAA Advisory Circular 150/5370-7.

F. Citizen Concerns - As in previous Airport studies, the concerns expressed by citizens of neighboring communities strongly influenced selection of the specific recommendations. The greatest concerns were those associated with noise impact as well as expansion which could damage the natural environment.

The airside improvement recommendations included in this Update involve neither an expansion of the runways at the Airport nor the clearing of pine barrens located adjacent to the Airport. The opportunity exists in these improvement programs to protect and even enhance the natural

environment. The noise impact around the Airport will be essentially the same with or without these improvements. However, as stated at the beginning of this Chapter (Mission Statement (4)) the aviation community will take steps to minimize intrusive aircraft sound.

G. Environmental Assessment - The extent of the impacts produced by the proposed development is required to be set out by the State and County's environmental review policies (SEQR). These impacts are outlined in the Environmental Assessment Form (EAF) required by Suffolk County on all County initiated projects and included in this report as Appendix 4.

Section IV - SUMMARY OF ELEMENTS

Element A: Rehabilitation of existing facilities as noted in the "Maintain Present Facilities".

1. Overlay Runway 15/33 (5,000 feet).
2. Repairs on buildings and removal of deteriorated buildings.
3. South taxiway lighting.
4. REILS on Runways 15, 33 and 6.
5. VASI on Runway 15.

Element B: Enhance general aviation at the Airport by providing additional hangars and tie-down areas for based aircraft as well as itinerant aircraft. The development would be in linear form parallel to the existing taxiway.

Element C: Develop and market the airport commercial/industrial technology park in concert with the general aviation area plan.

Element D: The recommended operational airfield improvements involve the provision for a new extension to a parallel taxiway for Runway 6/24; an overlay of Runway 15/33; navigational aids (REILS & VASI) on specific Runways; along with improved paving of taxiways (South and Southeast).

Element E: The commuter passenger accommodations can be at the same facility as used by general aviation without major changes.

Element F: Lease Terms of Aviation and Aviation-related tenants should encourage their locating at the Airport, similar to practices utilized at other municipal airports. The method and timing of lease approvals could be improved.

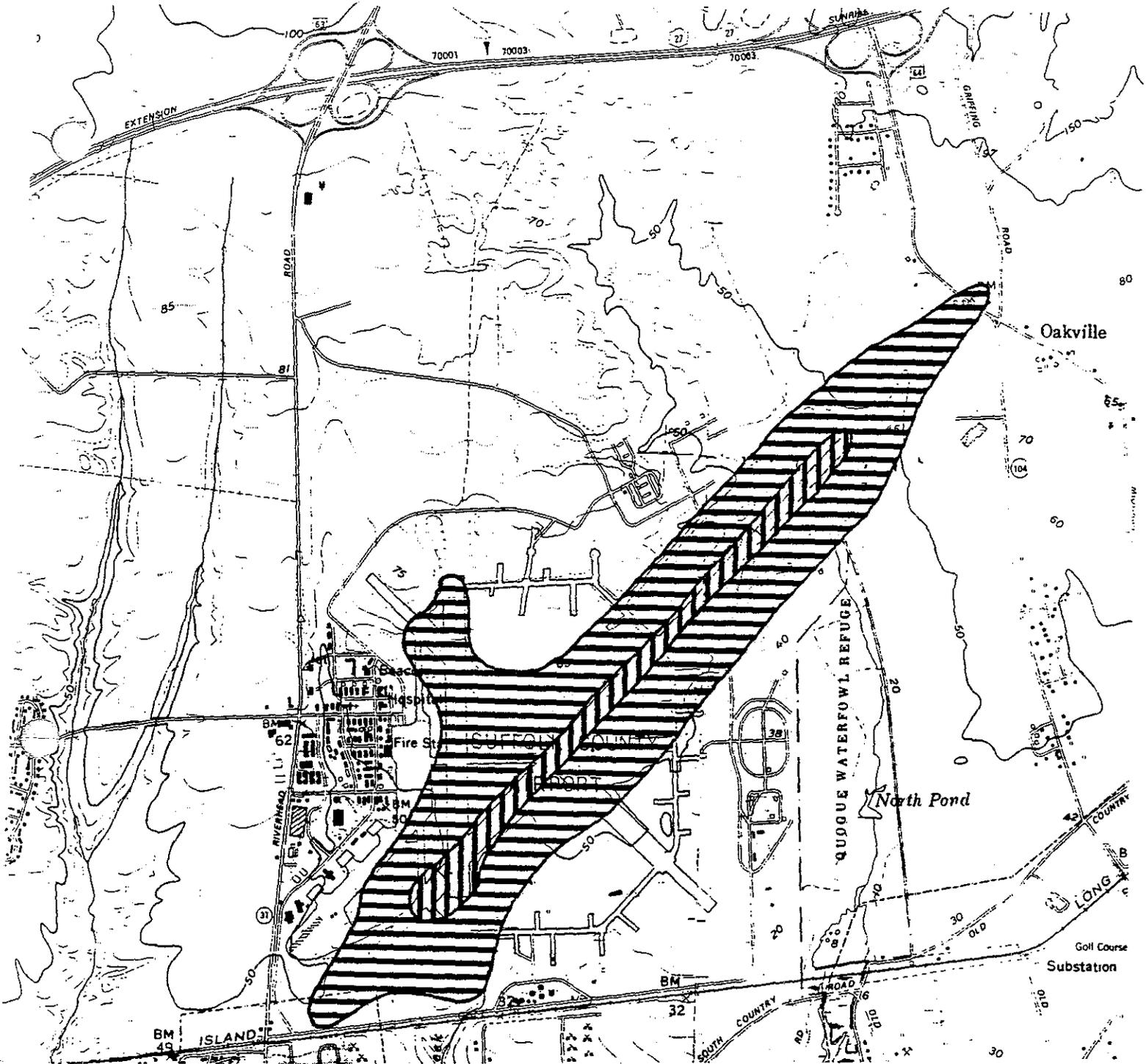
Element G: Place daily management (by contract) of the Airport under the guidance of an experienced professional service whose expertise is in airport management. The County will have "oversight" of operations.

Section V - LAND DEVELOPMENT PLAN

A. Zoning Regulations - The Town of Southampton zoning map and Future Land Use map designate Airport as "Light Industry" (which includes transportation uses). The recommendations of this Update of the 1980 Airport Plan for its development include continued aviation and aviation-related uses, non-aviation commercial and industrial uses, the continuance of some "incubator" activities as well as commercial offices and an industrial technology park. These would all fall within the parameters of "Light Industry." Therefore, no need exists to change either the future land use plans or zoning uses for on-airport activity. However, the Towns' height and bulk (lot size, street frontage and building coverage) regulations should not be specifically applied to the Airport.

B. Off-Airport Land Use - As in the case of on-airport land use, recommendations for off-airport land use were also based on projected Ldn noise levels **FIGURE 11 AIRCRAFT NOISE IMPACTS**. All of the land within the 65-75 Ldn and 75+ Ldn areas are located on airport property except for approximately 3.5 acres to the northeast of the airport. It was recommended in 1980 that all proposed uses within the 65 Ldn area be reviewed as to their compatibility with such noise levels. Noise sensitive uses such as hospitals, schools or homes should, in most instances, be avoided within this "Ldn area". Again in 1980, the Town was encouraged to specifically avoid locating new housing adjacent to the Airport, and especially under the approach zones of Runways 15 and 20 (northwest) and the main Runway 24 (northeast). New housing developments, including condominiums, have subsequently been permitted to locate near the east and northeast fringes of the Airport.

The Southampton Master Plan also recognized the need for enhancement of air travel facilities and expressed the desire to avoid establishment of "any major civilian airport." The recommended aviation development of Suffolk County Airport included in this Update encourages primarily a general aviation purpose (with no air-cargo activity) and does not encourage the Airport be used as a major civilian aviation facility.



LAND USE CATEGORY

- Residential
- Schools, Libraries, Churches
- Hospitals, Nursing Homes
- Playgrounds, Neighborhood Parks
- Office Buildings
- Commercial-Retail
- Commercial-Wholesale, Some Retail, Ind., Mfg. Util.
- Manufacturing, Communication (Noise Sensitive)
- Extensive Natural Recreation Areas

LAND USE CATEGORY	LAND USE INTERPRETATION FOR Ldn VALUE			
	55	65	75	85
Residential		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Schools, Libraries, Churches		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Hospitals, Nursing Homes		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Playgrounds, Neighborhood Parks	Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Diagonal lines (top-left to bottom-right)	Solid black
Office Buildings		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Commercial-Retail		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Commercial-Wholesale, Some Retail, Ind., Mfg. Util.		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black
Manufacturing, Communication (Noise Sensitive)	Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Diagonal lines (top-left to bottom-right)	Solid black
Extensive Natural Recreation Areas		Diagonal lines (top-left to bottom-right)	Diagonal lines (bottom-left to top-right)	Solid black

LEGEND

- 65 LDN
- 75 LDN



FIGURE 11
AIRCRAFT NOISE IMPACTS

The FAA description of noise zones in terms of land use, as shown in **FIGURE 11**, served as a guideline for analyzing land use compatibility. Since 1980 the advent of quieter aircraft and improved noise-mitigating approaches to the Airport have reduced the noise levels. An update of the 1980 contours was considered unnecessary as it would be costly and may, in fact, under the revised noise standards, result in less restrictive contours. There should be no significant effect on land use in areas impacted by noise levels below 65 Ldn, except in the case of locating new sensitive uses such as schools or hospitals close to the Airport. Any new sensitive land uses proposed for the 55-65 Ldn area should be reviewed for compatibility prior to approval for development.

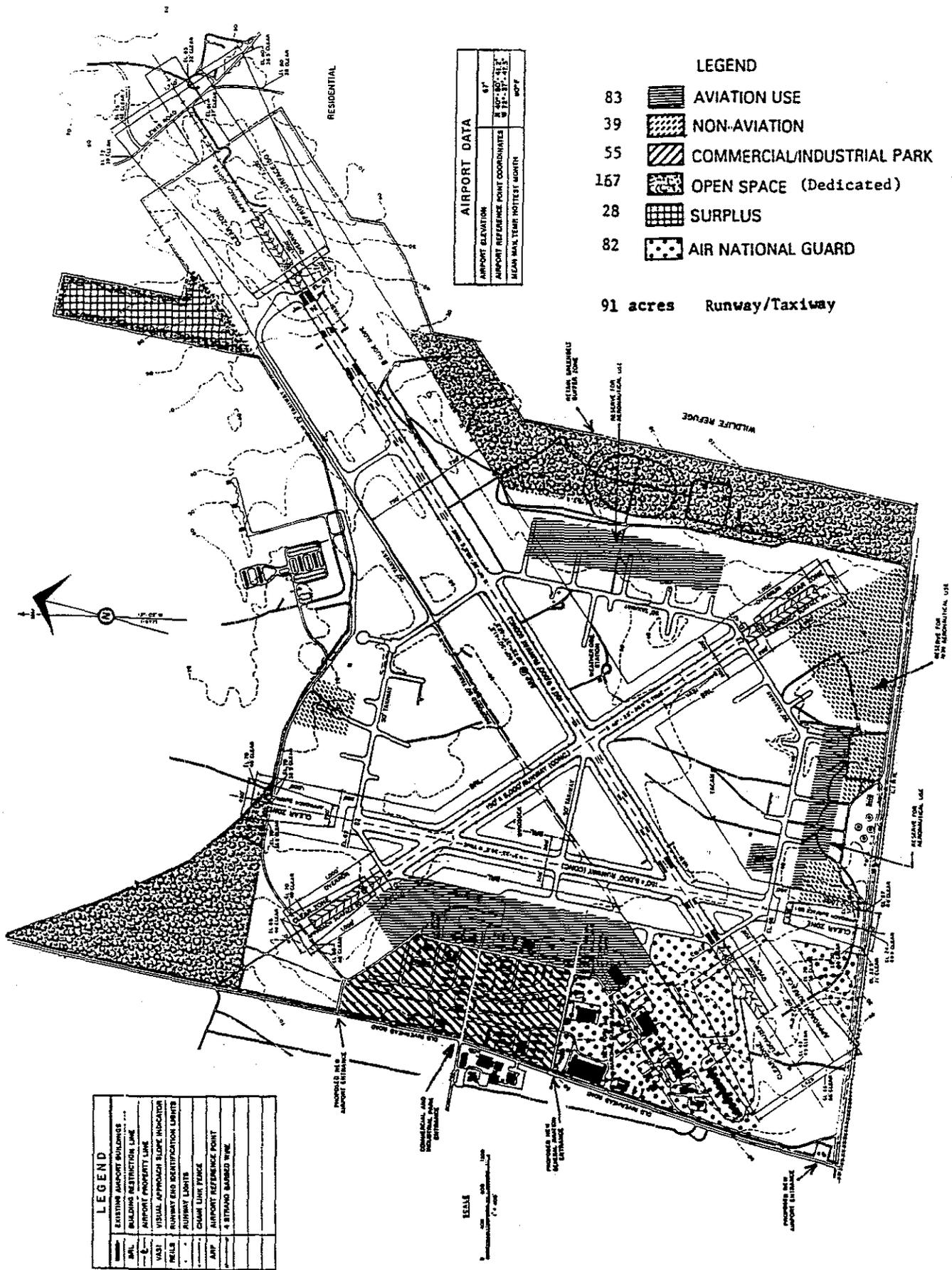
C. On-Airport Land Uses - The current recommendations were strongly influenced by the findings of the 1980 Plan and reflect many of the same principles of development.

Noise Levels: On-airport land use recommendations were strongly influenced by projected Ldn noise levels. All land within the 75 Ldn contour is located on airport property and there are no buildings located within this contour, or the 65 Ldn contour.

Aviation Uses: On its Existing Land Use map, the Long Island Regional Planning Board designated the property on which the airport is located as a transportation and utility land use. Delineated in **FIGURE 12 AIRPORT LAND USE PLAN** are the generalized land uses within the Airport.

This on-Airport plan was predicated on satisfying the primary purpose of the County's airport property - aviation, with its essential operating surfaces such as runways and taxiways, to provide maximum operational efficiency and safety on the Airport.

The Itinerant aircraft apron will need to be expanded beyond its present "parking" capacity on the flight-line in front of the terminal building in order to meet the forecasted demands of the year 2000. This apron and additional tie-down apron will be located to the northwest of the



AIRPORT DATA	
AIRPORT ELEVATION	47'
AIRPORT REFERENCE POINT COORDINATES	N 20° 50' 41.5" W 72° 57' 42.5"
BEGAN MAIL TARIFF HISTORY MONTH	1897

LEGEND	
83	AVIATION USE
39	NON-AVIATION
55	COMMERCIAL/INDUSTRIAL PARK
167	OPEN SPACE (Dedicated)
28	SURPLUS
82	AIR NATIONAL GUARD

91 acres Runway/Taxiway

LEGEND	
EXISTING AIRPORT BUILDINGS	
BUILDING RESTRICTION LINE	
AIRPORT PROPERTY LINE	
VISUAL APPROACH SLOPE INDICATOR	
ROWAY END IDENTIFICATION LIMITS	
ROWAY LIMITS	
CHAIN LINK FENCE	
AIRPORT REFERENCE POINT	
4 BITUMINOUS BARRED WY.	

FIGURE 12
AIRPORT LAND USE PLAN

existing flight-line, adjacent to the parallel taxiway of Runway 2/20. The location of T-Hangars are proposed next to the tie-down aprons, but not mandated to be placed as graphically depicted. Any new or expanded terminal building area for commuter activity should be located behind to the existing terminal facility. Included in the new apron area of the western flight-line is a future Crash/Fire/Rescue (C.F.R.) facility next to the Airport administrative offices. The construction of Executive Hangars, T-Hangars, or Aircraft Service buildings will be at the expense of interested tenants.

There are two other designated aviation activity areas, located on the south section and the east section of the Airport, which take advantage of the taxiway access to runways.

All of these existing and proposed aviation-related facilities are located so as to provide convenient access for the users, both via the Airport access roads on the groundside and the runways on the airside.

Non-Aviation Uses: Suffolk County Airport is fortunate in that not only does sufficient land exist on the Airport to accommodate the aviation needs for the future, but some of the land can also be made available for non-aviation uses. The re-use of already disturbed non-aviation land on the west side of the Airport is suggested for the related uses of a Commercial/Industrial Technology Park.

The non-aviation uses for special municipal activities, requiring large parcels and direct roadway access, should be limited to the south and southeast sections of the Airport with sufficient buffer provided to protect adjacent uses, and avoid conflict with military or civil aviation activities. Renumeration to the County by these uses must also be a part of the negotiations no matter who requests them, including County agencies other than DPW. The 1980 Plan recommendation for 18.5 acres of non-aviation development on the eastern side of the Airport has been dropped. The reasoning is that if the western building area is revitalized as recommended in this Update, that the viability of the Airport can be supported without these 18 acres being utilized.

County Action: On-airport land acquisition is not required for any physical improvements, however, the immediate acquisition of an out-parcel at the southwest perimeter of the Airport, known as the "Mexican Hut" parcel is recommended to prevent an unplanned use impacting the Airport development plan and as part of the solution to a new and safer entrance to the southern section of the Airport.

Commercial/Industrial Technology Park: The Master Plan published by the Town of Southampton recognizes the need for development of industrial facilities and cites Suffolk County Airport as a suitable and desirable location for such facilities.

Since the Southampton Community has limited public transportation and considerable distance from supporting populations, industrial locations shall be, in large part, on the west side of the Shinnecock Canal.

Industrial development should be of an industrial park character. Heavy water users and plants with waste disposal effluents that might deteriorate the groundwater shall be prohibited.

Particular attention should be given to the Suffolk County Airport as the site for light industrial development with airport access.

Therefore, in keeping with the ideals set forth by the Town of Southampton Master Plan, it is recommended that a commercial/industrial technology park be established on the western section of the Airport, adjacent to Old Riverhead Road. This is a proper location for light industrial and commercial uses. All property leased and used by the New York Air National Guard, the Airport's major tenant generally located on the southwest portion of the Airport, should be maintained as such.

A hierarchy of commercial/industrial uses has already been established within the western building area of the Airport, delineating three

— general categories of use and their respective placements in relation to the airfield. These categories also reflect the recommendations of this Update which locates them as follows: (1) aviation-related industry / located adjacent to the airfield and the general aviation apron; (2) commercial and industrial park development / located along Old Riverhead Road but facing into the Airport; (3) non-aviation related industry and facilities of an incubator-type / located between the other major uses.

Building Removal Program: In 1988 alone 17 buildings were removed with the removal of two more major facilities pending approval of the Legislature. The practice of removing these unused or unmarketable old military buildings has been underway for years. A specific program of timed removal of additional buildings will aid the marketability of the land, improve the aesthetics of the site and facilitate the planning and construction of the proposed Commercial/Industrial Technology Park.

Building removal must be an on-going process. All buildings that are currently not occupied and are recommended by DPW to be removed, should be removed with the surfaces regraded. The remaining buildings which might interfere with the proposed development of the Airport, but have been retained because of prior leasing commitments, should be designated and specifically scheduled for demolition. The surfaces should be similarly rehabilitated.

Open Space: The term "open space" is defined as that portion of the Airport property which is not paved and not anticipated to be required for any future airport growth. Although the main purpose of these areas is for operational and safety buffers, any future use of the land would require substantial expenditure for development of these areas, in the form of access roads, extension of utility services, etc.

There are two areas specifically designated for open space in this Plan. The first is the 60+ acres at the northwest corner proposed for Pine Barren Preserve. The second is 107 acres at the eastern boundary area, including the 18.5 acres mentioned previously in this Section regarding

non-aviation uses on the eastern side of the Airport. Within this 107 acres the removal of existing structures not needed for aviation purposes is recommended to encourage the re-vegetation of the area as a buffer to the Quogue Wildlife Refuge, located at the eastern boundary of the Airport. Another 28 acre area shown as "surplus" on the northern boundary of the Airport could be utilized for open space in conjunction with other acquisitions in the immediate area.

It should also be noted that a large percentage of the Airport property will be in open space use which is compatible with its location within the "Central Suffolk" Special Groundwater Protection Area (SGPA).

Proposed commercial/industrial uses should be reviewed prior to their acceptance for leases as to their usage of water and creation of waste and other demands on the infrastructure. The uses should be consistent with the goals of Suffolk County in water protection and waste disposal as well as the SGPA designation.

Aesthetic Enhancement Program: With the development of the Commercial/Industrial Technology Park a program of aesthetic enhancement should be instituted, including the introduction of buffer strips and suitable plant materials. Buffer strips should be located between the:

- * commercial areas and the non-aviation related industry
- * non-aviation related and the aviation-related industry
- * aviation-related industry and the general aviation facilities

In addition, the use of "natural" (evergreen) screening be introduced along the fence line fronting on Old Riverhead Road (C.R. 31) to soften the visible impact of the buildings in the commercial/industrial area while at the same time providing a noise buffer and privacy.

Safety and design improvements should be made to the three Airport entrances, and the addition of a new northerly traffic access point immediately adjacent to the proposed industrial technology park.

The existing main entrance from Old Riverhead Road (Wallen Street) should remove the former guard's gatehouse and widen the roadway. This area should be aesthetically improved as the primary entrance to the "landside" development area of the Airport. This improvement may be an eligible project for joint-funding. Access to the Industrial Technology Park is 600 feet from this entrance.

The re-opened "aviation" entrance roadway (Cook Street) will require safety improvements on Old Riverhead Road such as turning lane striping and a traffic control light, as well as aesthetic enhancements.

The additional entrance (new) recommended north of the industrial park, intended to relieve the peak period traffic movements, will also require aesthetic and safety considerations in its design.

Similarly, construction of safe turning lanes will be needed on Old Riverhead Road, to facilitate the movement of traffic to and from the "south" gate entrance to the Airport. Improvement to the existing entrance is complicated by its close proximity of the railroad/highway crossing which is controlled by on-grade gates. Some land acquisition of existing cleared land on the west side of Old Riverhead Road, north of the south gate and opposite the Mexican Hut property, is recommended.

D. Summary of Airport Land Uses - The following chart compares the existing land use acreages to those proposed by this Update targeted for the year 2000, by their general use and acreage on the Airport property.

It should be noted that the three "open space" acreages (dedicated, surplus, balance) total 889 acres, representing 71% of the total site. The 167 acres of designated open space in the Study recommendations targets protection for the Pine Barrens Preserve on the north, and for both pine barrens and the wildlife preserve on the east.

<u>LAND USE AGREAGES</u>			
<u>Land Use</u>	<u>Existing Acres</u>	<u>Proposed Acres</u>	
AVIATION	117		126
Runways	65	65	
Taxiways	23	26	
G.A. Building Area	12	12	
G.A. Apron	17	23	
AIR NATIONAL GUARD	75		82
ANG Building Area	39	39	
ANG Apron	36	36	
ANG Fuel Depot		7	
COMML/INDL AREA	28		55
Commercial		3	
Office Park		10	
Indl/Technology Park		16	
Aviation Related		8	
Non-Aviation		8	
Incubator		4	
Public		6	
OUTSIDE WESTERN SECTION	20		87
Aviation	3	29	
Aviation Related	8	19	
Non-Aviation	9	39	
OPEN SPACE	1,010		900
Dedicated Open Space		167	
Surplus/Open Space	28	28	
Balance of Lands	982	705	
TOTAL AIRPORT PROPERTY	1,250		1,250

Section VI - RECOMMENDATIONS & GROUND ACCESS PLANS

A. General Aviation Improvements: The location of the recommendations for facility improvements as shown in **FIGURE 13 FACILITIES IMPROVEMENT PLAN** are on the flight-line at the west side of the Airport and parallel to the taxiway of Runway 1/19. Development of the needed general aviation facilities has been recommended in this area because of its convenient location adjacent to existing apron areas, hangars, and the terminal. This section of the Airport property also has some existing buildings which could be used for aviation-related facilities. The following discussion covers improvements not previously addressed.

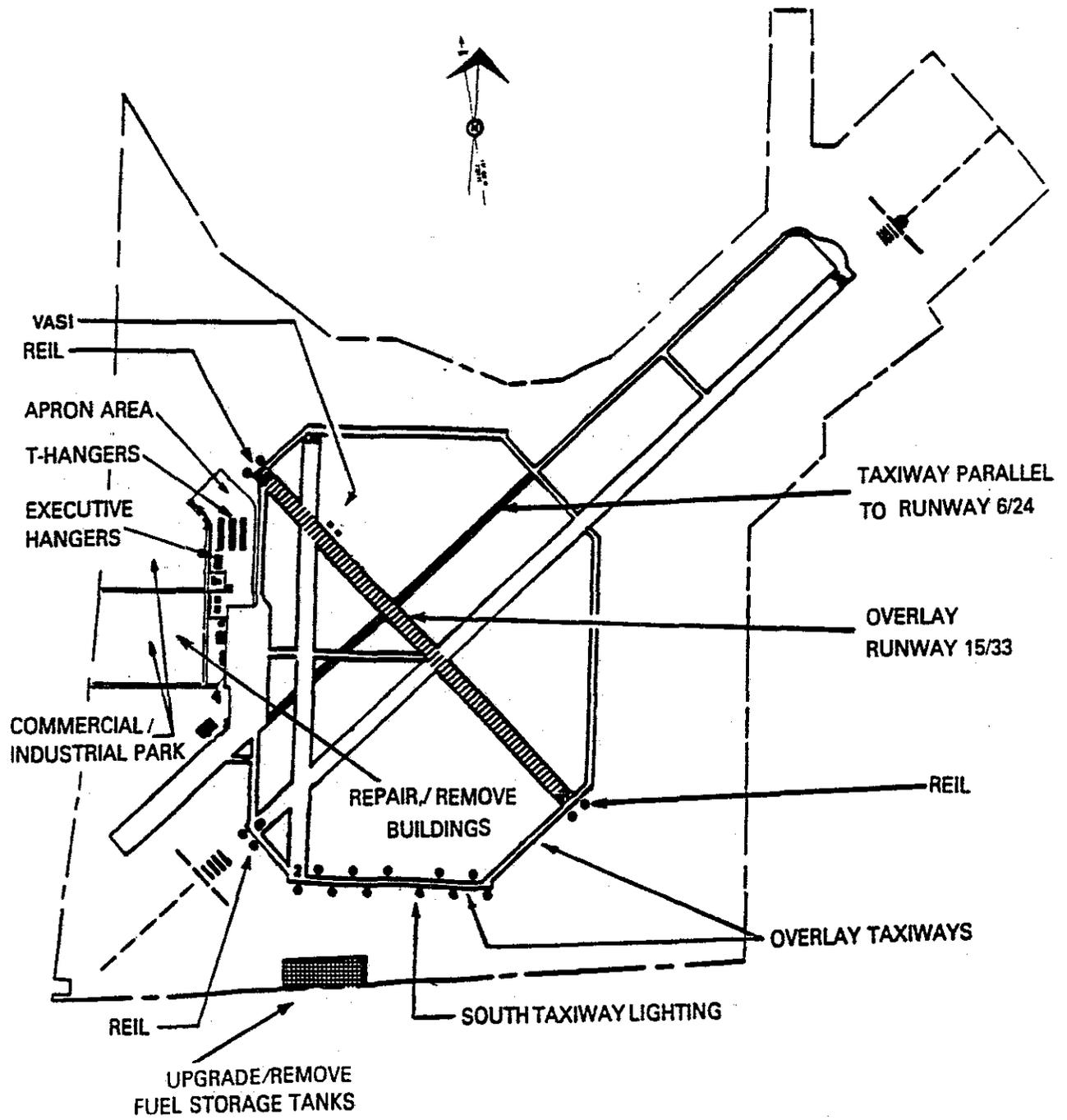


FIGURE 13
FACILITIES IMPROVEMENT PLAN

Hangars: The physical layout of the new general aviation facilities recommended is based on linear development. Three sets of T-Hangars (10 units each) are adjacent to the apron taxiway which is parallel to Runway 2/20 at the northern boundary of the general aviation section.

Tie-Down Apron: South of the T-Hangars is located one segment of the tie-down apron with the other segment north of the T-Hangars. These apron areas are also to accommodate Itinerant aircraft parking. South of the existing tie-down area are several existing F.B.O. hangars. The needed additions to the tie-down area, and any future commuter passenger terminal facility expansion is recommended for this area because it is easily accessed.

Other: Two Executive Hangars are located in this area in anticipation of the corporate aircraft potential drawn to an improved airport facility. Also shown are two buildings for direct flight-line aircraft services such as maintenance and engine repair. These "other aviation" uses will be provided by interested tenants or F.B.O's.

Fuel Storage: The new fuel storage depots, proposed by Malloy Air and the Air National Guard, are located outside the existing Fuel Farm. The controversial fuel spill negotiations for environmental remediation are advancing toward a final agreement. Therefore, **FIGURE 16 PROJECTED DEVELOPMENT COSTS** will reflect the County's estimated balance of costs for the cleanup next to "Environmental Mitigation".

Overlay of Taxiways: Substantial use of the South (2,000 feet) and Southeast (1,600 feet) taxiways necessitate their receiving an overlay so as to sustain their continued and safe utilization.

Crash/Fire/Rescue Facility: A new Crash/Fire/Rescue (C.F.R.) facility is located on the "airside" the Airport administrative offices but also accessible (via Wallen Street) to the "landside facilities. With an improved and active Airport and development complex, the need for this service to both aviation and non-aviation tenants is clear.

Passenger Terminal: Additional passenger terminal facilities should be located behind the existing terminal. To accommodate a future need of commuter activity, the expansion of the building now being used by the charter and itinerant aircraft flights would consist primarily of a lounge for passengers waiting for commuter or charter flights, and an improved weather/flight information center and lounge for pilots.

B. Commercial/Industrial Technology Park: Uses of lands located on the western side of the Airport itself, between Old Riverhead Road (C.R. 31) and the proposed general aviation facilities area on the flight-line, are shown on **FIGURE 14 BUILDING AREA LAYOUT**. The siting of these activities was selected because it is the most accessible 50 acres within the Airport and had previously been disturbed with the placement of military facilities. Some of the existing buildings, roads, and parking lots may be used. They are identified on **FIGURE 14** as : (1) aviation related, (2) non-aviation related, (3) start-up "incubator" business, (4) commercial (incl. office park) business, (5) a specific industrial technology park, and (6) public uses.

Of the six categories, the office park and the industrial technology park areas will influence positively the aesthetic quality of the Airport's appearance. The office park (10 acres) will have its buildings facing into the Airport. Beginning with one parcel on the north side of Wallen Street, and bounded on the west by Old Riverhead Road the offices will be located on both sides of Smith Street to the property line of AHRC building. There will be six lots of 60,000 s.f. each for this land use. Within the technology park (16 acres) there are 8 lots of 80,000 s.f. each which back onto Old Riverhead Road, running north for about 1,000 feet to the recommended new North Access road. The area is bounded on the east by the back property line of the Wings Club and on the south by one lot of the office park which fronts on Wallen Street. The transitional incubator area (4 acres) is located between the office park and the aviation related (8 acres) lands which are immediately adjacent to the flight-line. The two non-aviation areas comprise of a total 8 acres within the western building area. Another 6 acres (public) includes the airport offices and a fliers club.

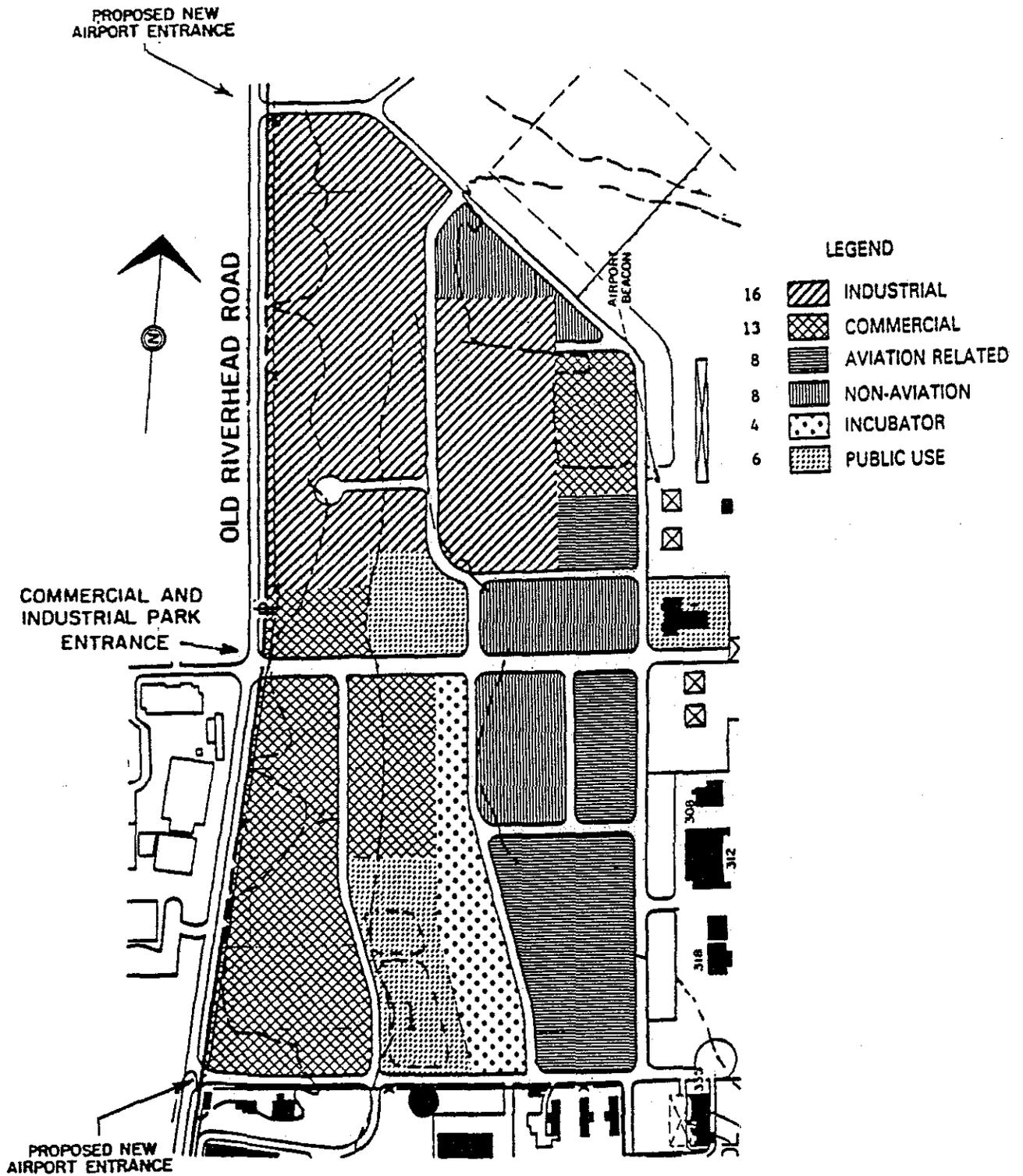


FIGURE 14
 BUILDING AREA LAYOUT
 COMMERCIAL/INDUSTRIAL PARK AREA

Standards of development for the new commercial and industrial facilities should be considered at the Airport. These "standards" do not replace the New York State Building Code requirements but rather relate to construction site mitigation as well as how to properly dispose of wastes and utilize utilities, etc. The construction site standards can be incorporated into the preparatory work for a scheduled development program. Other facility use standards, in keeping with tenant responsibilities and the County policies, will relate to waste disposal, sewage and other operational requirements.

C. Ground Access Plan: The limited improvements recommended by this Update of the 1980 Report will have little effect upon the need for major, off-Airport ground access facilities except for the entrance for the south gate. The existing public roads in the vicinity of the Airport are considered adequate to meet all foreseeable needs of the Airport. Although the development of Airport property for an industrial/commercial purposes will have the effect of increased traffic on this roadway network, the system appears capable of handling the anticipated additional non-peak demand, with the bulk of the traffic travelling north or the LIRR tracks, to or from the Sunrise Highway.

Pavement striping for left turn lanes on Old Riverhead Road (C.R. 51) into the Airport will improve the Airport access at two of the three existing entrances, at Wallen Street as the "main" entrance, and Cook Street as the "aviation" entrance. A new entrance is recommended for a point immediately north of the proposed Industrial Technology Park to ease the traffic congestion caused by all movements having to be made from Wallen Street.

One off-Airport improvement needed is the access from Old Riverhead Road into the southern end of the Airport. The County's acquisition of the Mexican Hut property (40,000 s.f) and of sufficient land to accommodate a designed 90 degree crossing (i.e. NJ left turn), at a point a safe sight distance (150 feet) north of LIRR crossing.

With regard to on-Airport traffic on the west side of Old Riverhead Road (C.R. 31), the existing roadway system provides ready access to all existing areas of landside development. Any new, non-aviation growth of an industrial or commercial nature may find the widths on this internal road network inadequate. Roadway improvements being considered for new commercial and industrial development should conform with roadway standards utilized by the Town/County for these types of development.

For the anticipated aviation development which will occur adjacent to the taxiways on the east side of the Airport access can be accommodated over the existing roadway. Therefore, the consideration of the dedication of lands on the east side for an open space "buffer" to benefit the Quogue Wildlife Refuge should not include this roadway.

One area where traffic circulation improvement is possible is in the provision of ground access to the terminal area facilities at the Airport. This could be accomplished by re-opening Cook Street, the road running west from the terminal building and connects directly with Old Riverhead Road. In addition to improving the access to the facilities on the west side of the Airport, the Cook Street access would also improve the direct traffic flow to the aviation and aviation-related areas adjacent to the flight-line. This second entrance to the Airport will also facilitate the access for needed off-site fire and emergency vehicles. The graphic presentation of ground access both on-Airport and off-Airport is provided in **FIGURE 15 AIRPORT GROUND ACCESS.**

The common mode of transportation to the Airport for employees is the private automobile. The minimal Long Island Railroad (LIRR) service (5 per day in each direction) between New York City and Montauk should be adequate through the year 2000. In regard to bus service, the existing system (Route S-90) "Center Moriches/Riverhead" provides very limited service to the Airport. Improvements in response to demand could be implemented to make this alternate source of travel more effective for workers commuting to the Airport or to the industrial and commercial areas.

PROPOSED NEW AIRPORT ENTRANCE

OLD RIVERHEAD ROAD

AIRPORT BEACON

LEGEND

■■■■ INGRESS/EGRESS

COMMERCIAL AND INDUSTRIAL PARK ENTRANCE

PROPOSED NEW GENERAL AVIATION ENTRANCE

60

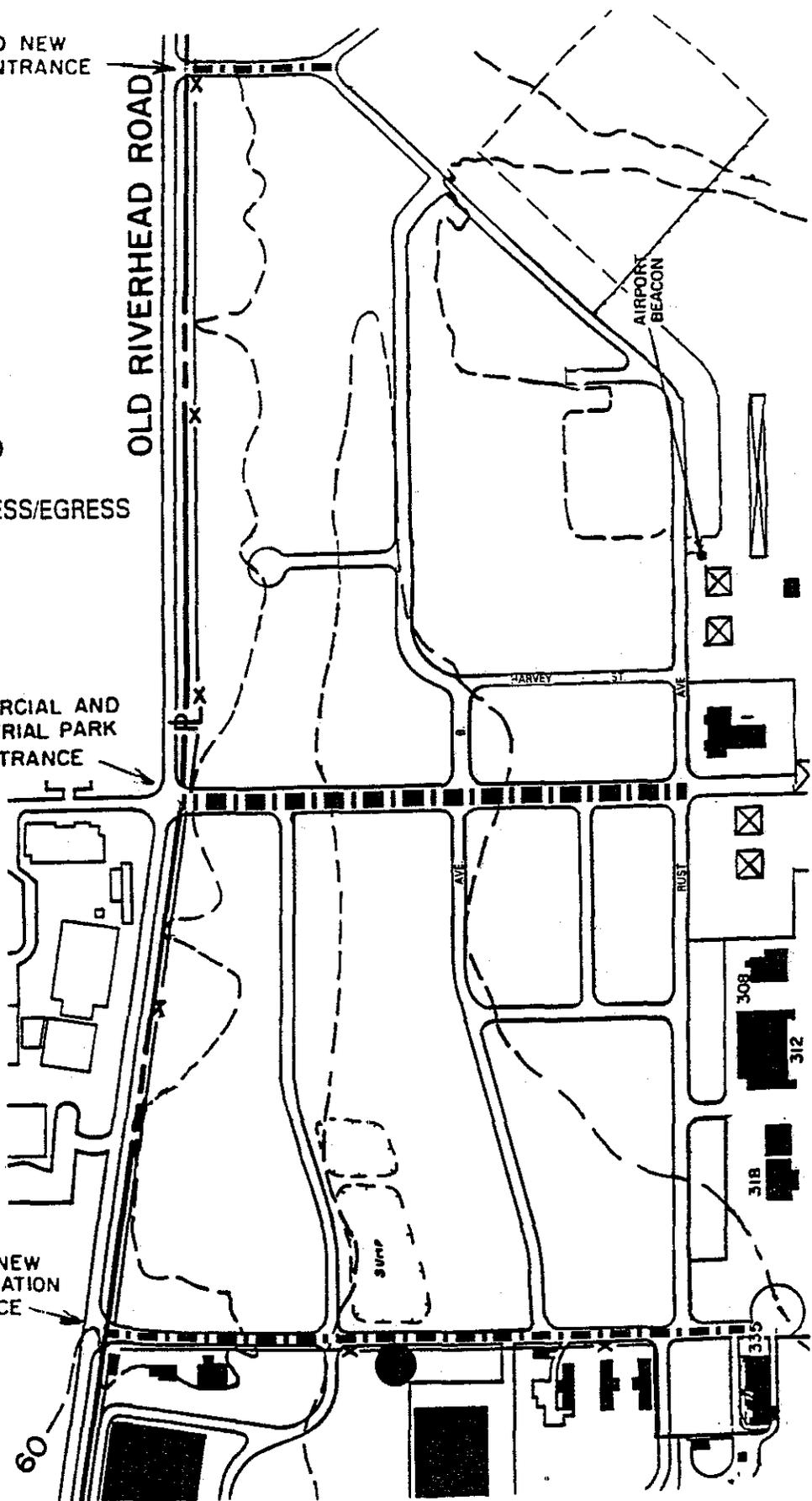


FIGURE 15
AIRPORT GROUND ACCESS

CHAPTER 4 - FINANCING

CHAPTER 4 - FINANCING

Section I - FACILITIES SCHEDULE

There are three factors which govern the timing of the Suffolk County Airport development program. They are as follows:

- * Improvements needed immediately to bring the Airport up to current standards of aeronautical reliability in terms of both safety and the requirements of a general aviation airport.
- * Improvements needed as soon as feasible to relieve capacity limitations that exist such as infrastructure conditions.
- * Improvements needed in the future in response to projected increases in traffic demand and use of the facilities.

Some "immediate" projects, related to safety of aircraft operations, recommended in the 1980 Airport Plan, have been completed. This Update shows only a 10 year period in its recommendations, therefore, other than imminent safety items, there is no specific priority established. All recommendations are considered needed to be planned for now.

Section II - CAPITAL DEVELOPMENT FUNDING SOURCES

The County's cost factors for the improvement program, detailed in **FIGURE 16 PROJECTED DEVELOPMENT COSTS**, relies on the federal Airport Development Aid Program (ADAP) legislation. The FAA participation in airport projects at general aviation airports will be a 90 percent share of the qualified costs. State and the local governments are expected to contribute the remaining 10 percent, with New York State picking up 7.5 percent of this obligation, leaving the County only a 2.5 percent obligation. All navigational aid improvements are funded in their entirety by the FAA through the Facilities & Equipment Program. Some supplemental funding through the Air National Guard may be available for qualified "shared" improvements such as the Runway 15/33 overlay.

	<u>Estimated Costs</u>	
	<u>1990</u>	<u>2000</u> 1\
<u>Airside</u>		
Runway 15/33 Overlay (83,333sy)	833,300	1,357,400
Overlay South Taxiway (11,000sy)	111,000	180,800
Overlay SoEast Taxiway(8,800sy)	88,000	143,300
Taxiway Lighting	315,600	514,000
REIL's on Runways 15, 33 & 6	86,000	140,000
VASI-2 on Runway 15	60,000 2\	97,700
Taxiway Parallel to Runway 6/24	<u>2,333,300</u>	<u>3,800,700</u>
Airside Sub Totals	\$ 3,827,200	\$ 6,233,900
<u>Landside</u>		
* New T-Hangers (3)	390,000	635,200
Hanger Apron Space (1,333sy)	93,300	151,900
Tie-Down Apron Space (420sy)	29,400	47,900
Itinerant Apron Space (25,822sy)	1,807,500	2,944,200
Main Entrance Road (3,333sy)	233,310	380,000
* Removal of Buildings	760,000	1,237,000
* Environmental Mitigation	<u>100,000 3\</u>	<u>155,100</u>
Landside Sub Totals	\$ 3,413,510	\$ 5,551,300
Grand Totals	\$ <u>7,240,710</u>	\$ <u>11,785,200</u>

1\ 1990 +5% CPI 2\ 1988 bid +5% CPI 3\ SC/AF Agmt * FAA Ineligible
 (1990 Prices: Overlays @ \$10/sy; New Taxiway & Aprons @ \$70/sy - FAA)
 Share of Eligible Costs: Federal 90% - State 7.5% - County 2.5%

<u>SUFFOLK COUNTY COSTS</u>		
	<u>1990</u>	<u>2000</u>
Total Development Costs	7,240,710	11,785,200
Ineligible Costs (*)	1,250,000	2,027,300
<u>Total Shared-Funding Costs</u>	<u>5,990,710</u>	<u>9,757,900</u>
<u>COUNTY SHARE (2.5%)</u>	<u>149,768</u>	<u>243,900</u>
Building Removal Costs	760,000	1,237,000
Environmental Mitigation	100,000	155,100
Total County Costs	\$ 1,009,768	\$ 1,636,000

FIGURE 16
 PROJECT DEVELOPMENT COSTS

A. County Costs: In summary, Suffolk County will be able to provide the Airport with a \$ 9.7 million shared-funding development program (year 2000 cost) for as little as \$ 244,000. While the environmental mitigation is not eligible for shared funds under this program from FAA and NYSDOT Aviation, the \$100,000 shown is the County's "share" of the cleanup through a joint agreement with the U.S. Air Force. The providing of T-Hangers, needed for the forecasted aircraft, is a cost item to be borne by the benefitted tenant through lease adjustments. The major portion of the County's non-shared-funding expense is for building removal.

B. Building Removal: Since 1980 there have been 25 buildings removed by the County. In the 1980 Report the removal of buildings was estimated to cost \$0.70 per square foot. Applying a CPI of 6% on that estimate through the year 1990, the cost would be \$ 1.33 per square foot. However, a review of recent bids showed a wide range of square foot costs for building removal. The costs used in this update for 1990 are in the \$4.00 per square foot range and if applied against 20 buildings, each averaging the typical 2,500 square feet the costs would be \$ 200,000. In the year 2000 (using a CPI of 5%) the cost would be close to \$ 6.50 per square foot to remove a building driving the costs up to \$ 325,000 for the same 20 buildings (50,000 s.f.).

The preceding cost estimates are for buildings not requiring the extra precautions (and costs) involving asbestos removal. The removal of two asbestos involved buildings (43,369 s.f.) at the Airport has a per square foot price of \$ 13.00, with the total cost of removal bid (1989) at \$ 560,000. The structures involved are the mess hall (Bldg# 190) and the two-story officers quarters (Bldg# 68). The costs of these two buildings are added to the previously cited building removal costs, bringing this line item to \$ 760,000 (1990) which increases to \$1,237,000 (2000).

In approaching the necessary costs of improving the Airport (using the figures listed in **FIGURE 16**) a significant portion is reflected in the decision to construct the Runway 6/24 taxiway extension. The cost of the

anticipated Itinerant Apron may be deferred until later years of the development program. If deferrment is applied to these to items, the eventual decision to expend the funds could be based on aircraft activity on Runway 6/24 and the documented increase of Itinerant Civil aircraft operations, and related demands on tie-down areas and aviation services.

Section III - USER CHARGES

A. Airport Operating Revenues

There are certain Airport revenues that are directly related to aviation improvement expenditures, while others are related to the end result of marketing of the Airport for commercial and industrial development. In addition to the straight non-aviation building lease revenues, the aviation activities provide several revenue streams.

Three management options influence the revenues:

1. Maintain Present Facilities
2. Enhance General Aviation Facilities
3. Improved Building Area

Option 1: Maintain Present Facilities - For the purposes of projecting future operating revenues at the Airport assuming the continuation of only present facilities, the analysis is based on present management policy, and the current fee schedule (established in 1988) as shown in **FIGURE 17 AIRPORT FEE SCHEDULE.**

a) Aviation Activity The primary source of aviation revenues comes from the on-site operations of the fixed base operator (F.B.O) tenants who sell their services such as maintenance and fuel to aircraft owners and operators. Services of a fixed base operator nature are offered by Malloy Air, the largest F.B.O., as well as by Sky East (aircraft fuel, open bay hanger space, and tie-down rental), and Oldham (T-hanger space rental). These firms have terms within their leases for certain revenue-sharing with the County of fees collected on supplies and fuel sales, hanger and tie-down rentals.

Schedule Adopted 1988

LANDING FEES: (For commercial 1\, and non-based aircraft only 2\)

<u>Maximum Gross Weight</u>	<u>Fee</u>	<u>Maximum Gross Weight</u>	<u>Fee</u>
0 - 2,500 lbs	5.00	10,000 - 12,500 lbs	8.00
2,500 - 5,000 lbs	6.00	12,500 lbs and over	0.70/per
5,000 - 10,000 lbs	7.00		1,000 lbs

1\ No fee if based at the Airport 2\ No fee if fueled at the Airport
 * * * * *

TIE-DOWN FEES: (All aircraft - outside)

<u>Single-Engine</u>		<u>Light Multi-Engine</u>	
Per Day	7.00	Per Day	15.00
Per Month	45.00	Per Month	60.00
<u>Light Helicopter</u>		<u>Small Business</u>	
Per Day	15.00	Per Day	25.00
Per Month	60.00	<u>Large Business</u>	
		Per Day	60.00

* * * * *

HANGER RENTAL: (Per Month)

<u>Open Bay Hanger</u>		<u>T-Hanger</u>	
Single-engine	185.00	Single-engine	200.00
Multi-engine	235.00	(none currently available	
Helicopter	235.00	for multi-engine aircraft)	

FIGURE 17
AIRPORT FEE SCHEDULE

Revenues for the County are generated by the F.B.O. and other aviation type uses (not ANG) as well as a few service operations, as follows:

- * F.B.O. Lease Payments
- * Fuel Sales
- * Sale of Supplies
- * Sales of Services
- * Tie-down and Hanger Rentals
- * Landing Fees

The tenant contributors of revenues from this variety of sources (not including Landing Fees) are shown below, taken from the 1989 annual report of the Aviation Division:

Tenant	Bldg/Area	Lease	Gross-Sales-Fuel	Total
Barta/Isotrans 1\	1,224 sf	\$ 4,738	\$ 3,069 (5%) \$ -	\$ 7,807
Dedalos Flt Schl	2,520 sf	8,200	1,765 (2%) -	9,965
Geddes Aircraft 1\	2,074 sf	4,620	107 (2%) -	4,727
* Malloy Air	59,308 sf+ 5.6 ac	25,780 2\	9,884 (5%) 17,630 (\$.03/gal)	53,294
Oldham Constn	T-Hgrs	2,750	218 (2%) -	2,968
Perrys Fly Svc	2,266 sf+ 0.4 ac+ Hanger	8,103	2,047 (2%) -	10,150
* Sky East	8,776 sf+ 2.0 ac	21,339	1,491 (2%) -	22,830
Sky Sailors	1,257 sf	3,143	3,079 (2%) -	6,222
Westhampton Taxi	300 sf	1,100	46 (2%) -	1,146

1\ Left Airport 2\ Total due is \$37,778

b) Do Nothing Approach If nothing is done to improve the Airport, the forecasted aviation activity will not be realized. The number of based aircraft may also seek alternative airports where safety and services are an integral part of the operation. The resulting diminishing in sales of fuel and services by the F.B.O.'s may cause them to consider moving

elsewhere. This would leave the Airport to the touch-n-go aircraft, which flights emanate from other airports. When they use the Airport for their flight training operations they may pay the required landing fees (one landing fee per five touch-n-go's).

With no action on the recommended Airport improvements the facility will continue to deteriorate. This in turn will require increased County budget underwriting to keep the Airport open with no improved revenue generation by its users.

Option 2: Enhance General Aviation Facilities - Once the improvement work begins on the recommendations for the general aviation element of the Airport it will attract the interest of aviation and aviation-related businesses. Beyond the lease revenues will be the anticipated income from increased aviation-related activities.

The added revenues from improving the general aviation facilities (and services) at the Airport would come from rentals of hanger and tie-down space under the guidance of an enlightened F.B.O. It is proposed, that in order to meet a forecasted year 2000 shortfall in aircraft accommodation, that construction of T-hanger and tie-down space be undertaken. An existing (or new) aviation tenant, should provide the hangers as their cost, in combination with lease adjustments.

Aviation Activity: Again, the primary source of aviation revenues comes from the on-site operations of the fixed base operator (F.B.O) tenants who offer services such as maintenance and fuel to aircraft owners and operators. Revenue from the F.B.O. and other aviation tenants is generated in the following ways, each of which will be discussed:

1. F.B.O. Lease Payments
2. Fuel and Supplies
3. Tie-down and Hanger Rentals
4. Landing Fees

1. F.B.O. Lease An examination of ~~the~~ two F.B.O. leases, of Malloy Air and Sky East, can expect (applying a 5% per year CPI escalation) their combined 1989 lease payment of \$80,607 to increase to approximately \$131,300 by the year 2000.

2. Fuel & Services Commissions of \$0.03 per gallon on fuel sold and 5 percent of the gross sales of supplies are paid to the County by the tenants currently involved in these activities. Prior to the Kuwait invasion aviation fuel was selling at \$2.05 per gallon. In estimating revenues generated by this activity only the "based" private (not flight school) aircraft were included. It would be speculative to estimate revenues from itinerant aircraft which may refuel and purchase supplies at the Westhampton airport facility. The assumptions which are applied to the based private aircraft of 1990 and 2000 include: a) each aircraft flying an average of 100 hours per year; b) each aircraft using about 15 gallons of fuel per hour, but c) only purchasing 50 percent of their annual fuel used at Suffolk County Airport. As to oil and supplies for maintenance it is estimated that each based private aircraft expends \$4,000 annually, from which the County receives a 5% commission.

<u>REVENUES FROM OPERATIONS & SERVICES</u>				
Fuel Sales & Supplies				
<u>YEAR</u>	<u>BASED ACFT</u>	<u>FUEL SALES</u>	<u>SUPPLY SALES</u>	<u>TOTALS</u>
1990	84	\$129,150 (@\$2.05)	\$336,000 (@\$4k)	\$ 465,150
County Share		\$ 1,890 (@\$.03)	\$ 16,800 (@ 5%)	\$ 18,690
2000	120	\$299,700 (@\$3.33) <u>1\</u>	\$780,000 (@\$6.5k) <u>1\</u>	\$1,079,700
County Share		\$ 2,700 (@\$.03)	\$ 39,000 (@ 5%)	\$ 41,700

1\ 5% CPI applied to Sales Price & Supplies Expense

Airport Study - Financing

3. Tie-Down & Hanger Rentals The Airport also gains revenue from tie-down and hanger rentals collected by the F.B.O., at a rate of 5 percent of gross sales (not including sales tax). The tie-down spaces and hangers are leased by the County to the F.B.O.'s who in turn rent the space to aircraft owners or users.

a) Tie-Down Needs Within the combination of forecasted needs for total apron space, the itinerant aircraft apron shows the greatest shortfall in currently available space. Malloy Air leases 5.6 acres of apron and Sky East leases 2.0 acres of apron. When the analysis was completed of the current apron areas against the FAA standards for apron required, it was realized that there is only a small area for itinerant aircraft parking - directly in front of the Terminal Building.

To determine the apron needs in line with the forecasts, the required square footage for fueling was subtracted from the tie-down areas, as was the required square footage for hanger-apron in front of the existing hangers. Reducing the existing apron area (440,682 s.f.) by the required areas for hanger apron and fuel apron leaves a balance of 164,220 s.f. for tie-down apron which would accommodate (by FAA standards) approximately 58 aircraft.

b) Additional Hangers The present square footage available in the five (5) available open bay hangers at the Airport is 63,682 s.f. can accomodate 47 aircraft. A sixth hanger is a ten unit T-Hanger for single-engine aircraft only. This provides the Airport a current hanger capacity for 57 aircraft. In 1989, assuming all multi-engine based aircraft (18) would be hangered in open-bay hangers, and about 50% of single engine based aircraft (30) would be hangered in the balance of space available, we have already reached a practical capacity of 48. For the year 2000 another thirty (30) hanger spaces should be constructed. This will provide the hanger space to accommodate a forecasted 30 multi-engine aircraft and a minimum of 50 of the anticipated 90 single-engine based aircraft.

The revenue estimates that follow are based on the current airport fees shown in FIGURE 17. Of the 84 general aviation aircraft based at the Airport 18 are multi-engine aircraft. It is assumed that all of the multi-engine aircraft are to be hangered, as are half of the based single-engine aircraft, with the balance of single-engine aircraft using the tie-down.

While forecasting revenues generated by itinerant aircraft is speculative, and their frequency will be prevalent during the summer months, the cumulative use approach is used in assigning the following forecasts. In 1990 it is assumed that two (2) single-engine aircraft per month will use the tie down area at a rate of \$45.00 per month, with eight (8) per month by the year 2000.

TIE-DOWN & HANGER REVENUES

Monthly Activity

YEAR	AIRCRAFT	TIE-DOWN	\$ *	HANGER	\$ *	TOTALS
	Itinerant	2 @ 45 =	1,080	n/a		1,080
1990	Single-Engine	33 @ 45 =	17,820	33 @ 185 =	73,260	91,080
	Multi-Engine	n/a		18 @ 235 =	50,760	50,760
	<u>1990 Revenues:</u>		<u>18,900</u>		<u>124,020</u>	<u>141,840</u>
	Itinerant	8 @ 45 =	4,320	n/a		4,320
2000	Single-Engine	40 @ 45 =	21,600	50 @ 185 =	111,000	132,600
	Multi-Engine	n/a		30 @ 235 =	84,600	84,600
	<u>2000 Revenues:</u>		<u>25,920</u>		<u>195,600</u>	<u>221,520</u>

* Computations are multiplied by 12 to reflect annual revenues

The County receives 5 percent of the gross revenue which, using the above forecasted figures could provide \$7,092 in 1990 and \$11,076 in the year 2000 from just these two F.B.O. activities.

A summary of the revenues expected from the tenants offering F.B.O.-type services follows. This includes the anticipated lease revenues from the two primary F.B.O.'s which are shown as a (deficit) in the "of Total" line due to their being an expenditure to the F.B.O.

<u>COUNTY SHARE OF F.B.O. REVENUES</u>						
<u>YEAR</u>	<u>FUEL/SVC</u>	<u>TIE-DWN</u>	<u>HANGER</u>	<u>SUB-TOT</u>	<u>LEASE</u>	<u>TOTAL</u>
1990	18,690	945	6,201	25,206	80,607	106,443
of Total:	465,150	18,900	124,020	608,070	(80,607)	527,463
2000	41,700	1,296	9,780	51,876	131,300	184,076
of Total:	1,079,700	25,920	195,600	1,301,220	(131,300)	1,169,920

4. Landing Fees Another source of Airport revenues is from landing fees, which is the responsibility of the primary F.B.O. (Malloy) to collect. The County receives the full amount of this revenue. Landing fees are not applied to Suffolk County Airport based aircraft. They are applied to corporate aircraft unless, fueled prior to takeoff, or based at the Airport.

Itinerant (non based) aircraft operations are the primary source of landing fee revenues. Itinerant flight training operations are currently charged one landing fee for every five (5) touch-n-go operations. It is questioned whether these fees (a) can be assumed to be a reliable source of revenue, (b) are effectively collected and (if there is a negative on the preceding two queries) (c) if their imposition should be continued. The scheduled landing fees shown in **FIGURE 17** are applied in five aircraft weight classes ranging from \$5.00 (0-2,500 lbs) to \$0.70 per 1,000 lbs for aircraft weighing 12,500 lbs and over.

The calculation of landing fees is initially based on revenues actually collected during the past two years from Itinerant general

aviation aircraft operations. In order to break down the fees to a number of aircraft it is assumed that no training flights were involved and that 80 percent of the revenues were paid by single-engine aircraft, with the other 20 percent being light multi-engine aircraft. The example of 1988 revenues of \$4,662 under the previous fees schedule, and 1989's revenues (thru October) of \$8,416 under the new fee schedule reflects an 11 percent increase in landings between 1988 and 1989, from 1,429 to 1,586 landings.

Anticipating the number of fee-charged landings for 1989 will reach the 1,600 figure, reflecting 3,200 operations, this represents about 5 percent of the estimated total itinerant general aviation operations (64,200) for the year 1990. The application of this percentage to the year 2000's forecasts of 87,600 total itinerant operations would result in 4,380 operations, or 2,190 landings

<u>LANDING FEE REVENUES</u>							
Itinerant Aircraft Operations							
	LANDINGS				REVENUES		
	TOTAL						
YEAR	OPNS	TOTAL*	SINGLE	MULTI	SINGLE	MULTI	TOTAL
1990	64,200	1,600	1,280	320	6,400	2,240	\$ 8,640
2000	87,600	2,190	1,752	438	8,760	3,066	\$11,826

* Charged a Landing Fee @ \$5 single-engine, \$7 multi-engine

5. Other Revenue Sources Other aviation-related revenues are generated at the Airport which sustain its operations.

a) Control Tower Reimbursement An important source of revenue to the County comes in the form of reimbursement from the U.S. Air Force which has an agreement with the County to cover 75 percent of

the costs of the four (4) air traffic control tower employees. For 1988 the amount was \$156,750, which would rise (using CPI of 5%) to \$281,150 by the year 2000.

b) Aircraft Sales Aircraft sales, while anticipated in the lease terms of aviation tenants, have been limited. The lease of the only aircraft broker tenant on the Airport expired in 1990 and he left the Airport. No revenues for this category are forecasted in this Update. With improvements to, the marketing and attraction of, the Airport this revenue element may later emerge.

Option 3: Improved Building Area - The major source of revenues is from the leasing of Airport property and/or buildings to aviation and non-aviation tenants. For the purpose of the following revenue discussion they will be collectively addressed.

a) Current Uses The re-use of existing military buildings located in the building area on the western side of the Airport property has been practiced, with mixed success, since the County began operating the facility in 1970.

Major Tenant The New York Air National Guard complex of 75 acres is not included in the following discussion of the building areas for lease, nor in the annual revenue derived from these activities. The ANG's mission is that of air/sea rescue operations. They have a 50 year lease (through 2021), paying the County \$50,000 annually for the "use" of the Airport, with a lease renegotiation due in September 1991.

Other Tenants As of (8/90) there were 33 tenants and 1 subtenant leasing 149,182 square feet within 38 buildings, plus 22.05 acres of land, who generated 1989 lease income to the County of over \$300,000 (in addition to the commissions revenue from services and supplies sales).

Departed Since January 1989 twenty-two (22) tenants, with about 100 employees, representing 59,399 s.f. of leaseable space and \$156,000 in annual lease revenues (1988) to the County have vacated their premises (26 buildings) at the Airport. Their motivation may have been in anticipation of substantial raises after the moratorium on lease negotiations was scheduled to end in November 1989. The first reviews by the Legislative Lease Committee of lease renewals and new lease applications did not occur until June 1990. When the new rates were established the tenant renewing a lease was expected to make a retropayment of the difference between the old and new rate.

b) Future Uses The Airport could gain additional revenues from removing many existing marginally usable buildings and preparing this building area for a commercial and industrial development. This analysis also assumes that the County would lease the land designated for Office Park and Industrial Technology Park to tenants at a percentage of fair market value who, in turn, would build their own facilities.

Land Revenues Approximately 25 acres (office park & industrial technology park) of the 50 acres involved could be leased at a lease rate of \$1,800 per acre, which is 10% of the fair market value (\$18,000 per acre) placed on the land in the Homan Boatyard lease appraisal of February 1990. If fully developed in 1990, the 25 acres would generate \$45,000 in land revenues. The application of a 5% CPI for the next ten years, to the year 2000, would see the revenue on the land only increase to \$77,300 for the same 25 acres.

Building Revenues In addition to the land revenues there will be building value revenues produced. The detail of how a building built by a tenant is appraised for the purposes of establishing a lease rate will be worked out by the County Real Estate Department who will continue to be the primary lease negotiator.

Professional Management Assistance in attaining the forecasted revenue could come in the form of the marketing and encouragement of locating new tenants at the Airport by a professional airport management team. They would also contract with the County to meet the goals of the 1980 Master Plan Update as outlined herein, and make assurances to the County of facility improvements and marketing as well as certain levels of revenue returns within specific time frames.

B. Airport Operating Expenses

The security at the Airport has been an added expense for the County with the hiring in 1987 of a private security force. This item, under the professional management approach may be incorporated into the services provided by such management firm. While it does not erase the continued cost, it does extract the County from that direct responsibility.

The proposed new general aviation facilities would require a minimal additional annual expense for maintenance. The proposed industrial technology park and commercial office center buildings would be built and maintained by the tenants, with the County only leasing them the land.

Lighting, power, and water costs are expected to increase at a moderate rate to accommodate greater levels of operations on the Airport. Unknown at this time is the cost factor connected to the possibility of LILCO and SCWA assuming responsibility for the power and water supply serving the Airport. Also, with more aircraft operations, the communications equipment costs may increase to meet the additional operational demands. Some alternative funding sources i.e. NY State or aviation-related improvement funds may be available to assist in the acquisition of new flight-line and related equipment.

The more use the Airport gets the greater the demand for repairs and maintenance of existing buildings and grounds. Almost all of the maintenance expenses shown in the Budget (1988) are for "airport systems

and vehicles", which will continue as a funded priority. Demands for building and facilities repair funds will increase dramatically as the structures (already 40+ years old) age. Tools and materials should decrease for building repairs because of the diminishing number of original buildings, as well as the possibility of the professional management firm assuming this maintenance role. The other expense categories should not be affected much by the number of based aircraft or operations at the Airport.

The current expense of insurance costs being borne by the County may realize some significant savings should professional airport management be initiated at the Airport. The details of these potential savings need to be worked out in preparation for the request for proposals (RFP) from airport management firms.

Salaries and wages, as well as fees for services of non-employees, should not increase under the scenario of a professional airport management approach. Three of the six County personnel assigned to the Airport could be reassigned within DPW as the Airport Manager (private management contractor) assumes more control of the daily operations and maintenance of the Airport facility. In 1989 there were six Airport employees:

AVIATION EMPLOYEES

<u>Title</u>	<u>Grade</u>
Airport Manager	25
* Maintenance Supvr.	22
Airport Light Specialist	22
Secretarial Asst.	16
* Airport Maint. Mechanic	15
* Airport Maint. Mechanic	15

Using a conservative Step 8 in each grade (1988 contract) the reassignment of the three Airport employees (*) to other positions within D.P.W. would result in a savings for the Aviation Division budget of \$87,800 in salary alone, not including the benefits.

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Section IV - REVENUE/EXPENDITURE CONCLUSION

A review of the preceding income/expenditure scenarios clearly indicates that facility improvements are needed at the Airport. Without these improvements, the Airport is projected to continue operating at a loss through 2000 and beyond. The annual losses from the "do-nothing" alternative could increase to over \$200,000 annually by the year 2000.

If the recommendations and improvements as outlined in this Update are implemented, the Airport should begin to see a noticeable profit by the year 2000. This conclusion assumes that a professional airport management firm administers, regulates and maintains the Airport tenancy properties, encourages improved services for general aviation, while marketing the Airport and pursuing the approvals and shared-revenue funding for eligible projects.

Enhanced general aviation facilities and the development of the commercial/industrial technology park, together should create a profit close to the year 2000 depending on how quickly the land is prepared and the marketing strategy is implemented.

It should be noted that the projected expenditures in this Update do not include the overhead and bond costs of financing the capital programs..

Section V - FINANCING DECISIONS

Airport improvements at publicly owned airports are financed in a variety of ways. Among these are Federal grants, State grants, County taxes, general obligation bonds, and revenue bonds. Future capital improvements could also be financed through accumulated airport revenue surpluses.

As indicated in Section II - CAPITAL DEVELOPMENT FUNDING SOURCES of this Chapter, the Airport could receive substantial aid from the FAA and the New York State DOT Aviation programs to help finance the proposed capital improvements. If the County decides to pursue the joint-funding

initiative with FAA and NY State DOT, it would need to capitalize only --\$ 243,900 of the cost of the \$ 9.7 million in eligible projects.

We have arrived at the point where the question of what comes first, (posed in the EXECUTIVE SUMMARY) whether the County invests in this development to encourage the revenue return, or seek the revenue up-front to support all the development? The second scenario is at best a "wish".

Section VI - OTHER CONSIDERATIONS

All the financial figures previously cited assume that revenues and expenses follow the forecasted pattern. If revenues turned out to be larger, or expenses smaller, a profit could be realized earlier. Consideration of four examples of cost-cutting/revenue-producing items are as follows:

1. It was assumed in the calculations that the proposed area for the commercial/industrial development would begin generating revenue in 1991, with the specific industrial park element being fully leased by the year 2000. One way to increase revenues would be to aggressively market the Airport's office park and industrial technology park and thereby lease the property more quickly than forecasted. For example, if all the industrial park land (16 acres) was leased by 1992 at a lease value of the land of \$ 4,500 per acre (\$ 72,000 in year one) it would accumulate \$687,000 in revenues over the following eight-year period to the year 2000, using a 5% CPI.
2. Similarly, if the 9 acres of commercial (office) land was leased by 1992 @ \$ 4,500 per acre it would result in an additional \$386,740 over the following eight-year period to the year 2000, using a 5% CPI.
3. A line-item of \$20,000 per year is proposed for future Aviation budgets to be allocated for special projects, in case extra

funds are needed for non-budgeted expenses. This line item should be cumulative. If this money is not spent in some years, a net savings for that year would result. Over the 10 year forecast period, this is an extra \$200,000 that could help reduce losses and meet unexpected (unbudgeted) but necessary extra expenses.

4. Paying the County a commission (Fuel Flowage Fee) on the basis of a couple of cents per gallon of aviation fuel sold at the Airport was established during the 1950's when it was one cent per gallon on fuel dispensed that sold for 25 cents a gallon.

An amount of \$17,630.08 in fuel fees was paid to the County in 1989 according to the Aviation Division's annual report. If the fuel fee was calculated at \$.04/gal then the F.B.O. dispensed over 440,752 gallons of fuel during 1989. At \$2.05 per gallon this would generate over \$903,542 before taxes and expenses.

The pre-paid taxes and the cost of the fuel totals \$1.65 per gallon. The sale price of \$2.05 minus the the taxes, fuel cost and County's fuel fee (\$.04) leaves the profit to be earned at \$.36 on each gallons sold which would provide a net return of \$158,671 to the F.B.O. for the 440,752 gallons sold in 1989.

Now with the Kuwait situation and the resultant steep hikes in fuel prices the \$.03/gallon fuel flowage fee to the County is not realistic. Using a wholesale cost of \$2.00/gallon and a retail sales price of \$2.50/gallon, the sale of the same 440,752 gallons would net the F.B.O. \$207,153 at \$.47 net per gallon.

Another approach to the fuel flowage fee is on the same basis of the sales and service commissions - a percentage of "gross" sales. By this approach an escalation in sale price of the fuel will not require the County to seek periodic adjustments to the per gallon fee to recover its fair share. This "gross"

percentage fuel flowage fee would provide revenue to the County @ 2% = \$22,038 (nets FBO \$185,115); @ 3% = \$33,056 (nets FBO \$174,097); @ 4% = \$44,075 (nets FBO \$163,078); @ 5% = \$55,094 (nets FBO \$152,059). This approach would require additional auditing, raising a question as to its cost/benefit.

A comparison of applying a 2% of gross for fuel flowage fee, using the pre-Kuwait price of fuel, with the forecasted revenue figures (p.87) would be:

<u>REVENUES FROM OPERATIONS & SERVICES</u>				
Fuel Sales & Supplies				
<u>YEAR</u>	<u>BASED ACET</u>	<u>FUEL SALES</u>	<u>SUPPLY SALES</u>	<u>TOTALS</u>
1990	84	\$129,150 <u>1\</u> (@\$2.05)	\$336,000 (@\$4k)	\$ 465,150
County Share		\$ 2,583 (@ 2%)	\$ 16,800 (@ 5%)	\$ 19,383
2000	120	\$299,700 <u>2\</u> (@\$3.33) <u>3\</u>	\$780,000 (@\$6.5k) <u>3\</u>	\$1,079,700
County Share		\$ 8,100 (@ 2%)	\$ 15,600 (@ 5%)	\$ 23,700

1\ 63,000 gallons; 2\ 90,000 gallons; 3\ 5% CPI

- It is recommended that in a role of County "oversight" the Airport Manager (sic. Director), the Principal Stenographer, and the Airport Light Specialist would be retained at the Airport. The other three personnel could be reassigned within the Department of Public Works. This savings item is predicated on the transfer of maintenance responsibility for the buildings and grounds to a professional airport management firm.

CHAPTER 5 - AIRPORT BENEFITS

CHAPTER 5 - AIRPORT BENEFITS

It has long been established that airport development is an important element among the region's and local community's action programs for balanced development. It is, therefore, difficult to isolate airport benefits solely on their own merits. This chapter attempts to identify Suffolk County Airport's influence upon the County and the adjacent local communities.

A. Social Benefits - In a social role, the Suffolk County Airport will serve as a vital link in our region's transportation network. Traveling to or from the Westhampton area and eastern Long Island can be done much more quickly by air. Air transportation adds dimensions of speed and comfort to travel.

Personal aircraft extend the capability of the individual. The owner may use the aircraft for transportation as one would a car, or simply use it for recreation and sport.

An airport, such as Suffolk County Airport, that has a flying school for pilot training tends to be one where highly qualified personnel are flying airplanes, thus, increasing the safety factor. These skills are valuable at all times and especially in national emergencies. Police work constantly involves the use of airplanes and helicopters. They are used for surveillance, rescue work, and traffic control.

The U. S. Coast Guard patrols our coasts by air and - with the Air National Guard - assists in rescues by air. Air ambulances provide a service that can be appreciated by everyone. None can place a value on life, but it is highly evident that such activities will require airports that lie in close proximity to a community and thus provide easy access for the user. It is most difficult to quantify all the social benefits of an airport to the user and the community as a whole.

B. Economic Benefits - A common misconception about airports is that they exist only for the benefit of those who fly. However, the truth is that airports benefit everyone because they attract new industry and new jobs, new money and a broader tax base.

1. Overall Benefits - With respect to the economic benefits, a study was prepared by the Systems Planning Division of the Federal Aviation Administration entitled, "The Airport - Its Influence on the Community Economy," in which the following findings were made:

Airport development is a catalyst for business and industrial growth.

Within the communities selected for study, the census index "value added by manufacture" recorded substantial increases in each selected community in the period following the construction of a new airport, or modernization of existing facilities. Usually, retail trade, the volume of wholesale trade, and the volume of service business, as well as other economic activity all registered increases in their rate of growth following airport development.

An airport is an attraction for new industry.

The existence of an adequate facility is a major factor in attracting new industry to an area as well as in retaining existing business and industry and their related job opportunities.

Air transportation is an aid to industrial equipment maintenance programs.

An airport in a suitable location increases the possibility for key industries to keep equipment downtime to a minimum by the rapid replacement of supplies and parts, thus, reducing the need for excessive high cost inventories.

The airport can be a nucleus for industrial concentration.

In many cases, an airport becomes the center for a large planned industrial development area only when the airport is made directly accessible to business and industry.

Airport activity furnishes alternative employment opportunities for seasonal labor.

It must be emphasized that the airport is an integral part of the total region in which it serves. The airport provides jobs both directly and indirectly. Many jobs are provided at the airport itself and this, in turn, spurs indirect employment in other areas of the community, such as real estate, wholesale and retail trade, education and manufacturing. Thus, the jobs at the airport are doubled and redoubled many times within the community.

2. Financial Benefits - In the Discussion of Alternatives (CHAPTER 3) the benefits for the various development plans were outlined. These initial benefits were then multiplied by 2.5 to reflect the impact on the community by the addition of new jobs and new income. The following is a summary of the estimated annual benefits to Suffolk County and the community-at-large from each of the alternatives:

Enhanced General Aviation Facilities:

7 new jobs @ \$22,000 annual salary	= \$	154,000 annually
x 2.5	= \$	385,000 in economic benefits

Commercial/Industrial Technology Park:

396 new jobs @ \$22,000 annual salary	= \$	8,712,000 annually
x 2.5	= \$	21,780,000 in economic benefits

The combination of the preceding alternatives would generate over \$22 million per year in direct and indirect benefits within the County, or over \$221 million over a ten-year period. It is evident that these improvements would provide a substantial stimulus to the economic vitality of the surrounding area, as well as to the attraction of the Airport.

Improved General Aviation Services: The operation of an airport requires a variety of services such as supplying aviation fuel, aircraft sales and maintenance, and operating concessions. A Fixed Base Operator (F.B.O.) sells general aviation products or services at an airport. At some airports, the F.B.O. also conducts the actual management and operation of the airport. The more recent management approach at municipally owned airports is to retain a professional airport management firm. They may employ one or two people, or as many as a hundred. His services can include aircraft airframe, engine and/or instrument repairs; flight training; air taxi service and charter flights; aircraft sales; fuel and parts; and aircraft exterior and/or interior modification. Job opportunities in such an operation call for aviation mechanics, flight instructors, and aircraft salesmen, as well as office personnel and grounds maintenance employees.

Aircraft Repair & Engine Services: With the increasing demand for maintenance of jet-type Corporate aircraft Suffolk County Airport should be seeking to attract a flight-line engine maintenance and remanufacturing firm which also specializes in jet engines. The closest jet maintenance services are available at Long Island-MacArthur Airport in Islip.

Supply of Labor & Services: Another major function of an airport is to attract new industry. Industries need and use airports. However, it should be noted that the attraction of such industry is dependent upon a variety of factors. Among these factors are the existence and accessibility of labor supply, markets, raw materials, utilities and other transportation modes. Tax structures and community attitudes play an important role as well. Thus, once an area has access to the above, the airport becomes an additional asset to the community in attracting new industry.

Corporate Aircraft/Location: Companies planning to locate a new plant have consistently listed the availability of an airport among the first five requirements. A survey of 500 leading U. S. firms indicated that 80 percent would not locate a new plant where there is no airport. Most companies need an airport for business aircraft located within 45 minutes driving time of the ultimate destination.

The use of corporate aircraft is increasing. Companies having facilities in the region whose business requires flexible and reliable transportation options often base their aircraft close to their plants and headquarters. This is a growing market which could be attracted to the Westhampton facility.

Commuter/Charter Service: It should also be understood that commuter passengers who use the Airport also provide an economic stimulus. The economic base of the community tends to become more stable. Additional funds are supplied to the community in taxes, while Airport users pay gas and oil taxes.

As previously stated, airports are important to the growth of business and industry. Market expansion, and the demands of competition can be satisfied only by air travel. The Airport is important to the community in its service to both locally based and itinerant business aviation. Communities which offer less than adequate facilities place limitation upon their economic growth. It is for all the above cited reasons that the Suffolk County Airport should be developed.

A "marketing" of the Airport along with the improvements program must also be considered at an early stage along with the overall development program, so that the Airport is there when needed.

C. Intangible Benefits - The intangible benefits are best illustrated by describing a ripple effect. As more jobs are created and the community witnesses increases in its economic growth, the level of income per

capita increases. This increase provides ~~g~~reater demand for such luxuries as cultural or sporting centers, thus, increasing tourism as well as further utilization of the airport.

Air transportation in general aviation flights and business flights represents an ever increasing proportion of the nation's total transportation volume. The community without access to air transportation through a nearby airport is a community cut-off from today's and tomorrow's fastest growing form of transportation.

AIRSIDE RECOMMENDATIONS

- * OVERLAY RUNWAY 15/33 FOR ENTIRE LENGTH
- * CONSTRUCT TAXIWAY PARALLEL TO MAIN RUNWAY (6/24)
- * COMPLETE TAXIWAY LIGHTING
- * COMPLETE "REILS" ON RUNWAYS 15, 33 AND 6
- * INSTALL "VASI-2" ON RUNWAY 15
- * OVERLAY SOUTH AND SOUTHEAST TAXIWAYS

LANDSIDE RECOMMENDATIONS

- * ENTRANCE ROADWAY IMPROVEMENTS
- * PROVIDE NEW "T" HANGERS TO ACCOMMODATE AIRCRAFT
- * INCREASE PAVED APRON FOR AIRCRAFT PARKING
AND SERVICING
- * REMOVE DETERIORATED AND UNSAFE BUILDINGS
- * DEVELOP COMMERCIAL/INDUSTRIAL TECHNOLOGY PARK AREAS
- * TAKE MEASURES TO PREVENT WATER POLLUTION
- * COORDINATE CLEANUP OF PRIOR ENVIRONMENTAL HAZARDS

OPERATIONAL RECOMMENDATIONS

- * UTILIZE PROFESSIONAL AIRPORT MANAGEMENT SERVICES
- * REVISE AVIATION AND NON-AVIATION LEASE CRITERIA
- * CONSIDER REVISION OF FUEL FLOWAGE COMMISSIONS
- * SUPPORT THE PREPARATION OF A MARKETING STRATEGY

FIGURE 18
RECAP OF RECOMMENDATIONS

APPENDICES

APPENDICES

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LEASE

made the _____ day of _____, 1990, between _____, whose address is _____ (hereinafter called the Tenant), and the COUNTY OF SUFFOLK, a municipal corporation whose address is County Center, Riverhead, New York (hereinafter called the Landlord).

W I T N E S S E T H:

I. DESCRIPTION. Landlord hereby leases to Tenant space known as Building No.# _____, Suffolk County Airport, Westhampton Beach, New York, (hereinafter called premises).

II. TERM. For a term to commence on _____ and end at 12 o'clock noon on _____, or on such earlier date as this lease may terminate as hereinafter provided, except that, if any such date falls on a Sunday or a holiday, then this lease shall end at 12 o'clock noon the business day next preceding the aforementioned date.

III. RENTAL AND SECURITY. Rental at the annual rental rate of \$ _____ payable in equal monthly installments, in advance on the first day of each calendar month during the term. Tenant further agrees to deposit the sum of \$ _____ as security for the payment of the rent and the performance by Tenant of all other of its obligations under this lease. Said security less any monies due the Landlord by reason of violation of the terms of this lease by the Tenant shall be returned to the Tenant at the termination of the lease, together with such interest, if any, as shall have accrued thereon.

IV. PURPOSE. The parties hereto acknowledge that the Landlord is a municipal corporation and is entering into and executing this lease by virtue of the authority of Resolution No. _____ dated the _____ day of _____, 19__ of the Suffolk County Legislature for the purpose and intent expressed in said resolution, that the same is incorporated herein by reference, and further that the Tenant has examined the same and is fully aware of the intended purpose thereof, and that the Tenant's occupancy shall be for the sole purpose of using said premises as _____

V. COVENANT TO PAY RENT. Tenant shall pay rent and additional rent to Landlord at Landlord's said address or at such other place as Landlord may designate in writing.

VI. CARE AND REPAIR OF PREMISES. Tenant is renting premises in their "as is" condition and it shall be Tenant's sole obligation to make any repairs or renovations required to suit premises to the needs of the Tenant. Tenant shall not, however, make any substantial renovations or alterations of the premises or paint premises any color other than white, without the written consent of the Suffolk County Department of Public Works. Tenant shall commit no act of waste and shall take good care of the premises and the fixtures and the appurtenances therein, and shall, in the use and occupancy of the premises: (a) conform to all laws, orders and regulations of the federal, state and municipal governments, or any of their departments, and (b) regulations of the New York Board of Fire Underwriters, provided they are applicable by reason of the use of the premises by the Tenant. All improvements made by Tenant to the premises which are so attached to the premises that they cannot be removed without material injury to the premises, shall become the property of the Landlord upon installation, as part of the premises. Tenant shall, at Tenant's expense, remove all of the Tenant's personal property and those improvements made by the Tenant which have not become the property of the Landlord, including trade fixtures, cabinet work, movable panelling, partitions and the like and surrender the premises in a broom-clean condition, reasonable wear and damage by fire, the elements, casualty, or other cause not due to the misuse or neglect by Tenant or Tenant's agents, servants, visitors or licensees, excepted. The County is under no obligation to repair, rebuild or replace any real and/or personal property in the event of loss, regardless of any insurance recoveries that may be received.

VII. NEGATIVE COVENANTS. Tenant shall not, without Landlord's written consent: (a) do or suffer anything to be done on the premises which will increase the rate of fire insurance on the building, and (b) permit the accumulation of waste or refuse matter.

VIII. EMINENT DOMAIN. If the premises or any part thereof or any estate therein, or any other part of the building materially affecting Tenant's use of the premises, including parking area, be taken by virtue of eminent domain, this lease shall terminate on the date when title vests pursuant to such taking, the rent and additional rent shall be apportioned as of said date and any rent paid for any period beyond said date shall be repaid to Tenant. Tenant shall not be entitled to any part of the award or any payment in lieu thereof, but Tenant may file a claim for any taking of fixtures and improvements owned by Tenant, and for moving expenses.

- IX. NOTICES. Any notice by either party to the other shall be in writing and shall be deemed to be duly given only if delivered personally or mailed by registered or certified mail in a postpaid envelope addressed (a) if to Tenant, at Tenant's address first above set forth, and (b) if to Landlord, at Landlord's address first above set forth, or at such other addresses as Tenant or Landlord, respectively, may designate in writing. Notice shall be deemed to have been duly given, if delivered personally, upon delivery thereof, and if mailed, upon the third day after the mailing thereof.
- X. LANDLORD'S RIGHT TO INSPECT AND REPAIR. Landlord may, but shall not be obligated to, enter the premises at any reasonable time, on reasonable notice to Tenant (except that no notice need be given in case of emergency) for the purposes of inspection or the making of such repairs, replacements, and additions in, to, on and about the premises or the building, as Landlord deems necessary or desirable.
- XI. LANDLORD'S RIGHT TO SHOW PREMISES. Landlord may, during the four months prior to termination of this lease, show premises to prospective tenants, during business hours upon reasonable notice to Tenant.
- XII. NO REPRESENTATIONS. Neither party has made any representations nor promises, except as contained herein, nor in some further writing signed by the party making such representation or promise.
- XIII. QUIET ENJOYMENT. Landlord covenants that if and so long as Tenant pays the rent and additional rent and performs the covenants hereof, Tenant shall peaceably and quietly have, hold and enjoy the premises for the term herein mentioned, subject to the provisions of this lease.
- XIV. MARGINAL NOTATIONS. The paragraph headings in this lease are included for convenience only and shall not be taken into consideration in any construction or interpretation of this lease or any of its provisions.
- XV. PARKING PLACES. During the term of this lease, parking by the Tenant shall be limited to the following area as designated by the Suffolk County Airport Manager:
- XVI. UTILITIES. Tenant shall assume and be responsible to pay for all utilities' services, including the connections thereto, used by it with respect to its operations granted by this agreement, including water, electricity and fuel. Tenant agrees to install a water and an electric meter at Tenant's expense.

XVII. SIGNS. Tenant shall not, without the prior written approval of the Landlord, erect, maintain or display any advertising, signs, posters, or similar devices at or on the premises or elsewhere at the facility; provided, however, that on those interior portions of the premises which are not visible from outside the premises, the Tenant may install necessary directional and identification signs.

XVIII. INDEMNITY AND INSURANCE. Tenant agrees to indemnify and hold harmless the County of Suffolk, the County's consultant (if any), its agents, employees, or any other person against loss or expense including attorney's fees, by reason of the liability imposed by law upon the County, except in cases of its sole negligence, for damage because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of the County, its employees or agents or any other person.

Prior to the commencement of the term of the lease, Tenant shall procure and maintain at his own expense a comprehensive general liability policy with a limit not less than \$300,000.00 combined single limit per occurrence for bodily injury and property damage.

All insurance required by this agreement shall be maintained with insurance underwriters authorized to do business in the State of New York satisfactory to Landlord. All policies shall name the County of Suffolk as additional insured. Tenant shall furnish Landlord with a Certificate of Insurance from the insurer showing such insurance to be in full force and effect during the entire term of this lease.

Said policies or certificates shall contain a provision that written notice of cancellation or of any material change in said policy by the insurer shall be delivered to Landlord thirty (30) days in advance of the effective date thereof.

The risk of loss or destruction from any peril to the furniture, fixtures, equipment or other personal property of the Tenant while on the said premises shall be borne by the Tenant. It is further understood that the Tenant waives any right to subrogation against the Landlord for loss or destruction or from any peril to the furniture, fixtures, equipment or other personal property of the Tenant while on the said premises except in cases due to any active or passive negligence of the County, its employees, officers and agents.

The Landlord shall not be obligated to maintain insurance for loss from fire or other peril causing damage or destruction to the real property of the Landlord or to rebuild in the event of a partial or complete loss at the premises. In the event of such a loss, lease shall terminate unless Tenant shall promptly restore premises. Rent shall in any even abate for the period premises are uninhabitable. Tenant may at its option obtain fire and other peril insurance for said premises. Such insurance shall name Landlord as an additional insured and shall contain a waiver of subrogation against Landlord.

In the event that any of the insurance required by this agreement ceases to be in full force and effect, the Tenant agrees to cease all operations covered by the terms of this Lease.

XIX. TERMINATION OF LEASE. This lease shall terminate at the end of the full term hereof and Tenant shall have no further right or interest in any of the ground improvements hereby demised.

The Landlord shall have the right to terminate this agreement in its entirety immediately upon the happening of any of the following events:

1. Filing by or the final adjudication against the Tenant of any petition in bankruptcy, or in the final adjudication of any petition for the appointment of a receiver or trustee for the assets or business of the Tenant;
2. The making by the Tenant of any general assignment for the benefit of creditors;
3. The occurrence of any act which operated to deprive the Tenant permanently of the rights, powers and privileges necessary for the proper conduct and operation of its business granted herein;
4. The abandonment and discontinuance of the operation of the Tenant;
5. The failure by the Tenant to perform, keep and observe any of the terms, covenants and conditions herein contained on the part of the Tenant to be performed, kept or observed after the expiration of thirty (30) days from the date written notice has been given to the Tenant by the Landlord to correct such default or breach.
6. The failure of the Tenant to pay the whole or any part of the amounts agreed upon hereunder for a period of ten (10) days after the time such payments become due.

7. The failure of the Tenant to maintain all required insurance and to furnish evidence of same within ten days of written demand by the Landlord.

In the event of such termination, the Landlord shall have the right at once and without further notice to the Tenant, to eject, oust, remove or expel the Tenant and its business, by force or otherwise, and with or without legal process to expel, oust and remove any and all goods and chattels belonging to the Tenant that may be found within or upon the Airport, without being liable to prosecution or to any claim for damages therefor. Upon such termination by the Landlord, all rights, powers, privileges of the Tenant hereunder will cease, and the Tenant shall immediately vacate any space occupied by it on the Airport and shall make no claim of any kind whatsoever against the Landlord, its agents or representatives, by reason of such termination or any act incident thereto.

The exercise of the remedy herein provided shall be cumulative and shall in no way affect any other remedy available to the Landlord.

The acceptance of charges and fees by the Landlord for any period or periods after a default in the performance of any of the terms, covenants and conditions herein contained to be performed, kept and observed by the Tenant, shall not be deemed a waiver of any rights on the part of the Landlord to terminate this agreement for failure by the Tenant so to perform, keep or observe any of the terms, covenants or conditions hereof to be performed, kept and observed.

Failure of Landlord to declare this lease terminated upon the default of Tenant for any of the reasons set out shall not operate to bar or destroy the right of Landlord to cancel this lease by reason of any subsequent violation of the terms hereof.

Any rental due hereunder shall be payable to said date of termination.

XX. DISCLOSURE AFFIDAVIT. It is agreed to between the parties hereto that the Tenant shall execute a disclosure affidavit in accordance with the requirements of the Landlord, County of Suffolk, indicating the interest of any nature or form whether oral or written held by any individual, partnership, firm or corporation in the demised premises, which affidavit is annexed hereto and made a part hereof, and further, said Tenant agrees that in the event of a substantial change or ownership of the Tenant, a new disclosure affidavit, or any revisions thereof, shall be submitted in accordance with the requirements of the County of Suffolk and filed with the County not later than five (5) days from the transfer of title. Failure to supply such disclosure affidavit shall be a material breach of this lease.

XXI. BROKER. The parties agree that no broker brought about this transaction.

XXII. ASSIGNMENT OF LEASE OR SUBLEASE. The Tenant shall not at any time, without the consent of the Suffolk County Executive in writing, assign, sublease, or transfer this agreement, or any part thereof, or any right, power or privilege hereunder. An assignment shall be deemed to include any consolidation, merger, or transfer of controlling interest of tenant's business entity under this lease.

XXIII. SUSPENSION OF LEASE. During the time of war or national emergency, Landlord shall have the right to lease the area or any part thereof to the United States Government for military use. If any such lease is executed, any provision of this instrument which is inconsistent with the provisions of the lease to the Government shall be suspended and the lease shall immediately terminate.

XXIV. GENERAL PROVISIONS.

A. Attorney's Fees. In any action brought by Landlord for the enforcement of the obligations of Tenant, Landlord shall be entitled to recover interest and reasonable attorney's fees.

B. Subordination of Lease. This lease shall be subordinate to the provisions of any existing or future agreement between Landlord and the United States relative to the operation & maintenance of the Airport, the execution of which has been or may be required as a condition precedent to the expenditure of federal funds for the development of the Airport. Should the effect of such agreement with the United State Government be to take any of the property under lease or substantially destroy the commercial value of such improvements, Landlord shall terminate this lease.

C. Federal, State and Local Law. The Tenant shall comply at its own cost and expense, with all federal, state, county and town statutes, local laws, ordinances, rules or regulations, now or hereinafter in force, which may be applicable to the operation of its business at the Airport, including obtaining and paying for all licenses and permits necessary for the operation thereof, and payment of all fees and charges and taxes (whether real property or otherwise) assessed under state, federal, county or local statutes or ordinances, insofar as they are applicable thereto.

D. Common Usage. The Tenant shall have the right, in common with others authorized so to do, subject to and in accordance with the laws of the United States of America, the State of New York, and the County of Suffolk, to use the common areas of the Airport, including roadways, flood lights, signals and other convenience of the Landlord.

- E. Liens. The Tenant shall not and will not suffer or permit during the term hereby granted, or any renewals thereof, any mechanics' liens or other liens for work, labor, services or materials, to attach to the premises hereby demised or to any portion thereof or any improvements to be erected upon the same or any portion thereof, or to any repairs to be made thereon, and whenever and as often, if ever, as any such lien or liens shall be filed or shall attach, the Tenant, within thirty (30) days after written notice of the filing of any such lien, shall either pay the same or procure the discharge thereof, by giving security or in such other manner as is or may be required by law.

If any such lien or encumbrance or any judgment in connection with the same is filed or docketed against said premises and if the Tenant shall not within thirty (30) days after notice of such filing or docketing, either pay the same or procure the discharge thereof, as above provided, the Landlord may pay such lien, encumbrance or judgment, or discharge the same by deposit or otherwise, as provided by law. All sums expended by the Landlord in paying or discharging such lien, encumbrance or judgment, together with interest, shall be deemed to be additional rental hereby reserved.

F. Future Acts of Legislature. The Tenant further agrees to be bound by any and all future recommendations, policies, local laws, resolutions and requirements as demanded, passed and promulgated by the County Legislature or any municipal or federal authorities which provide for the growth of the Airport in general, advance the progress of the County and Airport and would reasonably better the interests of the County of Suffolk, provided that if such action shall materially interfere for a period of more than thirty (30) days with the operation of the Tenant, appropriate adjustment in the rent will be made and if no agreement can be reached on such adjustment, the same shall be submitted to arbitration in accordance with the rules of the American Arbitration Association.

G. Taxes. Tenant agrees to pay as additional rent within ten (10) days of receipt of notice from Landlord any taxes levied against Tenant's occupancy or use of the demised premises or any improvements placed thereon as a result of Tenant's occupancy or use for other than public purposes. Any challenge to any assessment or tax shall be the obligation of the Tenant and the Landlord's responsibility shall be limited to sending to the Tenant copies of any notice of assessment or tax bill actually received by the Landlord. In the event any tax paid by Tenant shall be refunded to Landlord, the same shall be credited against rent next due.

XXV. LOCAL LAW No. 32-1980. The Tenant represents and warrants that he has not offered or given any gratuity to any official, employee or agent of Suffolk County, New York State, or of any political party, with the purpose or intent of securing favorable treatment with respect to the awarding, making or amendment of this agreement, or the making of any determination with respect to the performance of this agreement and that said Tenant has read and is familiar with the provisions of this Local Law No. 32-1980.

XXVI. LATE PAYMENT FEE. In the event that the rental payment is not made by the 10th day after the payment is deemed due under the provisions of this Lease, the Tenant agrees to pay an additional late fee penalty payment equal to five (5) percent of the monthly rental payment due.

XXVII. NOTICE OF INTENT TO RENEW. The Tenant shall provide a written notification to the Landlord of intention to renew this Lease no less than one hundred and eighty (180) days prior to the termination of the Lease. Such notification is for planning purposes only and shall not be binding on either party.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

APPROVED AS TO FORM
NOT REVIEWED AS TO EXECUTION

COUNTY OF SUFFOLK

By: _____
E. Thomas Boyle
Suffolk County Attorney

By: _____
Robert A. Kurtter
Deputy County Executive Finance

Date signed: _____

Date signed: _____

DEPARTMENT OF PUBLIC WORKS

#13(TENANT NAME)

By: _____
Joseph P. Hurley, P.E.
Commissioner

By: _____
(Title)

Date signed: _____

Date signed: _____

SEAL:

NOTE: THE FOLLOWING REQUIREMENTS APPLY TO ALL AVIATION LEASES

COUNTY REQUIREMENTS

LEASE CLAUSES

XVIII. INDEMNITY AND INSURANCE. Tenant agrees to indemnify and hold harmless the County of Suffolk, the County's consultant (if any), its agents, employees, or any other person against loss or expense including attorney's fees, by reason of the liability imposed by law upon the County, except in cases of its sole negligence, for damage because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of the County, its employees or agents or any other person.

Prior to the commencement of the term of the lease, Tenant shall procure and maintain at his own expense a comprehensive Airport Liability Policy including Hangerkeepers and Products & Completed Operations, with a limit not less than \$1 Million Combined Single Limit per occurrence for bodily injury and property damage & an Aircraft Liability Policy on all aircraft owned and operated by the Tenant, of All Risk Hull & Liability Insurance with a limit not less than \$1 Million Combined Single Limit per occurrence for bodily injury & property damage, including passengers at \$100,000. per passenger seat. With respect to Hull Insurance, Tenant must secure a Waiver of Subrogation for the benefit of the County from the Hull Underwriters and Tenant hereby waives subrogation. Tenant may elect not to carry Hull Insurance, but by that election, Tenant agrees to waive all rights of recovery against the County for damage to any and all owned or operated aircraft.

XXIX. ADDITIONAL PAYMENT TO THE LANDLORD. In addition to the rental as herein set forth, the Tenant agrees to pay the Landlord 2% of any and all gross sales sold in the course of business at the facility during the term of this lease, except in the sale of new and used aircraft, which will be ½% of Gross Sales; when acting as a broker in the sale of new or used aircraft, the Tenant shall pay to the Landlord 2% of its brokerage commission instead of ½% of the Gross Receipts from the sale.

Provisions relating to payments under this clause:

Gross Sales:

1. The term "gross Sales" shall consist of all revenue received or realized by or accruing to the lessee from all sales, for cash or credit, for services, products or other merchandise made pursuant to the privileges authorized by this agreement.

2. All revenue shall be deemed to be received at the time of the determination of the amount due the lessee for each transaction, whether for cash or credit, and not at the time of billing or payment.

3. Any taxes imposed by law which are separately stated and paid for by the customer, and which are directly payable to the taxing authority by the lessee, shall be excluded from the receipts of the lessee for the computation of the percentage assessment.

4. The payments as herein provided shall be in lieu of any landing fees.

Time of Payment:

Rentals shall be paid monthly in advance of the first day of each month, in a sum equalled to 1/12th of the annual rental due hereunder. Percentage rentals shall be due and payable on the tenth day of each month for the preceeding calendar month of operation.

Records of Lessee:

With respect to business done by it hereunder, lessee shall keep true and accurate records, books, and data, which shall show all the gross sales, as defined hereinabove, upon and with said airport.

With the payment of monthly percentage rentals on the tenth day of the month as hereinabove provided, lessee shall submit to lessor a detailed statement showing gross sales from the operation of the business hereunder for the preceeding calendar month. These reports shall show reasonable detail and breakdown as may be required by lessor.

Within 30 days after the end of each calendar year during the term of this lease or any extension thereof, lessee shall submit to lessor a detailed statement of gross sales reflecting adjusted gross sales for the preceeding year of operation. Such statement shall be certified by an independent certified public accountant and shall be accompanied by lessee's payment covering any deficiency between payment made during the previous year of operation and payment due for such year of operation. In lieu of accountant's report, a copy of the New York State Sales Tax Return may be submitted.

Audit:

For the purpose of determining accuracy of reporting gross sales, lessor may make a spot test audit and base its findings for the entire period upon such spot test; provided, however, that such a spot test shall include at least 25% of the total time of the period being audited.

In addition, lessor shall have the right during any calendar year of this lease to authorize an audit of lessee's records pertaining to its operation at the airport. Such audit shall be undertaken

by a reputable firm of independent certified accountants, satisfactory to lessor or by County personnel so authorized. The cost of such audit shall be borne by lessor, unless the results of such audit reveal a discrepancy of more than 5% between the gross sales reported in accordance with this paragraph one and the gross sales as determined by audit for any 12 month period. In case of such discrepancy, the full cost of the audit shall be borne by the lessee.

XXVIII. MANDATORY FEDERAL CLAUSES. Attached hereto and made a part hereof as Exhibit "A" are the Mandatory Lease Clauses as required by the Federal Government, which clauses are made a part of this Lease as if set forth herein at length.

FAA REQUIREMENTS

LEASE CLAUSES

- I Lessee agrees to operate the premises leased for the use and benefit of the public.
- (1) To furnish good, prompt and efficient services adequate to meet all the demands for its service at the airport;
 - (2) To furnish said service on a fair, equal and non-discriminatory basis to all users thereof; and
 - (3) To charge fair, reasonable and non-discriminatory prices for each unit of sale or service, provided that the Lessee may be allowed to make reasonable and non-discriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- II The Lessee, its agents and employees, will not discriminate against any person or class of persons by reason of race, color, creed or national origin in providing any services or in the use of any of its facilities provided for the public, in any manner prohibited by Part 15 of the Federal Aviation Regulations.
- The Lessee further agrees to comply with such enforcement procedures as the United States might demand that the Lessor take in order to comply with the Sponsor's Assurances.
- III It is clearly understood by the Lessee that no right or privilege has been granted which would operate to prevent any person, firm or corporation operating aircraft on the airport from performing any services on its own aircraft with its own regular employees (including, but not limited to, maintenance and repair) that it may choose to perform.
- IV It is understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right.

- V_ Lessor reserves the right to further develop or improve the landing area of the airport as it sees fit, regardless of the desires or view of the Lessee, and without interference or hindrance.
- VI Lessor reserved the right, but shall not be obligated to Lessee, to maintain and keep in repair the landing area of the airport and all publicly owned facilities of the airport, together with the right to direct and control all activities of Lessee in this regard.
- VII During the time of war or national emergency, Lessor shall have the right to lease the landing area or any part thereof to the United States Government for military or naval use, and, if such lease is executed, the provisions of this instrument insofar as they are inconsistent with the provisions of the lease to the Government shall be suspended.
- VIII Lessor reserves the right to take any action it considers necessary to protect the aerial approaches of the airport against obstruction, together with the right to prevent Lessee from erecting or permitting to be erected, any building or other structure on or adjacent to the airport which, in the opinion of the Lessor, would limit the usefulness of the airport or constitutes a hazard to aircraft.
- IX This lease shall be subordinate to the provisions of any existing or future agreement between Lessor and the United States, relative to the operation or maintenance of the airport, the execution of which has been or may be required as a condition precedent to the expenditure of Federal funds for the development of the airport.

APPENDIX 3

Tenants 1990	Term yrs.	Bldg. #	Sq. Ft.	EMPL Activity	Renewal Date
1 A.H.R.C.	25	own	3 acres	50 Workshop	2-28-91
2 A & M Electric	3	140	2025.00	6 Radio Repair	Pending 8/90
3 Annair of Suffolk	3	1150	1653.00	1 Awning Manuf.	Pending 8/90
4 Bacner, T.	3	1145	1637.00	2 Artist	7-14-90
5 Brown, Dayton, T.	1	2003	1947.00	Testing Site rocket igniters	Tabled 6/90
6 Brown, R.J.	5	134	2054.00	1 Machine Shop/Storage	14-30-90
7 Bulle/ Wings	10	65	11690.00	5 Restaurant & Club	6-30-92
		66			
			2 acres		
8 Cowan, T.	3	337	713.00	1 Windmill Design	Pending 8/90
9 Dedalos	5	309	2520.00	1 Aviation School	Pending 7/90
10 Excelsior Plumbing	5	157	3060.00	14 Contractor	10-1-90
11 Homan Boatyard	3	1289	1098.00	Storage of Dredge Equipment	Pending 8/90
		1295			
			3 acres		
12 H.T.L.A.	5	167	1020.00	1 Writer's Office	13-31-90
13 Kubla Crafts	3	90	7600.00	13 Distribution	3-31-91
14 L.I. Early Flyers	no.	121	2175.00	Aviation Museum	monthly
	30		1.5 acres		
15 L.I. Plumbing	3	104	2190.00	Appliance Storage	Pending 6/90
16 Malloy Air East	10	312	16654.00	7 Aviation FBO	19-30-89
		318	4311.00	Fuel Service	
		335	2136.00		
		344	27941.00		
		1220	6000.00		
			5.6 acres	tie down	
		332	2266.00		3-14-92
17 Mike's Music	3	169	1198.00	1 Equipment rental	Dropped
18 New Generation	3	35	448.00	5 Socked Delicacies Storage	5-31-91 Pending 6/90
		36	2140.00		
19 N.Y.A.N.G.	5	37 bldgs.		285 Rescue & Recovery	9-30-91
			75 acres	853 Reservists	4-1-2021
20 Oldham Constr.	30	T hanger	1.25 acres	Aircraft Storage	11-1-90
21 Patriot Security	20		11917.00	250 Security, Storage	5-31-93
22 Perry's Flying	3	128	2266.00	1 Flight School	Pending 6/90
			.4 acres		
	30	hanger	3000		6-30-92
23 Re-Engineer	3	110	1140.00	2 Engine Cycl. Head Rebuild	3-31-91
24 Relay Matic	3	39	1256.00	3 Elec. Relay Mfg.	Pending 6/90
25 Roday, S.	5	150	2040.00	2 Artist & Tool Dist.	Pending 6/90
	5	11	6506.00		
26 Sheanhan Coas.	3	1 Off. D & F	1679.00	7 Advertising & Bus. Publications	Tabled 6/90
		F	192.00		
27 Sky East	5	308	8776.00	2 Air Taxi, Maint. Tie downs	1-31-91
			2 acres	tie down	
28 Sky Harbor cafe	10	335 sub-tenant of #16		2 Terminal Coffee Shop	19-28-89
29 Sky Sailors	3	313	1257.00	2 Aviation Glider School	Pending 8/90
30 Southampton Town	3	76	2914.00	8 Fire marshal Storage of Boats & Marine Parts	Pending 6/90 9-30-90
31 South Shore Boatyard	3	155	2450.00	Storage of auto parts	3-31-91
	3		1.5 acres	Taxi Service	Pending 6/90
32 Westhampton Auto	3	1179	2036.00	4 Tower Controllers	
33 Westhampton Taxi	3	335	300.00	3 Security Guards 4 County Employees	

AIRPORT
TENANTS
(as of
8/90)