May 1988


Technical Feasibility of Joint Use Scott AFB, Selfridge AGB, and El Toro MCAS
This report was prepared in response to the FY 1988 Appropriations Conferees direction in House Report 100-498. The report concludes that joint civil-military use is feasible at Scott AFB, Selfridge AGB, and El Toro MCAS.
The Honorable William Lehman  
Chairman, Subcommittee on Transportation  
Committee on Appropriations  
House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

I am pleased to transmit to you a report on the technical feasibility of joint civil/military use of Scott Air Force Base (AFB), Selfridge Air Guard Base (AGB), and El Toro Marine Corps Air Station (MCAS). This report is in response to the FY 1988 Appropriations Conferees direction in House Report 100-498.

We determined that joint use is technically feasible at all three locations when evaluated for those aspects of civil aviation in which we have expertise. However, there are also military considerations, which are summarized in the final section of this report. The military's concerns must be resolved, because joint use can be accomplished only with the sponsorship of the State or a local agency and the cooperation of the military.

A State and county sponsored proposal for joint use of Scott AFB is already well advanced and could be implemented within the next 3 to 5 years. This would enable the St. Louis region to meet the aeronautical demand that is expected well into the 21st century. Joint use offers a practical solution to congestion in the St. Louis air traffic hub, which otherwise threatens to become a bottleneck, constraining the flow of air traffic across the Nation.

Planning is in the early stages for public airport facilities in Macomb County, Michigan. Joint use of Selfridge AGB will be studied in detail. We recommend that particular attention be given to limited joint use of Selfridge by air carrier, commuter, and corporate aircraft, with other civil aircraft being accommodated at a publicly owned airport. The combination of the acquisition or development of a publicly owned general aviation airport supplemented by limited joint use of Selfridge appears to be an appropriate and affordable answer to air transportation needs in the area northeast of Detroit.

Interest in joint use of El Toro MCAS offers the Federal Government an opportunity to stimulate local, regional, and State officials toward the partial solution of a serious problem that threatens to develop into a national crisis. Passenger demand will more than double in the Los Angeles region over the next 25 years. There are plans to expand existing airports, but they are likely to fall short of what is required. Unless timely action is
taken, air access to the region will become a scarce and expensive commodity, seriously impeding air transportation and economic interaction with the rest of the Nation. El Toro MCAS is well located to accommodate commercial aviation; however, joint use would have at least two shortcomings from a national viewpoint. First, because of Marine Corps activity, only about one-third of the capacity of the base could be used by civil aircraft; therefore, a large part of the air passenger demand would be left unmet. Second, the Marine Corps believes that joint use would degrade the tactical training mission assigned to El Toro. We recommend that an in-depth study of alternatives to meet air transportation demand be conducted by the State of California, Orange County, and other appropriate agencies, in close coordination with the Federal Aviation Administration (FAA) and the Marine Corps.

The FAA is ready to contribute advice and assistance to public agencies that intend to sponsor joint use agreements. Grants may be issued under the Airport Improvement Program (AIP) to plan and implement civil development at military airfields. The procedure for evaluating joint use applications is described in the Department of Transportation/Department of Defense Plan for Joint Use of Military Airfields, presented to Congress in 1984. We are very interested in participating in negotiations for joint use, in order to ensure that nothing in the agreement precludes the sponsor from being eligible for AIP grants and complying with necessary environmental, safety, and security requirements before AIP grants may be issued.

We appreciate having had the opportunity to prepare the report and look forward to helping to implement the recommendations.

Identical letters and reports are being provided to Chairmen Lautenberg and Stennis, Senator D'Amato, and Representative Coughlin.

Sincerely,

T. Allan McArtor
Administrator

Enclosures
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INTRODUCTION

This report was prepared in response to the FY 1988 Appropriations Conferences direction in House Report 100-498, which included the following statement:

Joint Civil-Military Use of Airfields. - The conferees direct the Federal Aviation Administration to study the technical feasibility of joint civil-military aviation use at El Toro Marine Base, California; Selfridge Field, Michigan; and Scott Air Force Base, Illinois. This study should consider airfield, terminal, and access issues, and any previous studies conducted by Federal, State, regional or local authorities that evaluate the short- and long-term importance of using these facilities to alleviate the shortage of civil airport and airspace capacity. The FAA shall report to the House and Senate Committees on Appropriations not later than March 31, 1988, and, if joint-use is determined to be technically feasible, the FAA shall recommend those steps that are necessary to implement joint-use agreements.

The report was prepared by the FAA with the cooperation of the Department of Defense. FAA specialists in airport planning and air traffic control reviewed prior studies and visited each airfield, meeting with local officials, transportation planners, and representatives of the military. The FAA assessed the civil demand at each airfield and described a possible approach to meeting that demand through joint use. Various aspects were evaluated, including air traffic control, availability of a site for civil development on or adjacent to the airfield, and adequacy of ground access. The FAA analysis did not include an assessment of environmental impact, which must be prepared by the Department of Defense prior to any joint use agreement.

The FAA found that joint use is technically feasible at all three locations. This indicates that joint use could be accomplished if it were sponsored by an appropriate public agency and were agreeable to the Department of Defense. However, the military have concerns, as indicated in their comments which are contained in the final section of this report. The FAA has recommended that potential sponsors prepare plans to respond to those concerns and provide a foundation for eventual joint use agreements.
REVIEW OF JOINT USE POTENTIAL

SCOTT AIR FORCE BASE

BELLEVILLE, ILLINOIS
Background

Lambert-St. Louis International Airport is the twelfth most active airport in the U.S. in terms of passenger enplanements. Total enplanements were 10.1 million in 1986 and are forecast to be 17.6 million in the year 2000. A large number of those passengers pass through St. Louis to connect with other flights, because Lambert is an important airline hub, or transfer point.

Lambert is the only major air carrier airport in the St. Louis area and it has been substantially improved and modernized in recent years. However, the runways are congested, particularly during adverse weather conditions, and the situation will worsen as traffic increases unless improvements to the airport keep pace with the growth in demand. The possibility of constructing a major new runway to increase capacity is limited, because of the scarcity of undeveloped land. The shortfall in runway capacity could eventually lead to severe air traffic delays, impeding air transportation to and from St. Louis and rippling out to affect other airports in the national system.

Most cities with passenger levels equal to or greater than St. Louis are served by more than one air carrier airport. Thus, a possible solution would be to designate a second air carrier airport to serve the St. Louis area. This could be an existing general aviation or military airport, or an entirely new airport. The second airport would have to meet certain criteria. It would supplement, not replace, Lambert. Lambert’s continued operation is essential in order to sustain the economy of the surrounding area and amortize the cost of recent renovations and improvements to the airport. Air carrier facilities at the second airport would be developed in stages, in order to keep pace with demand without creating an uneconomic surplus of airport facilities. The second airport should have the potential for eventual expansion to independent parallel runways in order to meet the long term needs of the area.

The State of Illinois has undertaken a major study of how best to accommodate the excess demand. The study considered alternatives and is now focusing on the potential of Scott AFB to serve the demand generated on the east side of the St. Louis metropolitan area.

Location of Scott AFB

Scott Air Force Base (AFB) is located on 3,800 acres in St. Clair County, Illinois, approximately 5 miles east of Belleville, Illinois, and 20 miles east of downtown St. Louis, Missouri.

Facilities

The airfield facilities at Scott AFB consist of a single runway oriented in a northwest/southeast (14/32) direction. It is 7,061 feet long and 150 feet wide with hardened overruns at each end that provide a total landing distance of 8,061 feet.

Traffic control is provided by Air Force operated tower and approach control facilities and the FAA’s Kansas City ARTCC. Scott AFB is located outside the St. Louis TCA.
Approach aids include an ILS, TACAN, and Precision Approach Radar to Runways 14 and 32 and an NDB to Runway 32.

Prevailing winds favor Runway 32 as the active runway.

Missions

Scott AFB plays a major role as a headquarters facility. Located at Scott AFB are: Military Airlift Command which is responsible for worldwide DOD airlift, rescue, weather, and audiovisual services; Air Force Communications Command which is responsible for USAF communications and automated data processing; and a new unified command, US Transportation Command, which is responsible for integrating DOD land, sea, and air transportation.

The airfield also supports a variety of flying missions. The 375th Aeromedical Evacuation Wing's C-9s perform stateside and near off-shore medical evacuation of DOD personnel and dependents. Six of the 375th's C-21s are dedicated to stateside operational support airlift. Those flying units generally operate outside the Scott AFB area. The remaining four C-21s and three C-12s are dedicated to centralized training for all Air Force operational support airlift. Most of this training mission is flown in the local area. The 1467th Facility Checking Squadron at Scott AFB has four C-140s. This unit checks Air Force navigational aids and controllers within the continental United States. Most of their mission is performed outside of the local Scott AFB area.

The Army Reserve also has a flying mission at Scott AFB. The 7th Battalion, 158th Aviation Regiment has 42 helicopters and one fixed wing aircraft. These aircraft fly seven days a week (day/night), primarily in the local area. The Army conducts peacetime proficiency training for its combat mission of transporting personnel and equipment in visual or instrument conditions.

Based Aircraft

The following units and their aircraft are assigned to Scott AFB:

<table>
<thead>
<tr>
<th>Active Air Force</th>
<th>Aircraft Type &amp; No.</th>
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<tr>
<td>375th Aeromedical Evacuation Wing</td>
<td>C-9A # 11</td>
</tr>
<tr>
<td></td>
<td>C-21A# 10</td>
</tr>
<tr>
<td></td>
<td>C-12F# 3</td>
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<tr>
<td>1467th Facility Checking Squadron</td>
<td>C-140A# 4</td>
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<thead>
<tr>
<th>US Army Reserve</th>
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<tr>
<td>7th Battalion/158th Aviation Regiment</td>
<td>UH-60 31</td>
</tr>
<tr>
<td></td>
<td>EH-60 3</td>
</tr>
<tr>
<td></td>
<td>CH-47 1</td>
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<td>OH-58 2</td>
</tr>
<tr>
<td></td>
<td>AH-1 1</td>
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<td></td>
<td>U-8F# 1</td>
</tr>
<tr>
<td></td>
<td>UH-1 4</td>
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<td></td>
<td>Total 71</td>
</tr>
</tbody>
</table>

* Fixed Wing Aircraft (others are helicopters)
Civil Air Demand

The prospect of severe congestion at Lambert-St. Louis International Airport has led the State of Illinois and St. Clair County, with financial aid from the FAA, to undertake a major study of how best to accommodate excess demand for air transportation. The study focuses on the seven county area on the east side of the St. Louis metropolitan area. The population of this eastern portion of the St. Louis region is capable of sustaining air service independent of Lambert-St. Louis.

In addition to increased passenger service, there is also a potential demand for a small package express service facility in the St. Louis area. An additional midwestern hub is likely to be needed for this rapidly expanding national industry. Air express hubs have unique requirements, including the ability to accommodate large numbers of early morning and late night flights and the availability of a labor pool to sort packages at night. Conventional heavy air freight and cargo service is also possible, but the market has not been well defined yet, nor have the environmental consequences of late night and early morning flights been analyzed.

Air traffic demand would probably develop gradually at Scott AFB. Initial service would probably be in the form of frequent short haul flights to major cities, particularly those that are air transportation hubs, such as Chicago, Memphis, Pittsburgh, and Kansas City. Service could be expanded gradually to supplement the service at Lambert and to keep pace with economic development in the area around Scott AFB. Air cargo flights could also be accommodated. Over the long range, Scott AFB and Lambert could develop into a successful multi-airport system, comparable to JFK International and La Guardia Airport or Dulles International and Washington National Airports.

Prior Studies

St. Louis' airport requirements received a tremendous amount of attention in the early 1970's. A number of studies centered on the issue of whether a major new air carrier airport should be built at a site in Illinois at Columbia-Waterloo, about 18 miles southeast of downtown St. Louis. Opponents felt that such a measure was premature and argued that resources could be better used to expand Lambert. At the time, Scott AFB was not considered to be available for joint use. A decision was eventually made to defer development of a new airport and proceed with major improvements to Lambert.

The FAA issued a grant of $900,000 in September 1986 to the Illinois Department of Transportation and St. Clair County for a master plan study for joint civil/military use of Scott AFB. The study is being done by a consulting firm. Phase 1 of the study was completed in August 1987 and recommended use of Scott AFB as the best alternative for providing commercial air service to the five Illinois and two Missouri counties in the study area. Phase 2 is underway to evaluate alternative developments at Scott AFB. The study is expected to be completed in June 1988.
Air Traffic

The airspace in the area of Scott AFB is heavily used because of its proximity to Lambert-St. Louis Airport, 25 miles to the west. The Air Force already encounters some air traffic delays and procedures that are less than optimum for operations at Scott AFB. An airspace feasibility study made by the FAA in May 1987 showed that the proposed joint use could have substantial operational effects that would require major changes in airspace and air traffic control procedures for the St. Louis area. Some of these changes would be warranted, even without joint use, in order to make more efficient use of airspace and expedite the movement of aircraft in and out of Scott AFB. FAA and Air Force representatives are working together to determine specific changes to improve the air traffic situation in the St. Louis area. These discussions have not yet addressed the issue of possible joint use. The FAA, which would be primarily responsible for changes to improve the efficiency of airspace usage around Scott AFB, believes that they are feasible. However, changes can be accomplished only with the mutual cooperation of the Air Force and the FAA.

Attitude of Military Personnel at Scott AFB

The Air Force has been cooperating in the master plan study but will make no commitment on joint use until after reviewing a detailed proposal and determining the effect on the military mission, Air Force residents on the base, and the environment.

Potential Sponsor

No recommendations have been made yet by the consultant with regard to local sponsorship of the civil airport facilities. The State of Illinois is a potential sponsor, with the financial and technical qualifications to develop a major joint use facility. St. Clair County is also a potential sponsor. The State and County cosponsored the master plan study and could cosponsor joint use.

Community Attitude

The local community and residents are for the most part cautiously observing the progress of the master plan study and withholding their judgments until after review and meetings on the draft final report. As in almost all major airport development proposals, there have been objections from some local citizens. The opposition has formed a group known as COPE (Conserve Our Present Environment).

The St. Clair County Board has supported the study and has contributed funds to be used for the study. The Chairman of the County Board is also Chairman of a Policy Committee that was established to oversee the conduct of the study. Other members of the Policy Committee represent the area municipalities, Illinois DOT, FAA, and US Air Force.
Proposed Civil Development

Joint use would eventually require substantial land acquisition and improvement to Scott AFB. The consultant has not made final recommendations yet, but the development is likely to include a new parallel 10,000 foot long runway and a civil terminal area adjacent to the northeast side of Scott AFB, with access from I-64. The new runway would be used primarily by civil aircraft, but its length could also accommodate most military aircraft.

The civil development would probably be phased, with the timing and extent of development depending on how rapidly civil demand increases, the degree to which temporary civil use of military facilities can be permitted, and the availability of funds for the civil development, which is expected to have a total cost in the area of $250 million.

Environmental Impact

A thorough environmental analysis is being conducted as part of the master plan study. It will address environmental concerns and issues such as noise, wetlands, floodplains, farmlands, and measures to mitigate adverse effects.

The Air Force, upon receipt of a definitive description of proposed action and alternatives, will prepare an environmental impact statement for its decision-making.

Recommended Actions

The FAA considers joint use of Scott AFB to be technically feasible from the viewpoint of civil aviation. The current master plan study will provide a foundation for a joint use agreement.

The next major step to be taken is for the State of Illinois to submit a detailed joint use proposal to the Air Force, fully describing the proposed civil use of Scott AFB, the method of implementation, and alternatives. The Air Force can then review the proposal and, if it is acceptable in principle, proceed as the lead agency in preparing an environmental impact statement (EIS). The cost of the EIS would be borne by the civil sponsor of joint use.

Following agreement in principle based on the absence of overriding mission impacts, and the satisfactory completion of the Air Force environmental impact statement, a joint use agreement would be executed and land acquisition and construction begun. It is estimated that civil operations could be initiated in 3 to 5 years.
REVIEW OF JOINT USE POTENTIAL

SELFRIJGE AIR GUARD BASE

MT. CLEMENS, MICHIGAN
Background

Macomb County is located in the northeastern part of the Detroit metropolitan area. The county is the third most populous of Michigan's 83 counties and one of the most rapidly growing. Macomb County has experienced economic revitalization since 1983, with a diversification of employment into areas other than manufacturing. As a result, the county accounted for almost 13 percent of total construction activity in Michigan in 1986.

Macomb County is one of the few counties in Michigan without a publicly owned civil airport. Three privately owned airports serve general aviation, while air carrier service is provided by Detroit Metropolitan Wayne County Airport, about 30 miles to the southwest on the other side of Detroit.

Macomb County began an Aviation Feasibility Study in 1986 to examine the county's need for a public airport. The initial phase of the study concluded that the existing privately-owned airports will not satisfy the county's needs. The study is now considering alternatives for providing public airport facilities. The alternatives include the purchase and improvement of a privately owned airport, the development of a new site for a public airport, and/or joint use of Selfridge AGB.

Location

Selfridge Air Guard Base is located in Macomb County 25 miles northeast of Detroit and 1/2 mile east of Mt. Clemens adjacent to Lake St. Clair. The base encompasses almost 3,100 acres of fee owned land and over 500 acres of easements and leased land.

Facilities

Selfridge AGB has a single instrument runway, a secondary runway and a closed runway.

The north/south instrument runway 1-19, is 9,000 feet by 150 feet. Navigational and lighting aids serving the single instrument runway include an Airport Surveillance Radar (ASR), Precision Approach Radar (PAR), Tactical Air Navigation (TACAN), Instrument Landing System (ILS) (Runway 19 only), Precision Approach Path Indicator (PAPI), and Approach Lighting Systems (ALSF-1 for Runway 19, short approach lighting system (SALS) for Runway 1).

The secondary runway, 10-28, is 4,870 feet by 150 feet, but due to deteriorated pavement along the runway edges, only the center 60 feet is usable. No navigational or lighting aids serve the secondary runway. Due to its relatively short length and lack of appropriate lighting, the secondary runway is closed to jet aircraft (with a specific waiver for Selfridge AGB assigned C-9 aircraft to prevent exceeding cross wind limitations) and at night (with specific waivers for Selfridge AGB assigned C-130s for short field landing practice using portable runway edge lights and Selfridge AGB assigned helicopters). The secondary runway is used almost exclusively as a taxiway, assault landing (short field) area, and arm/ disarm last chance maintenance inspection site and is equipped with taxiway lighting only.
The closed runway, NE-SW, is 6,000 feet by 150 feet and is currently being used as hazardous cargo area, engine maintenance test area, navigational aid site, and ground training area for military and civilian vehicle operators.

Missions

A diverse group of flying missions is concentrated at the base.

127th Tactical Fighter Wing - Trains and maintains combat readiness to conduct tactical fighter missions during contingencies or wartime in the event of mobilization.

191st Fighter Interceptor Group - Trains and maintains combat readiness to conduct missions in air defense of the US and provide forces for air defense overseas land areas as required in the event of mobilization. It also maintains an air defense alert during peacetime (nonmobilized).

305th Aerospace Rescue and Recovery Squadron - Trains and maintains readiness to conduct combat rescue operations during contingencies and/or wartime in the event of mobilization. It also performs peacetime rescue and recovery activities when missions are within the unit's operating capability.

927th Tactical Airlift Group - Trains and maintains readiness in the airlift and airdrop movement of combat forces, their equipment, and sustaining material under contingency or wartime conditions.

Naval Air Facility Detroit - Provides support to assigned reserve force squadrons and the Marine Air Reserve Training Unit. The unit recruits and trains Naval reservists for mobilization assignment in the event of contingency or war.

Patrol Squadron 93 - Trains and maintains readiness to conduct antisubmarine warfare and patrol missions in the event of mobilization.

Fleet Logistics Support Squadron 62 - Provides logistic support to US Navy and Navy Reserve units.

70th Training Division - Provides air transportation for the 70th Division command group that will, upon mobilization, assume command and control of the Army Training Center, Fort Benning, Georgia.

123rd Army Reserve Command - Provides rotary and fixed wing aviation support for the 123rd Army Reserve Command Commander and staff.

354th Medical Detachment Air Ambulance - Trains Army Reserve personnel to perform combat aeromedical evacuation operations during contingencies or war, in the event of mobilization.

524th Army Security Agency - Provides continuous electronic warfare support to the 32nd Infantry Brigade using ground based and airborne platforms.
Coast Guard Air Station, Detroit - Provides assistance to persons and property in distress (search and rescue operations). It provides law enforcement in maritime regions and supports the Coast Guard aid to navigation mission.

NOTE: The Air Force has transferred certain areas to the US Army. Ownership of the property and facilities associated with flight operations has been retained by the Air National Guard while the remainder of the property and facilities has been transferred to the US Army.

**Based Aircraft**

The following flying units and their aircraft are assigned to Selfridge AGB:

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<tr>
<th>Aircraft Type &amp; No.</th>
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<tr>
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<td>C-130E*</td>
<td>HC-130*</td>
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<td>927th Tactical Airlift Group</td>
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<td>HC-130E*</td>
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* Fixed Wing Aircraft (Others are helicopters)

Another Army Reserve aviation unit with 35 UH-1 helicopters is programmed for Selfridge in the 1988/89 timeframe. Also, future projected Air Force conversions will result in an increase in flight operations and the F-4D aircraft will be replaced by F-16s.

**Civil Air Demand**

Detroit Metropolitan Wayne County Airport (DTW) is the primary air carrier airport in the Detroit Hub. In 1986, Detroit Metro enplaned 8.9 million passengers, or 99.8 percent of the total enplaned passengers in the Detroit Hub. By the year 2000, the number of passengers enplaned at the airport is expected to total nearly 16.5 million. In order to accommodate increasing passenger enplanements, Detroit Metropolitan Wayne County Airport will need about $400 million in improvements by the turn of the century.
Approximately 40 percent of the population of the Detroit metropolitan area lives in the northern tier of counties (St. Clair, Macomb, and Oakland counties). Macomb County, which accounts for 16 percent of the population in the Detroit metropolitan area, is about 30 miles from Detroit Metro. It is estimated that an air carrier airport in Macomb County could serve 362,000 air carrier passenger enplanements in 1988, increasing to 628,700 by the year 2007. This could be accommodated initially by nine air carrier jet departures and four commuter departures per day, with the frequency of flights doubling by the year 2007.

There are 474 general aviation aircraft owned by residents of the county, of which about 1/2 are based at existing private airports in the county. General aviation aircraft ownership is expected to increase 21 percent by the year 2007. General aviation aircraft operations are expected to increase 49 percent from 119,750 in 1987 to 177,942 by the year 2007.

Existing Civil Airports

There are three privately owned/public use airports in Macomb County; a fourth was recently closed.

None of the airports listed below can accommodate large corporate business aircraft or air carrier jet aircraft. There is no guarantee that privately owned airports will remain open and they are not considered reliable sources of airport capacity over the long range future.

Berz-Macomb Airport, Utica, Michigan
Ownership: Private
Based Aircraft: 85
Annual Operations: 55,450
Runways: 4/22 Asphalt @ 4,200' x 60' with MIRL
(This airport is a reliever for Detroit Metro and has received Federal aid)

Macomb Airport, New Hudson, Michigan
Ownership: Private
Based Aircraft: 32
Annual Operations: 5,170
Runways: 09/27 Asphalt @ 2,500' x 30' with LIRL
18/36 Gravel @ 1,400' x 30'

Romeo Airport, Romeo, Michigan
Ownership: Private
Based Aircraft: 82
Annual Operations: 21,830
Runways: 15/33 Asphalt @ 4,850' x 50'
18/36 Asphalt @ 4,170' x 50'
09/27 Asphalt @ 2,120' x 50' with LIRL
Prior Studies

Formal proposals for joint use were denied in 1970, 1972, and 1975. The 1975 proposal was rejected by the Air Force due to "the incompatibility of joint use with current and programmed military operations, limited potential for expanding the facilities, limitations imposed by a single operational runway, and environmental considerations."

In August 1986, Macomb County initiated an Aviation Feasibility Study funded with a planning grant from the FAA. The study is divided into four phases. The first phase was to determine the county's aviation needs and the adequacy of the existing airport facilities.

In November 1987, the county reaffirmed an earlier determination that aviation demand cannot be met with existing privately-owned airports. The county authorized the initiation of Phase II to evaluate other alternatives. The study will investigate three major alternatives:

1. Joint civil-military use of Selfridge AGB.
2. Purchase and expansion of one or more existing privately-owned airports with intent to expand one to a transport category airport.
3. Purchase and development of a new site for a transport category airport.

Potential Civil Activity at Selfridge AGB

The FAA began its study by considering the possibility of accommodating all of Macomb County's general aviation and air carrier demand at Selfridge. However, discussions with the military, a review of land availability at the base, traffic mix considerations, and the considerable growth expected in general aviation led to consideration of more limited joint use.

The high level of general aviation aircraft ownership in Macomb County warrants a publicly owned airport, separate from Selfridge. The primary purpose of that airport would be to serve the single and twin engine propeller driven aircraft that account for most of the aircraft operations in the county. A joint use proposal considered appropriate by the FAA would be limited to air carrier, commuter, and corporate aircraft that require longer runways, stronger pavement, and specialized terminal and support facilities.

An advantage of this approach is to reduce the cost of developing a publicly owned airport by as much as 75 percent from what would be required if the airport had to accommodate corporate and air carrier aircraft. It would provide a compatible mix of aircraft and would not congest the facilities at Selfridge.
Under this proposal, operations of civil aircraft at Selfridge AGB are forecast as follows:

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<tr>
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<th>1989 (Operations/Year)</th>
<th>2007 (Operations/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Carrier (B-737, MD-80, B-727)</td>
<td>6,600</td>
<td>13,200</td>
</tr>
<tr>
<td>Commuter (Short 360, Casa 212)</td>
<td>3,000</td>
<td>6,000</td>
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<tr>
<td>Corporate (King Air, GIV-III)</td>
<td>5,000</td>
<td>7,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14,600</strong></td>
<td><strong>26,700</strong></td>
</tr>
</tbody>
</table>

**Selfridge Runway Capacity**

The existing north/south runway should be adequate to accommodate both military activity and the limited civil operations that are now foreseen. The civil and military demand forecast for Selfridge is approximately 60,000 military and 26,700 civil operations annually in the year 2007.

If more activity develops in the future, the east/west runway could be renovated and applied to civil use. A long-range alternative would be to develop a high capacity runway system by adding a new runway parallel to and east of the existing north/south runway. This would be expensive and disruptive to current and future military operations. Selfridge is a large base and no additional land acquisition is expected to be needed for joint use under either alternative. Another possibility would be for Macomb County to acquire enough land around a publicly owned airport so that it could be expanded to accommodate jets when future demand warrants.

**Noise**

There are noise sensitive land uses (residential/recreational) around the base, particularly to the south and southeast. A residential area is located about 2,000 feet southeast of the end of the main north/south runway. The effect of joint use on noise levels in these areas has not been determined yet.

**Proposed Civil Development**

A civil terminal and operations area would be required, with the most probable site being on the west side of the base. Up to 50 acres of base property might be made available for this purpose. This site would minimize security requirements, because it would be adjacent to the base property line, accessible through an existing gate with a very short access road, and could be easily connected to the taxiway for the main north/south runway. The cost of the civil development has not been estimated.

**Access**

Highway access to the proposed terminal area is excellent. The primary access route would be I-94 to the River Road interchange at the southwest corner of the base, and then Irwin Road to the gate and terminal access road.
Community Attitude

Macomb County is experiencing rapid development, and the need for public airport facilities is recognized by public officials, the media, and the general public.

However, many residents around the Base are strongly opposed to the concept of joint use. Some of this opposition might be encountered at any site of proposed airport development, but it may be aggravated by local considerations. A recent crash at Detroit Metropolitan Airport has heightened concerns about the safety of civil aviation. A well publicized controversy about expanding Detroit City Airport, involving grading of a cemetery at the runway end, highlighted a lack of communication between developers and other citizens.

Sponsorship

No sponsor has been selected for joint use, but Macomb County would be a capable and appropriate candidate.

Air Traffic

The air traffic control situation at Selfridge AGB is complicated by its location northeast of Detroit and adjacent to Canadian airspace. Operations at Selfridge now experience delays and flights are sometimes held to low altitude profiles until far north of the Base. The FAA believes that some of these problems can and will be alleviated by more efficient control of airspace in the area. Changes in airspace and air traffic control are being actively pursued by the FAA and the military, but the military have reservations about the extent of the improvements that will result.

Once these changes are made, the FAA believes that limited joint use could be accommodated without interfering with military operations.

Attitude of Military

FAA representatives visited Selfridge AGB and discussed possible joint use with representatives of the base and the major military tenants. There was considerable opposition to broad or unlimited joint use because of the limited capacity of the runway system, difference in aircraft performance characteristics, security, lack of a large site for civil operations and hangars, and a range of other objections.

A proposal for limited joint use by air carrier, commuter, and corporate aircraft raised a narrower range of more specific concerns. Air traffic delays are a problem now at Selfridge. Fighter aircraft are particularly affected because their missions are time critical. Firing range time is reserved far in advance, aircraft arriving at the range even a few minutes late may be forced to cancel their mission, and aircraft returning to
Selfridge have little reserve fuel and cannot cope with landing delays. The military is also concerned that joint use could aggravate noise levels around the base and antagonize residents of the surrounding area. Another concern is that air carrier service could expand and eventually force the military to restrict their use of Selfridge.

The comments of the military were necessarily broad, because they did not have a specific proposal before them. However, they are very concerned about the subject and should be kept abreast of the Macomb County study as it progresses, with the opportunity to comment or participate as warranted.

**Recommended Actions**

Based on available information, limited joint use of Selfridge AGB appears to be feasible. The FAA recommends that Macomb County continue with the Aviation Feasibility Study, evaluating joint use of Selfridge to supplement the acquisition or development of a publicly owned airport in the county. The study process should provide full information to the military and local residents about the impact of joint use on areas around the base. If joint use is recommended and found to be acceptable by the county, a detailed joint use proposal should be prepared and submitted to the base commander. An Air Force environmental impact statement would be required.
REVIEW OF JOINT USE POTENTIAL

EL TORO MARINE CORPS AIR STATION

ORANGE COUNTY, CALIFORNIA
Background

Orange County, in the southern portion of the Los Angeles metropolitan area, is one of the most rapidly developing areas in the Nation. The county's growing population and vibrant economy generate a huge market for air transportation. While air carrier service is available at John Wayne Orange County Airport, many passengers must travel to the Los Angeles International Airport to obtain flights to destinations not serviced by the John Wayne Airport.

Los Angeles International is the third busiest airport in the United States in terms of passengers and it is the only one of the top six airports that is not a major hub or transfer point. The airport is very congested; delays in 1986 cost the airlines and their passengers almost $200 million. Los Angeles International primarily serves traffic originating in the surrounding area. As a result, there is little prospect for relieving congestion at the airport by redistributing transfer traffic to a remote location. The Los Angeles region needs an order of magnitude increase in airport capacity to accommodate an inevitable and substantial increase in demand for air transportation.

A series of planning studies have addressed this problem but failed to find a solution. Topography and urban development restrict the options for developing a major new airport. Past studies have served to rule out alternatives, but have not identified a workable solution. A large part of the public and many elected officials prefer to add capacity in small increments at existing airports to satisfy immediate requirements, and to rely on untested concepts or vaguely defined proposals to meet future needs. "No-growth" initiatives and policy restrictions on airport capacity reflect the mood of the region.

The lack of an adequate plan for airport development has national significance, because the Nation must have convenient air access to the Orange County area. The area already plays a vital role in the national economy, and its importance is growing. Joint use of El Toro Marine Corps Air Station (MCAS) has been suggested as one part of the solution.

Location

El Toro MCAS is located on a 4,700 acre parcel in Central Orange County, California. The MCAS is within an unincorporated area of Orange County subject to a proposed annexation by the City of Irvine, California. The surrounding communities have implemented land use policies, zoning, and guidelines for the public's safety and welfare, and to protect and preserve the military mission. An Air Installation Compatibility Use Zone (AICUZ) study is the basis for land use in the area.

Facilities

El Toro MCAS has two sets of closely spaced parallel runways with a centerline separation of 500 feet, and one limited use runway. Runway 16L/34R is 10,000 feet long by 250 feet wide; runway 16R/34L is 6,310 feet long by 250 feet wide. Runway 34R with high intensity lights and a short approach light system (SALS)
serves as the instrument runway for all military arrivals. It also has emergency arresting systems. Instrument approaches to Runway 34R include VOR, VOR/DME, or TACAN, and Precision Approach Radar procedures. Runway 34L is used for Field Carrier Landing Practice by Tactical Fighter aircraft. Runways 7R and 7L, which are 8,000 feet long by 250 feet wide are primarily used for departures. However, wind conditions and the limited climb ability of some aircraft would restrict the use of Runway 7 by civil aircraft. In such cases, another runway must be utilized. All runways have distance remaining signs. Runways 7/25 have bi-directional arresting cables. Runway 3/21 is 3,900 feet long by 125 feet wide. It is normally used by the Marine Corps Aero Club aircraft. C-5 and C-141 aircraft are parked on Runway 3/21 for loading and off-loading equipment during mobilization exercises. The ramp area adjacent to 3/21 is used to stage troops, equipment, and cargo for embarkation.

Air freight and passenger services for military personnel are conducted in Building 624 close to the runway 16R threshold.

Mission

El Toro MCAS is operated in direct support of the tactical training and combat readiness requirements of the Third Marine Aircraft Wing. El Toro also provides search and rescue, storage and maintenance for other Fleet Marine Force units, serves as an expeditionary site for Marine Corps and joint service mobilization and tactical deployment exercises, and is an Aerial Port of Embarkation for troop movements and contingency mobilization.

The Third Marine Aircraft Wing (3d MAW) conducts on-going tactical mission readiness training to fight as the air component of the Marine Air-Ground Team. The F/A-18 pilot qualification training squadron located at the air station, fully trains 100 Navy and Marine pilots annually. A Marine Reserve Aircraft Group with one F-4 Phantom and one CH-46 Sea Knight Helicopter Squadron is also assigned to El Toro.

Based Aircraft

There are 143 aircraft at El Toro MCAS. These aircraft account for about 112,000 annual operations. By 1993, the number of based aircraft is anticipated to reach 192 aircraft with the addition of F/18's and MV-22 Osprey aircraft. By 1998, there will be 140,000 operations, including about 72,000 jet operations. Field Carrier Landing Practice (FCLP) training generates approximately 7,000 annual operations, and the use of other runways is severely limited during these training periods.

Civil Demand

About 27 million passengers were enplaned in the Los Angeles region in 1986. The Southern California Association of Governments (SCAG) forecasts that over 59 million passengers will be enplaned in the Los Angeles region in the year 2010. Twenty-three percent of these will originate in Orange County.
The situation is complicated by policies that restrict the amount of activity permitted at Los Angeles International, Ontario, Orange County, Burbank, and Long Beach Airports. Unless these policies are changed and additional airport capacity is provided, one in four passengers could be denied service in the year 2010.

El Toro MCAS could accommodate substantially more traffic than the current military demand. The FAA estimates that the current runway layout could handle the forecast military demand for 1998 plus about 50,000 civil operation annually, or 70 daily scheduled departures by air carrier aircraft. Depending on aircraft size and load factors, this would permit 2.5 to 3.6 million enplanements annually at El Toro, which could accommodate a part of the future demand for air transportation.

Prior Studies

A number of studies have addressed joint use of El Toro MCAS. The sources and conclusions are listed below:

a. 1966/1970, Orange County Transportation Plan explored the possibility of interim joint-use, but concluded that such use would not be compatible with the Marine Corps Tactical Mission.

b. 1972, Southern California Association of Governments prepared a study that proposed 6.7 million annual passengers at El Toro. Concurrent development at Camp Pendleton was suggested but feasibility was questioned.

c. 1972, City of Newport Beach explored the feasibility of other airport sites that would reduce the impact of John Wayne Airport on that city. No firm recommendation ensued.

d. 1975, Orange County Supervisors submitted a proposal for EL Toro MCAS joint use to the Secretary of the Navy. The U.S. Navy rejected the county's proposal because of incompatibility with the tactical mission assigned to El Toro.

e. 1982, Orange County Regional Airport Advisory Committee found that expanded civil use of El Toro MCAS could conflict with John Wayne-Orange County. They suggested consideration of an alternate site.

f. 1982, Southern California Association of Governments completed a detailed study which considered the conversion of El Toro MCAS to solely commercial aviation use.

g. 1983, city of Newport prepared a document entitled "The Workable Airport Solution" which recommended the joint use of El Toro MCAS in order to reduce the noise impacts of aircraft operations at the John Wayne Airport.
h. 1983, Department of Defense (DOD) and Department of Transportation (DOT), through a study directed by P.L. 97-248, identified El Toro as a candidate for possible joint use. The resulting Plan for Joint Use of Military Airfields jointly submitted by the Secretary of Transportation and the Secretary of Defense on March 8, 1984, proposed facilities that would accommodate 10,000 annual air carrier operations and 500,000 annual passengers. The study recognized the existence of community opposition based on environmental issues. DOD objected to joint use because of incompatibility with military operations.

Air Traffic

The airspace in the Orange County area is very heavily used. Military fixed wing aircraft and helicopters, air carriers, and general aviation aircraft make frequent flights to and from the area and through it. Safety is maintained through the intensive application of positive air traffic control procedures. This results in a heavy workload for air traffic controllers.

Runway 34R is the primary arrival runway at El Toro. The approach corridor does not conflict with the north-south V-23 airway. In addition to having a special use approach area, positive separation and control is provided by an FAA air traffic control facility, the Coast Tracon.

Runway 7R departures do not conflict with flight tracks associated with other airports. However, tailwind conditions, runway gradient, and payload limitations would restrict use of Runway 7R by civil aircraft. Departures would then use Runway 34R, which would require sequencing with the Orange County instrument approach traffic to Runway 19R. Runway 34R departures would also require coordination with VFR, IFR, and practice IFR helicopter traffic into Tustin MCAS. Despite sequencing, additional air traffic using El Toro would cause delays in the air and on the ground.

Based on projected 1998 military operations, the airport capacity available for civil use amounts to about 50,000 operations annually. This would permit 70 average daily departures by air carrier aircraft. The airspace appears to be capable of handling this additional traffic subject to some adjustments by the FAA in missed approach procedures and departure sequencing. Such sequencing, however, would not eliminate delays on the ground and in the air.

Attitude of Military Personnel at El Toro MCAS

FAA representatives visited El Toro MCAS and determined that the military personnel are strongly opposed to joint use. The primary objection is that joint use is incompatible with the tactical mission of the Marines at El Toro. The Marines want to preserve flexibility in how they use the base and need to ensure the separation of heavily armed military aircraft from civilian flights. They also foresee air traffic control problems and delays if joint use is permitted, and they do not want to upset the noise abatement and land use agreements that they have developed with local communities in order to provide for the public safety and welfare, and to maintain compatibility with surrounding land uses. El Toro's site is very well suited to Marine requirements, with ready access to Yuma MCAS, 29 Palms, the logistics facility at Barstow, and, most important, only 6 minutes flying time to Camp Pendleton. The Marines are adamant about their need for a viable tactical airfield in the area.
Potential Sponsor

No specific sponsor has been identified yet, but Orange County would be an appropriate and capable sponsor. An alternative would be the Inter-County Airport Authority. Another capable sponsor is the Southern California Regional Airport Authority, which was created to implement the regional airport system plan of the Southern California Association of Governments. The Airport Authority is not expected to interject itself into the El Toro issue unless the local and county government fail to take appropriate action.

Community Attitude

The attitude of residents throughout the county varies. But, the communities adjacent to El Toro MCAS and underlying the approach and departure paths oppose joint use. They have an excellent relationship with the Marines, are accustomed to military flight procedures, and support the role that El Toro plays in national defense. Land use around the base has been carefully developed to achieve compatibility with military operations and to provide for public safety and welfare. The neighbors are concerned that joint use might disrupt military operations, congest the airspace, increase noise levels and upset land use compatibility. The prospect of industrial or commercial development around the base and congestion of streets and freeways is a serious local concern.

From a broader, regional viewpoint there appears to be a great deal of support for joint use of El Toro as a part of the solution to a regional air transportation problems.

Proposed Civil Development

Joint use would rely heavily on the existing runways and taxiways at El Toro with modifications. A new civil terminal would be required. A possible site would be on land to be acquired along the west property line of the base. This site would be attractive because it would have an access road to the Santa Anna Freeway (I-5) independent of the base. The terminal would be connected to the base by a taxiway. This type of operation is called "through the fence" and minimizes some, but not all, impacts on military operations.

Certain other airfield improvements would probably be needed to support joint use. A precision instrument approach, either instrument landing system (ILS) or microwave landing system (MLS), would be installed on Runway 34R with appropriate approach and runway lighting. The current instrument approach procedures at El Toro are for military purposes only. They would have to be reviewed and validated for civil use. Runway 7R/25L might be extended up to 3,000 feet in order to provide ample runway length for unrestricted operations by short and medium haul air carrier aircraft.
Environmental Impact

If civil aircraft using El Toro used the quieter Stage 3 aircraft, the increase of noise levels around El Toro would be less than if non-Stage 3 aircraft were used. Nevertheless, even the use of Stage 3 aircraft would have an additive impact on community noise.

A variety of other impacts would be expected as a result of joint use, including the physical effects of construction, additional vehicle trips to the area, and possible acceleration of commercial development. These cannot be analyzed without a detailed proposal. A thorough review of environmental impact would be required prior to the implementation of a joint use agreement.

Recommended Action

Use of El Toro MCAS by civil air carrier aircraft is technically feasible and could play a role in accommodating future air passenger demand in Southern California. However, civil use depends on the concurrence of the military, and the Marine Corps is opposed to joint use of El Toro at this time. The objections posed by the Marines warrant thoughtful consideration.

A solution must be found that meets both national defense and national transportation requirements. Time is of the essence, because the shortage of air carrier airport capacity is already serious. Also, a great deal of real estate development is occurring around El Toro and a decision on the long range disposition of the airfield will help guide land use decisions and avoid future conflicts.

It is recommended that the Southern California Association of Governments (SCAG) assisted by the State of California in cooperation with Orange County, the Southern California Regional Airport Authority or other appropriate agencies develop alternatives and implementation plans to meet the air passenger demand in Southern California. These alternatives should include the possibility of mitigating locally-imposed restrictions on air carrier access to existing civil airports in the region, and the potential for joint use of military air facilities. This analysis of alternatives and recommended implementation should be closely coordinated with the FAA and the Department of Defense. In the event joint use of a military facility is recommended, the proposed implementation should assure the nondegradation of the military operations at the airfield. The FAA is ready to facilitate this effort, and also provide appropriate technical and financial assistance.
*RWY 3-21 RESTRICTED TO VFR DAYLIGHT OPERATIONS FOR MCAS EL TORO AERO CLUB AND MILITARY HELICOPTERS
COMMENTS OF THE MILITARY
Mr. Robert L. Donahue  
Associate Administrator for Airports  
Federal Aviation Administration  
800 Independence Avenue, S.W.  
Washington, D.C. 20591

Dear Mr. Donahue,

In the short time available, the Air Force and Marine Corps have evaluated your draft report on the technical feasibility of joint civil-military use of El Toro MCAS, Selfridge AFB, and Scott AFB. The comments provided as attached stand by themselves, but we think that a foreword is necessary to emphasize the Department of Defense's overall view of the study.

Issues affecting the feasibility of civil aviation using military bases are very broad in nature. They include not only technical matters such as the runways, taxiways, ramps, and buildings, but also the economic, environmental, and national defense impacts that would result. This report, as directed by the Congress, concerns itself only with the "technical feasibility" of joint use. We believe it is important that the report clearly distinguish for the reader the difference between "technical feasibility" as used by this report and true feasibility based upon all factors that must be considered. Only through a complete joint use study conducted as outlined in the Department of Transportation/Department of Defense Plan for Joint Use of Military Airfields, presented to Congress in 1984, can a proper judgement be made as to whether joint use should actually be undertaken.

The Department of Defense is not opposed to the principle of joint use of its airfields. The fact that over 20 of our military airfields are presently joint use should be adequate testimony. However, the decision for or against joint use must be a deliberate and comprehensive process, not just an evaluation of "technical feasibility."
We appreciate the opportunity to respond to your report and your cooperation in allowing us to make comments on the body of the report.

Sincerely,

FRANK J. COLSON
Executive Secretary
DOD Committee on Federal Aviation

3 Attachments
1. Scott AFB Comments
2. El Toro MCAS Comments
3. Selfridge AFB Comments
AF Comments on Scott AFB, Illinois

1. Technical Feasibility Concerns:

FAA conducted this study without defining the parameters of "technical feasibility." In our opinion, technical feasibility of civil joint use of military installations must address and mitigate impacts on military operations/activities. If the impacts of joint use cannot be mitigated satisfactorily, then joint use should be deemed not feasible.

Joint use of an Air Force installation requires the approval of the Air Force. Air Force approval/disapproval is based on review and analysis of a specific proposal for joint use from a state, county, or local governmental agency or airport authority. As a minimum, the proposal must identify type of operation, type and number of aircraft to be operated, facility requirements, and projected annual operations for the first five years. Joint use will only be considered if it does not compromise military response, security, readiness, safety, or quality of life.

FAA has determined that joint use is technically feasible from their perspective. The study report identifies many impacts on Scott that could result from joint use, but offers no solutions. From the DOD perspective, in its mission of national defense, technical feasibility addresses only one of many considerations. From an Air Force perspective, the FAA's evaluation of technical feasibility (airspace, air traffic,...) considers only a small subset of the total factors the Air Force deems important. The Air Force must consider total environment to implement a joint use proposal. The excess airport capacity that may exist at any given Air Force base is quickly consumed by additional aircraft operations when supporting contingencies, exercises, and deployment training. Implementation of joint use limits the capability of bases to support these requirements. In its charter to manage the nation's aviation system, the FAA is charged with giving equal consideration to the military requirements. That equality is lacking in this report.

There appear to be two different joint use scenarios considered for Scott AFB in the FAA's report. The Air Force has received a formal request from the State of Illinois; however, it is a very preliminary proposal with the final product very uncertain. The following comments are based on materials in the FAA study.

First, the incomplete study by the State of Illinois' suggests the development of a new runway and terminal facilities adjacent to the eastern boundary of Scott. Assuming Air Force land would not be used, this would be a collocated
aviation activity with only some joint use of airport infrastructure. However, increases in aircraft operations, as predicted by the Illinois' study, would exacerbate current air traffic conflicts between Scott and St. Louis-Lambert International Airport. This is a major concern to the Air Force. While a new runway near Scott may provide some relief at Lambert, the void would soon be filled by other civil aviation demands. This would cause greater flight delays and require both a joint DOD/DOT policy to handle operational requirements and develop a military priority system. The report acknowledges the need for major changes in airspace and air traffic control procedures, even in today's operating environment. Acceptable, mutually beneficial changes would have to be designed and implemented prior to judgment or agreement from the Air Force on the feasibility of joint (collocated) use.

Secondly, the FAA report suggests a phased development of civil operations. This appears to imply some type of joint use of existing facilities at Scott AFB. The Air Force does not agree that joint use of existing facilities at Scott AFB is technically feasible. There is no available land or facilities on Scott AFB. As stated in the 8 Mar 84 DOD/DOT Joint Use Plan, "Joint use will not normally be considered at locations with single runway capacity." Therefore, the State of Illinois must construct a second runway prior to joint use to satisfy that requirement. Additionally, the airspace conflicts and air traffic delays would be greatly exacerbated.


The primary functions at Scott AFB are Headquarters for Military Airlift Command, US Transportation Command, and a flying organization, the 375th Aeromedical Evacuation Wing. Joint use could compromise current airfield security under the second scenario. The civil aviation facilities could not be segregated, thereby providing access to the entire installation by the general public. Another major concern is the emergency nature of the missions performed by the 375th Aeromedical Evacuation Wing. Detailed mitigations would have to be worked out to ensure that mission effectiveness would not be reduced by joint use.

3. Community/Environmental Impacts: In either case, joint use at Scott would require displacement of military functions and activities. It could have an adverse effect on the quality of life for the military members and their families that are stationed at Scott. Replacement of facilities to accommodate displaced functions and activities would be required at no cost to the Air Force. Quality of life for military members and their dependents is a high priority for the Air Force and must be improved or remain at a status quo.
Environmental impacts have not been fully assessed. At the very least, any joint use of Scott would increase the noise level in the military housing area on base, the surrounding local communities, and nearby schools. The Air Force would prepare an environmental impact statement (EIS), the cost of which will be paid by the proponent of joint use of Scott, prior to any judgment or agreement to implement joint use.

4. Air Force Position:

The Air Force is willing to consider joint use in a collocated environment. Scott AFB is not excess to Air Force requirements, therefore, joint use of existing facilities is not feasible. Although a formal report has been submitted, the Air Force does not have sufficient information to conduct a thorough and complete evaluation. The formal evaluation will occur when the Air Force receives the State’s Description of Proposed Actions and Alternatives (DOPAA) and sufficient siting information (second runway, terminal, etc.) is available.
Air Force Comments on Selfridge AGB, MI

1. Technical Feasibility Concerns:

FAA conducted this study without defining the parameters of "technical feasibility." In our opinion, the technical feasibility of civil joint use of military installations must address and mitigate impacts on military operations/activities. If the impacts of joint use cannot be mitigated satisfactorily, then joint use should be deemed not feasible.

Joint use of an Air Force installation requires the approval of the Air Force. Air Force approval/disapproval is based on review and analysis of a specific proposal for joint use from a state, county or local governmental agency or airport authority. As a minimum, the proposal must identify type of operation, type and number of aircraft to be operated, facility requirements, and projected annual operations for the first five years. Joint use will only be considered if it does not compromise military response, security, readiness, safety, or quality of life.

FAA has determined that joint use is technically feasible from their perspective. The report identifies many impacts on Selfridge that could result from joint use but offers no solutions. From the DOD perspective in accomplishing its national defense mission, technical feasibility addresses only one of many considerations. From an Air Force perspective, the FAA's evaluation of technical feasibility (airspace, air traffic,...) considers only a small subset of the total factors the Air Force deems important. The Air Force must consider the total environment to implement a joint use proposal. The excess airport capacity that may exist at any given Air Force base is quickly consumed by additional aircraft operations when supporting contingencies, exercises, and deployment training. Implementation of joint use limits available bases to support these requirements. In its charter to manage the nation's aviation system, FAA is charged with giving equal consideration to the military requirements. That equality is lacking in this report.

In 1975, a formal proposal for joint civil/military use of Selfridge AGB was denied on the basis of incompatibility with military operations, limited potential for expanding civil aviation facilities, limitations imposed by a single operational runway, and environmental considerations. Since 1975, while military flying activities at Selfridge have increased, Air Force land area and facilities have been substantially reduced.

The land area (50 acres) identified in the FAA report as the most probable site for a civil terminal would require relocation of several military facilities/functions currently on the site.
In addition, the report fails to mention that an Army Reserve helicopter unit (35 helicopters) is scheduled to move into a portion of that same area in 1989.

The FAA report fails to address the lack of expansion capability of Selfridge. The base is surrounded on three sides by residential/commercial development and Lake St. Clair immediately to the east. If joint use were implemented, the FAA projections of civil air demands would result in annual passenger enplanements of over 6.5M at Selfridge by the year 2000. FAA suggests the future addition of a parallel runway to accommodate growth in civil activity but fails to consider Air Force safety and runway clearance criteria. Given the lack of expansion capability, a parallel runway would result in a sizeable expense to relocate military flight operations, most likely off of Selfridge. In our opinion, over the long-haul, Selfridge cannot efficiently meet both military and civilian aviation requirements at the same time. The military mission would be impaired, and the civil activities would be seriously limited. In the long-term, it would appear more economically beneficial for the local air transportation authorities to acquire and invest in a private airport with expansion possibilities. The use of Selfridge would merely be a temporary stop-gap approach at best.


The primary function of Selfridge AGB is to support the readiness training of the various military services’ reserve forces organizations located on the base. This is a very high priority item annually on the congressional and DOD agenda. The addition of civil aviation operations would have a detrimental effect on the ability of the base to support this training requirement. Joint use would have additional adverse impact on the reserve forces training capability by further exacerbating both the existing flight delays and adverse air traffic procedures experienced by military pilots enroute to specified training areas.

3. Community/Environmental Impacts:

A considerable amount of community opposition has been expressed in newspapers and letters in response to Macomb County’s suggested joint use of Selfridge. In addition, the Deputy Assistant Secretary of the Air Force for Installations has received many letters opposing joint use of Selfridge. Politically, the local, state, and federal governmental representatives have expressed reservations, and in some cases, opposition to the proposal of joint use of Selfridge AGB.

Community residents are opposing joint use on the basis of increased noise, air pollution, decreased property values, traffic congestion, and are particularly sensitive to the potential for aircraft accidents. Although there would be an increase in aviation related noise, the impacts cannot be judged
without complete analysis of the type of aircraft that would be used in civil operations. The Air Force would prepare an Environmental Impact Statement, the cost of which will be paid by the proponent of joint use of Selfridge, prior to any judgment or agreement to implement joint use.

4. Air Force Position: The Air Force does not agree with the FAA conclusion that joint use at Selfridge AGB is technically feasible as defined in the FAA report. The Air Force position is based on current and projected missions at Selfridge and the lack of suitable land area. However, the Air Force will thoroughly evaluate a formal proposal, if received, and will conduct a detailed analysis of the impacts and required mitigations.
DEPARTMENT OF THE NAVY
COMMENTS ON
MCAS EL TORO JOINT USE

1. Feasibility:

On numerous occasions, the Department of the Navy has stated its position on the joint civil/military use of Marine Corps Air Station, El Toro, California. This position has been that the Department is unequivocally opposed to joint use. There is no new information provided in this study which would establish a basis to change that position. While joint civil/military use of El Toro may be "technically feasible" in theory, it is neither prudent nor practical from a military operational perspective. Clearly, the introduction of civil aircraft at El Toro degrades the tactical training mission of the installation.

2. Community/Environmental Concerns:

Marine Corps Air Station, El Toro provides a vital link in the security of this nation. The Marines believe they are performing this responsibility well, and are acting as good neighbors in Southern California. For many years, the Marine Corps has worked closely with the communities surrounding Marine Corps Air Station, El Toro to develop compatibility between land uses and the installation's essential military aircraft operations. Because of the close coordination with, and cooperation of its neighbors, the Air Station remains a viable tactical training airfield and enjoys strong community support.

The Department of the Navy is gravely concerned that well meant but narrowly considered measures intended to satisfy air passenger demand in Southern California will prove inimical to the interests of our neighbors. This would surely place in jeopardy the hard won and greatly valued cooperative spirit that now exists.

3. National Air Transportation System Needs:

The Department of the Navy readily acknowledges the magnitude of the problems involved in achieving adequate airport capacity to meet current and projected public demand for air carrier service. It is truly a national issue, not susceptible to solution by any single action that would provide only limited and all too temporary relief. For this reason, we believe a comprehensive effort is required, involving all parties who can make a contribution to resolution, including the air carrier industry, airport proprietors and surrounding communities whose interests may be impacted. Further, the Department of the Navy must have full opportunity to participate in the development of proposals that may affect Department of the Navy installations.
Civil facilities at joint use airports are financed the same way as development at other public airports. It is sponsored by a state or local agency and is paid for out of operating funds or with revenue bonds secured by airport income from fees and rents. Grants-in-aid may be issued under the Airport Improvement Program (AIP) on the same terms and conditions as for other airports. Over 27 million dollars in AIP funds have been granted for joint use development since 1982.

JOINT USE DEVELOPMENT FUNDED UNDER  
AIRPORT IMPROVEMENT PROGRAM  
(1982-1988)

<table>
<thead>
<tr>
<th>CITY NAME</th>
<th>AIRPORT NAME</th>
<th>YEARS</th>
<th>ABBREVIATED WORK DESCRIPTION</th>
<th>TOTAL FEDERAL FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Lay</td>
<td>Point Lay Den Station</td>
<td>1984</td>
<td>Construct taxiway &amp; safety area</td>
<td>$ 417,656</td>
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<tr>
<td>Fort Huachuca</td>
<td>Libby AAF/Sierra Vista Municipal</td>
<td>1982-1985</td>
<td>Construction/reconstruction of taxiways, aprons, public access roads, &amp; security fencing</td>
<td>1,788,272</td>
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<tr>
<td>Yuma</td>
<td>Yuma MCAS/Yuma International</td>
<td>1982-1987</td>
<td>Terminal expansion/modernization; construct taxiways, runway, &amp; taxiway lighting; visual approach aids; expand aprons; construct access road, &amp; fencing; rehabilitation of access road, taxiways, &amp; aprons</td>
<td>1,768,689</td>
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<tr>
<td>Valparaiso</td>
<td>Eglin AFB</td>
<td>1983-1985</td>
<td>Expand, improve, &amp; modify terminal buildings &amp; baggage conveyor; acquire security vehicle</td>
<td>233,290</td>
</tr>
<tr>
<td>Agana</td>
<td>Guam International Air Terminal</td>
<td>1982-1987</td>
<td>Purchase land; construct terminal building, security fence, guard house, &amp; service road; install aircraft guide in system; tiedowns and apron</td>
<td>9,038,692</td>
</tr>
<tr>
<td>Kansas City</td>
<td>Richards-Gebaur</td>
<td>1986-1987</td>
<td>Master Plan update; overlay runway; reconstruct/rehabilitate taxiways</td>
<td>4,895,641</td>
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<tr>
<td>Chicopee</td>
<td>Westover AFB</td>
<td>1985</td>
<td>Airport Master Plan Study</td>
<td>76,320</td>
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### JOINT USE DEVELOPMENT FUNDED UNDER AIRPORT IMPROVEMENT PROGRAM (1982-1988)

<table>
<thead>
<tr>
<th>CITY NAME</th>
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<th>YEARS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Charleston</td>
<td>Charleston AFB/International</td>
<td>1982-1988</td>
<td>Airport Master Plan; construct aircraft parking apron, access road, air freight apron &amp; lighting, security fencing, passenger loading bridges, &amp; service roads; construct taxiways &amp; lighting</td>
<td>$ 7,272,162</td>
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<tr>
<td>Myrtle Beach</td>
<td>Myrtle Beach AFB</td>
<td>1982-1987</td>
<td>Airport Master Plan Study; expand terminal building; expand &amp; light apron; expand &amp; reconstruct aprons &amp; taxiways</td>
<td>1,912,990</td>
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<tr>
<td>Houston</td>
<td>Ellington Field</td>
<td>1983</td>
<td>Airport Master Plan Study</td>
<td>112,500</td>
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<tr>
<td>Wichita Falls</td>
<td>Sheppard AFB/Wichita Falls Municipal</td>
<td>1986</td>
<td>Rehabilitate terminal building</td>
<td>48,667</td>
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<td><strong>TOTAL AIP DEVELOPMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$27,564,879</strong></td>
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# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFB</td>
<td>Air Force Base</td>
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<tr>
<td>AGB</td>
<td>Air Guard Base</td>
</tr>
<tr>
<td>ARTCC</td>
<td>Air Route Traffic Control Center</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<td>DOT</td>
<td>Department of Transportation</td>
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<td>EIS</td>
<td>Environmental Impact Statement</td>
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<td>FAA</td>
<td>Federal Aviation Administration</td>
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<tr>
<td>IFR</td>
<td>Instrument Flight Rule</td>
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<tr>
<td>ILS</td>
<td>Instrument Landing System</td>
</tr>
<tr>
<td>TACAN</td>
<td>Tactical Air Navigation</td>
</tr>
<tr>
<td>VFR</td>
<td>Visual Flight Rule</td>
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