

# **SAN DIEGO**

## **International Airport**

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AIRPORT MASTER PLAN  
SAN DIEGO INTERNATIONAL AIRPORT

### **SECTION 3.5**

Airport Support Facilities



## 3.5 Airport Support Facilities

This section presents the inventory of existing airport support facilities at SDIA. Since the 2001 Master Plan, there have been several changes in the airline ancillary facilities at SDIA. These changes include new airlines occupying new facilities, airlines expanding or altering their operations and other airlines discontinuing service and vacating facilities. The areas included in the inventory are: air cargo facilities, general aviation facilities, aircraft rescue and fire fighting facilities, aircraft fuel storage facilities, airline maintenance facilities, airport office and maintenance facilities, additional airport support facilities, and other tenant facilities. Existing conditions drawings, interviews with the Authority staff, interviews with airport tenants, and on-site visual inspections served as the resource for the inventory.

### 3.5.1 Air Cargo Facilities

#### Cargo Buildings

As depicted in **Figure 3.5-1**, most of the cargo facilities are located to the east and west of the Commuter Terminal. These facilities serve both the passenger carriers and all-cargo carriers. **Table 3.5-1** outlines a detailed breakdown of air cargo and airport support facilities. The largest facility is a one-story, 39,300 square foot structure, formerly designated as the Air Support Facility. The facility, which presently accommodates belly cargo, provides services to the following passenger carriers: US Airways, Continental, Alaska, Northwest, American, and Delta Airlines. This facility also houses California Air Cartage (Shaker Express) a freight consolidator. Additional air cargo services are operated by Air Transport International, formerly known as Burlington Air Express and Paxton, Shreve, & Hayes, Inc.

There are two other smaller cargo facilities: United Cargo and Southwest Air Cargo Operations facilities and Southwest Air Cargo Terminal. Both facilities are housed in one-story buildings with 17,150 square feet and 13,300 square feet, respectively. The United and Southwest Cargo Operations facilities are mainly used for warehousing and have ancillary administration offices. The Southwest Air Cargo Terminal is used for warehousing and accommodating US Airways GSE and UPS administration offices.

The truck docks for all air cargo terminals are on the west side of these structures. Cargo staging takes place on the east side of the buildings, and aircraft are parked to the north of the facilities. Truck access to the Southwest Air Cargo Terminal is located along Winship Lane south of the terminal.

All-cargo carriers, such as FedEx and Emery Worldwide, operate out of four portable trailers next to the north cargo ramp. Cargo is sorted and loaded into containers off-site, then trucked to the Airport and loaded directly on the aircraft. Conversely, in-bound cargo is loaded directly onto trucks from the aircraft and sorted off-site. These portable trailers do not have access to water and sewer service, which has limited the development options in this area.

#### Cargo Apron

The 2001 Master Plan reported SDIA has approximately 270,000 square feet of existing cargo apron, including aircraft hardstands. The main cargo apron is congested during peak periods and often blocked by support equipment.

### 3. Inventory of Existing Conditions

Table 3.5-1

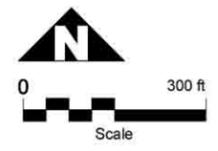
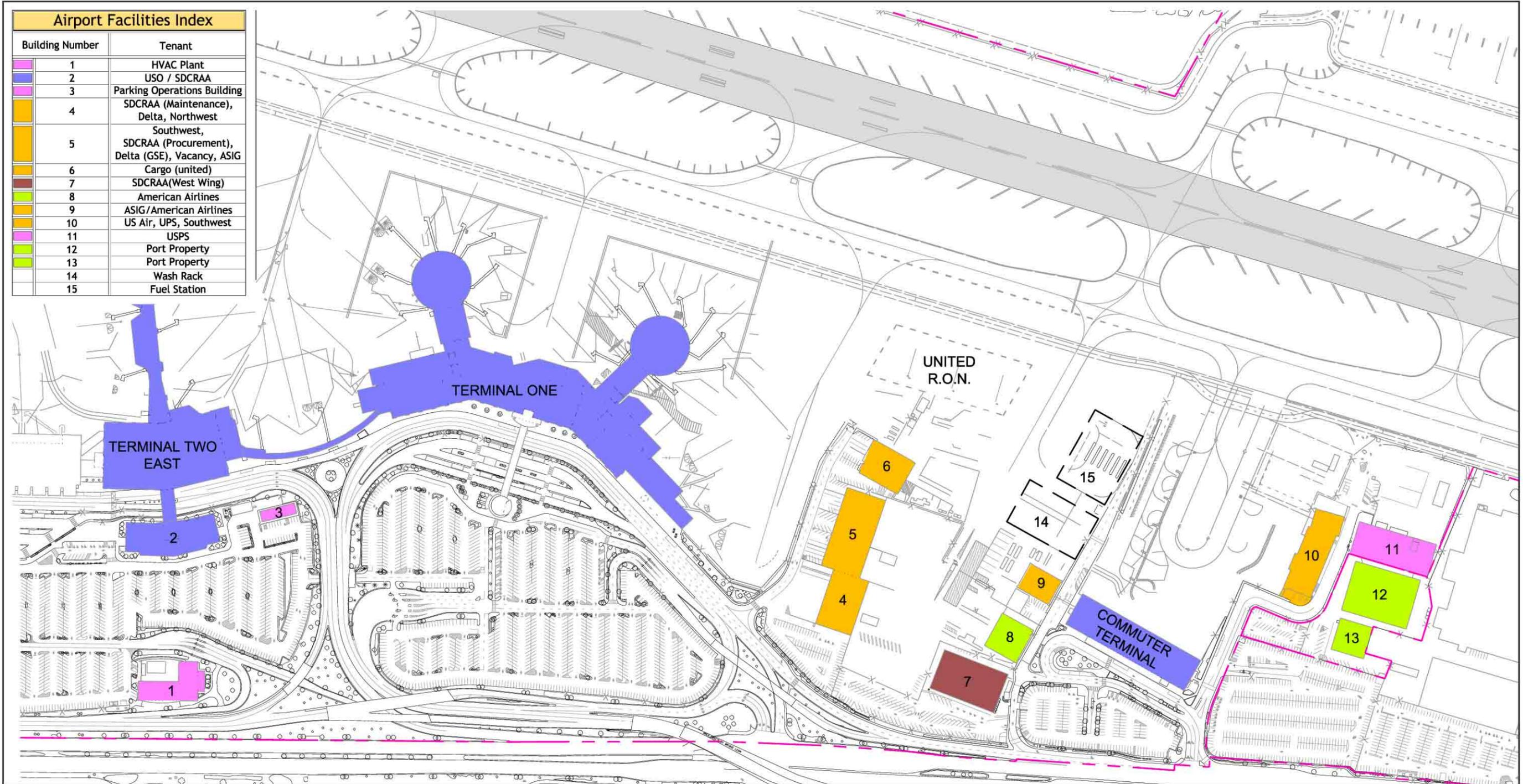
Existing Airport Support Facilities at SDIA

Airport Support Facility Structures	Square Feet
<b>Air Cargo Facilities</b>	
Air Cargo Buildings	
Former Air Support Facility	39,300
United/Southwest Air Cargo Operations Facility	17,150
Southwest Air Cargo Terminal	13,300
<b>Subtotal</b>	<b>69,750</b>
<b>General Aviation Facilities</b>	
Hangar	52,300
Terminal/Office/Maintenance	20,100
<b>Subtotal</b>	<b>72,400</b>
<b>ARFF Building</b>	<b>9,570</b>
<b>Airline Maintenance (ASIG)</b>	<b>21,000</b>
<b>Airport Office &amp; Maintenance</b>	
Commuter Terminal	45,000
West Wing	25,000
Terminal 2 West	5,000
Parking Operations Building	3,000
<b>Subtotal</b>	<b>78,000</b>
<b>Other Airport Support Facilities</b>	
ATCT (Base Building & Tower)	12,950
GSE Facilities (American Airlines & ASIG)	22,900
USPS	42,000
USO	6,520
Central Utility Plant	21,000
<b>Subtotal</b>	<b>105,370</b>
<b>Total</b>	<b>356,090</b>

Source: Compiled by HNTB, 2005.

### 3.5.2 General Aviation (GA) Facilities

General Aviation (GA) activity is confined to a single, 11.35 acre (494,254 square feet) area north of Taxiway C and east of Taxiway D with public access at 2904 Pacific Highway. The GA area is leased by a single Fixed Base Operator (FBO), has operated at SDIA since 1950, and provides services for general aviation and private corporate aircraft including aircraft apron parking, aircraft hangar parking, fueling, minor aircraft servicing and maintenance, catering, terminal services, and vehicle parking. Jimsair also sub-leases a portion of their leased area to DHL cargo airlines for aircraft parking. There are four permanent structures located in the GA area including three aircraft hangars and a vehicle maintenance building. Jimsair demolished their former terminal building in 2002 and began construction of a replacement facility. However, construction of the new facility was suspended shortly after it began and the structural foundation is all that is currently built. The bulk of information about the existing Jimsair lease and facilities was obtained from facility manager Al Garcia during an interview on January 12, 2006.



**Figure 3.5-1**

**Air Cargo and Airport Support Facilities South**



#### **Primary GA Services**

##### **Apron Areas**

The existing apron area totals approximately 300,000 square feet. The main apron area is located south and west of Hangars 1, 2, and 3 and totals approximately 150,000 square feet. The remaining apron areas within Jimsair's lease are located west of the vehicle maintenance area adjacent to Taxiway C and total approximately 150,000 square feet.

Jimsair utilizes portions of the corporate ramp, located east of the ATCT, adjacent to Taxiway D, to park customer aircraft. The corporate ramp has a weight limitation of 70,000 pounds. This area is not within the Jimsair leasehold.

An approximately 115,000 square foot portion of apron area is sub-leased to DHL. DHL utilizes this area for parking aircraft. The all-cargo carrier loads and unloads air cargo that has typically been containerized at a remote location. DHL is able to park aircraft as large as Boeing 767 at this location. DHL also has two modular office trailers parked at this location where they maintain a business office. There is also room for storage of GSE utilized for moving aircraft and loading and unloading cargo.

##### **Hangar Capacity**

Hangar 3 is located west of Hangars 1 and 2. Hangar 3 is approximately 22,000 square feet and is currently utilized to store three private jet aircraft including a Gulfstream II, a Gulfstream IV, and a Westwind. Hangar 2 is currently utilized to store a single, privately owned, Gulfstream V jet. Hangar 4 is an approximately 17,000 square foot structure located west of Hangar 3. Jimsair owns four aircraft, which are stored in Hangar 4, including three King Air aircraft and one Hawker 700A.

Jimsair currently has a waiting list of customers interested in leasing hangar space for storage of aircraft. According to Jimsair's management, there are approximately seven people that have expressed interest in leasing hangar space to store aircraft. Jimsair's existing aircraft hangars total approximately 51,000 square feet.

##### **Terminal/Office/Maintenance**

Hangar 1 and Hangar 2 occupy the same physical structure totaling approximately 24,000 square feet. The approximately 12,000 square foot Hangar 1 is currently converted to a temporary terminal facility including a lobby, a pilot's lounge, offices, a flight planning room, a security office, offices, and restrooms and is included in the terminal facility area total. Jimsair's corporate offices are located adjacent to Hangar 3 and total approximately 6,000 square feet of space on two levels. Jimsair's existing terminal and office facilities total approximately 18,000 square feet.

There is an approximately 2,100 square foot vehicle maintenance shop located west of the aircraft hangars. A small aircraft parts and maintenance office is located within Hangar 4, as is some additional storage. Jimsair's employees maintain the company's fleet of fueling and service vehicles at this location. The Jimsair vehicle fleet consists of eight fuel trucks that carry Jet-A aviation fuel ranging in capacity from 3,000 to 10,000 gallons, two trucks that carry Av-Gas, each with a capacity of 1,500 gallons and one truck that carries diesel fuel with a capacity of 1,500 gallons. Jimsair also owns and operates several vans and ground-service vehicles. Jimsair's existing vehicle maintenance facilities total approximately 2,000 square feet.

##### **Fueling**

There is a single 15,000 gallon Underground Storage Tank (UST) located below the aircraft apron utilized for storage of Jet-A fuel. Jimsair receives approximately three to four 8,000 gallon deliveries of Jet-A fuel

### **3. Inventory of Existing Conditions**

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per weekday. Fuel is delivered to Jimsair by tanker truck. Jimsair does not receive fuel from the airport's fuel farm.

There is possibly an additional 2,400 gallon UST utilized for 100LL (low lead) fuel located on the Jimsair property. However, according to Jimsair's management, this tank is not utilized.

Jimsair stores Av-Gas and Diesel fuel in two trucks, each with a 1,500 gallon capacity. These trucks remain stationary and are utilized primarily as above ground storage tanks while additional vehicles are utilized to carry fuel from these vehicles to aircraft or other vehicles.

Jimsair provides fueling services for two airlines: DHL air cargo, which sub-leases apron space from Jimsair for aircraft storage, and cargo loading and unloading, and Aeromexico Airlines. DHL purchases approximately 5,000 to 6,000 gallons of Jet-A fuel per weekday. Aeromexico purchases approximately 1,500 to 2,000 gallons of Jet-A fuel per weekday.

Jimsair also provides diesel-fueling service to Swissport, a Ground Service Equipment (GSE) provider to two cargo airlines: Custom Air Transport (C.A.T.) and Kitty Hawk Air Cargo.

#### **Secondary GA Services**

##### **Additional Services**

In addition to providing FBO services to corporate aircraft and fueling services to airlines, Jimsair also operates a charter operation. Jimsair owns four aircraft including two King Air 200 turbo props, a King Air 350 turbo prop, and a Hawker 700A jet. Customers are able to charter these aircraft for personal or business use.

Passengers arriving from International destinations must clear customs. There are no on-site customs facilities. Typically, customs officials from SDIA provide clearance to passengers arriving at Jimsair on an as-needed basis. All flights from Mexico must land at Brown Field in southern San Diego county and clear customs at that location prior to continuing on to SDIA.

The existing FBO provider operated a public restaurant (the Windsock) until approximately 2002, when it was closed in anticipation of the terminal facility improvements.

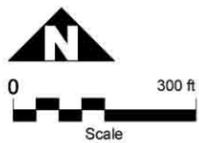
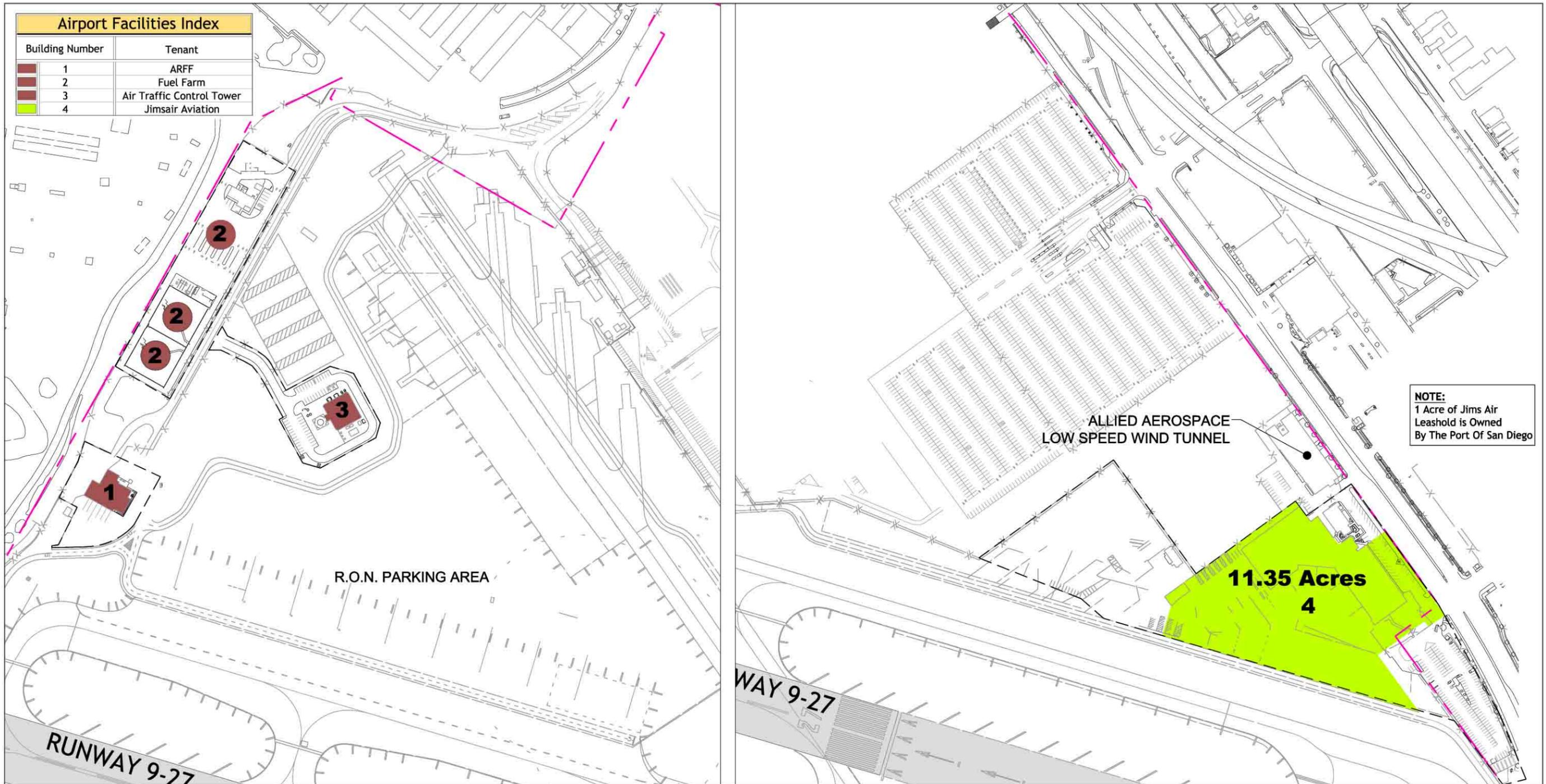
##### **Vehicle Parking**

Jimsair operates a parking lot within their lease that provides long term vehicle parking to the general public. The parking lot has approximately 150 parking stalls. A shuttle van transports parking customers between the parking lot and the SDIA terminal facilities. The parking lot is located along the west side of Pacific Highway, south of the Jimsair entrance at the intersection of West Palm Street.

#### **3.5.3 Aircraft Rescue and Fire Fighting (ARFF) Facilities**

In 1969, construction was completed on the new ARFF Building. This facility was formerly known as the Crash and Rescue Equipment Building. The one-story, 9,570-square-foot facility is located to the west of the existing Remain Overnight (RON) parking area as depicted in **Figure 3.5-2**. This facility houses an apparatus room for storage of fire fighting and paramedic vehicles and equipment, a dormitory with showers, a kitchen/dining room, a training room and a control room. In 1993, the dormitory section of the building was remodeled.

The current inventory of all four aircraft rescue and firefighting vehicles operating at SDIA is outlined in **Table 3.5-2**. It should be noted that these facilities were not inventoried in the 2001 Master Plan. Rescue One is the Airport's rapid intervention vehicle and has a response time of less than three minutes. Each of the three other ARFF vehicles has a response time of less than four minutes. These response times meet the current Federal Aviation Regulation (FAR) Part 139 requirements. The described ARFF



**Figure 3.5-2**

**Air Cargo and Airport Support Facilities North**



### 3. Inventory of Existing Conditions

vehicles have a combined capacity of approximately 10,500 gallons of water and approximately 1,500 gallons of foam. These combined capacities meet fire fighting "Index E" as established in FAR Part 139.

Table 3.5-2

SDIA Detailed ARFF Vehicle Description

Vehicle Name	Year	Make/Model	Water (Gallons)	AFFF <sup>1</sup> (Gallons)	Dry Chemical (Pounds)
Rescue One	2002	Emergency One P-501	1,500	230	500
Rescue Two	1990	Oshkosh T-3000	3,000	410	500
Rescue Three	1999	Oshkosh Ti-3000 w/nozzle	3,000	430	500
Rescue Five	1990	Oshkosh T-3000	3,000	410	500
<b>Total</b>			<b>10,500</b>	<b>1,480</b>	<b>2,000</b>

<sup>1</sup> AFFF = Aqueous Film Forming Foam

Source: SDCRAA, 2004.

#### 3.5.4 Aircraft Fuel Storage Facilities

Prior to 1996, the Aircraft Fuel Storage and Dispensing Facility was located north of North Harbor Drive. The old facility was demolished and relocated, and construction of the new Aircraft Fuel Storage and Dispensing Facility was completed in 1996. Its new location, north of Runway 9-27 and west of the ATCT, is depicted in **Figure 3.5-2**. The primary function of the Aircraft Fuel Storage and Dispensing Facility is to receive, store and transfer jet aircraft and vehicle fuel. This facility was originally built by the San Diego Port District and leased to the airlines. It is currently operated by Allied Aviation Services, Inc. The main fuel suppliers are Arco, Chevron, and Jetstar. Jimsair, FedEx, DHL, and Skywest receive fueling services directly from the Jimsair facility.

Fuel is delivered to the Airport's main storage and dispensing facility via an underground pipeline. Fuel is then distributed to several above-ground and underground fuel storage tanks. The main jet fuel storage areas are two above-ground tanks, which have a capacity of one million gallons of fuel each. Fuel used for airport operations (e.g., ground support equipment (GSE) and airport operation vehicles) is located below ground. One tank holds up to 15,000 gallons of automotive gasoline, and the other holds 15,000 gallons of diesel fuel. This facility also encompasses six jet fuel islands and one filtration station. Located on this site is also a one-story, 2,700-square-foot structure housing the administrative offices for the facility.

The Fuel Dispensing Apron is south of the Aircraft Fuel Storage and Dispensing Facility across Runway 9-27 (see Figure 3.7-7 in Section 3.7, Utilities of Developable Properties). Fuel is pumped underground from the Fuel Storage Facility to the Fuel Dispensing Apron. Fuel tanker trucks load jet fuel from the apron for transport to the aircraft. Three pumps, each with re-filtration systems, are provided to load the tanker trucks. Aircraft Service International Group (ASIG) provides this service for all of the airlines except American Airlines, which transports fuel to its own aircraft.

#### 3.5.5 Airline Maintenance Facilities

There is a single airline maintenance facility located at SDIA and operated by Aircraft Service International Group (ASIG). The airline maintenance facility consists of a hangar/office area with a total

### **3. Inventory of Existing Conditions**

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of 21,000 square feet. ASIG has indicated previous to this master plan they will need as much as 50,000 square feet in the future to accommodate increasing demand for airline maintenance services. The previous master plan recommended preserving 4.5 acres for future airline maintenance operations.

#### **3.5.6 Airport Office and Maintenance Facilities**

The transfer of the Airport from the San Diego Unified Port District to the Authority on January 1, 2003 created the need for new administrative offices for Authority employees. Prior to the change of administration, most airport administration was housed in the San Diego Unified Port District headquarters building at 3165 Pacific Highway. After the transfer, the Authority moved into on-airport facilities, totaling approximately 75,000 square feet, in multiple locations.

The commuter terminal was originally an aircraft hangar and has been remodeled into an active airline terminal and office facility. A portion of the ground floor has been preserved as an office and meeting facility for the authority. The primary Authority offices are located on the third floor of the commuter terminal. The offices of the CEO and several departments including planning and operations are located in the commuter terminal. There is additional space located on the second floor of the commuter terminal. However, the space remains unimproved and is, at the current time, unused. The total area of the third floor of the Commuter Terminal is approximately 45,000 square feet.

The West Wing is a temporary structure located at the northwest corner of Stillwater Road and North Harbor Drive. This facility is comprised of 34 rolling unit trailers arranged together and attached to accommodate employee offices, restrooms and break areas. The West Wing comprises a total of approximately 25,000 square feet. Facilities Development, Human Resources and other departments are located in the West Wing.

Terminal 2 West houses the Authority offices for the Maintenance & Procurement departments. The Terminal 2 West Authority offices comprise approximately 3,500 square feet within the building, and they occupy an approximately 1,000 square foot temporary facility adjacent to Terminal 2 West.

Additional airport maintenance offices and shops occupy a total of 2,000 square feet throughout the terminal areas.

The parking operations building houses the administration for managing all airport parking facilities. The 3,000 square foot building is located east of the former of Terminal 2 East baggage claim building, south of the Terminal 2 East roadway.

#### **3.5.7 Other Airport Support Facilities**

Existing airport support facilities are depicted in **Figure 3.5-1** and **Figure 3.5-2**. These facilities include the ATCT, Administration Base Building, ARFF Building, Aircraft Fuel Storage and Dispensing Facilities, general aviation (GA) facilities, and commercial buildings. All of these buildings are owned by SDIA except the ATCT, which is owned and operated by the Federal Aviation Administration (FAA).

##### **ATCT and Administration Base Building**

Construction of the new ATCT and the Administration Base Building was completed in September of 1996. The new ATCT is a 136-foot-tall, 7,000-square-foot facility, housing an ATC room, employee break rooms, and equipment rooms. Located adjacent to the ATCT, is a 5,950-square-foot Administration Base Building accommodating administration offices, conference rooms, and a physical plant equipment area. These buildings combined total 12,950 square feet.

##### **Ground Support Equipment (GSE) Facilities**

There are two GSE facilities next to the cargo terminals. American Airlines GSE facilities occupy one-story, 12,500-square-foot structure for GSE services and storage. The other facility is a one-story,

### ***3. Inventory of Existing Conditions***

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10,400-square-foot building operated by ASIG, housing administrative offices and GSE services. There is a GSE area north of the ATCT, which is mainly used by FedEx.

#### **United States Postal Service (USPS)**

The United States Postal Service (USPS) facility is located east of the commuter terminal as depicted in Figure 3.5-1. It occupies a two-story, 42,000-square-foot building at this site. The ground level is used for mail sorting, and the second level is used for administrative offices. North of the building is an in/out mail-staging zone used by all mail carrier airline services. USPS has a staging area east of the Southwest Cargo Terminal.

#### **Flight Kitchen**

Sky Chefs, the airline catering service provider, vacated from the buildings immediately south of the USPS facility in early 2005. As of March 2006, the buildings remain vacant.

#### **Wash Rack**

The Wash Rack is located south of the Fuel Dispensing Apron. It is leased to and operated by ASIG and is used for washing aircraft. Few airlines use the Wash Rack on a regular basis, so additional wash racks are unnecessary. However, the wash-rack is located in a location that would be better utilized for terminal or air-cargo facility development. Installing a new wash rack with the latest fluid retention and recycling capabilities would provide an appropriate upgrade.

#### **United Service Organizations (USO) Center**

The USO Center is located in the former baggage claim building for Terminal 2 East. This structure is south of the Terminal 2 East roadway and is connected to Terminal 2 East via an enclosed pedestrian bridge. The existing USO occupies 6,520-square-feet.

#### **Central Utility Plant**

The central utility plant was constructed in 1996 and is a one story 21,000-square-foot building. This facility was constructed to provide electrical power, hot water, heating, and cooling for the existing Terminals One, Two and the Terminal Two expansion. Terminal Two's mechanical facility, which was located between the former East and West Terminals, has been abandoned. Terminal One's mechanical facility, located on the mezzanine level above both concourse restrooms, has also been abandoned.

### **3.5.8 Other Tenant Facilities**

There are several facilities on airport property that do not provide support to SDIA or the Authority. Thus they are not included in the Airport Support facility totals. These entities are listed below for reference as to the occupants of all tenants on airport property.

#### **Port Facilities**

The Port of San Diego currently leases an approximately 15,000 square-foot parcel along Pacific Highway between Jimsair and the Low Speed Wind Tunnel facility. There is an approximately 8,000 square foot, two level building at this location. The Port of San Diego's Strategic Management Services and Corporate Learning and Development offices are located at this facility. The facility address is 2980 Pacific Highway. This facility does not provide support to SDIA or the Authority and is not included in the Airport Support facility totals.

### **3. Inventory of Existing Conditions**

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#### **Low Speed Wind Tunnel**

The San Diego Air and Space Museum (formally leased by Allied Aerospace) leases a total of 49,246 square feet (1.13 Acres) of land at 3050 Pacific Highway, north of Jimsair and the Port facility. The site contains a single structure. The structure houses a low speed wind tunnel used for aerodynamic, propulsion, loads, and aero-elasticity (flutter) testing. The structure also contains the offices and other facilities utilized for operation and maintenance of the wind tunnel. The facility does not provide support to SDIA or the Authority and is not included in the Airport Support facility totals.

#### **Temporary Tenants**

Three additional tenants lease portions of the former General Dynamics site north of Taxiway C and east of Taxiway D. Mossy Ford leases 80,000 square feet of space for temporary vehicle storage and Metro Imports leases an additional 10,000 square feet for temporary vehicle storage. These lease areas are unimproved, consisting of a gravel surface only, and, therefore, were not included in **Table 3.5-1**. The San Diego Convention Center also leases 217,800 square feet of space in this area for temporary storage of trailers utilized to haul exhibits for vendors exhibiting at the Convention Center. These facilities do not provide support to SDIA or the Authority and are not included in the Airport Support facility totals.